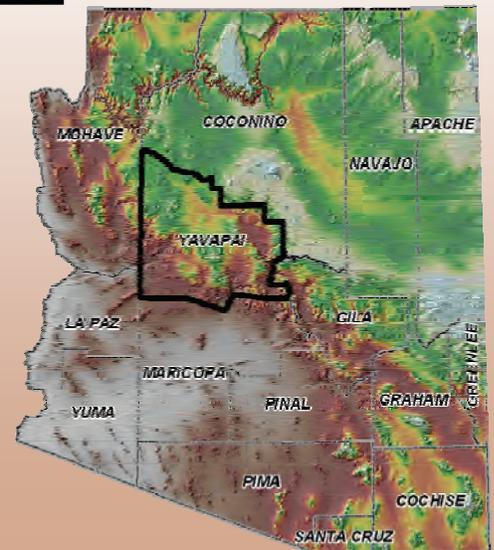
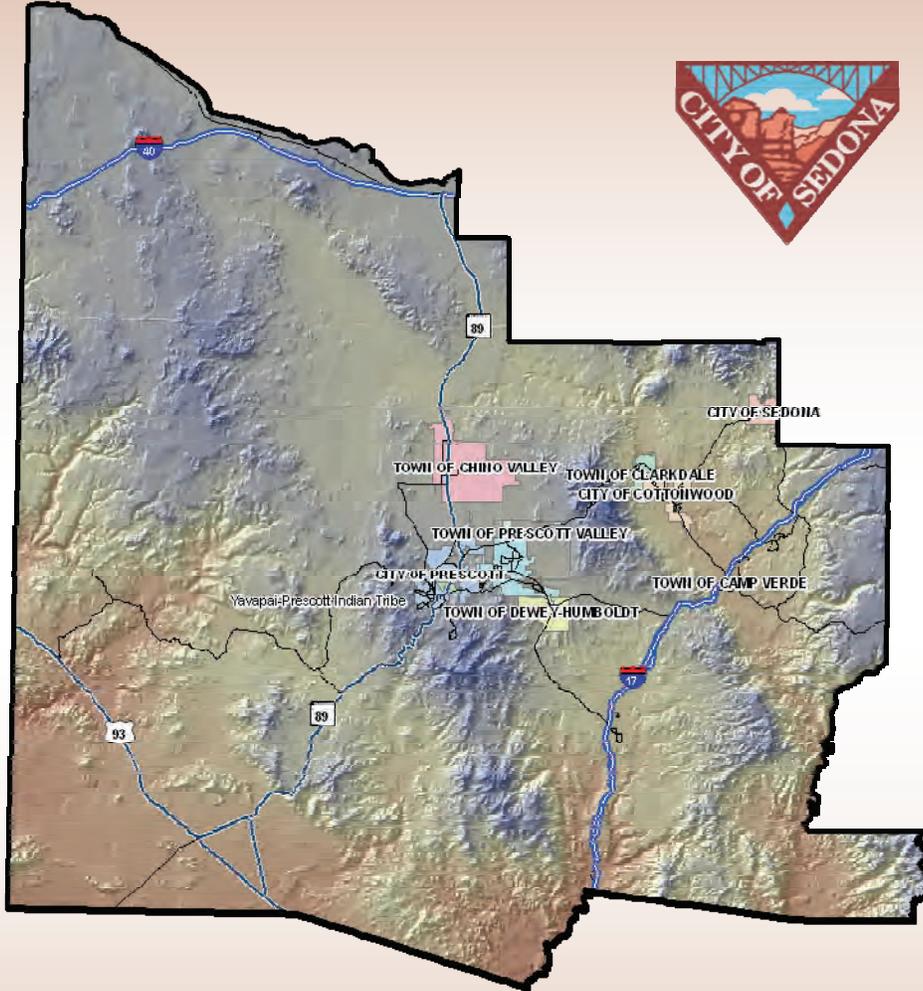




# Yavapai County Multi-Jurisdictional Hazard Mitigation Plan 2011



## **EXECUTIVE SUMMARY**

Across the United States, natural and human-caused disasters have led to increasing levels of death, injury, property damage, and interruption of business and government services. The toll on families and individuals can be immense and damaged businesses cannot contribute to the economy. The time, money and effort to respond to and recover from these emergencies or disasters divert public resources and attention from other important programs and problems. With 35 federal or state declarations, 370 other significant events, and a combined total of 405 disaster events recorded, the ten jurisdictions within Yavapai County, Arizona participating in this planning effort, recognize the consequences of disasters and the need to reduce the impacts of natural and human-caused hazards. The county and jurisdictions also know that with careful selection, mitigation actions in the form of projects and programs can become long-term, cost effective means for reducing the impact of natural and human-caused hazards.

The elected and appointed officials of Yavapai County, Camp Verde, Chino Valley, Clarkdale, Cottonwood, Dewey-Humboldt, Jerome, Prescott, Prescott Valley and Sedona demonstrated their commitment to hazard mitigation in 2005-2006 (2009 for Dewey-Humboldt) by preparing the first set of Single Jurisdiction Multi-Hazard Mitigation Plans (2006 Plans). The 2006 Plans were developed through a planning effort that resulted in an unincorporated county plan and nine city/town plans. The 2006 Plans were approved by FEMA during a period between March and September 2006 (April 2010 for Dewey-Humboldt), and require full, FEMA approved, updates prior to the subsequent five year expiration. The Yavapai-Prescott Indian Tribe also participated in the 2005-2006 planning effort, but never completed the necessary steps needed to receive approval of their tribal plan from FEMA.

In response, the Arizona Division of Emergency Management (ADEM) secured a federal planning grant and hired JE Fuller/ Hydrology & Geomorphology, Inc. to assist the county and participating jurisdictions with the update process. Yavapai County reconvened a multi-jurisdictional planning team comprised of veteran and first-time representatives from each participating jurisdiction, various county departments and organizations, ADEM, local fire and flood control districts, and Indian tribes. The Planning Team met three times during the period of October 2010 to January 2011 in a collaborative effort to review, evaluate, and update the 2006 Plans. In addition, the Yavapai-Prescott Indian Tribe also met to develop the tribe-specific planning elements required for a Tribal Plan approval. The resulting Yavapai County Multi-Jurisdictional Hazard Mitigation Plan (Plan) will continue to guide the county, tribe and participating jurisdictions toward greater disaster resistance in full harmony with the character and needs of the community and region.

The Plan and accompanying Tribal Annex has been prepared in compliance with Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act or the Act), 42 U.S. C. 5165, enacted under Sec. 104 the Disaster Mitigation Act of 2000, (DMA 2000) Public Law 106-390 of October 30, 2000, as implemented at CFR 201.6 and 201.7 dated October, 2007. The Plan identifies hazard mitigation measures intended to eliminate or reduce the effects of future disasters throughout the county, and was developed in a joint and cooperative venture by members of the Yavapai County Planning Team.

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**LIST OF APPENDICES**

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- Appendix B: Planning Process Documentation**
- Appendix C: Public Involvement Records**
- Appendix D: Detailed Historic Hazard Records**
- Appendix E: Plan Maintenance Review Memorandums**

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## SECTION 1: JURISDICTIONAL ADOPTION AND FEMA APPROVAL

**Requirement §201.6(c)(5):** *[The local hazard mitigation plan shall include...] Documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval of the plan (e.g., City Council, County Commissioner, Tribal Council). For multi-jurisdictional plans, each jurisdiction requesting approval of the plan must document that it has been formally adopted.*

**Requirement §201.6(d)(3):** *A local jurisdiction must review and revise its plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval within five (5) years in order to continue to be eligible for mitigation project grant funding.*

### 1.1 DMA 2000 Requirements

#### 1.1.1 General Requirements

The Yavapai County Multi-Jurisdictional Hazard Mitigation Plan (the Plan) has been prepared in compliance with Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (Stafford Act), 42 U.S.C. 5165, as amended by Section 104 of the Disaster Mitigation Act of 2000 (DMA 2000) Public Law 106-390 enacted October 30, 2000. The regulations governing the mitigation planning requirements for local mitigation plans are published under the Code of Federal Regulations (CFR) Title 44, Section 201.6 (44 CFR §201.6). Minimum requirements for tribal mitigation plans are published under CFR Title 44, Section 201.7 (44 CFR §201.7). Additionally, a DMA 2000 compliant plan that addresses flooding will also meet the minimum planning requirements for the Flood Mitigation Assistance program as provided for under 44 CFR §78.

DMA 2000 provides requirements for States, Tribes, and local governments to undertake a risk-based approach to reducing risks to natural hazards through mitigation planning<sup>1</sup>. The local mitigation plan is the representation of the jurisdictions' commitment to reduce risks from hazards, serving as a guide for decision makers as they commit resources to reducing the effects of hazards. Local plans will also serve as the basis for the State to provide technical assistance and to prioritize project funding.

Under 44 CFR §201.6 and §201.7, local and tribal governments must have a Federal Emergency Management Agency (FEMA)-approved local / tribal mitigation plan in order to apply for and/or receive funding under the following hazard mitigation assistance programs:

- Hazard Mitigation Grant Program (HMGP)
- Pre-Disaster Mitigation (PDM)
- Flood Mitigation Assistance (FMA)
- Repetitive Flood Claims (RFC), at FEMA's discretion
- Severe Repetitive Loss (SRL)
- Public Assistance Categories C – G, applies to Tribes

#### 1.1.2 Tribal Assurance

The Yavapai-Scottsdale Indian Tribe will comply with all Federal Statutes and regulations during the periods for which it receives grant funding, in compliance with 44CFR 13.11(c) and the DMA 2000 requirement §201.7(c)(6), and will amend its plan whenever necessary to reflect changes in tribal or Federal laws and statutes as required in 44CFR 13.11(d).

---

<sup>1</sup> FEMA, 2008, *Local Multi-Hazard Mitigation Planning Guidance*

*1.1.2 Update Requirements*

DMA 2000 requires that existing plans be updated every five years, with each plan cycle requiring a complete review, revision, and re-approval of the plan at both the state and FEMA level. Yavapai County, the incorporated communities of Camp Verde, Chino Valley, Clarkdale, Cottonwood, Dewey-Humboldt, Jerome, Prescott, Prescott Valley, and Sedona all currently have FEMA approved hazard mitigation plans. The Yavapai-Prescott Indian Tribe also participated in the 2005-2006 planning work, but did not complete the tribal plan approval process. The Plan is the result of a planning process performed by the Yavapai County jurisdictions to both update and consolidate the individual community plans developed in the 2005-2006 planning period (2009-2010 for Dewey-Humboldt).

**1.2 Official Record of Adoption**

Adoption of the Plan is accomplished by the governing body for each participating jurisdiction in accordance with the authority and powers granted to those jurisdictions by either the State of Arizona or the federal government. The officially participating jurisdictions in the Plan include:

| <b>County</b>   | <b>Tribes</b>   | <b>Cities</b>  | <b>Towns</b>   |
|---|---|--|--|
| <ul style="list-style-type: none"> <li>• Yavapai</li> </ul> | <ul style="list-style-type: none"> <li>• Yavapai-Prescott Indian Tribe</li> </ul> | <ul style="list-style-type: none"> <li>• City of Cottonwood</li> <li>• City of Prescott</li> <li>• City of Sedona</li> </ul> | <ul style="list-style-type: none"> <li>• Town of Camp Verde</li> <li>• Town of Chino Valley</li> <li>• Town of Clarkdale</li> <li>• Town of Dewey-Humboldt</li> <li>• Town of Jerome</li> <li>• Town of Prescott Valley</li> </ul> |

Jurisdictions may keep copies of official adoption documents in Appendix A of their copy of the Plan.

**1.3 FEMA Approval Letter**

The Plan was submitted to the Arizona Division of Emergency Management (ADEM), the authorized state agency, and FEMA for review and approval. FEMA’s approval letter may be provided on the following page.

*[Insert FEMA Approval Letter Here]*

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## SECTION 2: INTRODUCTION

### 2.1 Plan History

In 2005-2006 (2009-2010 for Dewey-Humboldt), Yavapai County and the incorporated communities of Camp Verde, Chino Valley, Clarkdale, Cottonwood, Dewey-Humboldt, Jerome, Prescott, Prescott Valley, and Sedona participated in a mitigation planning process that resulted in the development of separate stand-alone plans for each participating jurisdiction. The Yavapai-Prescott Indian Tribe also participated in the 2005-2006 planning work, but did not complete the tribal plan approval process with FEMA. The following is a list of the plans that were produced for the Yavapai County jurisdictions:

- *Yavapai County Multi-Hazard Mitigation Plan*
- *Camp Verde Multi-Hazard Mitigation Plan*
- *Chino Valley Multi-Hazard Mitigation Plan*
- *Clarkdale Multi-Hazard Mitigation Plan*
- *Cottonwood Multi-Hazard Mitigation Plan*
- *Dewey-Humboldt Multi-Hazard Mitigation Plan*
- *Jerome Multi-Hazard Mitigation Plan*
- *Prescott Multi-Hazard Mitigation Plan*
- *Prescott Valley Multi-Hazard Mitigation Plan*
- *Sedona Multi-Hazard Mitigation Plan*

Collectively and individually, these plans will be referred to herein as the 2006 Plan(s). The 2006 Plans received official FEMA approval during a period that generally ranges from March to September 2006 (April 2010 for Dewey-Humboldt). The 2006 Plans have either already expired or are nearing the end of the 5-year planning cycle, with most of the single-jurisdictional plans being set to expire in September 2011.

### 2.2 Plan Purpose and Authority

The purpose of the Plan is to identify hazards that impact the various jurisdictions located within Yavapai County, assess the vulnerability and risk posed by those hazards to community-wide human and structural assets, develop strategies for mitigation of those identified hazards, present future maintenance procedures for the plan, and document the planning process. The Plan is prepared in compliance with DMA 2000 requirements and represents a multi-jurisdictional update of the 2006 Plans listed in Section 2.1.

Yavapai County and all of the Cities and Towns are political subdivisions of the State of Arizona and are organized under Title 9 (cities/towns) and Title 11 of the Arizona Revised Statutes (ARS).

The Yavapai-Prescott Indian Tribe is a federally recognized tribe, organized and established as a sovereign nation pursuant to the provisions of the Indian Reorganization Act of June 18, 1934. The Yavapai-Prescott Community Association adopted its Articles of Association in 1962 and thereby established a legal community and the current day government structure, which is comprised of a five member elected Board of Directors. The officers of the Tribal Board of Directors consist of a President, Vice-President and Secretary/Treasurer.

Accordingly, each of the participating jurisdictions is empowered to formally plan and adopt the Plan on behalf of their respective jurisdictions.

Funding for the development of the Plan was provided through a PDM planning grant obtained by the State of Arizona from FEMA. JE Fuller/ Hydrology & Geomorphology (JE Fuller) was retained by Arizona Division of Emergency Management (ADEM) to provide consulting services in guiding the planning process and Plan development.

### 2.3 General Plan Description

The Plan is generally arranged and formatted to be consistent with the 2010 State of Arizona Multi-Hazard Mitigation Plan (State Plan) and is comprised of the following major sections:

**Planning Process** – this section summarizes the planning process used to update the Plan, describes the assembly of the planning team, meetings conducted and summarizes the public involvement efforts.

**Community Description** – this section provides an overall description of the participating jurisdictions and the County as a whole.

**Risk Assessment** – this section summarizes the identification and profiling of hazards that impact the County and the vulnerability assessment for each hazard that considers exposure/loss estimations and development trend analyses.

**Mitigation Strategy** – this section presents a capability assessment for each participating jurisdiction and summarizes the Plan mitigation goals, objectives, actions/projects and strategy for implementation of those actions/projects.

**Plan Maintenance Strategy** – this section outlines the proposed strategy for evaluating and monitoring the Plan, updating the Plan in the next 5 years, incorporating plan elements into existing planning mechanisms, and continued public involvement.

**Plan Tools** – this section includes a list Plan acronyms and a glossary of definitions.

### 2.4 Overall Plan Update Process

The Plan is the result of a thorough update process that included a section by section review and evaluation of the 2006 Plans by the planning participants. As previously stated, the individual 2006 Plans are being consolidated into a single, multi-jurisdictional plan with this update. Accordingly, the final arrangement of the Plan is different from the 2006 Plans.

At the onset of the planning process, ADEM printed a copy of each of the 2006 Plans and provided them to each respective jurisdiction as a working document for their review and use during the planning process. This way the jurisdictions could keep their original 2006 Plan intact and unmarked. Digital versions of the Yavapai County 2006 Plan were made available to planning team members not directly associated with a specific jurisdiction. The Planning Team performed a general review of each 2006 Plan section during the first meeting, wherein the plan purpose was explained, sections were generally discussed, and the plans' relation to the DMA 2000 requirements were summarized. Use of the existing Plan(s) provided the seed material for subsequent discussions on how to update and improve the Plan. Planning participants were requested bring their working copy to every meeting as the team stepped through each stage of the update process and reviewed each 2006 Plan section in greater detail. Table 2.1 summarizes the review and analysis of each section of the 2006 Plans and generally describes what changes were or were not made and why. Additional details of that process are also discussed in the following sections of this Plan as well.

| <b>Table 2-1: Summary of 2006 Plan review and 2011 Plan correlation</b> |                          |  |
|---|--------------------------|--|
| <b>2006 Plan Section</b>  | <b>2011 Plan Section</b> | <b>Review and Changes Description (2006 Plan to the 2011 Plan)</b>   |
| 1   | 1, 2, and 4              | <ul style="list-style-type: none"> <li>Plan format changes were made to make the Plan more compatible with the 2010 State Plan format.</li> <li>General plan descriptions were changed to reflect the update process, the new plan format, and authorizations</li> <li>Community descriptions were compiled and updated to provide both a county-wide and jurisdiction specific depiction. Much of the original text was kept. Time sensitive data such as demographics, climate statistics, and incorporated community boundaries were updated with the latest information available.</li> <li>Descriptions of development history were updated to reflect the last five years.</li> </ul>  |
| 2   | 3                        | <ul style="list-style-type: none"> <li>The 2006 Plan contacts were updated as necessary and recompiled into Section 3 of the 2011 Plan. The review concluded that the original Section 2 data did not warrant a separate section and it could be added to Section 3.</li> </ul>  |
| 3   | 3                        | <ul style="list-style-type: none"> <li>Section 3 was expanded to include evaluation summaries and to better describe the planning team development.</li> <li>Added a column to the table listing the planning team participants to describe their roles</li> <li>Decided to keep the table format summarizing the planning team meetings and agendas, but provide supplemental meeting minutes in an Appendix</li> <li>Provided a new section to address agency/organization participation and changes between the 2006 Plan and 2011 Plan participation</li> </ul>  |
| 4   | 5                        | <ul style="list-style-type: none"> <li>Risk Assessment changed from Section 4 to Section 5</li> <li>The whole structure of the risk assessment was revised to provide a hazard based approach to the subsections. The planning team felt this would make the plan easier to understand and follow.</li> <li>Each hazard profile and vulnerability analysis was carefully updated to reflect either more current or totally new data.</li> <li>Asset inventories were updated and refined to make them more complete and current.</li> </ul>  |
| 5   | 6                        | <ul style="list-style-type: none"> <li>Mitigation Strategy changed from Section 5 to Section 6</li> <li>A review of the goals and objectives subsection resulted in minor changes to adjust the goals and objectives to reflect the current Plan hazard list. Reasoning for the changes are summarized in Section 6.1</li> <li>Tables 5.1 and 5.4 of the capability assessment were compiled into one table to provide an “at-a-glance” summary of these elements. The details of the old Table 5.4 were relegated to the reference lists provided at the end of each hazard subsection of the new Plan Section 5.3 and at other locations throughout the Plan where the documents are referenced.</li> <li>Tables summarizing previous mitigation activities for each jurisdiction were provided to document past mitigation activities</li> <li>Section addressing the NFIP program was added in compliance to requirement changes from the 2006 Plan to the 2011 Plan</li> <li>Each mitigation action/project in the 2006 Plan were reviewed and assessed by the respective jurisdiction. Tables summarizing the results are provided</li> <li>Planning team chose to combine the old tables 5.5 and 5.6 into one table to have all the details of the new mitigation actions/projects in one table.</li> </ul> |

| <b>Table 2-1: Summary of 2006 Plan review and 2011 Plan correlation</b> |                          |   |
|---|--------------------------|---|
| <b>2006 Plan Section</b>  | <b>2011 Plan Section</b> | <b>Review and Changes Description (2006 Plan to the 2011 Plan)</b>  |
| 6   | 7                        | <ul style="list-style-type: none"> <li>• Plan Maintenance Procedures changed from Section 6 to Section 7.</li> <li>• In general, the review of this section highlighted the lack of plan maintenance actually performed and forced a better definition of future efforts. It is anticipated that a multi-jurisdictional plan will provide the platform for a more regular review.</li> <li>• Added text to discuss review past plan maintenance activities and reasons for successes/failures.</li> <li>• Identified the need to expand Section 7.3 to provide a better explanation of plan incorporation by each of the jurisdictions.</li> <li>• Identified a need to provide more definition and specificity to the approach in Section 7.4. Revised to be more specific in the types and schedules of future public involvement opportunities.</li> </ul> |

### SECTION 3: PLANNING PROCESS

**§201.6 (b):** *Planning process. An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include:*

- (1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;*
- (2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and*
- (3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.*

**§201.6(c)(1):** *[The plan shall include...]* (1) *Documentation of the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.*

This section includes the delineation of various DMA 2000 regulatory requirements, as well as the identification of key stakeholders and planning team members within Yavapai County. In addition, the necessary public involvement meetings and actions that were applied to this process are also detailed.

#### 3.1 Planning Process Description

ADEM applied for and received a PDM planning grant to fund a multi-jurisdictional effort to review, update and consolidate the 2006 Plans. Once the grant was received, ADEM then selected JE Fuller to work with the participating jurisdictions and guide the planning process. An initial project kick-off meeting was convened in September 2010 to begin the planning process, outline the plan objectives, outline the anticipating meeting agendas for the planning efforts, and to discuss the new plan format and other administrative tasks. A total of three multi-jurisdictional planning team meetings were conducted over the period of October 2010 through January 2011, beginning with the first meeting on October 26, 2010. A separate tribal planning meeting was conducted with Yavapai-Prescott Indian Tribe officials on February 3, 2011. Throughout that period of time and for several months afterward, all work required to collect, process, and document updated data and make changes to the plan was performed, culminating in a draft of the Plan. Details regarding key contact information and promulgation authorities, the planning team selection, participation, and activities, and public involvement are discussed in the following sections.

#### 3.2 Previous Planning Process Assessment

The first task of preparation for this Plan, was to evaluate the process used to develop the 2006 Plans. The previous planning approach included a blended use of multi-jurisdictional planning team meetings and individual local planning team meetings within each jurisdiction. This was mostly due to the development of individual plans for each participating jurisdiction and the difficulty in acquiring the needed data. The process worked moderately well, but required a tremendous amount of time and budget that is not available for this planning process. A conclusion of the 2006 Plans process assessment was that the new planning process and approach would result in a paradigm shift away from individual plans and planning meetings, and will require a slightly different strategy in gathering and compiling the Plan information. The result is a multi-jurisdictional plan (one document for all participating jurisdictions).

The new planning process was presented and discussed at the first multi-jurisdictional planning team meeting and was contrasted to the 2006 Plan approach. Less than half of the planning team members were returning members from the 2006 Plan process and were familiar with the prior planning process. No significant notations were made for the general process and the planning team understood the budgetary limitations.

#### 3.3 Primary Point of Contact

Table 3-1 summarizes the primary points of contact identified for each participating jurisdiction.

| <b>Table 3-1: List of jurisdictional primary points of contact</b> |                        |   |   |                       |                                   |
|--|------------------------|---|---|-----------------------|-----------------------------------|
| <b>Jurisdiction</b>  | <b>Name</b>            | <b>Department / Position</b>                              | <b>Address</b>  | <b>Phone</b>          | <b>Email</b>                      |
| Yavapai County   | Nick Angiolillo        | Emergency Management / Coordinator                        | 1100 Commerce Dr. Prescott, AZ 856305                                 | 928-771-3321          | nick.angiolillo@co.yavapai.az.us  |
| Town of Camp Verde   | Ron Long               | Public Works / Director                                   | 395 S. Main St. Camp Verde, AZ 86322                                  | 928-567-0534          | Ron.Long@campverde.az.gov         |
| Town of Chino Valley   | Mark Garcia            | Police Department / Commander                             | 1020 W. Palomino Rd. Chino Valley, AZ 86323                           | 928-636-4223 Ext. 128 | mgarcia@chinoaz.net               |
| Town of Clarkdale  | Kathy Bainbridge       | Clerk /Finance Director                                   | PO Box 308 39 N. Ninth Street Clarkdale, AZ 86324                     | 928-639-2445          | kathy.bainbridge@clarkdale.az.gov |
| City of Cottonwood   | Roger Biggs            | Development Services / Utilities Administrative Manager   | 111 North Main Street Cottonwood, AZ 86326                            | 928-639-4254          | rbiggs@cottonwoodaz.gov           |
| Town of Dewey-Humboldt   | Ed Hanks (Joel Berman) | Public Works /Director                                    | P.O. Box 69 2735 S. Highway 69, Suite 12 Humboldt, AZ 86329           | 928-632-7362          | edhanks@dhaz.gov                  |
| Town of Jerome   | Candace Gallagher      | Administration / Town Manager and Clerk                   | P.O. Box 335 Jerome, AZ 86331   | 928-634-7943          | manager@tojaz.us                  |
| City of Prescott   | Darrell Willis         | Fire / Emergency MGT / Division Chief                     | 1700 Iron Springs Rd. Prescott, AZ 86305                              | 928-777-1701          | darrell.willis@prescott-az.gov    |
| Town of Prescott Valley  | Boyd Robertson         | Public Works/Deputy Public Works Director                 | 7501 E. Civic Circle, 2 <sup>nd</sup> Floor Prescott Valley, AZ 86314 | 928-759-3079          | brobertson@pvaz.net               |
| City of Sedona   | David Peck             | Public Works / Assistant Engineer                         | 102 Roadrunner Drive Sedona, AZ 86336                                 | 928-204-7108          | dpeck@sedonaaz.gov                |
| Yavapai-Prescott Indian Tribe                                      | Amber Tyson            | Environmental Office/ Environmental Protection Specialist | 530 E. Merritt Prescott, AZ 86301                                     | 928-515-7453          | atyson@ypit.com                   |

### **3.4 Planning Teams**

Two levels of planning teams were organized for the development of this Plan. The first was a Multi-Jurisdictional Planning Team (Planning Team) that was comprised of one or more representatives from each participating jurisdiction. The second was an optional Local Planning Team.

The role of the Planning Team was to work on the coordination, research, and planning element activities required to update the 2006 Plans. Attendance by each participating jurisdiction was required for every Planning Team meeting as the meetings were structured to progress through the planning process. Steps and procedures for updating the 2006 Plans were presented and discussed at each Planning Team meeting, and assignments were given as necessary. Each meeting built on information discussed and assignments given at the previous meeting. The Planning Team also had the responsibility of liaison to Local Planning Team(s), and was tasked with:

- Conveying information and assignments to the Local Planning Team
- Ensuring all requested assignments were completed fully and returned on a timely basis.
- Arranging for review and official adoption of the Plan.

The function and role of the Local Planning Team was to:

- Provide support and data
- Assist the Planning Team representative with assignments
- Make planning decisions regarding Plan components
- Review the Plan draft documents

*3.4.1 Planning Team Assembly*

At the beginning of this planning process, Yavapai County organized and identified members for the Planning Team by initiating contact with, and extending invitations to, all incorporated communities and Indian tribes within the county limits. Other entities that were subsequently invited to participate are discussed in Section 3.4.3. The participating members of the Planning Team are summarized in Table 3-2. Returning planning team members are highlighted.

**Table 3-2: Summary of multi-jurisdictional planning team participants**

| <b>Name</b>      | <b>Jurisdiction / Organization</b> | <b>Department / Position</b>                          | <b>Planning Team Role</b>  |
|------------------|------------------------------------|---|--|
| Nick Angiolillo  | Yavapai County                     | EM / Coordinator                                      | Planning Team Primary Point of Contact<br>Jurisdictional Point of Contact<br>Lead coordinator for LPT<br>Planning Team participant |
| Kathy Bainbridge | Town of Clarkdale                  | Clerk /Finance Director                               | Jurisdictional Point of Contact<br>Lead coordinator for LPT<br>Planning Team participant   |
| Fred Barton      | Sedona-Oak Creek School District   | Public School /Plant Foreman                          | Planning Team participant  |
| Joel Berman      | Town of Dewey - Humboldt           | Public Works /Director                                | Jurisdictional Point of Contact<br>Lead coordinator for LPT<br>Planning Team participant   |
| Rusty Blair      | Town of Jerome                     | Fire Department/Fire Chief                            | Lead coordinator for LPT<br>Planning Team participant  |
| Steve Burroughs  | Town of Clarkdale                  | Public Works/Director                                 | Planning Team participant<br>Local Planning Team resource  |
| Debbie Calkins   | Yavapai College                    | Emergency Management/Emergency Management Coordinator | Planning Team participant  |
| Mike Casson      | City of Cottonwood                 | Fire Department/Fire Chief/EM                         | Planning Team participant<br>Local Planning Team resource  |
| Art Castricone   | Town of Dewey - Humboldt           | Private Citizen                                       | Planning Team participant  |
| Charlie Cave     | Yavapai County Flood Control       | Flood/Director  | Planning Team participant<br>Local Planning Team resource  |
| Wayne Debrosky   | Town of Clarkdale                  | Utilities/Director                                    | Planning Team participant<br>Local Planning Team resource  |
| Fernando Diaz    | Yavapi-Apache Nation               | Emergency Management/P.S. Manager                     | Jurisdictional Point of Contact<br>Lead coordinator for LPT<br>Planning Team participant   |
| Mark Garcia      | Town of Chino Valley               | Police/Commander                                      | Jurisdictional Point of Contact<br>Lead coordinator for LPT<br>Planning Team participant   |
| Ryan Gildehaus   | City of Cottonwood                 | Police Dept./TLO/SGT                                  | Jurisdictional Point of Contact<br>Lead coordinator for LPT<br>Planning Team participant   |
| Paul Grasso      | Town of Clarkdale                  | Building Official CDD/Bldg Official/Inspector         | Planning Team participant<br>Local Planning Team resource  |
| Jan Grogan       | Camp Verde Sanitary District       | Manager   | Planning Team participant<br>Local Planning Team resource  |
| Valerie House    | Town of Camp Verde                 | Public Works\Special Projects Coordinator             | Planning Team participant<br>Local Planning Team resource  |
| Earl Huff        | Town of Camp Verde                 | Marshal's Office/Lieutenant                           | Planning Team participant  |
| Todd Hyslip      | Town of Chino Valley               | Police/PTO/Officer                                    | Planning Team participant<br>Local Planning Team resource  |
| Michael Jenkins  | Town of Camp Verde                 | Community Development/ Director                       | Planning Team participant<br>Local Planning Team resource  |
| Ken Krebbs       | Sedona Fire District               | Operations/Firefighter                                | Planning Team participant<br>Local Planning Team resource  |
| William Loesche  | Sedona Fire District               | Fire Marshal  | Planning Team participant<br>Local Planning Team resource  |

| <b>Table 3-2: Summary of multi-jurisdictional planning team participants</b> |   |  |  |
|--|---|--|--|
| <b>Name</b>  | <b>Jurisdiction / Organization</b>            | <b>Department / Position</b>                             | <b>Planning Team Role</b>  |
| Ron Long   | Town of Camp Verde                            | Public Works/Director                                    | Jurisdictional Point of Contact<br>Lead coordinator for LPT<br>Planning Team participant               |
| Dan Lueder   | City of Cottonwood                            | Development Services/<br>General Manager                 | Planning Team participant<br>Local Planning Team resource  |
| Jan Mazy   | Town of Chino Valley                          | GIS/ Dev Services/<br>GIS/CAD Tech.                      | Planning Team participant<br>Local Planning Team resource  |
| Joe Moore  | Clarkdale Fire District                       | Chief  | Planning Team participant<br>Local Planning Team resource  |
| Scott Ogden  | JE Fuller/ Hydrology &<br>Geomorphology, Inc. | Planning Facilitator                                     | Consultant   |
| Bill Parry   | Unisource Energy                              | Verde District/Supervisor                                | Planning Team participant  |
| David Peck   | City of Sedona                                | Public Works/Assistant<br>Engineer                       | Jurisdictional Point of Contact<br>Lead coordinator for LPT<br>Planning Team participant               |
| Larry Prentice   | Town of Prescott Valley                       | Public Works / GIS Manager                               | Planning Team participant<br>Local Planning Team resource  |
| Boyd Robertson   | Town of Prescott Valley                       | Public Works/Deputy Public<br>Works Director             | Jurisdictional Point of Contact<br>Lead coordinator for LPT<br>Planning Team participant               |
| Keith Self   | Arizona Water Company                         | Verde Valley<br>Division/Manager                         | Planning Team participant  |
| Troy Smith   | Town of Clarkdale                             | Police/Sergeant  | Planning Team participant<br>Local Planning Team resource  |
| Scott Stebbins   | Prescott Valley                               | Police/Disaster Plans<br>Coordinator                     | Planning Team participant<br>Local Planning Team resource  |
| Mistie Stebbins  | Yavapai County EM                             | Emergency Mgt./Emergency<br>Planner                      | Planning Team participant<br>Secondary Jurisdictional Point of Contact<br>Lead coordinator for LPT     |
| John Sterling  | Yavapai-Prescott Indian Tribe                 | Environmental/<br>Environmental Technician               | Planning Team participant<br>Secondary Jurisdictional Point of Contact<br>Local Planning Team resource |
| Amber Tyson  | Yavapai-Prescott Indian Tribe                 | Environmental/<br>Environmental Technician<br>Specialist | Jurisdictional Point of Contact<br>Lead coordinator for LPT<br>Planning Team participant               |
| Lynn Whitman   | Yavapai County Flood Control                  | Flood/Senior Hydrologist                                 | Planning Team participant<br>Former Jurisdictional Point of Contact                                    |
| Darrell Willis   | City of Prescott                              | Fire / Emergency MGT<br>/Division Chief                  | Jurisdictional Point of Contact<br>Lead coordinator for LPT<br>Planning Team participant               |
| Susan Wood   | Arizona Division of Emergency<br>Management   | Project Manager  | Management level support for planning<br>effort, Mitigation strategy development                       |

Lists of Local Planning Team members and their respective roles, for each jurisdiction, are provided in Appendix B.

### 3.4.2 Planning Team Activities

The Planning Team met for the first time on October 26, 2010 to begin the planning process. Two more meetings were convened on about a monthly basis (except the last one) to step through the plan review and update process. Planning Team members used copies of the 2006 Plan for their jurisdiction for review and reference. Following each Planning Team meeting, the Point of Contact for each jurisdiction would convene meetings with the Local Planning Team as needed to work through the assignments. Table 3-3 summarizes the Planning Team meetings along with a brief list of the agenda items discussed. Detailed meeting notes for all of the Planning Team meetings are provided in Appendix B. There are no details of the Local Planning Team meetings.

**Table 3-3: Summary of planning meetings convened as part of the plan update process**

| <b>Meeting Type, Date, and Location</b>   | <b>Meeting Agenda</b>  |
|---|--|
| <p>Planning Team Meeting No. 1</p> <p><u>Initial Meeting:</u><br/>October 26, 2010</p> <p>Yavapai County<br/>Public Safety Complex<br/>Cottonwood, AZ</p> | <ul style="list-style-type: none"> <li>• INTRODUCTIONS / GREETING</li> <li>• MITIGATION PLANNING OVERVIEW</li> <li>• CURRENT MITIGATION PLAN REVIEW</li> <li>• PLANNING PROCESS                             <ul style="list-style-type: none"> <li>a. MJ Planning Team Roles</li> <li>b. Public Involvement Strategy</li> </ul> </li> <li>• RISK ASSESSMENT                             <ul style="list-style-type: none"> <li>a. Hazard Identification / Profiling</li> <li>b. Asset Inventory</li> </ul> </li> <li>• PREVIOUS MITIGATION PROJECTS</li> <li>• OTHER DATA NEEDS</li> <li>• NEXT MEETING DATES</li> <li>• ACTION ITEM SUMMARY</li> </ul>  |
| <p>Planning Team Meeting No. 2</p> <p>December 14, 2010</p> <p>Prescott Valley Library,<br/>Crystal Room<br/>Prescott Valley, AZ</p>                      | <ul style="list-style-type: none"> <li>• ACTION ITEM REVIEW/STATUS</li> <li>• HAZARD PROFILE MAP/INFORMATION REVIEW</li> <li>• CAPABILITY ASSESSMENT                             <ul style="list-style-type: none"> <li>a. Jurisdictional Capabilities</li> <li>b. Prior Mitigation Activities</li> <li>c. NFIP Participation and Status</li> <li>d. Repetitive Loss Properties</li> </ul> </li> <li>• PLAN MAINTENANCE STRATEGY                             <ul style="list-style-type: none"> <li>a. Review/discuss activity for last plan cycle</li> <li>b. Strategize new monitoring schedule</li> <li>c. Documentation of activity</li> <li>d. Responsibility</li> </ul> </li> <li>• PLAN UPDATE                             <ul style="list-style-type: none"> <li>a. Review scope and schedule in current plan</li> <li>b. Revise/Update scope and schedule for new plan</li> </ul> </li> <li>• PLAN INCORPORATION                             <ul style="list-style-type: none"> <li>a. Discuss past ways of incorporation</li> <li>b. Discuss challenges/successes/obstacles</li> <li>c. Formulate future mechanisms for incorporation</li> </ul> </li> <li>• CONTINUED PUBLIC INVOLVEMENT                             <ul style="list-style-type: none"> <li>a. Discuss past public involvement</li> <li>b. Identify future public involvement opportunities</li> </ul> </li> <li>• PLAN IMPLEMENTATION</li> <li>• MEETING ENDING                             <ul style="list-style-type: none"> <li>a. Review of action items</li> <li>b. Next meeting reminder/verification</li> </ul> </li> </ul> |
| <p>Planning Team Meeting No. 3</p> <p>January 11, 2011</p> <p>Cottonwood Parks and<br/>Recreation Building<br/>Cottonwood, AZ</p>                         | <ul style="list-style-type: none"> <li>• ACTION ITEM REVIEW/STATUS</li> <li>• VULNERABILITY ANALYSIS REVIEW</li> <li>• MITIGATION GOALS AND OBJECTIVES REVIEW/UPDATE</li> <li>• MITIGATION ACTION/PROJECT FORMULATION AND IMPLEMENTATION STRATEGY</li> <li>• MEETING ENDING                             <ul style="list-style-type: none"> <li>a. Review of action items</li> </ul> </li> </ul>  |

**Table 3-3: Summary of planning meetings convened as part of the plan update process**

| Meeting Type, Date, and Location  | Meeting Agenda  |
|---|---|
| Tribal Planning Team Meeting No. 1<br><br>February 3, 2011<br><br>Yavapai-Prescott Indian Tribe Police Training Room, 530 West Merritt Street, Prescott, AZ | <ul style="list-style-type: none"> <li>• INTRODUCTION</li> <li>• MITIGATION PLANNING OVERVIEW</li> <li>• TRIBAL ASSURANCES</li> <li>• AGENCY COORDINATION</li> <li>• PLAN INTEGRATION</li> <li>• PUBLIC INVOLVEMENT</li> <li>• CULTURAL/SACRED SITE VULNERABILITY ASSESSMENT</li> <li>• CAPABILITY ASSESSMENT                             <ul style="list-style-type: none"> <li>a. Summary of legal and regulatory capabilities</li> <li>b. Summary of technical staff and personnel capabilities</li> <li>c. Summary of fiscal capabilities</li> <li>d. Summary of departments/entities with pre- and/or post-disaster hazard management responsibilities</li> </ul> </li> <li>• MITIGATION STRATEGY PROGRESS ASSESSMENT</li> </ul> |

**3.4.3 Agency/Organizational Participation**

In addition to the adopting jurisdictions listed in Section 1.2, several agencies and organizations that operate within or have jurisdiction over small and large areas of Yavapai County were invited to participate in the planning process. Following the first Planning Team meeting, invitations were extended to several entities via both email and letter, to provide an opportunity for participation in the planning process. Copies of the various email and letter invitations are provided in Appendix B. The following is a partial list of the various agencies/organizations invited:

- Arizona Public Service
- Arizona Water Company
- Camp Verde Fire District
- Camp Verde Health Center
- Camp Verde Sanitary District
- Camp Verde Unified School District
- Camp Verde Water
- Central Yavapai Fire District
- Chino Valley Chamber of Commerce
- Chino Valley Unified School District
- Clarkdale Chamber of Commerce
- Clarkdale Fire District
- Clarkdale-Jerome School District
- Cottonwood Chamber of Commerce
- Oak Creek Water Company
- Phoenix Cement
- Prescott Chamber of Commerce
- Embry Riddle Aeronautical University
- Prescott National Forest
- Qwest Communications
- Sedona Fire District
- Sedona-Oak Creek School District
- Several Local Churches
- Several Local Businesses
- Unisource Energy
- Verde Canyon Railroad
- Yavapai-Apache Nation
- Yavapai College
- Yavapai County Sheriff's Office

Table 3-4 summarizes the organizations and agencies that participated in the 2006 Plan and those that participated in the 2010-2011 plan update process. An explanation of the differences between the two lists is also provided where appropriate.

**Table 3-4: Comparative summary of agency/organization participation in the plan update process**

| Agency / Organization                    | Participation |           | Explanation   |
|--|---------------|-----------|---|
|  | 2006 Plan     | 2011 Plan |   |
| Arizona Division of Emergency Management | yes           | yes       |   |
| Arizona Water Company                    | no            | yes       | Participation primarily due to a more direct invitation process |
| City of Cottonwood                       | yes           | yes       |   |
| Camp Verde Sanitary District             | no            | yes       | Participation primarily due to a more direct invitation process |
| City of Prescott                         | yes           | yes       |   |
| City of Sedona                           | yes           | yes       |   |
| Clarkdale Fire District                  | no            | yes       | Participation primarily due to a more direct invitation process |
| JE Fuller/ Hydrology & Geom.             | yes           | yes       |   |

**Table 3-4: Comparative summary of agency/organization participation in the plan update process**

| Agency / Organization            | Participation |           | Explanation  |
|----------------------------------|---------------|-----------|--|
|                                  | 2006 Plan     | 2011 Plan |  |
| Sedona Fire District             | no            | yes       | Participation primarily due to a more direct invitation process              |
| Sedona-Oak Creek School District | no            | yes       | Participation primarily due to a more direct invitation process              |
| Town of Camp Verde               | yes           | yes       |  |
| Town of Chino Valley             | yes           | yes       |  |
| Town of Clarkdale                | yes           | yes       |  |
| Town of Dewey-Humboldt           | no            | yes       | Dewey-Humboldt was not incorporated at the time of the 2006 Plan development |
| Town of Jerome                   | yes           | yes       |  |
| Town of Prescott Valley          | yes           | yes       |  |
| Unisource Energy                 | no            | yes       | Participation primarily due to a more direct invitation process              |
| Yavapai College                  | no            | yes       | Participation primarily due to a more direct invitation process              |
| Yavapai County                   | yes           | yes       |  |
| Yavapai-Apache Nation            | no            | yes       |  |
| Yavapai-Prescott Indian Tribe    | yes           | yes       |  |

An integral part of the planning process included coordination with agencies and organizations outside of the participating jurisdiction’s governance to obtain information and data for inclusion into the Plan or to provide more public exposure to the planning process. Much of the information and data that is used in the risk assessment is developed by agencies or organizations other than the participating jurisdictions. In some cases, the jurisdictions may be members of a larger organization that has jointly conducted a study or planning effort like the development of a community wildfire protection plan or participation in an area association of governments. Examples of those data sets include the FEMA floodplain mapping, the county-wide community wildfire protection plan, severe weather statistics and incidents, and the Northern Arizona Council of Governments. A summary of the resources obtained, reviewed and compiled into the risk assessment are summarized at the end of each subsection of Section 5.3 and in Section 3.6. Jurisdictions needing these data sets obtained them by requesting them directly from the host agency or organization, downloading information posted to website locations, or engaging consultants.

### 3.5 Public Involvement

#### 3.5.1 Previous Plan Assessment

The pre-draft public involvement strategy for the 2006 Plan development included two public meetings that were advertised using local radio and newspaper announcements and convened in different geographic regions of the county. A general press release announcing the planning process was also made.

The post-draft strategy requested public comment and participation in the formal council and board of supervisors meetings wherein the 2006 Plans were presented and promulgated. The details of the meeting process varied from jurisdiction to jurisdiction, but typically included some form of advertisement of the meeting agenda two to four weeks in advance of the council/board meeting. In most cases, an informal, pre-adoption presentation of the 2006 Plan was made during a working session of the council/board. The final adoptions of the resolutions were almost unanimously done as part of a consent agenda at a formal council/board meeting.

Attendance at the public meetings was extremely small and there were no recorded comments of any significance related to the mitigation planning effort. Most were related to other county activities. There were also no records of any public comment on the 2006 Plan adoption process. The Planning Team discussed the prior public involvement actions and concluded that the pre-draft public meetings were not an efficient use of time and resources, especially given the extremely low turnout. The Planning Team also concluded that more web-based technology should be used for the update. Also,

since any formal council/board action has a built-in public notification and comment opportunity, the Planning Team chose to continue using this process as one of the post-draft mechanisms for getting the Plan before the public.

### *3.5.2 Plan Update*

Pre-draft public involvement and input to the planning process was encouraged cooperatively among all of the participating jurisdictions using the following strategies:

- Yavapai County prepared a webpage with a public notice announcing the planning process and providing contact information for further inquiries.
- Each local jurisdiction with a website developed a similar posting with a link to the county's website.
- Local jurisdictions included notices of the planning effort as follows:
  - Clarkdale included an announcement in their "Small Talk" town newsletter
  - Cottonwood ran an article announcement in the Cottonwood Journal Extra.
  - Sedona distributed a news release in their Sedona.Biz outlet and was interviewed for an article appearing in the Red Rock News.

On the county website, email, phone, and fax contact information for the Yavapai County Emergency Manager are provided. Any comments would be routed to the emergency manager for address and further action. Additionally, city and town postings and announcements also include phone and/or email contact information for the Planning Team representative for their community. No questions, concerns, or responses were received from the first round of notices from the general public.

The post-draft public involvement included the following actions:

- Update of the County website to include the draft Plan.
- A press release announcing the posting of the draft Plan to the Pinal County website and requesting comment.
- Notices will be posted to each jurisdiction's website (as appropriate) notifying readers that the draft Plan is completed and available for comment via the County website, for which links will be provided.
- Kearny and Superior will publish notification articles in their local papers announcing the draft Plan availability and the website address.

All of the notices, postings, and articles encouraged review and comment of the draft Plan by the public. Interested citizens were also encouraged to participate in the local community adoption process which, depending upon the jurisdiction, may have included a public meeting and a formal public hearing. Copies of the pre- and post-draft public notices, web pages, and newspaper notices are provided in Appendix C.

**3.6 Reference Documents and Technical Resources**

Over the course of the update planning process, numerous other plans, studies, reports, and technical information were obtained and reviewed for incorporation or reference purposes. The majority of sources referenced and researched pertain to the risk assessment and the capabilities assessment. To a lesser extent, the community descriptions and mitigation strategy also included some document or technical information research. Table 3-5 provides a reference listing of the primary documents and technical resources reviewed and used in the Plan. Detailed bibliographic references for the risk assessment are provided at the end of each hazard risk profile in Section 5.3. Other bibliographic references are provided as footnotes.

| <b>Table 3-5: List of resource documents and references reviewed and incorporated in the plan update process</b> |                                     |   |
|--|-------------------------------------|---|
| <b>Referenced Document or Technical Source</b>   | <b>Resource Type</b>                | <b>Description of Reference and Its Use</b>   |
| AZ Department of Commerce  | Website Data and Community Profiles | Reference for demographic and economic data for the county. Used for community descriptions   |
| AZ Division of Emergency Management  | Data and Planning Resource          | Resource for state and federal disaster declaration information for Arizona. Also a resource for hazard mitigation planning guidance and documents.   |
| AZ Department of Water Resources   | Technical Resource                  | Resource for data on drought conditions and statewide drought management (AzGDTF), and dam safety data. Used in risk assessment.  |
| AZ Geological Survey   | Technical Resource                  | Resource for earthquake, fissure, landslide/mudslide, subsidence, and other geological hazards. Used in the risk assessment.  |
| AZ Model Local Hazard Mitigation Plan  | Hazard Mitigation Plan              | Guidance document for preparing and formatting hazard mitigation plans for Arizona.   |
| AZ State Land Department   | Data Source                         | Source for statewide GIS coverages (ALRIS) and statewide wildfire hazard profile information (Division of Forestry). Used in the risk assessment.   |
| AZ Wildland Urban Interface Assessment (2004)  | Report                              | Source of wildfire hazard profile data and urban interface at risk communities. Used in the risk assessment.  |
| AZ Workforce Informer  | Website                             | Source for employment statistics in Arizona.  |
| Bureau Net (2010)  | Website Database                    | Source for NFIP statistics for Arizona.   |
| City of Cottonwood Multi-Hazard Mitigation Plan (2006)   | Hazard Mitigation Plan              | FEMA approved hazard mitigation plan that together with the other Pinal County jurisdiction's MHMPs, formed the starting point for the update process. See Section 2.4 for further discussion |
| City of Prescott Multi-Hazard Mitigation Plan (2006)   | Hazard Mitigation Plan              | FEMA approved hazard mitigation plan that together with the other Pinal County jurisdiction's MHMPs, formed the starting point for the update process. See Section 2.4 for further discussion |
| City of Sedona Multi-Hazard Mitigation Plan (2006)   | Hazard Mitigation Plan              | FEMA approved hazard mitigation plan that together with the other Pinal County jurisdiction's MHMPs, formed the starting point for the update process. See Section 2.4 for further discussion |
| Cottonwood General Plan 2003-2013  | General Plan                        | Source for history, demographic and development trend data for the city.  |
| Town of Camp Verde Multi-Hazard Mitigation Plan 2006   | Hazard Mitigation Plan              | FEMA approved hazard mitigation plan that together with the other Pinal County jurisdiction's MHMPs, formed the starting point for the update process. See Section 2.4 for further discussion |
| Town of Chino Valley Multi-Hazard Mitigation Plan 2006   | Hazard Mitigation Plan              | FEMA approved hazard mitigation plan that together with the other Pinal County jurisdiction's MHMPs, formed the starting point for the update process. See Section 2.4 for further discussion |
| Town of Clarkdale General Plan   | General Plan                        | Source for history, demographic and development trend data for the town.  |
| Town of Clarkdale Multi-Hazard Mitigation Plan 2006  | Hazard Mitigation Plan              | FEMA approved hazard mitigation plan that together with the other Pinal County jurisdiction's MHMPs, formed the starting point for the update process. See Section 2.4 for further discussion |
| Town of Dewey-Humboldt Multi-Hazard Mitigation Plan (2006)   | Hazard Mitigation Plan              | FEMA approved hazard mitigation plan that together with the other Pinal County jurisdiction's MHMPs, formed the starting point for the update process. See Section 2.4 for further discussion |
| Town of Jerome Multi-Hazard Mitigation Plan (2006)   | Hazard Mitigation Plan              | FEMA approved hazard mitigation plan that together with the other Pinal County jurisdiction's MHMPs, formed the starting point for the update process. See Section 2.4 for further discussion |
| Town of Prescott Valley Multi-Hazard Mitigation Plan (2006)  | Hazard Mitigation Plan              | FEMA approved hazard mitigation plan that together with the other Pinal County jurisdiction's MHMPs, formed the starting point for the update process. See Section 2.4 for further discussion |

| <b>Table 3-5: List of resource documents and references reviewed and incorporated in the plan update process</b> |                                 |   |
|--|---------------------------------|---|
| <b>Referenced Document or Technical Source</b>   | <b>Resource Type</b>            | <b>Description of Reference and Its Use</b>   |
| Town of Prescott Valley General Plan 2020  | General Plan                    | Source for history, demographic and development trend data for the town.  |
| Federal Emergency Management Agency  | Technical and Planning Resource | Resource for HMP guidance (How-To series), floodplain and flooding related NFIP data (mapping, repetitive loss, NFIP statistics), and historic hazard incidents. Used in the risk assessment and mitigation strategy. |
| HAZUS-MH   | Technical Resource              | Based data sets within the program were used in the vulnerability analysis.   |
| National Climatic Data Center  | Technical Resource              | Online resource for weather related data and historic hazard event data. Used in the risk assessment.   |
| National Weather Service   | Technical Resource              | Source for hazard information, data sets, and historic event records. Used in the risk assessment.  |
| National Wildfire Coordination Group (2010)  | Technical Resource              | Source for historic wildfire hazard information. Used in the risk assessment.   |
| Office of the State Climatologist for AZ   | Website Reference               | Reference for weather characteristics for the county. Used for community description.   |
| Standard on Disaster/Emergency Management and Business Continuity Programs (2000)                                | Standards Document              | Used to establish the classification and definitions for the asset inventory. Used in the risk assessment.  |
| State of Arizona Hazard Mitigation Plan (2007)   | Hazard Mitigation Plan          | The state plan was used a source of hazard information and the state identified hazards were used as a starting point in the development of the risk assessment.  |
| USACE Flood Damage Report (1978)   | Technical Data                  | Source of historic flood damages for 1978 flood. Used in the risk assessment.   |
| USACE Flood Damage Report (1994)   | Technical Data                  | Source of historic flood damages for 1993 flood. Used in the risk assessment.   |
| US Forest Service  | Technical Data                  | Source for local wildfire data. Used in the risk assessment.  |
| US Geological Survey   | Technical Data                  | Source for geological hazard data and incident data. Used in the risk assessment.   |
| Yavapai-Prescott Indian Tribe's Land Use Master Plan   | Master Land Use Plan            | Source of land planning information on tribal lands.  |
| Yavapai-Prescott Indian Tribe Water Management Plan (1999)   | Technical Resource              | Information and data are shared between the Water Management Plan and the drought hazard profile where it pertains to the Tribe.  |
| Wildland Fire Management Plan Yavapai-Prescott Indian Reservation (2003)   | Technical Resource              | Information and data are shared between the Wildland Fire Management Plan and the wildfire hazard profile where it pertains to the Tribe.   |
| Western Regional Climate Center  | Website Data                    | Online resource for climate data used in climate discussion of Section 4  |
| World Wildlife Fund (2010)   | GIS Data                        | Terrestrial ecoregions database used in the general county description.   |

## SECTION 4: COMMUNITY DESCRIPTIONS

### 4.1 General

The purpose of this section is to provide updated basic background information on Yavapai County as a whole and includes information on geography, climate, population and economy. Abbreviated details and descriptions are also provided for each participating jurisdiction.

### 4.2 County Overview

#### 4.2.1 Geography

According to the AZ Department of Commerce<sup>2</sup>, Yavapai County was formed along with the original four counties created when Arizona was still a territory. Known as the “Mother of Counties”, Yavapai County was initially more than 65,000 square miles from which five other counties were later formed. Today, Yavapai County covers 8,125 square miles, with Prescott as its County seat. Yavapai County is located in the central portion of the State of Arizona, as depicted in Figure 4-1.

The County limits generally extend from longitude 111.5 to 113.3° west and latitude 33.9 to 35.5° north. Major roadway transportation routes through the County include Interstates 17 and 40, U.S. Highway 93, State Routes 69, 71, 89, 89A, 96, 97, 169, 179, and 260. Railways include the Burlington Northern Santa Fe Railway and Arizona Central Railway. Figure 4-2 shows all the major roadway and railway transportation routes and the airports within Yavapai County.

Yavapai County is home to portions of five rivers and four mountain ranges. The Verde River is the longest stretch of riparian area which has year-long flows and is located along the eastern portion of the County. All the other rivers have intermittent flows and include the Santa Maria River, Aqua Fria River, Hassayampa River, and a small segment of New River. Except to the north, Prescott is nearly surrounded by the four mountain ranges, which are the Bradshaws, Black Hills, Weaver Mountains, and Sierra Prieta. This sort of geographical characteristics can be used to identify terrestrial ecoregions.

The geographical characteristics of Yavapai County have been mapped into three terrestrial ecoregions<sup>3</sup>, which are depicted in Figure 4-3 and described below:

- **Arizona Mountain Forests** – this ecoregion contains a mountainous landscape, with moderate to steep slopes. Elevations in this zone range from approximately 4,000 to 13,000 feet, resulting in comparatively cool summers and cold winters. Vegetation in these areas is largely high altitude grasses, shrubs, brush, and conifer forests.
- **Sonoran Desert** – this ecoregion is an arid environment that covers much of southwestern Arizona. The elevation varies in this zone from approximately sea level to 3,000 feet. Vegetation in this zone is comprised mainly of Sonoran Desert Scrub and is one of the few locations in the world where saguaro cactus can be found. The climate is typically hot and dry during the summer and mild during the winter.
- **Colorado Plateau Shrublands** – this ecoregion covers a small portion of the North-West corner of the County with elevations that average around 4,000-5,000 feet. Vegetation in this ecoregion is comprised mainly of Plains Grassland and Great Basin Desert scrub. Temperatures can vary widely in this zone, with comparatively warm summers and cool winters.

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<sup>2</sup> Arizona Department of Commerce, 2003, *Community Profile for Yavapai County*

<sup>3</sup> URS, 2004, *State of Arizona All Hazard Mitigation Plan*

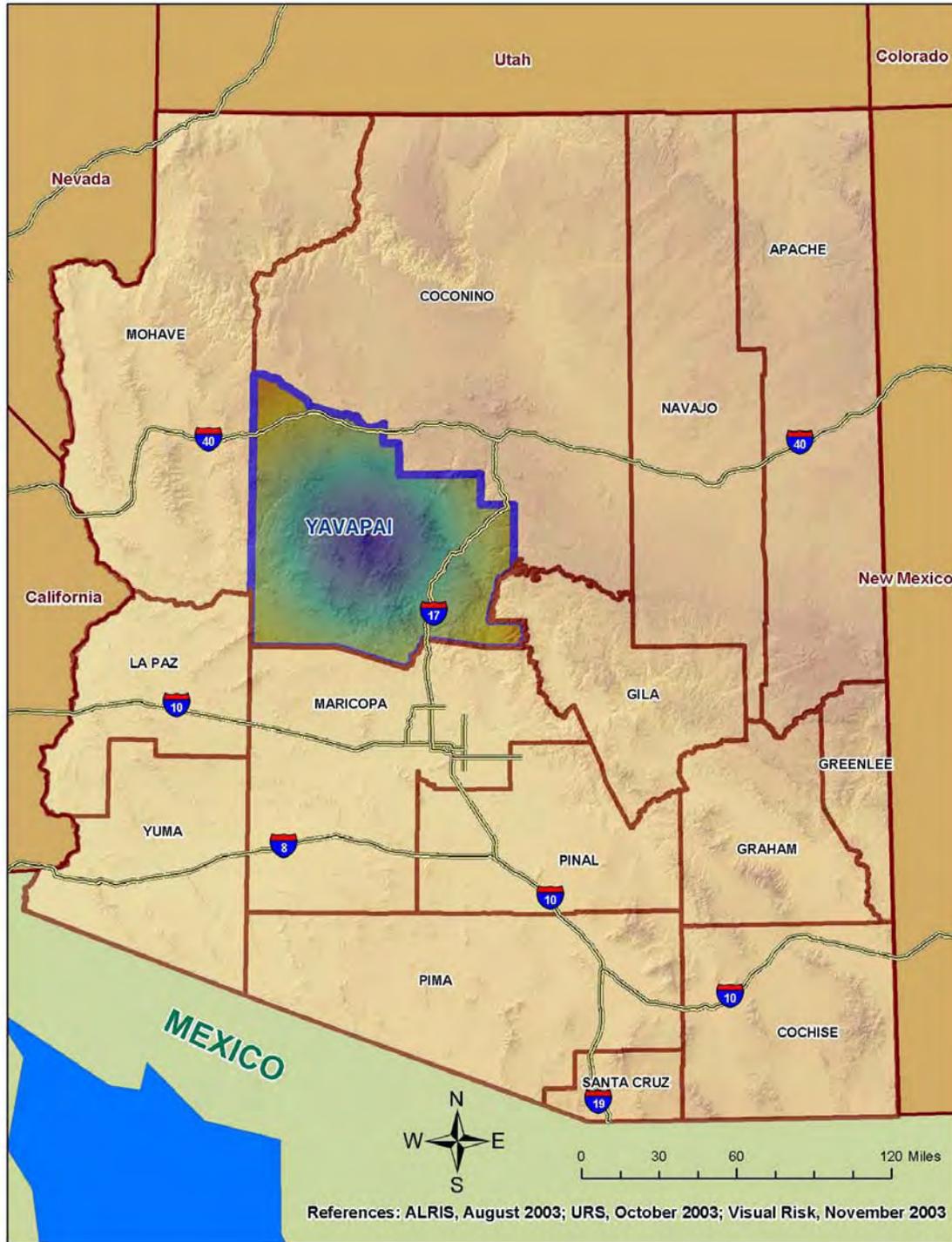


Figure 4-1  
Vicinity Map

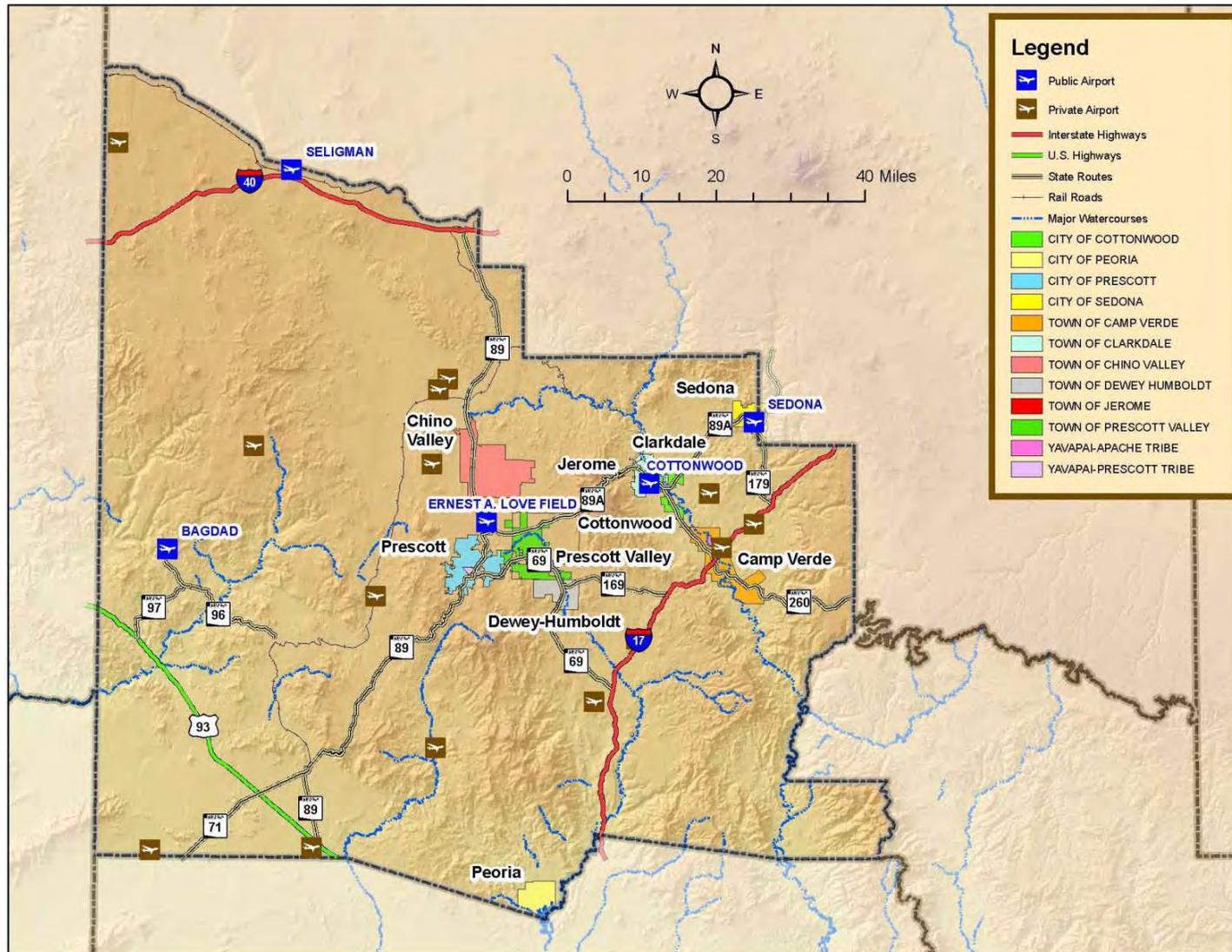


Figure 4-2  
 Transportation Routes Map

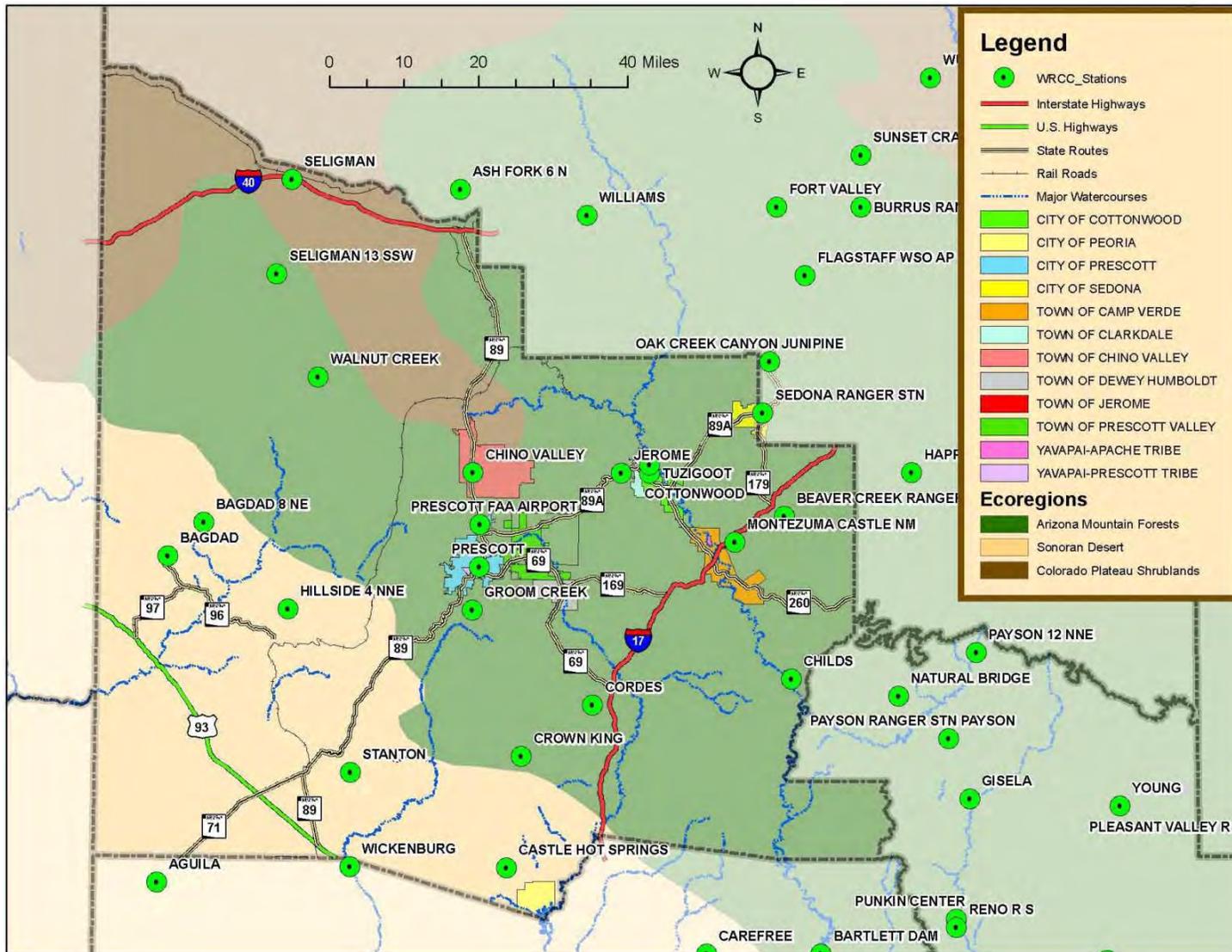
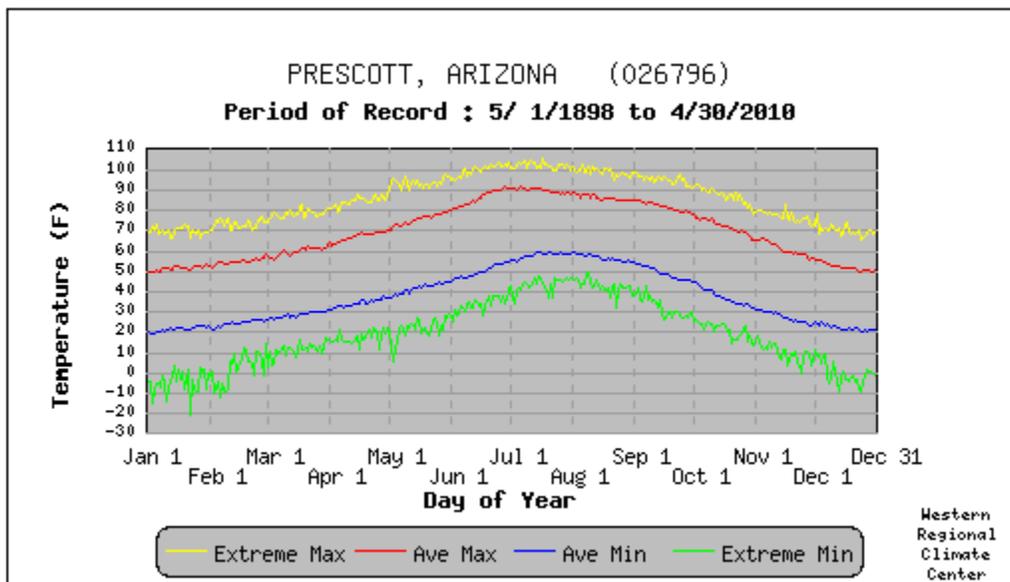


Figure 4-3  
 Terrestrial Ecoregions Map

4.2.2 *Climate*

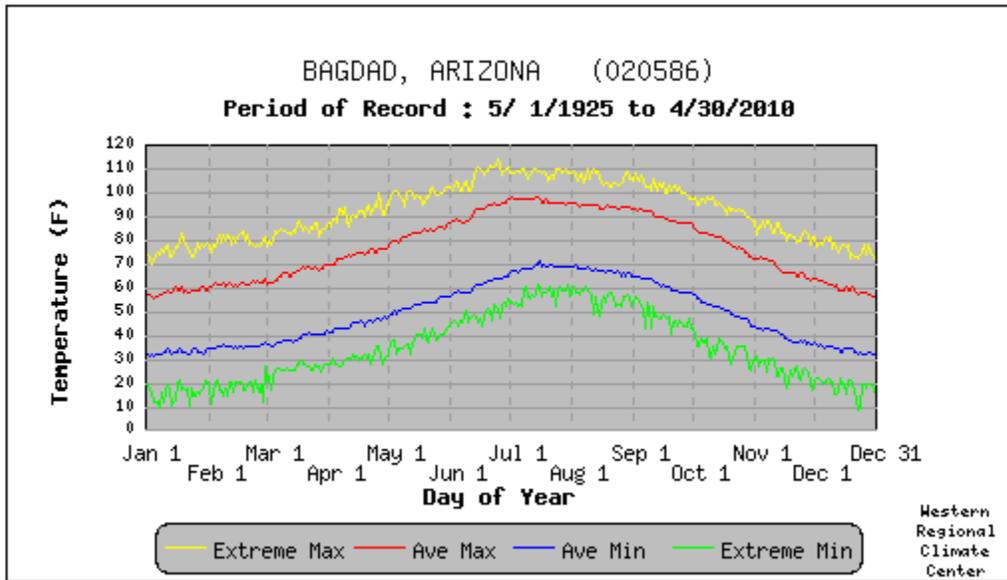
The majority of Yavapai County can be classified as Sonoran Desert and Arizona Mountain Forest. The elevation range for these two ecoregions in the County is from approximately 2,000-8,000 feet. Such a range in elevation results in differences in climate. Climatic statistics for weather stations within the County are produced by the Western Region Climate Center<sup>4</sup> and span records dating back to the early 1900's. Locations of reporting stations within or near the County are shown on Figure 4-3.

Average temperatures within Yavapai County range from below freezing during the winter months to over 100°F during the hot summer months. The severity of temperatures in either extreme is highly dependent upon the location, and more importantly the altitude, within the County. Below are figures taken from three climate stations found in the three ecoregions (See Section 4.2.1) found in the County. Figure 4-4 presents a graphical depiction of temperature variability and extremes throughout the year for the Prescott station, and it shows values typical to the Arizona Mountain Forest ecoregion. A similar graph is presented in Figure 4-5 for the Bagdad station, which is typical of the Sonoran Desert ecoregion. Figure 4-6 shows the temperature variability for the Seligman station and is typical of the Colorado Plateau Shrublands ecoregion. In general, there is an approximate ten degree reduction in temperatures between the lower Sonoran Desert and upper Arizona Mountain Forest elevation stations.

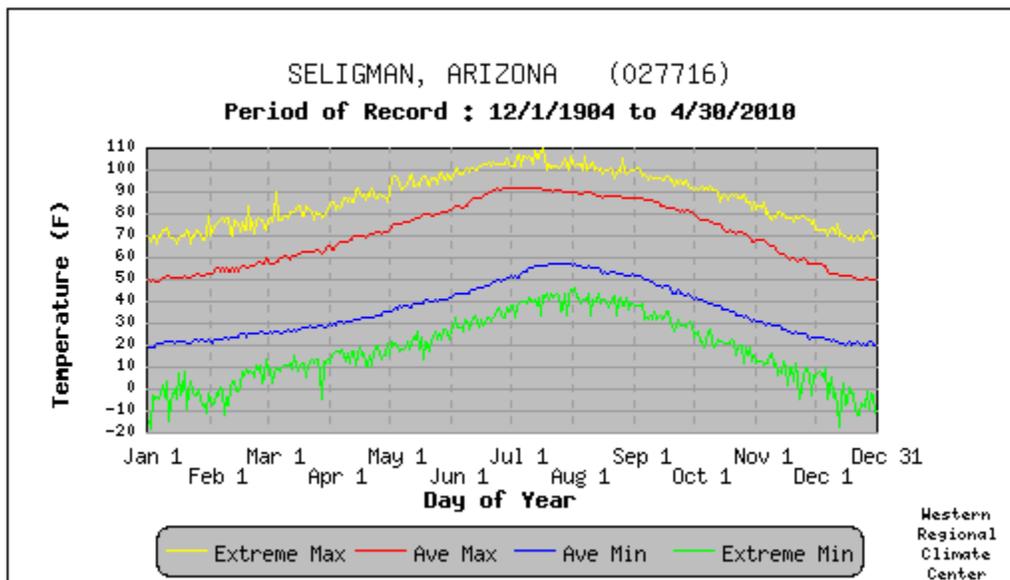


**Figure 4-4  
Daily Temperatures and Extremes for Prescott, Arizona**

<sup>4</sup> Most of the data provided and summarized in this plan are taken from the WRCC website beginning at the following URL: <http://www.wrcc.dri.edu/CLIMATEDATA.html>



**Figure 4-5**  
**Daily Temperatures and Extremes for Bagdad, Arizona**



**Figure 4-6**  
**Daily Temperatures and Extremes for Seligman, Arizona**

Precipitation throughout Yavapai County is governed to a great extent by elevation and season of the year. From November through March, storm systems from the Pacific Ocean cross the state as broad winter storms producing mild precipitation events and snowstorms at the higher elevations. Summer rainfall begins early in July and usually lasts until mid-September. Moisture-bearing winds move into Arizona at the surface from the southwest (Gulf of California) and aloft from the southeast (Gulf of Mexico). The shift in wind direction, termed the North American Monsoon, produces summer rains in the form of thunderstorms that result largely from excessive heating of the land surface and the subsequent lifting of moisture-laden air, especially along the primary mountain ranges. Thus, the strongest thunderstorms are usually found in the mountainous regions of the central southeastern portions of Arizona. These thunderstorms are often accompanied by strong winds, blowing dust, and

infrequent hail storms<sup>5</sup>.

Figures 4-7, 4-8, and 4-9 show tabular temperature and precipitation statistics for the Prescott, Bagdad, and Seligman stations. Statistics for other stations shown on Figure 1-3 will be somewhat similar to those of the Prescott, Bagdad, and Seligman stations, and hence are not included herein.

| <b>PRESCOTT, ARIZONA (026796)</b>  |      |      |      |      |      |      |      |      |      |      |      |      |        |
|--|------|------|------|------|------|------|------|------|------|------|------|------|--------|
| <b>Period of Record Monthly Climate Summary</b>  |      |      |      |      |      |      |      |      |      |      |      |      |        |
| <b>Period of Record : 5/ 1/1898 to 4/30/2010</b>   |      |      |      |      |      |      |      |      |      |      |      |      |        |
|  | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  | Annual |
| Average Max. Temperature (F)   | 50.7 | 54.0 | 59.2 | 66.8 | 75.5 | 85.8 | 89.0 | 86.1 | 81.8 | 72.0 | 60.6 | 51.7 | 69.4   |
| Average Min. Temperature (F)   | 21.3 | 24.2 | 28.4 | 34.2 | 40.9 | 49.2 | 57.6 | 56.2 | 48.6 | 37.3 | 27.5 | 22.0 | 37.3   |
| Average Total Precipitation (in.)  | 1.77 | 1.85 | 1.71 | 0.93 | 0.48 | 0.39 | 2.89 | 3.22 | 1.70 | 1.09 | 1.23 | 1.67 | 18.92  |
| Average Total SnowFall (in.)   | 5.9  | 4.7  | 4.9  | 1.2  | 0.2  | 0.0  | 0.0  | 0.0  | 0.0  | 0.2  | 2.1  | 4.6  | 23.8   |
| Average Snow Depth (in.)   | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0      |
| Percent of possible observations for period of record.   |      |      |      |      |      |      |      |      |      |      |      |      |        |
| Max. Temp.: 97.1% Min. Temp.: 96.7% Precipitation: 98.1% Snowfall: 97.5% Snow Depth: 94.5%                           |      |      |      |      |      |      |      |      |      |      |      |      |        |
| Check <a href="#">Station Metadata</a> or <a href="#">Metadata graphics</a> for more detail about data completeness. |      |      |      |      |      |      |      |      |      |      |      |      |        |
| Western Regional Climate Center, <a href="mailto:wrcc@dri.edu">wrcc@dri.edu</a>                                      |      |      |      |      |      |      |      |      |      |      |      |      |        |

**Figure 4-7**  
**Monthly Climate Summary for Prescott, Arizona**

| <b>BAGDAD, ARIZONA (020586)</b>  |      |      |      |      |      |      |      |      |      |      |      |      |        |
|--|------|------|------|------|------|------|------|------|------|------|------|------|--------|
| <b>Period of Record Monthly Climate Summary</b>  |      |      |      |      |      |      |      |      |      |      |      |      |        |
| <b>Period of Record : 5/ 1/1925 to 4/30/2010</b>   |      |      |      |      |      |      |      |      |      |      |      |      |        |
|  | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  | Annual |
| Average Max. Temperature (F)   | 58.3 | 61.3 | 66.3 | 73.7 | 82.9 | 92.0 | 96.6 | 94.3 | 89.6 | 79.4 | 67.9 | 59.8 | 76.8   |
| Average Min. Temperature (F)   | 32.7 | 34.9 | 38.6 | 44.4 | 52.6 | 61.0 | 68.6 | 67.2 | 61.2 | 50.5 | 39.8 | 33.8 | 48.8   |
| Average Total Precipitation (in.)  | 1.68 | 1.99 | 1.42 | 0.73 | 0.29 | 0.27 | 1.29 | 2.16 | 1.27 | 1.01 | 0.91 | 1.43 | 14.45  |
| Average Total SnowFall (in.)   | 0.7  | 0.5  | 0.4  | 0.1  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.2  | 0.8  | 2.7    |
| Average Snow Depth (in.)   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0      |
| Percent of possible observations for period of record.   |      |      |      |      |      |      |      |      |      |      |      |      |        |
| Max. Temp.: 82.1% Min. Temp.: 82.2% Precipitation: 87.9% Snowfall: 87.2% Snow Depth: 86.3%                           |      |      |      |      |      |      |      |      |      |      |      |      |        |
| Check <a href="#">Station Metadata</a> or <a href="#">Metadata graphics</a> for more detail about data completeness. |      |      |      |      |      |      |      |      |      |      |      |      |        |
| Western Regional Climate Center, <a href="mailto:wrcc@dri.edu">wrcc@dri.edu</a>                                      |      |      |      |      |      |      |      |      |      |      |      |      |        |

**Figure 4-8**  
**Monthly Climate Summary for Bagdad, Arizona**

<sup>5</sup> Office of the State Climatologist for Arizona, 2004. Partially taken from the following weblink:  
<http://geography.asu.edu/azclimate/narrative.htm>

**SELIGMAN, ARIZONA (027716)**

**Period of Record Monthly Climate Summary**

Period of Record : 12/1/1904 to 4/30/2010

|                                   | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  | Annual |
|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|--------|
| Average Max. Temperature (F)      | 51.3 | 55.2 | 61.4 | 69.1 | 78.0 | 87.6 | 91.4 | 88.5 | 83.9 | 73.7 | 62.1 | 52.5 | 71.2   |
| Average Min. Temperature (F)      | 21.5 | 24.1 | 27.1 | 32.1 | 38.9 | 46.4 | 55.3 | 54.2 | 46.9 | 36.6 | 27.2 | 21.7 | 36.0   |
| Average Total Precipitation (in.) | 0.98 | 0.98 | 0.97 | 0.52 | 0.34 | 0.35 | 1.82 | 2.07 | 1.10 | 0.78 | 0.70 | 0.94 | 11.56  |
| Average Total SnowFall (in.)      | 3.4  | 2.7  | 1.7  | 0.4  | 0.2  | 0.0  | 0.0  | 0.0  | 0.0  | 0.1  | 1.1  | 2.8  | 12.5   |
| Average Snow Depth (in.)          | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0      |

Percent of possible observations for period of record.

Max. Temp.: 90.4% Min. Temp.: 90.6% Precipitation: 92.8% Snowfall: 92.3% Snow Depth: 90%

Check [Station Metadata](#) or [Metadata graphics](#) for more detail about data completeness.

Western Regional Climate Center, [wrc@ari.edu](mailto:wrc@ari.edu)

**Figure 4-9**  
**Monthly Climate Summary for Seligman, Arizona**

4.2.3 *Population*

Yavapai County is home to 211,033 residents, with a large portion of the population living in Prescott and Prescott Valley. Table 4-1 summarizes jurisdictional population statistics for Yavapai County communities and the County as a whole.

| Jurisdiction   | 1990    | 2000    | 2010    | 2015    | 2020    |
|--|---------|---------|---------|---------|---------|
| Yavapai County (total)   | 108,500 | 160,075 | 211,033 | 275,056 | 305,343 |
| City, Towns and Reservations   |         |         |         |         |         |
| Camp Verde   | 6,375   | 8,955   | 10,873  | 14,990  | 16,550  |
| Chino Valley   | 4,835   | 7,860   | 10,817  | 20,681  | 24,299  |
| Clarkdale  | 2,170   | 3,135   | 4,097   | 4,160   | 4,368   |
| Cottonwood   | 5,930   | 9,405   | 11,265  | 13,988  | 15,343  |
| Dewey-Humboldt   | n/a     | 3,421   | 3,894   | 4,967   | 5,377   |
| Jerome   | 405     | 580     | 444     | 331     | 332     |
| Prescott   | 26,625  | 36,975  | 39,843  | 53,484  | 58,989  |
| Prescott Valley  | 9,040   | 23,285  | 38,822  | 50,372  | 58,044  |
| Sedona(Yavapai part only)  | n/a     | 7,229   | 8,424   | 8,963   | 9,451   |
| Yavapai-Apache Indian Tribe  | n/a     | 743     | 899     | 969     | 1,032   |
| Yavapai-Prescott Indian Tribe  | n/a     | 182     | 189     | 193     | 196     |
| <p>Note:</p> <ul style="list-style-type: none"> <li>Figures for 1990 and 2000 (1980 – 2008 Historical Estimates): <a href="http://www.azcommerce.com/econinfo/demographics/Population+Estimates.html">http://www.azcommerce.com/econinfo/demographics/Population+Estimates.html</a></li> <li>Figures for 2010 from AZ Dept of Commerce’s Arizona Workforce Informer, as accessed at: <a href="http://www.workforce.az.gov/?PAGEID=67&amp;SUBID=255">http://www.workforce.az.gov/?PAGEID=67&amp;SUBID=255</a></li> <li>Figures for 2015 and 2020 AZ Dept of Commerce’s Arizona Workforce Informer, as accessed at: <a href="http://www.workforce.az.gov/?PAGEID=67&amp;SUBID=257">http://www.workforce.az.gov/?PAGEID=67&amp;SUBID=257</a></li> </ul> |         |         |         |         |         |

*4.2.4 Economy*

As with most of the state and nation, the Yavapai County economy has slowed over the last few years. According to the AZ Department of Commerce, the major industries within the county include retail trade, public and private services, and public administration.<sup>6</sup> Tourism also continues to serve a significant role in the economic health of the county and communities. As of June 2011, the civilian workforce was estimated at 97,600 with an unemployment rate of 10.4%.

*4.2.5 Development History*

Yavapai County was established by the Arizona Territorial Government in 1864, with the first Territorial Capital established in Prescott. Miners migrated to south and western Yavapai County with the building of Fort Whipple and Fort Verde. In the 1870s, large deposits of copper were discovered in Jerome spawning smelters in Clarkdale and Cottonwood (formerly Clemenceau). The railroad through northern Arizona was constructed in the 1880s and attracted farmers and ranchers in combination with the vast grasslands of the Verde, Chino and Peebles Valleys. Mining operations continued well into the 20<sup>th</sup> century and businesses diversified maintaining growth even after the mines started shutting down in the 1940s and 50s.

In addition to the nine incorporated cities and towns, there are a total of 41 unincorporated communities scattered across the County, with many being comprised of only one structure or a prominent landmark. Within Yavapai County, the US Forest Service, US Bureau of Land Management, and State Land combined, constitute nearly 75% of land ownership. The majority of which is owned by the US Forest Service at 38%. Twenty-five (25%) is individually or corporately owned, and less than a half of a percent belongs to Yavapai-Prescott Indian Community and the Yavapai Apache Nation combined.<sup>7</sup> The City of Peoria has annexed land surrounding Lake Pleasant in Yavapai County. The City of Peoria participated in the Maricopa County Multi-Jurisdictional Hazard Mitigation Plan and will be treated as unincorporated Yavapai County for the purposes of this plan. Figure 4-9 provides a visual depiction of the land ownership and incorporated community locations within the County.

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<sup>6</sup> Az Dept of Commerce, 2009, *Community Profile for Yavapai County*

<sup>7</sup> Arizona Department of Commerce, 2003, *Community Profile for Yavapai County*

# YAVAPAI COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

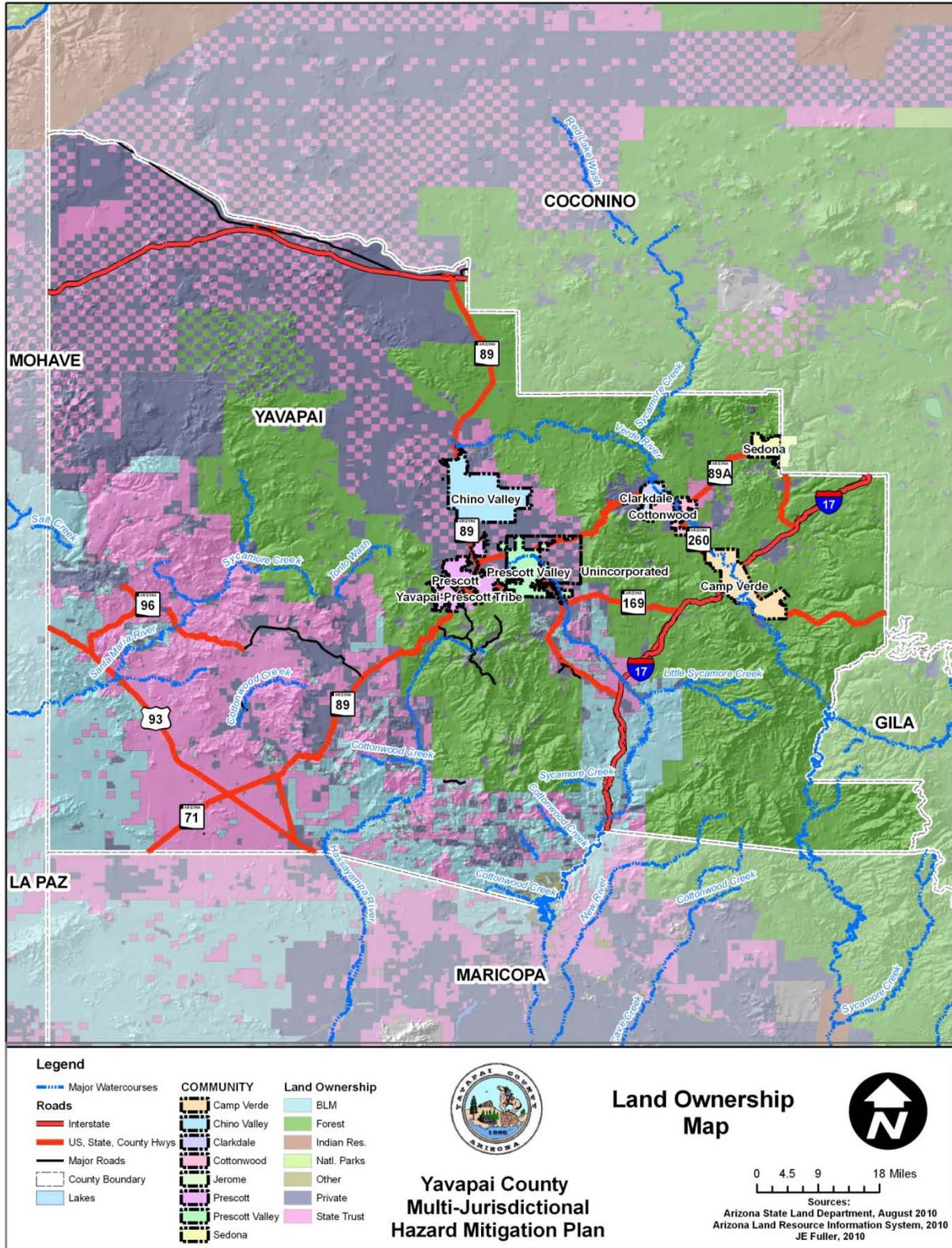


Figure 4-9: 2010 Land Ownership and Location for Yavapai County

### 4.3 Jurisdictional Overviews

The following are brief overviews for each of the participating jurisdictions in the Plan.

#### 4.3.1 *Camp Verde*

Historic Fort Verde State Park and Montezuma Castle National Monument provide a historic backdrop for the Verde Valley's oldest community. It was established as a military fort on the banks of the Verde River in 1865, to protect settlers. The Town now covers 46 square miles, and was incorporated in 1986. The mostly sunny weather and moderate year-round temperatures attract retirees, tourists and part-time residents. According to the AZ Department of Commerce<sup>8</sup>, Camp Verde was founded in 1865 and later incorporated in 1986.

Located near the geographical center of Arizona, the Town of Camp Verde is located in the eastern portion of Yavapai County, as depicted in Figure 4-2, and is situated at an elevation of 3,160 feet. The Town is geographically located at longitude 111.88° west and latitude 34.58° north, and is 92 miles north of Phoenix and 205 miles northwest of Tucson. State Route 260 and Interstate-17 pass through Camp Verde and serve as the major roadways servicing the community. The land ownership and major transportation routes around Camp Verde are shown on Figure 4-10.

The AZ Department of Commerce prepares annual community profiles for individual counties and communities within the state. The total 2010 population for Camp Verde is estimated at 10,873. Table 4-1 summarizes population estimates for Camp Verde and other Yavapai County communities in 10-year cycles beginning in 1990 and projecting through 2020.

Employment in Camp Verde is provided by a wide variety of services. Major public employers include: Camp Verde Unified School District, US Postal Service, Town of Camp Verde, and Yavapai County Justice Facility. Major private employers include Alco, Basha's, McDonald's, Bank One, and Cliff Castle Casino. The civilian labor force in June 2011 was 5,584 with an unemployment rate of 13.9%.

Camp Verde is the oldest community in the Verde Valley. Anglo Americans settled in the Verde River Valley in the early 1860s and shortly after came into conflict with Tonto-Apache and Yavapai Indians in the area. In 1865, voluntary military units established a tent camp to protect settlers from Indian attacks. The voluntary military was relieved in 1866 by the U.S. Army. Camp Lincoln was established in 1865 one mile north of the current site and re-named Camp Verde in 1868. The Army moved the camp in 1870 to the current location to avoid Malaria that plagued the area. Camp Verde was renamed to Fort Verde in 1879 and was eventually abandoned after the Indian Wars ceased and was eventually sold at a public auction in 1899. The Fort Verde Historic State Park offers remnants of this early history of Camp Verde.

Camp Verde has remained a strong community as a result of its desirable climate, geographic location and proximity to tourist attractions including Montezuma Castle National Monument, Tuzigoot National Monument and the Historic Fort Verde. New building permits declined from an estimated 252 in 2000 to 164 in 2008. Taxable sales from 2000 are estimated at \$79.9 million and have increased to \$122.9 million in 2008.

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<sup>8</sup> Arizona Department of Commerce, 2009, *Community Profile for Camp Verde, Arizona*

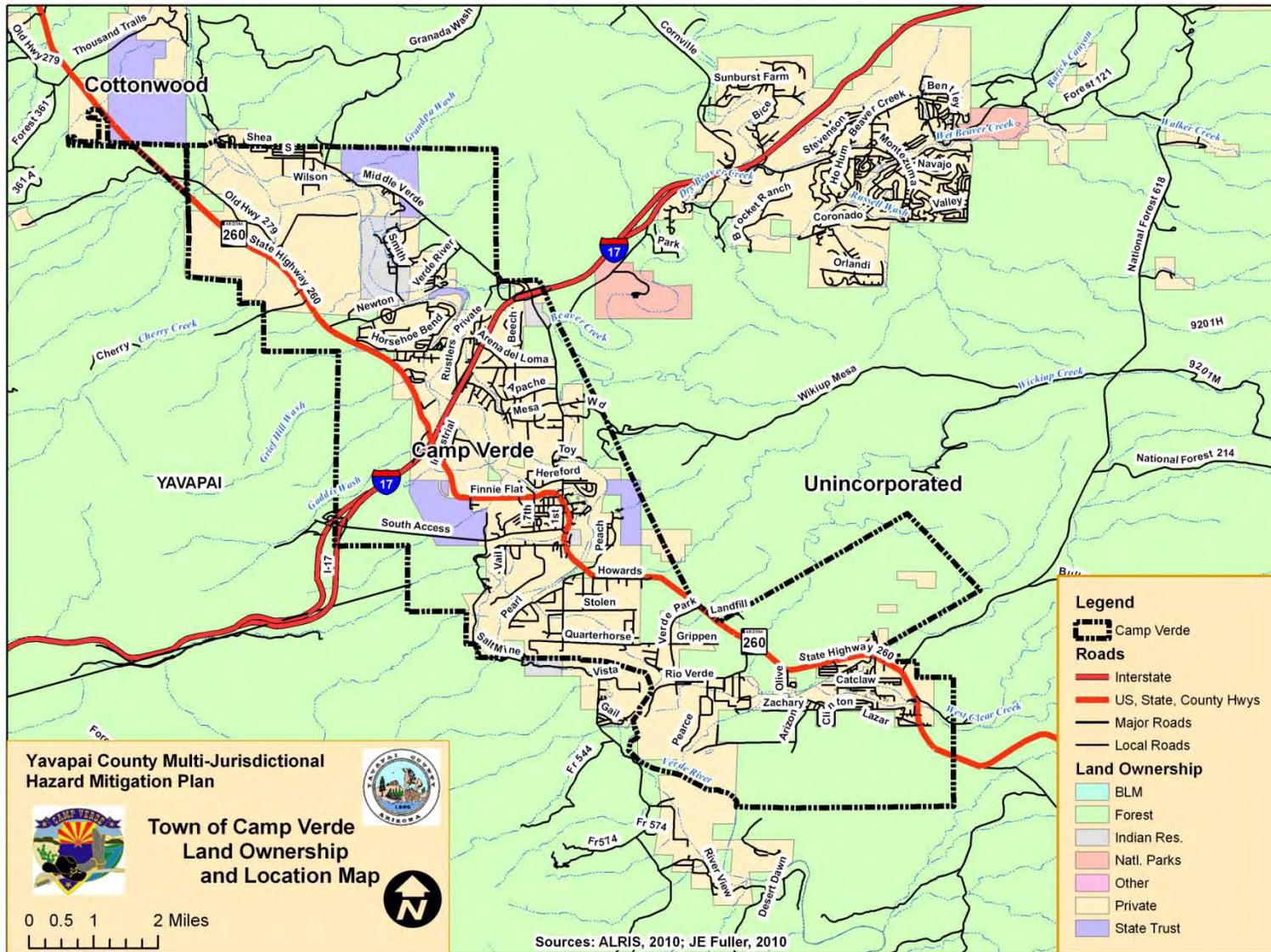


Figure 4-10: Town of Camp Verde Land Ownership and Location Map

**4.3.2 Chino Valley**

Chino Valley is one of the Tri-Cities including Prescott and Prescott Valley and was the first Territorial Capital in Arizona, originally known as Camp Clark. Chino Valley was founded in 1871<sup>9</sup> and eventually incorporated in 1970. The land in Chino Valley is known for its rich soil and abundant ground water supply which requires little or no treatment and serves Chino Valley and Prescott.

Chino Valley is located in central Yavapai County, as depicted in Figure 4-2, and is situated at an elevation of 4,750 feet. The Town is geographically located at longitude 112.45° west and latitude 34.76° north, and is 115 miles northwest of Phoenix and 228 miles northwest of Tucson. State Route 89 passes through Chino Valley and serves as the only major roadway servicing the community. The land ownership and major transportation routes around Chino Valley are shown on Figure 4-11.

The total 2010 population for Chino Valley is estimated at 10,817. Table 4-1 summarizes population estimates for Chino Valley and other Yavapai County communities in 10-year cycles beginning in 1990 and projected through 2020.

Chino Valley has some retail, commercial, and government employment. Major public employers include: Chino Valley Unified School District #5 and the U.S. Post Office. Major private employers include: American Sandstone and Safeway, Inc. The civilian labor force in June 2011 was 4,734 with an unemployment rate of 10.7%.

U.S. Army Cavalry Lt. Amiel W. Whipple temporarily set up a Territorial Capital at Chino Valley and named the community after the Mexican name for the grasses in the area. Soon the capital was moved to Prescott, located 15 miles south of Chino Valley. In 1895, a railway was completed to Jerome, and from 1900 to 1925, Chino Valley thrived from the activity that resulted from the railway.

New building permits declined from an estimated 220 in 2000 to 76 in 2008. Taxable sales from 2000 are estimated at \$78.9 million and have increased to \$164.5 million in 2008.

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<sup>9</sup> Arizona Department of Commerce, 2009, *Community Profile for Chino Valley, Arizona*.

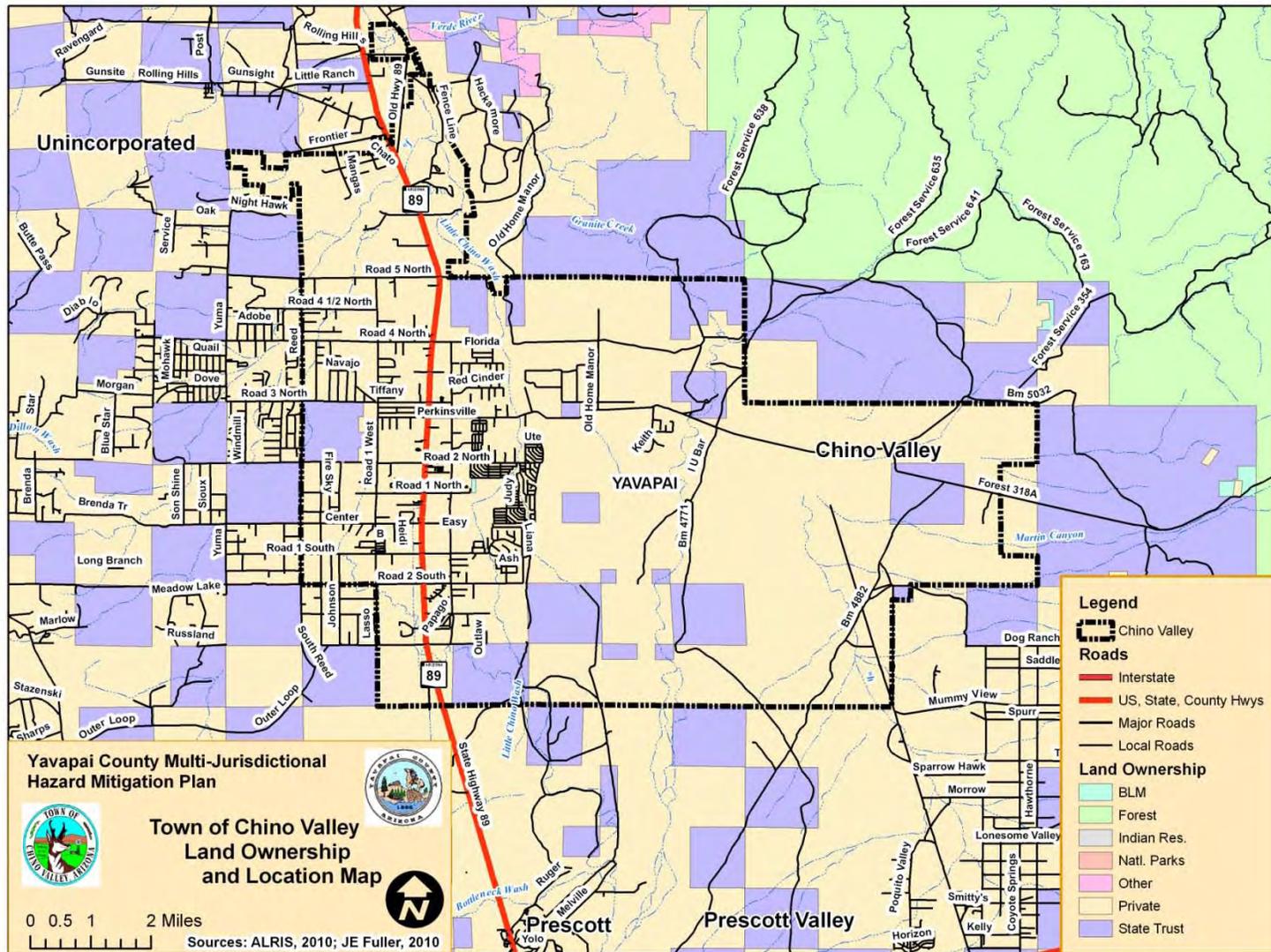


Figure 4-11: Town of Chino Valley Land Ownership and Location Map

4.3.3 *Clarkdale*

The Town of Clarkdale was founded in 1912 and was originally owned by the United Verde Copper Company whose residents worked in the nearby smelter<sup>10</sup> Clarkdale was built from a unified master plan intended to include all typical parts of a comprehensive planned small town. As a result of the Clarkdale Smelter, Clarkdale was ahead of other western towns with modern amenities. Mining operations shut down in 1953 however today, many of the old mining and smelter facilities still stand. According to the Arizona Department of Commerce<sup>11</sup>, Clarkdale was incorporated in 1957.

The Town of Clarkdale occupies approximately 10.1 square miles in the Verde Valley of North Central Arizona in Yavapai County, as depicted in Figure 4-2abd us situated at an elevation of 3,550 feet. The Verde River bisects the north portion of the town at a low elevation of around 3,300'. The west side of the town boundary is located along the foothills of Mingus Mountain in the Black Hills Range at a high elevation of approximately 4,600' above sea level. The Town is geographically located at longitude 112.06° west and latitude 34.76° north, and is 110 miles north of Phoenix, 50 miles southwest of Flagstaff, and 42 miles northeast of Prescott, Lands of the Prescott National Forest to the west, lands of the Coconino National Forest to the east, portions of the City of Cottonwood to the south and various unincorporated private lands in Yavapai County surround the Town. In addition, trust lands of the Yavapai Apache Nation are located within the town boundary. State Route Highway 89A passes through Clarkdale and serves as the major roadway servicing the community. The land ownership and major transportation routes around Clarkdale are shown on Figure 4-12.

The Town of Clarkdale is located in the Arizona Mountain Forest terrestrial ecoregion as described in Section 4.2.1. The description of climate and elevation ranges may not be appropriate descriptors for Clarkdale.

The total 2010 population for Clarkdale is estimated at 4,267, which includes 243 from the Yavapai Apache Nation. Table 4-1 summarizes population estimates for Clarkdale and other Yavapai County communities in 10-year cycles beginning in 1990 and projecting through 2020.

Clarkdale's economy developed as a service center for mining. Today, Major public employers include: Clarkdale-Jerome School District, Yavapai College, the US Post Office, Clarkdale Fire District, and the Town of Clarkdale. Major private employers include: Bent River Machine, Phoenix Cement, Wolf Insulation, Mold in Graphic Systems, Olsen's Grain, Clarkdale Metals Corporation, and Verde Canyon Railroad. The civilian labor force in June 2011 was 2,057 with an unemployment rate of 10.1%.

New building permits declined from an estimated 93 in 2000 to 8 in 2008. Taxable sales from 2000 are estimated at \$14.7 million and have increased to \$39.6 million in 2008.

Clarkdale seeks to maintain and enhance the livability, health and vitality of the Verde Valley and the natural systems to which it is a part preserving choices for future generations and anticipating and adapting changing community needs and external influences.

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<sup>10</sup> Clarkdale's 2002 General Plan, April 2002

<sup>11</sup> Arizona Department of Commerce, 2009, *Community Profile for Clarkdale, Arizona*

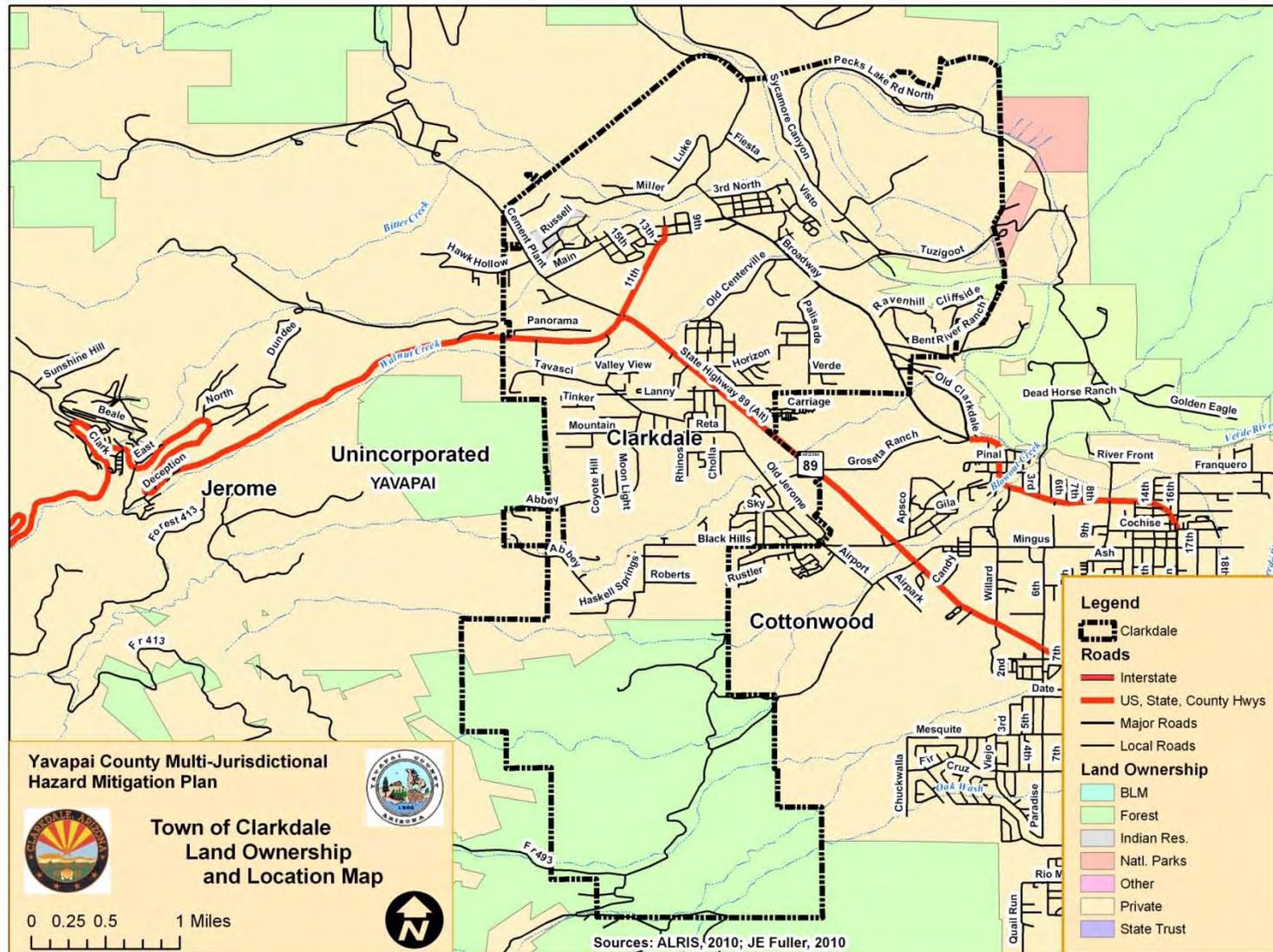


Figure 4-12: Town of Clarkdale Land Ownership and Location Map

4.3.4 *Cottonwood*

Cottonwood is in the upper watershed of the Verde River located adjacent to and east of the Town of Clarkdale. Terrain in the Cottonwood area is generally level or of a shallow slope, although steep terrain exists close to the existing City limits. The Verde River, one of Arizona's most important perennial water bodies, traverses north to south along the East side of the City. Several intermittent streams drain through the City into the Verde River and include Del Monte wash, Railroad Wash, Silver Springs Wash and Oak Wash. According to the Arizona Department of Commerce<sup>12</sup>, Cottonwood was founded in 1879 and later incorporated in 1960.

Cottonwood is located in the Northeastern portion of Yavapai County, as depicted in Figure 4-2, and is situated at an elevation of 3,320 feet. The City is geographically located at longitude 112.01° west and latitude 34.72° north, and is 106 miles north of Phoenix and 217 miles northwest of Tucson. State Route 89A and 260 pass through Cottonwood and serve as the major roadways servicing the community. The major transportation routes and land ownership around Cottonwood are shown on Figure 4-13.

The City of Cottonwood is located within the Arizona Mountain Forest terrestrial ecoregion, which is described as Section 4.3.1.

The total 2010 population for Cottonwood is estimated at 11,265. Table 4-1 summarizes population estimates for Cottonwood and other Yavapai County communities in 10-year cycles beginning in 1990 and projecting through 2020.

Cottonwood's economy is a trading center of the Verde Valley, providing retail, professional services and manufacturing. Major public employers include: Arizona Public Service, Cottonwood/Oak Creek School District, City of Cottonwood, and Mingus Union High School. Major private employers include: Verde Valley Medical Center, Phelps & Sons, Inc., Home Depot, and Wal-Mart. The civilian labor force in June 2011 was 5,288 with an unemployment rate of 11.3%.

Settlers in the Cottonwood area began farming in the area and providing goods to the army in Camp Verde and miners in Jerome. More settlers began moving in and named the development after a ring of 16 cottonwood trees growing along the Verde River. Cottonwood attracted residents trying to escape prejudice and regulations from nearby company towns including Clarkdale and Clemenceau.<sup>13</sup> Cottonwood was a booming small town with a high density of merchants and tradesmen.

The City serves as the business and retail center of the Verde Valley and is also the educational and medical hub for the valley. New building permits declined from an estimated 501 in 2000 to 20 in 2008. Taxable sales from 2000 are estimated at \$263.9 million and have increased to \$450.5 million in 2008.

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<sup>12</sup> Arizona Department of Commerce, 2009, *Community Profile for Cottonwood, Arizona*

<sup>13</sup> City of Cottonwood, 2003, *Cottonwood General Plan 2003-2013*

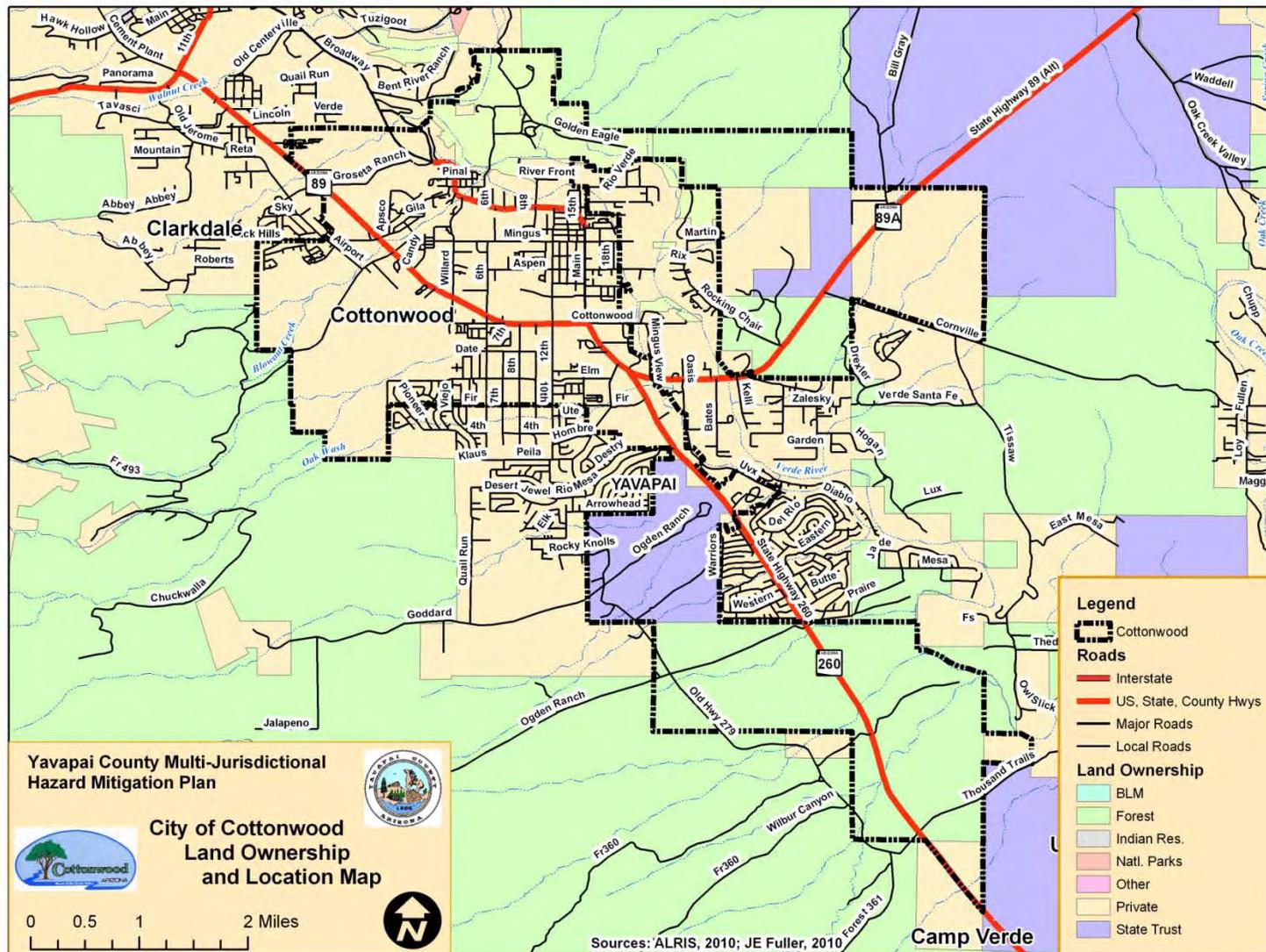


Figure 4-13: Town of Clarkdale Land Ownership and Location Map

*4.3.5 Dewey-Humboldt*

The Town is adjacent to and south of the Town of Prescott Valley located in central Yavapai County, as depicted in Figure 4-2, and is situated at an elevation of 4,556 feet. The Town is geographically located at longitude 112.249374° west and latitude 34.517168° north, and is 85 miles north of Phoenix and 199 miles North of Tucson. Dewey-Humboldt is part of the “Quad-Cities” that includes Dewey-Humboldt, Prescott, Chino Valley, and Prescott Valley. On December 20, 2004, the Town of Dewey-Humboldt was incorporated with a population estimate of 4,005. State Routes 69 and 169 pass through Dewey-Humboldt and are the main roadways servicing the community. The major transportation routes and land features around Dewey-Humboldt are shown on Figure 4-14.

Dewey-Humboldt’s economic base is fairly small and dependant on a more regional economic base. Construction related fields provide the largest proportion of employment for residents of the Town. One of the Town’s largest employers is the Humboldt Unified School District. Residents of Dewey-Humboldt cherish the very low density, rural lifestyle within the Town, one of the main drivers of incorporation in 2004.

Dewey-Humboldt began as two separate towns in the late 1800s. One of the towns, later named Humboldt, was established to support mining activity in the area. The first smelter, the Agua Fria Smelter (Bashford Mill), was built in 1876 in Humboldt. The other town, later named Dewey, was established for agriculture and ranching. The area was originally known as Agua Fria with the first post office named the Agua Fria Post Office that was eventually discontinued in 1895. The post office was re-established in 1898 as the Dewey Post Office.

The mining operation in Humboldt suffered closures common to other communities in the state with a short closure in 1907 and again in 1930, at which point the population in Humboldt declined to 300. The nearby Iron King Mine re-opened in 1934 and did not close again until 1968. Presently, the mine tailings are being reprocessed into Ironite fertilizer.

The total 2010 population for Dewey-Humboldt is estimated at 3,894. Table 4-1 summarizes population estimates for Dewey-Humboldt and other Yavapai County communities in 10-year cycles beginning in 1990 and projecting through 2020. The civilian labor force in June 2011 was 3,264 with an unemployment rate of 7.3%. Taxable sales from 2008 are estimated at \$21 million.

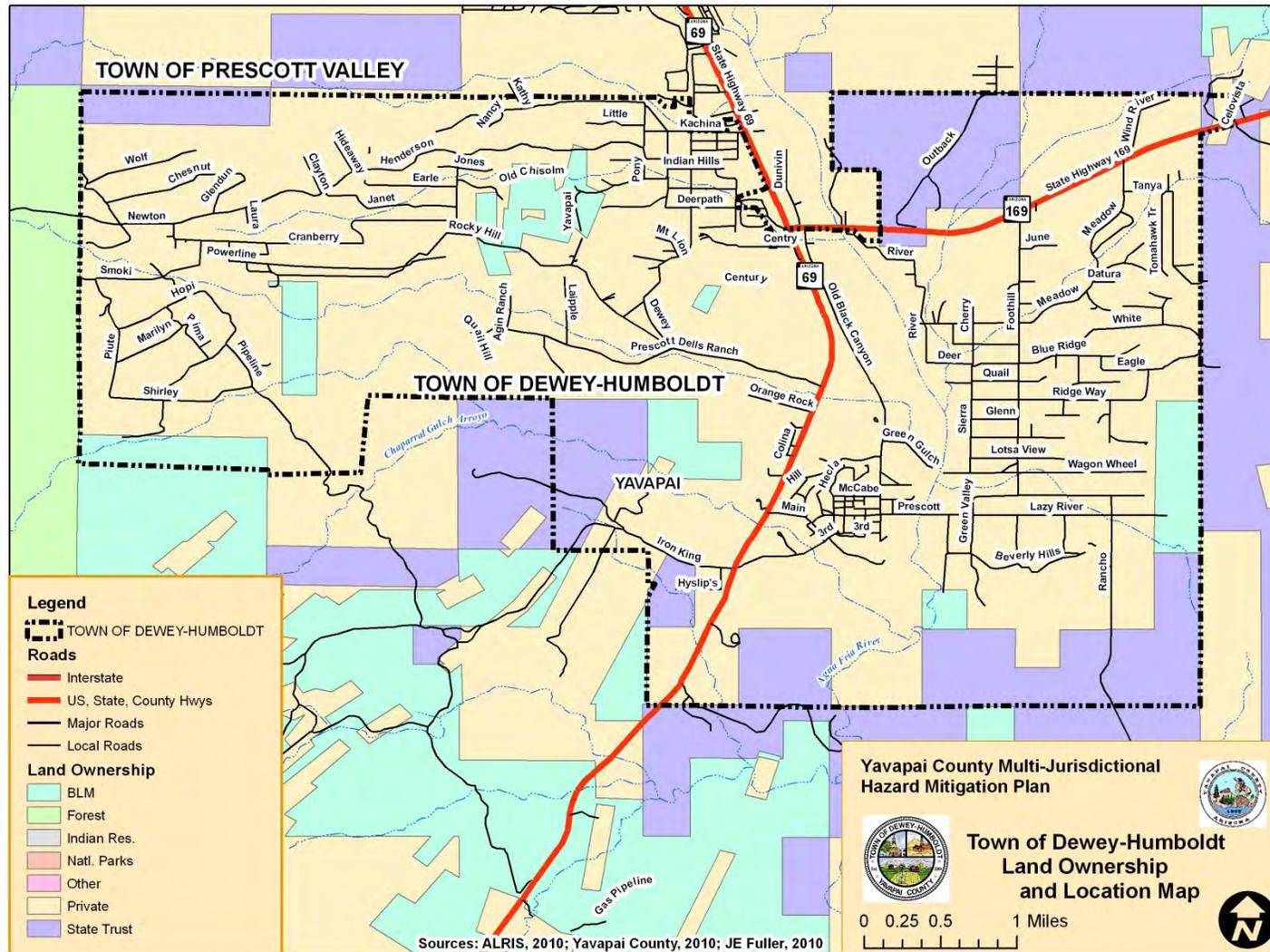


Figure 4-14: Town of Dewey-Humboldt Land Ownership and Location Map

4.3.6 *Jerome*

Jerome is located in the mid-northeastern portion of Yavapai County, as depicted in Figure 4-2, and is situated on Cleopatra Hill at an elevation of 5,435 feet. The Town is geographically located at longitude 112.11° west and latitude 34.75° north, and is 110 miles north of Phoenix and 224 miles northwest of Tucson. State Route 89A passes through Jerome and serves as the major roadway servicing the community. The major transportation routes and land ownership around Jerome are shown on Figure 4-15.

Founded in 1876, Jerome started as a mining town and became Arizona's largest copper mine. According to the Arizona Department of Commerce<sup>14</sup>, Jerome was incorporated in 1899. Building collapse and landslides were common and during the 1930s, dynamite blasts were the catalyst for a landslide that caused the Town jail to slide a whole block from its original location. During the great depression of the 1930s, production of the Jerome mines decreased and by 1953, all production stopped. As a result, Jerome became the world's largest ghost town. The remaining residents promoted the Town as a ghost town tourist attraction, which it is known for today.

The Town of Jerome is located in the Arizona Mountain Forest terrestrial ecoregions as described in Section 4.3.1.

The AZ Department of Commerce prepares annual community profiles for individual counties and communities within the state, however, Town staff noticed some outdated economic information such as a Safeway store cited as a major employer that no longer exists in the Town. The total 2010 population for Jerome is estimated at 444. Table 1-1 summarizes population estimates for Jerome and other Yavapai County communities in 10-year cycles beginning in 1990 and projecting through 2020.

Jerome's economy is dependent upon tourism and recreation. Major public employers include: Jerome Post Office, Town of Jerome, and Jerome Public Library. Major private employers include: The English Kitchen, Skyfire, Western Heritage Furniture, Mile Hi Restaurant, and the Jerome Place. The civilian labor force in June 2011 was 276 with an unemployment rate of 10.9%.

The Town of Jerome once had a population of 15,000. However, with the drop of copper prices, the Phelps Dodge Mine closed in 1953. Since then, Jerome has become a well known stop for tourists and has attracted an artistic community including craft people, writers, musicians, bed and breakfast owners, museum caretakers and gift shop proprietors<sup>15</sup>.

There were no new building permits reported for either 2000 or 2008. Taxable sales from 2000 are estimated at \$11.0 million and have increased to \$16.9 million in 2008. One major development proposal in the Town included a large restaurant and brewery with a capacity for over 100 people; however, water supply limitations and public opposition may prove to defeat the project.

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<sup>14</sup> Arizona Department of Commerce, 2009, *Community Profile for Jerome, Arizona*.

<sup>15</sup> Partially taken from the following weblink: <http://www.azjerome.com/>.



4.3.6 Prescott

According to the AZ Department of Commerce<sup>16</sup>, Prescott was founded in 1864 as the first Territorial Capital of Arizona. The community was named for William Hickling Prescott, a historian. Prescott is now known as one of the Tri-Cities including Prescott Valley and Chino Valley. Prescott was incorporated in 1883.

Prescott is located in central Yavapai County, as depicted in Figure 4-2, and is situated at an elevation of 5,400 feet. The City is geographically located at longitude 112.48° west and latitude 34.55° north, and is 102 miles north-northwest of Phoenix and 213 miles northwest of Tucson. State Route 69 and 89 pass through Prescott and serve as two major roadways servicing the community. The major transportation routes and land ownership around Prescott are shown on Figure 4-16.

The City of Prescott is located within the Arizona Mountain Forest terrestrial ecoregion, which is described in Section 4.3.1.

The AZ Department of Commerce prepares annual community profiles for individual counties and communities within the state. The total 2010 population for Prescott is estimated at 39,843. Table 4-1 summarizes population estimates for Prescott and other Yavapai County communities in 10-year cycles beginning in 1990 and projecting through 2020.

There are many outdoor activities and a rich history available in the Prescott area. As a result tourism, culture, and governmental agencies are important to Prescott's economy. Prescott is also central to trade in the region. Major public employers include: the City of Prescott, State of Arizona, Yavapai County, Prescott Unified School District, and Veterans Administration Medical Center. Major private employers include: Embry-Riddle University, Sturm Ruger & Company, Yavapai Regional Medical Center, Phelps-Dodge Bagdad Copper, and Wal-Mart. The civilian labor force in June 2011 was 18,665 with an unemployment rate of 9.3%.

The City of Prescott has a long history as an incorporated City, dating as far back as 1883. The City was initially founded as the first Territorial Capital of Arizona in 1864, and government has been dominant in Prescott's history and development since that time. The early economic makeup consisted of cattle ranching, mining and government. Part of Prescott has been designated as a historic preservation district. A fire destroyed many commercial buildings in July of 1900. When the buildings were rebuilt, they were reconstructed of brick and masonry, many of which are still standing today.

During the 20<sup>th</sup> Century, Prescott developed health care facilities which service all of Yavapai County. Arts, cultural and educational facilities have been established, adding to the City's economic growth.

New building permits declined from an estimated 1,145 in 2000 to 390 in 2008. Taxable sales from 2000 are estimated at \$789.5 million and have decreased to \$530.1 million in 2008.

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<sup>16</sup> Arizona Department of Commerce, 2009, *Community Profile for Prescott, Arizona*



4.3.7 *Prescott Valley*

Prescott Valley is one of the Tri-Cities including Prescott and Chino Valley and is known for its beautiful rolling hills and lush grass lands. According to the AZ Department of Commerce<sup>17</sup>, Prescott Valley was founded in 1966 on the outskirts of the City of Prescott. Prescott Valley incorporated in 1978.

Prescott Valley is located in central Yavapai County, as depicted in Figure 4-2, and is situated at an elevation of 5,100 feet. The Town is geographically located at longitude 112.32° west and latitude 34.60° north, and is 87 miles north-northwest of Phoenix and 186 miles northwest of Tucson. State Route 69 and 89A pass through Prescott Valley and serve as two major roadways servicing the community. The major transportation routes and land ownership around Prescott Valley are shown on Figure 4-17.

The Town of Prescott Valley is located within the Arizona Mountain Forest terrestrial ecoregion, which is described in Section 4.3.1. However, the description for the Colorado Plateau Shrublands may be a much better representation of Prescott Valley with its grasslands:

The AZ Department of Commerce prepares annual community profiles for individual counties and communities within the state. The total 2010 population for Prescott Valley is estimated at 38,822. Table 4-1 summarizes population estimates for Prescott Valley and other Yavapai County communities in 10-year cycles beginning in 1990 and projecting through 2020.

Prescott Valley's economy is defined by growth. Its industry, manufacturing, retail and services businesses are all growing. Major public employers include: the AZ Department of Transportation, Town of Prescott Valley, and Humboldt School District. Major private employers include: AAE, Arizona Public Service, Prescott Newspapers, Ace retail Support Center, and BetterBilt-Div.MI Home Products. The civilian labor force in June 2011 was 13,846 with an unemployment rate of 10.5%.

Prescott Valley was formerly known as Lonesome Valley, when cattlemen arrived in the 1860s attracted by lush grass and water. Tom Sanders and Dan Fain were the heads of two pioneering families who established ranching in the area.<sup>18</sup> The Town of Prescott Valley was founded when a Phoenix based real-estate company bought a large piece of land from the Fain family. The company sold home lots in the mid 1960s to people from Arizona and extending out to the Midwest marketing the mild weather and beautiful scenery.

The Town of Prescott Valley has only been incorporated since 1978 but it has become one of Arizona's fastest growing communities. The population of Prescott Valley has more than quadrupled over the last 20 years growing from a population of 8,904 in 1990 to 38,822 in 2010.

New building permits declined from an estimated 2,658 in 2000 to 461 in 2008. Taxable sales from 2000 are estimated at \$229.2 million and have increased to \$625.9 million in 2008.

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<sup>17</sup> Arizona Department of Commerce, 2009, *Community Profile for Prescott Valley, Arizona*

<sup>18</sup> Town of Prescott Valley General Plan 2020 Final, Adopted January 17, 2002

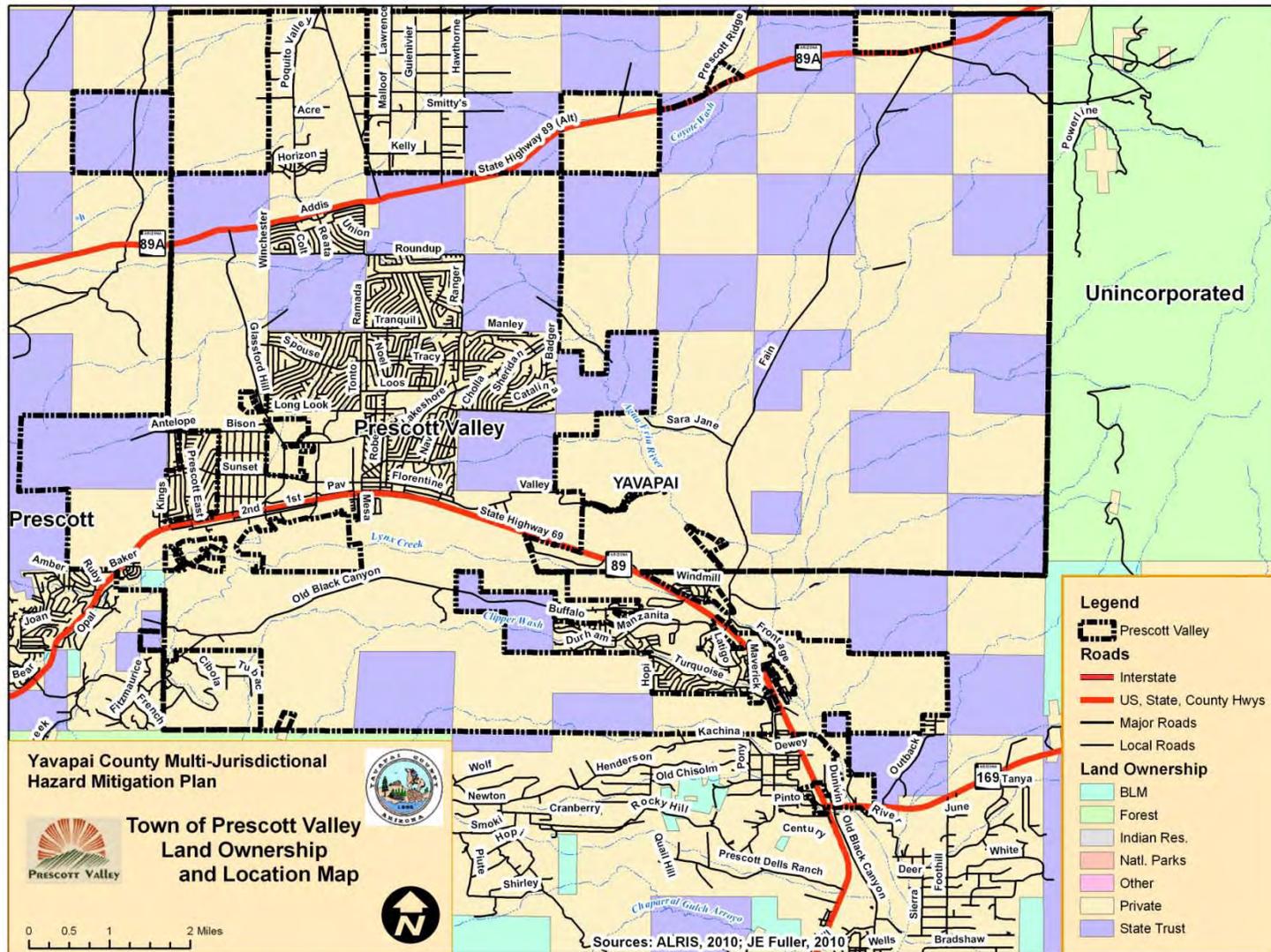


Figure 4-17: Town of Prescott Valley Land Ownership and Location Map

4.3.8 *Sedona*

Sedona is located at the base of the red sandstone cliffs with numerous red buttes and monoliths around the City. The City is bisected by the beautiful Oak Creek Canyon that runs southwest. According to the AZ Department of Commerce<sup>19</sup>, Sedona was founded in 1902 and later incorporated in 1988.

Sedona is located in the northeastern portion of Yavapai County, as depicted in Figure 4-2, and is situated at an elevation of 4,500 feet. The City is geographically located at longitude 111.78° west and latitude 34.86° north, and is 119 miles north of Phoenix and 230 miles northwest of Tucson. State Route 89A and 179 pass through Sedona and serve as the major roadways servicing the community. The major transportation routes and land ownership around Sedona are shown on Figure 4-18.

The City of Sedona is located in the Arizona Mountain Forest terrestrial ecoregion and is described in Section 4.3.1.

The AZ Department of Commerce prepares annual community profiles for individual counties and communities within the state. The total 2010 population for Sedona is estimated at 11,373 (includes Coconino part). Table 4-1 summarizes population estimates for Sedona and other Yavapai County communities in 10-year cycles beginning in 1990 and projecting through 2020.

Sedona's economy is centered around tourism. Major public employers include: the City of Sedona, Sedona-Oak Creek School District, Yavapai College (Sedona campus), and the Sedona Fire District. Major private employers include: Hyatt Resort, Radisson Resort, Best Western, L'Auberge de Sedona Resort, Los Abrigados Resort and Spa, Bashas' Grocery Store, Safeway Grocery Store, and New Frontiers Health Food Store. The civilian labor force in 2011 was 13,846 with an unemployment rate of 10.5%.

The City of Sedona is named after an early settler by the name of Sedona Schnebly. Sedona was first settled in 1876 with agricultural development and became known for the abundant apple orchards.<sup>20</sup> Famous artists including Max Ernst moved to Sedona starting in 1950, establishing a thriving artist community. Sedona has evolved into a large attraction, drawing tourists to the beautiful red rock formations, the unique small-town atmosphere, recreation, resorts and the arts centers. The number of tourists that visit Sedona are second only to the Grand Canyon in the State of Arizona.

New building permits declined from an estimated 539 in 2000 to 166 in 2008. Taxable sales from 2000 are estimated at \$330.8 million and have increased to \$475.1 million in 2008.

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<sup>19</sup> Arizona Department of Commerce, 2009, *Community Profile for Sedona, Arizona*

<sup>20</sup> Partially taken from the following weblink: <http://www.azjerome.com/>

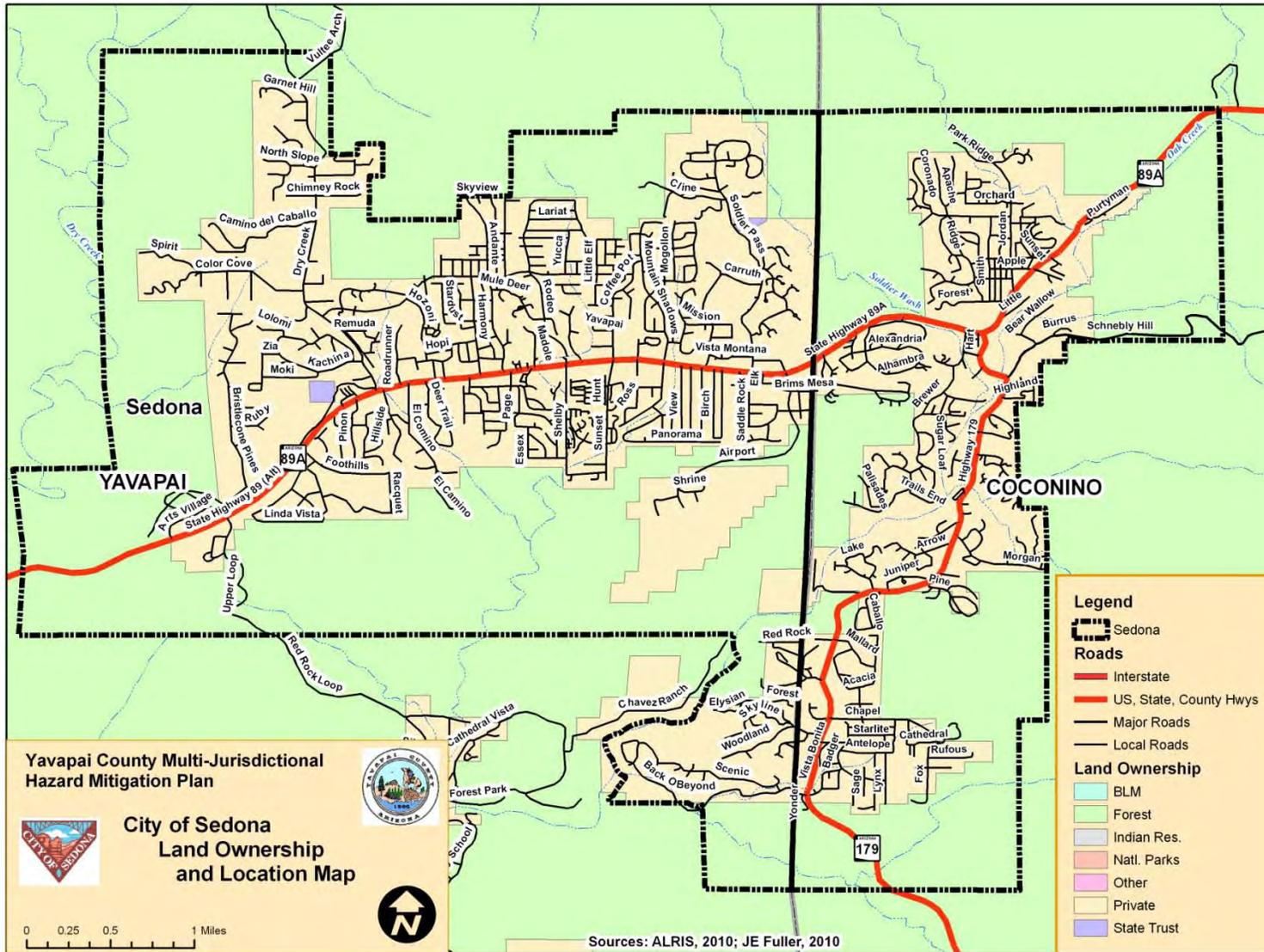


Figure 4-18: City of Sedona Land Ownership and Location Map

*4.3.8 Yavapai-Prescott Indian Tribe*

The Yavapai-Prescott Indian Tribe is a federally recognized Tribe that is organized and established as a sovereign nation pursuant to the provisions of the Indian Reorganization Act of June 18, 1934. The Tribe adheres to its Tribal constitution and sovereign government status.

The Yavapai-Prescott Indian Tribe land is held in trust by the federal government through the Secretary of the Interior and, therefore, requires compliance with federal laws as it pertains to the environment and community land within the reservation boundaries. According to the Yavapai-Prescott Indian Tribe Land Use Master Plan<sup>21</sup>, the reservation was officially established on 75 acres that were transferred from the Old Fort Whipple Military Reserve to the Interior Department on June 7, 1935. This land transfer created the only reservation just for Yavapai Indians. When the Reservation was established, the government also issued two cows to each family as a potential source of income. Over time, as the cattle herd grew, the government finally agreed to increase the Reservation by an additional 1,320 acres from the Old Fort Whipple Military Reserve. These acres were officially included as part of the Reservation on May 18, 1956.

The Yavapai-Prescott Community Association adopted its Articles of Association in 1962 and thereby established a legal community and the current day government structure. The Tribe governs itself through a five member elected Board of Directors. The officers of the Tribal Board of Directors consist of a President, Vice-President and Secretary/Treasurer. The Tribal government administers programs in housing, community development, health, social services, history/culture and education.

The Yavapai-Prescott Indian Reservation (Reservation) is located in central Arizona, as illustrated by Figure 4-2. The Reservation boundaries are within the central portion of Yavapai County, and are situated north of and adjacent to the City of Prescott. The Reservation contains 1,395 trust acres and approximately 29 acres of permanent easement. The centroid of the Reservation is approximately located at longitude 112.44° west and latitude 34.56° north. Elevations vary from a low of approximately 5,210 feet above sea level where Granite Creek exits the Reservation to a high of 5,900 feet at the Reservation boundary near the summit of Badger Mountain.

Major transportation routes through the reservation are shown on Figure 1-2 and include State Routes 69 and 89.

Terrestrial characteristics of the Reservation include terrain that varies from the nearly flat floodplain along Granite Creek to mountainous, forested land at the southeast end of the Reservation. Most of the Reservation is composed of hilly terrain that is a part of the watershed of Granite Creek, an ephemeral stream which bisects the Reservation from the southwest to the northeast. The vegetation on the Reservation ranges from open grassland to wooded mountains. Some of the wildlife that exists in the area include: coyote, brush mouse, roadrunner, pronghorn, Red-tailed hawk, Gambel's quail, common raven, rock squirrel, and mule deer. The geographical characteristics of the Reservation have been mapped entirely within AZ Mountain Forests terrestrial ecoregion as described in Section 4.3.1.

The history of the Yavapai Tribe has its origins in the prehistory of the North American southwest. For thousands of years, the Yavapai lived within a territory encompassing over nine million acres in what is now known as central and western Arizona. Although there were three divisions of Yavapai, they considered themselves one people who spoke the same language and shared common beliefs and customs. Except for minor skirmishes with neighboring tribes, the Yavapai lived in peace.

Prior to the 1860s, it is estimated that the Yavapai homelands supported several thousand members of the Tribe. Relatively untouched by non-Indian visitors, rapid changes to their lifestyle began to occur as settlers and miners invaded their homelands as early as the 1840s. At first, the Yavapai sought to live alongside the newcomers in peace. The Anglos, however, mistakenly identified them as Apaches and attacked Yavapai at every opportunity. By the mid-1860's, the Yavapai could no longer move about freely in search of game and shelter and began to fight back in a desperate attempt to hold their

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<sup>21</sup> Yavapai-Prescott Indian Tribe, 1999, *Land Use Master Plan*.

land and its resources.

During the 1870’s, several attempts to relocate the Yavapai onto the Reservations failed primarily due to inadequate food and supplies. Yavapai were first driven to the Rio Verde Reservation. In 1875, they were force marched to the San Carlos Apache Indian Reservation on what became known as the Trail of Tears. This difficult 180-mile journey resulted in the deaths of more than 115 Yavapai men, women and children. At the San Carlos Apache Indian Reservation, scarce supplies of food and water, illness and disease further reduced the Yavapai population.

By the early 1900s, eight families from the San Carlos returned to the Prescott area and joined a few Yavapai that managed to escape during the earlier relocations. Some Yavapai moved to reservations at Middle Verde and Fort McDowell, while some remained at San Carlos. Historians estimate that by this time the entire Yavapai Tribe had been reduced to fewer than 600 Indians whose numbers and lifestyles were unalterably changed.

In 1935, the Yavapai-Prescott Indian Reservation was established by an Act of Congress on 75 acres of land transferred from the Old Fort Whipple Military Reserve. In 1956, the U.S. government added 1,320 acres, also from the Military Reserve, to the Reservation.

During the last 20 years, the Tribe has successfully implemented strategies for economic development on the Reservation. The benefits of this development include the creation of a wealth of jobs not only for Tribal members, but also the surrounding labor force available from Prescott, Prescott Valley and surrounding communities. Table 4–2 identifies the various development and On-Reservation business ventures that have generated approximately 1,200 jobs during that period.

**Table 4-2  
On-Reservation development and business ventures**

| <b>Business Venture</b>   | <b>Number of Employees</b> |
|---|----------------------------|
| Frontier Village (28 Tenants)   | 600                        |
| Sundog Business Park (7 Tenants)  | 12                         |
| Prescott Resort   | 198                        |
| Tribal Gaming Agency (includes Bucky’s & Yavapai Casinos)               | 297                        |
| Total   | 1,107                      |
| Note: Figures from Yavapai-Prescott Indian Tribe as of January 4, 2011. |                            |

Future development of Reservation lands will be guided by the Yavapai-Prescott Indian Tribe Land Use Master Plan. Provisions for potential future development of residential, commercial, and light industrial land uses are identified and mapped<sup>22</sup> in the Master Plan and presented herein as Figure 4-19. There are also areas that have been specifically identified as Resort Hotel, Cultural/Museum, Open Space, Riparian and Mountain Reserves.

The residential area in the northwest portion of the Reservation is planned to meet the housing needs of the Tribal membership. This land use category is comprised of approximately 168 acres that encompass the existing housing area. In 1999, the Tribe began working with the Bureau of Indian Affairs and Indian Health Service to evaluate development alternatives to expand the existing residential infrastructure to accommodate approximately twenty-five (25) new homes.

Other areas planned for future development include commercial opportunities along State Route 69 and the extreme northwest corner of the Reservation, and light industrial areas east of State Route 89 along the northern reservation boundary.

<sup>22</sup> 1999, *Yavapai-Prescott Indian Tribe Land Use Master Plan*, Figure 4-1, p 4-2.

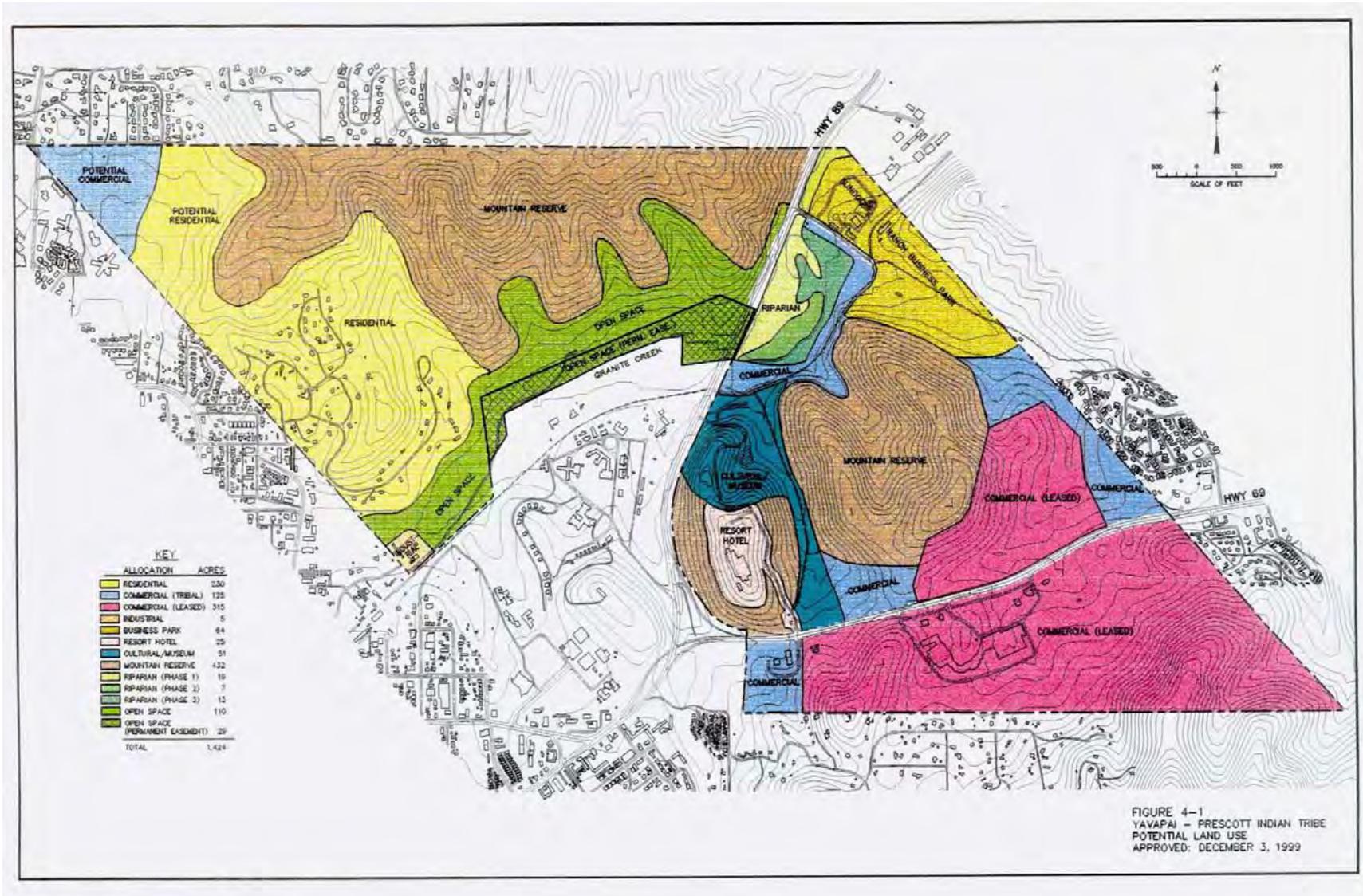


Figure 4-19: Yavapai-Prescott Indian Tribe Land Use Master Plan

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## SECTION 5: RISK ASSESSMENT

**§201.6(c)(2):** [The plan shall include...] (2) A **risk assessment** that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards. The risk assessment shall include:

- (i) A description of the type, location, and extent of all natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.
- (ii) A description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description shall include an overall summary of each hazard and its impact on the community. The plan should describe vulnerability in terms of:
  - (A) The types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas;
  - (B) An estimate of the potential dollar losses to vulnerable structures identified in paragraph (c)(2)(i)(A) of this section and a description of the methodology used to prepare the estimate;
  - (C) Providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.
- (iii) For multi-jurisdictional plans, the risk assessment section must assess each jurisdiction's risks where they vary from the risks facing the entire planning area.

One of the key elements to the hazard mitigation planning process is the risk assessment. In performing a risk assessment, a community determines “what” can occur, “when” (how often) it is likely to occur, and “how bad” the effects could be<sup>23</sup>. According to DMA 2000, the primary components of a risk assessment that answer these questions are generally categorized into the following measures:

### **Hazard Identification and Screening**

### **Hazard Profiling**

### **Assessing Vulnerability to Hazards**

The risk assessment for Yavapai County and participating jurisdictions was performed using a county-wide, multi-jurisdictional perspective, with much of the information gathering and development being accomplished by the Planning Team. This integrated approach was employed because many hazard events are likely to affect numerous jurisdictions within the County, and are not often relegated to a single jurisdictional boundary. The vulnerability analysis was performed in a way such that the results reflect vulnerability at an individual jurisdictional level, and at a countywide level.

## **5.1 Hazard Identification and Screening**

Hazard identification is the process of answering the question; “*What hazards can and do occur in my community or jurisdiction?*” For this Plan, the list of hazards identified in the 2006 Plan were reviewed by the Planning Team with the goal of refining the list to reflect the hazards that pose the greatest risk to the jurisdictions represented by this Plan. The Planning Team also compared and contrasted the 2006 Plan list to the comprehensive hazard list summarized in the 2010 State Plan<sup>24</sup> to ensure compatibility with the State Plan. Table 5-1 summarizes the 2006 Plan and 2010 State Plan hazard lists.

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<sup>23</sup> National Fire Protection Association, 2000, *Standard on Disaster/Emergency Management and Business Continuity Programs*, NFPA 1600.

<sup>24</sup> ADEM, 2010, *State of Arizona Multi-Hazard Mitigation Plan*

| <b>Table 5-1: Summary of initial hazard identification lists</b>   |  |
|--|--|
| <b>2006 Yavapai County Plan Hazard List</b>  | <b>2010 State Plan Hazard List</b>   |
| <ul style="list-style-type: none"> <li>• Flooding/Flash Flooding</li> <li>• Thunderstorm/High Winds</li> <li>• Hazardous Material Incidents</li> <li>• Transportation Accidents</li> <li>• Wildfire</li> </ul> | <ul style="list-style-type: none"> <li>• Dam Failure</li> <li>• Drought</li> <li>• Earthquake</li> <li>• Extreme Heat</li> <li>• Fissure</li> <li>• Flooding/Flash Flooding</li> <li>• Landslides/Mudslides</li> <li>• Levee Failure</li> <li>• Severe Wind</li> <li>• Subsidence</li> <li>• Wildfires</li> <li>• Winter Storms</li> </ul> |

The review included an initial screening process to evaluate each of the listed hazards based on the following considerations:

- Experiential knowledge on behalf of the Planning Team with regard to the relative risk associated with the hazard
- Documented historic context for damages and losses associated with past events (especially events that have occurred during the last plan cycle)
- The ability/desire of Planning Team to develop effective mitigation for the hazard under current DMA 2000 criteria
- Compatibility with the state hazard mitigation plan hazards
- Duplication of effects attributed to each hazard

One tool used in the initial screening process was the historic hazard database referenced in 2006 Plan. With this update, the 2006 Plan database was reviewed and revised to separately summarize declared disaster events versus non-declared events. Declared event sources included Yavapai County Department of Emergency Management (YCDem), Arizona Division of Emergency Management (ADEM), Federal Emergency Management Agency (FEMA), and United States Department of Agriculture (USDA). Non-declared sources included Arizona State Land Department (ASLD), National Weather Service (NWS), National Oceanic and Atmospheric Administration (NOAA), National Climatic Data Center (NCDC), United States Geological Survey (USGS), and United States Forest Service (USFS). Both data sets were updated with additional hazard events that have occurred over the last plan cycle. The declared events represent the period of February 1966 to August 2010. The undeclared events represent a period of approximately 40 years. Three tables are used in this update to summarize the historic hazard events. Table 5-2 summarizes the federal and state disaster declarations that included Greenlee County with data provided solely from ADEM, Recovery Section. Table 5-3 summarizes federal and state declarations with data provided by many sources that included fatalities, injuries, and property damages. Table 5-4 summarizes all non-declared hazard events that were considered to be a significant event to the jurisdiction(s). These events may have included:

- 1 or more fatalities
- 1 or more injuries
- Any dollar amount in property or crop damages
- Significant event, as expressed in historical records or according to defined criteria above

Detailed historic hazard records are provided in Appendix D.

**Table 5-2: State and Federally Declared Natural Hazard Events That Included Yavapai County – February 1966 to August 2010**

| 2010 State Plan Hazard Categories | Arizona Declared Events That Included Yavapai County February 1966 to August 2010 |                    |               |
|-----------------------------------|---|--------------------|---------------|
|                                   | No. of Events   | Total Expenditures |               |
|                                   |   | State              | Federal       |
| Drought                           | 2   | \$211,499          | \$0           |
| Flooding / Flash Flooding         | 13  | \$48,161,355       | \$379,987,625 |
| Wildfire                          | 20  | \$5,874,995        | \$0           |
| Winter Storm                      | 2   | \$2,647,918        | \$5,109,724   |

Notes: Damage Costs are reported as is and no attempt has been made to adjust costs to current dollar values. Only a portion of the reported expenditures were spent in the subject county.  
Source: ADEM - Recovery Section, October 2010

**Table 5-3: State and Federally Declared Events That Included Yavapai County February 1966 to August 2010**

| Hazard                    | No. of Declarations | Recorded Losses |          |                   |
|---------------------------|---------------------|-----------------|----------|-------------------|
|                           |                     | Fatalities      | Injuries | Damage Costs (\$) |
| Drought                   | 5                   | 0               | 0        | \$300,000,000     |
| Flooding / Flash Flooding | 14                  | 42              | 1090     | \$1,339,250,000   |
| Wildfire                  | 20                  | 0               | 0        | \$0               |
| Winter Storm              | 2                   | 8               | 0        | \$750,000         |

Damage Costs are reported as is and no attempt has been made to adjust costs to current dollar values.  
Sources: ADEM, FEMA, USDA

**Table 5-4: Yavapai County Historic Hazard Events – September 1960 to July 2010**

| Hazard                    | No. of Records | Recorded Losses |          |                   |
|---------------------------|----------------|-----------------|----------|-------------------|
|                           |                | Fatalities      | Injuries | Damage Costs (\$) |
| Dam Failure               | 1              | 0               | 0        | \$0               |
| Earthquake                | 1              | 0               | 0        | \$0               |
| Flooding / Flash Flooding | 58             | 0               | 2        | \$4,668,000       |
| Severe Wind               | 123            | 1               | 14       | \$18,713,280      |
| Wildfire                  | 183            | 0               | 7        | \$4,818,647       |
| Winter Storm              | 4              | 6               | 10       | \$0               |

Notes: Damage Costs include property and crop/livestock losses and are reported as is with no attempt to adjust costs to current dollar values. Furthermore, wildfire damage cost does not include the cost of suppression which can be quite substantial. Sources: ADEM, NCDC, NWCG, NWS, USFS

The culmination of the review and screening process by the Planning Team resulted in a revised list of hazards that will be carried forward with this Plan. Several of the hazards in the 2006 Plan list may be better described as storm events wherein the effects of the storm may pose exposure to multiple hazards. For instance, hazards associated with *Tropical Storms/Hurricane* may include flooding and severe winds in a single event. With the direction of ADEM, the Planning Team chose to eliminate this hazard and account for its impacts in other categories. Similarly, the predominant perceived hazard associated with *Thunderstorms/High Winds* and *Tornadoes/Dust Devils* is the associated damaging high winds. Therefore, ADEM has decided to account for the wind related hazards associated with these events into a new category named *Severe Wind*. Flooding

aspects of these events are addressed in the *Flooding/Flash Flooding* category. *Hazardous Materials Incidents* was dropped from the list in order to focus the plan on natural hazards and recognizing that FEMA mitigation funds cannot be used for typical HAZMAT mitigation efforts. *Transportation Accidents* are still a major concern and especially when they occur on I-17 and the freeway closes during the hot summer months. The team realized this is more of a response and preparedness issue and not really mitigation. The team chose to drop transportation accidents. Town of Jerome would be interested in looking at *Landslide/Mudslide* due to the town's location on a hillside and the potential for those kinds of events. *Earthquake* was discussed at length during the first couple of meetings, especially given that a moderate event occurred near Chino Valley in the recent past. The perceived risk was not sufficient, however, to lead to any meaningful mitigation measures and the hazard was dropped. *Winter Storm* will also be added as a new hazard.

The Planning Team has selected the following list of hazards for profiling and updating based on the above explanations and screening process. Revised and updated definitions for each hazard are provided in Section 5.3 and in Section 8.2:

- **Flooding/Flash Flooding**
- **Severe Wind**
- **Winter Storm**
- **Landslide / Mudslide**
- **Wildfire**

## 5.2 Vulnerability Analysis Methodology

### 5.2.1 General

The following sections summarize the methodologies used to perform the vulnerability analysis portion of the risk assessment. For this Plan, the entire vulnerability analysis was either revised or updated to reflect the new hazard categories, the availability of new data, or differing loss estimation methodology. Specific changes are noted below and/or in Section 5.3. A comparison was made between the new vulnerability analysis and the 2006 Plan for Flooding/Flash Flooding and Wildfire and is noted in Section 5.3.

For the purposes of this vulnerability analysis, hazard profile maps were developed for Flooding/Flash Flooding, Wildfire and Winter Storm to map the geographic variability of the probability and magnitude risk of the hazards as estimated by the Planning Team. Hazard profile categories of HIGH, MEDIUM, and/or LOW were used for Flooding/Flash Flooding and Wildfire, and were subjectively assigned based on the factors discussed in the Probability and Magnitude sections below. Within the context of the county limits, the other hazards do not exhibit significant geographic variability and will not be categorized as such.

Unless otherwise specified in this Plan, the general cutoff date for new hazard profile data and jurisdictional corporate limits is the end of February 2011.

### 5.2.2 Calculated Priority Risk Index (CPRI) Evaluation

The first step in the vulnerability analysis (VA) is to assess the perceived overall risk for each of the plan hazards using a tool developed by the State of Arizona called the Calculated Priority Risk Index<sup>25</sup> (CPRI). The CPRI value is obtained by assigning varying degrees of risk to four (4) categories for each hazard, and then calculating an index value based on a weighting scheme. Table 5-4 summarizes the CPRI risk categories and provides guidance regarding the assignment of values and weighting factors for each category.

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<sup>25</sup> ADEM, 2003, *Arizona Model Local Hazard Mitigation Plan*, prepared by JE Fuller/ Hydrology & Geomorphology, Inc.

Table 5-5: Summary of Calculated Priority Risk Index (CPRI) categories and risk levels

| CPRI Category          | Degree of Risk     |   |             | Assigned Weighting Factor |
|------------------------|--------------------|---|-------------|---------------------------|
|                        | Level ID           | Description   | Index Value |                           |
| Probability            | Unlikely           | <ul style="list-style-type: none"> <li>▪ Extremely rare with no documented history of occurrences or events.</li> <li>▪ Annual probability of less than 0.001.</li> </ul>   | 1           | 45%                       |
|                        | Possible           | <ul style="list-style-type: none"> <li>▪ Rare occurrences with at least one documented or anecdotal historic event.</li> <li>▪ Annual probability that is between 0.01 and 0.001.</li> </ul>  | 2           |                           |
|                        | Likely             | <ul style="list-style-type: none"> <li>▪ Occasional occurrences with at least two or more documented historic events.</li> <li>▪ Annual probability that is between 0.1 and 0.01.</li> </ul>  | 3           |                           |
|                        | Highly Likely      | <ul style="list-style-type: none"> <li>▪ Frequent events with a well documented history of occurrence.</li> <li>▪ Annual probability that is greater than 0.1.</li> </ul>   | 4           |                           |
| Magnitude/<br>Severity | Negligible         | <ul style="list-style-type: none"> <li>▪ Negligible property damages (less than 5% of critical and non-critical facilities and infrastructure).</li> <li>▪ Injuries or illnesses are treatable with first aid and there are no deaths.</li> <li>▪ Negligible quality of life lost.</li> <li>▪ Shut down of critical facilities for less than 24 hours.</li> </ul>   | 1           | 30%                       |
|                        | Limited            | <ul style="list-style-type: none"> <li>▪ Slight property damages (greater than 5% and less than 25% of critical and non-critical facilities and infrastructure).</li> <li>▪ Injuries or illnesses do not result in permanent disability and there are no deaths.</li> <li>▪ Moderate quality of life lost.</li> <li>▪ Shut down of critical facilities for more than 1 day and less than 1 week.</li> </ul> | 2           |                           |
|                        | Critical           | <ul style="list-style-type: none"> <li>▪ Moderate property damages (greater than 25% and less than 50% of critical and non-critical facilities and infrastructure).</li> <li>▪ Injuries or illnesses result in permanent disability and at least one death.</li> <li>▪ Shut down of critical facilities for more than 1 week and less than 1 month.</li> </ul>  | 3           |                           |
|                        | Catastrophic       | <ul style="list-style-type: none"> <li>▪ Severe property damages (greater than 50% of critical and non-critical facilities and infrastructure).</li> <li>▪ Injuries or illnesses result in permanent disability and multiple deaths.</li> <li>▪ Shut down of critical facilities for more than 1 month.</li> </ul>  | 4           |                           |
| Warning Time           | Less than 6 hours  | Self explanatory.   | 4           | 15%                       |
|                        | 6 to 12 hours      | Self explanatory.   | 3           |                           |
|                        | 12 to 24 hours     | Self explanatory.   | 2           |                           |
|                        | More than 24 hours | Self explanatory.   | 1           |                           |
| Duration               | Less than 6 hours  | Self explanatory.   | 1           | 10%                       |
|                        | Less than 24 hours | Self explanatory.   | 2           |                           |
|                        | Less than 1 week   | Self explanatory.   | 3           |                           |
|                        | More than 1 week   | Self explanatory.   | 4           |                           |

As an example, assume that the project team is assessing the hazard of flooding, and has decided that the following assignments best describe the flooding hazard for their community:

- Probability = Likely
- Magnitude/Severity = Critical
- Warning Time = 12 to 24 hours
- Duration = Less than 6 hours

The CPRI for the flooding hazard would then be:

$$\text{CPRI} = [(3*0.45) + (3*0.30) + (2*0.15) + (1*0.10)]$$

$$\text{CPRI} = 2.65$$

### 5.2.3 Asset Inventory

A detailed asset inventory was performed for the 2006 Plan to establish a fairly accurate baseline data-set for assessing the vulnerability of each jurisdiction's critical infrastructure and assets to the hazards previously identified. The asset inventory from the 2006 Plan was reviewed and updated by the Planning Team to reflect the facilities and infrastructure most important to the participating jurisdictions.

The 2010 State Plan defines assets as:

*Any natural or human-caused feature that has value, including, but not limited to people; buildings; infrastructure like bridges, roads, and sewer and water systems; lifelines like electricity and communication resources; or environmental, cultural, or recreational features like parks, dunes, wetlands, or landmarks.*

The 2006 Plan asset inventory database was generally categorized into critical and non-critical categories. The working definition for **Critical facilities and infrastructure**, adopted for the 2006 Plan and continuing with this Plan is as follows:

*Systems, structures and infrastructure within a community whose incapacity or destruction would:*

- *Have a debilitating impact on the defense or economic security of that community.*
- *Significantly hinder a community's ability to recover following a disaster.*

Following the criteria set forth by the Critical Infrastructure Assurance Office (CIAO), the State of Arizona has adopted eight general categories<sup>26</sup> that define critical facilities and infrastructure:

1. **Communications Infrastructure:** Telephone, cell phone, data services, radio towers, and internet communications, which have become essential to continuity of business, industry, government, and military operations.
2. **Electrical Power Systems:** Generation stations and transmission and distribution networks that create and supply electricity to end-users.
3. **Gas and Oil Facilities:** Production and holding facilities for natural gas, crude and refined petroleum, and petroleum-derived fuels, as well as the refining and processing facilities for these fuels.
4. **Banking and Finance Institutions:** Banks, financial service companies, payment systems, investment companies, and securities/commodities exchanges.
5. **Transportation Networks:** Highways, railroads, ports and inland waterways, pipelines, and airports and airways that facilitate the efficient movement of goods and people.
6. **Water Supply Systems:** Sources of water; reservoirs and holding facilities; aqueducts and

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<sup>26</sup> Instituted via Executive Order 13010, which was signed by President Clinton in 1996.

other transport systems; filtration, cleaning, and treatment systems; pipelines; cooling systems; and other delivery mechanisms that provide for domestic and industrial applications, including systems for dealing with water runoff, wastewater, and firefighting.

7. **Government Services:** Capabilities at the federal, state, and local levels of government required to meet the needs for essential services to the public.
8. **Emergency Services:** Medical, police, fire, and rescue systems.

Other assets such as public libraries, schools, businesses, museums, parks, recreational facilities, historic buildings or sites, churches, residential and/or commercial subdivisions, apartment complexes, and so forth, are typically not classified as critical facilities and infrastructure unless they serve a secondary function to the community during a disaster emergency (e.g. - emergency housing or evacuation centers). As a part of the update process, each community was tasked with determining which of the previously identified “non-critical” assets, if any, were deemed critical by the community. The remaining “non-critical” assets were deleted from the database. New facilities were also added as appropriate and available. Each community was also tasked with making any needed changes to the geographic position, revision of asset names, updating replacement costs, etc. to bring the dataset into a current condition. The updated asset inventory is attributed with a descriptive name, physical address, geospatial position, and an estimated building/structure and contents replacement cost for each entry to the greatest extent possible and entered into a GIS geodatabase.

The 2006 Plan used a combination of the Asset Inventory and HAZUS<sup>®</sup>-MH<sup>27</sup> (HAZUS) data to represent the critical facilities and general building stock and population for Yavapai County jurisdictions. Tools used for this Plan included GIS data sets, on-line mapping utilities, insurance pool information, county assessors data, and manual data acquisition. Table 5-6 summarizes the facility counts provided by each of the participating jurisdictions in this Plan.

It should be noted that the facility counts summarized in Table 5-6 do not represent a comprehensive inventory of all the category facilities that exist within the county. They do represent the facilities inventoried to-date by each jurisdiction and are considered to be a work-in-progress that is to be expanded and augmented with each Plan cycle.

#### 5.2.4 Loss Estimations

In the original 2006 Plan, losses were estimated by either quantitative or qualitative methods. Quantitative methods consisted of intersecting hazard map layers with the asset inventory map layer and the HAZUS map layer. Other quantitative methods included statistical methods based on historic data. The loss estimates for this Plan represent the current hazard map layers and asset databases using the procedures discussed below.

Economic loss and human exposure estimates for each of the final hazards identified in Section 5.1 begins with an assessment of the potential exposure of critical and non-critical assets and human populations to those hazards. Exposure estimates of critical and non-critical assets identified by each jurisdiction are accomplished by intersecting the asset inventory with the hazard profiles in Section 5.3. Human or population exposures are estimated by intersecting the same hazards with the 2000 Census Data population statistics that have been re-organized into GIS compatible databases and distributed with HAZUS.

Additional exposure estimates for general residential, commercial and industrial building stock not specifically identified with the asset inventory, are also accomplished using the HAZUS database, wherein the developers of the HAZUS database have made attempts to correlate building/structure counts to census block data. *It is duly noted that the HAZUS data population statistics may not exactly equate to the current population statistics provided in Section 4.2 due to actual changes in population counts associated with a particular census block, GIS positioning anomalies and the way HAZUS*

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<sup>27</sup> U.S. Department of Homeland Security, Federal Emergency Management Agency, HAZUS<sup>®</sup>-MH.

**Table 5-6: Asset inventory structure counts by category and jurisdiction as of March 2011**

|                               | Communications Infrastructure | Electrical Power Systems | Gas/Oil Facilities | Banking/Finance Institutions | Transportation Networks | Water Supply Systems | Government Services | Emergency Services | Educational <sup>a</sup> | Cultural <sup>a</sup> | Business <sup>a</sup> | Flood Control <sup>a</sup> | Residential <sup>a</sup> | Recreational <sup>a</sup> |
|-------------------------------|-------------------------------|--------------------------|--------------------|------------------------------|-------------------------|----------------------|---------------------|--------------------|--------------------------|-----------------------|-----------------------|----------------------------|--------------------------|---------------------------|
| <b>County-Wide Totals</b>     | 134                           | 40                       | 27                 | 29                           | 96                      | 231                  | 70                  | 78                 | 19                       | 14                    | 29                    | 12                         | 1                        | 0                         |
| Camp Verde                    | 7                             | 4                        | 8                  | 3                            | 12                      | 5                    | 5                   | 9                  | 1                        | 14                    | 8                     | 0                          | 0                        | 0                         |
| Chino Valley                  | 3                             | 3                        | 2                  | 3                            | 0                       | 5                    | 3                   | 5                  | 0                        | 0                     | 2                     | 1                          | 0                        | 0                         |
| Clarkdale                     | 1                             | 0                        | 2                  | 0                            | 5                       | 14                   | 6                   | 6                  | 1                        | 0                     | 6                     | 0                          | 0                        | 0                         |
| Cottonwood                    | 4                             | 3                        | 0                  | 6                            | 7                       | 30                   | 0                   | 11                 | 0                        | 0                     | 7                     | 0                          | 0                        | 0                         |
| Dewey-Humboldt                | 6                             | 0                        | 0                  | 0                            | 0                       | 3                    | 1                   | 2                  | 0                        | 0                     | 0                     | 0                          | 0                        | 0                         |
| Jerome                        | 4                             | 0                        | 0                  | 0                            | 0                       | 12                   | 2                   | 4                  | 0                        | 0                     | 0                     | 0                          | 0                        | 0                         |
| Prescott                      | 6                             | 9                        | 1                  | 8                            | 13                      | 28                   | 10                  | 15                 | 8                        | 0                     | 0                     | 0                          | 0                        | 0                         |
| Prescott Valley               | 5                             | 2                        | 10                 | 0                            | 2                       | 49                   | 3                   | 10                 | 7                        | 0                     | 2                     | 0                          | 0                        | 0                         |
| Sedona                        | 6                             | 1                        | 0                  | 6                            | 1                       | 24                   | 4                   | 6                  | 2                        | 0                     | 3                     | 0                          | 0                        | 0                         |
| Unincorporated Yavapai        | 92                            | 18                       | 3                  | 3                            | 55                      | 61                   | 29                  | 10                 | 0                        | 0                     | 0                     | 11                         | 0                        | 0                         |
| Yavapai-Apache Nation         | 0                             | 0                        | 0                  | 0                            | 0                       | 0                    | 1                   | 0                  | 0                        | 0                     | 1                     | 0                          | 0                        | 0                         |
| Yavapai-Prescott Indian Tribe | 0                             | 0                        | 1                  | 0                            | 1                       | 0                    | 6                   | 0                  | 0                        | 0                     | 6                     | 0                          | 0                        | 0                         |

NOTES: Assets listed under these categories have been determined to be critical per the definition of this Plan by the corresponding jurisdiction.

depicts certain census block data. It is also noted that the residential, commercial and industrial building stock estimates for each census block may severely under-predict the actual buildings present due to the substantial growth in the last decade, the general lack of commercial and industrial data for some of the more rural communities and counties and the disparity of the HAZUS replacement cost estimates for these categories when compared to current market rates. However, without a detailed, site specific structure inventory of these types of buildings, the HAZUS database is still the best available and the results are representative of a general magnitude of population and residential, commercial and industrial facility exposures to the various hazards discussed. Combining the exposure results from the asset inventory and the HAZUS database provides a fairly comprehensive depiction of the overall exposure of building stock and the two datasets are considered complimentary and not redundant.

Economic losses to structures and facilities are estimated by multiplying the exposed facility replacement cost estimates by an assumed loss to exposure ratio for the hazard. The loss to exposure ratios used in this plan update is summarized by hazard in Section 5.3. It is important to note that the loss to exposure ratios are subjective and the estimates are solely intended to provide an understanding of relative risk from the hazards and potential losses. The reality is that uncertainties are inherent in any loss estimation methodology due to:

- Incomplete scientific knowledge concerning hazards and our ability to predict their effects on the built environment;
- Approximations and simplifications that are necessary for a comprehensive analysis; and,
- Lack of detailed data necessary to implement a viable statistical approach to loss estimations.

Several of the hazards profiled in this Plan will not include quantitative exposure and loss estimates. The vulnerability of people and assets associated with some hazards are nearly impossible to evaluate given the uncertainty associated with where these hazards will occur as well as the relatively limited focus and extent of damage. Instead, a qualitative review of vulnerability will be discussed to provide

insight to the nature of losses that are associated with the hazard. For subsequent updates of this Plan, the data needed to evaluate these unpredictable hazards may become refined such that comprehensive vulnerability statements and thorough loss estimates can be made.

*5.2.5 Yavapai-Prescott Indian Tribe Cultural/Sacred Sites*

Like the assets listed above, cultural and sacred sites are of high priority for the Tribe and special consideration is needed when considering hazard mitigation activities. The locations are not a necessary component of this Plan, and therefore are not included. A summary, however, is provided below.

Currently, 67 archaeological sites are known to be present on the Yavapai-Prescott Indian Reservation: 17 prehistoric, 47 historic and 3 multi-component prehistoric/historic. Of these, 8 prehistoric sites, 18 historic sites, and 2 multi-component sites are considered eligible to the National Register of Historic Places (NRHP). Additionally, 6 prehistoric sites and 14 historic sites are considered potentially eligible to the NRHP (i.e., they require further research to determine their NRHP eligibility status). Maps, descriptions, and locations of each of these sites are recorded in Tribal files.

Eight potential traditional cultural places have been identified on Yavapai-Prescott Indian Reservation. These places include properties such as named rock formations and resource gathering locations. Like the archaeological sites, their descriptions and locations are recorded in Tribal files.

*5.2.6 Development Trend Analysis*

The 2006 Plan development trend analysis will require updating to reflect growth and changes in Yavapai County and jurisdiction boundaries over the last planning cycle. The updated analysis will focus on the potential risk associated with projected growth patterns and their intersection with the Plan identified hazards.

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### 5.3 Hazard Risk Profiles

The following sections summarize the risk profiles for each of the Plan hazards identified in Section 5.1. For each hazard, the following elements are addressed to present the overall risk profile:

- **Description**
- **History**
- **Probability and Magnitude**
- **Vulnerability**
- **Sources**
- **Profile Maps (if applicable)**

Much of the 2006 Plan data has been updated, incorporated and/or revised to reflect current conditions and Planning Team changes, as well as an overall plan format change. County-wide and jurisdiction specific profile maps are provided at the end of the section (if applicable). Also, the maps are not included in the page count.

#### 5.3.1 Flood / Flash Flood

##### Description

The hazard of flooding addressed in this section will pertain to floods that result from precipitation/runoff related events. Other flooding due to dam or levee failures is addressed separately. The three seasonal atmospheric events that tend to trigger floods in Yavapai County are:

- *Tropical Storm Remnants:* Some of the worst flooding tends to occur when the remnants of a hurricane that has been downgraded to a tropical storm or tropical depression enter the State. These events occur infrequently and mostly in the early autumn, and usually bring heavy and intense precipitation over large regions causing severe flooding.
- *Winter Rains:* Winter brings the threat of low intensity; but long duration rains covering large areas that cause extensive flooding and erosion, particularly when combined with snowmelt.
- *Summer Monsoons:* A third atmospheric condition that brings flooding to Arizona is the annual summer monsoon. In mid to late summer the monsoon winds bring humid subtropical air into the State. Solar heating triggers afternoon and evening thunderstorms that can produce extremely intense, short duration bursts of rainfall. The thunderstorm rains are mostly translated into runoff and in some instances, the accumulation of runoff occurs very quickly resulting in a rapidly moving flood wave referred to as a flash flood. Flash floods tend to be very localized and cause significant flooding of local watercourses.

Damaging floods in the County include riverine, sheet, alluvial fan, and local area flooding. Riverine flooding occurs along established watercourses when the bankfull capacity of a watercourse is exceeded by storm runoff or snowmelt and the overbank areas become inundated. Sheet flooding occurs in regionally low areas with little topographic relief that generate floodplains over a mile wide, Alluvial fan flooding is generally located on piedmont areas near the base of the local mountains and are characterized by multiple, highly unstable flowpaths that can rapidly change during flooding events. Local area flooding is often the result of poorly designed or planned development wherein natural flowpaths are altered, blocked or obliterated, and localized ponding and conveyance problems result. Erosion is also often associated with damages due to flooding.

Another major flood hazard comes as a secondary impact of wildfires in the form of dramatically increased runoff from ordinary rainfall events that occur on newly burned watersheds. Denuding of the vegetative canopy and forest floor vegetation, and development of hydrophobic soils are the primary factors that contribute to the increased runoff. Canopy and floor level brushes and grasses intercept and store a significant volume of rainfall during a storm event. They also add to the overall watershed roughness which generally attenuates the ultimate peak discharges. Soils in a wildfire burn area can be rendered hydrophobic, which according the NRCS is the development of a thin layer of nearly impervious soil at or below the mineral soil surface that is the result of a waxy substance derived from plant material burned during a hot fire. The waxy substance penetrates into the soil as a gas and solidifies after it cools, forming a waxy coating around soil particles. Hydrophobic soils, in

combination with a denuded watershed, will significantly increase the runoff potential, turning a routine annual rainfall event into a raging flood with drastically increased potential for soil erosion and mud and debris flows.

### **History**

Flooding is clearly a major hazard in Yavapai County as shown in Tables 5-2 and 5-3. The County has been part of 14 disaster declarations for flooding, with one of those declarations occurring in the past five years. There have been at least 58 other non-declared events of reported flooding incidents that met the thresholds outlined in Section 5.1, five of which occurred in the last five years. The following incidents represent examples of major flooding that has impacted the County:

- In February 1980, severe flooding in central Arizona occurred, resulting in record discharges gauged in Metro Phoenix on the Verde, Agua Fria and Gila Rivers, as well as on Oak Creek in north central Arizona. Precipitation during this period measured at Crown King in the Bradshaw Mountains was 16.63 inches. Heavy to light rainfall fell between February 13<sup>th</sup> and the 22<sup>nd</sup>. Extensive damage to roads and bridges occurred. Flooding occurred on rivers including the Upper and Lower Verde, Upper Agua Fria, New River, Upper Centennial, and the Upper Hassayampa. Source: National Climatic Data Center, January 2003, Storm Event Database.
- In January-February 1993, heavy rain fell over most of north, central and southeastern Arizona, resulting in significant flooding along most major watercourses. Yavapai County experienced considerable damages and resulted in loss of power, phone and roadway access. The County had in excess of \$10 million in public and private losses due to flooding damages. The flooding prompted a federal disaster declaration for almost the entire state. Source: USACE Flood Damages Report <sup>28</sup>.
- In December 2004-January 2005, flooding occurred in multiple northern Arizona Counties. Flooding along the Verde River peaked at over two feet above flood stage in Clarkdale. Bridgeport and Cottonwood were similarly affected. Precipitation and snow melt in the Oak Creek watershed caused flooding more than a foot above floodstage in Sedona. Yavapai County had extensive flooding that overtopped roads and left many residents stranded in their homes. Property damage was estimated at \$2,000,000. A federal disaster was declared, releasing approximately \$3.2 million in federal funds for Yavapai County. (ADEM, 2010; NCDC, 2008)
- In February 2005, flooding occurred in multiple northern Arizona Counties. The Verde River and Williamson Valley Wash were heavily impacted by heavy rainfall on snowpack that resulted in evacuations, rescues, isolated communities, and extraordinary damage. Yavapai Co received extensive flooding and road damages. The Wineglass subdivision in Paulden was completely cut-off for over 10 days by floodwaters overtopping the three access roads. A County Detention Facility was isolated for five days, denying parolees' access for mandatory check in. Property damage was estimated at \$1.5 million. A federal disaster was declared, releasing federal funds of approximately \$2.0 million for Yavapai Co. (ADEM, 2010; NCDC, 2008)
- In August 2006, Heavy rains occurred along SR169 just east of SR69 resulting in shallow flooding across 6 properties in the Sierra Dells subdivision which resulted in \$100,000 in damages. The flooding caused water damage to 6 structures and other accessory buildings, as well as loss of land due to erosion of the river bank. (Town of Dewey-Humboldt, 2010)
- In September 2009, heavy rain, with rates up to 4 inches in an hour, fell on the Red Rocks on the northwest side of Sedona. With virtually no infiltration, the water quickly flowed into normally dry channels and washes. There were reports of numerous flooded homes, widespread street flooding, over flowing stream beds, large boulders washed into streets,

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<sup>28</sup> US Army Corps of Engineers, Los Angeles District, 1994, *Flood Damage Report – State of Arizona – Floods of 1993*

eroded paved roads, and cars moved and stacked by flood water. A 4 foot wall of water swept through the Los Abridados Resort parking lot and moved parked cars. One normally dry gully filled with 6 feet of rushing water. Several people were rescued after their cars started floating in the rapidly raising water in parking lots. City officials estimated that clean on public roads and drainage would cost over \$600,000. A thunderstorm produced very heavy rain that caused flash flooding and damage to the Tlaquepaque area of Sedona. (NCDC, April 2010)

- In September 2009, a thunderstorm in the Cottonwood area produced two to three feet of flowing water in a low water crossing. A car attempting to cross the watercourse became trapped, forcing a dangerous swift water rescue of the driver. Other damages in the area were estimated to exceed \$2,000 (City of Cottonwood, 2011).

Numerous other flood related incidents are summarized in the historic hazard database provided in Appendix D and on the enclosed CD.

**Probability and Magnitude**

For the purposes of this Plan, the probability and magnitude of flood hazards in Yavapai County jurisdictions are primarily based on the 1% (100-year) and 0.2% (500-year) probability floodplains delineated on FEMA Flood Insurance Rate Maps (FIRMs), plus any provisional floodplain delineations used for in-house purposes by participating jurisdictions or Planning Team delineated areas. FEMA has recently completed a map modification program to update the FIRMs for the County into a digital FIRM (DFIRM) format. The effective date for the new DFIRM maps is September 3, 2010. DFIRM floodplain GIS base files were obtained from FEMA and are the basis for the flood hazard depictions in this Plan.

Two designations of flood hazard are used. Any “A” zone is designated as a high hazard area. Medium flood hazard areas are all “Shaded X” zones. All “A” zones (e.g. – A, A1-99, AE, AH, AO, etc.) represent areas with a 1% probability of being flooded at a depth of one-foot or greater in any given year. All “Shaded X” zones represent areas with a 0.2% probability of being flooded at a depth of one-foot or greater in any given year. These two storms are often referred to as the 100-year and 500-year storm, respectively. Additional 100-year “in-house” floodplains were provided by Sedona for the Sedona city limits.

Maps 1A through 1D show the flood hazard areas for the entire county. Maps 1E through 1O show the flood hazard areas for each of the communities.

**Vulnerability – CPRI Results**

Flooding CPRI results for each community are summarized in Table 5-7 below.

| <b>Participating Jurisdiction</b> | <b>Probability</b> | <b>Magnitude / Severity</b> | <b>Warning Time</b> | <b>Duration</b> | <b>CPRI Score</b> |
|-----------------------------------|--------------------|-----------------------------|---------------------|-----------------|-------------------|
| Camp Verde                        | Likely             | Catastrophic                | <6 hours            | < 1 week        | 3.45              |
| Chino Valley                      | Highly Likely      | Limited                     | < 6 hours           | < 6 hours       | 3.10              |
| Clarkdale                         | Highly Likely      | Critical                    | < 6 hours           | < 1 week        | 3.60              |
| Cottonwood                        | Highly Likely      | Critical                    | < 6 hours           | < 1 week        | 3.60              |
| Dewey-Humboldt                    | Likely             | Critical                    | < 6 hours           | < 1 week        | 3.15              |
| Jerome                            | Highly Likely      | Critical                    | < 6 hours           | < 1 week        | 3.60              |
| Prescott                          | Highly Likely      | Critical                    | < 6 hours           | < 1 week        | 3.60              |
| Prescott Valley                   | Highly Likely      | Critical                    | < 6 hours           | < 1 week        | 3.60              |
| Sedona                            | Likely             | Catastrophic                | < 6 hours           | < 1 week        | 3.45              |
| Unincorporated Yavapai Co         | Highly Likely      | Critical                    | < 6 hours           | < 1 week        | 3.60              |
| Yavapai-Prescott Indian Tribe     | Likely             | Limited                     | 6 - 12 hours        | < 24 hours      | 2.60              |
| <b>County-wide average CPRI =</b> |                    |                             |                     |                 | <b>3.40</b>       |

**Vulnerability – Loss Estimations**

The estimation of potential exposure to high and medium flood hazards was accomplished by intersecting the human and critical facility assets with the flood hazard limits depicted on Maps 1A, 1B, 1C and 1D. Loss estimates to all facilities located within the high and medium flood hazard areas were made based on loss estimation tables published by FEMA (FEMA, 2001). Most of the assets located within high hazard flood areas will be subject to three feet or less of flooding. Using the FEMA tables, it is assumed that all structural assets located within the high hazard areas will have a loss-to-exposure ratio of 0.20 (or 20%). A loss to exposure ratio of 0.05 (5%) is assumed for assets located in the medium hazard areas. Table 5-8 summarizes the Planning Team identified critical facilities potentially exposed to high and medium flood hazards, and the corresponding estimates of losses. Table 5-10 summarizes population sectors exposed to the high and medium flood hazards. HAZUS residential, commercial and industrial exposures and loss estimates to high and medium flood hazards are summarized in Tables 5-10 through 5-23.

In summary, \$29 million and \$0.4 million in asset related losses are estimated for high and medium flood hazards, for all the participating jurisdictions in Yavapai County. An additional \$206 and \$13 million in high and medium flood losses to HAZUS defined residential, commercial, and industrial facilities is estimated for all participating Yavapai County jurisdictions. Regarding human vulnerability, a total population of 11,276 people, or 6.74% of the total population, is potentially exposed to a high hazard flood event. A total population of 2,672 people, or 1.6% of the total population, is potentially exposed to a medium hazard flood event. Based on the historic record, multiple deaths and injuries are plausible and a substantial portion of the exposed population is subject to displacement depending on the event magnitude.

It is duly noted that the loss and exposure numbers presented above represent a comprehensive evaluation of the County as a whole. It is unlikely that a storm event would occur that would flood all of the delineated high and medium flood hazard areas at the same time. Accordingly, actual event based losses and exposure are likely to be only a fraction of those summarized above. Furthermore, it should be noted that any flood event that exposes assets or population to a medium hazard will also expose assets and populations to the high hazard flood zone. That is, the 100-year floodplain would be entirely inundated during a 500-year flood.

| <b>Table 5-8: Asset inventory exposure to high and medium hazard flooding and corresponding loss estimates</b> |   |                            |  |  |  |
|--|---|----------------------------|--|--|--|
| <b>Community</b>   | <b>Total Facilities Reported by Community</b> | <b>Impacted Facilities</b> | <b>Percentage of Total Community Facilities Impacted</b> | <b>Estimated Replacement Cost (x \$1000)</b> | <b>Estimated Structure Loss (x \$1000)</b> |
| <b>HIGH</b>  |   |                            |  |  |  |
| <b>County-Wide Totals</b>  | <b>786</b>                                    | <b>82</b>                  | <b>10.43%</b>  | <b>\$145,469</b>                             | <b>\$29,094</b>                            |
| Camp Verde   | 76  | 9                          | 11.84%   | \$34,680                                     | \$6,936                                    |
| Chino Valley   | 27  | 0                          | 0.00%  | \$0  | \$0  |
| Clarkdale  | 44  | 6                          | 13.64%   | \$31,125                                     | \$6,225                                    |
| Cottonwood   | 68  | 7                          | 10.29%   | \$17,548                                     | \$3,510                                    |
| Dewey-Humboldt   | 12  | 0                          | 0.00%  | \$0  | \$0  |
| Jerome   | 22  | 0                          | 0.00%  | \$0  | \$0  |
| Prescott   | 99  | 10                         | 10.10%   | \$9,785                                      | \$1,957                                    |
| Prescott Valley  | 91  | 6                          | 6.59%  | \$3,190                                      | \$638                                      |
| Sedona   | 49  | 6                          | 12.24%   | \$9,018                                      | \$1,804                                    |
| Unincorporated   | 282   | 37                         | 13.12%   | \$38,723                                     | \$7,745                                    |
| YAN  | 2   | 0                          | 0.00%  | \$0  | \$0  |
| Yavapai-Prescott Indian Tribe  | 14  | 1                          | 7.14%  | \$1,400                                      | \$280                                      |
| Sedona (Coconino Co. only)   | 22  | 3                          | 13.64%   | \$725  | \$145                                      |
| <b>MEDIUM</b>  |   |                            |  |  |  |
| <b>County-Wide Totals</b>  | <b>786</b>                                    | <b>10</b>                  | <b>1.27%</b>   | <b>\$8,406</b>                               | <b>\$420</b>                               |
| Camp Verde   | 76  | 2                          | 2.63%  | \$2,625                                      | \$131                                      |
| Chino Valley   | 27  | 0                          | 0.00%  | \$0  | \$0  |
| Clarkdale  | 44  | 2                          | 4.55%  | \$625  | \$31                                       |
| Cottonwood   | 68  | 0                          | 0.00%  | \$0  | \$0  |
| Dewey-Humboldt   | 12  | 1                          | 8.33%  | \$600  | \$30                                       |
| Jerome   | 22  | 0                          | 0.00%  | \$0  | \$0  |
| Prescott   | 99  | 3                          | 3.03%  | \$2,760                                      | \$138                                      |
| Prescott Valley  | 91  | 1                          | 1.10%  | \$796  | \$40                                       |
| Sedona   | 49  | 1                          | 2.04%  | \$1,000                                      | \$50                                       |
| Unincorporated   | 282   | 0                          | 0.00%  | \$0  | \$0  |
| YAN  | 2   | 0                          | 0.00%  | \$0  | \$0  |
| Yavapai-Prescott Indian Tribe  | 14  | 0                          | 0.00%  | \$0  | \$0  |
| Sedona (Coconino Co. only)   | 22  | 2                          | 9.09%  | \$2,300                                      | \$115                                      |

| <b>Table 5-9: Population sectors exposed to high and medium hazard flooding</b> |                         |                           |                                      |                                 |                                   |  |
|---|-------------------------|---------------------------|--------------------------------------|---------------------------------|-----------------------------------|--|
| <b>Community</b>  | <b>Total Population</b> | <b>Population Exposed</b> | <b>Percent of Population Exposed</b> | <b>Total Population Over 65</b> | <b>Population Over 65 Exposed</b> | <b>Percent of Population Over 65 Exposed</b> |
| <b>HIGH</b>   |                         |                           |                                      |                                 |                                   |  |
| <b>County-Wide Totals</b>   | <b>167,304</b>          | <b>11,276</b>             | <b>6.74%</b>                         | <b>36,586</b>                   | <b>2,307</b>                      | <b>6.30%</b>                                 |
| Camp Verde  | 8,915                   | 1,906                     | 21.38%                               | 1,788                           | 380                               | 21.23%                                       |
| Chino Valley  | 8,244                   | 208                       | 2.53%                                | 1,202                           | 32                                | 2.69%  |
| Clarkdale   | 3,240                   | 226                       | 6.97%                                | 799                             | 44                                | 5.56%  |
| Cottonwood  | 9,665                   | 655                       | 6.78%                                | 1,913                           | 81                                | 4.25%  |
| Dewey-Humboldt  | 3,312                   | 139                       | 4.19%                                | 517                             | 21                                | 3.99%  |
| Jerome  | 333                     | 0                         | 0.00%                                | 86                              | 0                                 | 0.00%  |
| Peoria  | 1                       | 0                         | 0.00%                                | 0                               | 0                                 | 0.00%  |
| Prescott  | 34,085                  | 1,694                     | 4.97%                                | 8,862                           | 384                               | 4.33%  |
| Prescott Valley   | 24,387                  | 680                       | 2.79%                                | 4,397                           | 141                               | 3.20%  |
| Sedona  | 7,140                   | 605                       | 8.47%                                | 1,816                           | 157                               | 8.62%  |
| Unincorporated  | 67,272                  | 5,126                     | 7.62%                                | 15,045                          | 1,058                             | 7.03%  |
| Wickenburg  | 1                       | 0                         | 9.97%                                | 0                               | 0                                 | 10.04%                                       |
| Yavapai-Apache Nation   | 710                     | 37                        | 5.19%                                | 161                             | 9                                 | 5.60%  |
| Yavapai-Prescott Indian Tribe   | 190                     | 9                         | 4.73%                                | 16                              | 0                                 | 0.00%  |
| Sedona<br>(Coconino Co. only)   | 2,967                   | 285                       | 9.61%                                | 922                             | 88                                | 9.60%  |
| <b>MEDIUM</b>   |                         |                           |                                      |                                 |                                   |  |
| <b>County-Wide Totals</b>   | <b>167,304</b>          | <b>2,672</b>              | <b>1.60%</b>                         | <b>36,586</b>                   | <b>536</b>                        | <b>1.46%</b>                                 |
| Camp Verde  | 8,915                   | 212                       | 2.38%                                | 1,788                           | 41                                | 2.27%  |
| Chino Valley  | 8,244                   | 16                        | 0.19%                                | 1,202                           | 2                                 | 0.20%  |
| Clarkdale   | 3,240                   | 38                        | 1.16%                                | 799                             | 7                                 | 0.93%  |
| Cottonwood  | 9,665                   | 509                       | 5.27%                                | 1,913                           | 63                                | 3.31%  |
| Dewey-Humboldt  | 3,312                   | 54                        | 1.62%                                | 517                             | 7                                 | 1.44%  |
| Jerome  | 333                     | 0                         | 0.02%                                | 86                              | 0                                 | 0.01%  |
| Peoria  | 1                       | 0                         | 0.00%                                | 0                               | 0                                 | 0.00%  |
| Prescott  | 34,085                  | 777                       | 2.28%                                | 8,862                           | 186                               | 2.09%  |
| Prescott Valley   | 24,387                  | 94                        | 0.39%                                | 4,397                           | 21                                | 0.49%  |
| Sedona  | 7,140                   | 55                        | 0.77%                                | 1,816                           | 14                                | 0.76%  |
| Unincorporated  | 67,272                  | 913                       | 1.36%                                | 15,045                          | 192                               | 1.28%  |
| Wickenburg  | 1                       | 0                         | 0.00%                                | 0                               | 0                                 | 0.00%  |
| Yavapai-Apache Nation   | 710                     | 5                         | 0.69%                                | 161                             | 1                                 | 0.91%  |
| Yavapai-Prescott Indian Tribe   | 190                     | 0                         | 0.00%                                | 16                              | 0                                 | 0.00%  |
| Sedona<br>(Coconino Co. only)   | 2,967                   | 30                        | 1.00%                                | 922                             | 8                                 | 0.82%  |

**Table 5-10: Yavapai County HAZUS building exposure to flooding**

|                              | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Yavapai County HAZUS Summary | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| <b>County-Wide Totals</b>    | <b>82,854</b>    | <b>\$12,145,236</b>                 | <b>3,722</b>     | <b>\$3,297,715</b>                  | <b>1,319</b>     | <b>\$706,634</b>                    | <b>\$16,149,585</b>                    |                        |                                |
| High Hazard Exposure         | 5,449            | \$719,165                           | 269              | \$253,547                           | 94               | \$57,446                            | \$1,030,158                            | 20%                    | \$206,032                      |
| Medium Hazard Exposure       | 1,304            | \$168,197                           | 78               | \$80,452                            | 25               | \$14,356                            | \$263,006                              | 5%                     | \$13,150                       |
| Yavapai County HAZUS Summary | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure         | 06.58%           | 05.92%                              | 07.22%           | 07.69%                              | 07.16%           | 08.13%                              |  |                        |                                |
| Medium Hazard Exposure       | 01.57%           | 01.38%                              | 02.11%           | 02.44%                              | 01.88%           | 02.03%                              |  |                        |                                |

**Table 5-11: Camp Verde HAZUS building exposure to flooding**

|                              | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Camp Verde HAZUS Summary     | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| <b>Community-Wide Totals</b> | <b>3,851</b>     | <b>\$512,459</b>                    | <b>160</b>       | <b>\$124,045</b>                    | <b>65</b>        | <b>\$35,167</b>                     | <b>\$671,671</b>                       |                        |                                |
| High Hazard Exposure         | 825              | \$110,794                           | 18               | \$9,112                             | 12               | \$5,159                             | \$125,065                              | 20%                    | \$25,013                       |
| Medium Hazard Exposure       | 88               | \$12,923                            | 3                | \$1,008                             | 1                | \$257                               | \$14,187                               | 5%                     | \$709                          |
| Camp Verde HAZUS Summary     | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure         | 21.42%           | 21.62%                              | 11.57%           | 07.35%                              | 18.08%           | 14.67%                              |  |                        |                                |
| Medium Hazard Exposure       | 02.28%           | 02.52%                              | 02.04%           | 0.81%                               | 01.05%           | 0.73%                               |  |                        |                                |

|                            | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|----------------------------|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Chino Valley HAZUS Summary | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| Community-Wide Totals      | 3,610            | \$394,930                           | 128              | \$79,379                            | 64               | \$29,717                            | \$504,025                              |                        |                                |
| High Hazard Exposure       | 86               | \$9,171                             | 3                | \$2,546                             | 2                | \$1,805                             | \$13,521                               | 20%                    | \$2,704                        |
| Medium Hazard Exposure     | 6                | \$803                               | 1                | \$466                               | 0                | \$716                               | \$1,985                                | 5%                     | \$99                           |
| Chino Valley HAZUS Summary | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure       | 02.37%           | 02.32%                              | 02.69%           | 03.21%                              | 03.12%           | 06.07%                              |  |                        |                                |
| Medium Hazard Exposure     | 0.17%            | 0.20%                               | 0.50%            | 0.59%                               | 0.64%            | 02.41%                              |  |                        |                                |

|                         | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|-------------------------|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Clarkdale HAZUS Summary | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| Community-Wide Totals   | 1,639            | \$193,639                           | 58               | \$38,407                            | 23               | \$17,771                            | \$249,817                              |                        |                                |
| High Hazard Exposure    | 99               | \$13,181                            | 4                | \$2,968                             | 2                | \$2,452                             | \$18,601                               | 20%                    | \$3,720                        |
| Medium Hazard Exposure  | 16               | \$2,055                             | 1                | \$489                               | 0                | \$892                               | \$3,436                                | 5%                     | \$172                          |
| Clarkdale HAZUS Summary | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure    | 06.03%           | 06.81%                              | 06.81%           | 07.73%                              | 09.71%           | 13.80%                              |  |                        |                                |
| Medium Hazard Exposure  | 01.0%            | 01.06%                              | 01.20%           | 01.27%                              | 01.61%           | 05.02%                              |  |                        |                                |

| Table 5-14: Cottonwood HAZUS building exposure to flooding |                  |                                     |                  |                                     |                  |                                     |  |                        |                                |
|--|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
|  | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
| Cottonwood HAZUS Summary                                   | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| Community-Wide Totals                                      | 4,265            | \$595,814                           | 285              | \$440,562                           | 70               | \$48,877                            | \$1,085,252                            |                        |                                |
| High Hazard Exposure                                       | 287              | \$37,112                            | 21               | \$17,475                            | 4                | \$1,820                             | \$56,406                               | 20%                    | \$11,281                       |
| Medium Hazard Exposure                                     | 244              | \$29,569                            | 18               | \$14,820                            | 7                | \$2,923                             | \$47,312                               | 5%                     | \$2,366                        |
| Cottonwood HAZUS Summary                                   | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure                                       | 06.73%           | 06.23%                              | 07.46%           | 03.97%                              | 05.30%           | 03.72%                              |  |                        |                                |
| Medium Hazard Exposure                                     | 05.71%           | 04.96%                              | 06.20%           | 03.36%                              | 09.60%           | 05.98%                              |  |                        |                                |

| Table 5-15: Dewey-Humboldt HAZUS building exposure to flooding |                  |                                     |                  |                                     |                  |                                     |  |                        |                                |
|--|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
|  | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
| Dewey-Humboldt HAZUS Summary                                   | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| Community-Wide Totals  | 1,459            | \$177,128                           | 47               | \$18,751                            | 30               | \$9,805                             | \$205,684                              |                        |                                |
| High Hazard Exposure   | 57               | \$7,836                             | 2                | \$758                               | 1                | \$314                               | \$8,908                                | 20%                    | \$1,782                        |
| Medium Hazard Exposure   | 21               | \$3,251                             | 1                | \$322                               | 0                | \$8                                 | \$3,581                                | 5%                     | \$179                          |
| Dewey-Humboldt HAZUS Summary                                   | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure   | 03.88%           | 04.42%                              | 03.60%           | 04.04%                              | 02.52%           | 03.21%                              |  |                        |                                |
| Medium Hazard Exposure   | 01.44%           | 01.84%                              | 01.50%           | 01.72%                              | 0.09%            | 0.08%                               |  |                        |                                |

|                        | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|------------------------|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Jerome HAZUS Summary   | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| Community-Wide Totals  | 310              | \$32,286                            | 23               | \$21,064                            | 7                | \$4,135                             | \$57,485                               |                        |                                |
| High Hazard Exposure   | 0                | \$0                                 | 0                | \$0                                 | 0                | \$0                                 | \$0                                    | 20%                    | \$0                            |
| Medium Hazard Exposure | 0                | \$5                                 | 0                | \$0                                 | 0                | \$0                                 | \$5                                    | 5%                     | \$0                            |
| Jerome HAZUS Summary   | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure   | 0.0%             | 0.0%                                | 0.0%             | 0.0%                                | 0.0%             | 0.0%                                |  |                        |                                |
| Medium Hazard Exposure | 0.01%            | 0.01%                               | 0.0%             | 0.0%                                | 0.0%             | 0.0%                                |  |                        |                                |

|                        | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|------------------------|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Prescott HAZUS Summary | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| Community-Wide Totals  | 15,995           | \$2,878,128                         | 989              | \$1,214,850                         | 277              | \$158,198                           | \$4,251,176                            |                        |                                |
| High Hazard Exposure   | 781              | \$124,647                           | 93               | \$135,892                           | 23               | \$17,136                            | \$277,676                              | 20%                    | \$55,535                       |
| Medium Hazard Exposure | 376              | \$55,978                            | 37               | \$49,268                            | 8                | \$4,944                             | \$110,189                              | 5%                     | \$5,509                        |
| Prescott HAZUS Summary | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure   | 04.88%           | 04.33%                              | 09.39%           | 11.19%                              | 08.39%           | 10.83%                              |  |                        |                                |
| Medium Hazard Exposure | 02.35%           | 01.94%                              | 03.75%           | 04.06%                              | 03.03%           | 03.13%                              |  |                        |                                |

| Table 5-18: Prescott Valley HAZUS building exposure to flooding |                  |                                     |                  |                                     |                  |                                     |  |                        |                                |
|---|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
|   | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
| Prescott Valley HAZUS Summary                                   | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| <b>Community-Wide Totals</b>                                    | <b>9,734</b>     | <b>\$1,507,726</b>                  | <b>524</b>       | <b>\$395,664</b>                    | <b>203</b>       | <b>\$129,065</b>                    | <b>\$2,032,455</b>                     |                        |                                |
| High Hazard Exposure  | 284              | \$42,415                            | 15               | \$10,604                            | 6                | \$4,029                             | \$57,048                               | 20%                    | \$11,410                       |
| Medium Hazard Exposure  | 46               | \$6,099                             | 4                | \$4,119                             | 1                | \$864                               | \$11,082                               | 5%                     | \$554                          |
| Prescott Valley HAZUS Summary                                   | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure  | 02.92%           | 02.81%                              | 02.82%           | 02.68%                              | 03.15%           | 03.12%                              |  |                        |                                |
| Medium Hazard Exposure  | 0.47%            | 0.40%                               | 0.76%            | 01.04%                              | 0.60%            | 0.67%                               |  |                        |                                |

| Table 5-19: Sedona (Yavapai County) HAZUS building exposure to flooding |                  |                                     |                  |                                     |                  |                                     |  |                        |                                |
|---|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
|   | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
| Sedona (Yavapai County) HAZUS Summary                                   | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| <b>Community-Wide Totals</b>  | <b>4,154</b>     | <b>\$596,398</b>                    | <b>231</b>       | <b>\$178,462</b>                    | <b>75</b>        | <b>\$38,817</b>                     | <b>\$813,676</b>                       |                        |                                |
| High Hazard Exposure  | 362              | \$49,924                            | 25               | \$19,167                            | 8                | \$5,031                             | \$74,122                               | 20%                    | \$14,824                       |
| Medium Hazard Exposure  | 30               | \$5,021                             | 3                | \$3,360                             | 1                | \$1,118                             | \$9,498                                | 5%                     | \$475                          |
| Sedona (Yavapai County) HAZUS Summary                                   | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure  | 08.72%           | 08.37%                              | 10.99%           | 10.74%                              | 10.10%           | 12.96%                              |  |                        |                                |
| Medium Hazard Exposure  | 0.73%            | 0.84%                               | 01.33%           | 01.88%                              | 01.44%           | 02.88%                              |  |                        |                                |

| Table 5-20: Unincorporated Yavapai County HAZUS building exposure to flooding |                  |                                     |                  |                                     |                  |                                     |  |                        |                                |
|---|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
|   | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
| Unincorporated (Yavapai County) HAZUS Summary                                 | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| <b>Community-Wide Totals</b>  | <b>37,551</b>    | <b>\$5,217,729</b>                  | <b>1,273</b>     | <b>\$783,936</b>                    | <b>503</b>       | <b>\$233,930</b>                    | <b>\$6,235,594</b>                     |                        |                                |
| High Hazard Exposure  | 2,651            | \$321,842                           | 86               | \$54,656                            | 37               | \$19,382                            | \$395,879                              | 20%                    | \$79,176                       |
| Medium Hazard Exposure  | 475              | \$52,360                            | 11               | \$6,555                             | 6                | \$2,448                             | \$61,362                               | 5%                     | \$3,068                        |
| Unincorporated (Yavapai County) HAZUS Summary                                 | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure  | 07.06%           | 06.17%                              | 06.78%           | 06.97%                              | 07.28%           | 08.29%                              |  |                        |                                |
| Medium Hazard Exposure  | 01.26%           | 01.0%                               | 0.89%            | 0.84%                               | 01.17%           | 01.05%                              |  |                        |                                |

| Table 5-21: Yavapai-Apache Nation HAZUS building exposure to flooding |                  |                                     |                  |                                     |                  |                                     |  |                        |                                |
|---|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
|   | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
| Yavapai-Apache Nation HAZUS Summary                                   | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| <b>Community-Wide Totals</b>  | <b>217</b>       | <b>\$23,885</b>                     | <b>3</b>         | <b>\$1,770</b>                      | <b>1</b>         | <b>\$1,143</b>                      | <b>\$26,798</b>                        |                        |                                |
| High Hazard Exposure  | 14               | \$1,365                             | 1                | \$365                               | 0                | \$318                               | \$2,047                                | 20%                    | \$409                          |
| Medium Hazard Exposure  | 1                | \$136                               | 0                | \$45                                | 0                | \$188                               | \$368                                  | 5%                     | \$18                           |
| Yavapai-Apache Nation HAZUS Summary                                   | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure  | 06.33%           | 05.71%                              | 18.20%           | 20.59%                              | 07.47%           | 27.81%                              |  |                        |                                |
| Medium Hazard Exposure  | 0.65%            | 0.57%                               | 01.92%           | 02.52%                              | 02.31%           | 16.41%                              |  |                        |                                |

|   | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|---|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Yavapai-Prescott Indian Tribe HAZUS Summary | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| <b>Community-Wide Totals</b>                | <b>62</b>        | <b>\$14,794</b>                     | <b>2</b>         | <b>\$825</b>                        | <b>0</b>         | <b>\$10</b>                         | <b>\$15,630</b>                        |                        |                                |
| High Hazard Exposure                        | 4                | \$870                               | 0                | \$6                                 | 0                | \$0                                 | \$876                                  | 20%                    | \$175                          |
| Medium Hazard Exposure                      | 0                | \$0                                 | 0                | \$0                                 | 0                | \$0                                 | \$0                                    | 5%                     | \$0                            |
| Yavapai-Prescott Indian Tribe HAZUS Summary | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure                        | 05.98%           | 05.88%                              | 02.61%           | 0.77%                               | 0.0%             | 0.0%                                |  |                        |                                |
| Medium Hazard Exposure                      | 0.0%             | 0.0%                                | 0.01%            | 0.01%                               | 0.0%             | 0.0%                                |  |                        |                                |

|  | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|--|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Sedona (Coconino County) HAZUS Summary | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| <b>Community-Wide Totals</b>           | <b>1,883</b>     | <b>\$361,645</b>                    | <b>145</b>       | <b>\$143,823</b>                    | <b>28</b>        | <b>\$12,477</b>                     | <b>\$517,945</b>                       |                        |                                |
| High Hazard Exposure                   | 192              | \$42,801                            | 16               | \$21,105                            | 4                | \$1,619                             | \$65,525                               | 20%                    | \$13,105                       |
| Medium Hazard Exposure                 | 25               | \$6,013                             | 2                | \$3,331                             | 0                | \$134                               | \$9,478                                | 5%                     | \$474                          |
| Sedona (Coconino County) HAZUS Summary | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure                   | 10.19%           | 11.84%                              | 10.88%           | 14.67%                              | 15.20%           | 12.97%                              |  |                        |                                |
| Medium Hazard Exposure                 | 01.32%           | 01.66%                              | 01.49%           | 02.32%                              | 01.36%           | 01.08%                              |  |                        |                                |

A summary comparison of the 2006 Plan county-wide flooding vulnerability analysis results to the current plan is shown in Table 5-24. Changes shown in Table 5-24 are a result of revisions to the Planning Team asset inventory (several of the 2006 Plan assets did not have estimated replacement costs), a different flood hazard layer (DFIRM), a refinement of the GIS algorithms used to determine the HAZUS exposure, and a different loss to exposure ratio applied to the HAZUS exposure numbers.

| <b>Exposure</b>                 | <b>2006 Plan</b> | <b>2011 Plan</b> |
|---------------------------------|------------------|------------------|
| Assets: High Hazard             | \$47.6 Million   | \$29 Million     |
| Assets: Medium Hazard           | \$1.8 Million    | \$0.4 Million    |
| HAZUS Facilities: High Hazard   | \$55 Million     | \$206 Million    |
| HAZUS Facilities: Medium Hazard | \$2.6 Million    | \$13.1 Million   |
| Human: High Hazard              | 12,175           | 11,276           |
| Human: Medium Hazard            | 2,677            | 2,672            |

**Vulnerability – Repetitive Loss Properties**

Repetitive Loss (RL) properties are those NFIP-insured properties that since 1978 have experienced multiple flood losses. FEMA tracks RL property statistics, and in particular to identify Severe RL (SRL) properties. RL properties demonstrate a track record of repeated flooding for a certain location and are one element of the vulnerability analysis. RL properties are also important to the NFIP, since structures that flood frequently put a strain on the National Flood Insurance Fund. FEMA records dated January 2010 (provided by ADEM) and current Yavapai County Flood Control District records indicate that there are 21 identified RL properties in Yavapai County, with a total of over \$1 million in associated building and contents value payments. Only one loss payment has occurred within the 2006-2011 period. Table 5-25 summarizes the RL property characteristics by jurisdiction.

| <b>Jurisdiction</b>  | <b>No. of Properties</b> | <b>No. of Properties Mitigated</b> | <b>Total Payments</b> |
|--|--------------------------|------------------------------------|-----------------------|
| Camp Verde   | 5                        | 1                                  | \$220,753             |
| Chino Valley   | 1                        | 1                                  | \$19,166              |
| Cottonwood   | 1                        | 0                                  | \$2,144               |
| Unincorporated Yavapai County  | 14                       | 6                                  | \$768,158             |
| Sources: FEMA Region IX, 2010 (data as of January 31, 2010); YCFCD, 2011 |                          |                                    |                       |

**Vulnerability – Development Trends**

Most floodprone properties in Yavapai County pre-date the planning jurisdictions’ entry into the NFIP and were constructed prior to current floodplain management practices. Rapid growth during the first half of the 2006 Plan cycle provided a challenge to jurisdictions in the effective regulation and identification of floodplains and drainage. The development of new properties or substantial re-development of existing structures is now subject to regulatory review procedures implemented by each jurisdiction. New development, adequate planning and regulatory tools are in place to regulate future development. For many areas within the county, challenges for the management of new growth include the need for master drainage planning and additional floodplain delineations to identify and map the flood hazards within the growth areas where no mapping currently exists.

**Sources**

- Arizona Division of Emergency Management, 2010, State of Arizona Multi-Hazard Mitigation Plan.
- FEMA, 2001, Understanding Your Risks; Identifying Hazards & Estimating Losses, FEMA Document No. 386-2.
- JE Fuller/ Hydrology & Geomorphology, 2006, Yavapai County Multi-Hazard Mitigation Plan
- JE Fuller/ Hydrology & Geomorphology, 2006, Camp Verde Multi-Hazard Mitigation Plan
- JE Fuller/ Hydrology & Geomorphology, 2006, Chino Valley Multi-Hazard Mitigation Plan
- JE Fuller/ Hydrology & Geomorphology, 2006, Clarkdale Multi-Hazard Mitigation Plan
- JE Fuller/ Hydrology & Geomorphology, 2006, Cottonwood Multi-Hazard Mitigation Plan
- JE Fuller/ Hydrology & Geomorphology, 2006, Dewey-Humboldt Multi-Hazard Mitigation Plan
- JE Fuller/ Hydrology & Geomorphology, 2006, Jerome Multi-Hazard Mitigation Plan
- JE Fuller/ Hydrology & Geomorphology, 2006, Prescott Multi-Hazard Mitigation Plan
- JE Fuller/ Hydrology & Geomorphology, 2006, Prescott Valley Multi-Hazard Mitigation Plan
- JE Fuller/ Hydrology & Geomorphology, 2006, Sedona Multi-Hazard Mitigation Plan
- NOAA, National Weather Service Forecast Office – Tucson, 2011, accessed via the following URL:  
<http://www.wrh.noaa.gov/twc/hydro/floodhis.php>
- U.S. Dept of Commerce, National Climatic Data Center, 2010, Storm Events Database, accessed via the following URL: <http://www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwevent~storms>
- U.S. Army Corps of Engineers, Los Angeles District, 1994, Flood Damage Report, State of AZ, Floods of 1993.

**Profile Maps**

- Maps 1A through 1D – County-Wide Flood Hazard Maps
- Maps 1E through 1O – Community Flood Hazard Maps

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# Yavapai County Multi-Jurisdictional Hazard Mitigation Plan



## Legend

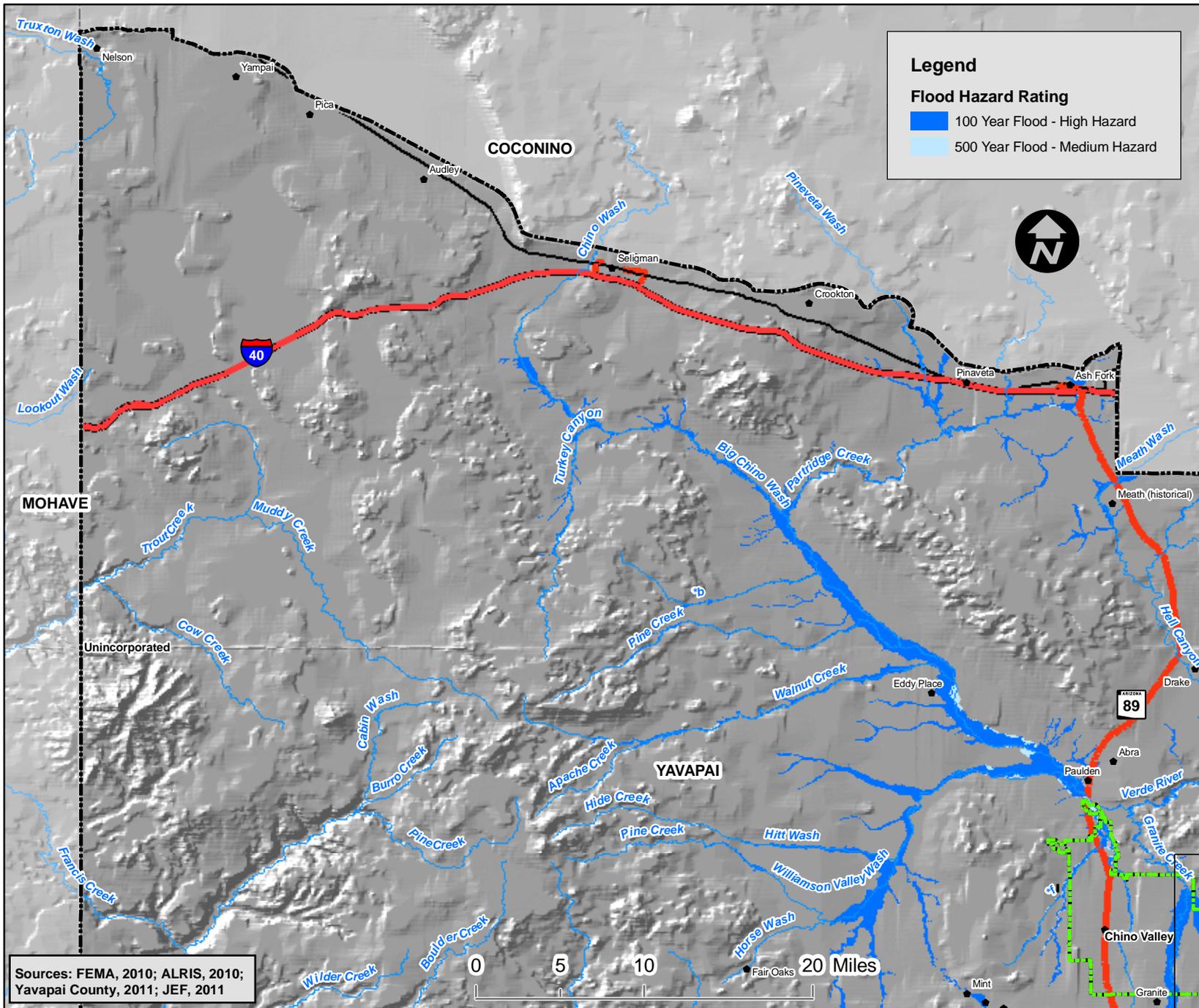
### Community

- Camp Verde
  - Chino Valley
  - Clarkdale
  - Cottonwood
  - Dewey-Humboldt
  - Jerome
  - Peoria
  - Prescott
  - Prescott Valley
  - Sedona
  - Unincorporated
  - Wickenburg
  - Yavapai-Apache Nation
  - Yavapai-Prescott Indian Tribe
  - Cities and Places
  - Watercourses
- ### Roads
- Interstate
  - US, State, County Hwys
  - Major Roads
  - County Boundary
  - Lakes

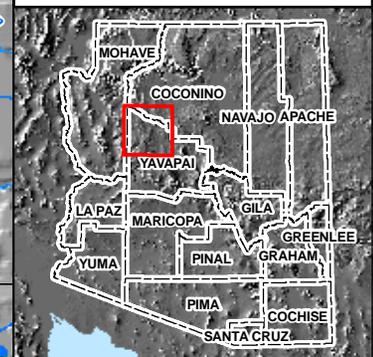
## Legend

### Flood Hazard Rating

- 100 Year Flood - High Hazard
- 500 Year Flood - Medium Hazard



Sources: FEMA, 2010; ALRIS, 2010;  
Yavapai County, 2011; JEF, 2011



Map 1A  
Yavapai County  
Flood Hazard Map  
as of January 2011

# Yavapai County Multi-Jurisdictional Hazard Mitigation Plan



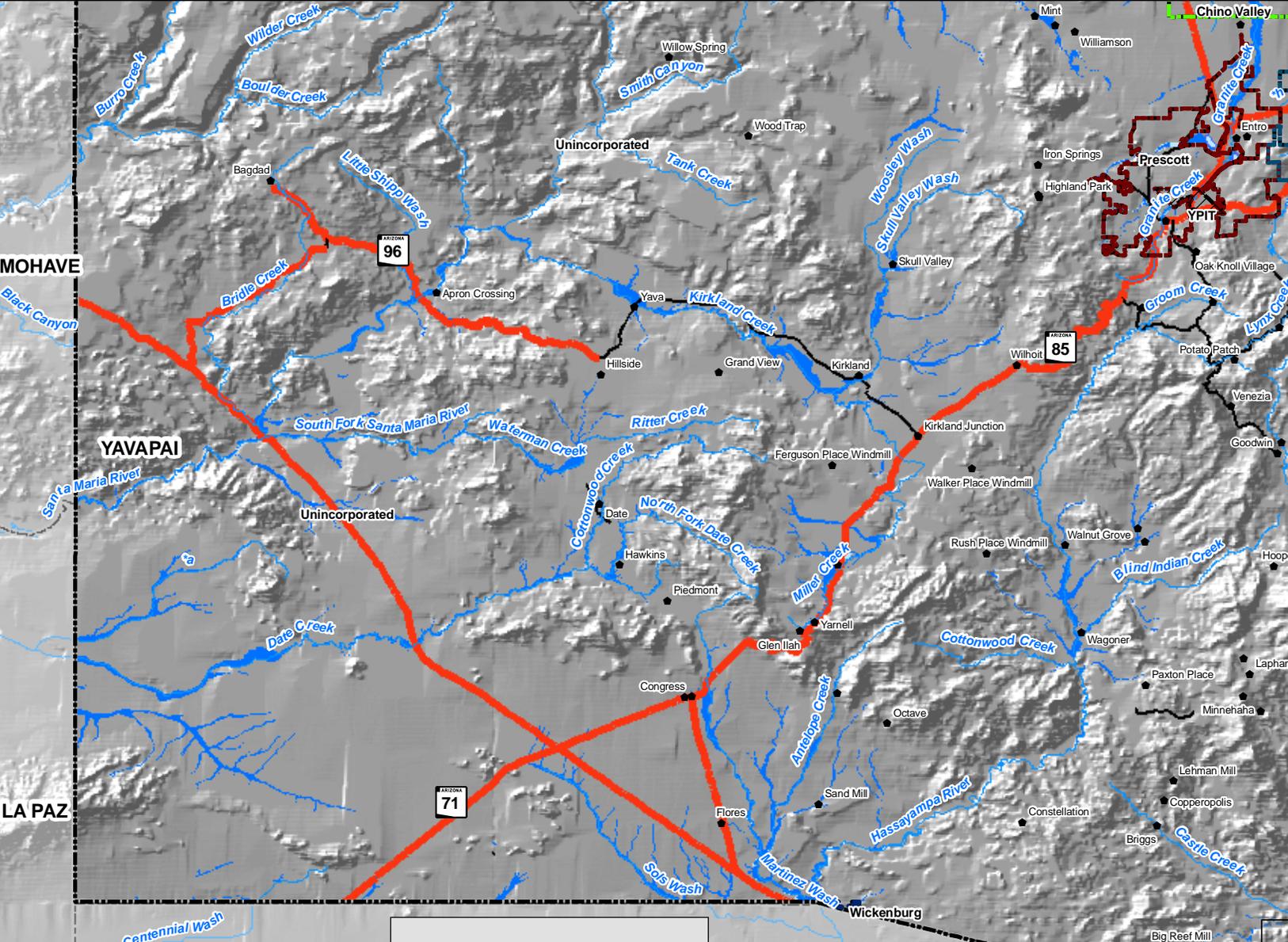
## Legend

### Community

- Camp Verde
- Chino Valley
- Clarkdale
- Cottonwood
- Dewey-Humboldt
- Jerome
- Peoria
- Prescott
- Prescott Valley
- Sedona
- Unincorporated
- Wickenburg
- Yavapai-Apache Nation
- Yavapai-Prescott Indian Tribe
- Cities and Places
- Watercourses

### Roads

- Interstate
- US, State, County Hwy
- Major Roads
- County Boundary
- Lakes



MOHAVE

YAVAPAI

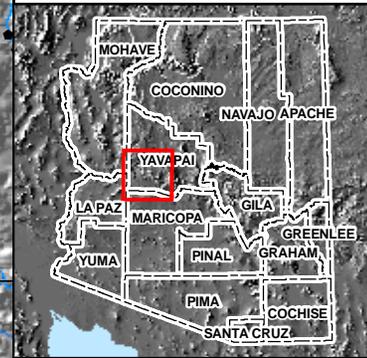
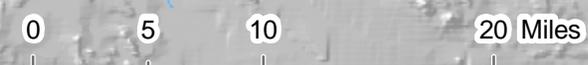
LA PAZ

Sources: FEMA, 2010; ALRIS, 2010; Yavapai County, 2011; JEF, 2011

**Legend**

**Flood Hazard Rating**

- 100 Year Flood - High Hazard
- 500 Year Flood - Medium Hazard



Map 1B  
Yavapai County  
Flood Hazard Map  
as of January 2011

# Yavapai County Multi-Jurisdictional Hazard Mitigation Plan



## Legend

### Community

- Camp Verde
- Chino Valley
- Clarkdale
- Cottonwood
- Dewey-Humboldt
- Jerome
- Peoria
- Prescott
- Prescott Valley
- Sedona
- Unincorporated
- Wickenburg
- Yavapai-Apache Nation
- Yavapai-Prescott Indian Tribe
- Cities and Places
- Watercourses

### Roads

- Interstate
- US, State, County Hwys
- Major Roads
- County Boundary
- Lakes

## Legend

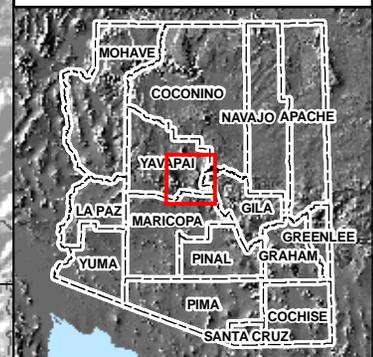
### Flood Hazard Rating

- 100 Year Flood - High Hazard
- 500 Year Flood - Medium Hazard

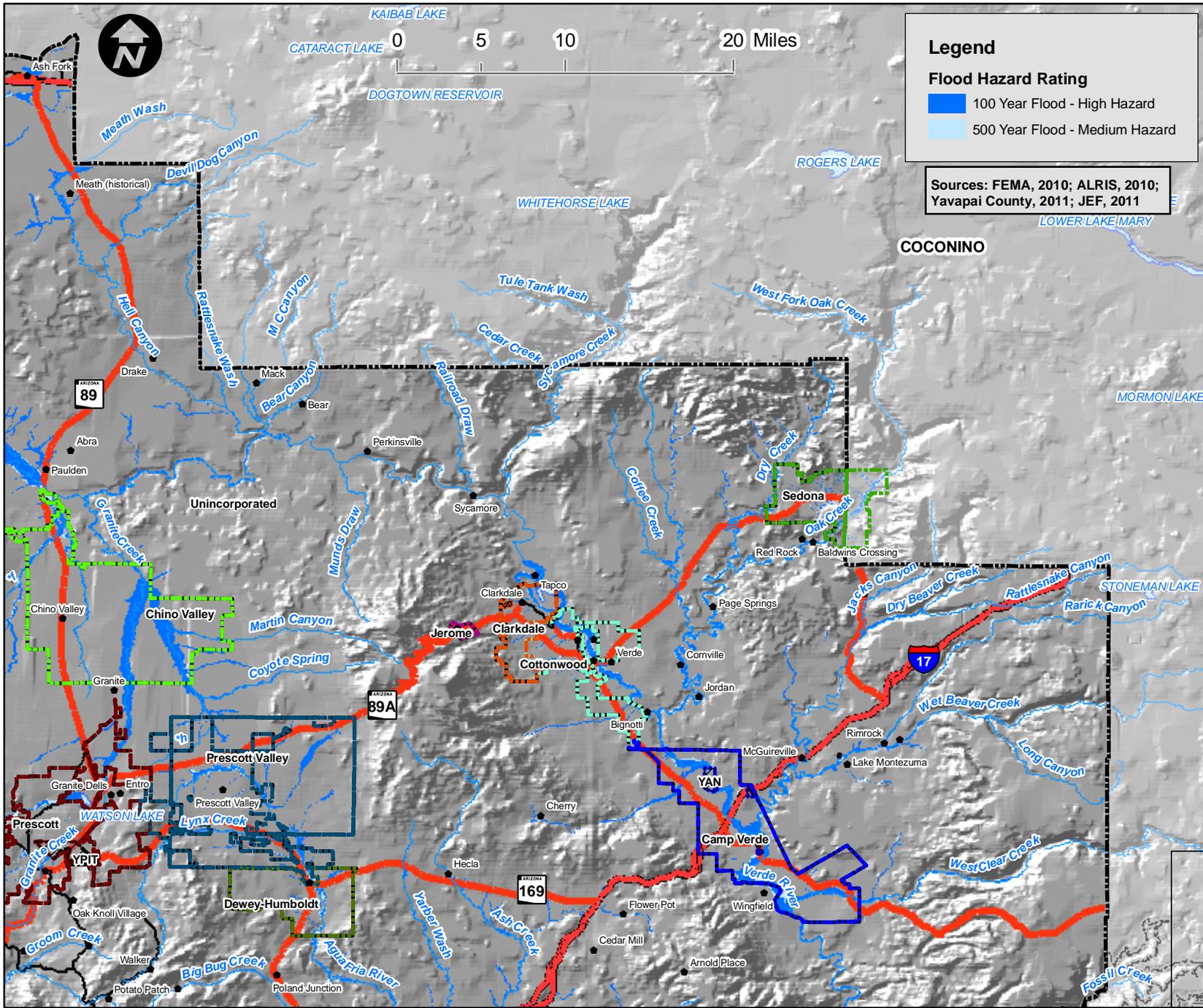
Sources: FEMA, 2010; ALRIS, 2010;  
Yavapai County, 2011; JEF, 2011



0 5 10 20 Miles



Map 1C  
Yavapai County  
Flood Hazard Map  
as of January 2011



**Legend**

**Flood Hazard Rating**

- 100 Year Flood - High Hazard
- 500 Year Flood - Medium Hazard

Sources: FEMA, 2010; ALRIS, 2010; Yavapai County, 2011; JEF, 2011

**Yavapai County  
Multi-Jurisdictional  
Hazard Mitigation Plan**



**Legend**

**Community**

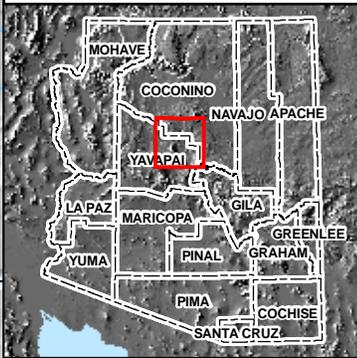
- Camp Verde
- Chino Valley
- Clarkdale
- Cottonwood
- Dewey-Humboldt
- Jerome
- Peoria
- Prescott
- Prescott Valley
- Sedona
- Unincorporated
- Wickenburg

**Other Symbols:**

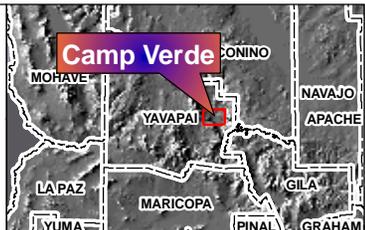
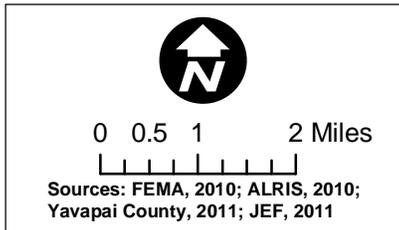
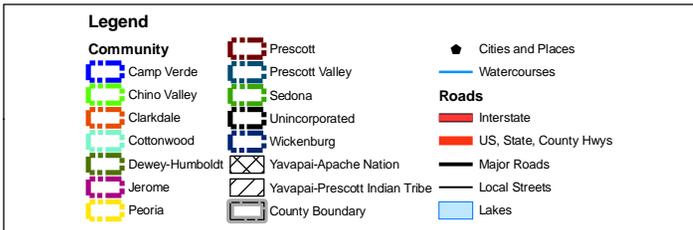
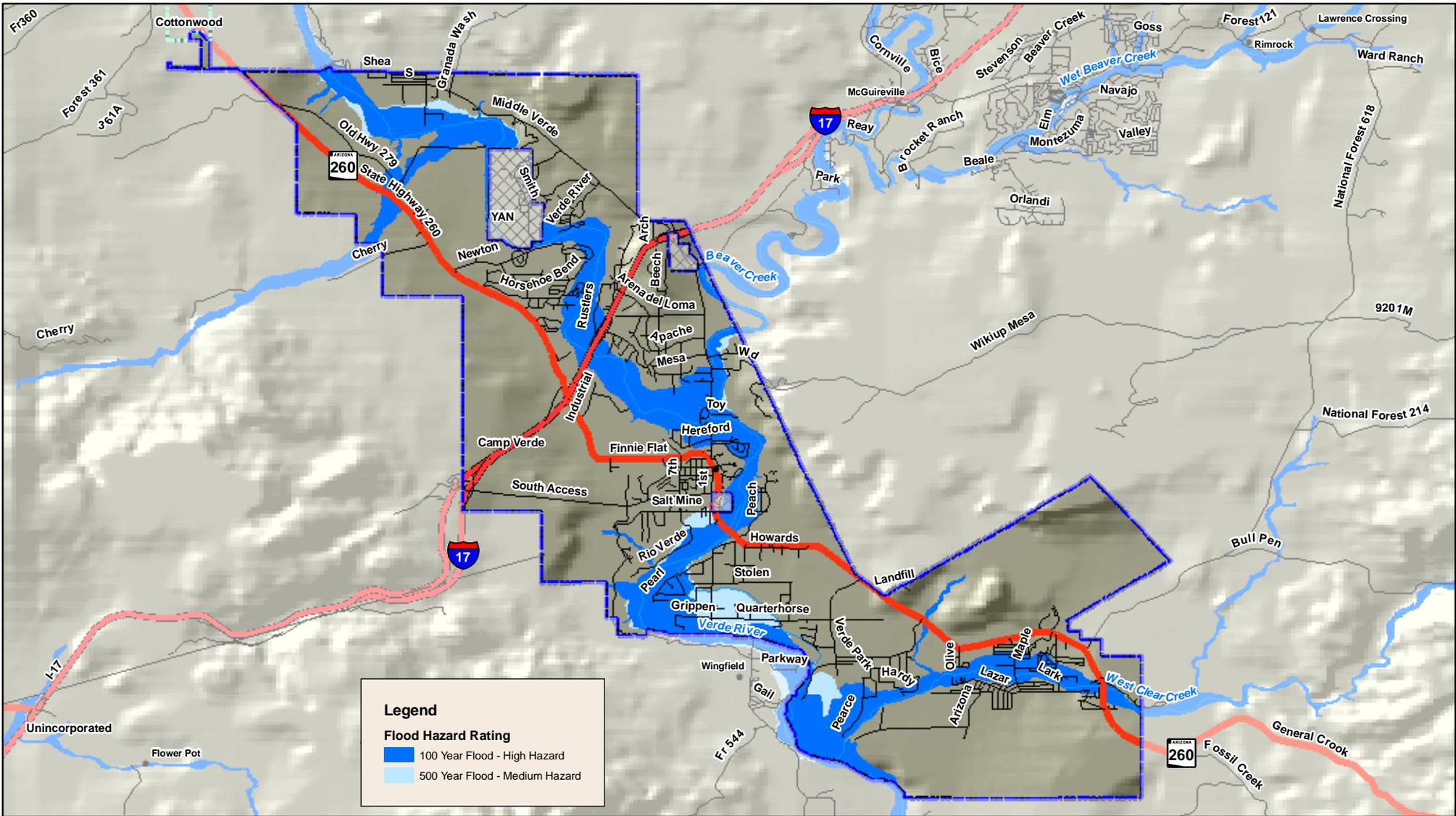
- Yavapai-Apache Nation
- Yavapai-Prescott Indian Tribe
- Cities and Places
- Watercourses

**Roads**

- Interstate
- US, State, County Hwys
- Major Roads
- County Boundary
- Lakes



**Map 1D  
Yavapai County  
Flood Hazard Map  
as of January 2011**



**Yavapai County Multi-Jurisdictional Hazard Mitigation Plan**

**Map 1E**

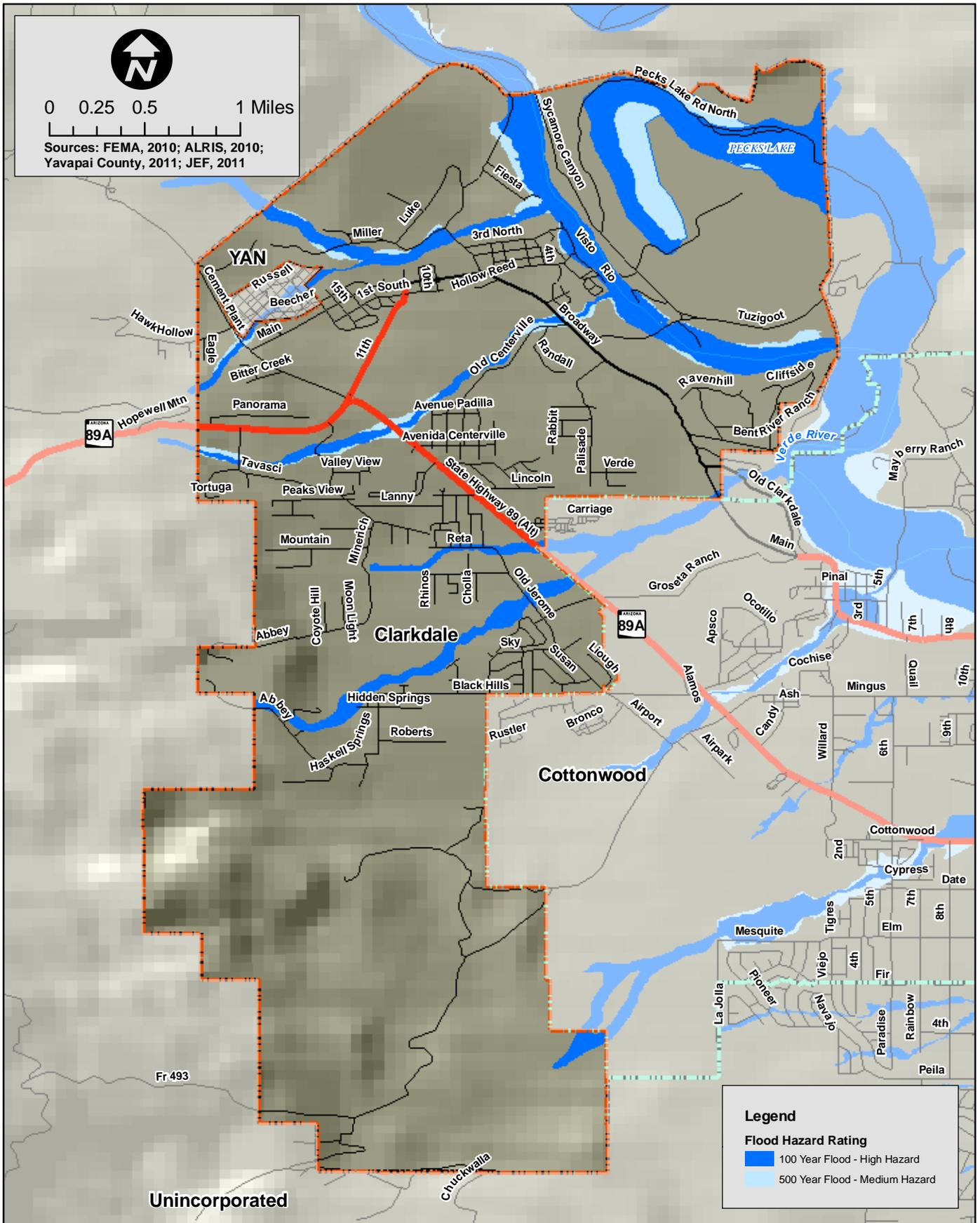
**Town of Camp Verde**

**Flood Hazard Map**

as of January 2011



  
 0 0.25 0.5 1 Miles  
 Sources: FEMA, 2010; ALRIS, 2010; Yavapai County, 2011; JEF, 2011



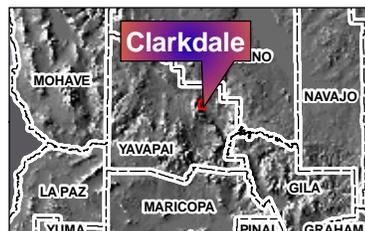
**Legend**

**Flood Hazard Rating**

- 100 Year Flood - High Hazard
- 500 Year Flood - Medium Hazard

**Legend**

|                  |                               |                        |
|------------------|-------------------------------|------------------------|
| <b>Community</b> | Prescott                      | Cities and Places      |
| Camp Verde       | Prescott Valley               | Watercourses           |
| Chino Valley     | Sedona                        | <b>Roads</b>           |
| Clarkdale        | Unincorporated                | Interstate             |
| Cottonwood       | Wickenburg                    | US, State, County Hwys |
| Dewey-Humboldt   | Yavapai-Apache Nation         | Major Roads            |
| Jerome           | Yavapai-Prescott Indian Tribe | Local Streets          |
| Peoria           | County Boundary               | Lakes                  |



**Yavapai County Multi-Jurisdictional Hazard Mitigation Plan**

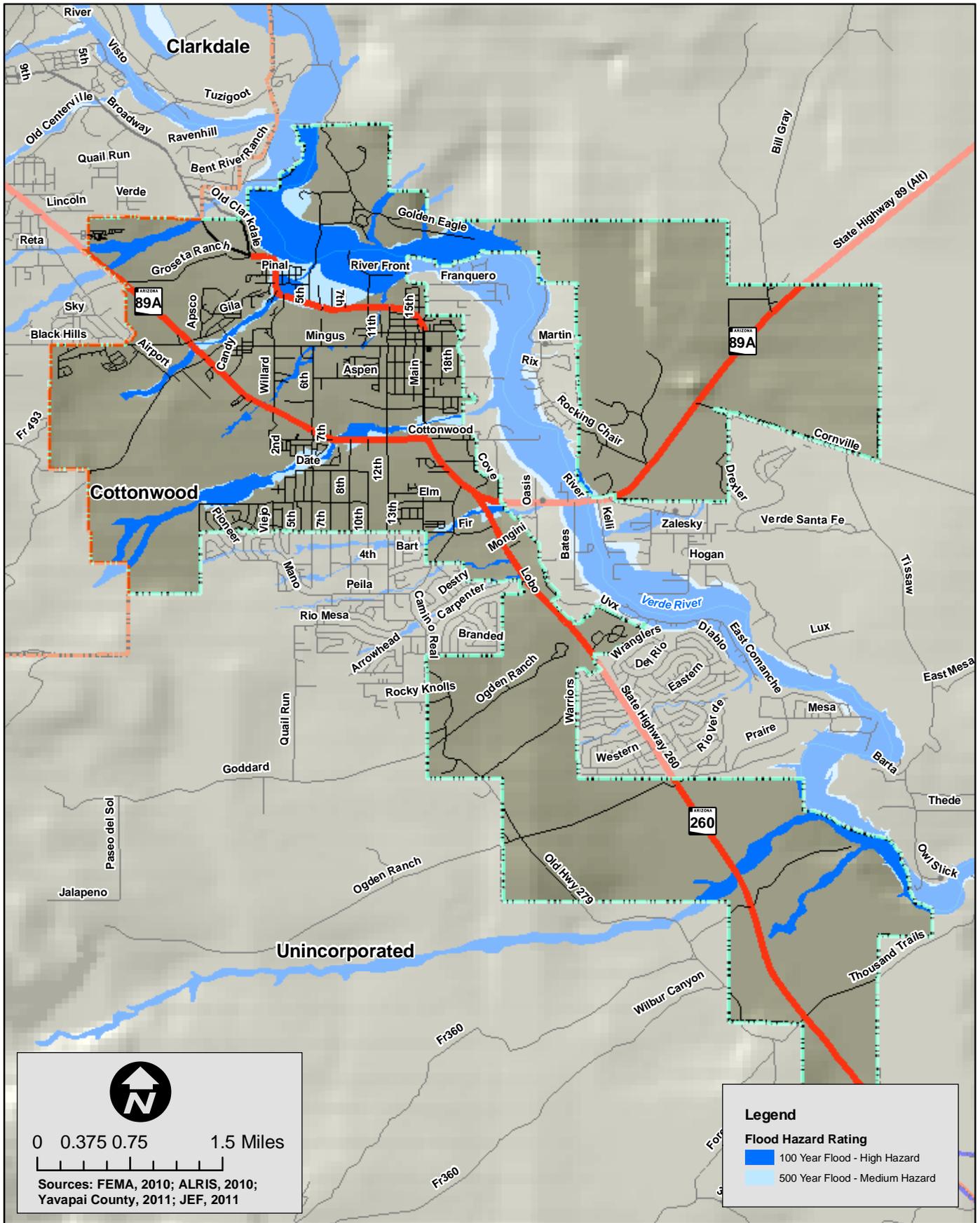
**Map 1G**

**Town of Clarkdale**

**Flood Hazard Map**

**as of January 2011**

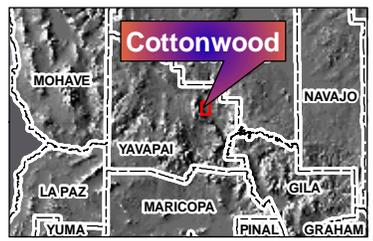




  
 0 0.375 0.75 1.5 Miles  
 Sources: FEMA, 2010; ALRIS, 2010; Yavapai County, 2011; JEF, 2011

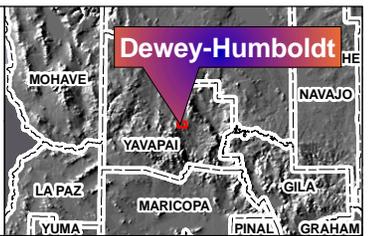
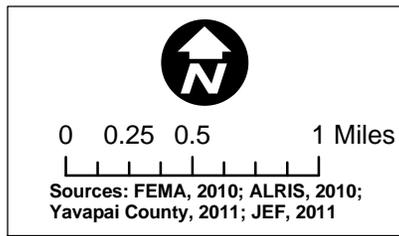
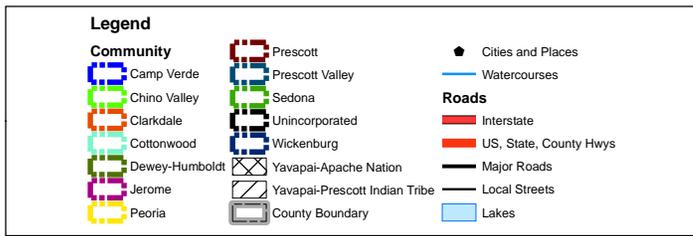
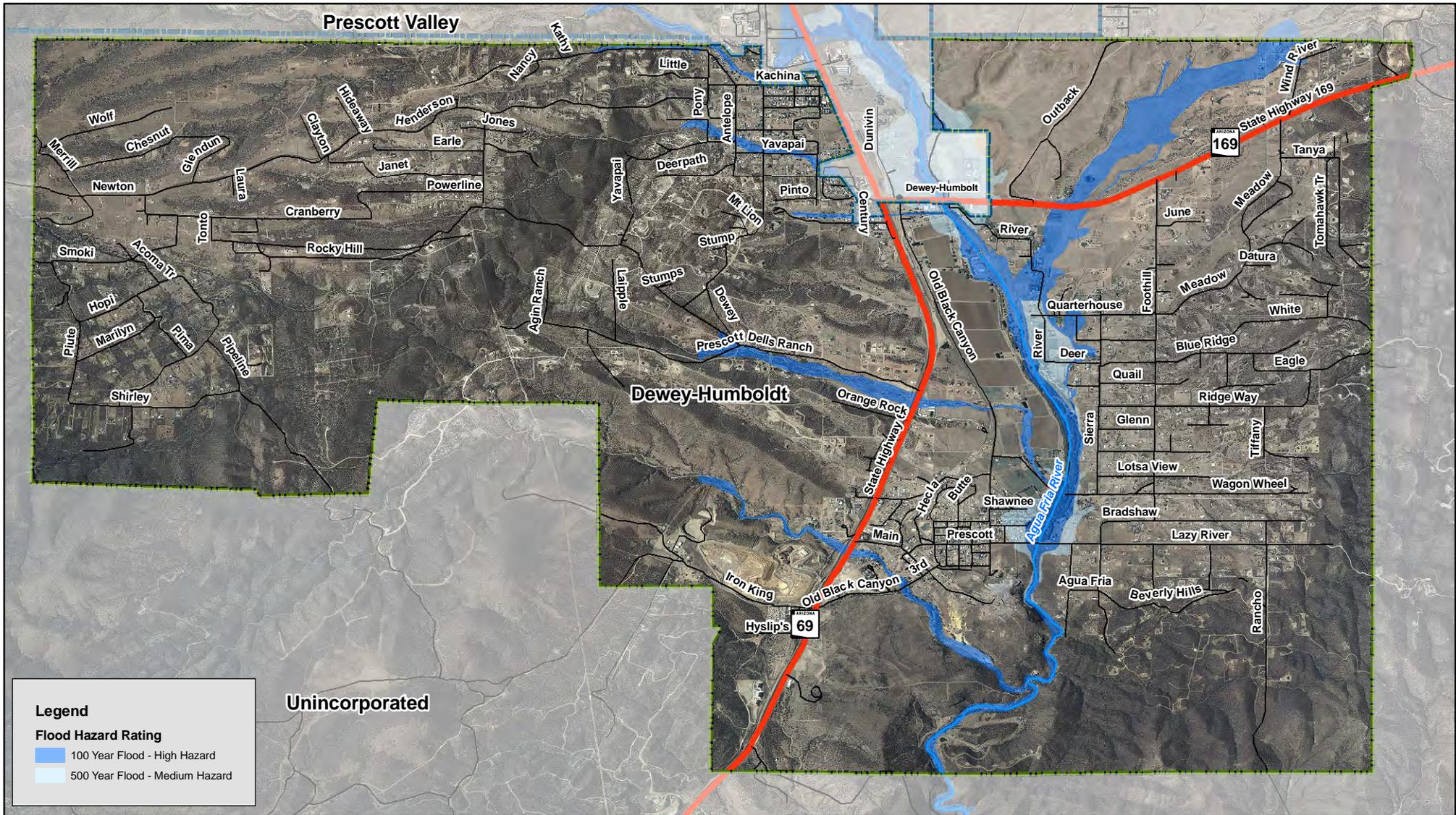
**Legend**  
**Flood Hazard Rating**  
 100 Year Flood - High Hazard  
 500 Year Flood - Medium Hazard

**Legend**  
**Community**



**Yavapai County Multi-Jurisdictional Hazard Mitigation Plan**  
**Map 1H**  
**City of Cottonwood Flood Hazard Map**  
 as of January 2011



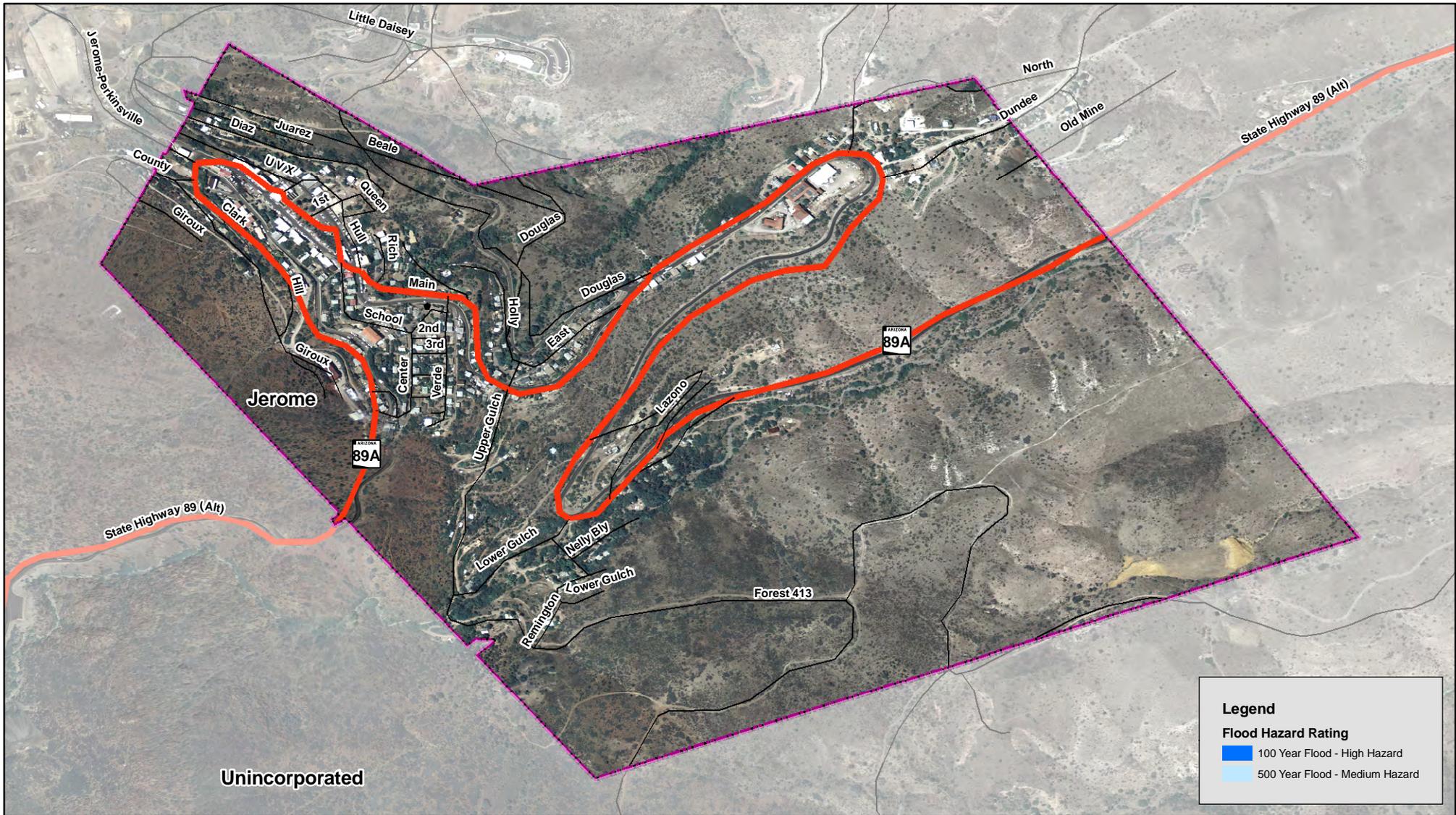


**Yavapai County Multi-Jurisdictional Hazard Mitigation Plan**

**Map 11**

**Town of Dewey-Humboldt Flood Hazard Map**

as of January 2011



**Legend**

**Flood Hazard Rating**

- 100 Year Flood - High Hazard
- 500 Year Flood - Medium Hazard

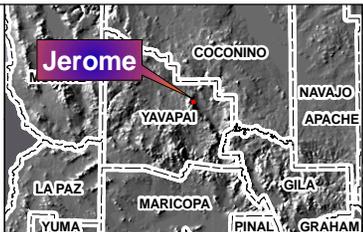
**Legend**

|  |  |   |
|--|--|---|
| <b>Community</b>   | <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid red; border-radius: 50%;"></span> Prescott</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid blue; border-radius: 50%;"></span> Prescott Valley</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid green; border-radius: 50%;"></span> Sedona</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid orange; border-radius: 50%;"></span> Unincorporated</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid purple; border-radius: 50%;"></span> Wickenburg</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px dashed black; border-radius: 50%;"></span> Yavapai-Apache Nation</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px dashed gray; border-radius: 50%;"></span> Yavapai-Prescott Indian Tribe</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; border-radius: 50%;"></span> County Boundary</li> </ul> | <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; border-radius: 50%;"></span> Cities and Places</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid blue; border-radius: 50%;"></span> Watercourses</li> </ul> <p><b>Roads</b></p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid red; border-radius: 50%;"></span> Interstate</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid orange; border-radius: 50%;"></span> US, State, County Hwys</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; border-radius: 50%;"></span> Major Roads</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; border-radius: 50%;"></span> Local Streets</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid blue; border-radius: 50%;"></span> Lakes</li> </ul> |
| <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid blue; border-radius: 50%;"></span> Camp Verde</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid green; border-radius: 50%;"></span> Chino Valley</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid orange; border-radius: 50%;"></span> Clarkdale</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid purple; border-radius: 50%;"></span> Cottonwood</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid red; border-radius: 50%;"></span> Dewey-Humboldt</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; border-radius: 50%;"></span> Jerome</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid gray; border-radius: 50%;"></span> Peoria</li> </ul> |  |   |

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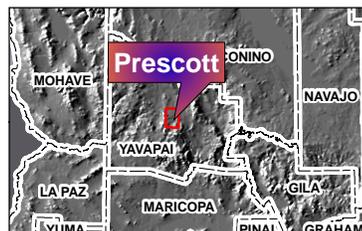
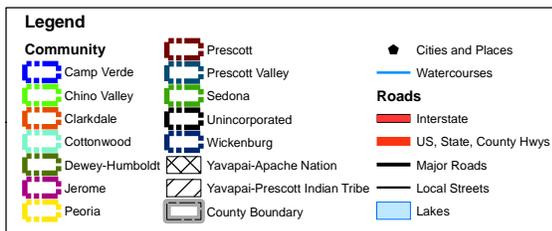
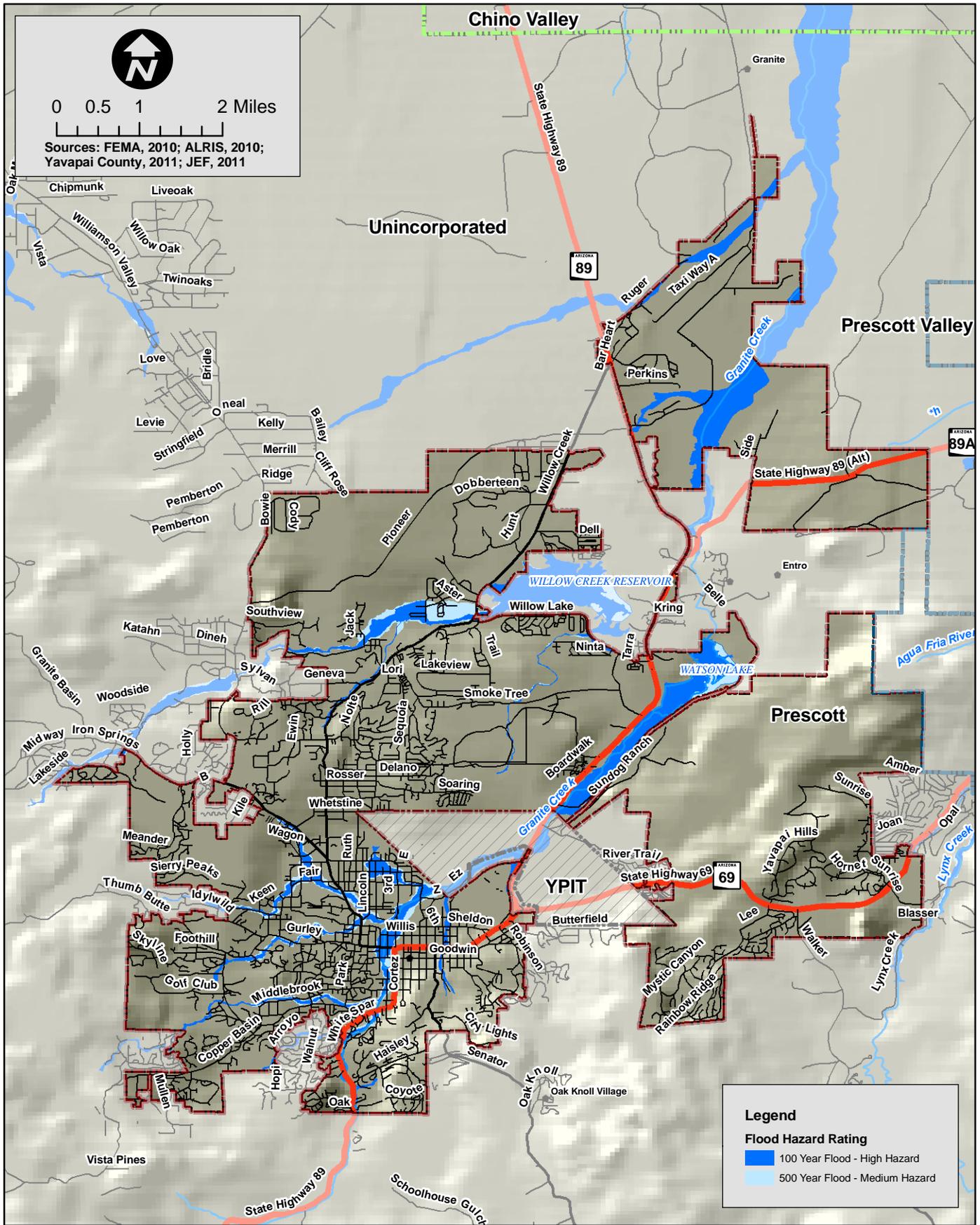
0 90 180 360 Yards

Sources: FEMA, 2010; ALRIS, 2010; Yavapai County, 2011; JEF, 2011



**Yavapai County Multi-Jurisdictional Hazard Mitigation Plan**

**Map 1J**  
**Town of Jerome**  
**Flood Hazard Map**  
**as of January 2011**



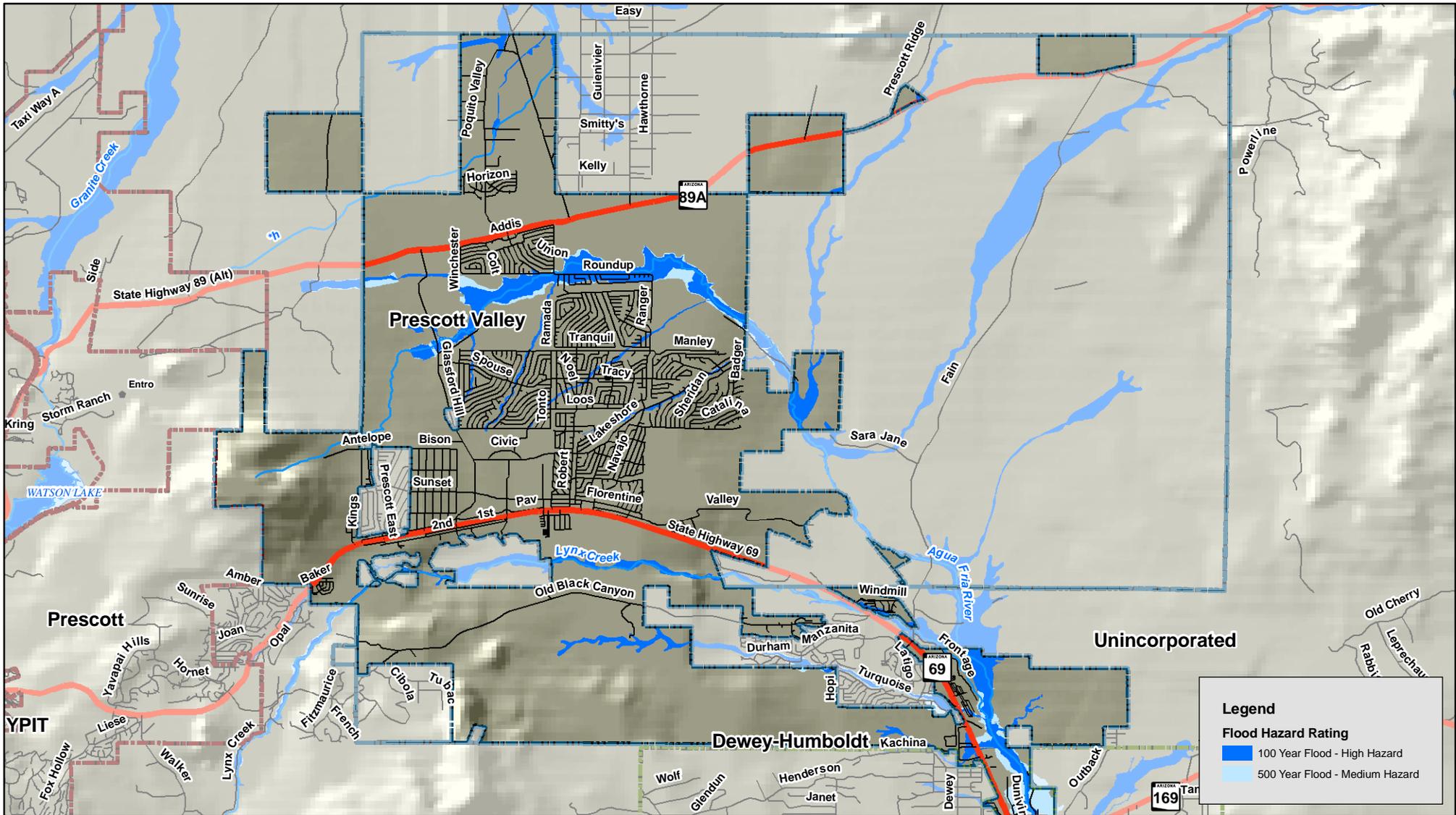
**Yavapai County Multi-Jurisdictional Hazard Mitigation Plan**

**Map 1K**

**City of Prescott**

**Flood Hazard Map**

**as of January 2011**



**Legend**

**Flood Hazard Rating**

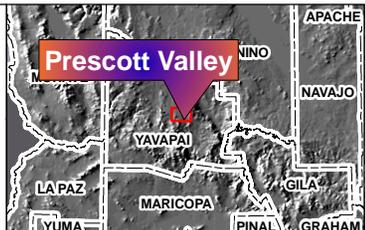
- 100 Year Flood - High Hazard
- 500 Year Flood - Medium Hazard

**Legend**

|   |  |   |
|---|--|---|
| <b>Community</b>  | <ul style="list-style-type: none"> <li>Prescott</li> <li>Prescott Valley</li> <li>Sedona</li> <li>Unincorporated</li> <li>Wickenburg</li> <li>Yavapai-Apache Nation</li> <li>Yavapai-Prescott Indian Tribe</li> <li>County Boundary</li> </ul> | <ul style="list-style-type: none"> <li>Cities and Places</li> <li>Watercourses</li> </ul> |
| <ul style="list-style-type: none"> <li>Camp Verde</li> <li>Chino Valley</li> <li>Clarkdale</li> <li>Cottonwood</li> <li>Dewey-Humboldt</li> <li>Jerome</li> <li>Peoria</li> </ul> | <ul style="list-style-type: none"> <li>Interstate</li> <li>US, State, County Hwys</li> <li>Major Roads</li> <li>Local Streets</li> <li>Lakes</li> </ul>  |   |

0 0.5 1 2 Miles

Sources: FEMA, 2010; ALRIS, 2010; Yavapai County, 2011; JEF, 2011



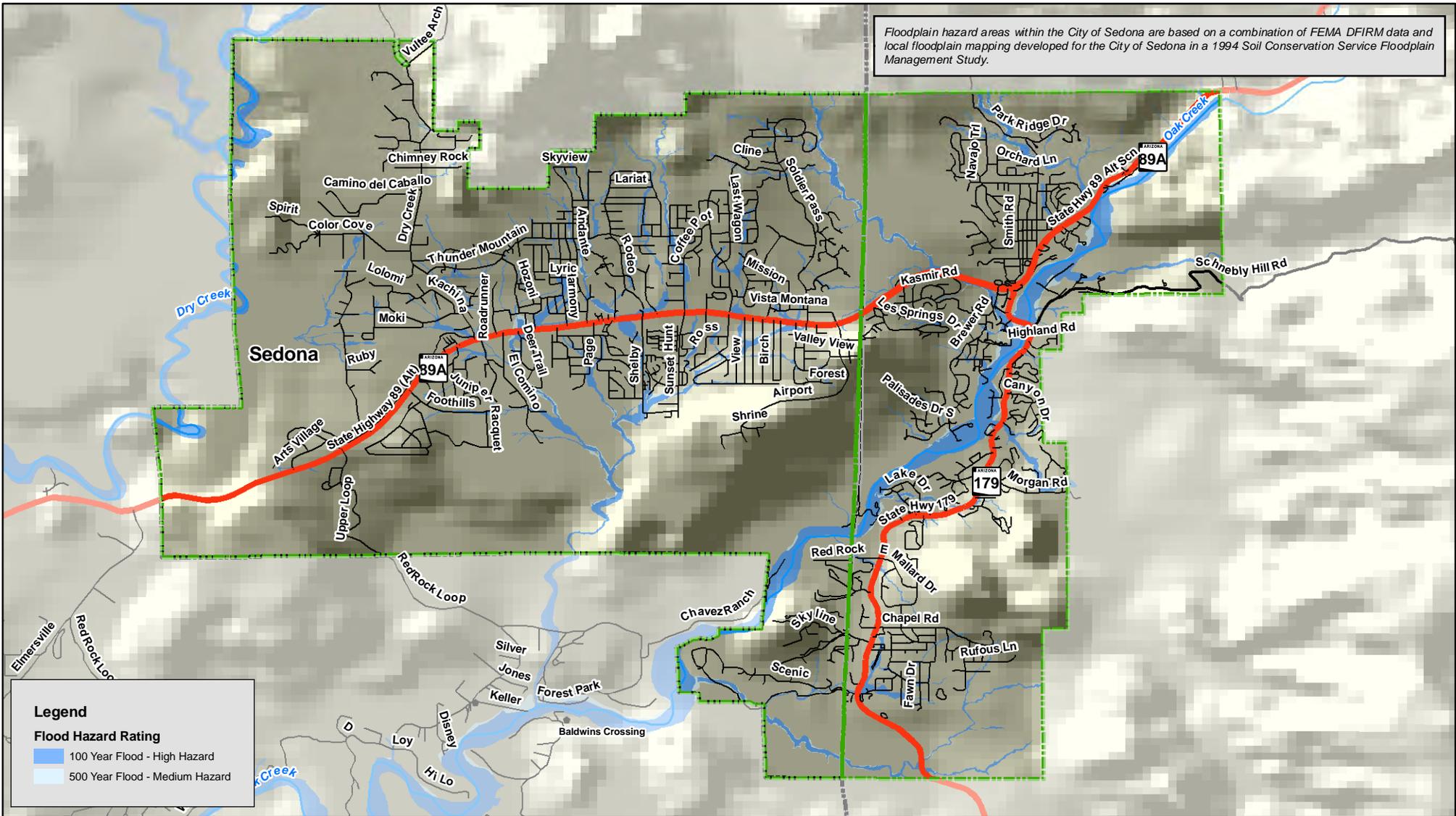
**Yavapai County Multi-Jurisdictional Hazard Mitigation Plan**

**Map 1L**

**Town of Prescott Valley Flood Hazard Map**

as of January 2011

Floodplain hazard areas within the City of Sedona are based on a combination of FEMA DFIRM data and local floodplain mapping developed for the City of Sedona in a 1994 Soil Conservation Service Floodplain Management Study.



**Legend**

**Flood Hazard Rating**

- 100 Year Flood - High Hazard
- 500 Year Flood - Medium Hazard

**Legend**

|  |   |   |
|--|---|---|
| <p><b>Community</b></p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid red; border-radius: 50%;"></span> Prescott</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid green; border-radius: 50%;"></span> Camp Verde</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid blue; border-radius: 50%;"></span> Chino Valley</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid orange; border-radius: 50%;"></span> Clarkdale</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid purple; border-radius: 50%;"></span> Cottonwood</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid pink; border-radius: 50%;"></span> Dewey-Humboldt</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid yellow; border-radius: 50%;"></span> Jerome</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; border-radius: 50%;"></span> Peoria</li> </ul> | <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid red; border-radius: 50%;"></span> Prescott</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid green; border-radius: 50%;"></span> Prescott Valley</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid blue; border-radius: 50%;"></span> Sedona</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid orange; border-radius: 50%;"></span> Unincorporated</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid purple; border-radius: 50%;"></span> Wickenburg</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid pink; border-radius: 50%;"></span> Yavapai-Apache Nation</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid yellow; border-radius: 50%;"></span> Yavapai-Prescott Indian Tribe</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; border-radius: 50%;"></span> County Boundary</li> </ul> | <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 0; height: 0; border-left: 5px solid transparent; border-right: 5px solid transparent; border-bottom: 10px solid black;"></span> Cities and Places</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid blue; border-radius: 50%;"></span> Watercourses</li> </ul> <p><b>Roads</b></p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid red; border-radius: 50%;"></span> Interstate</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid orange; border-radius: 50%;"></span> US, State, County Hwys</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid purple; border-radius: 50%;"></span> Major Roads</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid yellow; border-radius: 50%;"></span> Local Streets</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; border-radius: 50%;"></span> Lakes</li> </ul> |
|--|---|---|

N  
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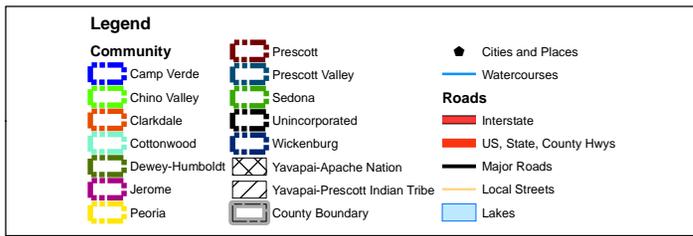
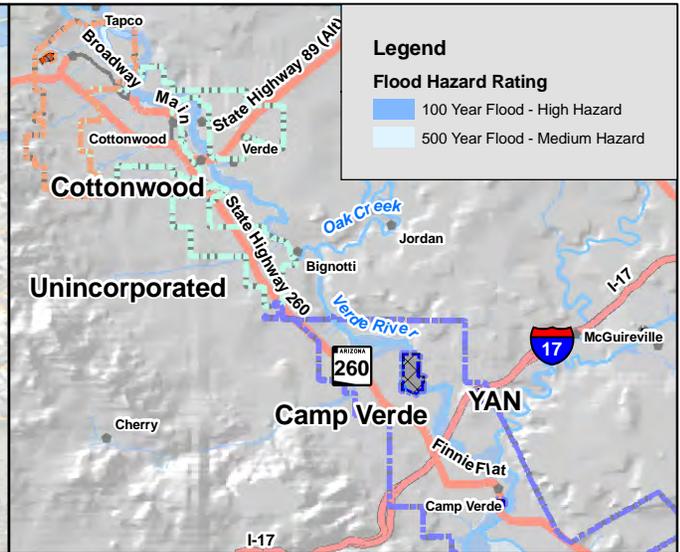
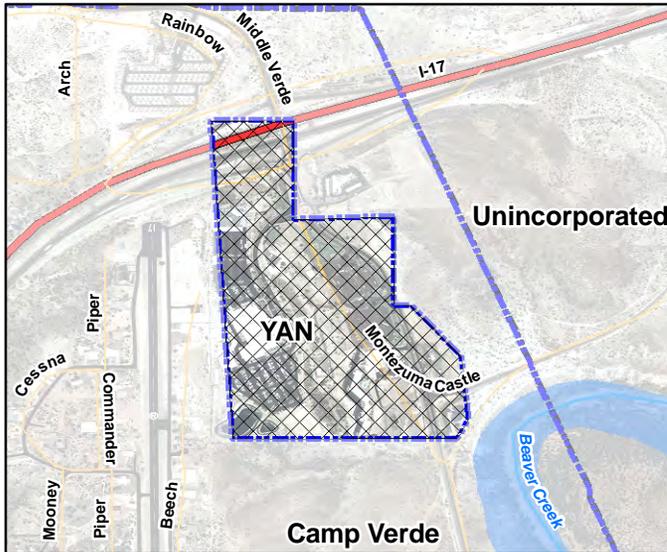
0      0.75      1.5 Miles

Sources: FEMA, 2010; ALRIS, 2010; Yavapai County, 2011; JEF, 2011

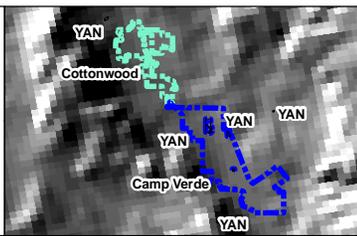


**Yavapai County Multi-Jurisdictional Hazard Mitigation Plan**

**Map 1M**  
**City of Sedona Flood Hazard Map**  
as of January 2011

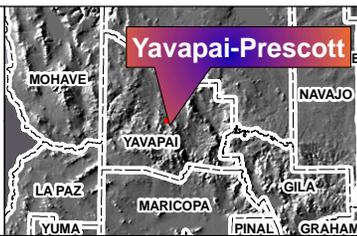
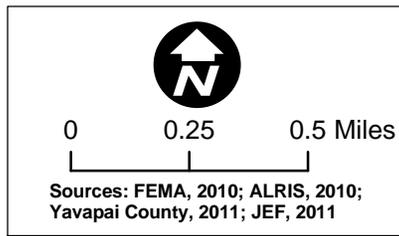
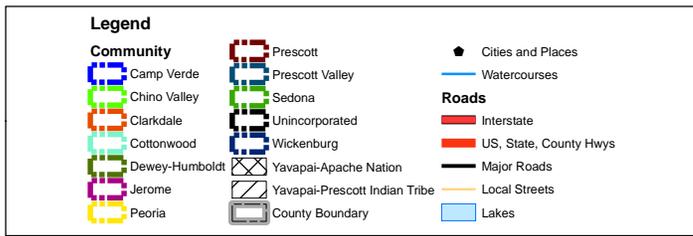
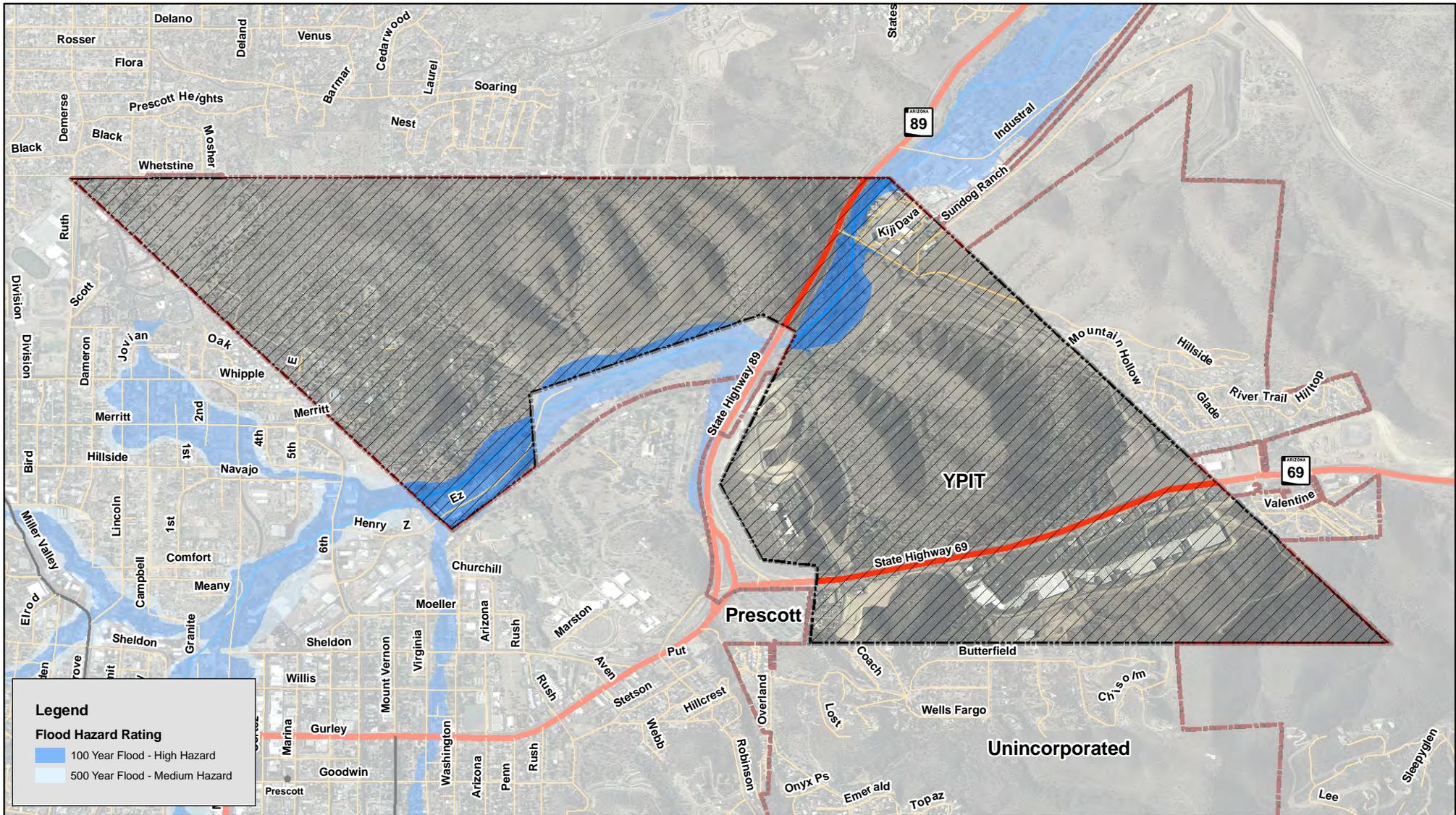


  
**Sources: FEMA, 2010; ALRIS, 2010;  
 Yavapai County, 2011; JEF, 2011**



**Yavapai County Multi-Jurisdictional  
 Hazard Mitigation Plan**  
**Map 1N**  
**Yavapai-Apache Nation**  
**Flood**  
**Hazard Map**  
**as of January 2011**





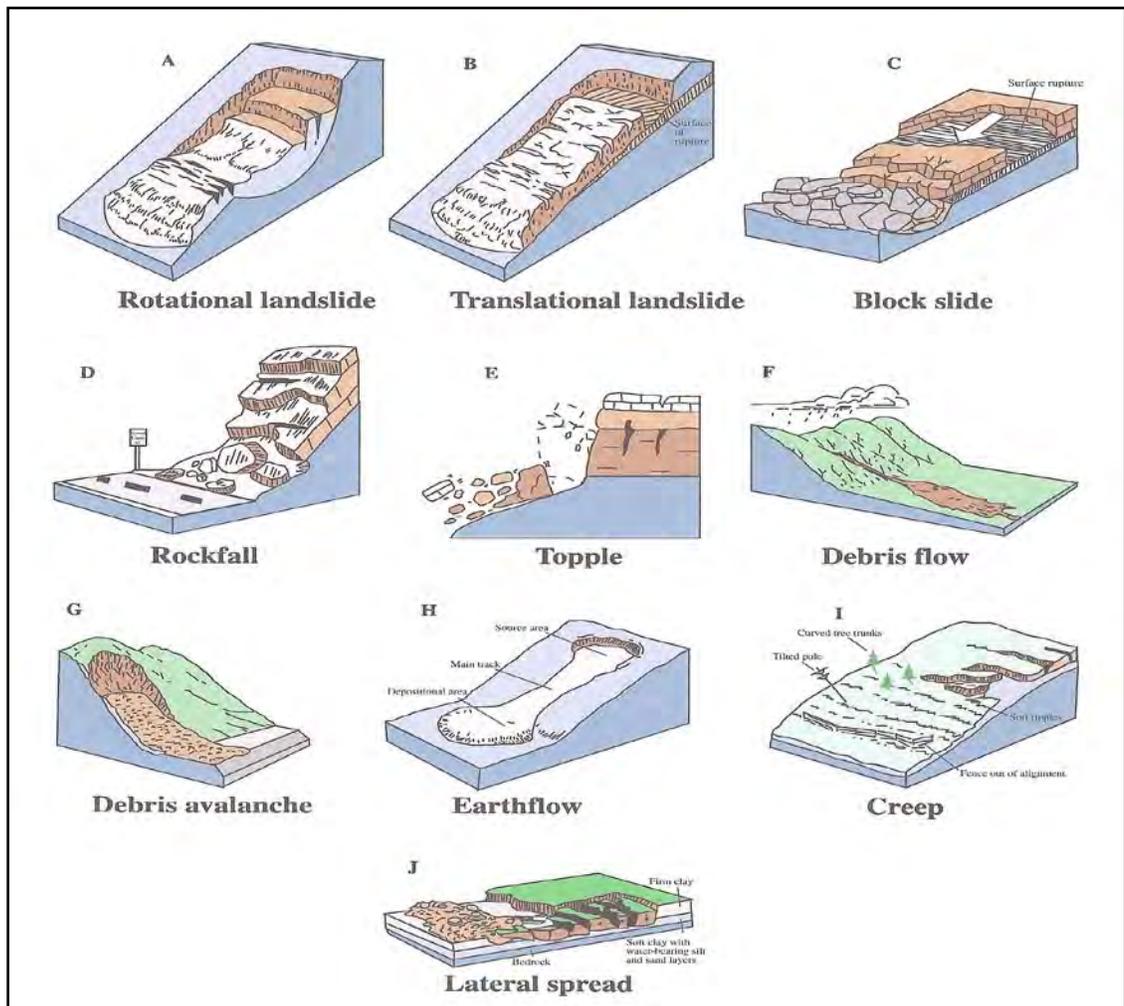
**Yavapai County Multi-Jurisdictional Hazard Mitigation Plan**  
**Map 10**  
**Yavapai-Prescott Indian Tribe**  
**Flood Hazard Map**  
 as of January 2011

5.3.2 *Landslide / Mudslide*

**Description**

Landslide is the generic term used to describe the downslope movement of earth materials due to gravity. Landslides may be triggered by earthquakes, extreme precipitation, flooding, or otherwise removing support from the slope. There are several different types of landslides that are categorized by the depth of failure, the type of material moved, the water content, and rate of movement (see below). Landslides may also cause flooding, either by displacing great volumes of water with surficial materials, or by damming a stream until it breaches and floods. Typical types of landslides are illustrated in Figure 5-1.<sup>29</sup> Diagrams A, B, C, D, E, F, and I are typical of the Transition Zone in which Yavapai County is mostly situated.

Many areas of Yavapai County are susceptible to various types of rock falls, landslides, and debris flows that can occur along steep mountain slopes, canyons, and along road cuts. Extreme precipitation, freeze/thaw, and snowmelt are the primary triggers post wildfire conditions also significantly increase the risk of debris flows and slope failures.



**Figure 5-1  
Illustration of Landslide Types**

<sup>29</sup> Diagram from USGS Fact Sheet 2004-3072.

### History

The Town of Jerome, which is constructed on the steep slopes of Cleopatra Hill, presents the most prominent history of landslide activity and damages for Yavapai County. The following is an excerpt from a summary of the Jerome landslide history that was provided by the Town (author unknown):

*In the first half of this century Jerome was a town on the move, literally. Perched precariously on the side of Cleopatra Hill with mining occurring directly underneath, Jerome was asking for trouble. Maybe the ground movement was Mother Nature's way of reminding people who were in charge.*

*Jerome reached a peak population of about 15,000 people in the late 1920's. Two major mines, the United Verde and the United Verde Extension (UVX) kept the economy booming. Main and Hull Streets were lined with businesses. However, the Great Depression reversed this prosperity. Most of the miners lost their jobs and businesses closed. It was during this era of economic hardship when the town's buildings began to show the most damage from earth movement.*

*Slides have been a persistent problem throughout Jerome's history. Harry Dicus testified: "I built seven or eight houses, business and residences on the hill slopes, several of which were constructed before UVX started operations [in 1914]. They wouldn't stand up. I had to jack up the building because they would get out of level, especially if they were not on bed rock." (Small vs. UVX)*

*The first significant slide happened in 1926 when the Episcopal Church, located uphill from the Catholic Church, became unstable. The oldest church in town, built in 1896 by the Baptists and later sold to the Episcopalians, moved three feet off its base. The church was demolished and replaced with the new Episcopal Church, now the History Center. The next noticeable ground movement occurred in 1927 when the south wing of the United Verde Clubhouse had to be destroyed. This structure, originally built as the third United Verde Hospital was found to sit directly on the Verde Fault.*

*The first noticeable ground movement on Main and Hull Streets began in 1924. The buildings in a three acre zone from Main Street near the Boyd Hotel down through Hull Street to just below Rich Street became unstable and had to be razed. The destruction from this slide is still very noticeable today. The parking lot on Main Street between First Street and what is now Made in Jerome Pottery was once crowded with buildings. The parking lot and park directly below this on Hull Street was also filled with structures including the Sliding Jail. All of these buildings suffered damage in 1936-37 when the land abruptly moved. Although this disaster may have increased the parking in Jerome, it was severe blow to a town already reeling from the Great Depression.*

*During the early 1920's and 1930's the area had been slipping steadily at a rate of about three-eighths of an inch a month in an eastward and downward direction. As long as this movement remained gradual and uniform in all directions it did not pose a significant danger. In late September 1936 the rate of movement accelerated. A sidewalk suddenly parted company with the building it paralleled, and in a trice it was six feet away, and more than four feet lower. A theater and several other buildings showed huge cracks as the irresistible force of gravity exerted itself on the 45 degree diagonal, and it was necessary for authorities to condemn them and tear them down. (AZ Republic, December 29, 1936) Buildings began cracking and became unstable. The Kovacovich Building's back fell out and then collapsed without warning one week later. The Post Office, Miller Building, Kelly's Garage, and the J.C. Penny Building all sank forcing them to be abandoned and eventually demolished. The Boyd Hotel and a nearby drugstore were spared through extensive repair work. The water, sewer, and fire lines underneath the town were also severely damaged and needed repairs costing the town an estimated \$134,871 (approximately \$2.1 million in 2010 dollars).*

*The sliding jail was the only building severely damaged by the earth movement which still stands. The concrete structure pulled apart from the wooden structure to which it was*

*attached and slowly began creeping across the road. The jail eventually came to rest 225 feet from its original location. After the sliding stopped the jail was preserved a lasting monument to this era in Jerome's history.*

Other historic landslides in Yavapai County are mostly related to incidents reported along highways.

**Probability and Magnitude**

Probability and magnitude statistics have not been developed for landslide hazards in Arizona. Landslide potential for Yavapai County vary in size and frequency and can range from small, nuisance events (minor shallow landslides, rockfalls) along roads or uninhabited areas, to large, fast-moving, destructive debris flows (commonly referred to as mudslides), with varying effects depending on location. Areas with the highest probability of landslides are highway corridors with deep cuts through hillsides, developments on steep hillsides, and areas downstream of wildfire burn areas.

**Vulnerability – CPRI Results**

Landslide / Mudslide CPRI results for each community are summarized in Table 5-26 below.

| <b>Participating Jurisdiction</b> | <b>Probability</b> | <b>Magnitude/<br/>Severity</b> | <b>Warning<br/>Time</b> | <b>Duration</b> | <b>CPRI<br/>Score</b> |
|-----------------------------------|--------------------|--------------------------------|-------------------------|-----------------|-----------------------|
| Camp Verde                        | Unlikely           | Limited                        | < 6 hours               | < 24 hours      | 1.85                  |
| Chino Valley                      | Unlikely           | Negligible                     | < 6 hours               | < 6 hours       | 1.45                  |
| Clarkdale                         | Likely             | Negligible                     | < 6 hours               | < 24 hours      | 2.45                  |
| Cottonwood                        | Unlikely           | Limited                        | > 24 hours              | < 24 hours      | 1.40                  |
| Dewey-Humboldt                    | Unlikely           | Limited                        | < 6 hours               | < 24 hours      | 1.85                  |
| Jerome                            | Likely             | Critical                       | < 6 hours               | < 6 hours       | 2.95                  |
| Prescott                          | Highly Likely      | Critical                       | < 6 hours               | < 6 hours       | 3.40                  |
| Prescott Valley                   | Possible           | Limited                        | < 6 hours               | < 6 hours       | 2.20                  |
| Sedona                            | Possible           | Limited                        | < 6 hours               | < 24 hours      | 2.30                  |
| Unincorporated Yavapai County     | Possible           | Negligible                     | < 6 hours               | < 1 week        | 2.10                  |
| Yavapai-Prescott Indian Tribe     | Possible           | Negligible                     | < 6 hours               | < 1 week        | 2.10                  |
| <b>County-wide average CPRI =</b> |                    |                                |                         |                 | <b>2.19</b>           |

**Vulnerability – Loss Estimations**

Critical facilities most vulnerable to landslides/mudslides are the roadways, bridges, and culverts along known debris flow areas and hillside cuts. Facilities located downhill of intensely burned wildfire areas are also at an elevated risk to debris flows and mudslides. Underground utility lines are also vulnerable to landslides.

Losses are difficult to estimate given a lack of accepted standards, however, the county and some communities have spent significant time and money removing and repairing landslide/mudslide related damages along the state highways, and especially following heavy precipitation events and post-wildfire debris flows. For the period of 1978 to 1985, a total of 16 landslide incidents have been cataloged by the Arizona Department of Transportation with repair costs ranging from \$1,000 to \$150,000. Thirteen (13) of the events are considered to be minor with repair costs of less than \$1,500 each. Comparatively, the damages experienced in Jerome in the 1920's and 1930's were equivalent to approximately \$2.1 million in 2010 dollars. Accordingly, losses associated with landslides/mudslides are highly variable and difficult to predict.

**Vulnerability – Development Trends**

In many of the communities within Yavapai County, development of hillside areas is both popular and sometimes necessary, as are hillside cuts that are required as a part of roadway improvements. Areas of greater slope will also be areas of greatest risk to landslides. Adequate geologic investigations should be made for any improvements involving construction on hillsides and/or creation of large hillside cuts.

**Sources**

Diaz, M., Gotee, B., 2008, *Preliminary Report on Highway 87 Landslide*.

Online at [http://www.azgs.az.gov/hazard\\_hwy87landslide\\_mar08.shtml](http://www.azgs.az.gov/hazard_hwy87landslide_mar08.shtml)

Godt, J.W., 1997, *Digital compilation of landslide overview map of the conterminous united states, 1982*. USGS, OFR 97-289.

Harris, R.C., & Pearthree, P.A., 2002, *A home buyer's guide to geologic hazards in Arizona*. AZGS, Down-to-Earth 13.

Jenny, J. P. and S. J. Reynolds.1989, *Geologic Evolution of Arizona*, in AZGS Society Digest, No. 17.

Pearthree, P.A., Youberg, A., 2006, *Recent Debris Flows and Floods in Southern Arizona*, Arizona Geology, Vol. 36, No. 3

Realmuto, V.J., 1985, *Preliminary map of selected mass movement events in Arizona*. AZGS, OFR 85-16.

**Profile Maps**

No profile maps provided

5.3.3 *Severe Wind*

**Description**

The hazard of severe wind encompasses all climatic events that produce damaging winds. For Yavapai County, severe winds typically result from either extreme pressure gradients that normally occur in the spring and early summer months, or from thunderstorms. Thunderstorms can occur year-round and are usually associated with cold fronts in the winter, monsoon activity in the summer, and tropical storm remnants in the late summer or early fall.

Three types of damaging wind related features typically accompany a thunderstorm; 1) downbursts, 2) straight line winds, and infrequently, 3) tornadoes.

Downbursts are columns of air moving rapidly downward through a thunderstorm. When the air reaches the ground, it spreads out in all directions, creating horizontal wind gusts of 80 mph or higher. Downburst winds have been measured as high as 140 mph. Some of the air curls back upward with the potential to generate a new thunderstorm cell. Downbursts are called macrobursts when the diameter is greater than 2.5 miles, and microbursts when the diameter is 2.5 miles or less. They can be either dry or wet downbursts, where the wet downburst contains precipitation that continues all the way down to the ground, while the precipitation in a dry downburst evaporates on the way to the ground, decreasing the air temperature and increasing the air speed. In a microburst the wind speeds are highest near the location where the downdraft reached the surface, and are reduced as they move outward due to the friction of objects at the surface. Typical damage from downbursts includes uprooted trees, downed power lines, mobile homes knocked off their foundations, block walls and fences blown down, and porches and awnings blown off homes.

Straight line winds are developed similar to downbursts, but are usually sustained for greater periods as thunderstorms reach the mature stage, traveling parallel to the ground surface at speeds of 75 mph or higher. These winds are frequently responsible for generating dust storms and sand storms, reducing visibility and creating hazardous driving conditions.

A tornado is a rapidly rotating funnel (or vortex) of air that extends toward the ground from a cumulonimbus cloud. Most funnel clouds do not touch the ground, but when the lower tip of the funnel cloud touches the earth, it becomes a tornado and can cause extensive damage. For Yavapai County, tornadoes are the least common type of severe wind to accompany a thunderstorm.

**History**

According to Table 5-4, Yavapai County has been subject to over 123 severe wind events meeting the criteria listed in Section 5.1, with a combined economic loss of over \$18.7 million to structures and agriculture in the last 50 years. In that same period, there were at least 1 death and 14 injuries, with most of the injuries being related to an F1 tornado that touched down in 1977. In reality, severe wind events occur on a significantly more frequent basis throughout the county, but do not always have reported damages associated with every event. For example, a total of 122 severe wind events were noted in the NCDC database for period of January 1960 through July 2010, but not all of those events had reports of damages associated with them. The following are examples of documented past events that have occurred in the last five years:

- In December 2004, a winter storm brought strong wind to many locations across northern Arizona with gusts over 50 MPH. There were numerous reports of broken tree limbs and other minor wind damage. Part of the roof on Camp Verde's Town Hall was ripped off. The Black Canyon fire station also suffered roof damage. Approximately \$40,000 in damage estimates was reported. The strong wind caused power outages in the Flagstaff area. Some wind gust reports include: Bright Angel 65 MPH, Grand Canyon 44 MPH, Crown King 49 MPH, Winslow 59 MPH, Flagstaff 53 MPH, and Sunset Point 54 MPH. (NCDC, 2010)
- In March 2009, up to 50 MPH wind caused blowing dust that reduced the visibility down to 20 feet between Chino Valley and Paulden just after 200 PM. There was a 15 car pileup near mile post 333. At least three people were taken to the hospital. A strong cold front brought very strong and gusty winds to northern Arizona on March 22, 2009. The winds locally caused damage to

- buildings, power outages, and near zero visibility in blowing dust and costing approximately \$150,000 in damages. (NCDC, 2010).
- In April 2009, a spotter in Chino Valley reported strong wind (52 MPH) that blew down fences and caused shingle damage on multiple homes resulting in \$12,000 in property damages. A 15 foot tower similar to a hunting blind was knocked over even though the posts were set in concrete. A strong low pressure system approaching Arizona brought damaging winds, blowing dust, blowing sand to northern portions of the state. (NCDC, 2010).
  - In October 2009, high winds knocked down tree limbs and power lines in Prescott, Groom Creek, and Walker. As many as 6,300 customers lost power 5 to 6 times. The downed power lines also caused a several small grass fires and damages were estimated at \$12,000. Cable and phone lines were also knocked out. A strong cold front brought strong winds to the Little Colorado River Valley. (NCDC, 2010).
  - In December 2009, very strong winds knocked over a 70' tall-two foot thick ponderosa pine tree about 20 miles east of Camp Verde. The tree fell on a man sleeping in a tent; the man was struck in the head and died instantly. Measured wind speeds include Prescott Love Field: 74 MPH; Crown King 69 MPH, and Mingus Mountain 70 MPH. (NCDC, 2010).

**Probability and Magnitude**

Most severe wind events in Yavapai County are associated with thunderstorms. The probability of a severe thunderstorm occurring with high velocity winds increases as the average duration and number of thunderstorm events increases. The average annual duration of thunderstorms in Yavapai County ranges from 90 to 110 minutes and is among the longest in the nation (ADEM, 2004).

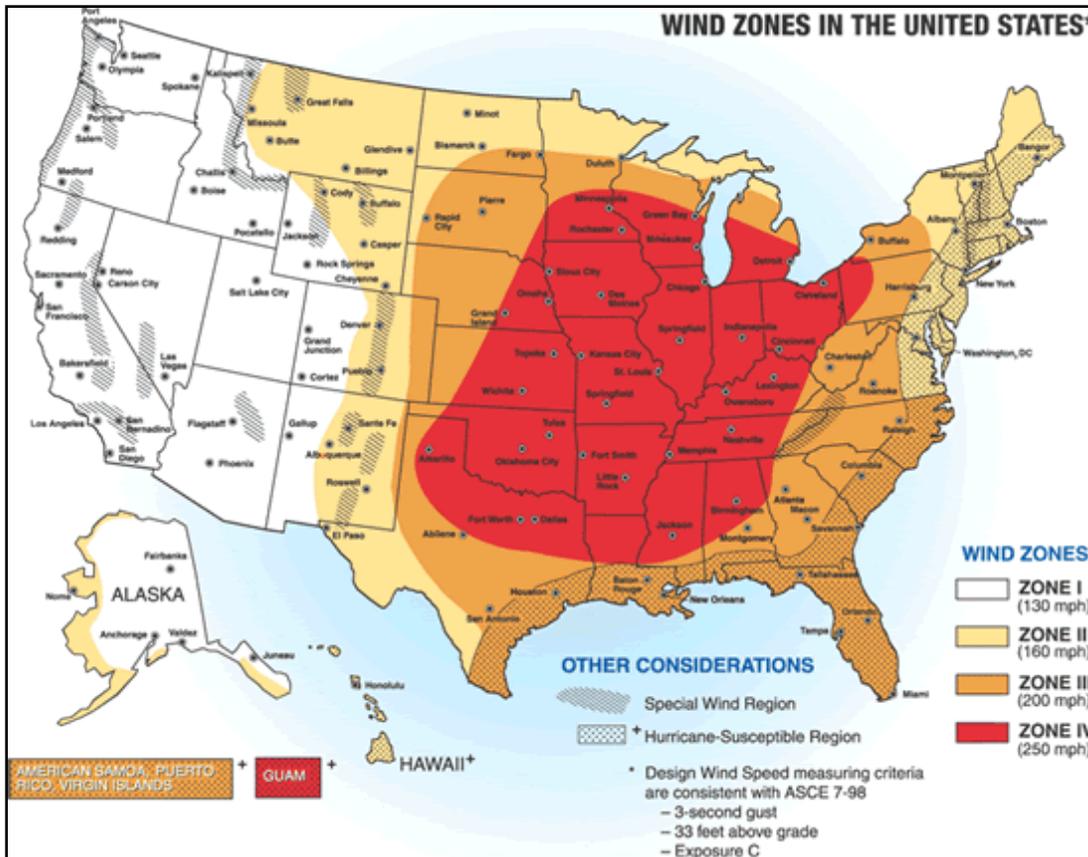
Despite the long duration time, the actual number of thunderstorms on average varies from 40 to 80 per year across the county. The highest number of storms occur in the northeastern part of the county and the lowest along the western border.

Lightning strikes are another indicator of thunderstorm hazard. Strike densities across Yavapai County vary from 2 to 8 lightning strikes per square kilometer annually, with the higher density of lightning strikes in the northern areas of the county.

The American Society of Civil Engineers (ASCE) has identified a 3-second wind gust speed as the most accurate measure for identifying the potential for damage to structures, and is recommended as a design standard for wind loading. Most of Arizona and all of Yavapai County is designated with a design 3-second gust wind speed of 90 mph, indicating relatively low levels of risk from severe winds (ASCE, 1999).

Likewise, FEMA identifies most of the county to be in design wind speed Zone I, as illustrated in Figure 5-2. In this zone, a design wind speed of 130 mph is recommended for the design and construction of community shelters.

The National Weather Service (NWS) issues a severe thunderstorm watch when conditions are favorable for the development of severe thunderstorms. The local NWS office considers a thunderstorm severe if it produces hail at least 3/4-inch in diameter, wind of 58 mph or higher, or tornadoes. When a watch is issued for a region, residents are encouraged to continue normal activities but should remain alert for signs of approaching storms, and continue to listen for weather forecasts and statements from the local NWS office. When a severe thunderstorm has been detected by weather radar or one has been reported by trained storm spotters, the local NWS office will issue a severe thunderstorm warning; an urgent message to the affected counties that a severe thunderstorm is imminent. The warning time provided by a severe thunderstorm watch may be on the order of hours, while a severe thunderstorm warning typically provides an hour or less warning time.



Source: FEMA Website at the following URL: [http://www.fema.gov/plan/prevent/saferoom/tsfs02\\_wind\\_zones.shtm](http://www.fema.gov/plan/prevent/saferoom/tsfs02_wind_zones.shtm)

**Figure 5-2**  
**Illustration of FEMA Wind Zones**

Based on the historic record, the probability of tornadoes occurring in Yavapai County is limited. Tornado damage severity is measured by the Fujita Tornado Scale, which assigns a numerical value of 0 to 5 based on wind speeds, as shown in Table 5-27, with the letter F preceding the number (e.g., FO, F1, F2). Most tornadoes in Arizona last less than 30 minutes and the paths can range from a few hundred feet to a few miles. The width of a tornado may range from tens of yards to more than a quarter of a mile.

| Category | Wind Speed MPH | Description of Damage  |
|----------|----------------|--|
| F0       | 40-72          | Light damage. Some damage to chimneys; break branches off trees; push over shallow-rooted trees; damage to sign boards.  |
| F1       | 73-112         | Moderate damage. The lower limit is the beginning of hurricane speed. Roof surfaces peeled off; mobile homes pushed off foundations or overturned; moving autos pushed off roads.                      |
| F2       | 113-157        | Considerable damage. Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light-object missiles generated.                                      |
| F3       | 158-206        | Severe damage. Roofs and some walls torn off well constructed houses; trains overturned; most trees in forest uprooted; cars lifted off ground and thrown.   |
| F4       | 207-260        | Devastating damage. Well-constructed houses leveled; structures with weak foundations blown off some distance; cars thrown and large missiles generated.   |
| F5       | 261-318        | Incredible damage. Strong frame houses lifted off foundations and carried considerable distance to disintegrate; automobile-sized missiles fly through the air in excess of 100-yards; trees debarked. |

Source: FEMA, 1997.

Map 2 presents a depiction of historic severe wind incident locations as reported by the NCDC for the period of record up to January 2010. It is noted that this map is only intended to provide a visual view of areas impacted most and is not intended to represent a predictive tool.

**Vulnerability – CPRI Results**

Severe Wind CPRI results for each community are summarized in Table 5-28 below.

**Table 5-28: CPRI results by jurisdiction for severe wind**

| <b>Participating Jurisdiction</b> | <b>Probability</b> | <b>Magnitude/<br/>Severity</b> | <b>Warning<br/>Time</b> | <b>Duration</b> | <b>CPRI<br/>Score</b> |
|-----------------------------------|--------------------|--------------------------------|-------------------------|-----------------|-----------------------|
| Camp Verde                        | Likely             | Limited                        | 12 to 24 hours          | > 6 hours       | 2.80                  |
| Chino Valley                      | Highly Likely      | Limited                        | 12 to 24 hours          | < 24 hours      | 2.60                  |
| Clarkdale                         | Likely             | Limited                        | 6 to 12 hours           | < 24 hours      | 2.60                  |
| Cottonwood                        | Likely             | Critical                       | >24 hours               | < 6 hours       | 2.50                  |
| Dewey-Humboldt                    | Highly Likely      | Critical                       | < 6 hours               | < 6 hours       | 3.40                  |
| Jerome                            | Highly Likely      | Limited                        | 6 to 12 hours           | < 6 hours       | 2.95                  |
| Prescott                          | Highly Likely      | Critical                       | 6 to 12 hours           | < 24 hours      | 3.15                  |
| Prescott Valley                   | Likely             | Critical                       | 6 to 12 hours           | < 24 hours      | 2.90                  |
| Sedona                            | Highly Likely      | Limited                        | 12 to 24 hours          | < 6 hours       | 2.80                  |
| Unincorporated Yavapai County     | Highly Likely      | Limited                        | 6 to 12 hours           | < 1 week        | 3.15                  |
| Yavapai-Prescott Indian Tribe     | Highly Likely      | Limited                        | > 24 hours              | < 6 hours       | 2.65                  |
| <b>County-wide average CPRI =</b> |                    |                                |                         |                 | <b>2.86</b>           |

**Vulnerability – Loss Estimations**

The entire County is assumed to be equally exposed to the damage risks associated with severe winds. Typically, incidents are fairly localized and damages associated with individual events are relatively small. Based on the historic records over the last five years, it is feasible to expect average annual losses of \$1.0 to \$1.5 million (county-wide). It is difficult to estimate losses for individual jurisdictions within the County due to the lack of discrete data.

**Vulnerability – Development Trend Analysis**

Future development will expand the exposure of life and property to the damaging effects of severe wind events. Enforcement and/or implementation of modern building codes to regulate new developments in conjunction with public education on how to respond to severe wind conditions is arguably the best way to mitigate against losses.

**Sources**

American Society of Civil Engineers, 1999, *ASCE 7-98: Minimum Design Loads for Buildings and Other Structures*.

Arizona Division of Emergency Management, 2004, *State of Arizona All Hazard Mitigation Plan*

Arizona Division of Emergency Management, 2010, *State of Arizona Multi-Hazard Mitigation Plan*

Changnon, Jr. S., 1988, *Climatology of Thunder Events in the Conterminous U.S., Part I: Temporal Aspects and Part II: Spatial Aspects*, Journal of Climate, Vol. 1, No. 4, pp. 389-405.

FEMA, 1997, *Multi-Hazard Identification & Risk Assessment – A Cornerstone of the National Mitigation Strategy*.

U.S. Dept of Commerce, National Climatic Data Center, 2010, Storm Events Database, accessed via the following URL: <http://www4.ncdc.noaa.gov/cgi-win/wvcgi.dll?wwevent~storms>

**Profile Maps**

Maps 2 – Severe Wind Hazard Map (County-wide)

**Yavapai County  
Multi-Jurisdictional  
Hazard Mitigation Plan**



**Legend**

- Community**
- Camp Verde
  - Chino Valley
  - Clarkdale
  - Cottonwood
  - Dewey-Humboldt
  - Jerome
  - Peoria
  - Prescott
  - Prescott Valley
  - Sedona
  - Unincorporated
  - Wickenburg
  - Yavapai-Apache Nation
  - Yavapai-Prescott Indian Tribe
- Roads**
- Interstate
  - US, State, County Hwys
  - Major Roads
  - County Boundary
  - Lakes

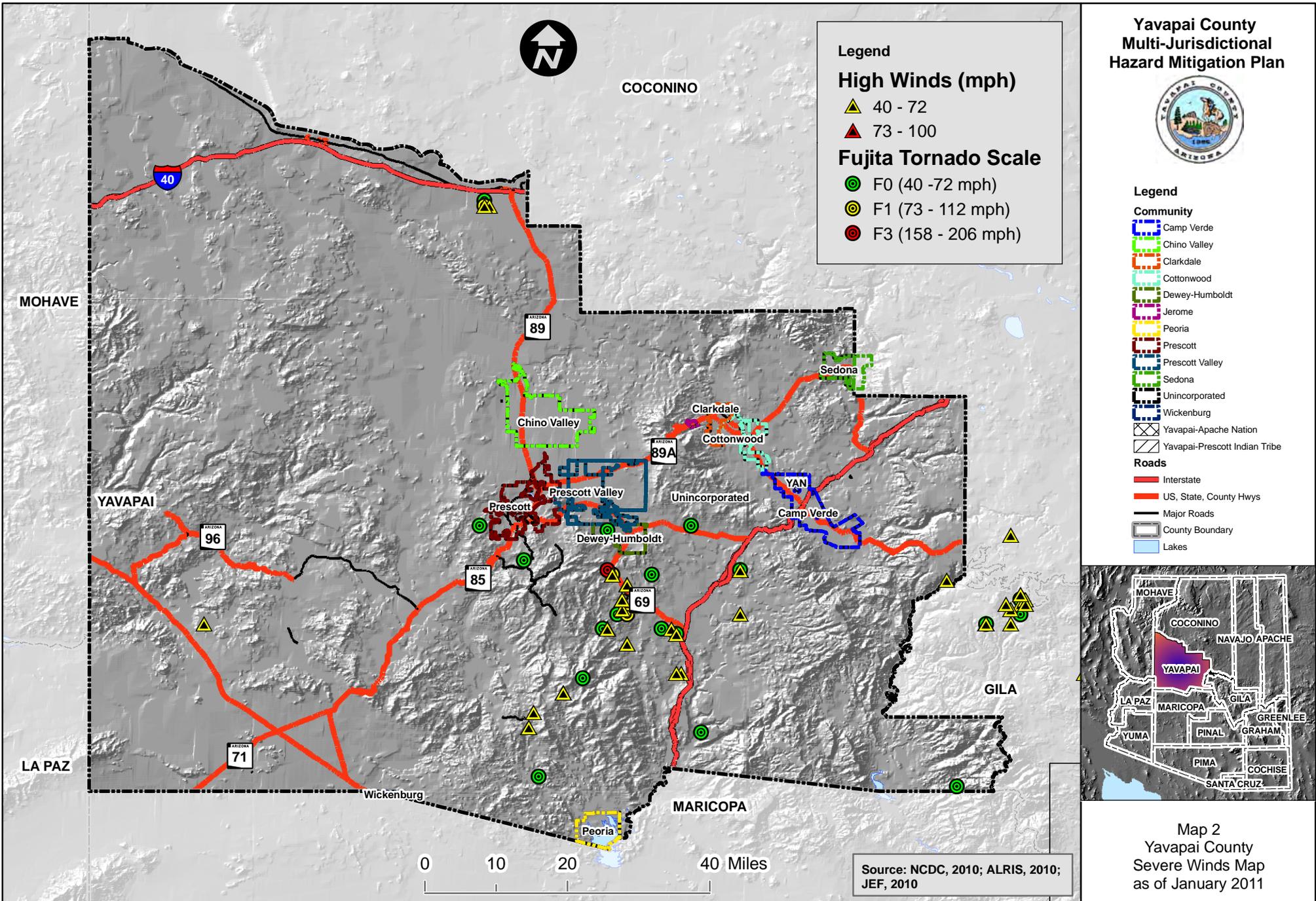
**Legend**

**High Winds (mph)**

- 40 - 72
- 73 - 100

**Fujita Tornado Scale**

- F0 (40 - 72 mph)
- F1 (73 - 112 mph)
- F3 (158 - 206 mph)



Source: NCDL, 2010; ALRIS, 2010; JEF, 2010

Map 2  
Yavapai County  
Severe Winds Map  
as of January 2011

5.3.4 *Wildfires*

**Description**

A wildfire is an uncontrolled fire spreading through wildland vegetative fuels and/or urban interface areas where fuels may include structures. They often begin unnoticed, spread quickly, and are usually signaled by dense smoke that may fill the area for miles around. Wildfires can be human-caused through acts such as arson or campfires, or can be caused by natural events such as lightning. If not promptly controlled, wildfires may grow into an emergency or disaster. Even small fires can threaten lives, resources, and destroy improved properties.

The indirect effects of wildfires can also be catastrophic. In addition to stripping the land of vegetation and destroying forest resources and personal property, large, intense fires can harm the soil, waterways and the land itself. Soil exposed to intense heat may temporarily lose its capability to absorb moisture and support life. Exposed soils in denuded watersheds erode quickly and are easily transported to rivers and streams thereby enhancing flood potential, harming aquatic life and degrading water quality. Lands stripped of vegetation are also subject to increased landslide hazards.

**History**

For the period of 1980 to 2008, data compiled by the Arizona State Forestry Division for the 2010 State Plan update indicates that at least 124 wildfires greater than 100 acres in size have occurred in all of Yavapai County. According to the National Wildfire Coordination Group (NWCG, 2010), there have been 13 fires larger than 100 acres, that have burned within Yavapai County during the period of 2004 to 2009. The more significant fires are listed below in chronological order:

- In June 2004, the Willow Fire was ignited by lightning and burned an area 6 miles southwest of Payson. The fire started June 24, 2004 and was controlled July 17, 2004, and burned a total of 119,500 acres with over \$11.5 million in fire suppression costs. Two out buildings were destroyed and three people were injured.
- In July of 2005, the J. Canyon Fire was ignited by lightning and burned an area 15 miles northeast of Wickenburg. The fire started July 17, 2005 and was controlled July 23, 2005. It burned a total of 10,500 acres with over \$1.5 million in fire suppression costs. No injuries or structural losses were reported.
- In July of 2005, the SH Ranch Complex Fire was started by fifteen lightning strike locations and burned an area 10 miles east of Bagdad. The fire started July 17, 2005 and was controlled July 24, 2005, burning a total of 23,696 acres with one reported injury and a final fire suppression cost of \$676,333. There were no reported injuries or structural losses.
- In June of 2008, the Lane 2 Fire was started by humans and burned an area 1 mile south of the community of Crown King. The fire started June 28, 2008 and was controlled July 14, 2008, and burned a total of 9,629 acres with over \$5.6 million in fire suppression costs. The fire destroyed 5 homes, 1 commercial property, and 12 other buildings. Two injuries were reported.

Maps 3A through 3D provide a graphical depiction of the 100 acre plus wildfires.

The Planning Team recognized that the declared disaster and historic hazard data collected and summarized in Section 5.1 does not adequately reflect the true cost of a wildfire. Particularly, the cost of wildfire suppression efforts to prevent structure and human loss. For example, the Willow Fire did not result in any structure losses except for two out buildings, however, the suppression costs exceeded \$11.5 million. Furthermore, the County, State, Forest Service, and other agencies spend millions of dollars every year in wildfire mitigation in fuel treatment projects.

**Probability and Magnitude**

The probability and magnitude of wildfire incidents for Yavapai County are influenced by numerous factors including vegetation densities, previous burn history, hydrologic conditions, climatic conditions such as temperature, humidity, and wind, ignition source (human or natural), topographic aspect and

slope, and remoteness of area.

In 2004, the State of Arizona prepared the AWUIA to analyze wildfire risk at a statewide basis, using a common spatial model. The model results were used for validation of those communities listed in the federal register as WUI, and for further identification other communities possibly at risk. The AWUIA approach used four main data layers:

- TOPO – aspect and slope derived from 30 meter Digital Elevation Model data from USGS.
- RISK – historical fire density using point data from fire record years 1986–1996 from all wildland agencies.
- HAZARD – fuels, natural fire regimes and condition class.
- HOUSE – houses and/or structures

A value rating in the range of 1-15 was assigned for all layers to represent the level of risk.

Two separate results were developed. The first coverage used an applied weighting scheme that combined each of the four data layers to develop a ranking model for identifying WUI communities at greatest risk. The second coverage, referred to as the “Land Hazard”, also applied a weighting scheme that combined only the TOPO, RISK, and HAZARD layers, as follows:

$$\text{LAND HAZARD} = (\text{HAZARD} * 70\%) + (\text{RISK} * 20\%) + (\text{TOPO} * 10\%)$$

Weighing percentages were determined through discussion with the Arizona Interagency Coordinating Group. The “Land Hazard” layer produced from this model is based on a 250-meter raster grid (some data originated at 1,000-meter). The resultant raster values range from 1-15 and were classified into three groups to depict wildfire hazard without the influence of structures: HIGH (values of 10-15), MEDIUM (values of 7-9), and LOW (values of 1-6).

Maps 3A through 3O indicate the various wildfire hazard areas for Yavapai County and the incorporated boundaries of all the communities.

**Vulnerability – CPRI Results**

Wildfire CPRI results for each community are summarized in Table 5-29 below.

| <b>Participating Jurisdiction</b> | <b>Probability</b> | <b>Magnitude/<br/>Severity</b> | <b>Warning<br/>Time</b> | <b>Duration</b> | <b>CPRI<br/>Score</b> |
|-----------------------------------|--------------------|--------------------------------|-------------------------|-----------------|-----------------------|
| Camp Verde                        | Highly Likely      | Catastrophic                   | < 6 hours               | < 1 week        | 3.90                  |
| Chino Valley                      | Unlikely           | Negligible                     | > 24 hours              | < 6 hours       | 1.45                  |
| Clarkdale                         | Possibly           | Limited                        | < 6 hours               | < 24 hours      | 2.30                  |
| Cottonwood                        | Possibly           | Critical                       | 12 - 24 hours           | < 1 week        | 2.40                  |
| Dewey-Humboldt                    | Likely             | Limited                        | < 6 hours               | < 1 week        | 2.85                  |
| Jerome                            | Highly Likely      | Catastrophic                   | < 6 hours               | > 1 week        | 4.00                  |
| Prescott                          | Highly Likely      | Catastrophic                   | < 6 hours               | < 1 week        | 3.90                  |
| Prescott Valley                   | Possibly           | Limited                        | < 6 hours               | < 24 hours      | 2.30                  |
| Sedona                            | Highly Likely      | Catastrophic                   | < 6 hours               | < 1 week        | 3.90                  |
| Unincorporated Yavapai County     | Highly Likely      | Catastrophic                   | < 6 hours               | > 1 week        | 4.00                  |
| Yavapai-Prescott Indian Tribe     | Likely             | Critical                       | 6 -12 hours             | > 1 week        | 3.10                  |
| <b>County-wide average CPRI =</b> |                    |                                |                         |                 | <b>3.10</b>           |

**Vulnerability – Loss Estimations**

The estimation of potential exposure to high and medium wildfire hazards was accomplished by intersecting the human and facility assets with the wildfire hazard limits depicted on Maps 3A – 3O. Loss to exposure ratios of 0.20 (20%) and 0.05 (5%) were assumed to estimate losses for all facilities located within the high and medium wildfire hazard areas, respectively. Table 5-30 summarizes the Planning Team identified critical and non-critical facilities potentially exposed to high and medium wildfire hazards, and the corresponding estimates of losses. Table 5-31 summarizes population sectors

exposed to the high and medium wildfire hazards. HAZUS residential, commercial and industrial exposures and loss estimates to high and medium wildfire hazards are summarized in Tables 5-32 through 5-45.

In summary, \$31 and \$23 million in asset related losses are estimated for high and medium wildfire hazards, for all the participating jurisdictions in Yavapai County. An additional \$392 and \$111 million in high and medium hazard wildfire losses to HAZUS defined residential, commercial, and industrial facilities, is estimated for all participating Yavapai County jurisdictions. It should be noted that these exposure dollar amounts do not include the cost of wildfire suppression which can be substantial. For example, a Type 1 wildfire fighter crew costs about \$1 million per day.

Regarding human vulnerability, a county-wide population of 15,695 and 23,979 people, or 9.38% and 14.33% of the total, is potentially exposed to a high and medium hazard wildfire event, respectively. Typically, deaths and injuries not related to firefighting activities are rare. However, it is feasible to assume that at least one death and/or injury may be plausible. There is also a high probability of population displacement during a wildfire event, and especially in the urban wildland interface areas.

It is duly noted that the loss and exposure numbers presented above represent a comprehensive evaluation of the County as a whole. It is unlikely that a wildfire would occur that would impact all of the high and medium wildfire hazard areas at the same time. Accordingly, actual event based losses and exposure are likely to be only a fraction of those summarized above.

#### **Vulnerability – Development Trend Analysis**

By its very definition, the WUI represents the fringe of urban development as it intersects with the natural environment. As previously discussed, wildfire risks are significant for a sizeable portion of the county. Any future development will only increase the WUI areas and expand the potential exposure of structures to wildfire hazards. The YCWPP addresses mitigation opportunities for expanding WUI areas and provides recommended guidelines for safe building and land-use practices in wildfire hazard areas.

#### **Sources**

Arizona Division of Emergency Management, 2010, State of Arizona Multi-Hazard Mitigation Plan, 2010 Update  
Fisher, M., 2004, AZ Wildland Urban Interface Assessment, 2003, prepared for the AZ Interagency Coordination Group.

<http://www.azsf.az.gov/UserFiles/PDF/Arizona%20Wildland%20Urban%20Interface%20Assessment%2005MAR04.pdf>

Interagency Fire and Emergency Management Group of The Prescott Area Wildland/Urban Interface Commission, 2005 Version 2, Yavapai Communities Wildfire Protection Plan

National Wildfire Coordination Group, 2010, Historical ICS 209 reports at: [http://fam.nwcg.gov/fam-web/hist\\_209/report\\_list\\_209](http://fam.nwcg.gov/fam-web/hist_209/report_list_209)

White, Seth, 2004, *Bridging the Worlds of Fire Managers and Researchers: Lessons and Opportunities From the Wildland Fire Workshops*, USDA Forest Service, General Technical Report PNW-GTR-599, March 2004

#### **Profile Maps**

Maps 3A and 3D – County-Wide Wildfire Hazard Maps

Maps 3E and 3O – Community's Wildfire Hazard Maps

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# Yavapai County Multi-Jurisdictional Hazard Mitigation Plan



## Legend

### Community

- Camp Verde
  - Chino Valley
  - Clarkdale
  - Cottonwood
  - Dewey-Humboldt
  - Jerome
  - Peoria
  - Prescott
  - Prescott Valley
  - Sedona
  - Unincorporated
  - Wickenburg
  - Yavapai-Apache Nation
  - Yavapai-Prescott Indian Tribe
  - Cities and Places
  - Watercourses
- Roads**
- Interstate
  - US, State, County Hwys
  - Major Roads
  - County Boundary
  - Lakes

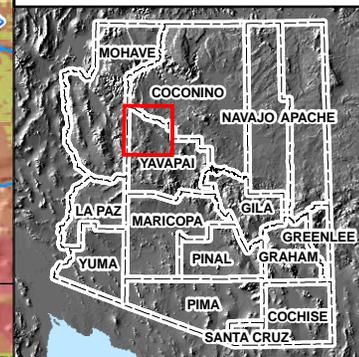
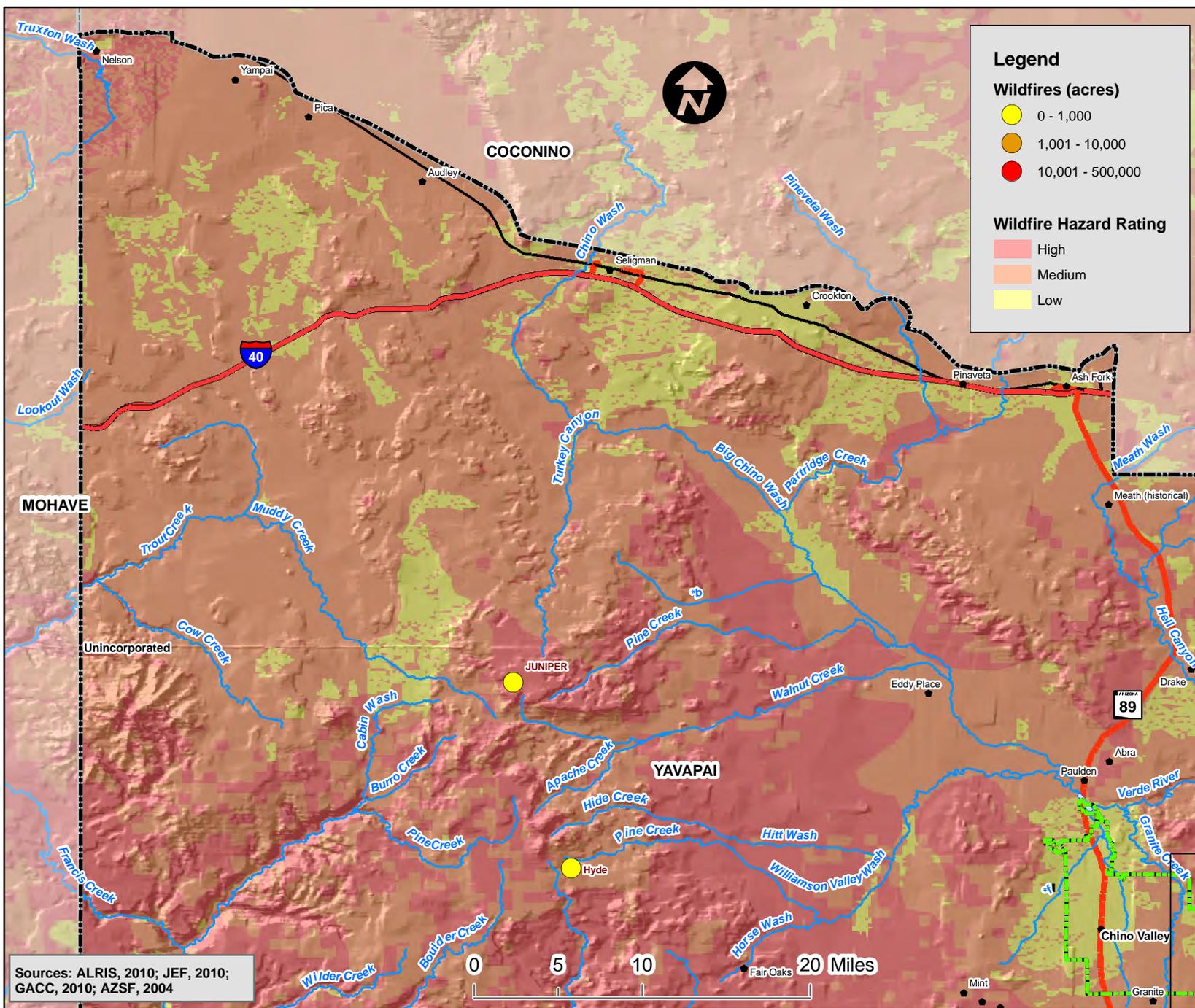
**Legend**

**Wildfires (acres)**

- 0 - 1,000
- 1,001 - 10,000
- 10,001 - 500,000

**Wildfire Hazard Rating**

- High
- Medium
- Low



Sources: ALRIS, 2010; JEF, 2010;  
GACC, 2010; AZSF, 2004

Map 3A  
Yavapai County  
Flood Hazard Map  
as of January 2011

# Yavapai County Multi-Jurisdictional Hazard Mitigation Plan



## Legend

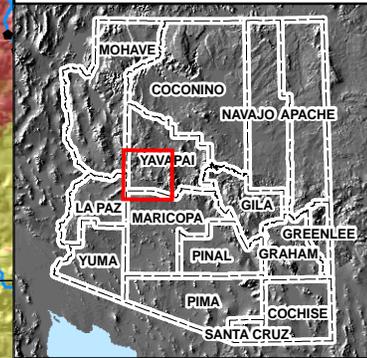
### Community

- Camp Verde
  - Chino Valley
  - Clarkdale
  - Cottonwood
  - Dewey-Humboldt
  - Jerome
  - Peoria
  - Prescott
  - Prescott Valley
  - Sedona
  - Unincorporated
  - Wickenburg
  - Yavapai-Apache Nation
  - Yavapai-Prescott Indian Tribe
  - Cities and Places
  - Watercourses
- ### Roads
- Interstate
  - US, State, County Hwys
  - Major Roads
  - County Boundary
  - Lakes

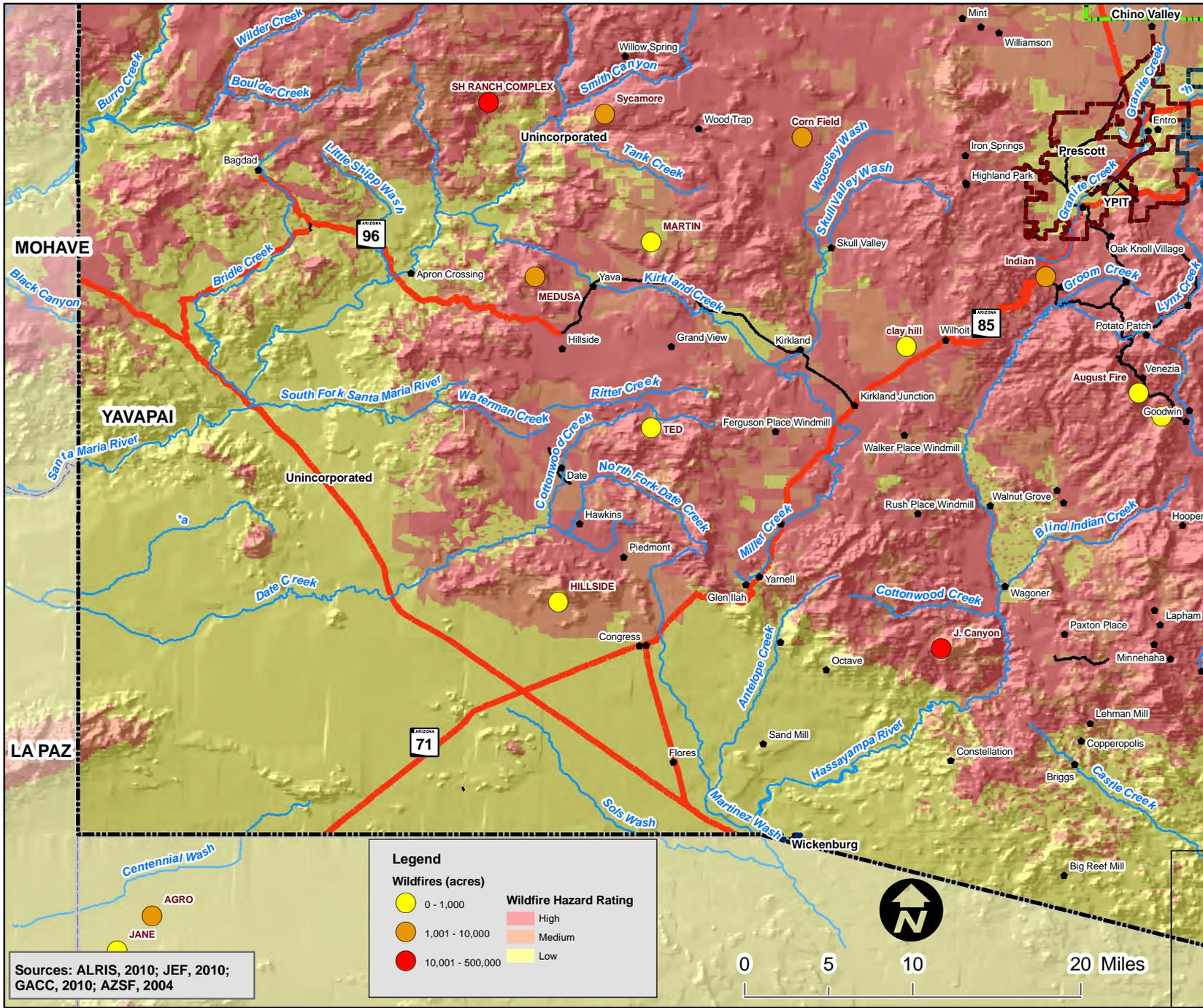
### Legend

| Wildfires (acres) |                  | Wildfire Hazard Rating |        |
|-------------------|------------------|------------------------|--------|
|                   | 0 - 1,000        |                        | High   |
|                   | 1,001 - 10,000   |                        | Medium |
|                   | 10,001 - 500,000 |                        | Low    |

Sources: ALRIS, 2010; JEF, 2010; GACC, 2010; AZSF, 2004



Map 3B  
Yavapai County  
Wildfire Hazard Map  
as of January 2011



# Yavapai County Multi-Jurisdictional Hazard Mitigation Plan



## Legend

### Community

- Camp Verde
- Chino Valley
- Clarkdale
- Cottonwood
- Dewey-Humboldt
- Jerome
- Peoria
- Prescott
- Prescott Valley
- Sedona
- Unincorporated
- Wickenburg
- Yavapai-Apache Nation
- Yavapai-Prescott Indian Tribe
- Cities and Places
- Watercourses

### Roads

- Interstate
- US, State, County Hwys
- Major Roads
- County Boundary
- Lakes

## Legend

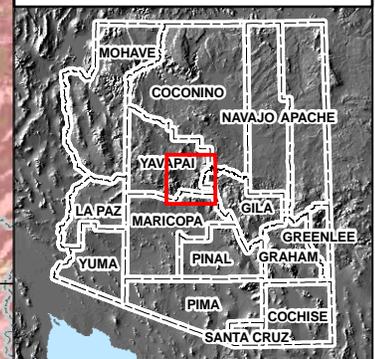
### Wildfires (acres)

- |  |                  |  |        |
|--|------------------|--|--------|
|  | 0 - 1,000        |  | High   |
|  | 1,001 - 10,000   |  | Medium |
|  | 10,001 - 500,000 |  | Low    |

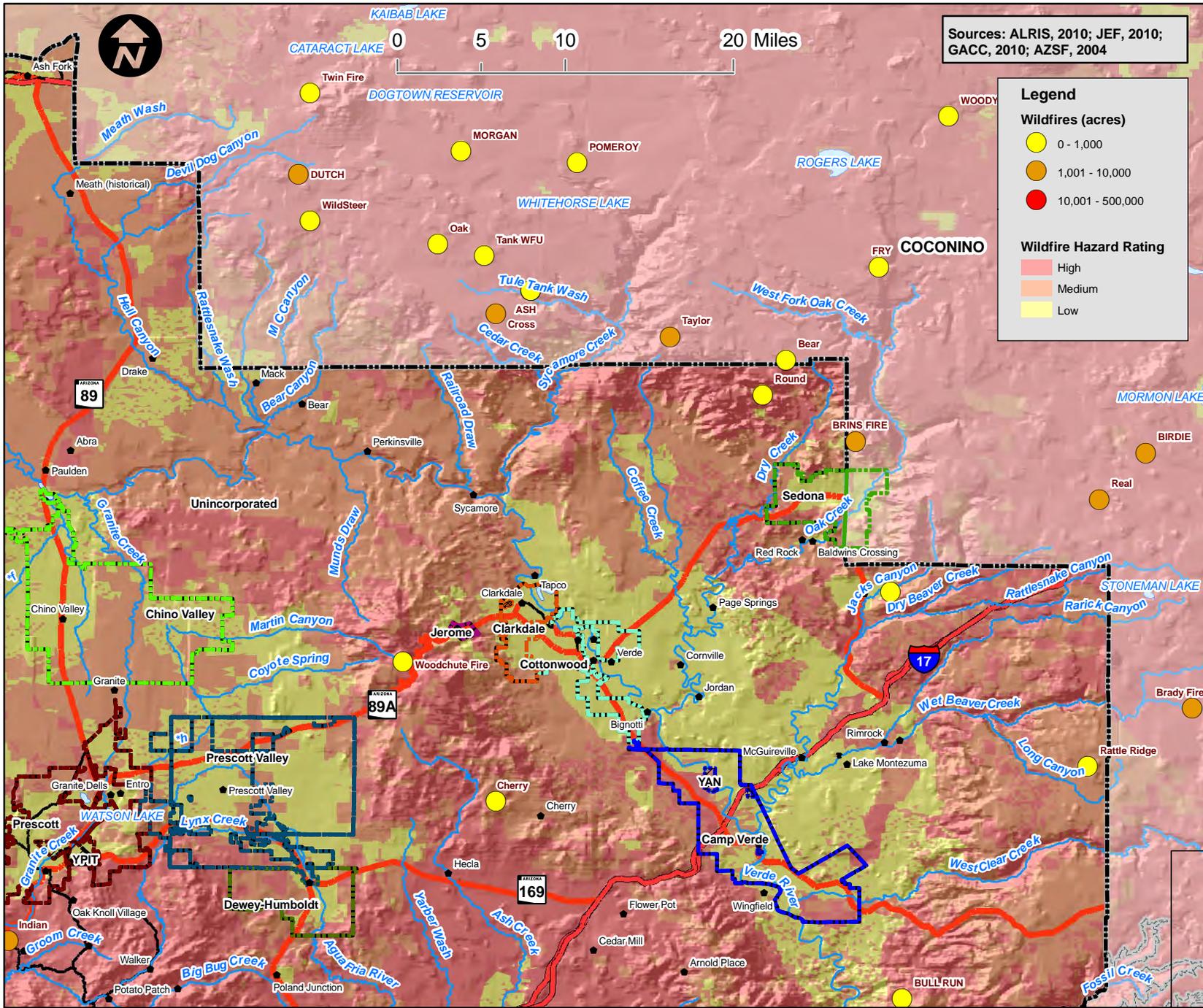
Sources: ALRIS, 2010; JEF, 2010; GACC, 2010; AZSF, 2004



0 5 10 20 Miles



Map 3C  
Yavapai County  
Wildfire Hazard Map  
as of January 2011

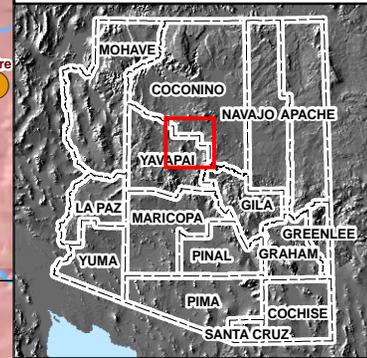


### Yavapai County Multi-Jurisdictional Hazard Mitigation Plan

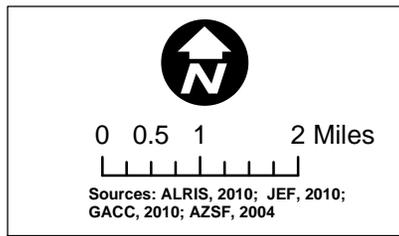
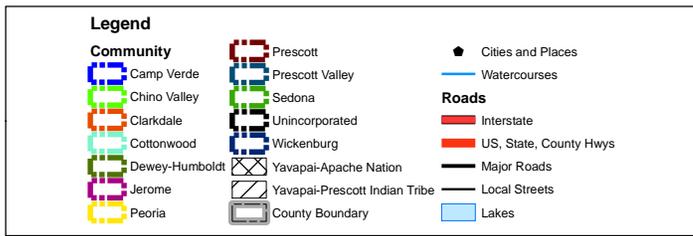
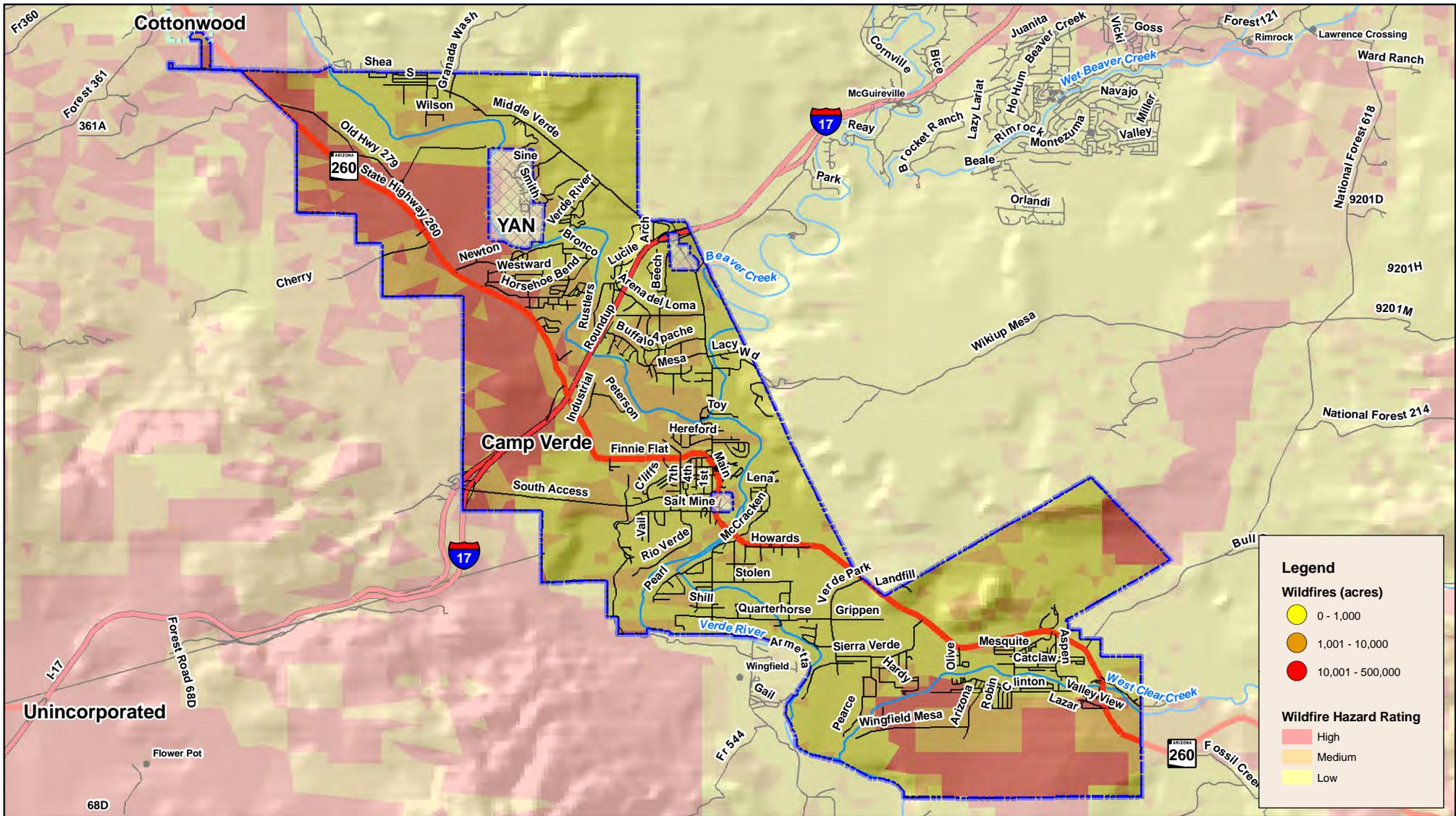


#### Legend

- Community**
- Camp Verde
  - Chino Valley
  - Clarkdale
  - Cottonwood
  - Dewey-Humboldt
  - Jerome
  - Peoria
  - Prescott
  - Prescott Valley
  - Sedona
  - Unincorporated
  - Wickenburg
  - Yavapai-Apache Nation
  - Yavapai-Prescott Indian Tribe
  - Cities and Places
  - Watercourses
- Roads**
- Interstate
  - US, State, County Hwys
  - Major Roads
  - County Boundary
  - Lakes



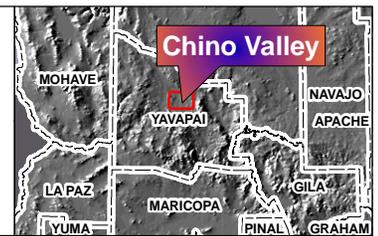
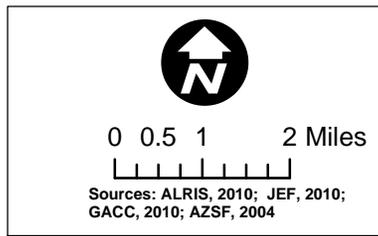
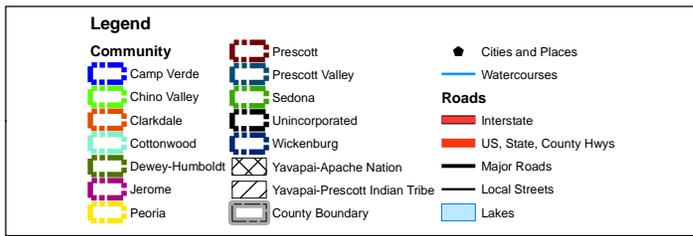
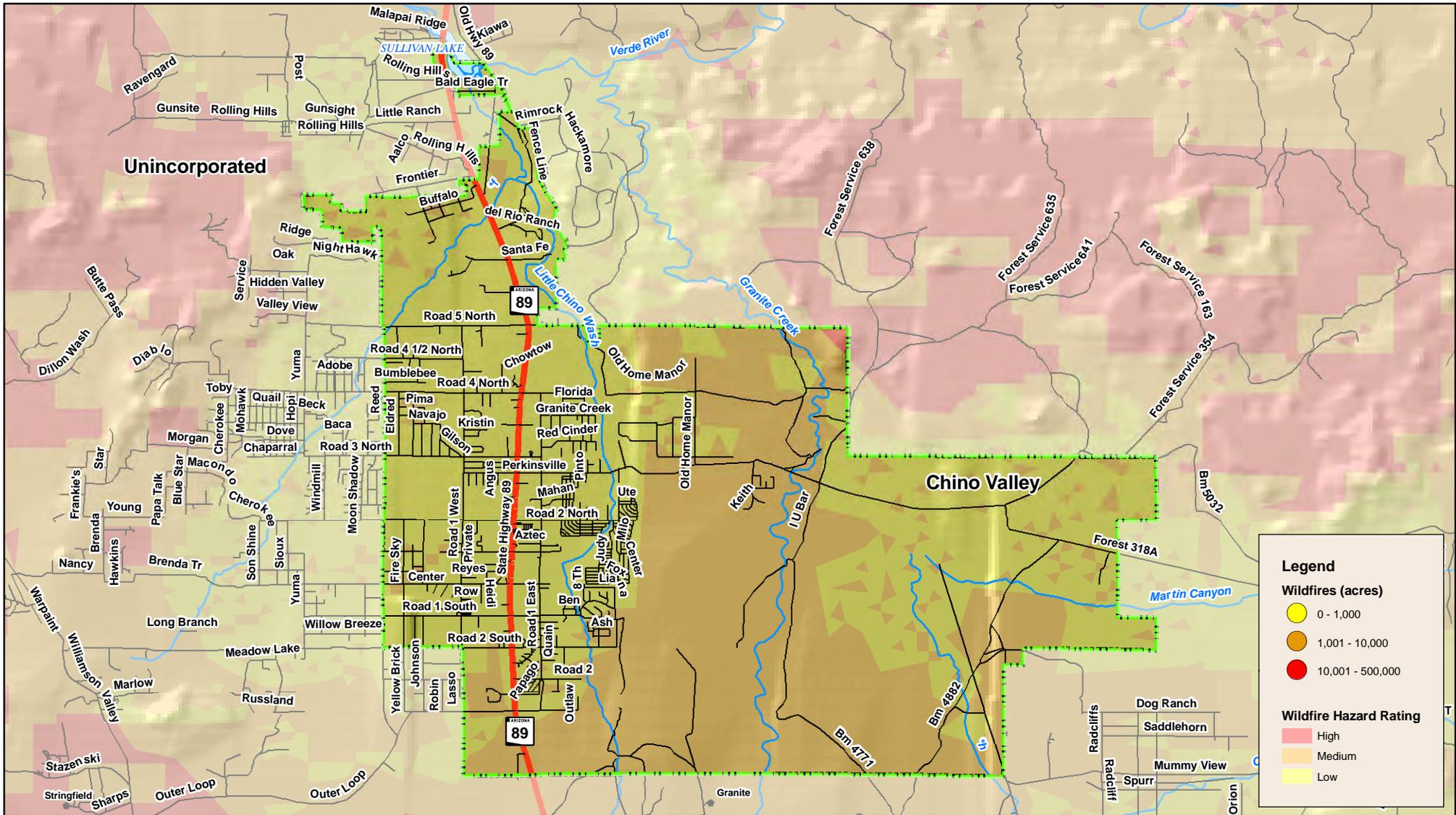
Map 3D  
Yavapai County  
Wildfire Hazard Map  
as of January 2011



**Yavapai County Multi-Jurisdictional Hazard Mitigation Plan**

**Map 3E**

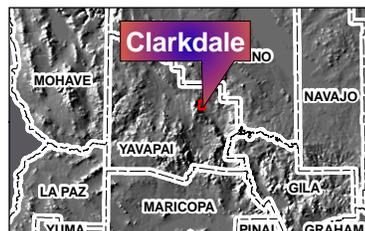
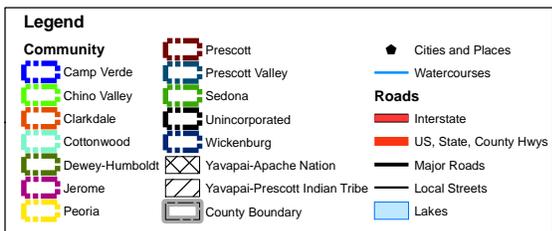
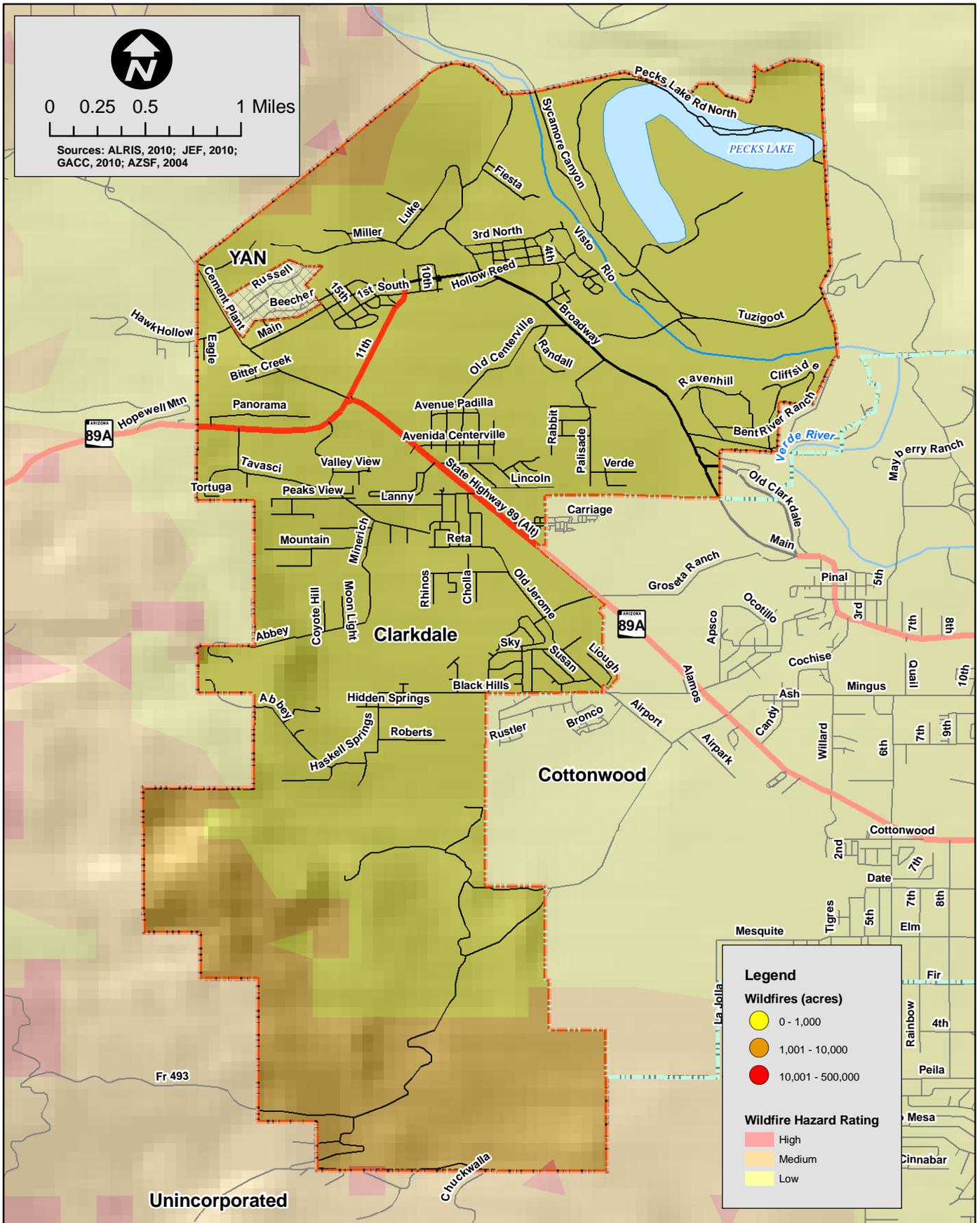
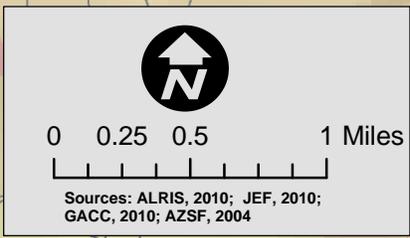
**Town of Camp Verde Wildfire Hazard Map as of January 2011**



**Yavapai County Multi-Jurisdictional Hazard Mitigation Plan**

**Map 3F**

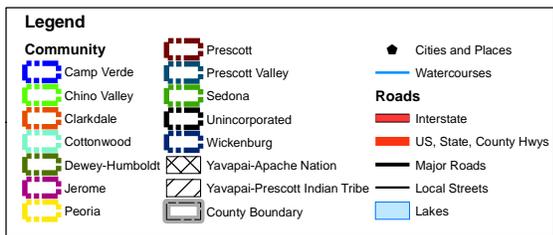
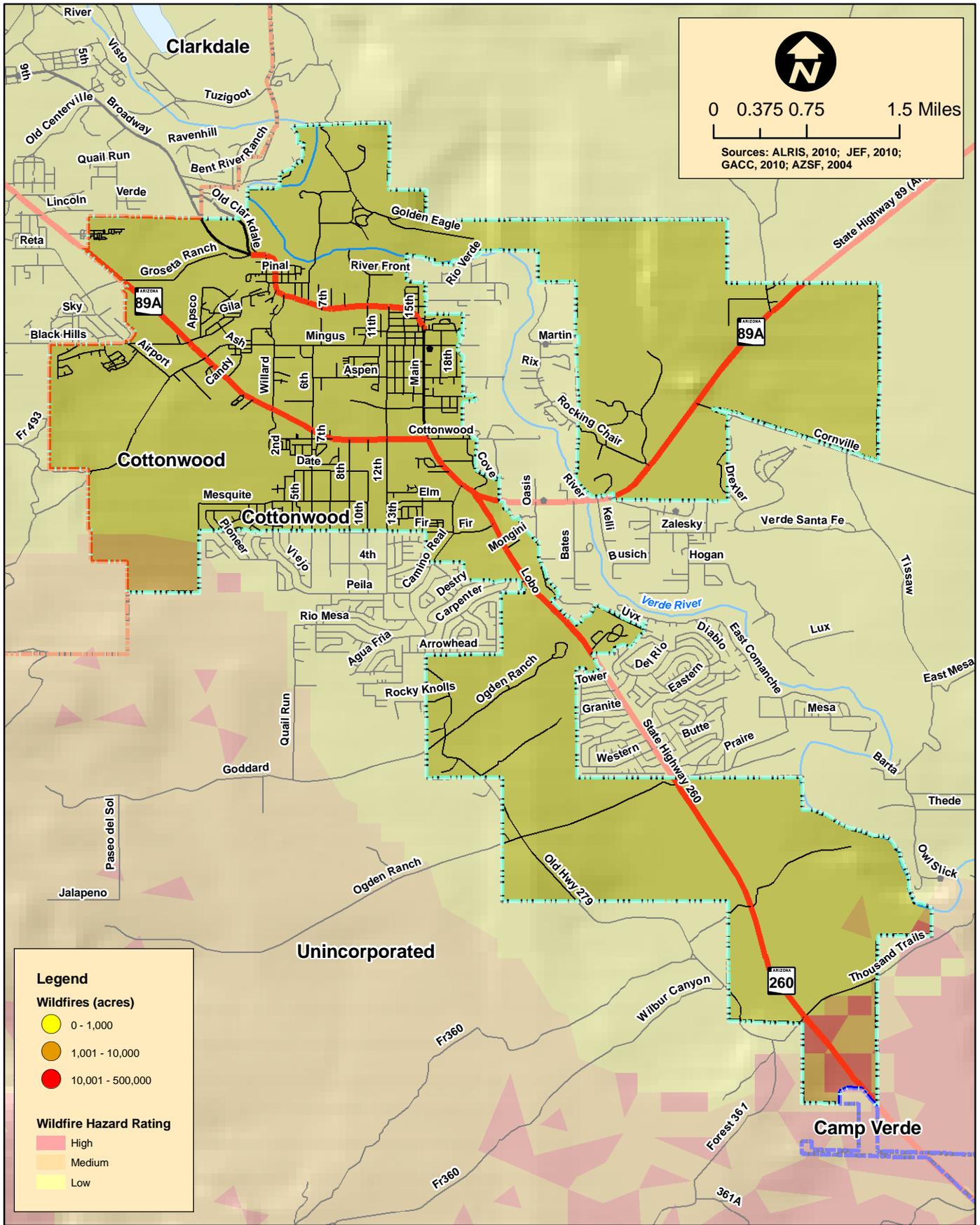
**Town of Chino Valley Wildfire Hazard Map as of January 2011**



**Yavapai County Multi-Jurisdictional Hazard Mitigation Plan**

**Map 3G**

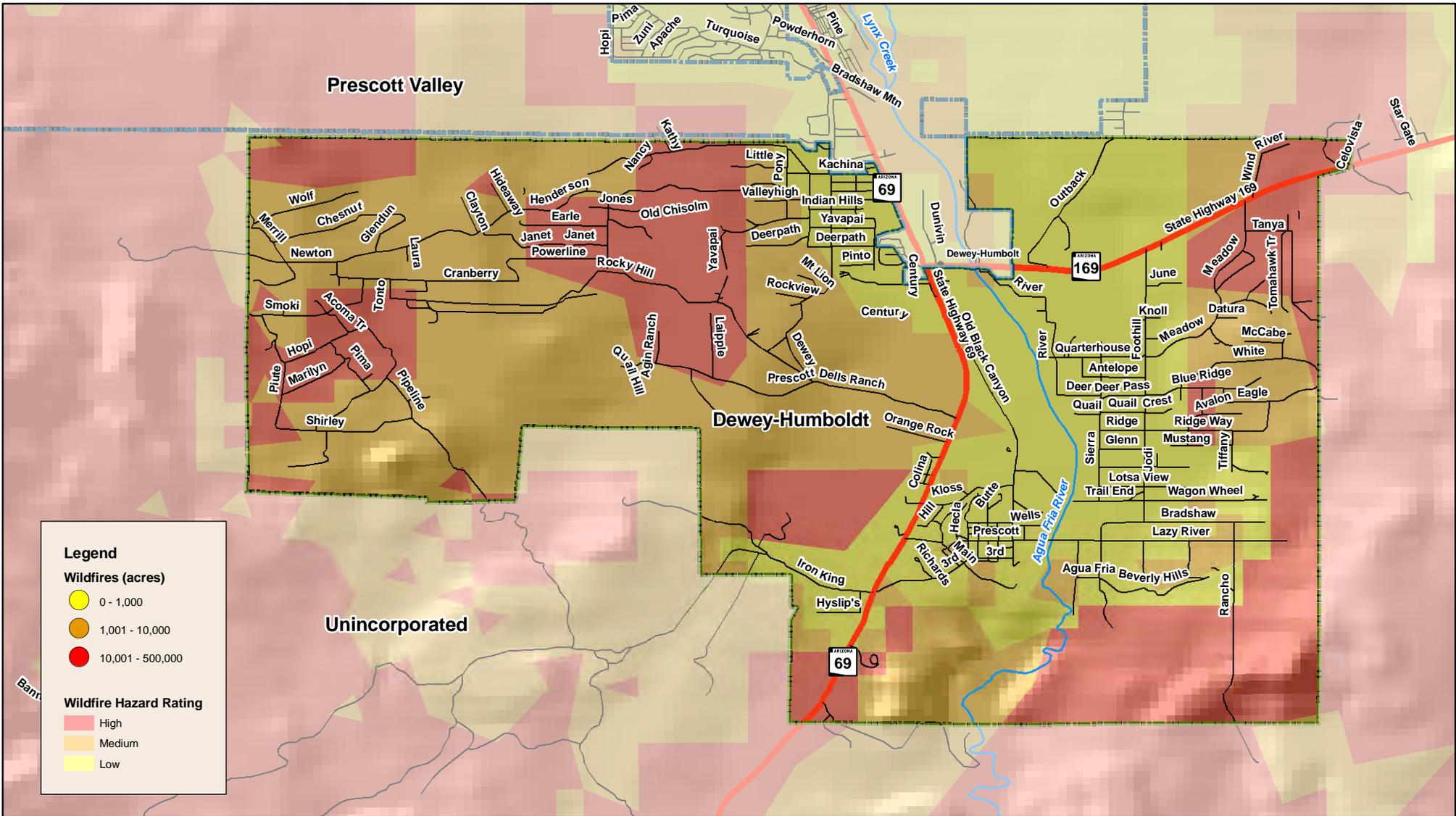
**Town of Clarkdale Wildfire Hazard Map as of January 2011**



**Yavapai County Multi-Jurisdictional Hazard Mitigation Plan**

**Map 3H**

**City of Cottonwood Wildfire Hazard Map as of January 2011**



**Legend**

**Wildfires (acres)**

- 0 - 1,000
- 1,001 - 10,000
- 10,001 - 50,000

**Wildfire Hazard Rating**

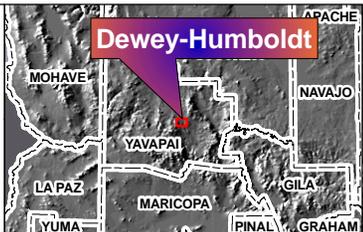
- High
- Medium
- Low

**Legend**

|                  |                               |                        |
|------------------|-------------------------------|------------------------|
| <b>Community</b> | Prescott                      | Cities and Places      |
| Camp Verde       | Prescott Valley               | Watercourses           |
| Chino Valley     | Sedona                        | <b>Roads</b>           |
| Clarkdale        | Unincorporated                | Interstate             |
| Cottonwood       | Wickenburg                    | US, State, County Hwys |
| Dewey-Humboldt   | Yavapai-Apache Nation         | Major Roads            |
| Jerome           | Yavapai-Prescott Indian Tribe | Local Streets          |
| Peoria           | County Boundary               | Lakes                  |

0 0.25 0.5 1 Miles

Sources: ALRIS, 2010; JEF, 2010; GACC, 2010; AZSF, 2004

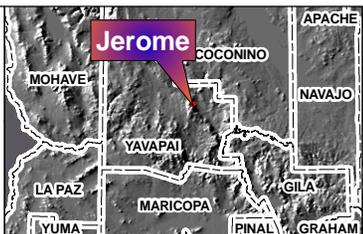
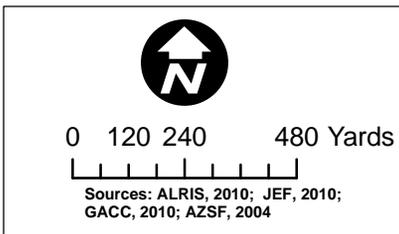
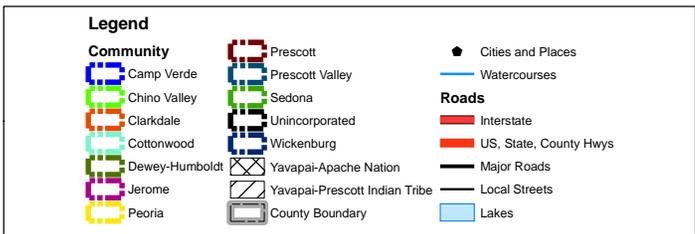
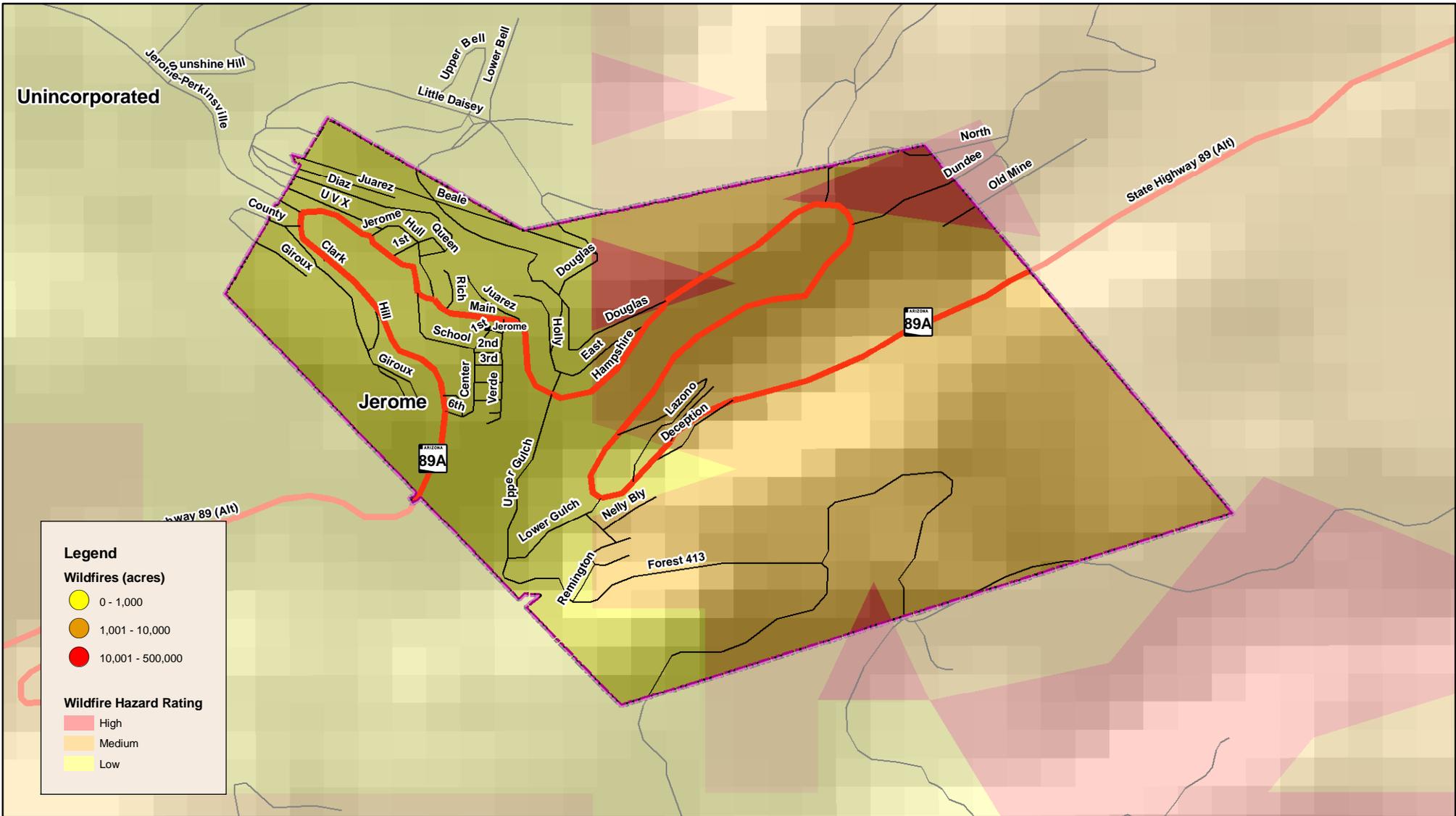


**Yavapai County Multi-Jurisdictional Hazard Mitigation Plan**

**Map 21**

**Town of Dewey-Humboldt Wildfire Hazard Map**

as of January 2011



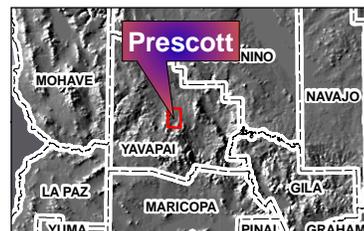
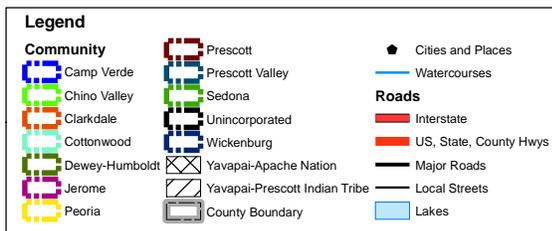
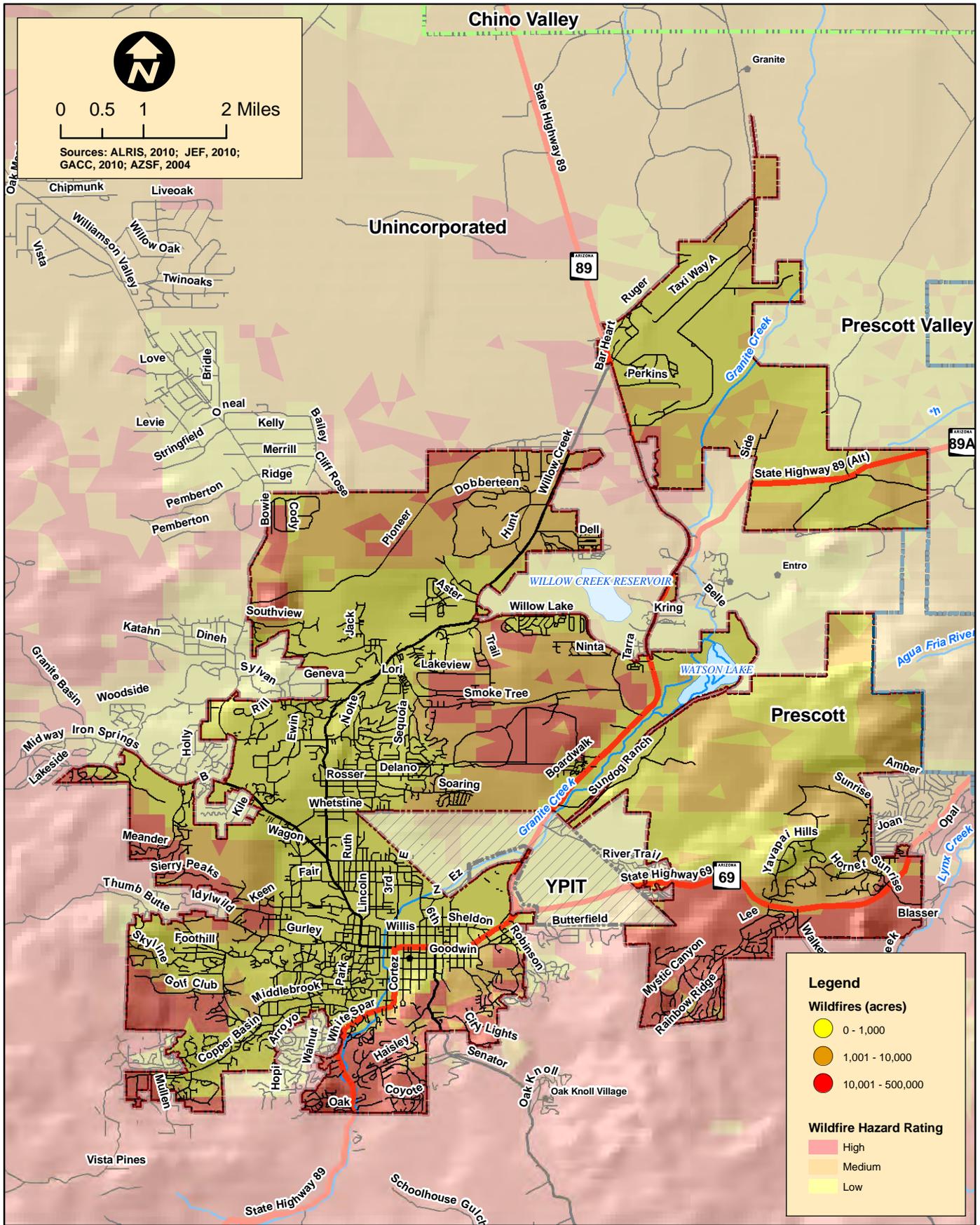
**Yavapai County Multi-Jurisdictional Hazard Mitigation Plan**

**Map 3J**

**Town of Jerome**

**Wildfire Hazard Map**

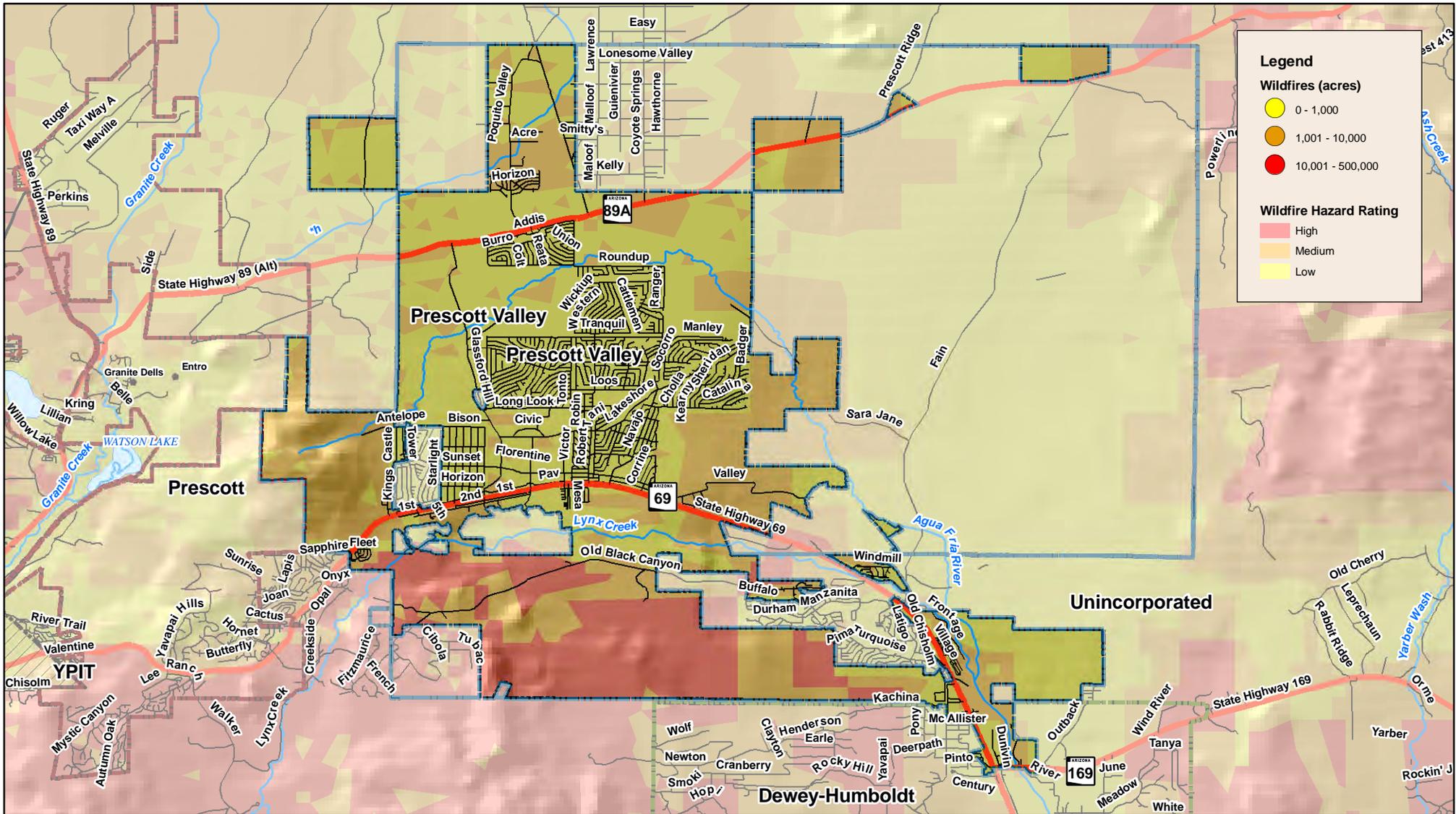
as of January 2011



**Yavapai County Multi-Jurisdictional Hazard Mitigation Plan**

**Map 3K**

**City of Prescott Wildfire Hazard Map as of January 2011**



**Legend**

**Wildfires (acres)**

- 0 - 1,000
- 1,001 - 10,000
- 10,001 - 500,000

**Wildfire Hazard Rating**

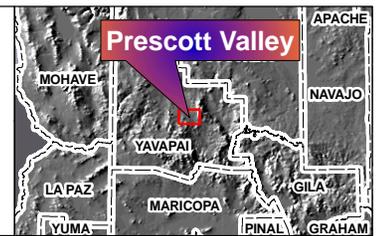
- High
- Medium
- Low

**Legend**

|                  |   |  |   |
|------------------|---|--|---|
| <b>Community</b> | <ul style="list-style-type: none"> <li>Prescott</li> <li>Camp Verde</li> <li>Chino Valley</li> <li>Clarkdale</li> <li>Cottonwood</li> <li>Dewey-Humboldt</li> <li>Jerome</li> <li>Peoria</li> </ul> | <ul style="list-style-type: none"> <li>Prescott Valley</li> <li>Sedona</li> <li>Unincorporated</li> <li>Wickenburg</li> <li>Yavapai-Apache Nation</li> <li>Yavapai-Prescott Indian Tribe</li> <li>County Boundary</li> </ul> | <ul style="list-style-type: none"> <li>Cities and Places</li> <li>Watercourses</li> </ul> <p><b>Roads</b></p> <ul style="list-style-type: none"> <li>Interstate</li> <li>US, State, County Hwys</li> <li>Major Roads</li> <li>Local Streets</li> <li>Lakes</li> </ul> |
|------------------|---|--|---|

0 0.5 1 2 Miles

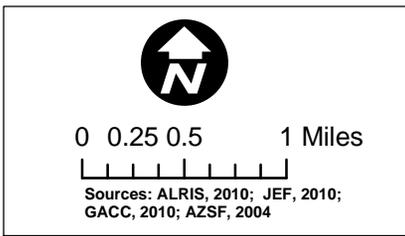
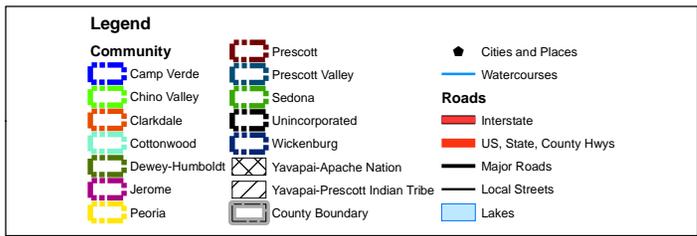
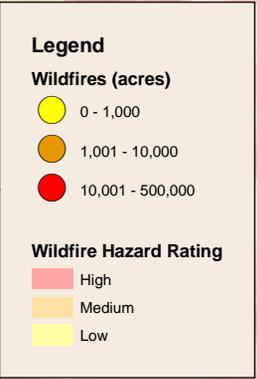
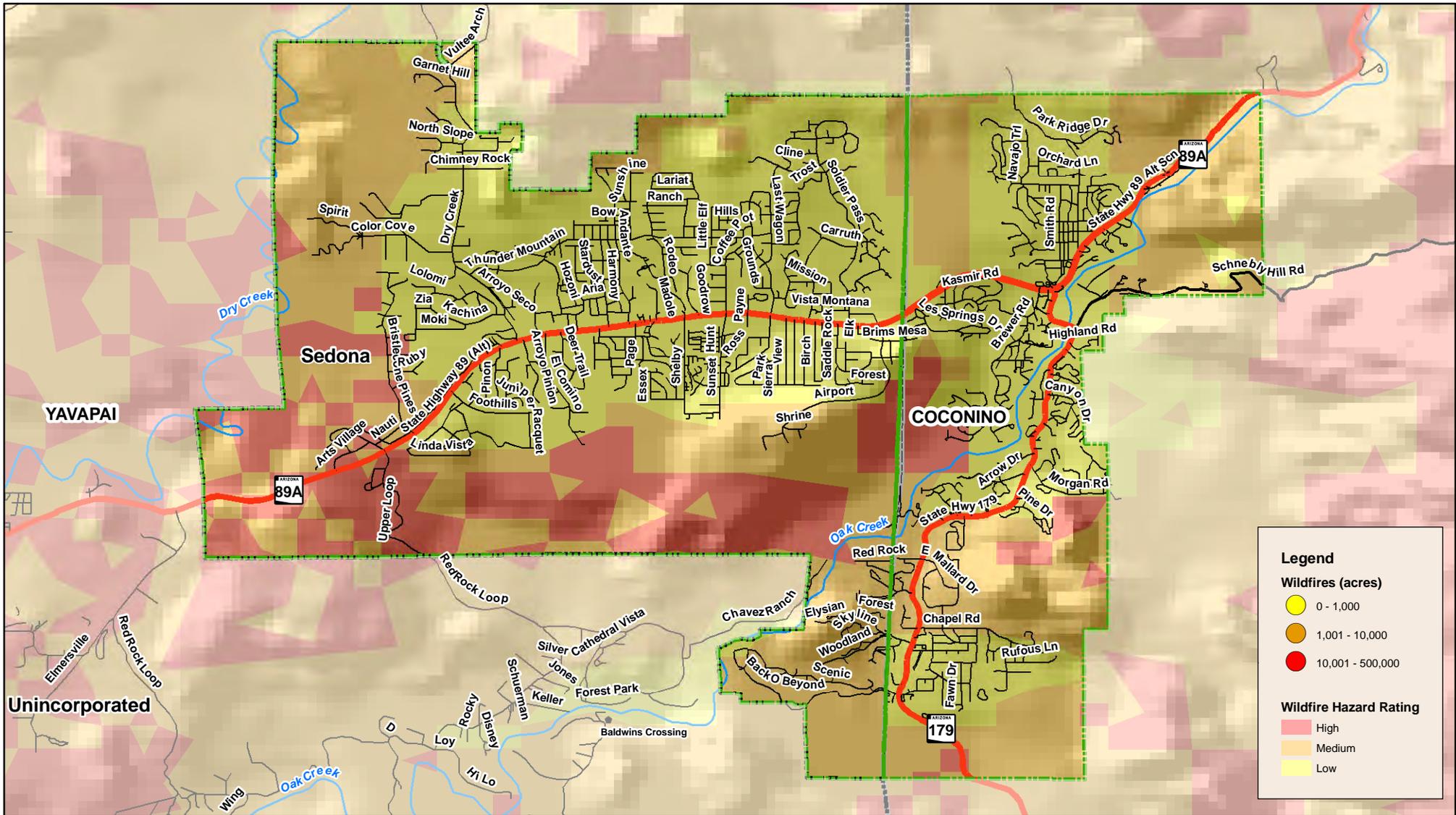
Sources: ALRIS, 2010; JEF, 2010; GACC, 2010; AZSF, 2004



**Yavapai County Multi-Jurisdictional Hazard Mitigation Plan**

**Map 3L**

**Town of Prescott Valley Wildfire Hazard Map as of January 2011**

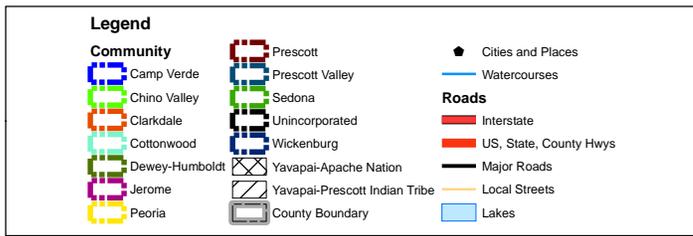
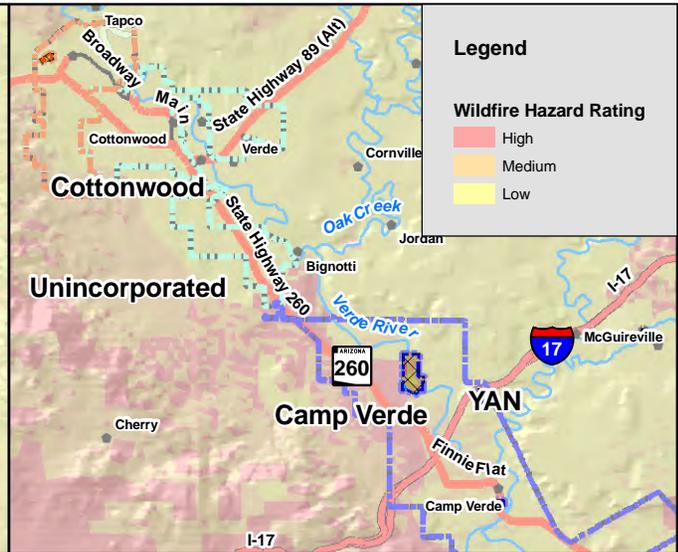
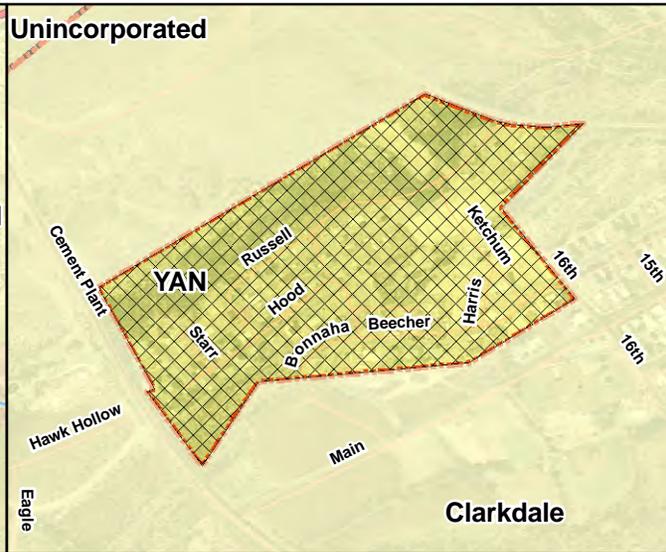
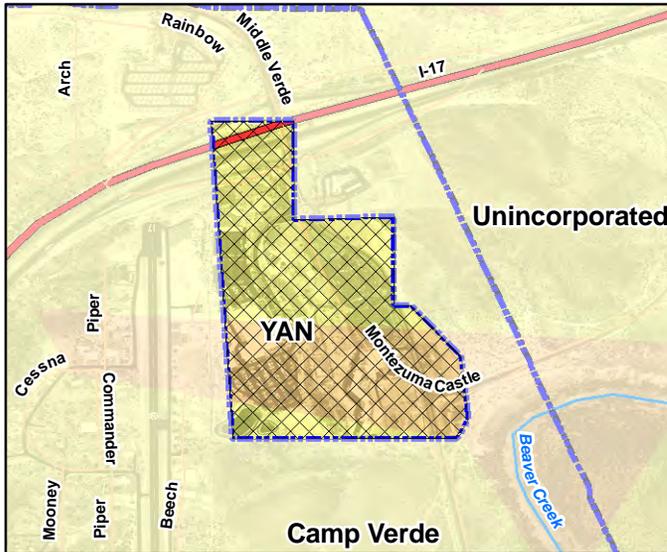
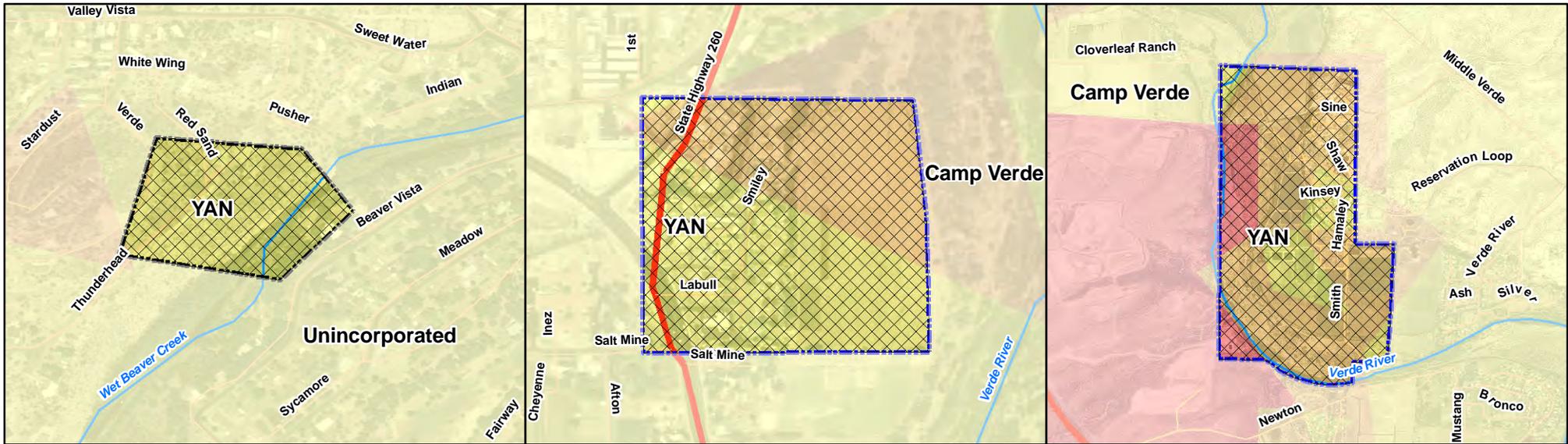


**Yavapai County Multi-Jurisdictional Hazard Mitigation Plan**

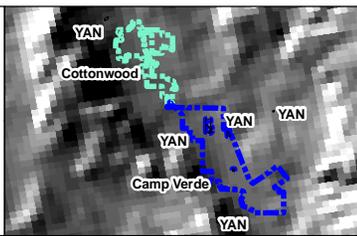
**Map 3M**

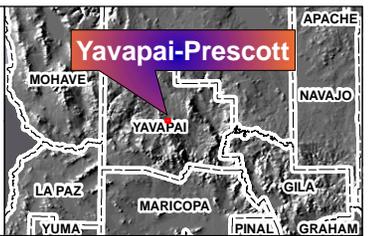
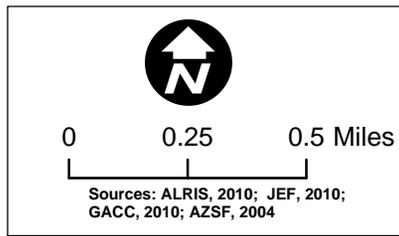
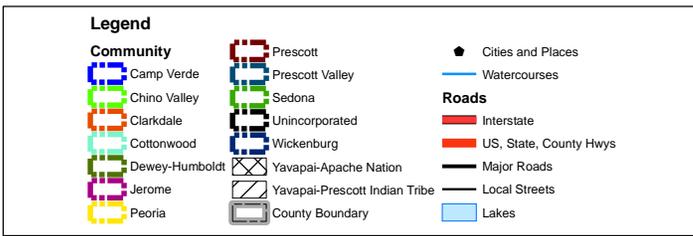
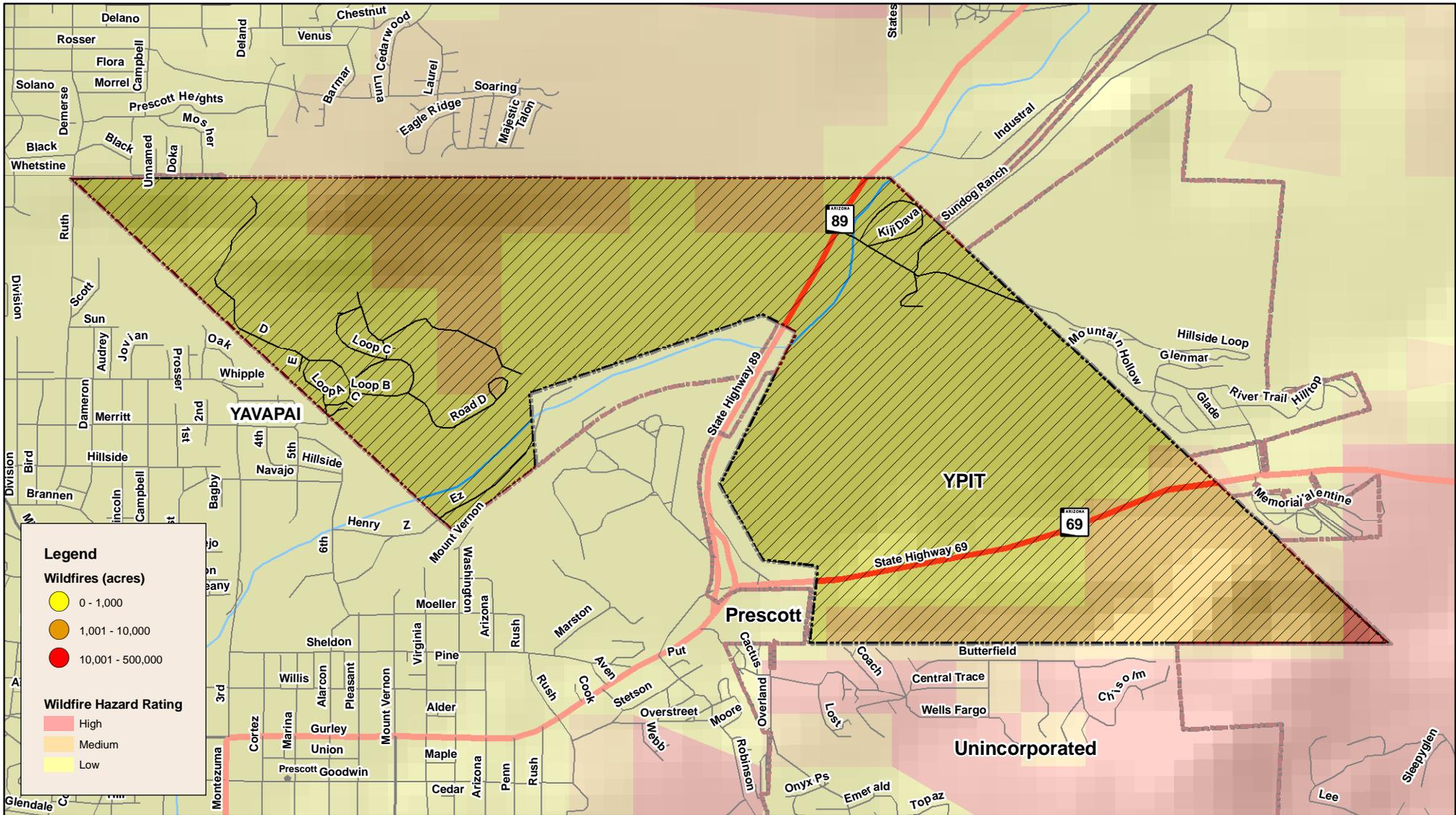
**City of Sedona Wildfire Hazard Map**

as of January 2011



  
 Sources: ALRIS, 2010; JEF, 2010;  
 GACC, 2010; AZSF, 2004





**Yavapai County Multi-Jurisdictional Hazard Mitigation Plan**

**Map 30**

**Yavapai-Preccott Indian Tribe Wildfire Hazard Map**

as of January 2011

| <b>Table 5-30: Asset inventory exposure to high and medium hazard wildfire and corresponding loss estimates</b> |   |                            |  |  |  |
|---|---|----------------------------|--|--|--|
| <b>Community</b>  | <b>Total Facilities Reported by Community</b> | <b>Impacted Facilities</b> | <b>Percentage of Total Community Facilities Impacted</b> | <b>Estimated Replacement Cost (x \$1000)</b> | <b>Estimated Structure Loss (x \$1000)</b> |
| <b>HIGH</b>   |   |                            |  |  |  |
| <b>County-Wide Totals</b>   | <b>786</b>                                    | <b>109</b>                 | <b>13.87%</b>  | <b>\$159,870</b>                             | <b>\$31,974</b>                            |
| Camp Verde  | 76  | 9                          | 11.84%   | \$5,900                                      | \$1,180                                    |
| Chino Valley  | 27  | 0                          | 0.00%  | \$0  | \$0  |
| Clarkdale   | 44  | 0                          | 0.00%  | \$0  | \$0  |
| Cottonwood  | 68  | 1                          | 1.47%  | \$1,500                                      | \$300                                      |
| Dewey-Humboldt  | 12  | 0                          | 0.00%  | \$0  | \$0  |
| Jerome  | 22  | 1                          | 4.55%  | \$40   | \$8  |
| Prescott  | 99  | 13                         | 13.13%   | \$16,965                                     | \$3,393                                    |
| Prescott Valley   | 91  | 4                          | 4.40%  | \$1,000                                      | \$200                                      |
| Sedona  | 49  | 3                          | 6.12%  | \$58,300                                     | \$11,660                                   |
| Unincorporated  | 282   | 78                         | 27.66%   | \$76,165                                     | \$15,233                                   |
| YAN   | 2   | 0                          | 0.00%  | \$0  | \$0  |
| Yavapai-Prescott Indian Tribe   | 14  | 0                          | 0.00%  | \$0  | \$0  |
| Sedona (Coconino Co. only)  | 22  | 0                          | 0.00%  | \$0  | \$0  |
| <b>MEDIUM</b>   |   |                            |  |  |  |
| <b>County-Wide Totals</b>   | <b>786</b>                                    | <b>155</b>                 | <b>19.72%</b>  | <b>\$469,036</b>                             | <b>\$23,452</b>                            |
| Camp Verde  | 76  | 32                         | 42.11%   | \$63,155                                     | \$3,158                                    |
| Chino Valley  | 27  | 3                          | 11.11%   | \$5,405                                      | \$270                                      |
| Clarkdale   | 44  | 0                          | 0.00%  | \$0  | \$0  |
| Cottonwood  | 68  | 1                          | 1.47%  | \$125  | \$6  |
| Dewey-Humboldt  | 12  | 1                          | 8.33%  | \$600  | \$30                                       |
| Jerome  | 22  | 3                          | 13.64%   | \$1,749                                      | \$87                                       |
| Prescott  | 99  | 12                         | 12.12%   | \$133,799                                    | \$6,690                                    |
| Prescott Valley   | 91  | 31                         | 34.07%   | \$10,584                                     | \$529                                      |
| Sedona  | 49  | 7                          | 14.29%   | \$2,205                                      | \$110                                      |
| Unincorporated  | 282   | 61                         | 21.63%   | \$107,419                                    | \$5,371                                    |
| YAN   | 2   | 2                          | 100.00%  | \$16,500                                     | \$825                                      |
| Yavapai-Prescott Indian Tribe   | 14  | 2                          | 14.29%   | \$127,494                                    | \$6,375                                    |
| Sedona (Coconino Co. only)  | 22  | 1                          | 4.55%  | \$175  | \$9  |

| <b>Table 5-31: Population sectors exposed to high and medium hazard wildfire</b> |                         |                           |                                      |                                 |                                   |  |
|--|-------------------------|---------------------------|--------------------------------------|---------------------------------|-----------------------------------|--|
| <b>Community</b>   | <b>Total Population</b> | <b>Population Exposed</b> | <b>Percent of Population Exposed</b> | <b>Total Population Over 65</b> | <b>Population Over 65 Exposed</b> | <b>Percent of Population Over 65 Exposed</b> |
| <b>HIGH</b>  |                         |                           |                                      |                                 |                                   |  |
| <b>County-Wide Totals</b>  | <b>167,304</b>          | <b>15,695</b>             | <b>9.38%</b>                         | <b>36,586</b>                   | <b>3,935</b>                      | <b>10.75%</b>                                |
| Camp Verde   | 8,915                   | 764                       | 8.57%                                | 1,788                           | 130                               | 7.27%  |
| Chino Valley   | 8,244                   | 0                         | 0.00%                                | 1,202                           | 0                                 | 0.00%  |
| Clarkdale  | 3,240                   | 0                         | 0.00%                                | 799                             | 0                                 | 0.00%  |
| Cottonwood   | 9,665                   | 25                        | 0.26%                                | 1,913                           | 7                                 | 0.38%  |
| Dewey-Humboldt   | 3,312                   | 572                       | 17.28%                               | 517                             | 92                                | 17.86%                                       |
| Jerome   | 333                     | 6                         | 1.91%                                | 86                              | 1                                 | 1.49%  |
| Peoria   | 1                       | 0                         | 0.00%                                | 0                               | 0                                 | 0.00%  |
| Prescott   | 34,085                  | 4,501                     | 13.21%                               | 8,862                           | 1,367                             | 15.43%                                       |
| Prescott Valley  | 24,387                  | 121                       | 0.49%                                | 4,397                           | 50                                | 1.13%  |
| Sedona   | 7,140                   | 334                       | 4.68%                                | 1,816                           | 69                                | 3.83%  |
| Unincorporated   | 67,272                  | 9,358                     | 13.91%                               | 15,045                          | 2,215                             | 14.72%                                       |
| Wickenburg   | 1                       | 0                         | 0.00%                                | 0                               | 0                                 | 0.00%  |
| Yavapai-Apache Nation  | 710                     | 13                        | 1.82%                                | 161                             | 3                                 | 1.60%  |
| Yavapai-Prescott Indian Tribe  | 190                     | 0                         | 0.00%                                | 16                              | 0                                 | 0.00%  |
| Sedona (Coconino Co. only)   | 2,967                   | 157                       | 5.28%                                | 922                             | 49                                | 5.30%  |
| <b>MEDIUM</b>  |                         |                           |                                      |                                 |                                   |  |
| <b>County-Wide Totals</b>  | <b>167,304</b>          | <b>23,979</b>             | <b>14.33%</b>                        | <b>36,586</b>                   | <b>5,324</b>                      | <b>14.55%</b>                                |
| Camp Verde   | 8,915                   | 2,415                     | 27.09%                               | 1,788                           | 548                               | 30.66%                                       |
| Chino Valley   | 8,244                   | 508                       | 6.17%                                | 1,202                           | 73                                | 6.11%  |
| Clarkdale  | 3,240                   | 4                         | 0.12%                                | 799                             | 1                                 | 0.15%  |
| Cottonwood   | 9,665                   | 22                        | 0.22%                                | 1,913                           | 6                                 | 0.33%  |
| Dewey-Humboldt   | 3,312                   | 950                       | 28.69%                               | 517                             | 154                               | 29.78%                                       |
| Jerome   | 333                     | 63                        | 18.77%                               | 86                              | 16                                | 19.22%                                       |
| Peoria   | 1                       | 0                         | 0.00%                                | 0                               | 0                                 | 0.00%  |
| Prescott   | 34,085                  | 5,945                     | 17.44%                               | 8,862                           | 1,619                             | 18.27%                                       |
| Prescott Valley  | 24,387                  | 1,598                     | 6.55%                                | 4,397                           | 435                               | 9.89%  |
| Sedona   | 7,140                   | 735                       | 10.30%                               | 1,816                           | 184                               | 10.12%                                       |
| Unincorporated   | 67,272                  | 11,443                    | 17.01%                               | 15,045                          | 2,227                             | 14.80%                                       |
| Wickenburg   | 1                       | 0                         | 0.06%                                | 0                               | 0                                 | 0.04%  |
| Yavapai-Apache Nation  | 710                     | 296                       | 41.72%                               | 161                             | 60                                | 37.03%                                       |
| Yavapai-Prescott Indian Tribe  | 190                     | 52                        | 27.36%                               | 16                              | 3                                 | 18.75%                                       |
| Sedona (Coconino Co. only)   | 2,967                   | 648                       | 21.86%                               | 922                             | 228                               | 24.78%                                       |

Table 5-32: Yavapai County HAZUS building exposure to wildfire

|                              | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Yavapai County HAZUS Summary | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| <b>County-Wide Totals</b>    | <b>82,854</b>    | <b>\$12,145,236</b>                 | <b>3,722</b>     | <b>\$3,297,715</b>                  | <b>1,319</b>     | <b>\$706,634</b>                    | <b>\$16,149,585</b>                    |                        |                                |
| High Hazard Exposure         | 10,261           | \$1,600,358                         | 367              | \$285,371                           | 140              | \$77,809                            | \$1,963,538                            | 20%                    | \$392,708                      |
| Medium Hazard Exposure       | 12,641           | \$1,729,454                         | 501              | \$386,513                           | 194              | \$113,917                           | \$2,229,884                            | 5%                     | \$111,494                      |
| Yavapai County HAZUS Summary | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure         | 12.38%           | 13.18%                              | 09.86%           | 08.65%                              | 10.63%           | 11.01%                              |  |                        |                                |
| Medium Hazard Exposure       | 15.26%           | 14.24%                              | 13.46%           | 11.72%                              | 14.68%           | 16.12%                              |  |                        |                                |

Table 5-33: Camp Verde HAZUS building exposure to wildfire

|                              | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Camp Verde HAZUS Summary     | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| <b>Community-Wide Totals</b> | <b>3,851</b>     | <b>\$512,459</b>                    | <b>160</b>       | <b>\$124,045</b>                    | <b>65</b>        | <b>\$35,167</b>                     | <b>\$671,671</b>                       |                        |                                |
| High Hazard Exposure         | 264              | \$31,374                            | 9                | \$6,911                             | 4                | \$2,872                             | \$41,158                               | 20%                    | \$8,232                        |
| Medium Hazard Exposure       | 1,044            | \$140,583                           | 45               | \$50,511                            | 20               | \$13,878                            | \$204,972                              | 5%                     | \$10,249                       |
| Camp Verde HAZUS Summary     | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure         | 06.85%           | 06.12%                              | 05.34%           | 05.57%                              | 06.70%           | 08.17%                              |  |                        |                                |
| Medium Hazard Exposure       | 27.12%           | 27.43%                              | 28.0%            | 40.72%                              | 30.78%           | 39.46%                              |  |                        |                                |

|                            | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|----------------------------|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Chino Valley HAZUS Summary | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| Community-Wide Totals      | 3,610            | \$394,930                           | 128              | \$79,379                            | 64               | \$29,717                            | \$504,025                              |                        |                                |
| High Hazard Exposure       | 0                | \$4                                 | 0                | \$0                                 | 0                | \$0                                 | \$4                                    | 20%                    | \$1                            |
| Medium Hazard Exposure     | 224              | \$23,226                            | 12               | \$7,106                             | 5                | \$2,098                             | \$32,430                               | 5%                     | \$1,621                        |
| Chino Valley HAZUS Summary | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure       | 0.0%             | 0.0%                                | 0.0%             | 0.0%                                | 0.0%             | 0.0%                                |  |                        |                                |
| Medium Hazard Exposure     | 06.21%           | 05.88%                              | 09.46%           | 08.95%                              | 07.61%           | 07.06%                              |  |                        |                                |

|                         | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|-------------------------|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Clarkdale HAZUS Summary | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| Community-Wide Totals   | 1,639            | \$193,639                           | 58               | \$38,407                            | 23               | \$17,771                            | \$249,817                              |                        |                                |
| High Hazard Exposure    | 0                | \$3                                 | 0                | \$4                                 | 0                | \$9                                 | \$16                                   | 20%                    | \$3                            |
| Medium Hazard Exposure  | 2                | \$365                               | 1                | \$311                               | 0                | \$649                               | \$1,325                                | 5%                     | \$66                           |
| Clarkdale HAZUS Summary | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure    | 0.0%             | 0.0%                                | 0.01%            | 0.01%                               | 0.02%            | 0.05%                               |  |                        |                                |
| Medium Hazard Exposure  | 0.11%            | 0.19%                               | 01.17%           | 0.81%                               | 01.37%           | 03.65%                              |  |                        |                                |

|                              | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Cottonwood HAZUS Summary     | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| <b>Community-Wide Totals</b> | <b>4,265</b>     | <b>\$595,814</b>                    | <b>285</b>       | <b>\$440,562</b>                    | <b>70</b>        | <b>\$48,877</b>                     | <b>\$1,085,252</b>                     |                        |                                |
| High Hazard Exposure         | 14               | \$2,940                             | 1                | \$146                               | 0                | \$0                                 | \$3,087                                | 20%                    | \$617                          |
| Medium Hazard Exposure       | 11               | \$2,412                             | 0                | \$31                                | 0                | \$15                                | \$2,458                                | 5%                     | \$123                          |
| Cottonwood HAZUS Summary     | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure         | 0.33%            | 0.49%                               | 0.24%            | 0.03%                               | 0.0%             | 0.0%                                |  |                        |                                |
| Medium Hazard Exposure       | 0.26%            | 0.40%                               | 0.03%            | 0.01%                               | 0.04%            | 0.03%                               |  |                        |                                |

|                              | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Dewey-Humboldt HAZUS Summary | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| <b>Community-Wide Totals</b> | <b>1,459</b>     | <b>\$177,128</b>                    | <b>47</b>        | <b>\$18,751</b>                     | <b>30</b>        | <b>\$9,805</b>                      | <b>\$205,684</b>                       |                        |                                |
| High Hazard Exposure         | 257              | \$30,323                            | 7                | \$2,787                             | 7                | \$2,007                             | \$35,118                               | 20%                    | \$7,024                        |
| Medium Hazard Exposure       | 430              | \$48,869                            | 18               | \$7,594                             | 11               | \$3,778                             | \$60,242                               | 5%                     | \$3,012                        |
| Dewey-Humboldt HAZUS Summary | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure         | 17.62%           | 17.12%                              | 15.34%           | 14.87%                              | 23.68%           | 20.46%                              |  |                        |                                |
| Medium Hazard Exposure       | 29.46%           | 27.59%                              | 38.77%           | 40.50%                              | 36.87%           | 38.53%                              |  |                        |                                |

|                              | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Jerome HAZUS Summary         | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| <b>Community-Wide Totals</b> | <b>310</b>       | <b>\$32,286</b>                     | <b>23</b>        | <b>\$21,064</b>                     | <b>7</b>         | <b>\$4,135</b>                      | <b>\$57,485</b>                        |                        |                                |
| High Hazard Exposure         | 10               | \$405                               | 0                | \$50                                | 1                | \$748                               | \$1,203                                | 20%                    | \$241                          |
| Medium Hazard Exposure       | 54               | \$4,712                             | 1                | \$187                               | 1                | \$1,563                             | \$6,462                                | 5%                     | \$323                          |
| Jerome HAZUS Summary         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure         | 03.30%           | 01.26%                              | 01.46%           | 0.24%                               | 08.27%           | 18.09%                              |  |                        |                                |
| Medium Hazard Exposure       | 17.50%           | 14.59%                              | 04.30%           | 0.89%                               | 20.44%           | 37.80%                              |  |                        |                                |

|                              | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Prescott HAZUS Summary       | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| <b>Community-Wide Totals</b> | <b>15,995</b>    | <b>\$2,878,128</b>                  | <b>989</b>       | <b>\$1,214,850</b>                  | <b>277</b>       | <b>\$158,198</b>                    | <b>\$4,251,176</b>                     |                        |                                |
| High Hazard Exposure         | 2,475            | \$431,030                           | 98               | \$85,137                            | 31               | \$14,671                            | \$530,838                              | 20%                    | \$106,168                      |
| Medium Hazard Exposure       | 2,605            | \$454,205                           | 96               | \$70,075                            | 32               | \$15,115                            | \$539,395                              | 5%                     | \$26,970                       |
| Prescott HAZUS Summary       | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure         | 15.47%           | 14.98%                              | 09.95%           | 07.01%                              | 11.05%           | 09.27%                              |  |                        |                                |
| Medium Hazard Exposure       | 16.28%           | 15.78%                              | 09.67%           | 05.77%                              | 11.48%           | 09.55%                              |  |                        |                                |

|                               | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|-------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Prescott Valley HAZUS Summary | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| <b>Community-Wide Totals</b>  | <b>9,734</b>     | <b>\$1,507,726</b>                  | <b>524</b>       | <b>\$395,664</b>                    | <b>203</b>       | <b>\$129,065</b>                    | <b>\$2,032,455</b>                     |                        |                                |
| High Hazard Exposure          | 69               | \$9,915                             | 4                | \$924                               | 2                | \$1,108                             | \$11,947                               | 20%                    | \$2,389                        |
| Medium Hazard Exposure        | 775              | \$107,808                           | 68               | \$81,381                            | 24               | \$32,354                            | \$221,542                              | 5%                     | \$11,077                       |
| Prescott Valley HAZUS Summary | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure          | 0.71%            | 0.66%                               | 0.67%            | 0.23%                               | 01.10%           | 0.86%                               |  |                        |                                |
| Medium Hazard Exposure        | 07.96%           | 07.15%                              | 13.04%           | 20.57%                              | 11.90%           | 25.07%                              |  |                        |                                |

|                                       | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|---------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Sedona (Yavapai County) HAZUS Summary | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| <b>Community-Wide Totals</b>          | <b>4,154</b>     | <b>\$596,398</b>                    | <b>231</b>       | <b>\$178,462</b>                    | <b>75</b>        | <b>\$38,817</b>                     | <b>\$813,676</b>                       |                        |                                |
| High Hazard Exposure                  | 162              | \$23,493                            | 7                | \$10,516                            | 3                | \$2,099                             | \$36,108                               | 20%                    | \$7,222                        |
| Medium Hazard Exposure                | 394              | \$62,264                            | 17               | \$17,115                            | 6                | \$3,769                             | \$83,148                               | 5%                     | \$4,157                        |
| Sedona (Yavapai County) HAZUS Summary | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure                  | 03.91%           | 03.94%                              | 02.99%           | 05.89%                              | 03.49%           | 05.41%                              |  |                        |                                |
| Medium Hazard Exposure                | 09.49%           | 10.44%                              | 07.22%           | 09.59%                              | 08.04%           | 09.71%                              |  |                        |                                |

|   | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|---|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Unincorporated (Yavapai County) HAZUS Summary | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| <b>Community-Wide Totals</b>                  | <b>37,551</b>    | <b>\$5,217,729</b>                  | <b>1,273</b>     | <b>\$783,936</b>                    | <b>503</b>       | <b>\$233,930</b>                    | <b>\$6,235,594</b>                     |                        |                                |
| High Hazard Exposure                          | 7,005            | \$1,070,299                         | 241              | \$178,881                           | 93               | \$54,289                            | \$1,303,469                            | 20%                    | \$260,694                      |
| Medium Hazard Exposure                        | 6,999            | \$870,684                           | 242              | \$151,389                           | 93               | \$40,213                            | \$1,062,287                            | 5%                     | \$53,114                       |
| Unincorporated (Yavapai County) HAZUS Summary | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure                          | 18.66%           | 20.51%                              | 18.98%           | 22.82%                              | 18.38%           | 23.21%                              |  |                        |                                |
| Medium Hazard Exposure                        | 18.64%           | 16.69%                              | 19.05%           | 19.31%                              | 18.48%           | 17.19%                              |  |                        |                                |

|                                     | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Yavapai-Apache Nation HAZUS Summary | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| <b>Community-Wide Totals</b>        | <b>217</b>       | <b>\$23,885</b>                     | <b>3</b>         | <b>\$1,770</b>                      | <b>1</b>         | <b>\$1,143</b>                      | <b>\$26,798</b>                        |                        |                                |
| High Hazard Exposure                | 4                | \$569                               | 0                | \$15                                | 0                | \$5                                 | \$589                                  | 20%                    | \$118                          |
| Medium Hazard Exposure              | 85               | \$10,337                            | 1                | \$806                               | 1                | \$483                               | \$11,626                               | 5%                     | \$581                          |
| Yavapai-Apache Nation HAZUS Summary | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure                | 01.94%           | 02.38%                              | 0.26%            | 0.82%                               | 0.46%            | 0.47%                               |  |                        |                                |
| Medium Hazard Exposure              | 39.34%           | 43.28%                              | 34.19%           | 45.54%                              | 76.99%           | 42.24%                              |  |                        |                                |

|   | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|---|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Yavapai-Prescott Indian Tribe HAZUS Summary | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| <b>Community-Wide Totals</b>                | <b>62</b>        | <b>\$14,794</b>                     | <b>2</b>         | <b>\$825</b>                        | <b>0</b>         | <b>\$10</b>                         | <b>\$15,630</b>                        |                        |                                |
| High Hazard Exposure                        | 0                | \$2                                 | 0                | \$1                                 | 0                | \$0                                 | \$3                                    | 20%                    | \$1                            |
| Medium Hazard Exposure                      | 17               | \$3,989                             | 0                | \$7                                 | 0                | \$2                                 | \$3,998                                | 5%                     | \$200                          |
| Yavapai-Prescott Indian Tribe HAZUS Summary | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure                        | 0.02%            | 0.01%                               | 0.04%            | 0.07%                               | 0.75%            | 0.50%                               |  |                        |                                |
| Medium Hazard Exposure                      | 27.38%           | 26.96%                              | 01.88%           | 0.88%                               | 15.21%           | 17.94%                              |  |                        |                                |

|  | RESIDENTIAL      |                                     | COMMERCIAL       |                                     | INDUSTRIAL       |                                     | SUMMARY                                |                        |                                |
|--|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|--|------------------------|--------------------------------|
| Sedona (Coconino County) HAZUS Summary | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Building Count   | Potential Economic Impact (x\$1000) | Total of All Economic Impact (x\$1000) | Loss-to-Exposure Ratio | Total Estimated Loss (x\$1000) |
| <b>County-Wide Totals</b>              | <b>1,883</b>     | <b>\$361,645</b>                    | <b>145</b>       | <b>\$143,823</b>                    | <b>28</b>        | <b>\$12,477</b>                     | <b>\$517,945</b>                       |                        |                                |
| High Hazard Exposure                   | 87               | \$15,715                            | 3                | \$2,145                             | 1                | \$667                               | \$18,528                               | 20%                    | \$3,706                        |
| Medium Hazard Exposure                 | 400              | \$68,019                            | 28               | \$26,853                            | 4                | \$1,961                             | \$96,833                               | 5%                     | \$4,842                        |
| Sedona (Coconino County) HAZUS Summary | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         | % Building Count | % Potential Economic Impact         |  |                        |                                |
| High Hazard Exposure                   | 04.62%           | 04.35%                              | 02.21%           | 01.49%                              | 03.52%           | 05.34%                              |  |                        |                                |
| Medium Hazard Exposure                 | 21.26%           | 18.81%                              | 19.29%           | 18.67%                              | 12.88%           | 15.72%                              |  |                        |                                |

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5.3.5 *Winter Storm*

**Description**

Severe snow storms affect many aspects of life in the County, including; transportation, emergency services, utilities, agriculture and the supply of basic subsistence to isolated communities. Interstates 40 and 17 have produced numerous fatal multi-car accidents due to heavy winter snowfall and icy road conditions. Heavy snowfalls can also leave motorists stranded in their vehicles with potentially disastrous results like hypothermia and carbon-monoxide poisoning. Significant snow storms can also hinder both ground and air emergency services vehicles from responding to accidents or other emergencies. Remote areas and communities can be easily cut-off from basic resources such as food, water, electricity, and fuel for extended periods during a heavy storm. Extremely heavy snow storms can produce excessive snow loads that can cause structural damage to under-designed buildings. Agricultural livestock can also be vulnerable to exposure and starvation during heavy snow storms.

Freezing rain is formed as snow falls through a warm zone in the atmosphere completely melting the snow. The melted snow then passes through another zone of cool air “super cooling” the rain below freezing temperature while still in a liquid state. The rain then instantly freezes when it comes in contact with the ground or other solid object. Because freezing rain hits the ground as a rain droplet, it conforms to the shape of the ground, making one thick layer of ice. Sleet is similar to hail in appearance but is formed through atmospheric conditions more like freezing rain. The difference is the snowflakes don’t completely thaw through the warm zone and then freeze through the cool air zone closer to the ground. Sleet typically bounces as it hits a surface similar to hail. Sleet is also informally used to describe a mixture of rain and snow and is sometimes used to describe the icy coating on trees and powerlines.

Sleet and freezing rain can cause slippery roadway surfaces and poor visibility leading to traffic accidents, and can leave motorists stranded in their vehicles with potentially disastrous results like hypothermia and carbon monoxide poisoning. Heavy sleet or freezing rain can produce excessive ice-loads on powerlines, telecommunication lines and other communication towers, tree limbs, and buildings causing power outages, communication disruptions, and other structural damage to under-designed facilities.

**History**

Winter snows are the lifeblood of water supplies for most of Yavapai County. However, according to the database summarized in Tables 5-3 and 5-4, winter storms are also one of the most deadly natural hazards to impact the County. According to both Tables 5-3 and 5-4, the County has endured at least 14 fatalities and 10 injuries as a result of snow storms in the last 50 years. The following are highlights of the more prominent snow storm events impacting Yavapai County:

- On October 23, 2005, AZ Department of Public Safety reported 5 wrecks due to hail covered road on I-17 near Highway 69. There was one fatality in a wreck on Highway 69 between I-17 and Mayer. (NCDC, 2010)
- In March of 2006, a major winter storm affected all of Northern Arizona from Friday (03/10) though most of the day on Sunday (3/12). Heavy snowfall and rare low elevation snowfall occurred over almost all of Northern Arizona. This made for difficult driving conditions on snow packed and icy roads with some areas having very poor visibility. Some storm totals from across northern Arizona (in inches) include: Ash Fork 7, Bagdad 5, Black Canyon City and Camp Verde T, Chinle 3, Clarkdale 0.5, Concho 23, Cordes Junction 6, Crown King 16, Forest Lakes 40-48, Jerome 6, Prescott 7-12, and Sedona 2. Two Embry Riddle University students and their friend died when their car hit a truck on a snow covered road in Prescott Valley. (NCDC, 2010)
- In December of 2008, snow began falling over the area during the afternoon of December 15th. By the morning of December 18th, there was about two feet of new snow on the ground at the 7000 foot level. The snow caused many traffic accidents, power outages, and business/school closures and/or delayed openings. A spotter at near 9000 feet had a storm total of 38 inches. Munds Park had 14 inches of snow by 8 AM on the 16th with snow still falling. A large scale trough of low pressure brought two back to back storms to northern Arizona over much of a four day period.

During this event the Department of Public Safety for northern Arizona responded to 188 slideoffs on highways in the northern region. Officers also responded to 65 collisions, 12 of which involved injury. Two people were transported to Flagstaff Medical Center to be treated for their injuries. (NCDC, 2010)

- In January of 2010, a winter storm emergency was declared for Yavapai and eight other counties in Arizona. A strong Pacific winter storm produced moderate valley rain and mountain snow to much of southeast Arizona. Heavy snow combined with strong winds to produce significant blowing and drifting at the higher elevations. Strong gusty winds also affected many valley locations during the evening hours of the 19th and the early morning hours of the 20th. Six inches of snow fell at 6700 feet 6 miles south of Prescott. A strong winter storm hit northern Arizona with widespread snow and rain. Heavy snow fell along the Eastern Mogollon Rim. Snowfall totals for this one storm include: Clints Well 16 inches, Heber 13 inches, Clay Springs 14-15 inches, and Forest Lakes 16 inches. The second in a series of strong Pacific storms moved across northern Arizona with widespread heavy precipitation. The snow level dropped down to 5000-5500 feet elevation by the storm moved east. The Governor signed a Declaration of Emergency and released \$200,000 for emergency response and recovery expenses from the weather events. An additional \$1 million was approved by the Governor to cover state-share costs. Damages from the winter storm were estimated at \$14.9 million (ADEM, 2010; FEMA, 2010)

**Probability and Magnitude**

Snow level measurements are recorded daily across the United States and can be used to estimate the probability and frequency of severe winter storms. In Arizona, there is a 5% annual chance that snow depths between zero and 25 centimeters will be exceeded, a snowfall probability that is among the lowest in the nation (FEMA, 1997). However, snowfall extremes can occur in Yavapai County and can have serious effects to the population and critical infrastructure.

The NCDC maintains a snow climatology data set that contains maximum 1-day, 2-day, and 3-day duration snow depths at various weather stations across the nation (except Hawaii). The data reflects the maximum depth of snowfall recorded as of 2006. Maps 4 and 5 represent a graphical depiction of zones of historically maximum snow depths for the 1- and 3-day durations for the county. Bordering gage stations in California, Nevada, Utah, Colorado, and New Mexico were also used to ensure that no boundary effects were created.

**Vulnerability – CPRI Results**

Winter Storm CPRI results for each community are summarized in Table 5-46 below.

| <b>Participating Jurisdiction</b> | <b>Probability</b> | <b>Magnitude/<br/>Severity</b> | <b>Warning<br/>Time</b> | <b>Duration</b> | <b>CPRI<br/>Score</b> |
|-----------------------------------|--------------------|--------------------------------|-------------------------|-----------------|-----------------------|
| Camp Verde                        | Likely             | Critical                       | 12 - 24 hours           | < 1 week        | 2.85                  |
| Chino Valley                      | Likely             | Limited                        | 12 - 24 hours           | < 24 hours      | 2.15                  |
| Clarkdale                         | Possible           | Limited                        | 12 - 24 hours           | < 24 hours      | 2.00                  |
| Cottonwood                        | Highly Likely      | Critical                       | > 24 hours              | < 1 week        | 3.15                  |
| Dewey-Humboldt                    | Possible           | Limited                        | < 6 hours               | < 1 week        | 2.40                  |
| Jerome                            | Highly Likely      | Critical                       | 6 - 12 hours            | < 1 week        | 3.45                  |
| Prescott                          | Highly Likely      | Critical                       | 6 - 12 hours            | < 1 week        | 3.45                  |
| Prescott Valley                   | Likely             | Limited                        | 12 - 24 hours           | < 1 week        | 2.55                  |
| Sedona                            | Possible           | Critical                       | 12 - 24 hours           | < 1 week        | 2.40                  |
| Unincorporated Yavapai County     | Likely             | Critical                       | 12 - 24 hours           | > 1 week        | 2.95                  |
| Yavapai-Prescott Indian Tribe     | Possible           | Negligible                     | > 24 hours              | < 1 week        | 1.65                  |
| <b>County-wide average CPRI =</b> |                    |                                |                         |                 | <b>2.64</b>           |

**Vulnerability – Loss Estimations**

The National Weather Service in Flagstaff<sup>30</sup>, uses the following criteria for issuing warnings about winter storm weather:

1. **Blizzard Warning:** Sustained winds or frequent gusts of 35 mph or more, AND visibility frequently below 1/4 mile in considerable snow and/or blowing snow, AND above conditions are expected to prevail for 3 hours or longer.
2. **Winter Storm Warning:** Issued when more than one winter hazard is involved producing life threatening conditions, such as a combination of heavy snow, strong winds producing widespread blowing and drifting snow, freezing rain, or wind chill.
3. **Heavy Snow Warning Criteria:**

|                 |                  |                   |
|-----------------|------------------|-------------------|
| Above 8500 ft   | 12 inches/12 hrs | 18 inches/24 hrs  |
| 7000 to 8500 ft | 8 inches/12 hrs  | 12 inches/24 hrs  |
| 5000 to 7000 ft | 6 inches/12 hrs* | 10 inches/24 hrs* |
| Below 5000 ft   | 2 inches/12 hrs  | 4 inches/24 hrs   |

\*(Prescott is in this range)

4. **Snow Advisory Criteria:**

|                 |                       |                        |
|-----------------|-----------------------|------------------------|
| Above 8500 ft   | 6 to 12 inches/12hrs  | 12 to 18 inches/24 hrs |
| 7000 to 8500 ft | 4 to 8 inches/12 hrs  | 8 to 12 inches/24 hrs  |
| 5000-7000 ft    | 3 to 6 inches/12 hrs* | 6 to 10 inches/24 hrs* |
| Below 5000 ft   | 1 to 2 inches/12 hrs  | 2 inches/24 hrs**      |

\*(Prescott is in this range)

\*\*or snow accumulation in any location where it is a rare event.

5. **Blowing Snow Advisory Criteria:** Visibility frequently at or below 1/4 mile.
6. **High Wind Warning Criteria:** Issued for strong winds not associated with severe local storms, including gradient, mesoscale, and channeled winds; Foehn/Chinook/downslope winds; and winds associated with tropical cyclones. The criteria:

|                 |                   |                     |
|-----------------|-------------------|---------------------|
| Sustained winds | 40 mph or greater | last 1 hr or longer |
| Wind gusts      | 58 mph or greater | for any duration    |

7. **Wind Advisory:** Issued for the same types of wind events as a High Wind Warning, but at lower speed thresholds. The criteria:

|                 |           |                     |
|-----------------|-----------|---------------------|
| Sustained winds | 30-39 mph | last 1 hr or longer |
| Wind gusts      | 40-57 mph | for any duration    |

8. **Visibility Hazards:** Visibility reduced to 1/4 mile or less by fog, blowing dust/sand, and smoke.
9. **Wind Chill:** Issued for a wind chill factor of minus 20 ° Fahrenheit or colder.
10. **Freezing Rain/Drizzle, or Sleet:** widespread, dangerous, and damaging accumulations of ice or sleet.
11. **Frost or Freeze Warning:** Issued when temperatures are critical for crops and sensitive plants. Criteria are season dependent, but usually a freeze warning is appropriate when temperatures are expected to fall below freezing for at least 2 hours.

<sup>30</sup> Based on information posted at the following NWS URL: <http://www.wrh.noaa.gov/fgz/safety/criteria.php?wfo=fgz>

All of the county population and assets are exposed to winter storm conditions to a varying degree, depending on the location within the county and the elevation. Estimation of losses due to winter storm is difficult, but given the historic record, losses of both life and property are probable.

**Vulnerability – Development Trend Analysis**

Future development will expand the exposure of life and property to the hazard of snow storm events. Enforcement and/or implementation of modern building codes to regulate new developments in conjunction with public education on how to respond to hazardous winter conditions is probably the best way to mitigate against such losses.

**Sources**

Arizona Division of Emergency Management, State of Arizona Multi-Hazard Mitigation Plan, 2010 Update  
 U.S. Dept of Commerce, National Climatic Data Center, 2006, Snow Climatology and Extremes, accessed online at: <http://www.ncdc.noaa.gov/ussc/USSCAppController?action=map>  
 U.S. Dept of Commerce, National Climatic Data Center, 2010, Storm Events Database, accessed via the following URL: <http://www4.ncdc.noaa.gov/cgi-win/wwcgl.dll?wwevent~storms>

**Profile Maps**

Maps 4 and 5

**5.4 Risk Assessment Summary**

The jurisdictional variability of risk associated with each hazard assessed in Section 5.3 is demonstrated by the various CPRI and loss estimation results. Accordingly, each jurisdiction has varying levels of need regarding the hazards to be mitigated, and may not consider all of the hazards as posing a great risk to their individual communities. Table 5-47 summarizes the hazards selected for mitigation by each jurisdiction and will be the basis for each jurisdictions mitigation strategy.

**Table 5-47: Summary of hazards to be mitigated by each participating jurisdiction**

| <b>Jurisdiction</b>           | <b>Flooding</b> | <b>Landslide/<br/>Mudslide</b> | <b>Severe<br/>Wind</b> | <b>Wildfire</b> | <b>Winter<br/>Storm</b> |
|-------------------------------|-----------------|--------------------------------|------------------------|-----------------|-------------------------|
| Camp Verde                    | x               |                                | x                      | x               | x                       |
| Chino Valley                  | x               |                                | x                      |                 | x                       |
| Clarkdale                     | x               |                                | x                      | x               | x                       |
| Cottonwood                    | x               |                                |                        | x               |                         |
| Dewey-Humboldt                | x               |                                | x                      | x               | x                       |
| Jerome                        | x               | x                              |                        | x               |                         |
| Prescott                      | x               |                                | x                      | x               | x                       |
| Prescott Valley               | x               |                                | x                      | x               |                         |
| Sedona                        | x               |                                |                        | x               |                         |
| Unincorporated Yavapai County | x               |                                |                        | x               |                         |
| Yavapai-Prescott Indian Tribe | x               |                                | x                      | x               | x                       |

# Yavapai County Multi-Jurisdictional Hazard Mitigation Plan



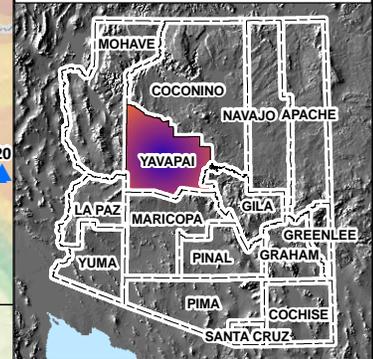
## Legend

### Community

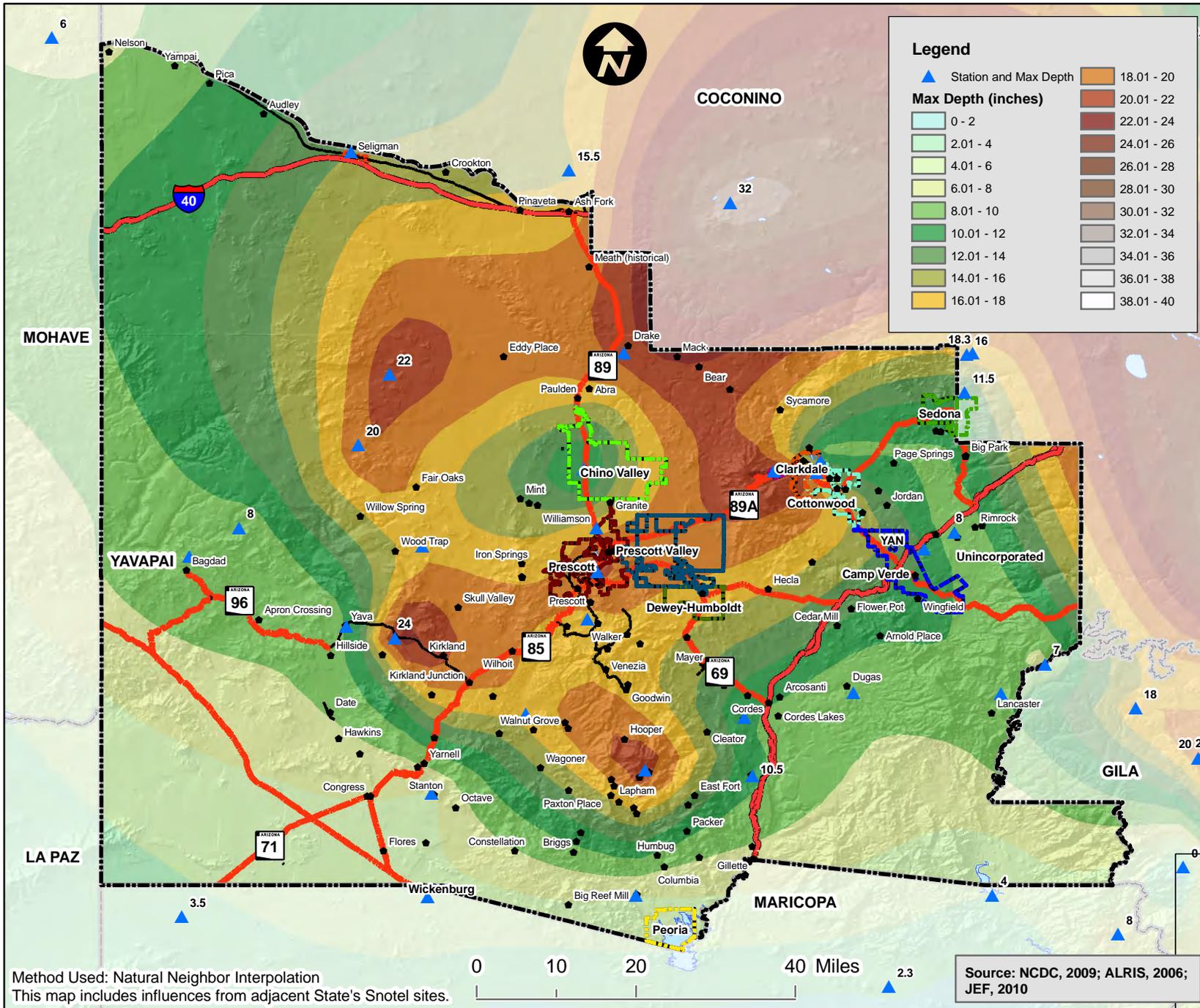
- Camp Verde
- Chino Valley
- Clarkdale
- Cottonwood
- Dewey-Humboldt
- Jerome
- Peoria
- Prescott
- Prescott Valley
- Sedona
- Unincorporated
- Wickenburg
- Yavapai-Apache Nation
- Yavapai-Prescott Indian Tribe
- Cities and Places

### Roads

- Interstate
- US, State, County Hwys
- Major Roads
- County Boundary
- Lakes



Map 4  
Yavapai County  
1-Day Maximum Snow Depth  
Winter Storm Event Map  
as of January 2011



Method Used: Natural Neighbor Interpolation  
This map includes influences from adjacent State's Snotel sites.

Source: NCDC, 2009; ALRIS, 2006;  
JEF, 2010



## SECTION 6: MITIGATION STRATEGY

**§201.6(c)(3):** [The plan shall include...] (3) A **mitigation strategy** that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools. This section shall include:

- (i) A description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.
- (ii) A section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.
- (iii) An action plan describing how the actions identified in paragraph (c)(3)(ii) of this section will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.
- (iv) For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.

The mitigation strategy provides the “what, when, and how” of actions that will reduce or possibly remove the community’s exposure to hazard risks. According to DMA 2000, the primary components of the mitigation strategy are generally categorized into the following:

### Goals and Objectives

### Capability Assessment

### Mitigation Actions/Projects and Implementation Strategy

The entire 2006 Plan mitigation strategy was reviewed and updated by the Planning Team, including a major re-organization of the mitigation strategy elements into this multi-jurisdictional plan format. Specifics of the changes and updates are discussed in the subsections below.

## 6.1 Hazard Mitigation Goals and Objectives

The 2006 Plan goals and objectives were developed using the 2004 State Plan<sup>31</sup> goals and objectives as a starting point. Each jurisdiction then edited and modified those goals and objectives to fit the mitigation planning vision for their community. An assessment of the goals and objectives by the Planning Team and the Local Planning Team for each jurisdiction was made with consideration of the following<sup>32</sup>:

- Do the goals and objectives identified in the 2006 Plan reflect the updated risk assessment?
- Did the goals and objectives identified in the 2006 Plan lead to mitigation projects and/or changes to policy that helped the jurisdiction(s) to reduce vulnerability?
- Do the goals and objectives identified in the 2006 Plan support any changes in mitigation priorities?
- Are the goals and objectives identified in the 2006 Plan reflective of current State goals?

A copy of the 2010 State Plan goals and objectives was provided for use during the review and assessment. The following comments were noted:

- All goals pertaining to human-caused hazards will need to be dropped.
- The planning team generally liked the 2006 Plan’s goals and objectives, and for the most part, felt they still represented the mitigation goals of the planning team, with a few needed edits.
- The planning team appreciated the simplicity of the 2010 State of Arizona HMP goals and objectives and determined that the 2006 Plan goals and objectives were generally in agreement.
- Some Planning Team members felt the 2006 Plan goals and objectives were too cumbersome and even confusing, and that they preferred the simplicity of the 2010 State Plan goals.
- Other enjoyed the detail and thoughtfulness of the 2006 goals and wanted to keep them, with selective modifications to reflect the current list of hazards.

<sup>31</sup> State of Arizona, 2004, *State of Arizona All Hazard Mitigation Plan*, prepared by URS.

<sup>32</sup> FEMA, 2008, *Local Multi-Hazard Mitigation Planning Guidance*

After much discussion and comparison of the 2006 Plan goals and objectives to the 2010 State Plan, the Planning Team chose to mostly retain the 2006 Plan goals and objectives and make necessary edits to reflect the current hazards. The following are the resulting list of updated goals and objectives for this Plan.

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**Goal 1. Promote disaster-resistant future development.**

Objective 1.A Update, develop, and support general plans, ordinances, and codes in accordance with state and federal regulations, to limit development in hazard areas or build to standards that will prevent or reduce damage.

Objective 1.B Adopt and support local, state, tribal and federal codes that protect assets and new development in hazard areas.

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**Goal 2. Promote public understanding, support, and demand for hazard mitigation.**

Objective 2.A Educate the public to increase awareness of hazards and opportunities for mitigation actions.

Objective 2.B Promote partnerships among the federal, state, counties, local and tribal governments to identify, prioritize, and implement mitigation actions.

Objective 2.C Promote hazard mitigation in the business, residential, and agricultural community.

Objective 2.D Monitor and publicize the effectiveness of mitigation actions implemented community wide.

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**Goal 3. Build and support local capacity and commitment to become less vulnerable to hazards.**

Objective 3.A Improve existing capabilities to warn the public of emergency situations.

Objective 3.B Develop mitigation programs to enhance the safety of the residents of each community during an emergency.

Objective 3.C Enhance capabilities and readiness of first responders through advanced training techniques and equipment.

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**Goal 4. Improve hazard mitigation coordination and communication with federal, state, local, and tribal governments.**

Objective 4.A Establish and maintain a close working relationship with federal, state agencies and local and tribal governments.

Objective 4.B Establish and maintain intergovernmental agreements with local and tribal governments.

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**Goal 5. Reduce the potential level of damage and losses to people, existing and future critical facilities/infrastructure, and other community assets due to floods.**

Objective 5.A Implement policies, procedures and regulations which reduce the potential exposure to flood hazards.

Objective 5.B Decrease vulnerability of community assets, especially critical facilities located in the 100-year floodplain.

Objective 5.C Maintain coordination with state and federal flood-related agencies.

Objective 5.D Maintain compliance with the National Flood Insurance Program (NFIP) requirements.

Objective 5.E Promote changes in current regulations to facilitate hazard mitigation.

Objective 5.F Educate the public about flood hazard dangers and mitigation measures.

Objective 5.G Identify and map additional flood hazard areas and refine existing mapping.

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**Goal 6. Reduce the level of human loss and damage and losses to existing and future critical**

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**facilities/infrastructure, and other community assets due to wildland fires.**

- Objective 6.A Develop a comprehensive approach to reducing the level of damage and losses due to wildland fires.
- Objective 6.B Protect life, improved property, and natural resources with vulnerability to the effects of wildland fires.
- Objective 6.C Maintain coordination and support existing efforts to mitigate wildland fire hazards.
- Objective 6.D Educate the public about wildland fire dangers and mitigation measures.
- Objective 6.E Promote changes in current regulations to facilitate hazard mitigation.
- Objective 6.F Promote commercial development of forest products to motivate wildfire fuel reduction.

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**Goal 7. Reduce the level of damage and losses to people, existing and future critical facilities/infrastructure, and other community assets due to severe wind.**

- Objective 7.A Educate the public to the threat of losses due to severe wind.
- Objective 7.B Educate/warn the public of actions and precautions to take during severe wind events.
- Objective 7.C Protect life, improved property, and natural resources with vulnerability to the effects of severe wind through improved warning systems.

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**Goal 8. Reduce the potential level of damage and losses to people, existing and future critical facilities/infrastructure, and other community assets due to other natural and human-caused hazards.**

- Objective 8.A Develop a comprehensive approach to reducing the level of damage and losses due to other hazards.
  - Objective 8.B Protect life, improve property, and natural resources with vulnerability to the effects of other hazards.
-

## 6.2 Capability Assessment

While not required by DMA 2000, an important component of the Mitigation Strategy is a review of each participating jurisdiction's resources in order to identify, evaluate, and enhance the capacity of local resources to mitigate the effects of hazards. The capability assessment is comprised of several components:

- ✓ Legal and Regulatory Review – a review of the legal and regulatory capabilities, including ordinances, codes, plans, manuals, guidelines, and technical reports that address hazard mitigation activities.
- ✓ Technical Staff and Personnel – this assessment evaluated and describes the administrative and technical capacity of the jurisdiction's staff and personnel resources.
- ✓ Fiscal Capability – this element summarizes each jurisdiction's fiscal capability to provide the financial resources to implement the mitigation strategy.
- ✓ National Flood Insurance Program (NFIP) Participation – the NFIP contains specific regulatory measures that enable government officials to determine where and how growth occurs relative to flood hazards. Participation in the NFIP is voluntary for local governments, but the program is promoted by FEMA as a basic first step for implementing and sustaining an effective flood hazard mitigation program, and is a key indicator for measuring local capability as part of this assessment.
- ✓ Prior Mitigation Actions – the final part of the capability assessment is a summary review of prior mitigation actions and/or projects that have been completed over the last five or so years.

The Planning Team reviewed the information provided in Section 5 of the 2006 Plan, and specifically Tables 5-1 through 5-4. The Planning Team chose to keep the format of Tables 5-2 and 5-3 for reporting the staff/personnel and fiscal resources. Table 5-1 and 5-4 were combined into a new table to not only report on the regulatory capabilities, but also to summarize the codes, plans, and studies/reports used by a jurisdiction. Therefore, Table 5-4 was dropped from the Plan.

### 6.2.1 Jurisdictional Capabilities

Tables 6-1-1 through 6-1-11 summarize the legal and regulatory mitigation capability for each participating jurisdiction. Information provided includes a brief listing of current codes, mitigation relevant ordinances, plans, and studies/reports. Tables 6-2-1 through 6-2-11 summarize the staff and personnel resources employed by each jurisdiction that serve as a resource for hazard mitigation. Tables 6-3-1 through 6-3-11 summarize the fiscal capability and budgetary tools available to each participating jurisdiction. Each of these three tables are listed below by jurisdiction.

**Table 6-1-1: Summary of legal and regulatory capabilities for Unincorporated Yavapai County**

| <b>Regulatory Tools for Hazard Mitigation</b> | <b>Description</b>   | <b>Responsible Department/Agency</b>   |
|---|--|--|
| CODES   | <ul style="list-style-type: none"> <li>• 2006 International Building Code and related codes adopted August 2007, Ordinance 2007-1.</li> </ul>  | <ul style="list-style-type: none"> <li>• Development Services</li> </ul>                                       |
| ORDINANCES                                    | <ul style="list-style-type: none"> <li>• Planning and Zoning Ordinance for the Unincorporated areas of Yavapai County, AZ, adopted Feb.5, 1968 updates through Nov. 2010.</li> <li>• Yavapai Subdivision Regulations adopted Sept. 8, 2009.</li> <li>• Yavapai County Flood Control District Ordinance 2010-1 Flood Damage Prevention Ordinance, adopted October, 2010.</li> </ul>   | <ul style="list-style-type: none"> <li>• Development Services, Flood Control District</li> </ul>               |
| PLANS, MANUALS, and/or GUIDELINES             | <ul style="list-style-type: none"> <li>• Disaster Response Plan (1/2005) - Disaster response protocols and pre-disaster mitigation.</li> <li>• Terrorism Response Plan (6/2005) - Preparation, data and response protocols for terrorists events.</li> <li>• General Plan (4/2003) - Includes related to Land use, Transportation, Water Resources, Open Space</li> <li>• Community Plans - Community Plans are part of the County general Plan:                             <ul style="list-style-type: none"> <li>○ Bagdad Townsite (1993)</li> <li>○ Ash Fork (1981)</li> <li>○ Chino Valley-Paulden (1985)</li> <li>○ Seligman (1985)</li> <li>○ Black Canyon City (1991)</li> <li>○ Cornville (1986)</li> <li>○ Dewey Humboldt (1998)</li> <li>○ Big Park (1998)</li> <li>○ Granite Dells (1991)</li> <li>○ Beaver Creek (1996)</li> <li>○ Red Rock Dry Creek Area (1992)</li> <li>○ Cordes Lake-Spring Valley, Hwy 69 Corridor (1995)</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Public Works, Development Services, Flood Control District</li> </ul> |
| STUDIES                                       | <ul style="list-style-type: none"> <li>• Transportation Study (1998) - Central Yavapai County.</li> <li>• Transportation Study (1999) - Verde Valley Regional.</li> <li>• Special Study (1998) - Yavapai County Master Trails for Non-Motorized Multi-Use</li> <li>• Special Study (2000) - Yavapai County Wireless Communication.</li> <li>• Various Area Drainage Master Studies for various unincorporated communities</li> </ul>   | <ul style="list-style-type: none"> <li>• Development Services, Flood Control District</li> </ul>               |

**Table 6-2-1: Summary of technical staff and personnel capabilities for Unincorporated Yavapai County**

| Staff/Personnel Resources   | <input checked="" type="checkbox"/> | Department/Agency - Position  |
|---|-------------------------------------|---|
| Planner(s) or engineer(s) with knowledge of land development and land management practices                  | <input checked="" type="checkbox"/> | Development Services: Planners<br>Flood Control District: Engineers<br>Public Works: Engineers  |
| Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure | <input checked="" type="checkbox"/> | Public Works: Engineers, Inspectors<br>Development Services: Professionals<br>Flood Control District: Engineers   |
| Planner(s) or engineer(s) with an understanding of natural and/or human-caused hazards                      | <input checked="" type="checkbox"/> | Public Works: Engineers, Emergency Managers, Professionals<br>Development Services: Planners & Professionals<br>Flood Control District: Engineers and Professionals |
| Floodplain Manager  | <input checked="" type="checkbox"/> | Flood Control District  |
| Surveyors   | <input checked="" type="checkbox"/> | Public Works  |
| Staff with education or expertise to assess the community's vulnerability to hazards                        | <input checked="" type="checkbox"/> | Public Works<br>Emergency Management<br>Development Services<br>Flood Control District  |
| Personnel skilled in GIS and/or HAZUS   | <input checked="" type="checkbox"/> | MIS Department<br>Public works  |
| Scientists familiar with the hazards of the community   | <input checked="" type="checkbox"/> | Flood Control District  |
| Emergency manager   | <input checked="" type="checkbox"/> | Public Works: Emergency Manager   |
| Grant writer(s)   | <input checked="" type="checkbox"/> | Emergency Management Coordinator  |
| Others  | <input checked="" type="checkbox"/> | Certified Floodplain Managers   |

**Table 6-3-1: Summary of fiscal capabilities for Unincorporated Yavapai County**

| Financial Resources                                  | Accessible or Eligible to Use (Yes, No, Don't Know) | Comments                           |
|--|---|------------------------------------|
| Community Development Block Grants                   | Yes   | Yes                                |
| Capital Improvements Project funding                 | Yes   | Yes                                |
| Authority to levee taxes for specific purposes       | Yes   | Generally requires voter approval. |
| Fees for water, sewer, gas, or electric service      | No  | No                                 |
| Impact fees for homebuyers or new developments/homes | Yes   | Yes                                |
| Incur debt through general obligation bonds          | Yes   | Generally requires voter approval. |
| Incur debt through special tax bonds                 | Yes   | Generally requires voter approval. |
| Other  |   |                                    |

**Table 6-1-2: Summary of legal and regulatory capabilities for Camp Verde**

| Regulatory Tools for Hazard Mitigation | Description   | Responsible Department/Agency  |
|--|---|--|
| CODES                                  | <ul style="list-style-type: none"> <li>• 2006 International Building Code, including Appendix J – Grading</li> <li>• 2006 International Residential Code</li> <li>• 2005 National Electric Code</li> <li>• 2006 International Plumbing Code</li> <li>• 2006 International Mechanical Code</li> <li>• 2006 International Fuel Gas Code</li> <li>• 2006 International Energy Conservation Code</li> <li>• 2003 International Fire Code</li> <li>• 2006 International Existing Building Code</li> <li>• Technical Code Amendments – Town Code Chapter 7, Article 7-1, Section 7-1-100</li> <li>• Administrative Building Code – Town Code Chapter 7, Article 7-2, Section 7-2-101-111</li> </ul> | <ul style="list-style-type: none"> <li>• Community Development</li> <li>• Building Safety</li> <li>• Camp Verde Fire Department</li> <li>• Planning &amp; Zoning</li> <li>• Public Works</li> </ul>  |
| ORDINANCES                             | <ul style="list-style-type: none"> <li>• Ordinance 2009-A359 – Building Codes</li> <li>• Ordinance 2009-A361 – Fees/Administrative</li> <li>• Ordinance 2005-A310 - Stormwater</li> <li>• Ordinance 2006A-335 – NFIP</li> <li>• IGA – Town/Camp Verde Fire Dept. (5/19/2010)</li> <li>• IGA – Town/Yavapai County Unified Emergency Management (6/17/2009)</li> <li>• Ordinance 2006-A337 Development Impact Fees</li> <li>• IGA Emergency Management with Yavapai Co (5/5/2010)</li> </ul>   | <ul style="list-style-type: none"> <li>• Community Development</li> <li>• Building Safety</li> <li>• Public Works</li> <li>• Camp Verde Fire Department</li> <li>• Planning and Zoning</li> <li>• Yavapai County</li> </ul>  |
| PLANS, MANUALS, and/or GUIDELINES      | <ul style="list-style-type: none"> <li>• General Plan (2004) - Growing Smarter Mandated.</li> <li>• Disaster Mitigation Plan (2003) - Disaster Preparedness Plan.</li> <li>• Focus Future (2005) - Economic Development Plan.</li> <li>• Capital Improvement Plan (2010)</li> <li>• Town of Camp Verde Multi-Hazard Mitigation Plan (2006)</li> <li>• 2007 Stormwater Management Plan</li> <li>• Cliffs Parkway/Finnie Flat Road Drainage Improvement Plans 2006-2010</li> <li>• Yavapai Drainage Criteria Manual</li> <li>• Town of Camp Verde Engineering Standards</li> </ul>  | <ul style="list-style-type: none"> <li>• Community Development</li> <li>• Building Safety</li> <li>• Planning and Zoning</li> <li>• Public Works</li> <li>• Camp Verde Fire Department</li> <li>• Camp Verde Sanitary District</li> <li>• Yavapai County</li> <li>• Camp Verde Marshal's Office</li> </ul> |
| STUDIES                                | <ul style="list-style-type: none"> <li>• Small Area Transportation Plan 2010</li> <li>• Town of Camp Verde Area Master Drainage Study 1992</li> <li>• Middle Verde Area Drainage Evaluation 2002</li> </ul>   | <ul style="list-style-type: none"> <li>• Public Works</li> <li>• Yavapai County</li> </ul>   |

| <b>Staff/Personnel Resources</b>  | <input checked="" type="checkbox"/> | <b>Department/Agency - Position</b>  |
|---|-------------------------------------|--|
| Planner(s) or engineer(s) with knowledge of land development and land management practices                  | <input checked="" type="checkbox"/> | Senior Planner, Acting Director of Community Development Department and Public Works Director/Engineer                             |
| Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure | <input checked="" type="checkbox"/> | Building Official<br>Building Permit Technician<br>Town of Camp Verde Public Works Director/Town Engineer                          |
| Planner(s) or engineer(s) with understanding of natural and/or human-caused hazards                         | <input checked="" type="checkbox"/> | Camp Verde Fire Department<br>Public Works Director/Town Engineer<br>Community Development Director<br>Camp Verde Marshal's Office |
| Floodplain Manager  | <input checked="" type="checkbox"/> | Public Works Director/Engineer<br>Yavapai County Flood Control District  |
| Surveyors   | <input checked="" type="checkbox"/> | Heritage Survey, Hammes Surveying and Geometrics (on-call Consultants)   |
| Staff with education or expertise to assess the community's vulnerability to hazards                        | <input checked="" type="checkbox"/> | Camp Verde Fire Department<br>Public Works Director/Town Engineer<br>Camp Verde Streets Department<br>Camp Verde Marshal's Office  |
| Personnel skilled in GIS and/or HAZUS   | <input checked="" type="checkbox"/> | GIS Senior Planner and Administrative staff  |
| Scientists familiar with the hazards of the community   |                                     |  |
| Emergency Manager   | <input checked="" type="checkbox"/> | Town Public Works Director/Engineer  |
| Grant writer(s)   | <input checked="" type="checkbox"/> | Town of Camp Verde Public Works Director/Engineer  |
| Others  |                                     |  |

| <b>Financial Resources</b>                           | <b>Accessible or Eligible to Use (Yes, No, Don't Know)</b> | <b>Comments</b> |
|--|--|-----------------|
| Community Development Block Grants                   | Yes  |                 |
| Capital Improvements Project funding                 | Yes  |                 |
| Authority to levee taxes for specific purposes       | Yes  |                 |
| Fees for water, sewer, gas, or electric service      | No   |                 |
| Impact fees for homebuyers or new developments/homes | Yes  | Adopted 2006    |
| Incur debt through general obligation bonds          | Yes  |                 |
| Incur debt through special tax bonds                 | Yes  |                 |
| Other  |  |                 |

**Table 6-1-3: Summary of legal and regulatory capabilities for Chino Valley**

| <b>Regulatory Tools for Hazard Mitigation</b> | <b>Description</b>  | <b>Responsible Department/Agency</b>  |
|---|---|---|
| CODES   | <ul style="list-style-type: none"> <li>• 2003 Fire Dept.</li> <li>• 2006, IBC, IRC, IFGC, IMC, IPC</li> <li>• 2005 NEC</li> </ul>   | <ul style="list-style-type: none"> <li>• Development Services</li> <li>• Building Department</li> <li>• Fire</li> <li>• Engineering</li> </ul>      |
| ORDINANCES                                    | <ul style="list-style-type: none"> <li>• Town of Chino Valley Zoning Ordinance</li> <li>• Town of Chino Valley Subdivision Code</li> <li>• Town of Chino Valley Council Ordinance</li> <li>• Adopt Town of Chino Valley Engineer Studies</li> </ul>                     | <ul style="list-style-type: none"> <li>• Development Services</li> <li>• Planning</li> </ul>  |
| PLANS, MANUALS, and/or GUIDELINES             | <ul style="list-style-type: none"> <li>• General Plan (2015) - This plan is to ensure the Town's future and maintain the vision of its citizens.</li> <li>• Master Community Center Park Project</li> </ul>   | <ul style="list-style-type: none"> <li>• Development Services</li> <li>• Planning</li> <li>• Parks and Recreation</li> <li>• Engineering</li> </ul> |
| STUDIES                                       | <ul style="list-style-type: none"> <li>• Chino Valley Extension Corridor Def. Study</li> <li>• Central Yavapai Metropolitan Planning Organization Small Area Transportation Plan.</li> <li>• State Route 89 Widening Between Road 4 South to Pioneer Parkway</li> </ul> | <ul style="list-style-type: none"> <li>• Public Works</li> <li>• Engineering</li> <li>• Development Services</li> </ul>                             |

| <b>Staff/Personnel Resources</b>  | <input checked="" type="checkbox"/> | <b>Department/Agency - Position</b>   |
|---|-------------------------------------|---|
| Planner(s) or engineer(s) with knowledge of land development and land management practices                  | <input checked="" type="checkbox"/> | David Nicolella – Planner<br>Ron Grittman, P.E. - Engineer  |
| Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure | <input checked="" type="checkbox"/> | Ron Grittman, P.E. – Engineer<br>Kurt Morrill – Public Works Technician<br>Pat Clingman – Building Official |
| Planner(s) or engineer(s) with and understanding of natural and/or human-caused hazards                     |                                     |   |
| Floodplain Manager  | <input checked="" type="checkbox"/> | Pat Clingman – Building Official<br>Ron Grittman, P.E.  |
| Surveyors   |                                     |   |
| Staff with education or expertise to assess the community’s vulnerability to hazards                        |                                     |   |
| Personnel skilled in GIS and/or HAZUS   | <input checked="" type="checkbox"/> | Jan Mazy, GIS/CAD Technician  |
| Scientists familiar with the hazards of the community   |                                     |   |
| Emergency Manager   | <input checked="" type="checkbox"/> | Ron Grittman, Public Works Director   |
| Grant writer(s)   |                                     |   |
| Others  |                                     |   |

| <b>Financial Resources</b>                           | <b>Accessible or Eligible to Use (Yes, No, Don’t Know)</b> | <b>Comments</b> |
|--|--|-----------------|
| Community Development Block Grants                   | Yes  |                 |
| Capital Improvements Project funding                 | Yes  |                 |
| Authority to levee taxes for specific purposes       | No   |                 |
| Fees for water, sewer, gas, or electric service      | Yes  |                 |
| Impact fees for homebuyers or new developments/homes | Yes  |                 |
| Incur debt through general obligation bonds          | Yes  |                 |
| Incur debt through special tax bonds                 | Yes  |                 |
| Other  |  |                 |

**Table 6-1-4: Summary of legal and regulatory capabilities for Clarkdale**

| Regulatory Tools for Hazard Mitigation | Description   | Responsible Department/Agency  |
|--|---|--|
| CODES                                  | <ul style="list-style-type: none"> <li>• 2006 International Building Code</li> <li>• 2006 International Residential Code</li> <li>• 2006 International Plumbing Code</li> <li>• 2006 International Mechanical Code</li> <li>• 2006 International Fire Code</li> <li>• 2002 National Electric Code</li> <li>• 2003 International Property Maintenance Code</li> <li>• Town Code of Clarkdale</li> </ul>  | <ul style="list-style-type: none"> <li>• Community Development</li> <li>• Clarkdale Fire District</li> <li>• Town Clerk</li> </ul>                           |
| ORDINANCES                             | <ul style="list-style-type: none"> <li>• Minor Land Division Ordinance</li> <li>• Flood Damage Prevention Ordinance (2010)</li> </ul>   | <ul style="list-style-type: none"> <li>• Community Development</li> <li>• Town Clerk</li> </ul>  |
| PLANS, MANUALS, and/or GUIDELINES      | <ul style="list-style-type: none"> <li>• Town of Clarkdale Disaster Plan &amp; Recovery Guide (9/2004) - Comprehensive, step-by-step plan that provides protocol for dealing with specific disasters.(Being Updated in 2011)</li> <li>• General Plan (2002) - Statement of Clarkdale’s vision for growth and development.(Update Complete in 2011)</li> <li>• Wastewater Master Plan (2002) - Establishes expansion areas, identifies units and population served. Outlines objections with action steps.(Ongoing Updates)</li> <li>• Municipal Water System Emergency Operation Plan – 2010</li> <li>• IGA for Establishment of Unified Emergency Management with County – 2010</li> <li>• IGA with ADOT for Bridge/Culvert Inspection - 2010</li> </ul> | <ul style="list-style-type: none"> <li>• Water &amp; Sewer Utility</li> <li>• Community Development</li> <li>• Public Works</li> <li>• Town Clerk</li> </ul> |
| STUDIES                                | <ul style="list-style-type: none"> <li>• Flood Insurance Study – 2007&amp;2010</li> <li>• Town Area Master drainage Study – 1994</li> <li>• Town Area Master Drainage Study – 1996</li> <li>• Lampliter Village &amp; Blackhills Estates Drainage Design Report – 2004</li> <li>• PARA Transportation Study - 2010</li> </ul>   | <ul style="list-style-type: none"> <li>• Community Development</li> <li>• Utilities</li> <li>• Public Works</li> </ul>                                       |

**Table 6-2-4: Summary of technical staff and personnel capabilities for Clarkdale**

| <b>Staff/Personnel Resources</b>  | <input checked="" type="checkbox"/> | <b>Department/Agency - Position</b>   |
|---|-------------------------------------|---|
| Planner(s) or engineer(s) with knowledge of land development and land management practices                  | <input checked="" type="checkbox"/> | Community Development Director<br>GIS Technician<br>Public Works Director<br>Town Manager               |
| Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure | <input checked="" type="checkbox"/> | Community Development Director<br>Building Inspector<br>Public Works Director                           |
| Planner(s) or engineer(s) with and understanding of natural and/or human-caused hazards                     | <input checked="" type="checkbox"/> | Community Development Director<br>Building Inspector<br>Public Works Director<br>Town Manager           |
| Floodplain Manager  | <input checked="" type="checkbox"/> | Yavapai County: Jim Young   |
| Surveyors   |                                     |   |
| Staff with education or expertise to assess the community's vulnerability to hazards                        | <input checked="" type="checkbox"/> | Community Development Dep. Staff generally<br>Town Manager<br>Public Works Director<br>Utility Director |
| Personnel skilled in GIS and/or HAZUS   | <input checked="" type="checkbox"/> | Community Development Director<br>GIS Technician  |
| Scientists familiar with the hazards of the community   |                                     | None  |
| Emergency Manager   |                                     | None  |
| Grant writer(s)   | <input checked="" type="checkbox"/> | Town Staff  |
| Others  |                                     |   |

**Table 6-3-4: Summary of fiscal capabilities for Clarkdale**

| <b>Financial Resources</b>                           | <b>Accessible or Eligible to Use (Yes, No, Don't Know)</b> | <b>Comments</b>  |
|--|--|--|
| Community Development Block Grants                   | Yes  | Apply for CDBG on rotation                               |
| Capital Improvements Project funding                 | Yes  |  |
| Authority to levee taxes for specific purposes       | Yes  |  |
| Fees for water, sewer, gas, or electric service      | Yes  | Sewer & Water  |
| Impact fees for homebuyers or new developments/homes | Yes  | Wastewater, Civic, Park, Library, and Police Impact Fees |
| Incur debt through general obligation bonds          | Yes  |  |
| Incur debt through special tax bonds                 | Yes  |  |
| Other  | Yes  | IGAs with County, State, ADOT                            |

**Table 6-1-5: Summary of legal and regulatory capabilities for Cottonwood**

| <b>Regulatory Tools for Hazard Mitigation</b> | <b>Description</b>  | <b>Responsible Department/Agency</b>  |
|---|---|---|
| CODES   | <ul style="list-style-type: none"> <li>• 2009 International Building Code</li> <li>• 2009 International Residential Code</li> <li>• 2009 International Plumbing Code</li> <li>• 2009 International Mechanical Code</li> <li>• 2008 National Electric Code</li> <li>• Cottonwood Municipal Code</li> </ul>   | <ul style="list-style-type: none"> <li>• Community Development</li> <li>• Code/Zoning Enforcement</li> <li>• Fire Department</li> </ul>             |
| ORDINANCES                                    | <ul style="list-style-type: none"> <li>• Storm Water Management</li> <li>• Fire Code</li> <li>• Zoning Ordinance</li> <li>• Building Code</li> <li>• Cottonwood Subdivision Regulations</li> </ul>  | <ul style="list-style-type: none"> <li>• Engineering</li> <li>• Fire Department</li> <li>• Community Development</li> <li>• Public Works</li> </ul> |
| PLANS, MANUALS, and/or GUIDELINES             | <ul style="list-style-type: none"> <li>• General Plan (2003) - Land Use Plan for the City</li> <li>• Disaster Response &amp; Recover Plan (2000) - Emergency Response &amp; Recovery Plan for the City.</li> <li>• Wildland Interface Pre-Fire Plan (2002) - Response Plan For Urban Interface/Wildland Fire Target Hazard areas in the City.</li> <li>• Hazardous Materials Response Plan (2002) - Haz Mat Response Plan for Yavapai County.</li> <li>• Emergency Response Plan (2003) - Cottonwood-Oak Creek Response Plan to Disasters/Terrorism.</li> </ul> | <ul style="list-style-type: none"> <li>• Community Development</li> <li>• Fire Department</li> <li>• Police Department</li> </ul>                   |
| STUDIES                                       | <ul style="list-style-type: none"> <li>• 2008 Verde Village Study</li> <li>• 2009/2010 Deception Gulch</li> <li>• 2009/2010 Mescal Gulch</li> <li>• 2011 Verde River Study</li> <li>• 1985 City of Cottonwood Drainage report</li> <li>• 2009 LOMR Silver Springs Gulch</li> <li>• 2010 FEMA FIRM Map</li> </ul>  | <ul style="list-style-type: none"> <li>• Engineering</li> </ul>   |

| <b>Staff/Personnel Resources</b>  | <input checked="" type="checkbox"/> | <b>Department/Agency - Position</b>   |
|---|-------------------------------------|---|
| Planner(s) or engineer(s) with knowledge of land development and land management practices                  | <input checked="" type="checkbox"/> | Community Development. – Director<br>Public Works Dept. – City Engineer<br>City Administration – City Manager                     |
| Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure | <input checked="" type="checkbox"/> | Community Development. – Building Official<br>Public Works Dept. – City Engineer & Asst.  |
| Planner(s) or engineer(s) with and understanding of natural and/or human-caused hazards                     | <input checked="" type="checkbox"/> | Community Development. - Director<br>Fire Dept. – Fire Chief<br>Public Works Dept. – City Engineer<br>Police Dept. – Police Chief |
| Floodplain Manager  | <input checked="" type="checkbox"/> | Engineering. - Director   |
| Surveyors   | <input checked="" type="checkbox"/> | Engineering. - Staff  |
| Staff with education or expertise to assess the community’s vulnerability to hazards                        | <input checked="" type="checkbox"/> | Fire Dept. – Fire Chief<br>Public Works Dept. – City Engineer<br>Police Dept. – Police Chief                                      |
| Personnel skilled in GIS and/or HAZUS   | <input checked="" type="checkbox"/> | Community Development. - Director<br>Fire Department.- Chief  |
| Scientists familiar with the hazards of the community   | <input checked="" type="checkbox"/> | Wastewater. – Supervisors<br>Engineering. – City Engineer   |
| Emergency Manager   | <input checked="" type="checkbox"/> | Fire Dept. – Fire Chief   |
| Grant writer(s)   | <input checked="" type="checkbox"/> | Engineering- Staff Engineer   |
| Others  |                                     |   |

| <b>Financial Resources</b>                           | <b>Accessible or Eligible to Use (Yes, No, Don’t Know)</b> | <b>Comments</b>    |
|--|--|--------------------|
| Community Development Block Grants                   | Yes  |                    |
| Capital Improvements Project funding                 | Yes  | Five Year CIP Plan |
| Authority to levee taxes for specific purposes       | Yes  | Sales Tax          |
| Fees for water and sewer                             | Yes  | Fees               |
| Impact fees for homebuyers or new developments/homes | Yes  |                    |
| Incur debt through general obligation bonds          | Yes  |                    |
| Incur debt through special tax bonds                 | Yes  |                    |
| Other  |  |                    |

**Table 6-1-6: Summary of legal and regulatory capabilities for Dewey-Humboldt**

| <b>Regulatory Tools for Hazard Mitigation</b> | <b>Description</b>   | <b>Responsible Department/Agency</b>   |
|---|--|--|
| CODES   | <ul style="list-style-type: none"> <li>• 2006 ICC Codes</li> <li>• 2005 National Electric Code</li> </ul>  | <ul style="list-style-type: none"> <li>• Development Services</li> </ul>   |
| ORDINANCES                                    | <ul style="list-style-type: none"> <li>• Dewey-Humboldt Zoning Ordinance 2005, revised 2008</li> <li>• Subdivision and Division of Land Ordinance 2009</li> <li>• Light Pollution Control Ordinance 2008</li> <li>• PAD Ordinance 2008</li> <li>• FEMA Flood Insurance Ordinance 2006</li> </ul>   | <ul style="list-style-type: none"> <li>• Development Services</li> <li>• Engineering</li> </ul>  |
| PLANS, MANUALS, and/or GUIDELINES             | <ul style="list-style-type: none"> <li>• Town of Dewey-Humboldt 2009 General Plan (May 2009)</li> <li>• Town of Dewey-Humboldt Multi-Hazard Mitigation Plan (2010)</li> <li>• Town of Dewey-Humboldt Capital Improvement Plan (10-year plan updated biennial)</li> <li>• Yavapai Communities Wildfire Protection Plan 2004</li> </ul>  | <ul style="list-style-type: none"> <li>• Development Services</li> <li>• Engineering</li> <li>• Central Yavapai Fire District</li> </ul> |
| STUDIES                                       | <ul style="list-style-type: none"> <li>• Whistle Wash Floodplain Analysis 2003</li> <li>• Kachina Place Flood Hazard Study 2002</li> <li>• An Analysis of Stormwater Flows at Hwy 169 Discharging from the Antelope Meadows Commercial Center 2010 and Evaluation of Potential Drainage Modifications to Reduce Downstream Flooding in the Sierra Dells Subdivision</li> <li>• FEMA DFIRM Maps, September 3, 2010</li> </ul> | <ul style="list-style-type: none"> <li>• Development Services</li> <li>• Engineering</li> <li>• FEMA</li> </ul>                          |

**Table 6-2-6: Summary of technical staff and personnel capabilities for Dewey-Humboldt**

| <b>Staff/Personnel Resources</b>  | <input checked="" type="checkbox"/> | <b>Department/Agency - Position</b>                |
|---|-------------------------------------|--|
| Planner(s) or engineer(s) with knowledge of land development and land management practices                  | <input checked="" type="checkbox"/> | Certified Planner; Town Engineer                   |
| Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure | <input checked="" type="checkbox"/> | Certified Planner                                  |
| Planner(s) or engineer(s) with and understanding of natural and/or human-caused hazards                     | <input checked="" type="checkbox"/> | Certified Planner; Town Engineer                   |
| Floodplain Manager  | <input checked="" type="checkbox"/> | Yavapai County                                     |
| Surveyors   | <input checked="" type="checkbox"/> | Town Engineer                                      |
| Staff with education or expertise to assess the community's vulnerability to hazards                        | <input checked="" type="checkbox"/> | Certified Planner; Town Engineer                   |
| Personnel skilled in GIS and/or HAZUS   | <input checked="" type="checkbox"/> | Town Engineer                                      |
| Scientists familiar with the hazards of the community   |                                     |  |
| Emergency Manager   |                                     |  |
| Grant writer(s)   | <input checked="" type="checkbox"/> | Certified Planner; Town Engineer; Finance Director |
| Others  |                                     |  |

**Table 6-3-6: Summary of fiscal capabilities for Dewey-Humboldt**

| <b>Financial Resources</b>                           | <b>Accessible or Eligible to Use (Yes, No, Don't Know)</b> | <b>Comments</b>  |
|--|--|--|
| Community Development Block Grants                   | Yes  | Apply for CDBG on an annual basis                                |
| Capital Improvements Project funding                 | Yes  | 10-year plan updated biennial                                    |
| Authority to levee taxes for specific purposes       | Yes  |  |
| Fees for water, sewer, gas, or electric service      | No   | No Town water or sewer facilities, no franchise for power or gas |
| Impact fees for homebuyers or new developments/homes | Yes  |  |
| Incur debt through general obligation bonds          | Yes  |  |
| Incur debt through special tax bonds                 | Yes  |  |
| Other  |  |  |

**Table 6-1-7: Summary of legal and regulatory capabilities for Jerome**

| <b>Regulatory Tools for Hazard Mitigation</b> | <b>Description</b>  | <b>Responsible Department/Agency</b>  |
|---|---|---|
| CODES   | JEROME TOWN CODE, which includes by reference: <ul style="list-style-type: none"> <li>• 2003 International Building Code (w. amendments)</li> <li>• 1988 Uniform Code for the Abatement of Dangerous Buildings</li> <li>• 2003 International Residential Code</li> <li>• 2003 International Plumbing Code</li> <li>• 2003 International Mechanical Code</li> <li>• 2003 International Fire Code (w. amendments)</li> <li>• 2003 International One- and Two-Family International Dwelling Code</li> <li>• 2002 National Electrical Code</li> <li>• 2003 International Fuel Gas Code</li> <li>• 2003 International Property Maintenance Code (w. amendments)</li> <li>• 2003 Town of Jerome Grading Ordinance</li> <li>• 2009 Town of Jerome Administrative Code</li> </ul> | <ul style="list-style-type: none"> <li>• Fire Chief</li> <li>• Chief Building Official</li> <li>• Zoning Administrator</li> </ul> |
| ORDINANCES                                    | All ordinances have been codified into the Jerome Town Code.  |   |
| PLANS, MANUALS, and/or GUIDELINES             | <ul style="list-style-type: none"> <li>• Town of Jerome Multi-Hazard Mitigation Plan (2006)</li> </ul>  | <ul style="list-style-type: none"> <li>• Planning and Zoning</li> <li>• Public Works</li> <li>• Emergency Management</li> </ul>   |
| STUDIES                                       | n/a   | n/a   |

**Table 6-2-7: Summary of technical staff and personnel capabilities for Jerome**

| <b>Staff/Personnel Resources</b>  | <input checked="" type="checkbox"/> | <b>Department/Agency - Position</b>                                  |
|---|-------------------------------------|--|
| Planner(s) or engineer(s) with knowledge of land development and land management practices                  | <input checked="" type="checkbox"/> | Town Planner<br>Town Engineer  |
| Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure | <input checked="" type="checkbox"/> | Building Inspector   |
| Planner(s) or engineer(s) with and understanding of natural and/or human-caused hazards                     | <input checked="" type="checkbox"/> | Town Engineer<br>Yavapai County                                      |
| Floodplain Manager  |                                     | Yavapai County   |
| Surveyors   | <input checked="" type="checkbox"/> | Town Engineer  |
| Staff with education or expertise to assess the community's vulnerability to hazards                        | <input checked="" type="checkbox"/> | Town Planner<br>Police Chief<br>Fire Chief                           |
| Personnel skilled in GIS and/or HAZUS   | <input checked="" type="checkbox"/> | Jerome Fire Department<br>Town Engineer                              |
| Scientists familiar with the hazards of the community   |                                     | Yavapai County   |
| Emergency Manager   | <input checked="" type="checkbox"/> | Jerome Police Department<br>Jerome Fire Department<br>Yavapai County |
| Grant writer(s)   | <input checked="" type="checkbox"/> | Jerome Fire Department<br>Jerome Police Department<br>Town Manager   |
| Others  | <input checked="" type="checkbox"/> | Mayor<br>Public Works Crew Chief<br>Town Planner                     |

**Table 6-3-7: Summary of fiscal capabilities for Jerome**

| <b>Financial Resources</b>                           | <b>Accessible or Eligible to Use (Yes, No, Don't Know)</b> | <b>Comments</b>              |
|--|--|------------------------------|
| Community Development Block Grants                   | Yes  | By application               |
| Capital Improvements Project funding                 | Yes  |                              |
| Authority to levee taxes for specific purposes       | Yes  |                              |
| Fees for water, sewer, gas, or electric service      | Yes  | Water/Sewer – Town of Jerome |
| Impact fees for homebuyers or new developments/homes | No   | No                           |
| Incur debt through general obligation bonds          | Yes  |                              |
| Incur debt through special tax bonds                 | Yes  |                              |
| Other  |  |                              |

**Table 6-1-8: Summary of legal and regulatory capabilities for Prescott**

| <b>Regulatory Tools for Hazard Mitigation</b> | <b>Description</b>   | <b>Responsible Department/Agency</b>   |
|---|--|--|
| CODES   | <ul style="list-style-type: none"> <li>• 2006 International Building Code, Plumbing code, Electrical Code</li> <li>• 2006 International Fire Code</li> <li>• 2006 ICC Wildland Urban Interface Code</li> </ul>   | <ul style="list-style-type: none"> <li>• Community Development</li> <li>• Fire Department</li> </ul> |
| ORDINANCES                                    | <ul style="list-style-type: none"> <li>• Zoning Ordinance 2005 General Plan</li> <li>• Subdivision Regulations</li> <li>• Site Plan reviews</li> <li>• General Plan 2005</li> </ul>  | <ul style="list-style-type: none"> <li>• Community Development</li> </ul>                            |
| PLANS, MANUALS, and/or GUIDELINES             | <ul style="list-style-type: none"> <li>• Conceptual Community Vegetation Management Plan (4/2001) - Wildfire Risk Assessment.</li> <li>• 2003 Prescott General Plan (2004) - Growing Smarter/Growing Smarter Plus – Mandated</li> <li>• Capital Improvement Plan</li> <li>• CWPP</li> <li>• Economic Development Plan</li> <li>• Emergency Operations Plan</li> <li>• Post Disaster Recovery Plan</li> </ul> | <ul style="list-style-type: none"> <li>• Fire Department</li> <li>• Community Development</li> </ul> |
| STUDIES                                       | <ul style="list-style-type: none"> <li>•</li> </ul>  | <ul style="list-style-type: none"> <li>•</li> </ul>  |

| <b>Table 6-2-8: Summary of technical staff and personnel capabilities for Prescott</b>                      |                                     |                                     |
|---|-------------------------------------|-------------------------------------|
| <b>Staff/Personnel Resources</b>  | <input checked="" type="checkbox"/> | <b>Department/Agency - Position</b> |
| Planner(s) or engineer(s) with knowledge of land development and land management practices                  | <input checked="" type="checkbox"/> | Community Development               |
| Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure | <input checked="" type="checkbox"/> | Public Works                        |
| Planner(s) or engineer(s) with and understanding of natural and/or human-caused hazards                     | <input checked="" type="checkbox"/> | Public Works                        |
| Floodplain Manager  | <input checked="" type="checkbox"/> | Public Works                        |
| Surveyors   | <input checked="" type="checkbox"/> | Engineering/Public Works            |
| Staff with education or expertise to assess the community's vulnerability to hazards                        | <input checked="" type="checkbox"/> | Fire Department                     |
| Personnel skilled in GIS and/or HAZUS   | <input checked="" type="checkbox"/> | Information Technology              |
| Scientists familiar with the hazards of the community   |                                     |                                     |
| Emergency Manager   | <input checked="" type="checkbox"/> | Fire Chief                          |
| Grant writer(s)   |                                     |                                     |
| Others  |                                     |                                     |

| <b>Table 6-3-8: Summary of fiscal capabilities for Prescott</b> |  |                 |
|---|--|-----------------|
| <b>Financial Resources</b>                                      | <b>Accessible or Eligible to Use (Yes, No, Don't Know)</b> | <b>Comments</b> |
| Community Development Block Grants                              | Yes  |                 |
| Capital Improvements Project funding                            | Yes  |                 |
| Authority to levee taxes for specific purposes                  | Yes  |                 |
| Fees for water, sewer, gas, or electric service                 | Yes  |                 |
| Impact fees for homebuyers or new developments/homes            | Yes  |                 |
| Incur debt through general obligation bonds                     | Yes  |                 |
| Incur debt through special tax bonds                            | Yes  |                 |
| Other   |  |                 |

**Table 6-1-9: Summary of legal and regulatory capabilities for Town of Prescott Valley**

| Regulatory Tools for Hazard Mitigation | Description  | Responsible Department/Agency   |
|--|--|---|
| BUILDING CODES                         | <ul style="list-style-type: none"> <li>2006 Series of International Codes (some limited aspects of building codes are established and controlled by state agencies. For example, the state sets and enforces standards for mobile/manufactured homes per ARS §41-2144, and for factory-built buildings per ARS §41-2155. Also, state buildings are exempt from local building codes per ARS §34-461. The state has insisted that local communities adopt a uniform plumbing code established by a state plumbing code commission (ARS §§9-805 and 41-619). And, Central Yavapai Fire District (which includes all of Prescott Valley) adopts and enforces applicable fire code regulations).</li> </ul>  | <ul style="list-style-type: none"> <li>Community Development Dept</li> </ul>  |
| ORDINANCES                             | <ul style="list-style-type: none"> <li>Zoning Ordinance – Use Same description from 2006 plan</li> <li>Subdivision Ordinance – Use same description from 2006 plan</li> <li>Special Purpose Ordinance – Use same description from 2006 plan</li> <li>Growth Management Ordinance – Use same description from 2006 plan</li> <li>Post-Disaster Recovery Ordinance-Use same description from 2006 plan</li> </ul>  | <ul style="list-style-type: none"> <li>Community Development Dept</li> <li>Community Development Dept</li> <li>Community Development Dept</li> <li>Community Development Dept</li> <li>Police Dept</li> </ul>                                     |
| PLANS, MANUALS, and/or GUIDELINES      | <ul style="list-style-type: none"> <li><u>Strategic</u> (3/2001 by Resolution, since updated annually) - Includes a mission statement, vision statement, goals, and implementing management action plans for Town staff.</li> <li><u>Disaster Plan and Guide</u> (12/2001) - Provides direction and guidance to Town departments and supporting agencies in the event of natural, technological, or national security disaster.</li> <li><u>General Plan 2020</u> (1/2002 by Resolution) - Comprehensive plan adopted in accordance with the "Growing Smarter Act" (1998 AZ Sess Laws, Chap. 204, §21, amended by 1999 AZ Sess Laws, Chap. 222, §2) and "Growing Smarter Plus" (2000 AZ. Sess. Laws Chap. 1).</li> <li><u>Master Drainage Plan</u> (1/2003) - Storm water drainage facilities and management plan.</li> <li><u>Capital Improvements Plan</u>- The Town has established capital Improvement plans from time to time as part of the adopting developmental impact fees. The most recent adoption of development fees was through Resolution No. 1461 dated May 25, 2006. Capital Improvement plans are also established and updated as part of the annual budget process.</li> <li><u>Economic Development Plan</u> - In addition to Chapter 09 "Economic Development" in the General Plan 2020, the Town has participated in the Focused Future Process approving "Focus on success in 2007".</li> <li><u>Emergency Response Plan</u> - Use same description from 2006 plan</li> <li><u>Post-Disaster Recovery Plan</u>- Use same description from 2006 plan</li> </ul> | <ul style="list-style-type: none"> <li>Management Dept</li> <li>Police Dept</li> <li>Community Development Dept</li> <li>Public Works Dept</li> <li>Management Dept</li> <li>Management Dept</li> <li>Police Dept</li> <li>Police Dept</li> </ul> |
| STUDIES                                | <ul style="list-style-type: none"> <li></li> </ul>   | <ul style="list-style-type: none"> <li></li> </ul>  |

**Table 6-2-9: Summary of technical staff and personnel capabilities for Town of Prescott Valley**

| Staff/Personnel Resources   | <input checked="" type="checkbox"/> | Department/Agency - Position  |
|---|-------------------------------------|---|
| Planner(s) or engineer(s) with knowledge of land development and land management practices                  | <input checked="" type="checkbox"/> | Richard Parker – Community Development Director<br>Dava & Associates, Town Engineer   |
| Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure | <input checked="" type="checkbox"/> | Woodrow Lewis, Building Official<br>Dava & Associates, Town Engineer  |
| Planner(s) or engineer(s) with and understanding of natural and/or human-caused hazards                     | <input checked="" type="checkbox"/> | Neil Wadsworth, Utilities Division Manager<br>Ray Smith, Civil Engineer<br>Dava & Associates, Town Engineer<br>Richard Parker, Community Development Director |
| Floodplain Manager  | <input checked="" type="checkbox"/> | Ray Smith, Civil Engineer   |
| Surveyors   | <input checked="" type="checkbox"/> | Dava & Associates, Town Engineer  |
| Staff with education or expertise to assess the community’s vulnerability to hazards                        | <input checked="" type="checkbox"/> | Larry Tarkowski, Town Manager<br>Norm Davis, Public Works Director<br>Ken Stanton, Operations Manager<br>Jim Maxson, Police Chief                             |
| Personnel skilled in GIS and/or HAZUS   | <input checked="" type="checkbox"/> | Larry Prentice, GIS Manager   |
| Emergency Manager   | <input checked="" type="checkbox"/> | Larry Tarkowski, Town Manager   |
| Grant writer(s)   | <input checked="" type="checkbox"/> | Ruth Mayday - Planner<br>Ryan Judy, Deputy Town Manager   |
| Others  | <input checked="" type="checkbox"/> | Diane Russell, Town Clerk (Risk Manager)<br>Ivan Legler, Town Attorney  |

**Table 6-3-9: Summary of fiscal capabilities for Town of Prescott Valley**

| Financial Resources                            | Accessible or Eligible to Use (Yes, No, Don’t Know) | Comments   |
|--|---|--|
| Community Development Block Grants             | Yes   |  |
| Capital Improvements Project funding           | Yes   |  |
| Authority to levee taxes for specific purposes | No  | Although permitted by law, the Town has not sought voter authorization to assess an ad valorem tax throughout the Town. An exception is ad valorem taxes charged by community facilities districts within the Town for purposes of funding bonds sold to finance specified public improvements within those districts. The transaction privilege/use taxes which are imposed Town-wide provide general revenues and are not limited to specific purposes (although the Town has publicly committed to apply .33% of the total 2.33% TPTax towards road construction and its municipal property corporation has sold bonds on that basis). Improvement district assessments under ARS §48-571 et seq. have been applied against property for specific improvements that benefit |

**Table 6-3-9: Summary of fiscal capabilities for Town of Prescott Valley**

| Financial Resources                                  | Accessible or Eligible to Use (Yes, No, Don't Know) | Comments  |
|--|---|---|
|  |   | such property.  |
| Fees for water, sewer, gas, or electric service      | Yes   | Water and sewer.  |
| Impact fees for homebuyers or new developments/homes | Yes   | A Circulation System Fee, a Public Safety Fee, a Recreation, Parks & Open Space Fee, a Civic Fee and a Cultural Fee. Related are one-time utility charges against new development namely the: Water System Capacity Charge, Wastewater System Capacity Charge, and Water Resource Charge. |
| Incur debt through general obligation bonds          | No  | The StoneRidge, Pronghorn Ranch, and Quailwood Meadows CFDs have issued GO bonds based on ad valorem taxes levied within their geographical boundaries. However, at present, there is no Town-wide ad valorem tax and the Town has no GO bonds and no current authority to issue any.     |
| Incur debt through special tax bonds                 | Yes   | The Town may issue debt backed by its transaction privilege tax collections or by specific utility rates, fees and charges. Voter approval is generally required. However, the Town may issue TPTax debt through its municipal property corporation without voter approval.               |
| Incur debt through private activity bonds            | Yes   | The Town's financial advisors have discussed various financing options, including bonds which may be taxable.   |
| Withheld spending in hazard-prone areas              | Yes   | For example, Town Code Article 9-05 currently prohibits connection of structures located within the FEMA floodplain to the Town's wastewater collection and treatment system  |
| Other  |   |   |

**Table 6-1-10: Summary of legal and regulatory capabilities for Sedona**

| Regulatory Tools for Hazard Mitigation | Description  | Responsible Department/Agency   |
|--|--|---|
| CODES                                  | <ul style="list-style-type: none"> <li>• 2006 International Building Code</li> <li>• 2006 International Residential Code</li> <li>• 2006 International Mechanical Code</li> <li>• 2006 International Plumbing Code</li> <li>• 2006 International Fuel Gas Code</li> <li>• 2005 National Electric Code</li> <li>• 2003 International Fire Code</li> <li>• 2003 Urban Wild-land Interface Code</li> <li>• Sedona City Code</li> <li>• Sedona Land Development Code</li> </ul>  | <ul style="list-style-type: none"> <li>• City Community Development</li> <li>• City Building Safety</li> <li>• City Planning</li> <li>• City Public Works Dept.</li> <li>• Sedona Fire District</li> </ul>      |
| ORDINANCES                             | <ul style="list-style-type: none"> <li>• Zoning Ordinance, Land Development Code with updates from Community Development.</li> <li>• 2010 City of Sedona Floodplain Ordinance</li> <li>• 2006 Yavapai County Flood Control District Ordinance (with amendments)</li> <li>• 1981 Floodplain Management Regulations for Coconino County (amended in 2000)</li> </ul>   | <ul style="list-style-type: none"> <li>• City Community Development</li> <li>• City Public Works Dept.</li> <li>• City Planning</li> <li>• Yavapai County</li> <li>• Coconino County</li> </ul>                 |
| PLANS, MANUALS, and/or GUIDELINES      | <ul style="list-style-type: none"> <li>• 1988 Wastewater Master Plan (with updates) - Plan for the identifying, prioritizing, and phasing for the construction of a City sewer system.</li> <li>• 1991 Sedona Community Plan (with updates) - Long range planning document for the City.</li> <li>• 2005 Storm Water Master Plan - Provides a procedure for identifying and prioritizing stormwater improvements for the City; provides a watershed hydrology model for the City.</li> <li>• 2005 Sedona Multi-Hazard Mitigation Plan (with 5-year updates)</li> <li>• 2005 Yavapai Co Drainage Manual (with updates)</li> <li>• ADOT Transportation Manual</li> <li>• November 2003 Storm Water Management Program - A plan that meets the requirements of the EPA for Phase II of the National Pollutant Discharge Elimination System regulations for storm water.</li> <li>• 1996 Urban Trails and Pathways Plan - Plan for a system of trails for pedestrian, equestrian, and non-motorized biking.</li> </ul> | <ul style="list-style-type: none"> <li>• City Community Development</li> <li>• City Planning</li> <li>• City Public Works Dept.</li> <li>• City Parks and Recreation</li> <li>• ADEM</li> <li>• ADOT</li> </ul> |
| STUDIES                                | <ul style="list-style-type: none"> <li>• Floodplain Management Study (1994) - Study which identified flood hazard areas within the City, profiles and Base Flood Elevations provided, for the purpose of Floodplain Management.</li> <li>• FEMA FIS &amp; DFIRMs for Yavapai and Coconino Counties (Effective date is September 3, 2010)</li> </ul>  | <ul style="list-style-type: none"> <li>• City Public Works Dept.</li> <li>• Yavapai County Flood Control</li> <li>• Coconino County Flood Control</li> <li>• ADWR</li> <li>• FEMA</li> </ul>                    |

**Table 6-2-10: Summary of technical staff and personnel capabilities for Sedona**

| Staff/Personnel Resources   | <input checked="" type="checkbox"/> | Department/Agency - Position  |
|---|-------------------------------------|---|
| Planner(s) or engineer(s) with knowledge of land development and land management practices                  | <input checked="" type="checkbox"/> | Public Works, Community Development, City Engineer and staff, Community Development director and staff                            |
| Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure | <input checked="" type="checkbox"/> | Public Works, Community Development, City Engineer and staff, Building Official, Plans Reviewer, Building Inspector, Fire Marshal |
| Planner(s) or engineer(s) with and understanding of natural and/or human-caused hazards                     | <input checked="" type="checkbox"/> | Public Works, City Engineer and staff   |
| Floodplain Manager  | <input checked="" type="checkbox"/> | Public Works, City Engineer and staff   |
| Surveyors   |                                     |   |
| Staff with education or expertise to assess the community's vulnerability to hazards                        | <input checked="" type="checkbox"/> | Public Works Dept., Police Dept., Sedona Fire District, City Manager  |
| Personnel skilled in GIS and/or HAZUS   | <input checked="" type="checkbox"/> | IS Division, GIS Analyst, Public Works – Civil Engineers  |
| Scientists familiar with the hazards of the community   |                                     |   |
| Emergency Manager   | <input checked="" type="checkbox"/> | Police Chief  |
| Grant writer(s)   |                                     |   |
| Others  |                                     |   |

**Table 6-3-10: Summary of fiscal capabilities for Sedona**

| Financial Resources                                  | Accessible or Eligible to Use (Yes, No, Don't Know) | Comments   |
|--|---|--|
| Community Development Block Grants                   | Yes   | Apply for CDBG every three years   |
| Capital Improvements Project funding                 | Yes   | Five year CIP Program  |
| Authority to levee taxes for specific purposes       | Yes   |  |
| Fees for water, sewer, gas, or electric service      | Yes   | Sewer fees only; no other utilities are owned by the City.                           |
| Impact fees for homebuyers or new developments/homes | Yes   | Storm Drainage, Transportation, Parks and Recreation, Police, and General Government |
| Incur debt through general obligation bonds          | Yes   |  |
| Incur debt through special tax bonds                 | Yes   |  |
| Other  |   |  |

| <b>Regulatory Tools for Hazard Mitigation</b> | <b>Description</b>  | <b>Responsible Department/Agency</b>  |
|---|---|---|
| CODES   | <ul style="list-style-type: none"> <li>Adopted August, 1999</li> </ul>  | <ul style="list-style-type: none"> <li>Board of Directors</li> <li>Planning</li> </ul>  |
| ORDINANCES                                    | <ul style="list-style-type: none"> <li>Ordinance No. 15, Land Use Zoning Ordinance for Economic Development (2000)</li> <li>Traffic regulation, adopted 1979 with amendments at later dates</li> </ul>  | <ul style="list-style-type: none"> <li>Board of Directors</li> <li>Planning</li> </ul>  |
| PLANS, MANUALS, and/or GUIDELINES             | <ul style="list-style-type: none"> <li>Yavapai-Prescott Indian Tribe Land Use Master Plan (1999)</li> <li>Multi-year Capital Improvement budget (annual)</li> <li>Emergency Response Plan (first completed in 2000 and updated annually)</li> <li>Emergency Operations Plan for Yavapai-Prescott Indian Tribe (2002)</li> <li>Yavapai-Prescott Indian Tribe Water Management Plan (1999)</li> <li>Wildland Fire Management Plan Yavapai-Prescott Indian Reservation (2003)</li> </ul> | <ul style="list-style-type: none"> <li>Board of Directors</li> <li>Planning</li> <li>Environmental Protection Program, Environmental Protection Specialist</li> </ul> |
| STUDIES                                       | <ul style="list-style-type: none"> <li>Yavapai-Prescott Indian Tribe Evacuation Route (2002)</li> <li>Hazardous Materials Sources on the Yavapai-Prescott Indian Tribe Reservation (1998)</li> </ul>  | <ul style="list-style-type: none"> <li>Board of Directors</li> <li>Environmental Protection Program</li> <li>Tribal Police Department</li> </ul>                      |

| <b>Staff/Personnel Resources</b>  | <input checked="" type="checkbox"/> | <b>Department/Agency - Position</b>  |
|---|-------------------------------------|--|
| Planner(s) or engineer(s) with knowledge of land development and land management practices                  | <input checked="" type="checkbox"/> | Planning Department – Planner, Environmental Protection Specialist, Housing Manager<br>Real Estate Department Manager                                      |
| Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure | <input checked="" type="checkbox"/> | Planning Department – Planner, Assistant Planner,<br>Construction Project Manager<br>Facilities – Facilities, Construction and Maintenance Mgrs            |
| Planner(s) or engineer(s) with and understanding of natural and/or human-caused hazards                     | <input checked="" type="checkbox"/> | Planning Dept – Planner, Environmental Protection Specialist<br>Police Chief<br>Environmental Health Department Specialist                                 |
| Floodplain Manager  | <input checked="" type="checkbox"/> | Environmental Health Department Specialist   |
| Staff with education or expertise to assess the community’s vulnerability to hazards                        |                                     | Planning Dept – Planner, Environmental Protection Specialist<br>Police Chief<br>Environmental Health Department Specialist<br>Cultural Department Director |
| Personnel skilled in GIS and/or HAZUS   | <input checked="" type="checkbox"/> | Planning Department – Planner<br>Environmental Protection Program – Environmental Protection Specialist/ Technician  |
| Scientists familiar with the hazards of the community   | <input checked="" type="checkbox"/> | Planning Dept – Planner, Environmental Protection Specialist<br>Environmental Health Department Specialist<br>Cultural Department Director                 |
| Emergency Manager   | <input checked="" type="checkbox"/> | TERC – Tribal President<br>Police Chief  |
| Grant writer(s)   | <input checked="" type="checkbox"/> | Grant Writer   |

**Table 6-3-11: Summary of fiscal capabilities for the Yavapai-Prescott Indian Tribe**

| <b>Financial Resources</b>                           | <b>Accessible or Eligible to Use (Yes, No, Don't Know)</b> | <b>Comments</b> |
|--|--|-----------------|
| Community Development Block Grants                   | Yes  |                 |
| Capital Improvements Project funding                 | Yes  |                 |
| Authority to levee taxes for specific purposes       | Yes  |                 |
| Fees for water, sewer, gas, or electric service      | No   |                 |
| Impact fees for homebuyers or new developments/homes | No   |                 |
| Incur debt through general obligation bonds          | Yes  |                 |
| Incur debt through special tax bonds                 | Yes  |                 |

The Yavapai-Prescott Indian Tribe’s financial resources for implementing previously identified mitigation actions have primarily come from their general revenue funds, bond funds, Indian Health Services funding and cooperative funding with Yavapai County Department of Transportation and AZ Department of Transportation dollars. Current financial sources available to the Tribe for hazard mitigation planning and projects include potential disaster and mitigation funds through FEMA (Public Assistance, HMGP and PDM funds), programs, casino and tribal enterprise revenues, and various departmental operation budgets. Other potential sources of funds may include the US Department of Interior (Bureau of Reclamation, Bureau of Indian Affairs, US Geological Survey, Bureau of Land Management), US Army Corps of Engineers, US Housing and Urban Development, US Department of Health and Human Services (Indian Health Service), and the US Department of Agriculture (US Forest Service, Natural Resources Conservation Service).

Table 6-4 summarizes tribal pre- and post-disaster hazard management that is currently accomplished through several Yavapai-Prescott Indian Tribe departments and programs.

**Table 6-4: Yavapai-Prescott Indian Tribe departments/entities with hazard mitigation responsibilities**

| <b>Department/Agency</b> | <b>Hazard Mitigation Activities</b>  |
|--------------------------|--|
| Tribal President         | Member of the TERC. Point of contact to Board of Directors and tribal community.   |
| Environmental Protection | Member of the Tribal Emergency Response Committee. Maintain and update Emergency Operations Plan. Perform fire and flood mitigation and prevention throughout the Reservation. |
| Police Department        | Member of the TERC. Maintain public safety and emergency response capabilities.  |
| Environmental Health     | Member of the TERC. Perform training, planning and health and safety of the community.   |
| Facilities Department    | Perform inspections to facilities prior to and after emergencies or disasters.   |

The pre-disaster policies will be strengthened with additional tribal policies prohibiting building in high hazard areas, and additional personnel have been given authority to enforce prohibition of development in these areas. Responsibility for assessing damage and determining post disaster reconstruction to reduce future hazard losses will be detailed in the tribal emergency response plan. Pre- and post-disaster capabilities will be improved with development of detailed pre-and post-disaster documents (Hazard Mitigation Plan and Emergency Operations Plan), and training for department directors on both plans. Tribal policies will become more stringent, with Tribal ordinances and adopted building codes prohibiting such development in hazard prone areas.

As Tables 6-1-11, 6-2-11, 6-3-11 and 6-4 indicate, the Yavapai-Prescott Indian Tribe has many good programs, policies and regulations in-place to provide for effective hazard mitigation. An evaluation of those capabilities was performed and the following mitigation related gaps and opportunities were identified:

- Need for increased understanding of available mitigation grant programs.
- Need for better floodplain hazard mapping across the Tribe.

Upon receipt of a presidential disaster declaration, the Tribe will work with FEMA to develop two post-disaster hazard management tools: a Public Assistance Administration Plan and a Hazard Mitigation Grant Program

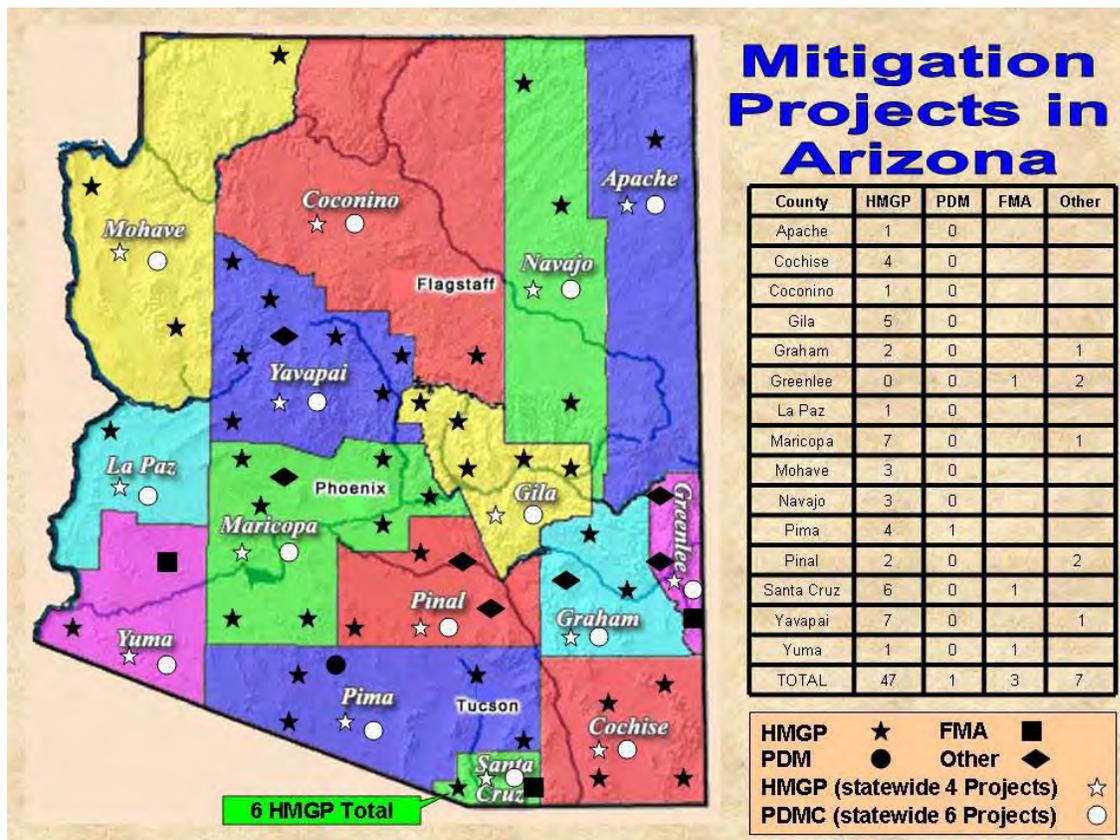
Administration Plan. Both plans will be used by the Tribe to identify their roles and responsibilities in administering the FEMA Public Assistance (PA) and Hazard Mitigation Grant Programs (HMGP) and to outline staffing requirements and the policies and procedures to be used. A result of developing these plans, as well as preparing this Plan, will be to further focus Tribal resources on the importance of hazard management and mitigation planning.

6.2.2 Previous Mitigation Activities

During the last planning cycle many mitigation activities have been accomplished by the jurisdictions within Yavapai County. Table 6-5 provides an updated summary, by jurisdiction, of recent mitigation activities performed over the last planning cycle or generally within the last five to ten years.

Yavapai County, the Cities of Cottonwood, Prescott and Sedona, and the Towns of Camp Verde and Jerome all received funding for a project through federal hazard mitigation grant money such as FMA, HMGP, or PDM. In 1979, the County received \$412,500 (total project cost of \$550,000) in HMGP funds from the 1978 flooding disaster (FEMA-570-DR) to relocate property owners in the Verde Lakes area. In 1998, Yavapai County, the Cities of Prescott and Cottonwood, and the Towns of Camp Verde and Jerome collectively received \$53,973 (\$71,964 total project cost) of HMGP funds from the 1993 flooding disaster (FEMA-977-DR) to develop flood mitigation plans for each jurisdiction. In 2001, Yavapai County received \$24,000 (\$32,000 total project cost) of HMGP funds from the 2000 Flood disaster (FEMA-1347-DR) to install upgrades to the county’s communications van. In 2007, the City of Sedona received \$16,800 (\$22,400 total project cost) in HMGP funds from the 2004-2005 winter storm disaster to construct a gabion bank-stabilization project to protect the banks at the Oak Creek crossing on Sycamore Road.

Figure 6-1 is depicts past federally funded mitigation projects in the State tracked by ADEM.



Source: ADEM, 2010

Figure 6-1: Past Mitigation Projects in Arizona

**YAVAPAI COUNTY  
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**

2011

| <b>Jurisdiction</b>                         | <b>Project Name</b>                   | <b>Project Description</b>  | <b>Project Cost</b> | <b>Funding Source</b>  | <b>Responsible Department</b>                      | <b>Completion Date</b>      |
|---|---------------------------------------|---|---------------------|------------------------|--|-----------------------------|
| Yavapai County                              | Partnership Projects                  | Annually the District partners with the Public Works Department to perform various drainage improvement projects throughout the County  | \$389,790           | Flood Control District | Public Works Department and Flood Control District | 6/30/2006 through 6/30/2010 |
| Yavapai County and Incorporated Communities | Intergovernmental Agreements          | Annually the District engages in IGA's with the incorporated communities of: Towns of Camp Verde, Chino Valley, Clarkdale, Prescott Valley, Cities of Cottonwood, Prescott, and the Yavapai County portion of Sedona for their continued drainage projects. | \$5,340,852         | Flood Control District | Flood Control District and Communities             | 6/30/2006 through 6/30/2010 |
| Yavapai County                              | Dry Creek Levee                       | Storm repair to levee (Sedona Area)   | \$4,425             | Flood Control District | Flood Control District                             | 6/30/2006                   |
| Yavapai County                              | Diamond Valley                        | Flood Damage mitigation Alberson Wash Coop with Public Works (Prescott Valley area)   | \$250,000           | Flood Control District | Flood Control District                             | 6/30/2007                   |
| Yavapai County                              | VOC – SR 179                          | Storm Drain – IGA with State of AZ (Sedona area)  | \$220,515           | Flood Control District | Flood Control District and ADOT                    |                             |
| Yavapai County                              | Wineglass Dam                         | Reconstruction of dam (Paulden area) – IGA with State Land and ADWR   | \$103,628           | Flood Control District | Flood Control District and State                   | 6/30/2006                   |
| Yavapai County                              | Big Springs Road                      | Low Water Crossing (Paulden Area)   | \$28,024            | Flood Control District | Flood Control District                             | 6/30/2006                   |
| Yavapai County                              | VOC – Devil's Kitchen                 | Devil's Kitchen Dr. and Merry Go Round Rock Rd. route storm water runoff into natural stream downstream of the roadway (Sedona area)  | \$132,000           | Flood Control District | Flood Control District Coop with Public Works      | 6/30/2007                   |
| Yavapai County                              | Cortez Dr                             | Low Water Crossing Improvement Project (Village of Oak Creek, Sedona Area)  | \$125,000           | Flood Control District | Flood Control District Coop with Public Works      | 6/30/2007                   |
| Yavapai County                              | Seligman                              | Drainage channel at outlet of ADOT box culvert under Old Route 66 in Seligman proper. Coop with Public Works.   | \$30,462            | Flood Control District | Flood Control District Coop with Public Works      | 6/30/2008                   |
| Yavapai County                              | VOC – Red Rock Cove                   | Red Rock Cove wash flood and erosion mitigation project. Coop with Public Works   | \$48,935            | Flood Control District | Flood Control District Coop with Public Works      | 6/30/2008                   |
| Yavapai County                              | Pioneer Park                          | Stormwater Quality Project – installation of a number of measures to improve the water quality and reduce discharge from the site. Grant from ADEQ and matching funds from the District   | \$481,320           | Flood Control District | Flood Control District with ADEQ and Public Works  | 6/30/2009                   |
| Yavapai County                              | Cordes Lakes                          | Drainage improvements – reconstruct channel, replace culverts, etc.   | \$82,845            | Flood Control District | Flood Control District                             | 6/30/2008                   |
| Camp Verde                                  | Fort River Caves Subdivision          | Repair and improve severely eroded drainage channel into Verde River caused by stormwater runoff  | \$5,000             | CIP                    | Public Works Department                            | October 2010                |
| Camp Verde                                  | Reddell Ranch Acres Subdivision       | Drainage Improvements to existing culverts  | \$7,000             | HURF                   | Public Works Department                            | March 2010                  |
| Camp Verde                                  | Annual maintenance to drainage basins | Cleaning, maintenance and repairs to drainage basins throughout the incorporated areas of the Town.   | \$28,000            | Budget                 | Public Works Department                            | FY 2010-2011                |

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| <b>Table 6-5: Previous mitigation activities for Yavapai County jurisdictions</b> |  |   |                               |                            |                               |                        |
|---|--|---|-------------------------------|----------------------------|-------------------------------|------------------------|
| <b>Jurisdiction</b>   | <b>Project Name</b>                              | <b>Project Description</b>  | <b>Project Cost</b>           | <b>Funding Source</b>      | <b>Responsible Department</b> | <b>Completion Date</b> |
| Camp Verde  | Verde Lakes Drive Culvert Mitigation             | Replace existing culverts for improved drainage and mitigation of roadway flooding that closes the main corridor to the Verde Lakes subdivision during storm events.<br><br>***A more comprehensive project would involve funding through HMGP to complete the culverts and a bridge.   | \$8,000<br><br>***\$2,500,000 | Town CIP                   | Public Works                  | FY 2012-2013           |
| Camp Verde  | Cliffs Parkway Drainage                          | The Cliffs Parkway/Finnie Flat Rd. Drainage Improvement Project is intended to mitigate flood hazards that are a result of the stormwater runoff from several residential subdivision and commercial developments located along the Cliffs Parkway and Finnie Flat Road corridors.  | \$1,800,000                   | Possible HMGP and Town CIP | Public Works                  | FY 2012-2013           |
| Camp Verde  | Salt Mine Road                                   | Stabilize earth on hillside next to Right of Way to prevent further hazardous conditions caused by mud slide onto the road  | \$15,000                      | HURF                       | Public Works                  | March 2010             |
| Clarkdale   | Planning Assistance for Rural Areas (PARA): 2010 | The PARA is a transportation study to forecast future conditions and infrastructure deficiencies of roadways and transit for the years 2015, 2020, and 2030, including: <ul style="list-style-type: none"> <li>• Inventory and evaluation of future land use patterns, travel and functional classification of roads, access management, and street conditions.</li> <li>• Inventory and evaluation of current and future levels of transit services.</li> <li>• Inventory and evaluation of current and future levels of multi-modal services.</li> <li>• Develop a planning tool for future needs of Clarkdale</li> <li>• Gather and compile information to be incorporated into the General Plan.</li> </ul> | \$125,000                     | ADOT                       | Public Works                  | January 2011           |
| Clarkdale   | Transportation Enhancement (TE21) (Local) - 2010 | Clarkdale Parkway Improvements include: <ul style="list-style-type: none"> <li>• 6' predestination pathway along Clarkdale Parkway from Eleventh Street to Hwy 89A, East side of the parkway</li> <li>• Bicycle lanes along Clarkdale Parkway from Eleventh Street to Hwy 89A, both sides of the parkway</li> </ul>   | \$494,799.                    | Grant                      | Public Works                  | 2011                   |
| Clarkdale   | Transportation Enhancement (TE21) (State)        | State Route Highway 89A Improvements include: <ul style="list-style-type: none"> <li>• Sidewalk from Clarkdale Parkway Roundabout to Lisa, Lincoln Roundabout</li> </ul>  | \$495,000                     | State                      | Public Works                  | 2011                   |

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**Table 6-5: Previous mitigation activities for Yavapai County jurisdictions**

| Jurisdiction | Project Name                                    | Project Description  | Project Cost | Funding Source | Responsible Department | Completion Date |
|--------------|---|--|--------------|----------------|------------------------|-----------------|
| Clarkdale    | Transportation Enhancement (ADOT, ARA) - 2010   | State Route Highway 89A Improvements include: <ul style="list-style-type: none"> <li>• Sidewalks both sides from Clarkdale Parkway Roundabout to Blackhills Roundabout</li> <li>• Bus Stop w/ shelters</li> <li>• Benches along sidewalks</li> </ul>   | \$1,300,000  | ADOT           | Public Works           | May 2011        |
| Clarkdale    | Safe Routes to School (SRTS) - 2010             | Main Street and 16 <sup>th</sup> Street Improvements include: <ul style="list-style-type: none"> <li>• Curb / Gutter and sidewalk along Main Street past 16<sup>th</sup> St.</li> <li>• Curb / Gutter and sidewalk along 16th Street from First South to the alley located between Main St and First North St.</li> <li>• Bicycle striping lane along Main Street from 16<sup>th</sup> street to 11<sup>th</sup> Street.</li> <li>• Improved handicap access at the intersection of Main Street and 16<sup>th</sup> Street.</li> </ul> | \$309,000    | Grant          | Public Works           | 2011            |
| Clarkdale    | Community Development Block Grant (CDBG) - 2010 | Broadway Road improvements include: <ul style="list-style-type: none"> <li>• Curb / Gutter and sidewalk from the Bitter Creek Bridge to Patio Park neighborhood</li> <li>• Improved road crosswalk at Bitter Creek Bridge</li> <li>• Solar Street Lighting (5)</li> <li>• Stop and Yield signage at Bitter Creek Bridge</li> </ul>   | \$365,000    | Grant          | Public Works           | 2012            |
| Clarkdale    | Surface Transportation Program (STP) - 2010     | Broadway Road and Main Street intersection improvements include: <ul style="list-style-type: none"> <li>• Development of a roundabout</li> <li>• Development of 2 slip lanes, Broadway Road onto Main Street from South to East and Broadway Road onto Main Street from North to West</li> <li>• Improved crosswalks, and signage</li> </ul>   | \$1,200,000  | Grant          | Public works           | 2011            |

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| <b>Table 6-5: Previous mitigation activities for Yavapai County jurisdictions</b> |  |   |                                   |                       |                               |                        |
|---|--|---|-----------------------------------|-----------------------|-------------------------------|------------------------|
| <b>Jurisdiction</b>   | <b>Project Name</b>                      | <b>Project Description</b>  | <b>Project Cost</b>               | <b>Funding Source</b> | <b>Responsible Department</b> | <b>Completion Date</b> |
| Clarkdale   | Yavapai County Flood Projects: 2009/2010 | <p>Flood Mitigation Projects:</p> <ul style="list-style-type: none"> <li>• Palisades Dr. &amp; Quail Run Ct. - Minor Project</li> <li>• Lanny Lane &amp; Lanny Ave. - Major Project</li> <li>• Deborah Dr. wash crossing - Major Project</li> <li>• Old Jerome &amp; Rogers Pl. / Sky Drive - Major Project</li> <li>• Luke Lane &amp; Broadway Road - Minor Project</li> <li>• Main Street &amp; 16<sup>th</sup> Street - Major Project</li> <li>• Rebuild Sky Drive retention ponds - Major Project</li> <li>• Park Rd. &amp; Western Ave. - Minor Project</li> <li>• Broadway Road at Town boundary - Minor Project</li> <li>• Cemetery drainage controls / ditches - Major Project</li> <li>• Town complex drainage - Minor Project</li> <li>• Sycamore Road drainage controls / ditches - Minor Project</li> <li>• Broadway Road &amp; Gerry Heights - Minor Project</li> <li>• Rincon Dr. &amp; Vista Ln - Minor Project</li> <li>• Deception Wash Crossing on Old Jerome Highway - Major Project</li> <li>• Intersection of Old Jerome Highway &amp; Minerrich Road - Major Project</li> </ul> <p>NOTE:<br/>Major Projects are driven by Historical Events<br/>Minor Projects are driven by local issues</p> | \$260,000                         | Yavapai County        | Public Works                  | 2009/2011              |
| Clarkdale   | Defensible Space                         | Church and Fire District together combined to mitigate fire hazard to historic building   | None                              | None                  | Church Fire District          | 2010                   |
| Clarkdale   | Tumbleweed Abatement                     | Fire District, Public Works, and Utility crew cleared tumbleweed around fire hydrants and utility boxes   | None                              | None                  | Fire District                 | 2010                   |
| Cottonwood  | SCADA Upgrade                            | Control and Monitoring system upgrade: Reduces Response time, improves system wide status verification  | \$300,000 5 years @ 60,000 a year | Capital Reserves      | Utilities Department          | Projected 2015         |
| Cottonwood  | System Interconnects                     | Allows transference of water between separate systems provides redundancy, reduces outage duration  | \$100,000 Year                    | Capital Reserves      | Utilities Department          | On Going               |
| Cottonwood  | Radio Upgrades                           | Enhanced handheld devices to improve communications and monitoring between departments  | \$6,000                           | Utilities             | Utilities Department          | 2011                   |
| Cottonwood  | Utility Building                         | New Utility building with improved SCADA monitoring and generator back-up power allows continued monitoring of operations during prolonged power outage   | \$850,000                         | Capital Purchase      | Utilities Department          | 2010                   |
| Cottonwood  | Employee Training                        | Expanded on-going training of Utility Maintenance Staff improves continuity of operations, post-disaster management awareness   | NA                                | NA                    | Utilities Department          | On Going               |
| Cottonwood  | Equipment Purchase                       | Acquisition of additional system maintenance equipment such as portable generators, pumps, lights, and vehicles. Improves redundancy, response times and ability to respond to multiple incidents   | \$50,000                          | Capital Reserves      | Utilities Department          | On Going               |

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| <b>Jurisdiction</b> | <b>Project Name</b>                                       | <b>Project Description</b>   | <b>Project Cost</b>             | <b>Funding Source</b>      | <b>Responsible Department</b>   | <b>Completion Date</b>                               |
|---------------------|---|--|---------------------------------|----------------------------|---|--|
| Cottonwood          | Wet Water Crossings                                       | Replace wet crossings with structures to allow uninterrupted traffic access during flood events on 6 <sup>th</sup> Street and Camino Real crossings  | \$350,000                       | Capital Reserves           | Public Works  | 2009   |
| Cottonwood          | Early Warning System                                      | Active early warning system for inclement weather and flooding conditions. Cooperative with Yavapai Co and NOAA  | \$75,000                        | Capital Reserves           | Police Department   | On Going   |
| Cottonwood          | Railroad Wash Channelization                              | Complete Channelization of Railroad Wash between State Route 89A to Beach Street to remove residential properties from floodplain  | \$100,000                       | Capital Reserves           | Public Works  | On Hold  |
| Dewey-Humboldt      | Antelope Meadows Commercial Center Drainage Modifications | Study historic, existing, and current drainage hydraulics and hydrology. Design drainage modification to alleviate downstream flooding.  | Unknown - \$9,500 spent to date | IGA through Yavapai County | Public Works / Engineering  | Not yet completed – awaiting stakeholder cooperation |
| Dewey-Humboldt      | Codes   | Adopt and enforce applicable codes.  | Unknown – Staff time            | Town general fund          | Public Works / Engineering / Code Enforcement / Community Outreach / Development Services | Ongoing  |
| Dewey-Humboldt      | NFIP  | Maintain compliance with the NFIP.   | Unknown – Staff time            | Town general fund          | Public Works / Engineering / Development Services   | Ongoing  |
| Prescott Valley     | Tani Drainage Flood Control Project                       | Constructed channel improvements and two 6'x3' box culverts at road crossings to protect residential area from flooding  | \$225,000                       |                            | Public Works  | 7/7/09   |
| Prescott Valley     | Windsong Drainage Flood Control Project                   | Constructed channel improvements, culverts and headwalls to protect residential area from flooding   | \$270,000                       |                            | Public Works  | 4/30/09  |
| Prescott Valley     | Glassford Hill Interceptor Channel                        | Constructed channel improvements to redirect floodwater around a residential area to alleviate residential flooding during major storm events.   | \$1.32 million                  |                            | Public Works  | 7/12/06  |
| Prescott Valley     | Mission Lane Drainage Flood Control Project               | Constructed flood control improvements to protect residential areas from flooding.   | \$1.5 million                   |                            | Public Works  | 3/13/07  |
| Prescott Valley     | Yavapai Drainage Flood Control Project                    | Constructed flood control improvements to protect residential areas from flooding.   | \$1.1 million                   |                            | Public Works  | 1/18/07  |
| Prescott Valley     | Mobile Emergency Operations/Command Center                | Obtained and equipped an alternate first response mobile Emergency Operations Center to be able to mitigate Hazardous Materials leaks and spills and other incidents.  |                                 |                            |   |  |
| Sedona              | Sedona Floodplain Ordinance                               | City Council adopted the Sedona Floodplain Ordinance on September 26, 2006. The ordinance incorporated Special Flood Hazard Areas (SFHA) delineated in the City of Sedona Floodplain Management Study as well as SFHA shown on the FEMA Flood Insurance Rate Maps. | N/A                             | N/A                        | Public Works. and Legal   | September 2006                                       |

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| <b>Table 6-5: Previous mitigation activities for Yavapai County jurisdictions</b> |                                |  |                     |  |   |                        |
|---|--------------------------------|--|---------------------|--|---|------------------------|
| <b>Jurisdiction</b>   | <b>Project Name</b>            | <b>Project Description</b>   | <b>Project Cost</b> | <b>Funding Source</b>                                | <b>Responsible Department</b>                                       | <b>Completion Date</b> |
| Sedona  | Early Warning Siren System     | The early warning siren system installation for Uptown and Oak Creek Canyon was completed on June 15, 2007. Signage throughout the canyon directs people to tune their radios to 92.9 FM for specific instructions. A total of nine sirens were installed, with the Southernmost siren located at the Arroyo Roble Resort and Northernmost siren located at Pine Flats.  | \$120,000           | 95K Fire Act Grant and \$25,000 Sedona Fire District | Sedona Fire District  | June 2007              |
| Sedona  | Doodlebug Low Water Crossing   | In July 2007, the City of Sedona Streets Maintenance Department, in coordination with Brewer Brothers Construction, completed a gabion bank-stabilization project to protect the banks at the Oak Creek crossing on Sycamore Road. The banks at this crossing have notoriously had washout problems during Oak Creek flooding.   | \$27,844            | 75 % HMGP and 25% City of Sedona                     | Sedona Streets Maintenance Department                               | July 2007              |
| Sedona  | CERT Training                  | Participation in the CERT Training through the SFD – More than 100 people have been certified in light search and rescue techniques, CPR, First Aide and disaster preparedness.  | N/A                 | N/A  | Sedona Fire District  | August 2007            |
| Sedona  | 179 Sewage Lift Station Gabion | The City of Sedona Engineering Dept, in coordination with Tiffany Construction, completed a gabion bank-stabilization project to protect the bank at the 179 Sewage Lift Station. The 179 Lift Station is responsible for pumping the sewage from most of the properties along Hwy. 179. This lift station was threatened of being undermined by the erosion process of Morgan Wash. The project also included raising the lift station equipment/controls to the Morgan Wash 100-year flood elevation.  | \$160,397           | City of Sedona                                       | Public Works  | August 2007            |
| Sedona  | La Marra Subdivision           | The Sedona Fire District now has an alternate route to the Village of Oak Creek. It passes through the La Marra Subdivision off Upper Red Rock Loop Road.  | Unknown             | Unknown  | Private Developer   | July 2008              |
| Sedona  | Fire Hydrant Installations     | 150 fire hydrants were installed within the City of Sedona between 2001 and 2008 as part of the Franchise Agreement that exists between the City, AZ Water Company, and the SFD. The goal of the SFD is to have a fire hydrant within 500 ft of every building within the City. As of 2008, the installation of approximately 150 more fire hydrants was needed in order to accomplish that goal. In 2009, 31 hydrants were installed as part of the SR 179 Project. In 2010, 13 hydrants were installed in the Western Hills area. The total still needed is 106. | \$970,000           | Arizona Water Company and City of Sedona             | City of Sedona, Arizona Water Company, and the Sedona Fire District | On-going               |
| Sedona  | SR 89A Variable Message Boards | A.D.O.T. installed two permanent variable message boards north of Sedona on SR 89A. One of the boards was installed near Lomacasi Cottages, and the other one was installed just south of Flagstaff.   | Unknown             | A.D.O.T.   | A.D.O.T.  | June 2009              |

**Table 6-5: Previous mitigation activities for Yavapai County jurisdictions**

| Jurisdiction | Project Name                                    | Project Description   | Project Cost | Funding Source | Responsible Department | Completion Date |
|--------------|---|---|--------------|----------------|------------------------|-----------------|
| Sedona       | Harmony Windsong Drainage Project               | The Harmony/Windsong Drainage Project, Phase I of multiple phases. This phase was for drainage improvements from the north side of SR 89A to a point just east of the Navajo Dr./Aria St. intersection. This design was based on the 2005 Sedona Stormwater Master Plan, and has capacity for a 25-year storm event.  | \$1,704,583  | City of Sedona | Public Works           | July 2010       |
| Sedona       | Chapel Area Sanitary Sewer and Drainage Project | The sewer portion of the project included installation of mainline and 379 new service laterals to individual parcels. The storm drain portion was for improvements based on the 2005 Sedona Stormwater Master Plan, and to allow capacity for a 25-year storm event.   | \$10,184,008 | City of Sedona | Public Works           | August 2010     |
| Sedona       | SR 179 Project                                  | All of the utilities: sewer main, high pressure gas main, water main, and communications were placed on the new pedestrian bridge over Oak Creek. These utilities are much better protected from the effects of floodwaters than they were in their past configuration on the old vehicular bridge.   | Unknown      | A.D.O.T.       | A.D.O.T.               | December 2009   |
| Sedona       | Three Majors                                    | The City of Sedona Public Works Engineering Dept has been working with Fann Construction to install 11,280-gallon bypass wet wells at the three major sewage pump stations. The bypass wet wells will allow for preventative maintenance on the primary wet wells, as well as, additional capacity during emergency situations. All three of the new bypass wet wells were operational as of February 2009. This project is scheduled for completion in January 2011. | \$8,700,000  | City of Sedona | Public Works           | January 2011    |

6.2.3 *National Flood Insurance Program Participation*

Participation in the NFIP is a key element of any community’s local floodplain management and flood mitigation strategy. Yavapai County and all incorporated jurisdictions other than Jerome, participate in the NFIP. Joining the NFIP requires the adoption of a floodplain management ordinance that requires jurisdictions to follow established minimum standards set forth by FEMA and the State of Arizona, when developing in the floodplain. These standards require that all new buildings and substantial improvements to existing buildings will be protected from damage by the 100-year flood, and that new floodplain development will not aggravate existing flood problems or increase damage to other properties. As a participant in the NFIP, communities also benefit from having Flood Insurance Rate Maps (FIRM) that map identified flood hazard areas and can be used to assess flood hazard risk, regulate construction practices and set flood insurance rates. FIRMs are also an important source of information to educate residents, government officials and the private sector about the likelihood of flooding in their community. Table 6-6 summarizes the NFIP status and statistics for each of the jurisdictions participating in this Plan.

| <b>Table 6-6: NFIP status and statistics for Yavapai County and participating jurisdictions as of August 31, 2010</b>  |                                       |                        |                                   |                           |                                       |   |
|--|---------------------------------------|------------------------|-----------------------------------|---------------------------|---------------------------------------|---|
| <b>Jurisdiction</b>  | <b>Community ID</b>                   | <b>NFIP Entry Date</b> | <b>Current Effective Map Date</b> | <b>Number of Policies</b> | <b>Amount of Coverage (x \$1,000)</b> | <b>Floodplain Management Role</b>   |
| Yavapai County   | 040093                                | 9/18/1985              | 9/3/2010                          | 952                       | \$197,890                             | Provides floodplain management for the Unincorporated County, Camp Verde, Clarkdale, Dewey-Humboldt, and Sedona |
| Camp Verde   | 040131                                | 12/30/1988             | 9/3/2010                          | 282                       | \$58,921                              | Town will do an initial review with ultimate floodplain management provided by Yavapai County                   |
| Chino Valley   | 040094                                | 9/1/1981               | 9/3/2010                          | 27                        | \$6,377                               | Floodplain management provided by Town staff.   |
| Clarkdale  | 040095                                | 9/1/1981               | 9/3/2010                          | 24                        | \$5,117                               | Town will do an initial review with ultimate floodplain management provided by Yavapai County                   |
| Cottonwood   | 040096                                | 9/16/1981              | 9/3/2010                          | 79                        | \$16,518                              | Floodplain management provided by City staff.   |
| Dewey-Humboldt   | 040061                                | 4/11/2008              | 9/3/2010                          | 0                         | \$0                                   | Town will do an initial review with ultimate floodplain management provided by Yavapai County                   |
| Jerome   | Not a participant in the NFIP Program |                        |                                   |                           |                                       |   |
| Prescott   | 040098                                | 2/2/1977               | 9/3/2010                          | 351                       | \$74,928                              | Floodplain management provided by City staff.   |
| Prescott Valley  | 040121                                | 8/16/1982              | 9/3/2010                          | 48                        | \$12,040                              | Floodplain management provided by Town staff.   |
| Sedona   | 040130                                | 12/30/1988             | 9/3/2010                          | 104                       | \$24,877                              | City will do an initial review with ultimate floodplain management provided by Yavapai County                   |
| Source: <a href="http://bsa.nfipstat.com/reports/1011.htm">http://bsa.nfipstat.com/reports/1011.htm</a> (8/31/2010); FEMA Community Status Report in NFIP (2/3/2009) |                                       |                        |                                   |                           |                                       |   |

**6.3 Mitigation Actions/Projects and Implementation Strategy**

Mitigation actions/projects (A/P) are those activities identified by a jurisdiction, that when implemented, will have the effect of reducing the community’s exposure and risk to the particular hazard or hazards being mitigated. The implementation strategy addresses the “how, when, and by whom?” questions related to implementing an identified A/P.

The process for defining the list of mitigation A/Ps for the Plan was accomplished in three steps. First, an assessment of the actions and projects specified in Section 5 of the 2006 Plan was performed, wherein each jurisdiction reviewed and evaluated their jurisdiction specific list. Second, a new list of A/Ps for the Plan was developed by combining the carry forward results from the assessment with new A/Ps. Third, an implementation strategy for the combined list of A/Ps was formulated. Details of each step and the results of the process are summarized in the following sections.

*6.3.1 Previous Mitigation Actions/Projects Assessment*

The Planning Team and Local Planning Team for each jurisdiction reviewed and assessed the actions and projects listed in Tables 5-5 and 5-6 of their corresponding 2006 Plans. The assessment included evaluating and classifying each of the previously identified A/Ps based on the following criteria:

| <i>STATUS</i>        |  | <i>DISPOSITION</i> |                          |
|----------------------|--|--------------------|--------------------------|
| Classification       | Explanation Requirement:                                     | Classification     | Explanation Requirement: |
| <b>“No Action”</b>   | Reason for no progress                                       | <b>“Keep”</b>      | None required            |
| <b>“In Progress”</b> | What progress has been made                                  | <b>“Revise”</b>    | Revised components       |
| <b>“Complete”</b>    | Date of completion and final cost of project (if applicable) | <b>“Delete”</b>    | Reason(s) for exclusion. |

Any A/P with a disposition classification of “Keep” or “Revise” was carried forward to become part of the A/P list for the Plan. All A/Ps identified for deletion were removed and are not included in this Plan. The results of the assessment for each of the 2006 Plan A/Ps are summarized by jurisdiction in Tables 6-7-1 through 6-7-10. It is noted that there is no Table 6-6-xx provided for the Yavapai-Prescott Indian Tribe, as this is their first mitigation plan and there are no previous A/Ps to evaluate.

| <b>Table 6-7-1<br/>Yavapai County assessment of previous plan cycle mitigation actions/projects</b> |   |  |   |               |                    |  |
|---|---|--|---|---------------|--------------------|--|
| <b>ID</b>   | <b>Name</b>   | <b>Description</b>   | <b>Lead Agency<br/>Proposed Cost<br/>Proposed Comp Date</b>   | <b>Status</b> | <b>Disposition</b> | <b>Explanation</b>   |
| 7.A.1   | High Wind Damage Video                                | Produce a video for local cable airing discussing the dangers and losses that occur due to high wind events to protect existing and future buildings and infrastructure.   | <ul style="list-style-type: none"> <li>• Yavapai Co EM</li> <li>• \$12,000</li> <li>• May 2006</li> </ul>                           | No Action     | Delete             | Funding did not become available.  |
| 9.C.1   | Collaborative Transportation Accident Mitigation Plan | Develop a plan to mitigate the length of transportation delays and the secondary effects of a transportation accident, Including hypothermia, dehydration, carbon monoxide poisoning, road rage and other accidents. | <ul style="list-style-type: none"> <li>• Yavapai Co EM</li> <li>• \$25,000</li> <li>• December 2006</li> </ul>                      | No Action     | Delete             | DPS revised their procedures for accident investigation, greatly reducing the backups and associated problems, thereby making the proposed plan unnecessary. |
| 5.B.1   | Lynx Creek Channelization                             | Proposed channelization of Lynx Creek downstream of SR 69 through Fain Rd bridge. Channel will contain 100-year flood flows with gabion bank stabilization. Local asset exposure of approximately \$5 million.       | <ul style="list-style-type: none"> <li>• Yavapai Co Flood Control District</li> <li>• \$2,200,000</li> <li>• April 2007</li> </ul>  | In Progress   | Keep               | Environmental Permitting Complete, Project on hold for funding   |
| 5.B.2   | Beaver Creek Channel Restoration                      | Channel bank restoration to prevent ongoing erosion hazard to protect existing and future buildings and infrastructure.  | <ul style="list-style-type: none"> <li>• Yavapai Co Flood Control District</li> <li>• \$100,000</li> <li>• June 2007</li> </ul>     | In Progress   | Keep               | Environmental Permitting Delay   |
| 7.B.1   | High Wind Safety Actions Video                        | Produce a video for local cable airing discussing the safety actions and precautions to take before/during high wind events.   | <ul style="list-style-type: none"> <li>• Yavapai County Emergency Management</li> <li>• \$12,000</li> <li>• May 2006</li> </ul>     | No Action     | Delete             | Funding not available  |
| 5.G.1   | Flood Hazard Mapping                                  | Identify and map new flood hazard areas and update existing mapping in accordance with FEMA requirements to protect existing and future buildings and infrastructure from flood hazards.                             | <ul style="list-style-type: none"> <li>• Yavapai County Flood Control District</li> <li>• \$1,000,000</li> <li>• Ongoing</li> </ul> | In Progress   | Keep               | Many flood hazard area studies have been completed or are in various stages of completion.   |

**Table 6-7-1  
Yavapai County assessment of previous plan cycle mitigation actions/projects**

| <b>ID</b>      | <b>Name</b>   | <b>Description</b>  | <b>Lead Agency<br/>Proposed Cost<br/>Proposed Comp Date</b>  | <b>Status</b> | <b>Disposition</b> | <b>Explanation</b>  |
|----------------|---|---|--|---------------|--------------------|---|
| 5.A.1<br>(3.A) | Flood Warning System  | Install additional in stream, weather, and precipitation gauges in watersheds impacting Yavapai County. To include website development and remote dial-up for public agencies.            | <ul style="list-style-type: none"> <li>• Yavapai County Flood Control District</li> <li>• \$500,000</li> <li>• Ongoing</li> </ul>    | In Progress   | Keep               | Gauges continue to be added to the County system. Website development is ongoing  |
| 5.A.2<br>(1.A) | Flood Damage Prevention, Drainage Criteria Ordinance and Stormwater Management Plan | Amend ordinances to prevent flood damage and water quality degradation and to protect existing and future buildings and infrastructure.   | <ul style="list-style-type: none"> <li>• Yavapai Co Flood Control District</li> <li>• \$150,000</li> <li>• June 2006</li> </ul>      | In Progress   | Keep               | The Flood Damage Prevention Ordinance was updated in 2006, the Drainage Criteria Manual is currently being reviewed for potential revision, the Stormwater Management Plan is ongoing with the state. |
| 10.A.1         | Groundwater Identification and Conservation   | Establish the extent of available groundwater and coordinate growth in accordance with defined water resources. Apply water allocation/budgeting as a growth management tool County wide. | <ul style="list-style-type: none"> <li>• Federal, State, Yavapai County</li> <li>• \$10,000,000</li> <li>• Ongoing</li> </ul>        | Ongoing       | Keep               | The economy of the past several years has thwarted this initiative. A re-emphasis will be forthcoming once fiscal resources become available.   |
| 3.A.2<br>(4.A) | Public Safety Information Network   | Enhance communications and database information capabilities among public safety agencies (to include police, fire, ems, etc.) to provide for advanced intelligence sharing.              | <ul style="list-style-type: none"> <li>• Sedona Fire, Central Yavapai Fire and DPS</li> <li>• \$3,500,000</li> <li>• 2009</li> </ul> | Ongoing       | Keep               | This is an extensive, long term project.  |
| 10.B.1         | County Building Security Project  | Provide security to Yavapai County Complex Buildings against civil disturbance and terrorism.   | <ul style="list-style-type: none"> <li>• Yavapai County</li> <li>• \$900,000</li> <li>• 2010</li> </ul>                              | Ongoing       | Keep               | YCSO partially complete, funding will need to be identified for all other county facilities.  |
| 3.B.1          | Alternate County Emergency Operations Center  | Design, development and equipment of an alternate County EOC in Chino Valley.   | <ul style="list-style-type: none"> <li>• Yavapai EM and Town of Chino Valley</li> <li>• \$145,000</li> <li>• 2007</li> </ul>         | Complete      | Delete             | The EOC structure was identified, all equipment has been purchased and is in place. The EOC is operational.   |

**Table 6-7-1**  
**Yavapai County assessment of previous plan cycle mitigation actions/projects**

| <b>ID</b>   | <b>Name</b>                            | <b>Description</b>  | <ul style="list-style-type: none"> <li>• <b>Lead Agency</b></li> <li>• <b>Proposed Cost</b></li> <li>• <b>Proposed Comp Date</b></li> </ul> | <b>Status</b> | <b>Disposition</b> | <b>Explanation</b>  |
|-------------|--|---|---|---------------|--------------------|---|
| 3.C.1       | First Responder Training and Equipment | Through advanced training and use of equipment first responders are better able to identify hazards and protect the public.   | <ul style="list-style-type: none"> <li>• Yavapai EM</li> <li>• \$400,000</li> <li>• 2010</li> </ul>   | Complete      | Delete             | Funding sources were identified. Equipment has been purchased and training completed. The responders are using advanced equipment and techniques. |
| 6.D.2 (2.A) | Neighborhood Wildfire Assessment       | Develop neighborhood wildfire assessment and rank at-risk neighborhoods with the goal to provide accurate wildfire information to residents and motivate them to implement personal and neighborhood mitigation measures. | <ul style="list-style-type: none"> <li>• PAWUIC</li> <li>• \$150,000</li> <li>• Ongoing</li> </ul>  | Ongoing       | Keep               | Significant progress has been achieved. Most HOA's and communities are on board.  |
| 6.B.2       | Regional Fuels Crew                    | Support two full-time crews dedicated to hazard fuel reduction, fire suppression, and public education in the Prescott Basin and surrounding areas.   | <ul style="list-style-type: none"> <li>• Prescott Fire and PAWUIC</li> <li>• \$750,000</li> <li>• Ongoing</li> </ul>                        | Ongoing       | Keep               | Grants continue to support the crews and other defensible space initiatives.  |
| 6.B.3       | County Fuels Crew                      | Support part-time road crew to perform roadside hazard fuel reduction along County roads in the interface.  | <ul style="list-style-type: none"> <li>• Yavapai Co and PAWUIC</li> <li>• \$150,000</li> <li>• Ongoing</li> </ul>                           | Ongoing       | Keep               | Grants and county funding will enable this operation to continue.   |
| 6.B.4 (2.A) | Fire Wise Community Programs           | Develop Fire Wise programs for all communities, neighborhoods and home owners associations within the wildland fire/urban interface including instruction materials & facilitating partnerships with insurance agencies.  | <ul style="list-style-type: none"> <li>• PAWUIC</li> <li>• \$30,000</li> <li>• Ongoing</li> </ul>   | Ongoing       | Keep               | 8 communities having attained national Firewise status and several others in application process  |
| 10.B.2      | Ensure Potable Water Supply            | Procure portable, mobile water purification systems for emergency drinking water supply as mandated by Homeland Security.   | <ul style="list-style-type: none"> <li>• Yavapai Co EM</li> <li>• \$130,000</li> <li>• December 2006</li> </ul>                             | Complete      | Delete             | 26 Mobile, portable purification systems were purchased and distributed to all jurisdictions.   |

**Table 6-7-1**  
**Yavapai County assessment of previous plan cycle mitigation actions/projects**

| <b>ID</b>   | <b>Name</b>                                  | <b>Description</b>  | <ul style="list-style-type: none"> <li>• <b>Lead Agency</b></li> <li>• <b>Proposed Cost</b></li> <li>• <b>Proposed Comp Date</b></li> </ul>            | <b>Status</b> | <b>Disposition</b> | <b>Explanation</b>  |
|-------------|--|---|--|---------------|--------------------|---|
| 3.A.1       | Reverse 911 System                           | Purchase and implement Reverse 911 system out of Prescott Police / Sheriff / Fire Dispatch Center to warn public of emergency situations. A second system will be implemented out of Sedona Fire Dispatch Center. | <ul style="list-style-type: none"> <li>• Prescott Police and Sedona Fire</li> <li>• \$260,000</li> <li>• December 2006</li> </ul>                      | Complete      | Delete             | Two systems have been purchase, installed and are operational. One, county-wide system resides with the Sheriff the other with Prescott PD. |
| 6.D.1 (2.A) | Wildfire Public Education Activities         | Continue and expand Town Hall style meeting to include annual expo and continuation and expansion of the regional alert website to protect existing and future buildings and infrastructure. Over ten years.      | <ul style="list-style-type: none"> <li>• Prescott Area Wildland/Urban Interface Commission (PAWUIC)</li> <li>• \$250,000</li> <li>• Ongoing</li> </ul> | Ongoing       | Keep               | Annual EXPO's are held and draw increasingly large audiences. The website now belongs to YCEM.  |
| 6.F.1       | Small Diameter Wood Business Recruitment     | Partnership between PAWUIC and development agencies to conduct outreach and attract sustainable, small-diameter wood-based businesses into the area.  | <ul style="list-style-type: none"> <li>• PAWUIC</li> <li>• \$75,000</li> <li>• Ongoing</li> </ul>  | Ongoing       | Keep               | ARRA Grants, Drake and the proposed pellet plant have provided a great start. Efforts will continue.  |
| 6.B.1       | County Wildland Mapping for State GIS        | Establish and maintain a County component of the state GIS mapping system documenting forest treatments, hazard data, grants, etc.  | <ul style="list-style-type: none"> <li>• County Assessors and PAWUIC</li> <li>• \$250,000</li> <li>• Ongoing</li> </ul>                                | Ongoing       | Keep               | Partially complete, new systems will allow for continued progress.  |
| 6.A.1       | Yavapai Communities Wildfire Protection Plan | Develop comprehensive communities planning and prioritization for wildfire fuels reduction and defensible space to protect existing and future buildings and infrastructure from wildfire hazards.                | <ul style="list-style-type: none"> <li>• Yavapai Co EM, Assessors Office and PAWUIC</li> <li>• \$100,000</li> <li>• 2012</li> </ul>                    | Complete      | Delete             | An updated version of the YCWPP which includes the entire county was completed October 2010.  |
| 6.B.4       | Boundary Project                             | Develop a 270 degree defensible wildfire boundary around interface immediately to the south of the City of Prescott.  | <ul style="list-style-type: none"> <li>• Prescott National Forest</li> <li>• \$10,000,000</li> <li>• 2013</li> </ul>                                   | Ongoing       | Keep               | Work continues on the project and is 75% complete.  |

**Table 6-7-1**  
**Yavapai County assessment of previous plan cycle mitigation actions/projects**

| <b>ID</b> | <b>Name</b>                                 | <b>Description</b>  | <b>Lead Agency<br/>Proposed Cost<br/>Proposed Comp Date</b>  | <b>Status</b> | <b>Disposition</b> | <b>Explanation</b>   |
|-----------|---|---|--|---------------|--------------------|--|
| 10.A.2    | Urban Search and Rescue Team Project        | Develop urban search and technical rescue capability in the County through training and procurement of specialized equipment.   | <ul style="list-style-type: none"> <li>• Prescott, Chino Valley, and Sedona Fire Departments</li> <li>• \$750,000</li> <li>• 2008</li> </ul> | Ongoing       | Keep               | Aspects of technical rescue have been introduced into a number of agencies along with specialized equipment.   |
| 10.B.1    | Ensure Water Quality                        | Protect water quality from contamination through development of household hazardous waste programs over ten years.  | <ul style="list-style-type: none"> <li>• Yavapai Co</li> <li>• \$2,500,000</li> <li>• Ongoing</li> </ul>                                     | No Action     | Keep               | The economy's fiscal limitations have stalled progress here. As the situation improves, this should once again gain momentum.                              |
| 8.B.1     | Personal Protection and Detection Equipment | Identify and purchase first responder advanced technology personal protection and detection equipment for chemical and biological incidents.  | <ul style="list-style-type: none"> <li>• Yavapai Co EM</li> <li>• \$650,000</li> <li>• 2008</li> </ul>                                       | Ongoing       | Keep               | Equipment has been purchased, however, advances continue to emerge. Subsequent purchases will be made.   |
| 3.B.2     | Community Emergency Response Team Program   | Citizen disaster training to form neighborhood teams as interim first responders in wide spread disasters or events where communities and neighborhoods are isolated. Ten year program. | <ul style="list-style-type: none"> <li>• Yavapai Co EM</li> <li>• \$300,000</li> <li>• Ongoing</li> </ul>                                    | Ongoing       | Keep               | This program will continue as long as the training is available.   |
| 5.F.1     | Repetitive Flood Loss Properties            | Inform and coordinate property owners to flood mitigation programs such as retrofit and/or property acquisition.  | <ul style="list-style-type: none"> <li>• Yavapai Co Flood Control District</li> <li>• \$5,000,000</li> <li>• Ongoing</li> </ul>              | In Progress   | Keep               | We have acquired one repetitive loss property for demolition and continue to annually inform and educate repetitive loss property owners of their options. |

**Table 6-7-2**  
**Camp Verde assessment of previous plan cycle mitigation actions/projects**

| <b>ID</b> | <b>Name</b>                        | <b>Description</b>  | <ul style="list-style-type: none"> <li>• <b>Lead Agency</b></li> <li>• <b>Proposed Cost</b></li> <li>• <b>Proposed Comp Date</b></li> </ul> | <b>Status</b>         | <b>Disposition</b> | <b>Explanation</b>   |
|-----------|------------------------------------|---|---|-----------------------|--------------------|--|
| 7.A.1     | Enforce Current Building Codes     | Continue to enforce building codes to mitigate against high wind damage to protect existing and future buildings and infrastructure from wind damage and other natural and human-caused disasters. 5 year cost. | <ul style="list-style-type: none"> <li>• Camp Verde Community Development</li> <li>• \$220,000</li> <li>• Ongoing</li> </ul>                | Completed In progress | Keep               | In 2009 the Town adopted 2006 IBC and IRC Building Codes; updating from the 2003 codes. Will continue to enforce building codes and provide inspections to ensure. |
| 3.A.1     | Reverse 911 System                 | Purchase and implement Reverse 911 system out of Camp Verde Police / Camp Verde/Sedona Fire Dispatch Center to warn public of emergency situations.   | <ul style="list-style-type: none"> <li>• Camp Verde E911 Communications Center</li> <li>• \$260,000</li> <li>• 2010</li> </ul>              | In progress           | Keep               | Seeking funding; funds unavailable due to economic climate.  |
| 9.B.1     | Variable Message Signs             | Acquire two variable message signs for traffic control to mitigate transportation accident potential.   | <ul style="list-style-type: none"> <li>• Camp Verde Streets Department</li> <li>• \$20,000</li> <li>• 2010</li> </ul>                       | In progress           | Keep               | Current budgets are not adequate to fund at this time; staff has researched costs and designs for signage; acquisition is accounted for in long-range planning     |
| 10.B.1    | Emergency Evacuation Route Signs   | Acquire and install Emergency Evacuation Route Signs along several routes.  | <ul style="list-style-type: none"> <li>• Camp Verde Streets Department</li> <li>• \$5,000</li> <li>• 2010</li> </ul>                        | Complete              | Delete             | Staff has purchased signs.   |
| 6.E.2     | Update Weed Abatement Code         | Revise weed abatement ordinance to include wildfire defensible space to protect existing and future buildings and infrastructure from wildfire hazards.   | <ul style="list-style-type: none"> <li>• Camp Verde Community Development</li> <li>• \$15,000</li> <li>• Ongoing</li> </ul>                 | In progress           | Keep               | Currently being reviewed by consultants (Dava & Associates) as part of Zoning Code update; to be adopted in early 2010.  |
| 9.A.1     | Develop Transportation Master Plan | Hire a consultant or develop a Town transportation engineer to develop a Transportation Master Plan to identify transportation hazards in the community.  | <ul style="list-style-type: none"> <li>• Camp Verde Community Development</li> <li>• \$200,000</li> <li>• 2010</li> </ul>                   | Complete              | Delete             | Small Area Transportation Study completed by consultants Jacobs which identified transportation hazards and mitigation remedies; completed September 2009.         |

**Table 6-7-2**  
**Camp Verde assessment of previous plan cycle mitigation actions/projects**

| ID     | Name  | Description   | <ul style="list-style-type: none"> <li>• Lead Agency</li> <li>• Proposed Cost</li> <li>• Proposed Comp Date</li> </ul>                        | Status               | Disposition | Explanation   |
|--------|---|---|---|----------------------|-------------|---|
| 5.A.1  | Update Stormwater Master Plan                         | Hire a consultant or develop a Town stormwater engineer to develop a Stormwater Master Plan to identify flooding hazards in the community.                | <ul style="list-style-type: none"> <li>• Camp Verde Community Development</li> <li>• \$200,000</li> <li>• 2010</li> </ul>                     | In progress          | Revise      | Stormwater Master Plan was updated in 2007; as budget permits, plans are to hire an engineer that will devote a portion of their time to stormwater and flooding hazards. Currently Yavapai Co. Flood Control and FEMA are excellent resources. |
| 8.B.1  | Personal Protection and Detection Equipment           | Identify and purchase first responder advanced technology personal protection and detection equipment for chemical and biological incidents. 5 year cost. | <ul style="list-style-type: none"> <li>• Camp Verde Fire District</li> <li>• \$1,000,000</li> <li>• 2010</li> </ul>                           | Complete In progress | Keep        | Have obtained hazmat technical vehicle and equipment including monitors and personal protection.  |
| 8.A.1  | First Responder and Technician Training and Equipment | Through advanced training and use of equipment first responders are better able to identify hazards and protect the public.                               | <ul style="list-style-type: none"> <li>• Camp Verde Fire District</li> <li>• \$420,000</li> <li>• 2010</li> </ul>                             | Complete In progress | Keep        | Hazmat technicians continually train to maintain ceu's and stay abreast of response practices and technology.   |
| 7.B.2  | Uninterrupted Power System for Traffic Signals        | Install battery backup power systems at major traffic intersections.  | <ul style="list-style-type: none"> <li>• Camp Verde Streets Department</li> <li>• \$150,000</li> <li>• 2010</li> </ul>                        | In progress          | Keep        | Quotes for different options will be obtained so that the purchase of backup power can be planned for in future budgets.  |
| 10.A.1 | Portable Repeater                                     | Acquire portable repeater for emergency communications in the event of site repeater damage.  | <ul style="list-style-type: none"> <li>• Camp Verde Marshal's Office</li> <li>• \$50,000</li> <li>• 2010</li> </ul>                           | No action            | Delete      | Will not be acquiring portable repeater.  |
| 2.A.1  | CERT Program  | Civilian Emergency Response Team. Train and educate public on basic first response capabilities. 5 year cost.   | <ul style="list-style-type: none"> <li>• Camp Verde Marshal's Office /Camp Verde Fire District</li> <li>• \$10,000</li> <li>• 2010</li> </ul> | Complete             | Delete      | Training provided by Yavapai Co EM and completed in early 2010.   |

**Table 6-7-2**  
**Camp Verde assessment of previous plan cycle mitigation actions/projects**

| ID    | Name                                    | Description  | <ul style="list-style-type: none"> <li>• Lead Agency</li> <li>• Proposed Cost</li> <li>• Proposed Comp Date</li> </ul> | Status      | Disposition | Explanation  |
|-------|---|--|--|-------------|-------------|--|
| 6.E.1 | Develop Fire Code IGA                   | Develop an IGA with the Camp Verde Fire District to enforce the current Fire Code adopted by the Town. Conduct public election within the Fire District to adopt Fire Code. Hire Fire Marshall/inspector to enforce the code. 5 year cost. | <ul style="list-style-type: none"> <li>• Camp Verde Fire District</li> <li>• \$250,000</li> <li>• 2006</li> </ul>      | Complete    | Delete      | Approved Intergovernmental Agreement on 5/23/2010 between the Town of Camp Verde and the Camp Verde Fire District to have the Fire Inspector review plans and ensure compliance with the International Fire Codes. |
| 6.C.1 | Fire Protection Water Source            | Town to work with private water companies to establish adequate water sources for fire protection by establishing a reservoir and/or fire hydrants.  | <ul style="list-style-type: none"> <li>• Town of Camp Verde</li> <li>• \$1,000,000</li> <li>• 2010</li> </ul>          | No Action   | Delete      | Due to economic climate, funding is not available at this time for such an undertaking.  |
| 5.B.1 | Flood Prone Property Acquisition        | Inform and coordinate property owners to flood mitigation programs such as retrofit and/or property acquisition in Verde Lakes area including Verde Lakes Drive/Clear Creek Restoration.   | <ul style="list-style-type: none"> <li>• Town of Camp Verde</li> <li>• \$1,500,000</li> <li>• Ongoing</li> </ul>       | In progress | Keep        | The Town has acquired 135 properties; properties were donated to the Town.   |
| 5.B.2 | Middle Verde Area Drainage Improvements | Channelization of Middle Verde area with box culverts, retention/detention basins to remove several homes from the floodplain as reported in the Middle Verde Area Drainage Evaluation by the USACE.                                       | <ul style="list-style-type: none"> <li>• Town of Camp Verde</li> <li>• \$2,000,000</li> <li>• Undetermined</li> </ul>  | In progress | Keep        | Enlarging box culverts to mitigate flooding; Phase 1) Design Engineering and construction plans, Phase 2) Budgeting and grant submittal  |

**Table 6-7-3**  
**Chino Valley assessment of previous plan cycle mitigation actions/projects**

| <b>ID</b> | <b>Name</b>                                 | <b>Description</b>  | <ul style="list-style-type: none"> <li>• <b>Lead Agency</b></li> <li>• <b>Proposed Cost</b></li> <li>• <b>Proposed Comp Date</b></li> </ul>                                 | <b>Status</b> | <b>Disposition</b> | <b>Explanation</b>  |
|-----------|---|---|---|---------------|--------------------|---|
| 8.B.1     | Personal Protection and Detection Equipment | Identify and purchase first responder advanced technology personal protection and detection equipment for chemical and biological incidents including personnel training. 5 year cost.  | <ul style="list-style-type: none"> <li>• Chino Valley Police Department</li> <li>• \$1,000,000</li> <li>• Undetermined</li> </ul>   | In Progress   | Keep               | Continue to Supply Equipment to officers on and as needed basis |
| 5.B.4     | Road 3 North and Voss Drive Drainage        | Install box culverts to convey sheet flow across Road 3 North with Retention/Detention basins southwest of Voss Drive.  | <ul style="list-style-type: none"> <li>• Chino Valley Public Works, Engineering Dept</li> <li>• \$250,000</li> <li>• Undetermined</li> </ul>                                | No Action     | Keep               | Ongoing projects as time/funding allows                         |
| 2.A.1     | Hazard Public Education Activities          | Continue and expand Town Hall style meetings, annual expos, and other public outreach. Expansion of the Town, Police, and Fire website. Distribution of educational materials related to all hazards the Town is susceptible to. 5 year cost. | <ul style="list-style-type: none"> <li>• Chino Valley Police Dept, Chino Valley Public Works, Chino Valley Fire District</li> <li>• \$200,000</li> <li>• Ongoing</li> </ul> | In Progress   | Keep               | Information is posted on PD website as updates are needed       |
| 9.B.1     | Variable Message Signs                      | Acquire two variable message signs for traffic control to mitigate transportation accident potential.   | <ul style="list-style-type: none"> <li>• Chino Valley Public Works</li> <li>• \$40,000</li> <li>• 2007</li> </ul>   | No Action     | Delete             | Unable to complete due to lack of funding                       |
| 6.B.3     | Town Fuels Crew                             | Hire, train, and equip crew to perform wildfire hazard fuel reduction for prevention and suppression in cooperation with State, County and private property owners to protect existing and future buildings and infrastructure.               | <ul style="list-style-type: none"> <li>• Chino Valley Public Works</li> <li>• \$300,000</li> <li>• Ongoing</li> </ul>   | No Action     | Delete             | PW is not in the fire fighting business                         |

**Table 6-7-3**  
**Chino Valley assessment of previous plan cycle mitigation actions/projects**

| ID    | Name   | Description  | <ul style="list-style-type: none"> <li>• Lead Agency</li> <li>• Proposed Cost</li> <li>• Proposed Comp Date</li> </ul>   | Status      | Disposition | Explanation  |
|-------|--|--|--|-------------|-------------|--|
| 7.B.2 | Uninterrupted Power System for Traffic Signals | Install battery backup power systems at major traffic intersections.   | <ul style="list-style-type: none"> <li>• ADOT, Chino Valley Public Works</li> <li>• \$125,000</li> <li>• Undetermined</li> </ul>   | No Action   | Delete      | N/A  |
| 9.A.1 | Emergency Vehicle Pre-emption System           | Purchase vehicle pre-emption system, software, conduits, and hardware to provide necessary pre-emption services and connections for all traffic signals within the Town limits. System to provide priority system for police and fire emergency response vehicles. | <ul style="list-style-type: none"> <li>• Chino Valley Police Dept, Chino Valley Public Works, Chino Valley Fire District, Lifeline Ambulance</li> <li>• \$600,000</li> <li>• Undetermined</li> </ul> | No Action   | Delete      | FD utilizes the Pre-emption system due to the time needed to stop/start large fire vehicles, Police will continue to stop on red light before proceeding through intersection. |
| 5.B.1 | Bridge Structure at Road 5 North               | Bridge Structure and drainage control at Road 5 North and Reed Road to construct an all weather crossing, preventing road closures due to heavy rains and allowing uninterrupted access.   | <ul style="list-style-type: none"> <li>• Chino Valley Public Works - Engineering Dept</li> <li>• \$750,000</li> <li>• Undetermined</li> </ul>  | No Action   | Keep        | N/A  |
| 6.E.1 | Develop Fire Code IGA                          | Develop an IGA with the Chino Valley Fire District to enforce the current Fire Code adopted by the Town and to protect existing and future buildings and infrastructure. 5 year cost.  | <ul style="list-style-type: none"> <li>• Chino Valley Community Development, Chino Valley Legal Depts, Chino Valley Fire District</li> <li>• \$250,000</li> <li>• Undetermined</li> </ul>            | Complete    | Delete      | Fire Codes have been adopted and are enforced by Fire Department   |
| 5.B.3 | Bridge on Road 2 North                         | Reconstruction of Bridge on Road 2 North over Santa Cruz Wash to eliminate frequent overtopping due to sedimentation. Project will prevent road closures due to heavy rains and allow uninterrupted access.  | <ul style="list-style-type: none"> <li>• Chino Valley Public Works - Engineering Dept</li> <li>• \$1,200,000</li> <li>• Undetermined</li> </ul>  | In Progress | Keep        | Project is in design and pending construction. Expect construction in Summer 2011 and project cost is estimated at \$600K  |

**Table 6-7-3**  
**Chino Valley assessment of previous plan cycle mitigation actions/projects**

| ID    | Name  | Description  | <ul style="list-style-type: none"> <li>• Lead Agency</li> <li>• Proposed Cost</li> <li>• Proposed Comp Date</li> </ul>  | Status      | Disposition | Explanation  |
|-------|---|--|---|-------------|-------------|--|
| 7.A.1 | Strengthen New Building Codes               | Adopt and enforce new building codes to protect existing and future buildings and infrastructure from high wind and other natural and human caused disasters. 5 year cost. | <ul style="list-style-type: none"> <li>• Chino Valley Community Development, Chino Valley Legal Depts, Chino Valley Fire District, Chino Valley Public Works</li> <li>• \$75,000</li> <li>• Undetermined</li> </ul> | In Progress | Keep        | Adopted 2006 ICC Codes. Will be adopting 2012 Codes when made available as a continual update. |
| 9.A.1 | Covered Load Ordinance                      | Adopt and enforce a new ordinance requiring vehicles to cover loads to prevent accidental spills. 5 year cost.   | <ul style="list-style-type: none"> <li>• Chino Valley Police Dept, Chino Valley Legal Depts, Chino Valley Public Works</li> <li>• \$20,000</li> <li>• Undetermined</li> </ul>                                       | No Action   | Delete      | Officers continue to use State Statutes reference the enforcement of load spilling issues      |
| 5.B.2 | Granite Creek Crossing at Perkinsville Road | All weather crossing on Perkinsville Road at Granite Creek Wash to prevent road closures due to heavy rains and allow uninterrupted access.                                | <ul style="list-style-type: none"> <li>• Chino Valley Public Works - Engineering Dept</li> <li>• \$3,000,000</li> <li>• Undetermined</li> </ul>   | No Action   | Delete      | Unable to complete due to lack of funding  |

**Table 6-7-4**  
**Clarkdale assessment of previous plan cycle mitigation actions/projects**

| ID                      | Name  | Description   | <ul style="list-style-type: none"> <li>• Lead Agency</li> <li>• Proposed Cost</li> <li>• Proposed Comp Date</li> </ul>            | Status               | Disposition | Explanation   |
|-------------------------|---|---|---|----------------------|-------------|---|
| 5.F.1                   | Improve Flood Warning System on Verde River           | Install gage and equipment for flood warning system in the Verde River at Tuzigoot Bridge.  | <ul style="list-style-type: none"> <li>• Yavapai Co Flood Control District</li> <li>• \$10,000</li> <li>• October 2006</li> </ul> | No Action            | Keep        | Funding   |
| 5.B.1                   | Tuzigoot Bridge                                       | Enlarge or replace Tuzigoot Bridge to alleviate traffic and emergency response vehicles during flooding events on the Verde River.  | <ul style="list-style-type: none"> <li>• ADOT</li> <li>• \$28,000,000</li> <li>• 2015</li> </ul>                                  | No Action            | Keep        | ADOT Project  |
| 8.A.1                   | First Responder and Technician Training and Equipment | Through advanced training and use of equipment first responders are better able to identify hazards and protect the public.   | <ul style="list-style-type: none"> <li>• Clarkdale Fire District</li> <li>• \$75,000</li> <li>• 2010</li> </ul>                   | Completed<br>Ongoing | Revise      | Review and modify as needed.                                      |
| 9.A.1                   | Develop Transportation Master Plan                    | Hire a consultant or develop a Town transportation engineer to develop a Transportation Master Plan to identify transportation hazards in the community.  | <ul style="list-style-type: none"> <li>• Clarkdale Public Works Dept</li> <li>• \$200,000</li> <li>• 2010</li> </ul>              | In Progress          | Revise      | PARA Study scheduled to be completed in January 2011              |
| 7.B.1<br>(6.E)<br>(1.B) | Property Maintenance Code                             | Adopt Int'l Construction Code Appendix - Property Maintenance Code to help maintain building integrity to prevent injury or loss of life and to mitigate structure damage to existing structures resulting from thunderstorms and high winds. | <ul style="list-style-type: none"> <li>• Town of Clarkdale</li> <li>• \$35,000</li> <li>• July 2006</li> </ul>                    | Complete<br>Ongoing  | Revise      | Review and modify as needed.                                      |
| 5.B.2<br>(6.B)          | Targeted Debris Removal and Wildfire Fuel Reduction   | Remove overgrowth and debris around washes in the Town including the Verde River. Project to increase river capacity and reduce wildfire hazard.  | <ul style="list-style-type: none"> <li>• Clarkdale Fire District</li> <li>• \$25,000</li> <li>• May 2006</li> </ul>               | In Progress          | Keep        | Ongoing education and maintenance with property owners as needed. |

**Table 6-7-4**  
**Clarkdale assessment of previous plan cycle mitigation actions/projects**

| ID             | Name                      | Description   | <ul style="list-style-type: none"> <li>• Lead Agency</li> <li>• Proposed Cost</li> <li>• Proposed Comp Date</li> </ul> | Status      | Disposition | Explanation   |
|----------------|---------------------------|---|--|-------------|-------------|---|
| 7.B.2<br>(1.B) | Enforce Building Codes    | Enforce recently adopted International Construction Codes to prevent injury or loss of life and to mitigate structure damage to future structures resulting from thunderstorms and high winds.                            | <ul style="list-style-type: none"> <li>• Town of Clarkdale</li> <li>• \$5,000</li> <li>• Ongoing</li> </ul>            | In Progress | Keep        | Ongoing education and maintenance with property owners as needed. |
| 6.B.1          | Wildfire Fuel Reduction   | Conduct wildfire hazard fuel reduction within and surrounding Clarkdale to reduce the risk to existing and new structures.  | <ul style="list-style-type: none"> <li>• Clarkdale Fire District</li> <li>• \$50,000</li> <li>• April 2006</li> </ul>  | In Progress | Keep        | Ongoing education and maintenance with property owners as needed. |
| 3.A.1          | Adopt Sprinkler Ordinance | Adopt fire protection sprinkler ordinance to protect existing and new structures against potential fire hazards.  | <ul style="list-style-type: none"> <li>• Town of Clarkdale</li> <li>• \$0</li> <li>• Completed</li> </ul>              | Complete    | Delete      | May 27, 2008 Adopted  |
| 7.B.3          | Back up Generators        | Purchase and install backup generators to provide power in the event of a power outage related to thunderstorms/high winds. Install back up power systems for critical public services and disaster shelters in the Town. | <ul style="list-style-type: none"> <li>• Town of Clarkdale</li> <li>• \$300,000</li> <li>• July 2008</li> </ul>        | In Progress | Keep        | Continuing to apply for grant funds.                              |

**Table 6-7-5**  
**Cottonwood assessment of previous plan cycle mitigation actions/projects**

| <b>ID</b> | <b>Name</b>  | <b>Description</b>   | <b>Lead Agency<br/>Proposed Cost<br/>Proposed Comp Date</b>  | <b>Status</b> | <b>Disposition</b> | <b>Explanation</b>   |
|-----------|--|--|--|---------------|--------------------|--|
| 7.A.1     | Enforce Current Building Codes                           | Continue to enforce building codes to protect existing and future buildings and infrastructure from wind damage and other natural and human-caused disasters. 5-year cost.                     | <ul style="list-style-type: none"> <li>• Cottonwood Building Dept</li> <li>• \$75,000</li> <li>• Ongoing</li> </ul>    | On going      | Keep               | City of Cottonwood has added 2 code enforcement officers to work on zoning and code enforcement within the City.   |
| 5.B.1     | Complete Railroad Wash Channelization Project            | Complete channelization of Railroad Wash between State Route 89A to Beach Street to remove residential properties from the floodplain.   | <ul style="list-style-type: none"> <li>• Cottonwood Public Works</li> <li>• \$100,000</li> <li>• 2006</li> </ul>       | In progress   | Keep               | Project is 90% complete and waiting on Hospital to remove water lines for project to be complete.  |
| 9.B.1     | Variable Message Signs                                   | Acquire two variable message signs for traffic control to mitigate transportation accident potential.  | <ul style="list-style-type: none"> <li>• Cottonwood Police Dept</li> <li>• \$20,000</li> <li>• Undetermined</li> </ul> | No action     | Delete             | Pending grant funds  |
| 2.A.1     | Public Education Activities                              | Initiate public outreach for hazard mitigation utilizing City information systems, distribution of educational materials, and neighborhood watch meetings related to all hazards. 5-year cost. | <ul style="list-style-type: none"> <li>• Cottonwood Fire Dept</li> <li>• \$50,000</li> <li>• Ongoing</li> </ul>        | In Progress   | Keep               | Pending funding ability  |
| 8.B.3     | HAZMAT Transportation Enforcement                        | Initiating interaction with commercial vehicle safety specialists to promote the continued enforcement of rules and regulations of HAZMAT transport.   | <ul style="list-style-type: none"> <li>• Cottonwood Police Dept</li> <li>• \$25,000</li> <li>• Ongoing</li> </ul>      | Complete      | Keep               | Police Department has trained a commercial truck inspector and had completed numerous commercial truck inspections within the City with the assistance of MVD. |
| 8.B.1     | HAZMAT First Responder Training and Resource Development | Through advanced training and use of equipment first responders are better able to identify hazardous materials and protect the public.  | <ul style="list-style-type: none"> <li>• Cottonwood Police Dept</li> <li>• \$50,000</li> <li>• Undetermined</li> </ul> | On going      | Keep               | Compliance through NIMS training and first responder training for officers to handle HAZMAT as crime scenes.   |

**Table 6-7-5**  
**Cottonwood assessment of previous plan cycle mitigation actions/projects**

| <b>ID</b> | <b>Name</b>  | <b>Description</b>   | <b>Lead Agency<br/>Proposed Cost<br/>Proposed Comp Date</b>   | <b>Status</b> | <b>Disposition</b> | <b>Explanation</b>  |
|-----------|--|--|---|---------------|--------------------|---|
| 8.B.2     | Haz Mat Code Enforcement                           | Ensure code compliance related to hazardous materials use, storage and disposal in the community.                    | <ul style="list-style-type: none"> <li>• Cottonwood Fire Dept</li> <li>• \$20,000</li> <li>• Ongoing</li> </ul>           | In progress   | Keep               | Ongoing inspection and code enforcement   |
| 9.B.2     | Accident Reduction Details                         | Continuation of traffic accident mitigation by selective enforcement in high risk areas. 5-year cost.                | <ul style="list-style-type: none"> <li>• Cottonwood Police Dept</li> <li>• \$75,000</li> <li>• Ongoing</li> </ul>         | In progress   | Keep               | Selective traffic enforcement, DUI patrols, Red light enforcement etc.  |
| 9.B.3     | MCI Training Exercises                             | Inter agency participation and involvement in mass casualty incident response. 5 exercises.                          | <ul style="list-style-type: none"> <li>• Cottonwood Police Dept</li> <li>• \$50,000</li> <li>• 2006</li> </ul>            | On going      | Delete             | Active shooter training with school staff and police and fire.  |
| 5.A.1     | Early Warning Systems                              | Active early warning system for inclement weather and flooding conditions. Cooperative with Yavapai County and NOAA. | <ul style="list-style-type: none"> <li>• Cottonwood Police Dept</li> <li>• \$75,000</li> <li>• 2008</li> </ul>            | In Progress   | Keep               | Pending grant funding for reserve 911 program and system. Also working on a Utility reverse 911 system.   |
| 7.B.1     | Backup Power Supply for Water Distribution Systems | Obtain backup electrical generation systems for emergency operation for the water distribution system.               | <ul style="list-style-type: none"> <li>• Cottonwood Utilities</li> <li>• \$1,500,000</li> <li>• Undetermined</li> </ul>   | In progress   | Keep               | Currently searching for a pull behind type generator for use at emergency scenes. Currently the Cottonwood Water system in on a gravity feed and had a minimum of 24 hour supply in the event of a power failure. |
| 7.B.2     | Public Safety Communication Improvements           | Upgrade public safety communication systems to handle storm related operational disruptions.                         | <ul style="list-style-type: none"> <li>• Cottonwood Police Dept</li> <li>• \$1,000,000</li> <li>• Undetermined</li> </ul> | In progress   | Keep               | New communications center is in planning stages. The center will possibly be a regional dispatch center for numerous police and fire departments.   |

| Table 6-7-5<br>Cottonwood assessment of previous plan cycle mitigation actions/projects |  |   |  |             |             |  |
|---|--|---|--|-------------|-------------|--|
| ID  | Name   | Description   | <ul style="list-style-type: none"> <li>• Lead Agency</li> <li>• Proposed Cost</li> <li>• Proposed Comp Date</li> </ul>     | Status      | Disposition | Explanation  |
| 5.B.2   | Eliminate Wet Crossings on collector streets within the City | Replace wet crossings with structures to allow uninterrupted traffic access during flood events on 6th Street and Camino Real crossing of Silver Springs Gulch. | <ul style="list-style-type: none"> <li>• Cottonwood Public Works</li> <li>• \$350,000</li> <li>• 2010</li> </ul>           | In progress | Keep        | New dry crossing on Willard Street opened in 2009 helps the 6 <sup>th</sup> Street wet crossing by providing an alternate route. |
| 5.B.3   | Targeted Stormwater Drainage Improvements                    | Identify repetitive flooding problems within the community and develop projects to reduce the flooding hazard.  | <ul style="list-style-type: none"> <li>• Cottonwood Public Works</li> <li>• \$2,200,000</li> <li>• Undetermined</li> </ul> | In progress | Keep        | Willard Street Extension built in 2009 protected a neighborhood with a flood channel.  |
| 6.B.1   | Wildfire Fuel Reduction Program                              | Identify and remove excess wildfire fuels from targeted wildland/urban interface areas to protect existing and future buildings and infrastructure.             | <ul style="list-style-type: none"> <li>• Cottonwood Fire Department</li> <li>• \$220,000</li> </ul>                        | In progress | Keep        | Little progress due to lack of funding   |

| Table 6-7-6<br>Dewey-Humboldt assessment of previous plan cycle mitigation actions/projects |                                    |   |  |             |             |  |
|---|------------------------------------|---|--|-------------|-------------|--|
| ID  | Name                               | Description   | <ul style="list-style-type: none"> <li>• Lead Agency</li> <li>• Proposed Cost</li> <li>• Proposed Comp Date</li> </ul>                         | Status      | Disposition | Explanation  |
| 1   | Antelope Meadows Commercial Center | Remove flooding risk to the resident downstream of the Antelope Industrial Park (1 mi east of SR69, on SR169) by diverting flow to the Agua Fria River. This will include constructing to capture and convey drainage in a controlled manner. | <ul style="list-style-type: none"> <li>• Dewey-Humboldt</li> <li>• \$100,000</li> <li>• Pending stakeholder cooperation (2011-2012)</li> </ul> | In Progress | Keep        | Hydraulic and Hydrologic study has been performed. Will continue to work with stakeholders towards a solution. |
| 2   | Codes                              | Continue to enforce building codes and adopt new international codes as they become available and/or are applicable.  | <ul style="list-style-type: none"> <li>• Dewey-Humboldt</li> <li>• \$0</li> <li>• Ongoing</li> </ul>   | In Progress | Revise      | Implement and enforce council directed codes   |

**Table 6-7-6**  
**Dewey-Humboldt assessment of previous plan cycle mitigation actions/projects**

| ID | Name            | Description   | <ul style="list-style-type: none"> <li>• Lead Agency</li> <li>• Proposed Cost</li> <li>• Proposed Comp Date</li> </ul>     | Status      | Disposition | Explanation   |
|----|-----------------|---|--|-------------|-------------|---|
| 3  | Public Outreach | Educate the public on the risks resulting from Drought & Thunderstorms/High Winds, including providing recommendations on how to conserve water and protect themselves and their property from damages due to wind events. Outreach materials will be made available/distributed via fliers and Town website. Phase 1 = info in newsletter by Jan 2009. | <ul style="list-style-type: none"> <li>• Dewey-Humboldt</li> <li>• \$0</li> <li>• Ph I – Jan 2009 &amp; Ongoing</li> </ul> | No Action   | Keep        | Staff turnover<br>Achievable through existing monthly newsletter                              |
| 4  | Firewise        | Apply for and ready community to become a Firewise Community. This will include completing work to meet program requirements.   | <ul style="list-style-type: none"> <li>• Dewey-Humboldt</li> <li>• \$0</li> <li>• Mid 2010</li> </ul>                      | No Action   | Delete      | Staff turnover<br>Staff availability<br>Fabric of community not conducive to Firewise Program |
| 5  | NFIP            | Maintain compliance with the National Flood Insurance Program (NFIP).   | <ul style="list-style-type: none"> <li>• Dewey-Humboldt</li> <li>• \$0</li> <li>• Ongoing</li> </ul>                       | In Progress | Keep        | Comply with federal and state regulations to maintain compliance                              |

**Table 6-7-7**  
**Jerome assessment of previous plan cycle mitigation actions/projects**

| ID     | Name                                | Description   | <ul style="list-style-type: none"> <li>• Lead Agency</li> <li>• Proposed Cost</li> <li>• Proposed Comp Date</li> </ul> | Status      | Disposition | Explanation   |
|--------|-------------------------------------|---|--|-------------|-------------|---|
| 13.A.1 | Alternative Water Supply Study      | Hire a consultant to conduct a study to identify an alternative water supply or filtration system in the event of a contamination.  | <ul style="list-style-type: none"> <li>• Jerome Public Works</li> <li>• \$5,000</li> <li>• 2006</li> </ul>             | No Action   | Delete      | No longer a priority  |
| 9.B.1  | Traffic Control Equipment           | Identify and acquire traffic control equipment for first responders related to transportation accidents including personal protection and communication equipment.  | <ul style="list-style-type: none"> <li>• Jerome Fire Department</li> <li>• \$15,000</li> <li>• 2007</li> </ul>         | In Progress | Delete      | Purchases made on an ongoing basis. Project is response oriented and will be discontinued   |
| 3.B.1  | Backflow Prevention Study           | Identify facilities with potential to contaminate the community water supply in the event of Town water supply shutoff and negative pressure occurrence. Develop a program for requiring backflow prevention devices. Address amending the Town ordinance and incur legal fees for the amended ordinance. | <ul style="list-style-type: none"> <li>• Jerome Public Works</li> <li>• \$15,000</li> <li>• Completed</li> </ul>       | In progress | Keep        | Study needs to be done. Code allows for refusal of service if no backflow device is in place.   |
| 8.C.1  | Hazardous Materials Public Outreach | Educate the public about hazardous materials safety.  | <ul style="list-style-type: none"> <li>• Jerome Fire Department</li> <li>• \$500</li> <li>• 2010</li> </ul>            | No action   | Keep        | Plan to undertake soon  |
| 6.B.3  | Town Fuels Crew                     | Hire, train, support and equip part-time wildland fire crew to perform wildfire hazard fuel reduction for prevention and suppression in cooperation with the Forest Service, mining companies and private property owners to protect existing and future buildings and infrastructure. 5-year cost.       | <ul style="list-style-type: none"> <li>• Jerome Public Works</li> <li>• \$150,000</li> <li>• 2010</li> </ul>           | In Progress | Keep        | Town has established a wildlands crew including a Type 6 engine. We have leased an area from the mining company for use as a brush pile to mitigate fuels. Also, Ord. 358 established a Property Maintenance Code that requires fuel abatement. |

**Table 6-7-7**  
**Jerome assessment of previous plan cycle mitigation actions/projects**

| ID     | Name                                 | Description   | <ul style="list-style-type: none"> <li>• Lead Agency</li> <li>• Proposed Cost</li> <li>• Proposed Comp Date</li> </ul>           | Status      | Disposition | Explanation  |
|--------|--------------------------------------|---|--|-------------|-------------|--|
| 10.B.1 | Structure Seismic Retrofit           | Identify and retrofit critical Town facilities including Fire Department, Spook Hall, and Civic Center to protect existing and future buildings and infrastructure.               | <ul style="list-style-type: none"> <li>• Jerome Fire Department</li> <li>• \$500,000</li> <li>• 2010</li> </ul>                  | No Action   | Delete      | No seismic retrofits have been or will be pursued.   |
| 12.A.1 | Pneumatic Airbag Rescue Equipment    | Acquire Pneumatic Airbag Rescue Equipment and other rescue tools and train personnel.   | <ul style="list-style-type: none"> <li>• Jerome Fire Department</li> <li>• \$150,000</li> <li>• 2010</li> </ul>                  | In Progress | Delete      | Tools acquired in 2006. Training is ongoing. Project is response oriented and will be discontinued.  |
| 5.A.1  | Storm sewer and Utility Master Plan  | Hire a consultant to prepare a storm sewer and utility master plan to identify storm drain problems and prioritize infrastructure improvements.                                   | <ul style="list-style-type: none"> <li>• Jerome Public Works - Streets Department</li> <li>• \$50,000</li> <li>• 2010</li> </ul> | Not Action  | Keep        | Funding not available. GPS software has been obtained. Problem areas with drainage have been identified. In process of creating a master Capital Improvement Plan to address needed infrastructure improvements. |
| 7.A.1  | Adopt and Enforce New Building Codes | Adopt and enforce new building codes to protect existing and future buildings and infrastructure from high wind damage and other natural and human caused disasters. 5 year cost. | <ul style="list-style-type: none"> <li>• Town of Jerome</li> <li>• \$35,000</li> <li>• Ongoing</li> </ul>                        | In Progress | Keep        | Ordinance updating all codes to 2003 in 2009. Ongoing review.  |

**Table 6-7-8  
Prescott assessment of previous plan cycle mitigation actions/projects**

| <b>ID</b> | <b>Name</b>                            | <b>Description</b>  | <b>Lead Agency<br/>Proposed Cost<br/>Proposed Comp Date</b>  | <b>Status</b> | <b>Disposition</b> | <b>Explanation</b>   |
|-----------|--|---|--|---------------|--------------------|--|
| 5.B.1     | Drainage Master Plan                   | Prepare a Drainage Master Plan for entire Prescott area to identify potential flooding hazards and identify and implement flood control alternatives. | <ul style="list-style-type: none"> <li>• City of Prescott Public Works</li> <li>• \$75,000</li> <li>• July 2007</li> </ul>       | Completed     | Delete             | Developing a program to complete mitigation measures. \$50,000 cost, complete summer of 2008.            |
| 3.C.1     | Improve Communications Infrastructure  | Construct seven communication sites to improve emergency response communication capabilities.   | <ul style="list-style-type: none"> <li>• City of Prescott Police and Fire</li> <li>• \$2,075,000</li> <li>• July 2007</li> </ul> | In Progress   | Revise             | Final phase implemented target completion date of 6/1/2012. 85% complete.                                |
| 6.B.1     | Wildfire Fuel Reduction                | Continue wildfire fuel reduction on private/public property to protect existing and future buildings and infrastructure. 5 year cost.                 | <ul style="list-style-type: none"> <li>• City of Prescott Fire</li> <li>• \$2,500,000</li> </ul>                                 | In Progress   | Keep               | On-going need for funding, program needs State Fire Assistance grants to continue.                       |
| 8.A.1     | Improve Response Capability            | Purchase additional hazardous materials mitigation equipment.   | <ul style="list-style-type: none"> <li>• City of Prescott Fire</li> <li>• \$500,000</li> <li>• Ongoing</li> </ul>                | In Progress   | Keep               | Minimal detection equipment purchased, need additional equipment and rolling stock due to lack of space. |
| 10.B.1    | Improve Emergency Operations Center    | Purchase and install computer, audio/visual, communications, and reverse 911 equipment.   | <ul style="list-style-type: none"> <li>• City of Prescott Fire</li> <li>• \$250,000</li> <li>• Undetermined</li> </ul>           | No Action     | Keep               | No funding available   |
| 3.C.2     | First Responder Training and Equipment | Through advanced training and use of equipment first responders are better able to identify hazards and protect the public.                           | <ul style="list-style-type: none"> <li>• City of Prescott Fire</li> <li>• \$150,000</li> <li>• Undetermined</li> </ul>           | In Progress   | Keep               | Continue training due to attrition and purchasing of needed equipment.                                   |
| 5.A.3     | Improve Low Water Crossings            | Install gates to prevent vehicle travel in 28 low water crossings during flooding events.   | <ul style="list-style-type: none"> <li>• City of Prescott Fire</li> <li>• \$200,000</li> <li>• Undetermined</li> </ul>           | In Progress   | Keep               | Completed survey and costs will include revised plan for 2011  |

**Table 6-7-8  
Prescott assessment of previous plan cycle mitigation actions/projects**

| ID     | Name   | Description   | <ul style="list-style-type: none"> <li>• Lead Agency</li> <li>• Proposed Cost</li> <li>• Proposed Comp Date</li> </ul>               | Status      | Disposition | Explanation   |
|--------|--|---|--|-------------|-------------|---|
| 10.B.1 | City Hall Building Security Project            | Provide security to City Hall against civil disturbance and terrorism.  | <ul style="list-style-type: none"> <li>• City of Prescott Police Department</li> <li>• \$200,000</li> <li>• Undetermined</li> </ul>  | In Progress | Keep        | Limited funding, major entries secured. Completed by COP funding \$68,000 on July 1, 2009.    |
| 10.A.2 | Urban Search and Rescue Team Project           | Improve urban search and technical rescue capability in the City through training and procurement of specialized equipment.   | <ul style="list-style-type: none"> <li>• City of Prescott Fire</li> <li>• \$250,000</li> <li>• Undetermined</li> </ul>               | In Progress | Keep        | Acquired limited equipment and Mass Casualty trailer. \$100,000 expended still need \$150,000 |
| 7.A.1  | Enforce Current Building Codes                 | Continue to enforce building codes to protect existing and future buildings and infrastructure from high wind damage and other natural and human caused disasters. 5 year cost. | <ul style="list-style-type: none"> <li>• City of Prescott Building Department</li> <li>• \$75,000</li> <li>• Undetermined</li> </ul> | In Progress | Keep        | Maintain current codes and staffing to ensure safety.   |
| 9.A.1  | Uninterrupted Power System for Traffic Signals | Install battery backup power systems at major traffic intersections.  | <ul style="list-style-type: none"> <li>• City of Prescott Public Works</li> <li>• \$300,000</li> <li>• Undetermined</li> </ul>       | No progress | Keep        | Identify costs and begin implementation.  |
| 6.E.1  | Wildfire Code Enforcement                      | Continue enforcement of wildland urban interface code. 5 year cost.   | <ul style="list-style-type: none"> <li>• City of Prescott Fire</li> <li>• \$500,000</li> <li>• Ongoing</li> </ul>                    | In Progress | Keep        | Need help with funding.   |

**Table 6-7-9**  
**Prescott Valley assessment of previous plan cycle mitigation actions/projects**

| <b>ID</b> | <b>Name</b>                       | <b>Description</b>   | <b>Lead Agency<br/>Proposed Cost<br/>Proposed Comp Date</b>  | <b>Status</b>          | <b>Disposition</b> | <b>Explanation</b>   |
|-----------|-----------------------------------|--|--|------------------------|--------------------|--|
| 3.A.1     | Reverse 911 System                | Purchase and implement Reverse 911 system out of Prescott Police / Fire Dispatch Center to warn public of emergency situations. A second system will be implemented out of Sedona Fire Dispatch Center.                        | <ul style="list-style-type: none"> <li>• Prescott/Prescott Valley</li> <li>• \$260,000</li> <li>• Undetermined</li> </ul>      | Completed              | Delete             | Informed that Yav. Co. Sheriff's Office completed this project.          |
| 6.D.2     | Neighborhood Wildfire Assessment  | Develop neighborhood wildfire assessment and rank at-risk neighborhoods with the goal to provide accurate wildfire information to residents and motivate them to implement personal and neighborhood mitigation measures.      | <ul style="list-style-type: none"> <li>• Central Yavapai Fire District</li> <li>• \$50,000</li> <li>• Undetermined</li> </ul>  | No Action              | Keep               | Unknown. Need follow-up coordination with CYFD                           |
| 6.B.1     | Wildfire Defensible Space Program | Provide funding for residents in at-risk subdivisions to create defensible space around their homes in designated high risk urban interface areas to protect existing and future buildings and infrastructure. 5-year program. | <ul style="list-style-type: none"> <li>• Central Yavapai Fire District</li> <li>• \$500,000</li> <li>• Undetermined</li> </ul> | No Action              | Keep               | Unknown. Need follow-up coordination with CYFD                           |
| 6.B.3     | Town Fuels Crew                   | Support and equip part-time road crew to perform roadside wildfire hazard fuel reduction along roads in the interface to protect existing and future buildings and infrastructure.   | <ul style="list-style-type: none"> <li>• Prescott Valley</li> <li>• \$150,000</li> <li>• Ongoing</li> </ul>                    | In-Progress<br>Ongoing | Keep               | Ongoing maintenance within the Public Works Department.                  |
| 5.B.2     | Agua Fria Sewer Line              | Flood mitigation on existing sewer line under Agua Fria River.   | <ul style="list-style-type: none"> <li>• Prescott Valley</li> <li>• \$75,000</li> <li>• 2006</li> </ul>                        | Completed              | Delete             | Work completed on this project.  |
| 5.B.3     | Tani Drainage                     | Flood control project to protect residential areas.  | <ul style="list-style-type: none"> <li>• Prescott Valley</li> <li>• \$300,000</li> <li>• 2007</li> </ul>                       | Completed              | Delete             | Channel improvements and 2 6'x3' box culverts under road. 7/7/09 \$225 K |

**Table 6-7-9  
Prescott Valley assessment of previous plan cycle mitigation actions/projects**

| <b>ID</b> | <b>Name</b>                          | <b>Description</b>   | <b>Lead Agency<br/>Proposed Cost<br/>Proposed Comp Date</b>  | <b>Status</b> | <b>Disposition</b> | <b>Explanation</b>   |
|-----------|--------------------------------------|--|--|---------------|--------------------|--|
| 5.B.4     | Windsong Drainage                    | Flood control project to protect residential areas.  | <ul style="list-style-type: none"> <li>• Prescott Valley</li> <li>• \$530,000</li> <li>• 2007</li> </ul>           | Completed     | Delete             | Channel improvements, culverts and headwalls installed. 4/30/09 \$270 K.   |
| 3.A.1     | Emergency Vehicle Pre-emption System | Traffic signal priority system for police and fire emergency response vehicles.  | <ul style="list-style-type: none"> <li>• Prescott Valley</li> <li>• \$500,000</li> <li>• Undetermined</li> </ul>   | No Action     | Keep               |  |
| 5.B.1     | Glassford Hill Interceptor Channel   | Divert floodwater out of a residential area to protect Castle Canyon Mesa area existing and future buildings and infrastructure.   | <ul style="list-style-type: none"> <li>• Prescott Valley</li> <li>• \$1,560,000</li> <li>• 2006</li> </ul>         | Completed     | Delete             | Channel construction around residential area to alleviate residential flooding during major events.7/12/06 \$1.32M                 |
| 9.B.1     | First Responder/Traffic Control      | Ensure proper training and equipment for Police, Fire, and Public Works to mitigate transportation accidents and other incidents in the community at a minimum of first responder level. | <ul style="list-style-type: none"> <li>• Prescott Valley</li> <li>• \$1,500,000</li> <li>• Undetermined</li> </ul> | In Progress   | Keep               | Working on plan. Wish list includes 2 lighted sign boards and trailer with traffic control devices.                                |
| 5.B.5     | Mission Lane Drainage                | Flood control project to protect residential areas.  | <ul style="list-style-type: none"> <li>• Prescott Valley</li> <li>• \$1,230,000</li> <li>• 2007</li> </ul>         | Completed     | Deleted            | Project was completed at a cost of \$1.5 M. Completed 3/13/07  |
| 5.B.6     | Agua Fria Channel                    | Flood control project to protect residential areas.  | <ul style="list-style-type: none"> <li>• Prescott Valley</li> <li>• \$750,000</li> <li>• 2008</li> </ul>           | No Action     | Keep               | Waiting on funding.  |
| 5.B.7     | Western Drainage                     | Flood control project to protect residential areas.  | <ul style="list-style-type: none"> <li>• Prescott Valley</li> <li>• \$2,200,000</li> <li>• 2008</li> </ul>         | In Progress   | Revise             | Phase 1 of project nearing completion. Phase 2 to begin if funded next fiscal year. \$1M. Revise to address 2 <sup>nd</sup> phase. |
| 5.B.8     | Spouse Drainage                      | Flood control project to protect residential areas.  | <ul style="list-style-type: none"> <li>• Prescott Valley</li> <li>• \$1,800,000</li> <li>• 2009</li> </ul>         | No Action     | Keep               | Waiting on funding/priority.   |

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**Table 6-7-9  
Prescott Valley assessment of previous plan cycle mitigation actions/projects**

| <b>ID</b> | <b>Name</b>  | <b>Description</b>   | <b>Lead Agency<br/>Proposed Cost<br/>Proposed Comp Date</b>   | <b>Status</b>       | <b>Disposition</b> | <b>Explanation</b>  |
|-----------|--|--|---|---------------------|--------------------|---|
| 5.B.9     | Yavapai Drainage   | Flood control project to protect residential areas.  | <ul style="list-style-type: none"> <li>• Prescott Valley</li> <li>• \$1,700,000</li> <li>• 2010</li> </ul>  | Completed           | Delete             | Finished 1/18/07 \$1.1 M  |
| 8.B.1     | Mobile Emergency Operations/Command Center                           | Obtain and equip an alternate first response mobile Emergency Operations Center to be able to mitigate Hazardous Materials leaks and spills and other incidents. | <ul style="list-style-type: none"> <li>• Prescott Valley</li> <li>• \$200,000</li> <li>• Undetermined</li> </ul>                                      | Completed           | Delete             | Mobile EOC has been acquired and placed into service  |
| 7.B.1     | Secondary Well Site Power System                                     | Obtain backup electrical generation systems for emergency operation at all well sites.   | <ul style="list-style-type: none"> <li>• Prescott Valley</li> <li>• \$500,000</li> <li>• Undetermined</li> </ul>                                      | In Progress         | Keep               | Mobile generator purchased. Additional funding currently not available for additional ones.       |
| 1.A.1     | Source Water Assessment Program                                      | Develop source water assessment program.   | <ul style="list-style-type: none"> <li>• Prescott Valley</li> <li>• \$100,000</li> <li>• 2007</li> </ul>  | No Action           | Keep               |   |
| 7.B.2     | Uninterrupted Power System for Traffic Signals                       | Install battery backup power systems at major traffic intersections.   | <ul style="list-style-type: none"> <li>• Prescott Valley</li> <li>• \$300,000</li> <li>• Undetermined</li> </ul>                                      | In Progress         | Keep               | Installed 3 systems over the last five years. Are targeting 10 more to consider project complete. |
| 10.B.1    | Town Building Security Project                                       | Provide security to Town of Prescott Valley Complex Buildings against civil disturbance and terrorism  | <ul style="list-style-type: none"> <li>• Prescott Valley</li> <li>• \$500,000</li> <li>• Undetermined</li> </ul>                                      | In Progress         | Keep               | Have installed card-key systems on bullet resistant panels on council chambers desk.              |
| 2.C.1     | Implement Community Secondary Route Regulations for new subdivisions | Develop requirements for secondary accessibility to all new residential developments.  | <ul style="list-style-type: none"> <li>• Prescott Valley</li> <li>• \$0</li> <li>• 2006</li> </ul>  | In Progress Ongoing | Delete             | Have requirements in place and will continue to enforce on a case-by-case basis.                  |
| 3.C.2     | Joint Police and Fire Training Center                                | Training facility to meet the changing needs and requirements of the emergency response personnel.   | <ul style="list-style-type: none"> <li>• Prescott Valley/<br/>Central Yavapai Fire District</li> <li>• \$7,500,000</li> <li>• Undetermined</li> </ul> | In Progress         | Keep               | Bond Funding is developing a portion of this project. Currently phasing under construction.       |

| Table 6-7-9<br>Prescott Valley assessment of previous plan cycle mitigation actions/projects |                            |   |  |           |             |                    |
|--|----------------------------|---|--|-----------|-------------|--------------------|
| ID   | Name                       | Description   | <ul style="list-style-type: none"> <li>• Lead Agency</li> <li>• Proposed Cost</li> <li>• Proposed Comp Date</li> </ul> | Status    | Disposition | Explanation        |
| 2.C.1  | Community Secondary Routes | Plan, design, construct secondary access routes for emergency vehicles. | <ul style="list-style-type: none"> <li>• Prescott Valley</li> <li>• \$5,000,000</li> <li>• Undetermined</li> </ul>     | No Action | Keep        | Funding necessary. |

| Table 6-7-10<br>Sedona assessment of previous plan cycle mitigation actions/projects |                             |   |  |           |             |  |
|--|-----------------------------|---|--|-----------|-------------|--|
| ID   | Name                        | Description   | <ul style="list-style-type: none"> <li>• Lead Agency</li> <li>• Proposed Cost</li> <li>• Proposed Comp Date</li> </ul> | Status    | Disposition | Explanation  |
| 5.B.2  | Debris Removal in Oak Creek | Remove debris and vegetation upstream of the Oak Creek/179 Bridge to maintain uninhibited conveyance under bridge during large flood events and prevent debris blockage that could force water over the bridge, scour bridge abutments, and cutoff traffic. | <ul style="list-style-type: none"> <li>• City of Sedona</li> <li>• \$30,000</li> <li>• 2007</li> </ul>                 | No Action | Delete      | No action was taken on this initiative due to denial of FEMA Mitigation Funding. This area is also located on private property. The bridge at this location was replaced in 2010 as part of the ADOT SR 179 Project.   |
| 1.A.1  | Update Fire Code            | Update and adopt the current fire code. Train officers, field assessments, update equipment to protect existing and future buildings and infrastructure from wildfire damage and other natural and human-caused disasters. 5 year cost.                     | <ul style="list-style-type: none"> <li>• Sedona Fire District</li> <li>• \$2,000,000</li> <li>• 2006</li> </ul>        | Complete  | Delete      | On 9/11/07, the public (residents within the Sedona Fire District) voted to adopt the 2003 Fire Code. The SFD currently has one Fire Inspector that is Fire Code Certified. One position was cut during the 09/10 Plan Year due to budgetary constraints. Training is ongoing. |

**Table 6-7-10**  
**Sedona assessment of previous plan cycle mitigation actions/projects**

| ID    | Name                                   | Description  | <ul style="list-style-type: none"> <li>• Lead Agency</li> <li>• Proposed Cost</li> <li>• Proposed Comp Date</li> </ul>      | Status              | Disposition | Explanation  |
|-------|--|--|---|---------------------|-------------|--|
| 5.B.1 | Protect Sewage Lift Station            | Protect 179 sewage lift station from Morgan Wash 100-year floodplain.  | <ul style="list-style-type: none"> <li>• City of Sedona</li> <li>• \$250,000</li> <li>• 2006</li> </ul>                     | Complete            | Delete      | In July and August of 2007, the City of Sedona Engineering Dep, in coordination with Tiffany Construction, completed a gabion bank-stabilization project to protect the bank at the 179 Sewage Lift Station. This initiative is complete.  |
| 7.A.1 | Increase Building Inspector Capability | Increase capability to inspect buildings and facilities to enforce building codes to protect existing and future buildings and infrastructure from wind damage and other natural and human-caused disasters. Including software, equipment and vehicle. 5-year cost. | <ul style="list-style-type: none"> <li>• City of Sedona</li> <li>• \$300,000</li> <li>• Undetermined</li> </ul>             | Complete            | Delete      | New residential and commercial structures have been reviewed, inspected and built to meet snow, wind and seismic loads per building code since the City's incorporation in 1988. City Council adopted the Sedona Floodplain Ord on Sept 26, 2006. Due to budgetary constraints, no new software, equipment or vehicles were purchased. |
| 8.A.1 | Establish Haz Mat Unit                 | Retain, train and certify personnel. Acquire equipment and vehicle. 5-year cost.   | <ul style="list-style-type: none"> <li>• Sedona Fire District</li> <li>• \$5,000,000</li> <li>• Undetermined</li> </ul>     | Complete<br>Ongoing | Delete      | Thus far, six SFD employees are certified Haz Mat Technicians. A Haz Mat tender truck has been procured for Station #1. A medium duty rescue truck went into service in April 2009.  |
| 9.A.1 | Vehicle Inspection Certification       | Train, certify and retain personnel for commercial vehicle safety inspections. 5-year cost.  | <ul style="list-style-type: none"> <li>• Sedona Police Department</li> <li>• \$2,000,000</li> <li>• Undetermined</li> </ul> | Complete<br>Ongoing | Delete      | Since the Fall of 2007, one officer has been conducting routine commercial vehicle inspections during his shifts. The current officer is Jerome Bilas.   |

**Table 6-7-10**  
**Sedona assessment of previous plan cycle mitigation actions/projects**

| ID    | Name   | Description  | <ul style="list-style-type: none"> <li>• Lead Agency</li> <li>• Proposed Cost</li> <li>• Proposed Comp Date</li> </ul> | Status  | Disposition | Explanation   |
|-------|--|--|--|---|-------------|---|
| 2.A.1 | CERT Program   | Civilian Emergency Response Team. Train and educate public on basic first response capabilities. 5 year cost.  | <ul style="list-style-type: none"> <li>• Sedona Fire District</li> <li>• \$10,000</li> <li>• Ongoing</li> </ul>        | Complete<br>Ongoing                                 | Keep        | More than 100 people were certified prior to 2008. No certifications during the 09/10 reporting period, due to lack of public interest. However, the certified people are still active.   |
| 3.A.3 | Sedona Alternate Route                                   | To construct an alternate route between Sedona and the Village of Oak Creek which would enhance emergency service response times and would provide a secondary route should the Hwy. 179 bridge become impassable. | <ul style="list-style-type: none"> <li>• City of Sedona</li> <li>• \$15,000,000</li> <li>• Undetermined</li> </ul>     | Complete<br>for<br>Emergency<br>Service<br>Vehicles | Delete      | In May 2009, the Verde Valley Multimodal Transportation Study was completed by Lima & Assoc. for Yavapai County. The study does not recommend a project for an alternate route between 2010 and 2030. However, there is an emergency services route to VOC via the La Marra Subdivision on Upper RR Loop Rd. Improvements were made to Brewer and Ranger Roads to ease pressure on the "Y" during the SR 179 Project. |
| 6.A.2 | Adopt Wildland Code<br>Urban Wildland Interface Training | <del>Adopt and urban wildland interface development code.</del> Urban Wildland Interface Training for officers, risk assessments. 5-year cost.   | <ul style="list-style-type: none"> <li>• Sedona Fire District</li> <li>• \$1,000,000</li> <li>• Ongoing</li> </ul>     | Complete<br>Ongoing                                 | Revise      | On 9/11/07, the public (residents within the Sedona Fire District) voted to adopt the 2003 International Urban-Wild-land Interface Code. The SFD has one Fire Inspector that is Wild-land Evaluator Certified. One position was cut during the 09/10 Plan Year due to budgetary constraints. Training is ongoing.   |

| Table 6-7-10<br>Sedona assessment of previous plan cycle mitigation actions/projects |                            |   |  |                     |             |   |
|--|----------------------------|---|--|---------------------|-------------|---|
| ID   | Name                       | Description   | <ul style="list-style-type: none"> <li>• Lead Agency</li> <li>• Proposed Cost</li> <li>• Proposed Comp Date</li> </ul> | Status              | Disposition | Explanation   |
| 3.A.1  | Early Warning Siren System | Install five sirens throughout the community to notify the public of impending hazards. | <ul style="list-style-type: none"> <li>• Sedona Fire District</li> <li>• \$75,000</li> <li>• 2005</li> </ul>           | Complete            | Delete      | This project was specifically for Uptown and Oak Creek Canyon. This initiative was completed on June 15, 2007. A total of nine sirens were installed, with the Southernmost siren located at the Arroyo Roble Resort and Northernmost siren located at Pine Flats.  |
| 3.A.2  | Variable Message Sign      | Oak Creek Canyon condition announcements along 89-A north.                              | <ul style="list-style-type: none"> <li>• City of Sedona</li> <li>• \$10,000</li> <li>• 2006</li> </ul>                 | Complete            | Delete      | ADOT installed two permanent variable message boards on SR 89A during FY 2008-2009. One board is near Lomacasi Cottages, the other is just south of Flagstaff. This initiative is complete.   |
| 6.A.1  | Wildland Mitigation        | Proposed wildland fire assessments to identify urban wildland interface. 5-year cost.   | <ul style="list-style-type: none"> <li>• Sedona Fire District</li> <li>• \$250,000</li> <li>• Ongoing</li> </ul>       | Complete<br>Ongoing | Keep        | SFD advertises and offers free property assessment to homeowners and business owners. They've adopted the 2003 International Urban-Wildland Interface Code. Inspections were done for several subdivisions and homeowners in the past 5-years. SFD has developed a Sedona Wild-land Interface Map that shows priority threat areas. |

| Table 6-7-10<br>Sedona assessment of previous plan cycle mitigation actions/projects |                                       |   |  |                  |             |  |
|--|---------------------------------------|---|--|------------------|-------------|--|
| ID   | Name                                  | Description   | <ul style="list-style-type: none"> <li>• Lead Agency</li> <li>• Proposed Cost</li> <li>• Proposed Comp Date</li> </ul> | Status           | Disposition | Explanation  |
| 7.B.1  | Develop Survey and Assessment Program | Develop program to assess vulnerability of structures in the community likely to be vulnerable to the affects of thunderstorms and high winds.                                  | <ul style="list-style-type: none"> <li>• City of Sedona</li> <li>• \$200,000</li> <li>• Undetermined</li> </ul>        | No Action        | Delete      | No action was taken on this initiative due to budgetary constraints. Per FEMA regulations, we only take action on flooding issues if a structure has at least 50% substantial damage.  |
| 2.C.1  | Engine Company Inspection Program     | Promote hazard mitigation in the business and residential areas in the community. <del>Install computer and communications equipment in existing facilities.</del> 5-year cost. | <ul style="list-style-type: none"> <li>• Sedona Fire District</li> <li>• \$200,000</li> <li>• Ongoing</li> </ul>       | Complete Ongoing | Revise      | 10 inspections are conducted per captain per shift per station. This equates to 30 inspections per station per month for a total of 90 inspections per month (three stations participate). Commercial inspections are done on a routine annual basis. Residential inspections are by citizen request only and they are free. |

6.3.2 *New Mitigation Actions / Projects and Implementation Strategy*

Upon completion of the assessment summarized in Section 6.3.1, each jurisdiction's Local Planning Team developed new A/Ps using the goals and objectives, results of the vulnerability analysis and capability assessment, and the planning team's institutional knowledge of hazard mitigation needs in the community. The A/Ps can be generally classified as either structural or non-structural. Structural A/Ps typify a traditional "bricks and mortar" approach where physical improvements are provided to effect the mitigation goals. Examples may include forest thinning, channels, culverts, bridges, detention basins, dams, emergency structures, and structural augmentations of existing facilities. Non-structural A/Ps deal more with policy, ordinance, regulation and administrative actions or changes, buy-out programs, and legislative actions. For each A/P, the following elements were identified:

- **ID No.** – a unique alpha-numeric identification number for the A/P.
- **Description** – a brief description of the A/P including a supporting statement that tells the "what" and "why" reason for the A/P.
- **Hazard(s) Mitigated** – a list of the hazard or hazards mitigated by the A/P.
- **Community Assets Mitigated** – a brief descriptor to qualify the type of assets (existing, new, or both) that the proposed mitigation A/P addresses.
- **Estimated Costs** – concept level cost estimates that may be a dollar amount or estimated as staff time.

Once the full list of A/Ps was completed to the satisfaction of the Local Planning Team, the team then developed the implementation strategy for those A/Ps. The implementation strategy addresses the "priority, how, when, and by whom?" questions related to the execution and completion of an identified A/P. Specific elements identified as a part of the implementation strategy included:

- **Priority Ranking** – each A/P was assigned a priority ranking of either "High", "Medium", or "Low". The assignments were subjectively made using a simple process that assessed how well the A/P satisfied the following considerations:
  - A favorable benefit versus cost evaluation, wherein the perceived direct and indirect benefits outweighed the project cost.
  - A direct beneficial impact on the ability to protect life and/or property from hazards.
  - A mitigation solution with a long-term effectiveness
- **Planning Mechanism(s) for Implementation** – where applicable, a list of current planning mechanisms or processes under which the A/P will be implemented. Examples could include CIPs, General Plans, Area Drainage Master Plans, etc.
- **Anticipated Completion Date** – a realistic and general timeframe for completing the A/P. Examples may include a specific target date, a timeframe contingent upon other processes, or recurring timeframes.
- **Primary Agency and Job Title Responsible for Implementation** – the agency, department, office, or other entity and corresponding job title that will have responsibility for the A/P and its implementation.
- **Funding Source** – the source or sources of anticipated funding for the A/P.

Tables 6-8-1 through 6-8-11 summarize the current mitigation A/P and implementation strategy for each jurisdiction participating in the Plan. Projects listed in *italics font* are recognized as being more response and recovery oriented, but are considered to be a significant part of the overall hazard management goals of the community.

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**Table 6-8-1: Mitigation actions and projects and implementation strategy for Yavapai County**

| Mitigation Action/Project |   |                     |                           |                | Implementation Strategy |  |                             |  |                        |
|---------------------------|---|---------------------|---------------------------|----------------|-------------------------|--|-----------------------------|--|------------------------|
| ID No                     | Description   | Hazard(s) Mitigated | Assets Mitigated (Ex/New) | Estimated Cost | Priority Ranking        | Planning Mechanism(s) for Implementation | Anticipated Completion Date | Primary Responsible Agency / Job Title | Funding Sources        |
| 1                         | Lynx Creek Channelization. Proposed channelization of Lynx Creek downstream of SR 69 through Fain Rd bridge. Channel will contain 100-year flood flows with gabion bank stabilization. Local asset exposure of approximately \$5 million. | Flood               | Both                      | \$2,200,000    | Low                     | N/A                                      | June 2013                   | Flood Control District                 | Flood Control District |
| 2                         | Beaver Creek Channel Restoration. Channel bank restoration to prevent ongoing erosion hazard to protect existing and future buildings and infrastructure.   | Flood               | Both                      | \$100,000      | Med                     | N/A                                      | June 2013                   | Flood Control District                 | Flood Control District |
| 3                         | Flood Hazard Mapping. Identify and map new flood hazard areas and update existing mapping in accordance with NFIP compliant requirements to protect existing and future buildings and infrastructure from flood hazards.                  | Flood               | Both                      | \$1,000,000    | High                    | N/A                                      | On Going                    | Flood Control District                 | Flood Control District |
| 4                         | Flood Warning System. Install additional in stream, weather, and precipitation gauges in watersheds impacting Yavapai County. To include website development and remote dial-up for public agencies.                                      | Flood               | Both                      | \$500,000      | High                    | N/A                                      | On Going                    | Flood Control District                 | Flood Control District |
| 5                         | Flood Damage Prevention, Drainage Criteria Ordinance and Stormwater Management Plan. Amend ordinances to prevent flood damage and water quality degradation and to protect existing and future buildings and infrastructure.              | Flood               | Both                      | \$150,000      | Med                     | N/A                                      | December 2012               | Flood Control District                 | Flood Control District |
| 6                         | Groundwater Identification and Conservation. Establish the extent of available groundwater and coordinate growth in accordance with defined water resources. Apply water allocation/budgeting as a growth management tool County wide.    | Drought             | Both                      | \$40,000       | High                    | Local Plan                               | on-going                    | Water Advisory Committee               | General Fund           |

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**Table 6-8-1: Mitigation actions and projects and implementation strategy for Yavapai County**

| Mitigation Action/Project |   |                                |                           |                 | Implementation Strategy |  |                             |   |                          |
|---------------------------|---|--------------------------------|---------------------------|-----------------|-------------------------|--|-----------------------------|---|--------------------------|
| ID No                     | Description   | Hazard(s) Mitigated            | Assets Mitigated (Ex/New) | Estimated Cost  | Priority Ranking        | Planning Mechanism(s) for Implementation | Anticipated Completion Date | Primary Responsible Agency / Job Title    | Funding Sources          |
| 7                         | <i>Public Safety Information Network. Enhance communications and database information capabilities among public safety agencies (to include police, fire, ems, etc.) to provide for advanced intelligence sharing.</i>                                      | <i>All – Response Oriented</i> | <i>Both</i>               | <i>\$20,000</i> | <i>High</i>             | <i>Communications Plan</i>               | <i>December 2011</i>        | <i>Sheriff &amp; Central Yavapai Fire</i> | <i>Homeland Security</i> |
| 8                         | County Building Security Project. Provide security to Yavapai County Complex Buildings against civil disturbance and terrorism.   | Civil Disturbance, Terrorism   | Existing                  | \$100,000       | High                    | Existing Plans                           | 2014                        | Capital Improvements                      | Building Fund            |
| 9                         | Neighborhood Wildfire Assessment. Develop neighborhood wildfire assessment and rank at-risk neighborhoods with the goal to provide accurate wildfire information to residents and motivate them to implement personal and neighborhood mitigation measures. | Wildfire                       | Both                      | \$500,000       | High                    | National Fire Code                       | On-going                    | Prescott Fire & Central Yavapai Fire      | USDA/FS Grants           |
| 10                        | Regional Fuels Crew. Support two full-time crews dedicated to hazard fuel reduction, fire suppression, and public education in the Prescott Basin and surrounding areas.  | Wildfire                       | Both                      | \$3,000,000     | High                    | National Fire Code                       | On-going                    | Prescott Fire & Central Yavapai Fire      | USDA/FS Grants           |
| 11                        | County Fuels Crew. Support part-time road crew to perform roadside hazard fuel reduction along County roads in the interface.   | Wildfire                       | Both                      | \$300,000       | Med                     | Local Plans                              | On-going                    | Public Works                              | USDA/FS Grants           |
| 12                        | Fire Wise Community Programs. Develop Fire Wise programs for all communities, neighborhoods and home owners associations within the wildland fire/urban interface including instruction materials & facilitating partnerships with insurance agencies.      | Wildfire                       | Both                      | \$15,000        | Med                     | Firewise Requirements                    | On-going                    | HOA's, Community Groups                   | Grants<br>USDA/FS        |
| 13                        | Wildfire Public Education Activities. Continue and expand Town Hall style meeting to include annual expo and continuation and expansion of the regional alert website to protect existing and future buildings and infrastructure. Over ten years.          | Wildfire                       | Both                      | \$100,000       | Med                     | Local Plans                              | On-going                    | PAWUIC                                    | USDA/FS Grants           |

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Table 6-8-1: Mitigation actions and projects and implementation strategy for Yavapai County

| Mitigation Action/Project |   |                                |                           |                    | Implementation Strategy |  |                             |  |                          |
|---------------------------|---|--------------------------------|---------------------------|--------------------|-------------------------|--|-----------------------------|--|--------------------------|
| ID No                     | Description   | Hazard(s) Mitigated            | Assets Mitigated (Ex/New) | Estimated Cost     | Priority Ranking        | Planning Mechanism(s) for Implementation | Anticipated Completion Date | Primary Responsible Agency / Job Title | Funding Sources          |
| 14                        | Small Diameter Wood Business Recruitment. Partnership between PAWUIC and development agencies to conduct outreach and attract sustainable, small-diameter wood-based businesses into the area.  | Wildfire                       | Both                      | \$1,200,000        | Med                     | Local Plans                              | On-going                    | PAWUIC/ YCEM                           | ARRA Grants              |
| 15                        | County Wildland Mapping for State GIS. Establish and maintain a County component of the state GIS mapping system documenting forest treatments, hazard data, grants, etc.   | Wildfire                       | Both                      | \$25,000           | Med                     | Local Plans                              | Dec. 2012                   | County GIS                             | General Fund             |
| 16                        | Boundary Project. Develop a 270 degree defensible wildfire boundary around interface immediately to the south of the City of Prescott.  | Wildfire                       | Both                      | \$3,000,000        | High                    | Local Plan                               | 2015                        | PAWUIC/ USFS                           | USDA/FS Grants           |
| 17                        | <i>Urban Search and Rescue Team Project. Develop urban search and technical rescue capability in the County through training and procurement of specialized equipment.</i>  | <i>All – Response Oriented</i> | <i>Both</i>               | <i>\$1,000,000</i> | <i>High</i>             | <i>Local Plans</i>                       | <i>On-going</i>             | <i>Participating Fire Depts.</i>       | <i>Homeland Security</i> |
| 18                        | Ensure Water Quality. Protect water quality from contamination through development of household hazardous waste programs over ten years.  | Drought; HAZMAT                | Both                      | \$200,000          | Med                     | Local Plans                              | 2015                        | YCEM                                   | county, city, ADEQ       |
| 19                        | <i>Personal Protection and Detection Equipment. Identify and purchase first responder advanced technology personal protection and detection equipment for chemical and biological incidents.</i>  | <i>Chemical and Biological</i> | <i>Both</i>               | <i>\$150,000</i>   | <i>High</i>             | <i>Local Plans</i>                       | <i>2012</i>                 | <i>county-wide Public Safety</i>       | <i>Homeland Security</i> |
| 20                        | <i>Community Emergency Response Team Program. Citizen disaster training to form neighborhood teams as interim first responders in wide spread disasters or events where communities and neighborhoods are isolated. Ten year program.</i> | <i>All – Response Oriented</i> | <i>Both</i>               | <i>\$50,000</i>    | <i>Low</i>              | <i>Local Plans</i>                       | <i>On-going</i>             | <i>YCEM</i>                            | <i>FEMA</i>              |
| 21                        | Repetitive Flood Loss Properties. Inform and coordinate property owners to flood mitigation programs such as retrofit and/or property acquisition.  | Flood                          | Existing                  | \$5,000,000        | Low                     | N/A                                      | On Going                    | Flood Control District                 | Flood Control District   |

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**Table 6-8-1: Mitigation actions and projects and implementation strategy for Yavapai County**

| Mitigation Action/Project |  |                     |                           |                | Implementation Strategy |  |                             |  |                        |
|---------------------------|--|---------------------|---------------------------|----------------|-------------------------|--|-----------------------------|--|------------------------|
| ID No                     | Description  | Hazard(s) Mitigated | Assets Mitigated (Ex/New) | Estimated Cost | Priority Ranking        | Planning Mechanism(s) for Implementation | Anticipated Completion Date | Primary Responsible Agency / Job Title | Funding Sources        |
| 22                        | Purchase and Store Rain Gages for use after a forest fire to assist in mitigating flood and mudslide losses.   | Flood and Mudslide  | Both                      | \$50,000       | High                    | N/A                                      | December 2012               | Flood Control District                 | Flood Control District |
| 23                        | Mayer Local Drainage. Construct various flood mitigation projects to protect structures from flooding.   | Flood               | Existing                  | \$30,000       | High                    | N/A                                      | August 2012                 | Flood Control District                 | Flood Control District |
| 24                        | Lake Montezuma Area-Wide Drainage Plan. Area-wide planning project to determine hazard and mitigation projects for construction.                     | Flood               | Both                      | \$200,000      | High                    | N/A                                      | June 2012                   | Flood Control District                 | Flood Control District |
| 25                        | Village of Oak Creek Area-Wide Construction Projects. Five of eight various flood mitigation projects as determined in the area-wide planning study. | Flood               | Both                      | \$250,000      | High                    | N/A                                      | June 2016                   | Flood Control District                 | Flood Control District |

**Table 6-8-2: Mitigation actions and projects and implementation strategy for Camp Verde**

| Mitigation Action/Project |   |                     |                           |                | Implementation Strategy |  |                             |   |                 |
|---------------------------|---|---------------------|---------------------------|----------------|-------------------------|--|-----------------------------|---|-----------------|
| ID No                     | Description   | Hazard(s) Mitigated | Assets Mitigated (Ex/New) | Estimated Cost | Priority Ranking        | Planning Mechanism(s) for Implementation | Anticipated Completion Date | Primary Responsible Agency / Job Title              | Funding Sources |
| 1                         | Enforce Current Building Codes. Continue to enforce building codes to protect existing and future buildings and infrastructure from severe wind damage and other natural and human-caused disasters. 5 year cost. | All                 | Both                      | Staff time     | High                    | Building Codes                           | Continued                   | Town of Camp Verde/<br>Building Official            | General Fund    |
| 2                         | Update Weed Abatement Code. Revise weed abatement ordinance to include wildfire defensible space to protect existing and future buildings and infrastructure from wildfire hazards.                               | Wildfire            | Both                      | Staff time     | Med                     | Planning & Zoning Codes                  | March 2011 next update      | Community Development/<br>Code Enforcement Official | General Fund    |

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**Table 6-8-2: Mitigation actions and projects and implementation strategy for Camp Verde**

| Mitigation Action/Project |   |                         |                           |                | Implementation Strategy |  |                             |  |                                |
|---------------------------|---|-------------------------|---------------------------|----------------|-------------------------|--|-----------------------------|--|--------------------------------|
| ID No                     | Description   | Hazard(s) Mitigated     | Assets Mitigated (Ex/New) | Estimated Cost | Priority Ranking        | Planning Mechanism(s) for Implementation | Anticipated Completion Date | Primary Responsible Agency / Job Title | Funding Sources                |
| 3                         | Implement Stormwater Master Plan. Hire an engineer to devote a portion of their time to overseeing the implementation of the Stormwater Master Plan for mitigation of stormwater and flooding hazards.  | Flooding                | Both                      | Staff time     | High                    | Storm Water Master Plan                  | February 2011               | Public Works/Project Manager           | General Fund                   |
| 4                         | Uninterrupted Power System for Traffic Signals. Install battery backup power systems at major traffic intersections.  | Transportation Accident | Both                      | \$150,000      | High                    | Engineering Standards                    | 2012                        | Public Works/Public Works Director     | General Fund                   |
| 5                         | Flood Prone Property Acquisition. Inform and coordinate property owners to flood mitigation programs such as retrofit and/or property acquisition in Verde Lakes area including Verde Lakes Drive/Clear Creek Restoration.                    | Flooding                | Existing                  | Staff time     | Med                     | Storm Water Master Plan                  | Continued                   | Public Works/Public Works Director     | General Fund                   |
| 6                         | Middle Verde Area Drainage Improvements. Channelization of Middle Verde area with box culverts, retention/detention basins to remove several homes from the floodplain as reported in the Middle Verde Area Drainage Evaluation by the USACE. | Flooding                | Both                      | \$2,000,000    | Low                     | Storm Water Master Plan                  | Continued                   | Public Works/Public Works Director     | FEMA HMGP / General Fund match |
| 7                         | Maintain IGA with the County as Floodplain Managers to ensure compliance with NFIP regulations for management and review of new developments located in the floodplain in regards to issuance of floodplain use permits.                      | Flooding                | Both                      | Staff time     | High                    | Town Codes/IGA's                         | Continued                   | Public Works/Public Works Director     | General Fund                   |

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Table 6-8-3: Mitigation actions and projects and implementation strategy for Chino Valley

| Mitigation Action/Project |   |  |                           |                    | Implementation Strategy |  |                             |  |                      |
|---------------------------|---|--|---------------------------|--------------------|-------------------------|--|-----------------------------|--|----------------------|
| ID No                     | Description   | Hazard(s) Mitigated                      | Assets Mitigated (Ex/New) | Estimated Cost     | Priority Ranking        | Planning Mechanism(s) for Implementation | Anticipated Completion Date | Primary Responsible Agency / Job Title                                     | Funding Sources      |
| 1                         | <i>Personal Protection and Detection Equipment. Identify and purchase first responder advanced technology personal protection and detection equipment for chemical and biological incidents including personnel training. 5 year cost.</i>  | <i>Chemical and Biological Incidents</i> | <i>Both</i>               | <i>\$1 million</i> | <i>Low</i>              | <i>None</i>                              | <i>TBD</i>                  | <i>Community Development, Legal, and Public Wo</i>                         | <i>Federal Grant</i> |
| 2                         | Road 3 North and Voss Drive Drainage. Install box culverts to convey sheet flow across Road 3 North with Retention/Detention basins southwest of Voss Drive.  | Flood                                    | Both                      | \$250,000          | Low                     | CIP Program                              | TBD                         | Public Works / Director  | CIP Program          |
| 3                         | Hazard Public Education Activities. Continue and expand Town Hall style meetings, annual expos, and other public outreach. Expansion of the Town, Police, and Fire website. Distribution of educational materials related to all hazards the Town is susceptible to. 5 year cost. | All                                      | Both                      | \$200,000          | Low                     | None                                     | Ongoing                     | Police and Public Works, Chino Valley Fire District                        | CIP Program          |
| 4                         | Bridge Structure at Road 5 North. Construct an all weather crossing at Road 5 North and Reed Road to mitigate road closures due to heavy rains and provide uninterrupted access.  | Flood                                    | Both                      | \$750,000          | Low                     | CIP Program                              | TBD                         | Public Works / Director  | CIP Program          |
| 5                         | Bridge on Road 2 North. Reconstruction of Bridge on Road 2 North over Santa Cruz Wash to eliminate frequent overtopping due to sedimentation. Project will prevent road closures due to heavy rains and allow uninterrupted access.   | Flood                                    | Both                      | \$600,000          | Med                     | CIP Program                              | December 2011               | Public Works / Director  | CIP Program          |
| 6                         | Strengthen Building Codes. Adopt and enforce new building codes to protect existing and future buildings and infrastructure from high wind and other natural and human caused disasters. 5 year cost.   | All                                      | Both                      | \$75,000           | Low                     | Unified Development Ordinance            | Ongoing                     | Community Development, Legal, and Public Works, Chino Valley Fire District | General Funds        |

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**Table 6-8-3: Mitigation actions and projects and implementation strategy for Chino Valley**

| Mitigation Action/Project |   |                     |                           |                | Implementation Strategy |  |                             |  |                 |
|---------------------------|---|---------------------|---------------------------|----------------|-------------------------|--|-----------------------------|--|-----------------|
| ID No                     | Description   | Hazard(s) Mitigated | Assets Mitigated (Ex/New) | Estimated Cost | Priority Ranking        | Planning Mechanism(s) for Implementation | Anticipated Completion Date | Primary Responsible Agency / Job Title         | Funding Sources |
| 7                         | Maintain compliance with NFIP regulations by enforcement of the FEMA floodplain management through review of new development located in the floodplain and issuance of FEMA floodplain use permits. | Flood               | Both                      | None           | Low                     | Floodplain Ordinance                     | Ongoing                     | Community Development, Legal, and Public Works | General Fund    |

**Table 6-8-4: Mitigation actions and projects and implementation strategy for Clarkdale**

| Mitigation Action/Project |  |                         |                           |                     | Implementation Strategy |  |                             |  |                 |
|---------------------------|--|-------------------------|---------------------------|---------------------|-------------------------|--|-----------------------------|--|-----------------|
| ID No                     | Description  | Hazard(s) Mitigated     | Assets Mitigated (Ex/New) | Estimated Cost      | Priority Ranking        | Planning Mechanism(s) for Implementation | Anticipated Completion Date | Primary Responsible Agency / Job Title             | Funding Sources |
| 1                         | Improve Flood Warning System on Verde River. Install gage and equipment for flood warning system in the Verde River at Tuzigoot Bridge.  | Flood                   | Both                      | \$10,000            | High                    | N/A                                      | 2013                        | Yavapai County Flood Control District              | Yavapai County  |
| 2                         | Tuzigoot Bridge. Enlarge or replace Tuzigoot Bridge to alleviate traffic and accommodate emergency response vehicles during flooding events on the Verde River.  | Flood                   | Both                      | \$28,000,000        | Med                     | N/A                                      | 2015                        | ADOT   | ADOT            |
| 3                         | Finalize PARA Study. Work with consultant or finalize the Transportation Master Plan for the Town.   | Transportation Accident | Both                      | \$125,000           | Med                     | General Plan                             | 2011                        | ADOT   | ADOT            |
| 4                         | Review and modify International Construction Code Appendix - Property Maintenance Code to help maintain building integrity to prevent injury or loss of life and to mitigate damage to existing and future structures resulting from severe winds. | Severe Wind             | Both                      | \$5,000 +Staff Time | Med                     | Town Code                                | On Going                    | Town of Clarkdale Community Development Department | General Fund    |

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**Table 6-8-4: Mitigation actions and projects and implementation strategy for Clarkdale**

| Mitigation Action/Project |  |  |                           |                        | Implementation Strategy |  |                             |  |  |
|---------------------------|--|--|---------------------------|------------------------|-------------------------|--|-----------------------------|--|--|
| ID No                     | Description  | Hazard(s) Mitigated                            | Assets Mitigated (Ex/New) | Estimated Cost         | Priority Ranking        | Planning Mechanism(s) for Implementation | Anticipated Completion Date | Primary Responsible Agency / Job Title             | Funding Sources                        |
| 5                         | Targeted Debris Removal and Wildfire Fuel Reduction. Remove overgrowth and debris around washes in the Town including the Verde River. Project to increase river capacity and reduce wildfire hazard.                                | Flood;<br>Wildfire                             | Both                      | \$25,000               | Med                     | Defensible Space Plan                    | 2015                        | Clarkdale Fire District                            | Fire District                          |
| 6                         | Enforce recently adopted International Construction Codes to prevent injury or loss of life and to mitigate damage to existing and future structures resulting from severe winds.  | Severe Wind                                    | Both                      | \$5,000<br>+Staff Time | High                    | Town Code                                | On Going                    | Town of Clarkdale Community Development Department | General Fund                           |
| 7                         | Wildfire Fuel Reduction. Conduct wildfire hazard fuel reduction within and surrounding Clarkdale to reduce the risk to existing and new structures.  | Wildfire                                       | Both                      | \$20,000               | High                    | Defensible Space Plan                    | 2012                        | Clarkdale Fire District                            | Fire District                          |
| 8                         | Purchase and install backup generators to provide power in the event of a power outage related to severe wind and winter storm events. Install back up power systems for critical public services and disaster shelters in the Town. | Severe Wind;<br>Winter Storm                   | Both                      | \$300,000              | Med                     | N/A                                      | 2014                        | Town of Clarkdale                                  | General Fund Grants                    |
| 9                         | Develop IGA with Yavapai County Flood Control District for establishing procedural guidelines for the implementation and enforcement of the NFIP floodplain management.  | Flood  | New                       | Staff Time             | Med                     | Town Code                                | Annually                    | Town of Clarkdale Community Development Department | General Fund                           |
| 10                        | Yavapai County Flood Mitigation Projects. Major projects are driven by historical events and minor projects are driven by local issues   | Flood  | New                       | Staff Time             | High                    | Flood Mitigation Project Plan            | Annually                    | Town of Clarkdale Public Works Department          | Yavapai Co Grants                      |
| 11                        | Twin 5 Water Main Location. Replace/relocate vulnerable existing exposed above ground dual 5" water main pipelines with a minimum 12" ductile iron pipe to enhance system security and improve operating capability.                 | Flood,<br>Wildfire,<br>Terrorism,<br>Vandalism | New                       | 3,500,000              | High                    | Water Master Plan                        | 2015                        | Town of Clarkdale Utility Department               | Water Fund HUD Homeland Security Grant |

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**Table 6-8-4: Mitigation actions and projects and implementation strategy for Clarkdale**

| Mitigation Action/Project |   |                         |                           |                | Implementation Strategy |  |                             |  |                 |
|---------------------------|---|-------------------------|---------------------------|----------------|-------------------------|--|-----------------------------|--|-----------------|
| ID No                     | Description   | Hazard(s) Mitigated     | Assets Mitigated (Ex/New) | Estimated Cost | Priority Ranking        | Planning Mechanism(s) for Implementation | Anticipated Completion Date | Primary Responsible Agency / Job Title | Funding Sources |
| 12                        | 89A Reservoir Site Protection. Install traffic control barricades to protect vulnerable existing reservoir tanks. | Transportation Accident | New                       | 30,000         | Med                     | Water Master Plan                        | 2015                        | Town of Clarkdale Utility Department   | Water Fund HUD  |

**Table 6-8-5: Mitigation actions and projects and implementation strategy for Cottonwood**

| Mitigation Action/Project |   |                     |                           |                | Implementation Strategy |  |                             |  |                            |
|---------------------------|---|---------------------|---------------------------|----------------|-------------------------|--|-----------------------------|--|----------------------------|
| ID No                     | Description   | Hazard(s) Mitigated | Assets Mitigated (Ex/New) | Estimated Cost | Priority Ranking        | Planning Mechanism(s) for Implementation   | Anticipated Completion Date | Primary Responsible Agency / Job Title | Funding Sources            |
| 1                         | Enforce Current Building Codes. Continue to enforce building codes to protect existing and future buildings and infrastructure from severe wind damage and other natural and human-caused disasters. 5-year cost.           | All                 | New                       | \$200,000      | High                    | A physical need to get plight and unsafe conditions cleaned up within the City.  | On Going                    | Code Enforcement Officers              | General Fund               |
| 2                         | Complete Railroad Wash Channelization Project. Complete channelization of Railroad Wash between State Route 89A to Beach Street to remove residential properties from the floodplain.                                       | Flood               | Both                      | \$1,000,000    | Med                     | FEMA Flood Plain   | On Hold                     | Public Works Utilities                 | Grants and General Funding |
| 3                         | Public Education Activities. Initiate public outreach for hazard mitigation utilizing City information systems, distribution of educational materials, and neighborhood watch meetings related to all hazards. 5-year cost. | All                 | Existing                  | \$5,000        | Low                     | Block watch meetings and Citizen Police Academes planned throughout the year. Seeking public input through public awareness. | 2016                        | Police/ Developmental Services         | General Fund               |

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Table 6-8-5: Mitigation actions and projects and implementation strategy for Cottonwood

| Mitigation Action/Project |  |                          |                           |                | Implementation Strategy |   |                             |  |                                      |
|---------------------------|--|--------------------------|---------------------------|----------------|-------------------------|---|-----------------------------|--|--------------------------------------|
| ID No                     | Description  | Hazard(s) Mitigated      | Assets Mitigated (Ex/New) | Estimated Cost | Priority Ranking        | Planning Mechanism(s) for Implementation  | Anticipated Completion Date | Primary Responsible Agency / Job Title | Funding Sources                      |
| 4                         | HAZMAT Transportation Enforcement. Initiating interaction with commercial vehicle safety specialists to promote the continued enforcement of rules and regulations of HAZMAT transport. Through spot inspections of commercial vehicles with the aid of surrounding law enforcement agencies and Motor Vehicle Division. | HAZMAT                   | Existing                  | \$2,500 Year   | Med                     | Police Officers trained in Commercial Vehicle inspections and working hand in hand with Motor Vehicle Division. | On Going                    | Police Department                      | General and RICCO Funds              |
| 5                         | <i>HAZMAT First Responder Training and Resource Development. Through advanced training and use of equipment first responders are better able to identify hazardous materials and protect the public.</i>   | HAZMAT                   | Both                      | \$1,000        | Low                     | <i>OSHA Requirement and annual refresher for HAZMAT First Responder Operations Level</i>                        | <i>On Going</i>             | <i>Fire Department</i>                 | <i>General Fund or Grant funding</i> |
| 6                         | HAZMAT Code Enforcement. Ensure code compliance related to hazardous materials use, storage and disposal in the community.   | HAZMAT                   | Both                      | \$10,000       | Med                     | Semi and Annual inspections of Tire 2 Level Reporting Facilities  | On Going                    | Fire Department                        | Grants and General Fund              |
| 7                         | Accident Reduction Details. Continuation of traffic accident mitigation by selective enforcement in high risk areas. 5-year cost.  | Traffic Accident         | Existing                  | N/A            | High                    | Traffic enforcement in areas where accidents frequently occur.  | On Going                    | Police Department                      | General Fund                         |
| 8                         | Early Warning System. Active early warning system for inclement weather and flooding conditions. Cooperative with Yavapai County and NOAA.   | All                      | Both                      | \$30,000       | Med                     |   | Pending Funding             | Public Works And Police Department     | Grant Funds                          |
| 9                         | Backup Power Supply for Water Distribution Systems. Obtain backup electrical generation systems for emergency operation for the water distribution system during power outages caused by severe wind or other hazard event.  | Severe Wind Winter Storm | Both                      | \$750,000      | High                    | Operational Requirement to maintain system continuity and redundancy  | Pending Funds               | Utilities                              | General Fund and Grant Funds         |

**Table 6-8-5: Mitigation actions and projects and implementation strategy for Cottonwood**

| Mitigation Action/Project |   |                         |                           |                | Implementation Strategy |   |                             |   |                              |
|---------------------------|---|-------------------------|---------------------------|----------------|-------------------------|---|-----------------------------|---|------------------------------|
| ID No                     | Description   | Hazard(s) Mitigated     | Assets Mitigated (Ex/New) | Estimated Cost | Priority Ranking        | Planning Mechanism(s) for Implementation  | Anticipated Completion Date | Primary Responsible Agency / Job Title                | Funding Sources              |
| 10                        | Public Safety Communication Improvements. Upgrade public safety communication systems to handle storm related operational disruptions during sever.   | All – Response Oriented | Existing                  | \$1,000,000    | High                    | Studies are being conducted to determine the size of communications center needed to handle all demands from the community and natural disasters. | Underway                    | Public Safety (Fire Department and Police Department) | Grant Funds<br>General Funds |
| 11                        | Eliminate Wet Crossings On Collector Streets Within the City. Replace wet crossings with structures to allow uninterrupted traffic access during flood events on 6th Street and Camino Real crossing of Silver Springs Gulch. | Flood                   | Both                      | \$20,000       | High                    | Wet water crossings cause major traffic problems during the monsoon season. Flash Flood issues  | 2015                        | Public Works  | Capital Purchase             |
| 12                        | Targeted Stormwater Drainage Improvements. Identify repetitive flooding problems within the community and develop projects to reduce the flooding hazard.   | Flood                   | Both                      | \$50,000       | High                    | Response from past experiences involving areas within the City that community.  | On Going                    | Public Works  | General Fund                 |
| 13                        | Wildfire Fuel Reduction Program. Identify and remove excess wildfire fuels from targeted wildland/urban interface areas to protect existing and future buildings and infrastructure.  | Wildfire                | Both                      | \$160,000      | High                    | Reduce fuel loads and potential for catastrophic fires along the river bottom in River Front Park   | On Going                    | Fire Department and Street Department                 | General Fund                 |

Table 6-8-6: Mitigation actions and projects and implementation strategy for Dewey-Humboldt

| Mitigation Action/Project |   |                            |                           |                | Implementation Strategy |   |   |  |                            |
|---------------------------|---|----------------------------|---------------------------|----------------|-------------------------|---|---|--|----------------------------|
| ID No                     | Description   | Hazard(s) Mitigated        | Assets Mitigated (Ex/New) | Estimated Cost | Priority Ranking        | Planning Mechanism(s) for Implementation  | Anticipated Completion Date             | Primary Responsible Agency / Job Title                               | Funding Sources            |
| 1                         | Antelope Meadows Commercial Center. Remove flooding risk to the resident downstream of the Antelope Industrial Park (1 mi east of SR69, on SR169) by diverting flow to the Agua Fria River. This will include constructing to capture and convey drainage in a controlled manner. | Flood                      | Existing                  | \$100,000      | 3                       | Completed studies & stakeholder outreach. Project cannot be completed as recommended by engineering consultant w/o stakeholder cooperation (easements). | Dependent upon stakeholder cooperation. | Town of Dewey-Humboldt Engineering and Public Works Department       | IGA, General Fund, or HURF |
| 2                         | Codes. Implement and enforce council directed building codes and adopt new international codes as they become available and/or are applicable.  | All                        | Both                      | \$0            | 1                       | Building official alertness and council adoption.   | As published                            | Town of Dewey-Humboldt Community Development and Building Department | N/A                        |
| 3                         | Public Outreach. Educate the public on the risks resulting from severe weather and associated hazards; including recommendations on how protect themselves and their property from damages due to natural and man-made hazards events.  | Drought, Severe Wind, Fire | Both                      | \$5,000        | 4                       | Outreach materials will be made available/distributed via fliers, newsletter, and Town website.   | Semi-annual basis                       | Town of Dewey-Humboldt Community Outreach                            | General Fund               |

**Table 6-8-6: Mitigation actions and projects and implementation strategy for Dewey-Humboldt**

| Mitigation Action/Project |   |                     |                           |                | Implementation Strategy |   |                             |  |                 |
|---------------------------|---|---------------------|---------------------------|----------------|-------------------------|---|-----------------------------|--|-----------------|
| ID No                     | Description   | Hazard(s) Mitigated | Assets Mitigated (Ex/New) | Estimated Cost | Priority Ranking        | Planning Mechanism(s) for Implementation  | Anticipated Completion Date | Primary Responsible Agency / Job Title   | Funding Sources |
| 4                         | Maintain compliance with National Flood Insurance Program (NFIP) regulations by enforcement of the county floodplain management ordinance through review of new development located in the floodplain and issuance of floodplain use permits. | Flood               | Both                      | \$0            | 2                       | IGA with Yavapai County to delineate Special Flood Hazard Areas (SFHA) and adopt and enforce regulations governing SFHA and SFHA management in its area of jurisdiction | 6/2011                      | Town of Dewey-Humboldt Community Development and Engineering and Public Works Department | N/A             |

**Table 6-8-7: Mitigation actions and projects and implementation strategy for Jerome**

| Mitigation Action/Project |  |                            |                           |                | Implementation Strategy |   |                             |  |  |
|---------------------------|--|----------------------------|---------------------------|----------------|-------------------------|---|-----------------------------|--|--|
| ID No                     | Description  | Hazard(s) Mitigated        | Assets Mitigated (Ex/New) | Estimated Cost | Priority Ranking        | Planning Mechanism(s) for Implementation  | Anticipated Completion Date | Primary Responsible Agency / Job Title       | Funding Sources                                    |
| 1                         | Storm Sewer And Utility Master Plan. Hire a consultant to prepare a storm sewer and utility master plan to identify storm drain problems and prioritize infrastructure improvements. | Flood, Landslide/ Mudslide | Both                      | \$50,000       | 1                       | In process of creating a master Capital Improvement Plan to address needed infrastructure improvements. | Ongoing                     | Town Manager, Fire Chief, Public Works Chief | Grants (CDBG, FEMA, USDA, others) plus town budget |

**Table 6-8-7: Mitigation actions and projects and implementation strategy for Jerome**

| Mitigation Action/Project |   |                               |                           |                | Implementation Strategy |  |                             |   |                             |
|---------------------------|---|-------------------------------|---------------------------|----------------|-------------------------|--|-----------------------------|---|-----------------------------|
| ID No                     | Description   | Hazard(s) Mitigated           | Assets Mitigated (Ex/New) | Estimated Cost | Priority Ranking        | Planning Mechanism(s) for Implementation   | Anticipated Completion Date | Primary Responsible Agency / Job Title            | Funding Sources             |
| 2                         | Town Fuels Crew. Support and equip part-time wildland fire crew to perform wildfire hazard fuel reduction for prevention and suppression in cooperation with the Forest Service, mining companies and private property owners to protect existing and future buildings and infrastructure. 5-year cost. | Wildfire, Landslide/ Mudslide | Both                      | \$20,000       | 2                       | Ord. 358 - a Property Maintenance Code that requires fuel abatement on private property. | Ongoing                     | Fire Chief and Chief Building Official.           | Wildlands fees              |
| 3                         | HAZMAT Public Outreach. Educate the public about hazardous materials safety by including information in Town newsletter and distributing flyers at Town events.   | HAZMAT                        | Both                      | \$500          | 3                       | None   | Ongoing                     | Town Manager and Fire Chief.                      | Town budget – general fund. |
| 4                         | Adopt and enforce new building codes to protect existing and future buildings and infrastructure from severe wind damage and other natural and human caused disasters. 5 year cost.   | All                           | Both                      | \$3,000        | 4                       | Town has recently adopted and is enforcing the 2003 IFC and IBC and related Codes        | Ongoing                     | Fire Chief, Chief Building Official, Police Chief | Town budget                 |

**Table 6-8-8: Mitigation actions and projects and implementation strategy for Prescott**

| Mitigation Action/Project |  |                                |                           |                    | Implementation Strategy |  |                             |  |                  |
|---------------------------|--|--------------------------------|---------------------------|--------------------|-------------------------|--|-----------------------------|--|------------------|
| ID No                     | Description  | Hazard(s) Mitigated            | Assets Mitigated (Ex/New) | Estimated Cost     | Priority Ranking        | Planning Mechanism(s) for Implementation | Anticipated Completion Date | Primary Responsible Agency / Job Title | Funding Sources  |
| 1                         | <i>Improve Communications Infrastructure. Finalize construction of seven communication sites to improve emergency response communication capabilities.</i>     | <i>All – Response Oriented</i> | <i>Both</i>               | <i>\$500,000</i>   | <i>High</i>             | <i>CIP and Engineers Est.</i>            | <i>7/1/12</i>               | <i>Police Department</i>               | <i>GF/Grants</i> |
| 2                         | Wildfire Fuel Reduction. Continue wildfire fuel reduction on private/public property to protect existing and future buildings and infrastructure. 5 year cost. | Wildfire                       | Both                      | \$600,000 Annually | High                    | Community Wildfire Protection Plan       | On-going                    | Fire Department                        | GF/Grants        |

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Table 6-8-8: Mitigation actions and projects and implementation strategy for Prescott

| Mitigation Action/Project |  |   |                           |                   | Implementation Strategy |  |                             |  |                 |
|---------------------------|--|---|---------------------------|-------------------|-------------------------|--|-----------------------------|--|-----------------|
| ID No                     | Description  | Hazard(s) Mitigated                         | Assets Mitigated (Ex/New) | Estimated Cost    | Priority Ranking        | Planning Mechanism(s) for Implementation | Anticipated Completion Date | Primary Responsible Agency / Job Title | Funding Sources |
| 3                         | Improve Response Capability. Purchase additional hazardous materials mitigation equipment.   | HAZMAT                                      | Both                      | \$300,000         | Med                     | CIP                                      | 7/1/16                      | Fire Department                        | Grants          |
| 4                         | <i>Improve Emergency Operations Center. Purchase and install computer, audio/visual, communications, and reverse 911 equipment.</i>  | <i>All – Response Oriented</i>              | <i>Both</i>               | <i>\$200,000</i>  | <i>Med</i>              | <i>CIP</i>                               | <i>7/1/16</i>               | <i>Fire Department</i>                 | <i>Grants</i>   |
| 5                         | <i>First Responder Training and Equipment. Through advanced training and use of equipment first responders are better able to identify hazards and protect the public.</i>                                       | <i>All – Response Oriented</i>              | <i>Both</i>               | <i>\$75,000</i>   | <i>Low</i>              | <i>CIP</i>                               | <i>7/1/12</i>               | <i>Fire Department</i>                 | <i>Grants</i>   |
| 6                         | Improve Low Water Crossings. Install gates, signs, and gages to prevent vehicle travel in 28 low water crossings during flooding events.   | Flood                                       | Both                      | \$383,731         | High                    | CIP and Engineers Est.                   | 7/1/12                      | Public Works                           | GF/Grants       |
| 7                         | City Hall Building Security Project. Provide security to City Hall against civil disturbance and terrorism. To include badging-entry system, and hardening glass around front office employees.                  | Civil Disturbance, Terrorism                | Existing                  | \$100,000         | Med                     | CIP and Engineers Est.                   | 7/1/12                      | Administrative Services                | Grants          |
| 8                         | <i>Urban Search and Rescue Team Project. Improve urban search and technical rescue capability in the City through training and procurement of specialized equipment.</i>   | <i>All – Response Oriented</i>              | <i>Both</i>               | <i>\$200,000</i>  | <i>Low</i>              | <i>CIP</i>                               | <i>7/1/12</i>               | <i>Fire Department</i>                 | <i>Grants</i>   |
| 9                         | Enforce Current Building Codes. Continue to enforce building codes to protect existing and future buildings and infrastructure from sever wind damage and other natural and human caused disasters. 5 year cost. | All   | Both                      | \$75,000 Annually | Med                     | On-going need                            | On-going                    | Community Development                  | GF/Grants       |
| 10                        | Uninterrupted Power System for Traffic Signals. Install battery backup power systems at major traffic intersections to mitigate potential accidents due to power outages associated with severe weather.         | Traffic Accident, Severe Wind, Winter Storm | Both                      | \$300,000         | Low                     | CIP/Engineers Est                        | 7/1/12                      | Public Works                           | GF/Grants       |

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**Table 6-8-8: Mitigation actions and projects and implementation strategy for Prescott**

| Mitigation Action/Project |   |                     |                           |                   | Implementation Strategy |  |                             |  |                 |
|---------------------------|---|---------------------|---------------------------|-------------------|-------------------------|--|-----------------------------|--|-----------------|
| ID No                     | Description   | Hazard(s) Mitigated | Assets Mitigated (Ex/New) | Estimated Cost    | Priority Ranking        | Planning Mechanism(s) for Implementation | Anticipated Completion Date | Primary Responsible Agency / Job Title | Funding Sources |
| 11                        | Wildfire Code Enforcement. Continue enforcement of wildland urban interface code. 5 year cost.  | Wildfire            | Both                      | \$75,000 annually | High                    | CWPP                                     | On-going                    | Fire Department                        | GF/Grants       |
| 12                        | Improve drainage infrastructure at various channel crossings and off-channel site locations.  | Flooding            | New                       | \$2,757,000       | High                    | Engineers Est                            | 7/1/12                      | Public Works                           | GF/Grants       |
| 13                        | Replacement and protecting of existing sewer and water mains within FEMA Floodplains which are subject to runoff.   | Flooding            | New                       | \$9,772,611       | High                    | Engineers Est.                           | 7/1/16                      | Public Works                           | GF/Grants       |
| 14                        | Enforcement of floodplain management requirements in accordance with the NFIP, including regulating all and substantially improved construction in floodplains to reduce the losses to property and people. | Flooding            | New                       | \$75,000          | High                    | NFIP                                     | 7/1/12                      | Public Works                           | GF/Grants       |

**Table 6-8-9: Mitigation actions and projects and implementation strategy for Prescott Valley**

| Mitigation Action/Project |   |                     |                           |                | Implementation Strategy |   |                             |  |                 |
|---------------------------|---|---------------------|---------------------------|----------------|-------------------------|---|-----------------------------|--|-----------------|
| ID No                     | Description   | Hazard(s) Mitigated | Assets Mitigated (Ex/New) | Estimated Cost | Priority Ranking        | Planning Mechanism(s) for Implementation  | Anticipated Completion Date | Primary Responsible Agency / Job Title | Funding Sources |
| 1                         | Neighborhood Wildfire Assessment. Develop neighborhood wildfire assessment and rank at-risk neighborhoods with the goal to provide accurate wildfire information to residents and motivate them to implement personal and neighborhood mitigation measures. | Wildfire            | Both                      | \$50,000       | High                    | Neighborhood meetings, flyers and pamphlets. Central Yavapai Fire District (CYFD) assessment. | Ongoing                     | Central Yavapai Fire District (CYFD)   | Grant           |

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Table 6-8-9: Mitigation actions and projects and implementation strategy for Prescott Valley

| Mitigation Action/Project |   |                           |                           |                  | Implementation Strategy |  |                             |  |                        |
|---------------------------|---|---------------------------|---------------------------|------------------|-------------------------|--|-----------------------------|--|------------------------|
| ID No                     | Description   | Hazard(s) Mitigated       | Assets Mitigated (Ex/New) | Estimated Cost   | Priority Ranking        | Planning Mechanism(s) for Implementation                     | Anticipated Completion Date | Primary Responsible Agency / Job Title   | Funding Sources        |
| 2                         | Wildfire Defensible Space Program. Provide funding for residents in at-risk subdivisions to create defensible space around their homes in designated high risk urban interface areas to protect existing and future buildings and infrastructure. 5-year program. | Wildfire                  | Both                      | \$500,000        | Low                     | Education programs. Neighborhood volunteers.                 | Ongoing                     | CYFD                                     | Grant                  |
| 3                         | Town Fuels Crew. Support and equip part-time road crew to perform roadside wildfire hazard fuel reduction along roads in the interface to protect existing and future buildings and infrastructure.   | Wildfire                  | Both                      | \$150,000        | Low                     | Staff Training & Employees as available                      | Ongoing                     | Public Works (PW)                        | General Fund           |
| 4                         | <i>Emergency Vehicle Pre-Emption System. Install a traffic signal priority system for police and fire emergency response vehicles.</i>  | <i>Response</i>           | <i>Response</i>           | <i>\$500,000</i> | <i>Low</i>              | <i>Call assessment for priority determination of routes.</i> | <i>Ongoing</i>              | <i>Police Department (PD) &amp; CYFD</i> | <i>Grant</i>           |
| 5                         | Traffic Control Devices. Obtain 2 lighted sign boards and trailer for use in providing location specific traffic control during hazard events.  | Traffic Accident          | Both                      | \$50,000         | Low                     | Staff Training   | June 2016                   | PW                                       | Grant                  |
| 6                         | Construct Agua Fria Channel flood control facilities on the to protect residential areas from flood damages.  | Flooding / Flash Flooding | Both                      | \$1,200,000      | Med                     | Funding delayed due to economy                               | June 2013                   | PW                                       | Flood Control District |
| 7                         | Complete Phase 2 of the Western Drainage flood control project to protect residential areas from flood damages.   | Flooding / Flash Flooding | Both                      | \$1,000,000      | Med                     | Project Construction Scheduled for October 2011              | March 2012                  | PW                                       | Flood Control District |
| 8                         | Construct Spouse Drainage flood control facilities to protect residential areas from flood damages.   | Flooding / Flash Flooding | Both                      | \$1,800,000      | Low                     | Preliminary Design Considerations                            | June 2014                   | PW                                       | Flood Control District |
| 9                         | Secondary Well Site Power Systems. Obtain backup electrical generation systems for emergency operation at all well sites.   | Severe Wind, Power Outage | Existing                  | \$500,000        | Med                     | Continued facility assessment for additional generators      | Ongoing                     | Utilities                                | Impact Fees            |

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Table 6-8-9: Mitigation actions and projects and implementation strategy for Prescott Valley

| Mitigation Action/Project |  |                               |                           |                    | Implementation Strategy |   |                             |  |                              |
|---------------------------|--|-------------------------------|---------------------------|--------------------|-------------------------|---|-----------------------------|--|------------------------------|
| ID No                     | Description  | Hazard(s) Mitigated           | Assets Mitigated (Ex/New) | Estimated Cost     | Priority Ranking        | Planning Mechanism(s) for Implementation                      | Anticipated Completion Date | Primary Responsible Agency / Job Title | Funding Sources              |
| 10                        | Source Water Assessment Program for the North Well Field, Big Chino Water System and the Agua Fria Recharge Facilities.  | Drought                       | Both                      | \$100,000          | Med                     | Design, Assessments & Approvals under way                     | August 2014                 | Utilities & Water Resources            | Impact Fees                  |
| 11                        | Uninterrupted Power System for Traffic Signals. Install battery backup power systems at 10 major traffic intersections.  | Traffic Accident, Severe Wind | Both                      | \$300,000          | Low                     | Assessments by PD & CYFD to determine phasing                 | Ongoing                     | PD, CYFD, PW                           | Grant                        |
| 12                        | Town Building Security Project. Provide security to Town of Prescott Valley Complex Buildings against civil disturbances and terrorism. 2 <sup>nd</sup> exit from PD Enclosed parking, bullet proof glass @ PD lobby, upgrade to larger generator at PD, bullet proof panels at Council desks and "safe haven" area, cameras @ Library & Civic Center, additional cameras at PD. | Terrorism, Civil Disturbance  | Both                      | \$230,000          | High                    | Capital Improvements Projects and Facilities Upgrades         | Within 5 years              | PD, PW                                 | Grant, Bond, General Fund    |
| 13                        | <i>Joint Police and Fire Training Center. Complete the construction of a training facility to meet the changing needs and requirements of the emergency response personnel.</i>  | <i>Response</i>               | <i>Response</i>           | <i>\$7,500,000</i> | <i>High</i>             | <i>Certain phases under construction, others under design</i> | <i>July 2015</i>            | <i>PD, CYFD</i>                        | <i>Grants &amp; Bond</i>     |
| 14                        | Community Secondary Routes. Plan, design, construct secondary access routes for emergency vehicles.  | All                           | Both                      | \$5,000,000        | Med                     | Emergency personnel assessment and determination of routes    | August 2016                 | PD, CYFD                               | Grants, Bonds & General Fund |
| 15                        | Maintain compliance with NFIP regulations by enforcement of the Town's floodplain management ordinance through the review of all new or substantially improved development located within FEMA delineated Special Flood Hazard Areas and the issuance of floodplain use permits.   | Flood                         | Both                      | Staff Time         | Med                     | NFIP Compliance, Floodplain Management                        | On-going                    | PW / Engineering Division Mgr          | General Fund                 |

**Table 6-8-10: Mitigation actions and projects and implementation strategy for Sedona**

| Mitigation Action/Project |  |                                |                           |                                 | Implementation Strategy |  |                             |  |   |
|---------------------------|--|--------------------------------|---------------------------|---------------------------------|-------------------------|--|-----------------------------|--|---|
| ID No.                    | Description  | Hazard(s) Mitigated            | Assets Mitigated (Ex/New) | Estimated Cost                  | Priority Ranking        | Planning Mechanism(s) for Implementation | Anticipated Completion Date | Primary Responsible Agency / Job Title                 | Funding Sources   |
| 1                         | <i>Civilian Emergency Response Team. Train and educate public on basic first response capabilities. 5-year cost.</i>   | <i>All – Response Oriented</i> | <i>Existing</i>           | <i>N/A – Uses current staff</i> | <i>Low</i>              | <i>General Plan</i>                      | <i>Ongoing</i>              | <i>Sedona Fire District</i>                            | <i>N/A</i>  |
| 2                         | Urban Wildland Interface Training for officers, risk assessments. 5-year cost.   | Wildfire                       | Both                      | N/A – Uses current staff        | Low                     | General Plan                             | Ongoing                     | Sedona Fire District                                   | N/A   |
| 3                         | Provide wildland fire property assessments to homeowners and business owners to identify urban wildland interface. Assessments will be based on the currently adopted International Urban-Wildland Interface Code and the latest Sedona Wild-land Interface Map that shows priority threat areas. 5-year cost. | Wildfire                       | Both                      | N/A – Uses current staff        | Med                     | General Plan                             | Ongoing                     | Sedona Fire District                                   | N/A   |
| 4                         | Keep sand and bags available to the public at the following three locations: 431 Forest Road, 120 Indian Cliffs Road, and Red Rock High School. 5-year cost.   | Flooding/<br>Flash Flooding    | Both                      | \$25,000                        | High                    | General Plan                             | Ongoing                     | City Public Works Dept./<br>Maintenance Superintendent | City Maintenance Budget   |
| 5                         | 2065 Sanborn Drive: Headwall and bank protection work at existing drainage crossing to protect the integrity of Sanborn Drive.   | Flooding/<br>Flash Flooding    | Existing                  | \$30,000                        | High                    | N/A                                      | Fall of 2011                | City Public Works Dept./<br>Assistant City Engineer    | Yavapai Co Flood Hazard Mitigation Grant Funding                                  |
| 6                         | Phase 2 of the Harmony/Windsong Drainage Project: Increase capacity to convey the 25-year storm under SR 89A at 2970 W. SR 89A. Capacity will increase from 400 CFS to 900 CFS.  | Flooding/<br>Flash Flooding    | Existing                  | \$400,000                       | High                    | Capital Improvement Program              | Spring of 2012              | City Public Works Dept./<br>Assistant City Engineer    | Yavapai Co Flood Hazard Mitigation Grant Funding and City Development Impact Fees |

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Table 6-8-10: Mitigation actions and projects and implementation strategy for Sedona

| Mitigation Action/Project |   |                                |                           |                          | Implementation Strategy |  |                             |  |   |
|---------------------------|---|--------------------------------|---------------------------|--------------------------|-------------------------|--|-----------------------------|--|---|
| ID No.                    | Description   | Hazard(s) Mitigated            | Assets Mitigated (Ex/New) | Estimated Cost           | Priority Ranking        | Planning Mechanism(s) for Implementation | Anticipated Completion Date | Primary Responsible Agency / Job Title           | Funding Sources   |
| 7                         | Phase 3 of the Harmony/Windsong Drainage Project: Increase capacity and culvert the existing drainage channel between Navajo Drive and Lyric Drive.   | Flooding/<br>Flash<br>Flooding | Both                      | \$1,100,000              | High                    | Capital Improvement Program              | Spring of 2012              | City Public Works Dept./ Assistant City Engineer | Yavapai Co Flood Haz Mitigation Grant Funding and City Development Impact Fees    |
| 8                         | Phase 4 of the Harmony/Windsong Drainage Project: Increase capacity and culvert the existing drainage channel between Lyric Drive and Thunder Mountain Road.  | Flooding/<br>Flash<br>Flooding | Both                      | \$1,400,000              | High                    | Capital Improvement Program              | Fall of 2015                | City Public Works Dept./ Assistant City Engineer | Yavapai Co Flood Hazard Mitigation Grant Funding and City Development Impact Fees |
| 9                         | Enforcement of floodplain management requirements in accordance with the NFIP, including regulating all and substantially improved construction in floodplains to reduce the losses to property and people.                       | Flooding/Flash<br>Flooding     | Both                      | N/A – Uses current staff | High                    | General Plan                             | Ongoing                     | City Public Works Dept./ Assistant Engineer      | N/A   |
| 10                        | Improve floodplain administration under the NFIP program by using best available community information to provide base flood elevations for unnumbered "A Zones" in order to provide more detailed information on the DFIRM maps. | Flooding/<br>Flash<br>Flooding | Both                      | \$10,000                 | Medium                  | N/A                                      | Fall of 2015                | City Public Works Dept./ Assistant Engineer      | City General Fund   |

**Table 6-8-11: Mitigation actions and projects and implementation strategy for Yavapai-Prescott Indian Tribe**

| Mitigation Action/Project |  |                          |                                     |          | Implementation Strategy |  |                             |  |                 |
|---------------------------|--|--------------------------|-------------------------------------|----------|-------------------------|--|-----------------------------|--|-----------------|
| ID No.                    | Description  | Hazard(s) Mitigated      | Community Assets Mitigated (Ex/New) | Est Cost | Priority Ranking        | Planning Mechanism(s) for Implementation | Anticipated Completion Date | Primary Responsible Agency / Job Title                 | Funding Sources |
| 1                         | Educate tribal community on the hazards of flooding/flash flooding through an informational / outreach meeting to be conducted at least once in the next year          | Flooding/ Flash Flooding | Both                                | \$500    | High                    | Education                                | Ongoing                     | Yavapai-Prescott Indian Tribe Environmental Protection | GAP             |
| 2                         | Educate tribal community on severe wind through an informational / outreach meeting to be conducted at least once in the next year.                                    | Severe Wind              | Both                                | \$500    | High                    | Education                                | Ongoing                     | Yavapai-Prescott Indian Tribe Environmental Protection | GAP             |
| 3                         | Clearing of overburden and brush and establishing defensible space on tribal properties.   | Wildfire                 | Existing                            | \$12,000 | High                    |  | 2011                        | Yavapai-Prescott Indian Tribe Environmental Protection | BIA             |
| 4                         | Educate tribal community on winter storm hazards and how to deal with them through an informational / outreach meeting to be conducted at least once in the next year. | Winter Storm             | Both                                | \$500    | High                    | Education                                | Ongoing                     | Yavapai-Prescott Indian Tribe Environmental Protection | GAP             |

## SECTION 7: PLAN MAINTENANCE PROCEDURES

**§201.6(c)(4):** [The plan shall include...] (4) A **plan maintenance process** that includes:

- (i) A section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.
- (ii) A process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.
- (iii) Discussion on how the community will continue public participation in the plan maintenance process.

**§201.6(d)(3):** Plans must be reviewed, revised if appropriate, and resubmitted for approval within five years in order to continue to be eligible for HMGP project grant funding.

According to the DMA 2000 requirements, each plan must define and document processes or mechanisms for maintaining and updating the hazard mitigation plan within the established five-year planning cycle. Elements of this plan maintenance section include:

### **Monitoring and Evaluating the Plan**

### **Updating the Plan**

### **Implementing the Plan by Incorporation into Other Agency or Jurisdictional Planning Mechanisms**

### **Continued Public Participation**

Yavapai County and the participating jurisdictions recognize that this hazard mitigation plan is intended to be a “living” document with regularly scheduled monitoring, evaluation, and updating.

Section 6 of the 2006 Plan outlined specific steps for plan maintenance. A poll of the Planning Team indicated that with the exception of the City of Sedona, few formal reviews or maintenance activities occurred over the past five years. The formal reviews by the City of Sedona were conducted annually and informational presentations to the Sedona City Council were done as well. Documentation of those reviews is included in Appendix E. The mitigation actions/projects in the 2006 Plan were referred to by several other jurisdictions on a periodic basis. Reasons for the lack of review included:

- Changes in staff and a lack of effectively communicating plan maintenance requirements and responsibilities,
- A general lack of priority regarding the importance and requirements of the maintenance element.
- Limited perceived value in performing the maintenance and evaluation and especially given the overwhelming workload of many jurisdictional staff.
- A lack of personnel or staff resources to take responsibility for the task.

Recognizing the need for improvement, the Planning Team discussed ways to make sure that the Plan review and maintenance process will occur over the next five years. The results of those discussions are outlined in the following sections and the plan maintenance strategy.

## **7.1 Monitoring and Evaluation**

### *7.1.1 General Planning Team Monitoring and Evaluation*

Developing a true multi-jurisdictional plan will aide in the Plan monitoring and evaluation by consolidating information for all county jurisdictions into one document. The Planning Team has established the following monitoring and evaluation procedures:

- **Schedule** – The Plan shall be reviewed annually around the end of February or following a major disaster. The Yavapai County Office of Emergency Management (YCOEM) will take the lead by arranging for a date and meeting place and distributing a reminder 30-days in advance of the meeting to each of the Community Points of Contact and other targeted members of the Planning Team. ADEM has also committed to help with reminders to the County on or around the anniversary of the Plan, as a double accountability.

- **Review Content** – The content and scope of the Plan review and evaluation will address the following questions:
  - **Hazard Identification:** *Have the risks and hazards changed?*
  - **Goals and objectives:** *Are the goals and objectives still able to address current and expected conditions?*
  - **Mitigation Projects and Actions:** *Has the project been completed? If not complete but started, what percent of the project has been completed? How much money has been expended on incomplete projects? Did the project require additional funds over the expected amount or were the costs less than expected?*

The reminder sent out by YCOEM to the Planning Team will include a note directing the attention of Planning Team to this section of the Plan and the questions above. Each jurisdiction will review the Plan as it relates to their community prior to the actual review meeting and document responses to the above questions in the form of an informal memorandum. During the annual meeting, each jurisdiction will have the opportunity to summarize their review findings to the group and discuss concerns or successes. Documentation of the annual meeting will include a compilation of memorandums generated by each jurisdiction plus any notes on the meeting discussions and conclusions. Copies of the annual review report will be included in Appendix E.

#### 7.1.2 Monitoring of Tribal Mitigation Activities

This section describes the Yavapai-Prescott Indian Tribe’s strategy for reviewing and assessing the progress of the mitigation goals and actions/projects (A/Ps) identified in this Plan.

Unless otherwise directed or warranted, the goals and objectives’ review will coincide with the annual overall plan review and update schedule. Goals will be assessed using a subjective approach and a summary of the assessment will be included in the annual review memorandum.

The A/Ps and the corresponding implementation strategies for the Yavapai-Prescott Indian Tribe are identified in the Plan’s mitigation strategy. For each annual review and plan update, the Yavapai-Prescott Indian Tribe will coordinate with the agencies identified for each A/P, to assess the implementation status of the identified A/P and generate a brief memorandum summarizing the status of each project using the following criteria:

Current Status of Action/Project - Assign a ‘No Action’, ‘In-Progress’ or ‘Completed’ status as appropriate

Project Disposition – Assign a ‘Keep’ or ‘Drop’ to identify future disposition of action/project

Explanation - Provide a description of the current project status including date of implementation, challenges faced, percentage completed, funding sources used, etc.

The implementation and progress of the A/Ps will be monitored by the Yavapai-Prescott Indian Tribe on at least an annual basis as described in Section 7.1.1. For FEMA supported projects, progress reports will be submitted to FEMA on a quarterly basis, or as required throughout the project duration. The degree of quarterly reporting will be dependent upon the type of A/P, its funding source, and the associated requirements. At a minimum, the quarterly report shall address:

- ✓ Project Completion Status
- ✓ Project Challenges/Issues (If any)
- ✓ Budgetary Considerations (Cost Overruns or Underruns)
- ✓ Detailed Documentation of Expenditures

Upon completion of projects, the project location will be visited and final results viewed and documented. Closed projects will then be monitored for effectiveness in the intended mitigation. FEMA supported project closeouts will include an audit of the A/P financials as well as other guidelines/requirements set forth under the funding or grant rules, and any attendant administrative plans developed by the Yavapai-Prescott Indian Tribe.

## **7.2 Plan Update**

According to DMA 2000, the Plan requires updating and approval from FEMA every five years. The plan updates will adhere to that set schedule using the following procedure:

- ✓ One year prior to the plan expiration date, the Yavapai Co of EM will reconvene the Planning Team to begin the formal Plan update process.
- ✓ The Planning Team will review and assess the materials accumulated in Appendix E, and update and/or revise the appropriate or affected portions of the Plan and produce a revised Plan document.
- ✓ The revised plan will be submitted to ADEM and FEMA for review, comment and initial approval.
- ✓ The state and FEMA approved Plan document will be presented before the respective councils and boards for an official concurrence/adoption of the changes.

## **7.3 Incorporation Into Existing Planning Mechanisms**

Incorporation of the Plan into other planning mechanisms, either by content or reference, enhances a community's ability to perform hazard mitigation by expanding the scope of the Plan's influence. A poll of the participating jurisdictions revealed that success of incorporating the 2006 Plan elements over the past planning cycle into other planning programs has varied. Ways in which the 2006 Plans have been successfully incorporated or referenced into other planning mechanisms are summarized below. Participating jurisdictions not listed either had nothing to report or did not have a 2006 Plan.

### **Yavapai County:**

- The 2006 Plan mitigation strategy was referenced by the Yavapai County Flood Control District in the preparation and prioritization of flood control projects.

### **Camp Verde**

- Since adoption of the 2006 Plan, the Town of Camp Verde incorporated the plan's recommendations in several planning mechanisms as follows:
  - As outlined in the primary goals of the 2006 Plan, the Town accomplished the following implementation strategies to prepare for the planning of hazardous events:
    - Goal 5.S.1 – the Town's Stormwater Master Plan was updated
    - Goal 8.A.1 – First Responder and Technician Training and Equipment was completed by the Camp Verde Fire Department
    - Goal 9.A.1 – A Small Area Transportation study was completed; the study identified the need for improved connectivity in the event of an emergency
    - Goal 10.B.1 – Emergency Evacuation Route Signs – The Town acquired Emergency Evacuation Route Signs in November 2010
  - February 2010 – 2006 Plan requirements were referenced in CDBG grant application relating to the Hollamon Street Project.

### **Clarkdale**

- The 2006 Plan was used and referenced during the update of the Town's emergency operations plan.
- The 2006 Plan was referenced during the release of the FEMA Map Modernization data.

### **Cottonwood:**

- The 2006 Plan was used as a reference for the update and implementation of the City's Emergency plan.
- The 2006 Plan was used as a reference for the update and implementation of the City's High Water Crossing plan.
- The 2006 Plan assisted with the planning for traffic control issues.

**Dewey-Humboldt:**

- The 2009 Plan was incorporated into the capital improvement plan (CIP) and the fiscal year budgets.
- The Antelope Meadows Commercial Center Drainage Modifications project (a 2009 Plan mitigation action/project) was included in the CIP and subsequently the FY10 and FY11 budget.

**Prescott:**

- The 2006 Plan was referenced during the update of the Community Wildfire Protection Plan.
- The 2006 Plan's mitigation strategy is tied to the City's Capital Improvement Program.
- The 2006 Plan risk assessment was referenced during the update of the City's Emergency Operations and Response Plan.

**Sedona:**

- City Council adopted the Sedona Floodplain Ordinance on September 26, 2006. The ordinance incorporated Special Flood Hazard Areas (SFHA) delineated in the 1994 City of Sedona Floodplain Management Study as well as SFHA shown on the FEMA Flood Insurance Rate Maps.
- 2005 Storm Water Master Plan - Provides a procedure for identifying and prioritizing stormwater improvements for the City; provides a watershed hydrology model for the City. This is a plan for implementing storm drainage improvements for the 25-year storm capacity, thus reducing the impacts of flooding on neighboring properties.
- During periodic updates to the City Code and Land Development Code, the 2006 Plan was referenced and opportunities were taken to make additions that will mitigate the impacts of hazards.
- Using the 2006 Plan as a reference, Wastewater Planning has recently removed a sewer lift station from a local floodway and built a new one outside of the special flood hazard area.

In all of the above instances, the 2006 Plan was found to be beneficial, and especially with regard to the critical facility inventories, vulnerability analysis results, and the mitigation strategy. Obstacles to further incorporation of the 2006 Plan for some of the communities were generally tied to:

- A lack of awareness of the 2006 Plan by departments outside the emergency management community
- The relative "newness" of the 2006 Plan with regard to other, more commonplace planning mechanisms such as comprehensive or general plans.
- No real opportunity for incorporation of reference of the 2006 Plan (e.g. – very little other planning being done by a community).

Typical ways to use and incorporate the Plan over the next five-year planning cycle, discussed by the Planning Team, included:

- Use of, or reference to, Plan elements in general and comprehensive planning update documents.
- Addition of defined mitigation A/Ps to capital improvement programming.
- Inclusion of Plan elements into development planning and practices.
- Resource for developing and/or updating emergency operations plans.

The Plan will continue to function as a standalone document subject to its own review and revision schedule presented in Sections 7.1 and 7.2. The Plan will also serve as a reference for other mitigation and land planning needs of the participating jurisdictions. Whenever possible, each jurisdiction will endeavor to incorporate the risk assessment results and mitigation actions and projects identified in the Plan, into existing and future planning mechanisms. At a minimum, each of the responsible agencies/departments noted in Tables 6-1-1 through 6-1-11 will review and reference the Plan and revise and/or update the legal and regulatory planning documents, manuals, codes, and ordinances summarized in Tables 6-1-1 through 6-1-11, as appropriate. Specific incorporation of the Plan risk assessment elements into the natural resources and safety elements of

each jurisdictions’ general plans (county comprehensive plan) and development review processes, adding or revising building codes, adding or changing zoning and subdivision ordinances, and incorporating mitigation goals and strategies into general and/or comprehensive plans, will help to ensure hazard mitigated future development. In addition, an implementation strategy outlining assignments of responsibility and completion schedules for specific actions/projects proposed in this plan are summarized in Tables 6-8-1 through 6-8-11.

Table 7-1 presents a list of current planning efforts for the Tribe that are either related to, referenced in, and/or are parallel to this Plan. It is the Tribe’s intention to integrate information as described below to ensure correlation of common planning elements.

| <b>Table 7-1: Yavapai-Prescott Indian Tribe planning efforts for future integration</b> |   |   |   |
|---|---|---|---|
| <b>Document</b>   | <b>Description</b>  | <b>Integration Characteristics/Mitigation Opportunities</b>   | <b>Author Owner</b>                           |
| Yavapai-Prescott Indian Tribe Land Use Master Plan (1999)                               | Plan is to formally establish & adopt a plan which represents goals, desires & feelings of the present members of the Tribe regarding existing and future land use for the ultimate benefit of future generations. The Plan is a management tool that can be used by the Tribe to prevent adverse impacts on the land & human resources of the Tribe  | Material from the Tribal Plan’s risk assessment will be used as a resource for any updates to the Land Use Plan.  | Gary Parker                                   |
|   |   |   | Environ Protection/ Planning Dept             |
| Multi-year Capital Improvement budget (updated annually)                                | We don’t really have a Capital Budget per se. What we have is a “Capital Suggestion List” that is presented to the Board every year. This lists major purchases and construction projects that different supervisors would like to have, to give the Board a “heads-up!” But then each major purchase and/or construction project must be brought to the Board individually to get approved before it can be implemented. | Mitigation actions/projects from the Tribal Plan will be reviewed when developing the “Capital Suggestion List” for potential implementation opportunities.           | YPIT Depts                                    |
|   |   |   | YPIT Board of Directors                       |
| Emergency Response Plan (first competed in 2000 and updated annually)                   | Emergency Response and Emergency Operations Plans are combined documents. These plans give an overview of who is responsible and what to do in the event of an emergency on Tribal properties.  | Material from the Plan’s risk assessment will be used as a resource and reference during the annual updates of the Emergency Response and Emergency Operations Plans. | Environ Protection                            |
| Emergency Operations Plan, Yavapai-Prescott Indian Tribe (2002)                         |   |   | Environ Protection                            |
| Yavapai-Prescott Indian Tribe Water Management Plan (1999)                              | Used to identify the water resources and the associated use of these resources by the Tribe. The plan was used for the intention to summarize the information from the numerous studies and investigations for water supplies and quality and to incorporate the findings into an achievable water management plan with an associated implementation plan.  | Information and data are shared between the Water Management Plan and the drought hazard profile of the Tribal Plan   | Gary Parker                                   |
|   |   |   | Environ Protection                            |
| Wildland Fire Management Plan Yavapai-Prescott Indian Reservation (2003)                | This plan outlines Wildland Urban Interface solutions to fire management problems on the Reservation.   | Information and data are shared between the Wildland Fire Management Plan and the wildfire hazard profile of the Tribal Plan  | George Kleindienst (BIA)                      |
|   |   |   | Environ Protection & BIA Truxon Cannon Office |
| Yavapai-Prescott  | Explains how to evacuate the Tribe and which  | The Plan risk assessment data will  | Police  |

**Table 7-1: Yavapai-Prescott Indian Tribe planning efforts for future integration**

| Document   | Description   | Integration Characteristics/Mitigation Opportunities   | Author Owner  |
|--|---|--|---------------|
| Indian Tribe Evacuation Route (2002)   | homes would need assistance.  | be useful in developing a new evacuation route with the next update of this plan.  | Police & TERC |
| Hazardous Materials Sources on the Yavapai-Prescott Indian Tribe Reservation | This document has not been kept; we do not have an up-to-date copy of this. | In process of requiring all tenants to give Real Estate a list of hazardous materials and MSDS sheets. This material could form the basis for future HAZMAT hazard risk assessment with the next update of the Tribal Plan |               |

**7.4 Continued Public Involvement**

The Planning Team reviewed Section 6.4 of the 2006 Plan and discussed the challenges and successes regarding the identified continued public involvement strategy. The 2006 Plan identified the following elements for continued public involvement:

- Provide periodic summary updates of hazard mitigation A/P measures being implemented using local media.
- Conduct an annual presentation of hazard mitigation planning discoveries, progress, or proposed A/P measures at the local board and council meetings.
- Participate in annual events such as the County fair and other public events.
- Perform public outreach and mitigation training meetings for targeted populations known to be in higher risk hazard areas (i.e. – floodplain residents).

All of the participating jurisdictions were successful to varying degrees, in their efforts to elevate hazard mitigation awareness in the general public and community on an ongoing basis. Yavapai County and participating jurisdictions remain committed to keeping the public informed about the hazard mitigation planning efforts, actions and projects. Table 7-2 summarizes successful public involvement efforts previously conducted by the participating jurisdictions, and proposed activities for public involvement and dissemination of information that shall be pursued whenever possible and appropriate.

**Table 7-2: Past and proposed continued public involvement activities or opportunities identified by Yavapai County jurisdictions**

| Jurisdiction   | Public Involvement Activity or Opportunity  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
|--|---|--|------|---------------------------------------|--------|-------------------------------------|--------|----------------------------------|--------|--|--------|--------------------|--------|-----------------------------|--------|-----------------------------------|--------|------------------------------------|--------|---|--------|----------------------------|--------|---|--------|--|--------|------------------|--|-------------------------------|--------|---------------------|--------|---|-----------|---|--------|-----------------------|--|---|----------------|--------------------------------------|--------|--|--------|--|--------|--|--------|---|
|  | PAST  | PROPOSED   |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| Yavapai County   | <ul style="list-style-type: none"> <li>Public involvement activities related to drainage and floodplain studies conducted by YCFCD:</li> </ul> <table border="1"> <thead> <tr> <th>STUDY NAME</th> <th>YEAR</th> </tr> </thead> <tbody> <tr> <td>Allen Canyon Wash Area Drainage Study</td> <td>Apr-09</td> </tr> <tr> <td>BCC Floodplain Delineation Re-Study</td> <td>Jul-05</td> </tr> <tr> <td>Big Bug Creek Flood Hazard Study</td> <td>Nov-09</td> </tr> <tr> <td>Black Canyon City Drainage Improvement Study</td> <td>Jun-05</td> </tr> <tr> <td>Carrol Canyon Wash</td> <td>Oct-10</td> </tr> <tr> <td>Central Lake Montezuma AMDS</td> <td>Feb-05</td> </tr> <tr> <td>Cordes Lakes Alternative Analysis</td> <td>Jul-10</td> </tr> <tr> <td>Cornville Drainage Analysis FLO-2D</td> <td>Feb-08</td> </tr> <tr> <td>Deception Wash Floodplain Delineation Restudy</td> <td>Aug-09</td> </tr> <tr> <td>Finnie Flat Drainage Study</td> <td>Mar-09</td> </tr> <tr> <td>Floodplain Delineation Study of a Portion of Spring Creek</td> <td>Aug-06</td> </tr> <tr> <td>Hydrologic Analysis &amp; Results for the Agua Fria River &amp; Tributaries.</td> <td>Apr-08</td> </tr> <tr> <td>KC's Korner ADMS</td> <td></td> </tr> <tr> <td>Lonesome Valley Wash Re-Study</td> <td>Jun-07</td> </tr> <tr> <td>Lower Geronimo Wash</td> <td>Feb-10</td> </tr> <tr> <td>Mint Wash Floodplain Delineation Report</td> <td>2005/2006</td> </tr> <tr> <td>Poquito Valley Flood Hazard Study Supplemental Hydraulic Analysis</td> <td>Aug-07</td> </tr> <tr> <td>Prescott Country Club</td> <td></td> </tr> <tr> <td>Verde Village Area Drainage Improvement Study</td> <td>Jan and May 09</td> </tr> <tr> <td>VOC Areawide Drainage Analysis - TDN</td> <td>Jun-08</td> </tr> <tr> <td>West Chino Valley Floodplain Delineation Restudy</td> <td>Jul-08</td> </tr> <tr> <td>Williamson Valley Area Drainage Master Study</td> <td>Mar-06</td> </tr> <tr> <td>Yarber Wash Floodplain Delineation Study</td> <td>Aug-05</td> </tr> </tbody> </table> | STUDY NAME   | YEAR | Allen Canyon Wash Area Drainage Study | Apr-09 | BCC Floodplain Delineation Re-Study | Jul-05 | Big Bug Creek Flood Hazard Study | Nov-09 | Black Canyon City Drainage Improvement Study | Jun-05 | Carrol Canyon Wash | Oct-10 | Central Lake Montezuma AMDS | Feb-05 | Cordes Lakes Alternative Analysis | Jul-10 | Cornville Drainage Analysis FLO-2D | Feb-08 | Deception Wash Floodplain Delineation Restudy | Aug-09 | Finnie Flat Drainage Study | Mar-09 | Floodplain Delineation Study of a Portion of Spring Creek | Aug-06 | Hydrologic Analysis & Results for the Agua Fria River & Tributaries. | Apr-08 | KC's Korner ADMS |  | Lonesome Valley Wash Re-Study | Jun-07 | Lower Geronimo Wash | Feb-10 | Mint Wash Floodplain Delineation Report | 2005/2006 | Poquito Valley Flood Hazard Study Supplemental Hydraulic Analysis | Aug-07 | Prescott Country Club |  | Verde Village Area Drainage Improvement Study | Jan and May 09 | VOC Areawide Drainage Analysis - TDN | Jun-08 | West Chino Valley Floodplain Delineation Restudy | Jul-08 | Williamson Valley Area Drainage Master Study | Mar-06 | Yarber Wash Floodplain Delineation Study | Aug-05 | <ul style="list-style-type: none"> <li>Conduct public involvement efforts related to drainage and floodplain delineation studies to keep public aware of flood hazards and mitigation efforts.</li> <li>Maintain a hazard mitigation webpage presence with a copy of the Plan posted for public review and comment.</li> <li>Present all major mitigation related projects to the Board of Supervisors for approval and funding.</li> </ul> |
| STUDY NAME   | YEAR  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| Allen Canyon Wash Area Drainage Study                                | Apr-09  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| BCC Floodplain Delineation Re-Study                                  | Jul-05  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| Big Bug Creek Flood Hazard Study                                     | Nov-09  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| Black Canyon City Drainage Improvement Study                         | Jun-05  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| Carrol Canyon Wash   | Oct-10  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| Central Lake Montezuma AMDS  | Feb-05  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| Cordes Lakes Alternative Analysis                                    | Jul-10  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| Cornville Drainage Analysis FLO-2D                                   | Feb-08  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| Deception Wash Floodplain Delineation Restudy                        | Aug-09  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| Finnie Flat Drainage Study   | Mar-09  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| Floodplain Delineation Study of a Portion of Spring Creek            | Aug-06  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| Hydrologic Analysis & Results for the Agua Fria River & Tributaries. | Apr-08  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| KC's Korner ADMS   |   |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| Lonesome Valley Wash Re-Study  | Jun-07  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| Lower Geronimo Wash  | Feb-10  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| Mint Wash Floodplain Delineation Report                              | 2005/2006   |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| Poquito Valley Flood Hazard Study Supplemental Hydraulic Analysis    | Aug-07  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| Prescott Country Club  |   |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| Verde Village Area Drainage Improvement Study                        | Jan and May 09  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| VOC Areawide Drainage Analysis - TDN                                 | Jun-08  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| West Chino Valley Floodplain Delineation Restudy                     | Jul-08  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| Williamson Valley Area Drainage Master Study                         | Mar-06  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| Yarber Wash Floodplain Delineation Study                             | Aug-05  |  |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |
| Camp Verde   | <ul style="list-style-type: none"> <li>Requested public participation in all council actions involving the approval or funding of mitigation projects or actions.</li> <li>Development of a website page on the Town's website to provide information on preparedness tips in the event of an emergency.</li> </ul>   | <ul style="list-style-type: none"> <li>Provide a public notice in local papers of progress, including completed mitigation actions/projects, at least once per year.</li> <li>Provide an update on the mitigation plan status to the Town Council during a public hearing at least once per year, as well as, provide public awareness of the potential hazards in the community.</li> <li>Maintain and update the Town's Hazard Mitigation webpage.</li> <li>Educate the public to increase the awareness of hazards and opportunities for mitigation actions with informational hazard mitigation brochures at local events such as:                         <ul style="list-style-type: none"> <li>National Night Out,</li> <li>Pecan and Wine Festival</li> <li>Fort Verde Days).</li> </ul> </li> </ul> |      |                                       |        |                                     |        |                                  |        |  |        |                    |        |                             |        |                                   |        |                                    |        |   |        |                            |        |   |        |  |        |                  |  |                               |        |                     |        |   |           |   |        |                       |  |   |                |                                      |        |  |        |  |        |  |        |   |

**Table 7-2: Past and proposed continued public involvement activities or opportunities identified by Yavapai County jurisdictions**

| Jurisdiction | Public Involvement Activity or Opportunity   |  |
|--------------|--|--|
|              | PAST   | PROPOSED   |
| Chino Valley | <ul style="list-style-type: none"> <li>• None reported</li> </ul>  | <ul style="list-style-type: none"> <li>• Maintain a website linking the public to the county website location where the Plan will be posted.</li> <li>• Provide hazard mitigation brochures provided by ADEM at Town Hall and other public venues.</li> <li>• Present and obtain approval for all hazard mitigation related projects from the Town Council</li> </ul>  |
| Clarkdale    | <ul style="list-style-type: none"> <li>• Contribute/Participate in WET</li> <li>• Communicated flooding related issues via flyers/phone calls/door hangers</li> <li>• Provided Town and Fire District information via the web for questions concerning hazards and mitigation.</li> <li>• Provided Defensible Space, Chimneys, and Smoke Alarms information in the “Talk About the Town” Newsletter</li> <li>• Disseminated flood hazard related information county wide via KBRD</li> <li>• Participated in the Nat’l Night Out program which Annually beginning of August</li> <li>• Participated in the 2007 &amp; 2008 Oct Fest events, which are held on the last Saturday in Sept</li> <li>• Participation on the LEPC</li> <li>• Church/Fire District Defensible Space Cleaning</li> <li>• Residents/Fire District - Tumbleweed abatement on vacant lots in development area</li> <li>• Police Dept Explorer Education Program</li> <li>• Yavapai County Flood Grant Funding Planning Schedule</li> </ul> | <p>The Town of Clarkdale will continue to participate in the same activities as before, plus the following:</p> <ul style="list-style-type: none"> <li>• Fire District Tweets</li> <li>• School/Fire District/Police Department preparedness planning</li> <li>• July 4<sup>th</sup> Booth for distribution of mitigation pamphlet</li> <li>• Halloween Booth for distribution of mitigation pamphlet</li> </ul> |
| Cottonwood   | <ul style="list-style-type: none"> <li>• Processed traffic related complaints from the public to prepare to prepare traffic control response plan and detour routes</li> </ul>   | <ul style="list-style-type: none"> <li>• The city will maintain a website or link to the county website, where the Plan will be posted and the public will have an opportunity to comment and make recommendations for changes.</li> <li>• PSA announcements in the local News Papers and public notices will be posted with the development of mitigation activities.</li> </ul>                                |

**Table 7-2: Past and proposed continued public involvement activities or opportunities identified by Yavapai County jurisdictions**

| Jurisdiction                  | Public Involvement Activity or Opportunity  |   |
|-------------------------------|---|---|
|                               | PAST  | PROPOSED  |
| Dewey-Humboldt                | <ul style="list-style-type: none"> <li>The public was offered an opportunity to participate on the capital improvement committee. This committee formed what eventually became the capital improvements plan. This plan was presented to council and the entire public body during council meetings. The capital improvements plan was partially borne from the hazard mitigation plan.</li> </ul>  | <ul style="list-style-type: none"> <li>The public will have the opportunity to implement projects contained within the hazard mitigation plan in the next 5 years by participating on the capital improvements committee and/or in the budget meetings.</li> </ul>  |
| Jerome                        | <ul style="list-style-type: none"> <li>None reported.</li> </ul>  | <ul style="list-style-type: none"> <li>Newsletter articles will be placed as appropriate to announce hazard mitigation activities.</li> <li>All mitigation projects will be presented to and approved by the town council and the public will be invited to participate.</li> </ul>   |
| Prescott Valley               | <ul style="list-style-type: none"> <li>Past project information has been posted on the Town web page for public review and comment.</li> <li>The Town issues a weekly newsletter with information related to town events.</li> <li>Past projects were processed through Council meetings which are public meetings.</li> <li>Conducted neighborhood meetings on major upcoming projects along with having an annual citizens' academy.</li> </ul> | <ul style="list-style-type: none"> <li>The Town will continue to provide the same public involvement opportunities as is in the past.</li> <li>Maintain website link to the county's website where the Plan will be posted.</li> </ul>  |
| Prescott                      | <ul style="list-style-type: none"> <li>Participated in Wildland Fire Outreach Meetings annually in the Spring since 2006</li> <li>Participated in LEPC meeting annually.</li> </ul>   | <ul style="list-style-type: none"> <li>The City will continue to participate in the same public meetings listed in column to the left.</li> <li>The City will participate in the annual spring Prescott Home Show and disseminate hazard mitigation materials and pamphlets.</li> </ul>   |
| Sedona                        | [SEE SUMMARY BELOW TABLE]   | [SEE SUMMARY BELOW TABLE]   |
| Yavapai-Prescott Indian Tribe | <ul style="list-style-type: none"> <li>N/A – The Tribe did not have a prior plan</li> </ul>   | The Tribe will conduct continued public involvement through the following: <ul style="list-style-type: none"> <li>LEPG meetings (conducted quarterly),</li> <li>Regular public outreach through Environmental Program events (events are conducted 6 times throughout a year from August to July; every couple of months),</li> <li>TEDC Newsletter (published 4 times a yr)</li> </ul> |

**Sedona PAST Public Involvement Activities:**

2006 - 2007:

- Coconino County Emergency Services, Sedona Fire District (SFD) and the Coconino National Forest hosted a community meeting on July 10<sup>th</sup> and 12<sup>th</sup>, 2006 at the Elks Lodge on Airport Road in Sedona. The purpose of the meeting was to inform Oak Creek Canyon residents and business owners of the potential risk of rock and debris slides in Oak Creek Canyon following the Brins fire. Local agencies shared

information as to what actions were needed in the event of a threatening storm in the canyon, particularly in the vicinity of the Brins fire.

- Held exhibits for the public at City Hall for Public Works Week on May 22, 2007. One of the exhibits covered FEMA's National Flood Insurance Program and flood awareness.
- The SFD continuously conducts outreach on defensible space for wildfire. In May 2007, two weekends (three days each weekend) were available to residents of the SFD to bring in yard brush and tree cuttings. Fire Station No. 4 was the collection point for this free service. SFD employees had a chipper which all of the delivered material was fed into. During the 2007 event, 15 large capacity roll-off dumpsters were filled with the chipped debris.
- The SFD periodically runs their "In-Quarters" Fire & EMS News in the Sedona Red Rock Newspaper. In-Quarters Fire & EMS news topics include: Wild-land fire defensible space, rockslides, burn restrictions, fire code, and miscellaneous household safety topics. SFD also has brochures on "Fire-wise Communities" and "Oak Creek Canyon Fire Evacuation for Visitors & Travelers".
- On August 7, 2007, the Sedona Police Department hosted its annual "National Night Out" event. This event offers public safety displays and information. Firefighters were also there to display rescue equipment and hand out information.

2007 – 2008:

- Participation in the Citizen's Emergency Response Team (CERT) Training through the Sedona Fire District (SFD) – More than 100 people have been certified in light search and rescue techniques, CPR, First Aide and disaster preparedness.
- On May 16, 2008, the SFD tested the emergency siren system that is designed to notify residents of Oak Creek Canyon and Uptown Sedona of severe emergencies that would require evacuation. The test served two purposes: (1) Assuring that the system is functioning properly; and (2) So that residents, business owners, and visitors become aware of what to expect in an actual emergency.
- Held exhibits for the public at the Teen Center for Public Works Week on May 20, 2008. One of the exhibits covered FEMA's National Flood Insurance Program and flood awareness. The local water companies also provided their own displays.
- SFD continuously conducts outreach on defensible space for wildfire. In May 2008, SFD held their annual Sedona cleanup weekend. Three days were available to residents within the SFD to bring in yard brush and tree cuttings. Fire Station No. 4 was the collection point for this free service. SFD employees had a chipper which all of the delivered material was fed into. During the 3 days of the cleanup, the SFD received 127 loads of flammable vegetation from 75 different locations within the District. Seven 40-cubic yard capacity roll-off dumpsters were filled with the chipped debris. The City of Sedona contributed to the event by paying for the backhoe rental.
- The SFD periodically runs their "In-Quarters" Fire & EMS News in the Sedona Red Rock Newspaper. In-Quarters Fire & EMS news topics include: Wild-land fire defensible space, rockslides, burn restrictions, Fire Code, Community Emergency Response Team Training, and miscellaneous household safety topics. SFD also has brochures on "Fire-wise Communities" and "Oak Creek Canyon Fire Evacuation for Visitors & Travelers".
- On August 5, 2008, the Sedona Police Department hosted its annual "National Night Out" event. This event offers public safety displays and information. Firefighters were also there to display rescue equipment (including a helicopter on Cardinal Lane) and to hand out information.

2008 – 2009:

- A.D.O.T. installed two permanent variable message boards north of Sedona on SR 89A. One of the boards was installed near Lomacasi Cottages, and the other one was installed just south of Flagstaff.
- On October 11, 2008, the City of Sedona, in conjunction with the Arizona Department of Environmental Quality, hosted a free household hazardous waste drop-off event for City of Sedona residents and City of Sedona employees. The drop-off site for the event was at the Sedona Red Rock High School.
- Held exhibits for the public at the Posse Grounds Community Park for Public Works Week on Earth Day in May 2009. One of the exhibits covered FEMA's National Flood Insurance Program and flood awareness. Another exhibit educated people on stormwater pollution prevention.
- In May 2009, the Sedona Fire District (SFD) tested the emergency siren system that is designed to notify residents of Oak Creek Canyon and Uptown Sedona of severe emergencies that would require evacuation.

The test served two purposes: (1) Assuring that the system is functioning properly; and (2) So that residents, business owners, and visitors become aware of what to expect in an actual emergency.

- SFD continuously conducts outreach on defensible space for wildfire. In May 2009, SFD held their annual Sedona cleanup weekend. Three days were available to residents within the SFD to bring in yard brush and tree cuttings. Fire Station No. 4 was the collection point for this free service. SFD employees had a chipper which all of the delivered material was fed into. The City of Sedona contributed to the event by paying for the backhoe rental.
- The SFD periodically runs their “In-Quarters” Fire & EMS News in the Sedona Red Rock Newspaper. In-Quarters Fire & EMS news topics include: Wild-land fire defensible space, rockslides, burn restrictions, Fire Code, Community Emergency Response Team Training, and miscellaneous household safety topics. SFD also has brochures on “Fire-wise Communities” and “Oak Creek Canyon Fire Evacuation for Visitors & Travelers”.
- In August 2009, the Sedona Police Department hosted its annual “National Night Out” event. This event offers public safety displays and information. Firefighters were also there to display rescue equipment (including a helicopter on Cardinal Lane) and to hand out information.

2009 – 2010:

- In April 2010, a Water Wise Day event was held at the West Sedona School for 4<sup>th</sup> graders from Big Park and W. Sedona School (over 100 students). Presentations on water conservation, sanitary sewer system basics, and stormwater pollution prevention were given.
- In May 2010, the Sedona Fire District (SFD) tested the emergency siren system that is designed to notify residents of Oak Creek Canyon and Uptown Sedona of severe emergencies that would require evacuation. The test served two purposes: (1) Assuring that the system is functioning properly; and (2) So that residents, business owners, and visitors become aware of what to expect in an actual emergency.
- SFD continuously conducts outreach on defensible space for wildfire. In May 2010, SFD held their annual Sedona cleanup weekend. Three days were available to residents within the SFD to bring in yard brush and tree cuttings. Fire Station No. 4 was the collection point for this free service. SFD employees had a chipper which all of the delivered material was fed into. The City of Sedona contributed to the event by paying for the backhoe rental.
- The SFD periodically runs their “In-Quarters” Fire & EMS News in the Sedona Red Rock Newspaper. In-Quarters Fire & EMS news topics include: Wild-land fire defensible space, rockslides, burn restrictions, Fire Code, Community Emergency Response Team Training, and miscellaneous household safety topics. SFD also has brochures on “Fire-wise Communities” and “Oak Creek Canyon Fire Evacuation for Visitors & Travelers”.
- In August 2010, the Sedona Police Department hosted its annual “National Night Out” event. This event offers public safety displays and information. Firefighters were also there to display rescue equipment (including a helicopter) and to hand out information. The event was held at the Posse Grounds Park for the first time this year.

**Sedona PROPOSED Public Involvement Activities:**

- Have exhibits for the public during Public Works Week each year (in the years that we have the budget to hold a function).
- The Sedona Fire District (SFD) continuously conducts outreach on defensible space for wildfire. In May of each year, two weekends (three days each weekend) are available to residents of the SFD to bring in yard brush and tree cuttings in an effort to mitigate the extent of residential structural damage from a wildfire.
- The SFD runs media releases as needed on Fire & EMS related News in the Sedona Red Rock Newspaper. Fire & EMS news topics include: Wild-land fire defensible space, rockslides, burn restrictions, fire code, and miscellaneous household safety topics. SFD also has brochures on “Fire-wise Communities” and “Oak Creek Canyon Fire Evacuation for Visitors & Travelers”.
- In August of each year, the Sedona Police Department hosts its annual “National Night Out” event. This event offers public safety displays and information. Firefighters are also there to display rescue equipment and hand out information.

- Participation in the CERT Training through the Sedona Fire District.
- In May of each year, the SFD tests the emergency siren system that is designed to notify residents of Oak Creek Canyon and Uptown Sedona of severe emergencies that would require evacuation. The test serves two purposes: (1) Assuring that the system is functioning properly; and (2) So that residents, business owners, and visitors become aware of what to expect in an actual emergency.
- A.D.O.T. installed two permanent variable message boards north of Sedona on SR 89A. One of the boards was installed near Lomacasi Cottages, and the other one was installed just south of Flagstaff. These message boards are used to warn drivers of unsafe driving conditions.
- Have exhibits for the public at the Posse Grounds Community Park for Earth Day in May of each year. One of the exhibits covered FEMA's National Flood Insurance Program and flood awareness. Another exhibit educated people on stormwater pollution prevention.
- In April of each year, a Water Wise Day event is held at the West Sedona School for 4th graders from Big Park and W. Sedona School (over 100 students). Presentations on water conservation, sanitary sewer system basics, and stormwater pollution prevention are given.
- The SFD has a Life and Fire Safety (LAFS) outreach program that involves going to each school in the Fire District (once per year) and talking on the subject as well as disseminating information.
- The SFD conducts annual outreaches at the following events/venues: Moonlight Madness, Halloween, Sedona Marathon, Senior Center, and local churches.

**SECTION 8: PLAN TOOLS**

**8.1 Acronyms**

|          |  |
|----------|--|
| A/P      | Mitigation Action/Project                                      |
| ADEM     | Arizona Division of Emergency Management                       |
| ADEQ     | Arizona Department of Environmental Quality                    |
| ADWR     | Arizona Department of Water Resources                          |
| AGFD     | Arizona Game and Fish Department                               |
| ARS      | Arizona Revised Statutes                                       |
| ASCE     | American Society of Civil Engineers                            |
| ASERC    | Arizona State Emergency Response Commission                    |
| ASLD     | Arizona State Land Department                                  |
| ASU      | Arizona State University                                       |
| AZGS     | Arizona Geological Survey                                      |
| BLM      | Bureau of Land Management                                      |
| CAP      | Central Arizona Project  |
| CAP      | Community Assistance Program                                   |
| CFR      | Code of Federal Regulations                                    |
| CRS      | Community Rating System  |
| CWPP     | Community Wildfire Protection Plan                             |
| DEMA     | Arizona Department of Emergency and Military Affairs           |
| DFIRM    | Digital Flood Insurance Rate                                   |
| DMA 2000 | Disaster Mitigation Act of 2000                                |
| DOT      | Department of Transportation                                   |
| EHS      | Extremely Hazardous Substance                                  |
| EPA      | Environmental Protection Agency                                |
| EPCRA    | Emergency Planning and Community Right to Know Act             |
| FEMA     | Federal Emergency Management Agency                            |
| FMA      | Flood Mitigation Assistance Grant Program                      |
| GIS      | Geographic Information System                                  |
| HAZMAT   | Hazardous Material   |
| HAZUS-99 | Hazards United States 1999                                     |
| HAZUS-MH | Hazards United States Multi-Hazard                             |
| IFCI     | International Fire Code Institute                              |
| LEPC     | Local Emergency Planning Committee                             |
| MJHMP    | Multi-Jurisdictional Hazard Mitigation Plan                    |
| MMI      | Modified Mercalli Intensity                                    |
| NCDC     | National Climate Data Center                                   |
| NDMC     | National Drought Mitigation Center                             |
| NESDIS   | National Environmental Satellite, Data and Information Service |
| NFIP     | National Flood Insurance Program                               |
| NFPA     | National Fire Protection Association                           |
| NHC      | National Hurricane Center                                      |
| NIBS     | National Institute of Building Services                        |
| NID      | National Inventory of Dams                                     |
| NIST     | National Institute of Standards and Technology                 |
| NSF      | National Science Foundation                                    |
| NOAA     | National Oceanic and Atmospheric Administration                |
| NRC      | National Response Center                                       |
| NWCG     | National Wildfire Coordination Group                           |
| NWS      | National Weather Service                                       |
| PSDI     | Palmer Drought Severity Index                                  |
| PAWUIC   | Prescott Area/Urban Interface Commission                       |

|             |  |
|-------------|--|
| RL .....    | Repetitive Loss                              |
| SARA .....  | Superfund Amendments and Reauthorization Act |
| SRLP .....  | Severe Repetitive Loss Properties            |
| SRL .....   | Severe Repetitive Loss                       |
| UBC .....   | Uniform Building Code                        |
| USACE ..... | United States Army Corps of Engineers        |
| USDA .....  | United States Department of Agriculture      |
| USFS .....  | United States Forest Service                 |
| USGS .....  | United States Geological Survey              |
| VA .....    | Vulnerability Analysis                       |
| WUI .....   | Wildland Urban Interface                     |
| YCEM .....  | Yavapai County Emergency Management          |
| YCFCD.....  | Yavapai County Flood Control District        |

## 8.2 Definitions

The following terms and definitions are provided for reference and are taken from the 2010 State Plan with a few minor modifications.

### ARIZONA HAZARDS

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#### Dam Failure

A dam failure is a catastrophic type of failure characterized by the sudden, rapid and uncontrolled release of impounded water. Dam failures are typically due to either overtopping or piping and can result from a variety of causes including natural events such as floods, landslides or earthquakes, deterioration of foundation or compositional materials, penetration by vegetative roots or animal burrows, fissures or improper design and construction. Such a failure presents a significant potential for a disaster as significant loss of life and property would be expected in addition to the possible loss of power and water resources.

#### Drought

A drought is a deficiency of precipitation over an extended period of time, resulting in water shortage for some activity, group or environmental sector. "Severe" to "extreme" drought conditions endanger livestock and crops, significantly reduce surface and ground water supplies, increase the potential risk for wildland fires, increase the potential for dust storms, and cause significant economic loss. Humid areas are more vulnerable than arid areas. Drought may not be constant or predictable and does not begin or end on any schedule. Short term droughts are less impacting due to the reliance on irrigation and groundwater in arid environments.

#### Earthquake

An earthquake is a naturally-induced shaking of the ground, caused by the fracture and sliding of rock within the Earth's crust. The magnitude is determined by the dimensions of the rupturing fracture (fault) and the amount of displacement that takes place. The larger the fault surface and displacement, the greater the energy. In addition to deforming the rock near the fault, this energy produces the shaking and a variety of seismic waves that radiate throughout the Earth. Earthquake magnitude is measured using the Richter Scale and earthquake intensity is measured using the Modified Mercalli Intensity Scale.

#### Fissure

Earth fissures are tension cracks that open as the result of subsidence due to severe overdrafts (i.e., pumping) of groundwater, and occur about the margins of alluvial basins, near exposed or shallow buried bedrock, or over zones of differential land subsidence. As the ground slowly settles, cracks form at depth and propagate towards the surface, hundreds of feet above. Individual fissures range in length from hundreds of feet to several miles, and from less than an inch to several feet wide. Rainstorms can erode fissure walls rapidly causing them to widen and lengthen suddenly and dangerously, forming gullies five to 15- feet wide and tens of feet deep.

**Flooding**

Flooding is an overflowing of water onto normally dry land and is one of the most significant and costly of natural disasters. Flooding tends to occur in Arizona during anomalous years of prolonged, regional rainfall (typical of an El Nino year), and is typified by increased humidity and high summer temperatures.

Flash flooding is caused excessive rain falling in a small area in a short time and is a critical hazard in Arizona. Flash floods are usually associated with summer monsoon thunderstorms or the remnants of a tropical storm. Several factors contribute to flash flooding: rainfall intensity and duration, topography, soil conditions, and ground cover. Most flash flooding is caused by slow-moving thunderstorms or thunderstorms repeatedly moving over the same area and can occur within a few minutes or hours of excessive rainfall, or a quick release from a dam or levee failure. Thunderstorms produce flash flooding, often far from the actual storm and at night when natural warnings may not be noticed.

**Landslide / Mudslide**

Landslides like avalanches are massive downward and outward movements of slope-forming materials. The term landslide is restricted to movement of rock and soil and includes a broad range of velocities. Slow movements, although rarely a threat to life, can destroy buildings or break buried utility lines. A landslide occurs when a portion of a hill slope becomes too weak to support its own weight. The weakness is generally initiated when rainfall or some other source of water increases the water content of the slope, reducing the shear strength of the materials. A mud slide is a type of landslide referred to as a flow. Flows are landslides that behave like fluids: mud flows involve wet mud and debris.

**Levee Failure / Breach**

Levee failures are typically due to either overtopping or erosive piping and can result from a variety of causes including natural events such as floods, hurricane/tropical storms, or earthquakes, deterioration of foundation or compositional materials, penetration by vegetative roots or animal burrows, fissures, or improper design, construction and maintenance. A levee breach is the opening formed by the erosion of levee material and can form suddenly or gradually depending on the hydraulic conditions at the time of failure and the type of material comprising the levee.

**Severe Wind**

Thunderstorms are characterized as violent storms that typically are associated with high winds, dust storms, heavy rainfall, hail, lightning strikes, and/or tornadoes. The unpredictability of thunderstorms, particularly their formation and rapid movement to new locations heightens the possibility of floods. Thunderstorms, dust/sand storms and the like are most prevalent in Arizona during the monsoon season, which is a seasonal shift in the winds that causes an increase in humidity capable of fueling thunderstorms. The monsoon season in Arizona typically is from late-June or early-July through mid-September.

Tornadoes are violently rotating columns of air extending from a thunderstorm to the ground. The most violent tornadoes are capable of tremendous destruction with wind speeds in excess of 250 mph. Damage paths can exceed a mile wide and 50 miles long. The damage from tornadoes is due to high winds. The Fujita Scale of Tornado Intensity measures tornado / high wind intensity and damage.

Tropical Storms are storms in which the maximum sustained surface wind ranges from 39-73 mph. Tropical storms are associated with heavy rain and high winds. High intensity rainfall in short periods is typical. A tropical storm is classified as a hurricane when its sustained winds reach or exceed 74 mph. These storms are medium to large in size and are capable of producing dangerous winds, torrential rains, and flooding, all of which may result in tremendous property damage and loss of life, primarily in coastal populated areas. The effects are typically most dangerous before a hurricane makes landfall, when most damage occurs. However, Arizona has experienced a number of tropical storms that caused extensive flooding and wind damage.

**Subsidence**

Land subsidence in Arizona is primarily attributed to substantial groundwater withdrawal from aquifers in sedimentary basins. As the water is removed, the sedimentary layers consolidate resulting in a general lowering of the corresponding ground surface. Subsidence frequently results in regional bowl-shaped depressions, with loss of elevation greatest in the center and decreasing towards the perimeter. Subsidence can measurably change or reverse basin gradients causing expensive localized flooding and adverse impacts or even rupture to long-baseline infrastructure such as canals, sewer systems, gas lines and roads. Earth fissures are the most spectacular and destructive manifestation of subsidence-related phenomena.

**Wildfire**

Wildfire is a rapid, persistent chemical reaction that releases heat and light, especially the exothermic combination of a combustible substance with oxygen. Wildfires present a significant potential for disaster in the southwest, a region of relatively high temperatures, low humidity, low precipitation, and during the spring moderately strong daytime winds. Combine these severe burning conditions with people or lightning and the stage is set for the occurrence of large, destructive wildfires.

**Winter Storm**

Winter storms bring heavy snowfall and frequently have freezing rain and sleet. Sleet is defined as pellets of ice composed of frozen or mostly frozen raindrops or refrozen partially melted snowflakes. These pellets of ice usually bounce after hitting the ground or other hard surfaces. Freezing rain begins as snow at higher altitudes and melts completely on its way down while passing through a layer of air above freezing temperature, then encounters a layer below freezing at lower level to become supercooled, freezing upon impact of any object it then encounters. Because freezing rain hits the ground as a rain droplet, it conforms to the shape of the ground, making one thick layer of ice. Snow is generally formed directly from the freezing of airborne water vapor into ice crystals that often agglomerates into snowflakes. Average annual snowfall in Arizona varies with geographic location and elevation, and can range from trace amounts to hundreds of inches. Severe snow storms can affect transportation, emergency services, utilities, agriculture and basic subsistence supply to isolated communities. In extreme cases, snowloads can cause significant structural damage to under-designed buildings.

**GENERAL PLAN TERMS**

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**Asset**

Any natural or human-caused feature that has value, including, but not limited to people; buildings; infrastructure like bridges, roads, and sewer and water systems; lifelines like electricity and communication resources; or environmental, cultural, or recreational features like parks, dunes, wetlands, or landmarks.

**Building**

A structure that is walled and roofed, principally above ground and permanently affixed to a site. The term includes a manufactured home on a permanent foundation on which the wheels and axles carry no weight.

**Critical Facilities and Infrastructure**

Systems or facilities whose incapacity or destruction would have a debilitating impact on the defense or economic security of the nation. The Critical Infrastructure Assurance Office (CIAO) defines eight categories of critical infrastructure, as follows:

**Telecommunications infrastructure:** Telephone, data services, and Internet communications, which have become essential to continuity of business, industry, government, and military operations.

**Electrical power systems:** Generation stations and transmission and distribution networks that create and supply electricity to end-users.

**Gas and oil facilities:** Production and holding facilities for natural gas, crude and refined petroleum, and petroleum-derived fuels, as well as the refining and processing facilities for these fuels.

**Banking and finance institutions:** Banks, financial service companies, payment systems, investment companies, and securities/commodities exchanges.

**Transportation networks:** Highways, railroads, ports and inland waterways, pipelines, and airports and airways that facilitate the efficient movement of goods and people.

**Water supply systems:** Sources of water; reservoirs and holding facilities; aqueducts and other transport systems; filtration, cleaning, and treatment systems; pipelines; cooling systems; and other delivery mechanisms that provide for domestic and industrial applications, including systems for dealing with water runoff, wastewater, and firefighting.

**Government services:** Capabilities at the federal, state, and local levels of government required to meet the needs for essential services to the public.

**Emergency services:** Medical, police, fire, and rescue systems.

**Disaster Mitigation Act of 2000 (DMA2K)**

A law signed by the President on October 30, 2000 that encourages and rewards local and state pre-disaster planning, promotes sustainability as a strategy for disaster resistance, and is intended to integrate state and local planning with the aim of strengthening statewide mitigation planning.

**Emergency Preparedness and Response (EPR) Directorate**

One of five major Department of Homeland Security Directorates which builds upon the formerly independent Federal Emergency Management Agency (FEMA). EPR is responsible for preparing for natural and human-caused disasters through a comprehensive, risk-based emergency management program of preparedness, prevention, response, and recovery. This work incorporates the concept of disaster-resistant communities, including providing federal support for local governments that promote structures and communities that reduce the chances of being hit by disasters.

**Emergency Response Plan**

A document that contains information on the actions that may be taken by a governmental jurisdiction to protect people and property before, during, and after a disaster.

**Federal Emergency Management Agency (FEMA)**

Formerly independent agency created in 1978 to provide a single point of accountability for all Federal activities related to disaster mitigation and emergency preparedness, response and recovery. As of March 2003, FEMA is a part of the Department of Homeland Security's Emergency Preparedness and Response (EPR) Directorate.

**Flood Insurance Rate Map (FIRM)**

Map of a community, prepared by FEMA that shows the special flood hazard areas and the risk premium zones applicable to the community.

**Frequency**

A measure of how often events of a particular magnitude are expected to occur. Frequency describes how often a hazard of a specific magnitude, duration, and/or extent typically occurs, on average. Statistically, a hazard with a 100-year recurrence interval is expected to occur once every 100 years on average, and would have a 1% chance – its probability – of happening in any given year. The reliability of this information varies depending on the kind of hazard being considered.

**Geographic Information Systems (GIS)**

A computer software application that relates physical features on the earth to a database to be used for mapping and analysis.

**Hazard**

A source of potential danger or adverse condition. Hazards include both natural and human-caused events. A natural event is a hazard when it has the potential to harm people or property and may include events such as floods, earthquakes, tornadoes, tsunami, coastal storms, landslides, and wildfires that strike populated areas. Human-caused hazard events originate from human activity and may include technological hazards and terrorism. Technological hazards arise from human activities and are assumed to be accidental and/or have unintended consequences (e.g., manufacture, storage and use of hazardous materials). While no single definition of terrorism exists, the Code of Federal Regulations defines terrorism as "...unlawful use of force and violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives."

**Hazard Event**

A specific occurrence of a particular type of hazard.

**Hazard Identification**

The process of identifying hazards that threaten an area.

**Hazard Mitigation**

Cost effective measures taken to reduce or eliminate long-term risk associated with hazards and their effects.

**Hazard Profile**

A description of the physical characteristics of hazards and a determination of various descriptors including magnitude, duration, frequency, probability, and extent.

**HAZUS**

A GIS-based nationally standardized earthquake, flood and high wind event loss estimation tool developed by FEMA.

**Mitigate**

To cause to become less harsh or hostile; to make less severe or painful. Mitigation activities are actions taken to eliminate or reduce the probability of the event, or reduce its severity of consequences, either prior to or following a disaster/emergency.

**Mitigation Plan**

A systematic evaluation of the nature and extent of vulnerability to the effects of hazards typically present in a defined geographic area, including a description of actions to minimize future vulnerability to hazards.

**100-Hundred Year Floodplain**

Also referred to as the Base Flood Elevation (BFE) and Special Flood Hazard Area (SFHA). An area within a floodplain having a 1% or greater chance of flood occurrence in any given year.

**Planning**

The act or process of making or carrying out plans; the establishment of goals, policies, and procedures for a social or economic unit.

**Probability**

A statistical measure of the likelihood that a hazard event will occur.

**Promulgation**

To make public and put into action the Hazard Mitigation Plan via formal adoption and/or approval by the governing body of the respective community or jurisdiction (i.e. – Town or City Council, County Board of Directors, etc.).

**Q3 Data**

The Q3 Flood Data product is a digital representation of certain features of FEMA's Flood Insurance Rate Map (FIRM) product, intended for use with desktop mapping and Geographic Information Systems technology. The digital Q3 Flood Data are created by scanning the effective FIRM paper maps and digitizing selected features and lines. The digital Q3 Flood Data are designed to serve FEMA's needs for disaster response activities, National Flood Insurance Program activities, risk assessment, and floodplain management.

**Repetitive Loss Property**

A property that is currently insured for which two or more National Flood Insurance Program losses (occurring more than ten days apart) of at least \$1,000 each have been paid within any 10 year period since 1978.

**Risk**

The estimated impact that a hazard would have on people, services, facilities, and structures in a community; the likelihood of a hazard event resulting in an adverse condition that causes injury or damage. Risk is often expressed in relative terms such as a high, moderate, or low likelihood of sustaining damage beyond a particular threshold due to a specific type of hazard event. It also can be expressed in terms of potential monetary losses associated with the intensity of the hazard.

**Substantial Damage**

Damage of any origin sustained by a structure in a Special Flood Hazard Area whereby the cost of restoring the structure to its before-damaged condition would equal or exceeds 50% of the market value of the structure before the damage.

**Vulnerability**

Describes how exposed or susceptible to damage an asset is. Vulnerability depends on an asset's construction, contents, and the economic value of its functions. Like indirect damages, the vulnerability of one element of the community is often related to the vulnerability of another. For example, many businesses depend on uninterrupted electrical power—if an electric substation is flooded, it will affect not only the substation itself, but a number of businesses as well. Often, indirect effects can be much more widespread and damaging than direct effects.

**Vulnerability Analysis**

The extent of injury and damage that may result from a hazard event of a given intensity in a given area. The vulnerability analysis should address impacts of hazard events on the existing and future built environment.

**Vulnerable Populations**

Any segment of the population that is more vulnerable to the effects of hazards because of things such as lack of mobility, sensitivity to environmental factors, or physical abilities. These populations can include, but are not limited to, senior citizens and school children.

**Goals**

General guidelines that explain what you want to achieve. Goals are usually broad statements with long-term perspective.

**Objectives**

Defined strategies or implementation steps intended to attain the identified goals. Objectives are specific, measurable, and have a defined time horizon.

**Actions/Projects**

Specific actions or projects that help achieve goals and objectives.

**Implementation Strategy**

A comprehensive strategy that describes how the mitigation actions will be implemented.

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**GENERAL HAZARD TERMS**

**Fujita Scale of Tornado Intensity**

Rates tornadoes with numeric values from F0 to F5 based on tornado winds speed and damage sustained. An F0 indicates minimal damage such as broken tree limbs or signs, while an F5 indicates severe damage sustained.

**Liquefaction**

The phenomenon that occurs when ground shaking (earthquake) causes loose soils to lose strength and act like viscous fluid. Liquefaction causes two types of ground failure: lateral spread and loss of bearing strength.

**Modified Mercalli Intensity Scale**

The Modified Mercalli Intensity Scale is commonly used in the United States by seismologists seeking information on the severity of earthquake effects. Intensity ratings are expressed as Roman numerals between I at the low end and XII at the high end. The Intensity Scale differs from the Richter Magnitude Scale in that the effects of any one earthquake vary greatly from place to place, so there may be many Intensity values (e.g.: IV, VII) measured from one earthquake. Each earthquake, on the other hand, should have just one Magnitude, although the several methods of estimating it will yield slightly different values (e.g.: 6.1, 6.3).

**Monsoon**

A monsoon is any wind that reverses its direction seasonally. In the Southwestern U.S., for most of the year the winds blow from the west/northwest. Arizona is located on the fringe of the Mexican Monsoon which during the summer months turns the winds to a more south/southeast direction and brings moisture from the Pacific Ocean, Gulf of California, and Gulf of Mexico. This moisture often leads to thunderstorms in the higher mountains and Mogollon Rim, with air cooled from these storms often moving from the high country to the deserts, leading to further thunderstorm activity in the desert. A common misuse of the term monsoon is to refer to individual thunderstorms as monsoons.

**Richter Magnitude Scale**

A logarithmic scale devised by seismologist C.F. Richter in 1935 to express the total amount of energy released by an earthquake. While the scale has no upper limit, values are typically between 1 and 9, and each increase of 1 represents a 32-fold increase in released energy.

## **Appendix A**

### **Official Resolution of Adoption**

## **Appendix B**

### **Planning Process Documentation**

| Name            | Jurisdiction/Agency/Organization | Department/Division/Branch | Title                        | Office Phone                  | Cell Phone    | E-Mail Address                    |
|-----------------|----------------------------------|----------------------------|------------------------------|-------------------------------|---------------|-----------------------------------|
| BOB ROBERTSON   | TOWN OF PRESCOTT VALLEY          | PUBLIC WORKS               | DEPUTY PUBLIC WORKS DIRECTOR | 928-759-3079                  |               | brobertson@pvaz.net               |
| CAROL PRUITT    | TOWN OF PRESCOTT VALLEY          | PUBLIC WORKS / GIS         | GIS MANAGER                  | 928-759-3126                  |               | lpruittc@pvaz.net                 |
| KATHY BAMBURGE  | TOWN OF CLARKDALE                | Clerk/Finance              | Clerk/Finance Dir            | 928-634-2445                  |               | kathy.bamburge@clarkdale.az.gov   |
| SCOTT STEBBINS  | PRESCOTT VALLEY                  | POLICE                     | DISASTER PLAN COORD.         | 928-772-5112                  | 928-237-0461  | S STEBBINS@PVAZ.NET               |
| Justin Stehlers | YAVAPAI COUNTY EM                | Emergency Mgt              | EMERGENCY PLANNING           | 928-771-3321                  | 928-8435-4219 | JUSTIE.stehlers@co.yavapai.az.us  |
| JAN MAZEY       | TOWN OF CHINO VALLEY             | GIS/Dev Services           | GIS/CAD Tech                 | 928-636-2648                  |               | jmazey@chinovaz.net               |
| Paul Grasso     | Town of Clarkdale                | Building Official/CDD      | Bld Official/Inspector       | 928-634-2500                  |               | paul-grasso@clarkdale.az.gov      |
| TROY SMITH      | TOWNSHIP CLARKDALE               | POLICE                     | SERGEANT                     | 928-300-0105                  | 928-300-0105  | TROY SMITH@CLARKDALE.AZ.GOV       |
| NICK ANGIOLILLO | YAVAPAI COUNTY                   | EM                         | COORDINATOR                  | 928-771-3321                  | 928-713-3020  | NICK.ANGIOLILLO@CO.YAVAPAI.AZ.US  |
| Joel Berman     | Town of Duyn-Humboldt            | Public Works               | Town Engineer                | 928-632-7362                  |               | joelberman@duyn-humboldt.az.gov   |
| Rusty Blair     | Town of Jerome                   | Fire Department            | Fire Chief                   | 928-300-8701                  | same          | Blair.R@jeromefire.us             |
| EARL HUFF       | TOWN OF CAMP VERDE               | MARSHAL'S OFFICE           | LIEUTENANT                   | 928-567-6621                  |               | EARL.HUFF@CAMPVERDE.AZ.GOV        |
| Ron Long        | Town of Camp Verde               | Public Work                | PNW Director                 | 928-567-0534                  |               | Ron.Long@campverde.az.gov         |
| MICHAEL JENKINS | TOWN OF CAMP VERDE               | COMMUNITY DEVELOPMENT      | DIRECTOR                     | (928) 567-8513                | SAME          | MIKE.JENKINS@CAMPVERDE.AZ.GOV     |
| Darrell Willis  | City of Prescott                 | Fire/Emergency Mgt         | DIVISION CHIEF               | (928) 777-1701 (928) 925-7311 |               | darrell.willis@prescott-az.gov    |
| KYAN GILBERTSON | CITY OF COTTONWOOD               | Police Dept                | TLR / SGT                    | (928) 634-0186 (928) 262-9305 |               | ry.gilbertson@ci.cottonwood.az.us |
| MIKE CASSON     | " " "                            | FIRE DEPT                  | FIRE CHIEF / E.M             | 928-634-2741                  | 301-2578      | mcasson@ci.cottonwood.az.us       |
| Lynn Whitman    | Yc Flood Control                 | Flood                      | Senior Hyd.                  | 928-771-3197                  | 602-296-9545  | lynn.whitman@co.yavapai.az.us     |
| Charlie Coe     | Yc Flood Control                 | Flood                      | Director                     | 928-771-3197 (928) 710-7357   |               | charlie.coe@co.yavapai.az.us      |
| DAN LUESER      | CITY OF COTTONWOOD               | DEVELOPMENT SERVICES       | GENERAL MANAGER              | 928-634-0186                  | 81-2557       | D.LUESER@CI.COTTONWOOD.AZ.US      |
| Steve Berberows | Town of Clarkdale                | Public Works               | PL Director                  | 928-634-2550                  | 928-301-1130  | STEVE.BERBEROWS@CLARKDALE.AZ.GOV  |
| Fernando Diaz   | YAVAPAI APACHE NAT               | EM                         | P.S. Manager                 | 428-649-7442                  | 301-4121      | fdiaz@yan-trbo.org                |



| Name                                      | Jurisdiction/Agency/Organization      | Department/Division/Branch                                  | Title  | Office Phone                                 | Cell Phone                                   | E-Mail Address   |
|---|---------------------------------------|---|--|--|--|--|
| Will Loesche<br>David Peck<br>Amber Tyson | Sedona Fire<br>City of Sedona<br>YPIT | Fire Marshal<br>Public Works - Engineering<br>Environmental | District Fire Marshal<br>Assistant Engineer<br>Env. Director | 928.204.8706<br>928.204.7108<br>928.515.7453 | 928.300.0509<br>928.239.0475<br>928.713.7302 | WLOESCHE@SEDONA.FIRE.ORG<br>dpeck@sedonazipit.com<br>atyson@ypit.com |



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|------------------|---|----------------------------|------------------------------|------------------------------|--------------|-----------------------------------|
| Nick Angiullo    | Yavapai County                            | EM                         | Coordinator                  | 928-771-3321                 | 928-713-3020 | nick.angiullo@co.yavapai.az.us    |
| Kathy Bainbridge | Town of Clarkdale                         | Clerk / Finance            | Clerk / Finance Director     | 928-639-2445                 |              | kathy.bainbridge@clarkdale.az.gov |
| Joel Beraman     | Town of Dewey - Humboldt                  | Public Works               | Town Engineer                | 928-632-7362                 |              | joelberman@dhaz.gov               |
| Rusty Blair      | Town of Jerome                            | Fire Department            | Fire Chief                   | 928-300-8701                 | 928-300-8701 | blair@jeromefire.us               |
| Steve Burroughs  | Town of Clarkdale                         | Public Works               | Director                     | 928-639-2550                 | 928-301-1130 | steve.burroughs@clarkdale.az.gov  |
| Mike Casson      | City of Cottonwood                        | Fire Department            | Fire Chief / E.M.            | 928-634-2741                 | 301-2578     | mcasson@ci.cottonwood.az.us       |
| Charlie Cave     | Yavapai County Flood Control              | Flood                      | Director                     | 928-771-3197                 | 928-710-7359 | charlie.cave@co.yavapai.az.us     |
| Fernando Diaz    | Yavapai-Apache Nation                     | Emergency Management       | P.S. Manager                 | 928-689-7142                 | 301-4821     | fdiaz@yan-tribe.org               |
| Ryan Glotchehaus | City of Cottonwood                        | Police Dept.               | TLO / SGT                    | 928-639-0186                 | 928-202-9305 | rglotchehaus@ci.cottonwood.az.us  |
| Paul Grasso      | Town of Clarkdale                         | Building Official CDD      | Bld Official / Inspector     | 928-634-2500                 |              | paul.grasso@clarkdale.az.gov      |
| Earl Huff        | Town of Camp Verde                        | Marshal's Office           | Lieutenant                   | 928-567-6621                 |              | earl.huff@campverde.az.gov        |
| Michael Jenkins  | Town of Camp Verde                        | Community Development      | Director                     | 928-567-8513                 | 928-567-8513 | mike.jenkins@campverde.az.gov     |
| Ron Long         | Town of Camp Verde                        | Public Works               | PW Director                  | 928-567-0534                 |              | Ron.Long@campverde.az.gov         |
| Dan Lueder       | City of Cottonwood                        | Development Services       | General Manager              | 928-634-0186 x3313           | 928-821-2557 | dlieder@ci.cottonwood.az.us       |
| Janet Hery       | Town of Chino Valley                      | GIS/Dev Services           | GIS/Dev Tech                 | 928-436-4800<br>928-436-2646 |              | jmazy@chinoaz.net                 |
| Scott Ogden      | JE Fuller Hydrology & Geomorphology, Inc. |                            | Project Manager              | 480-222-5717                 | 602-299-3394 | scott@jefuller.com                |
| Larry Prentice   | Town of Prescott Valley                   | Public Works / GIS         | GIS Manager                  | 928-759-3126                 |              | lprentice@pvaz.net                |
| Boyd Roberson    | Town of Prescott Valley                   | Public Works               | Deputy Public Works Director | 928-759-3079                 |              | broberson@pvaz.net                |
| Troy Smith       | Town of Clarkdale                         | Police                     | Sergeant                     | 928-300-0108                 | 928-300-0108 | troy.smith@clarkdale.az.gov       |
| Scott Stebbins   | Prescott Valley                           | Police                     | Disaster Plans Coord.        | 928-772-5112                 | 928-237-0461 | sstebbins@pvaz.net                |
| Mistie Stebbins  | Yavapai County EIM                        | Emergency Mgt              | Emergency Planner            | 928-771-3321                 | 928-925-4219 | mistie.stebbins@co.yavapai.az.us  |
| Lynn Whitman     | Yavapai County Flood Control              | Flood                      | Senior Hyd.                  | 928-771-3197                 | 602-296-9545 | lynn.whitman@co.yavapai.az.us     |
| Darrell Willis   | City of Prescott                          | Fire / Emergency MGT       | Division Chief               | 928-777-1701                 | 928-925-7311 | darrell.willis@prescott-az.gov    |
| Susan Wood       | Arizona Division of Emergency Management  | Mitigation Office          | Program Manager              | 602-464-6518                 |              | susan.wood@aztema.gov             |

Wayne DeBorsky *Wayne DeBorsky To Clarkdale*  
 Valerie House *Spec Projects Coord. 928-567-0534 928-572-3059 Valerie.house@campverde.az.gov*  
 William Laeschke *Fire Marshal 928 204 8906 928 300 5509 WLOESCHE@clarkdale.az.gov*  
 Ken Krebs *Fire Marshal 928-632-6801 928 593 0377 KREBS@clarkdale.az.gov*  
 Debbie Calkins *Emerg. Mgmt Coord. 928 710 2170*  
 D Calkins@ye.edu



| Name           | Jurisdiction/Agency/Organization | Department/Division/Branch | Title                      | Office Phone | Cell Phone   | E-Mail Address                 |
|----------------|----------------------------------|----------------------------|----------------------------|--------------|--------------|--------------------------------|
| Amber Tusu     | YPIT                             | Environment                | Env. Protection Specialist | 928-515-7453 | 928-713-7302 | atysun@ypit.com                |
| Art Castricone | D/H                              |                            | Citizen Charge             | 928-246-5091 |              | Castricone@Juno.com            |
| Jan Groggin    | CV Sanitary District             |                            | Manager                    | 928-567-6799 | 928-599-0975 | jan@compustel.sc.wv.com        |
| Valerie House  | T. Camp Verde                    | PO                         | Special Projects Dir.      | 928-567-0534 | 928-582-3089 | Valerie.house@campverde.az.gov |
| Rosa Long      | T. Camp Verde                    | PW                         | Director                   | 928-567-0534 | 928-619-8144 | Rosa.Long@campverde.az.gov     |
| TOODHYSLIPS    | TOWN OF CHANDLER                 | POWDER DEPT.               | PTO/OFFICER                | 928-636-4223 |              | THYSLIPS@CHANDLER.AZ.GOV       |
| JOE MOORE      | CHANDLER FIRE DEPT               | FIRE SERVICES              | CHIEF                      | 928-639-4591 | 928-739-0101 | JoeMoore@chandler.afd.az       |
| John Sterling  | YPIT                             | Environmental              | ENGINEER                   | 928-515-7452 |              | jssterling@ypit.com            |
| WAYNE DEBRASKY | To CHANDLER                      | UTILITIES                  | DIRECTOR                   | 928-639-8285 | 928-299-0450 | wayne.debrasky@chandler.az.gov |
| David Rick     | City of Sedona                   | Public Works               | Assistant Engineer         | 928-244-7108 |              | d.rick@sedona.az.gov           |



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| Nick Angiolillo  | Yavapai County                             | EM                         | Coordinator                      | 928-771-3321       | 928-713-3020 | nick.angiolillo@co.yavapai.az.us  |
| Kathy Bainbridge | Town of Clarkdale                          | Clerk / Finance            | Clerk / Finance Director         | 928-639-2445       |              | kathy.bainbridge@clarkdale.az.gov |
| Joel Berman      | Town of Dewey - Humboldt                   | Public Works               | Town Engineer                    | 928-632-7362       |              | joelberman@diaz.gov               |
| Rusty Blair      | Town of Jerome                             | Fire Department            | Fire Chief                       | 928-300-8701       | 928-300-8701 | rblair@jeromefire.us              |
| Steve Burroughs  | Town of Clarkdale                          | Public Works               | Director                         | 928-639-2550       | 928-301-1130 | steve.burroughs@clarkdale.az.gov  |
| Debbie Calkins   | Yavapai College                            | Emergency Management       | Emergency Management Coordinator | 928-760-2170       |              | dcalkins@yc.edu                   |
| Mike Casson      | City of Cottonwood                         | Fire Department            | Fire Chief / E.M.                | 928-634-2741       | 301-2578     | mcasson@ci.cottonwood.az.us       |
| Art Casiricome   | Town of Dewey - Humboldt                   |                            | Private Citizen                  | 928-246-5091       |              | casiricome@juno.com               |
| Charlie Cave     | Yavapai County Flood Control               | Flood                      | Director                         | 928-771-3197       | 928-710-7359 | charlie.cave@co.yavapai.az.us     |
| Wayne Debrosky   | Town of Clarkdale                          | Utilities                  | Director                         | 928-639-2525       | 928-239-0450 | wayne.debrosky@clarkdale.az.gov   |
| Fernando Diaz    | Yavapai-Apache Nation                      | Emergency Management       | P. S. Manager                    | 928-689-7142       | 301-4821     | fdiaz@yan-tribe.org               |
| Mark Garcia      | Town of Chino Valley                       | Police                     | Commander                        | 928-636-4223 x 128 |              | mgarcia@chinoaz.net               |
| Ryan Gildehaus   | City of Cottonwood                         | Police Dept.               | TLO /SGT                         | 928-639-0186       | 928-202-9305 | rgildehaus@ci.cottonwood.az.us    |
| Paul Grasso      | Town of Clarkdale                          | Building Official CDD      | Blid Official / Inspector        | 928-634-2500       |              | paul.grasso@clarkdale.az.gov      |
| Jan Grogan       | Camp Verde Sanitary District               |                            | Manager                          | 928-567-6794       | 928-399-0975 | jan@campverdesewer.com            |
| Valerie House    | Town of Camp Verde                         | Public Works               | Special Projects Coordinator     | 928-567-0534       | 928-592-3089 | valerie.house@campverde.az.gov    |
| Earl Huff        | Town of Camp Verde                         | Marshal's Office           | Lieutenant                       | 928-567-6621       |              | earlhuff@campverde.az.gov         |
| Todd Hyslip      | Town of Chino Valley                       | Police                     | PTO / Officer                    | 928-636-4223       |              | thyslip@chinoaz.net               |
| Michael Jenkins  | Town of Camp Verde                         | Community Development      | Director                         | 928-567-8513       | 928-567-8513 | mike.jenkins@campverde.az.gov     |
| Ken Krebs        | Sedona Fire District                       | Operations                 | Firefighter                      | 928-282-6801       | 928-593-0377 | kkrebs@sedonafire.org             |
| William Loesche  | Sedona Fire District                       |                            | Fire Marshal                     | 928-204-8906       | 928-300-0509 | wloesche@sedonafire.org           |
| Ron Long         | Town of Camp Verde                         | Public Works               | PW Director                      | 928-567-0534       | 928-619-8144 | Ron.Long@campverde.az.gov         |
| Dan Lueder       | City of Cottonwood                         | Development Services       | General Manager                  | 928-634-0186 x3313 | 928-821-2557 | dlueder@ci.cottonwood.az.us       |
| Jan Mazy         | Town of Chino Valley                       | GIS / Dev Services         | GIS / CAD Tech                   | 928-636-2646       |              | jmazy@chinoaz.net                 |
| Joe Moore        | Clarkdale Fire District                    |                            | Chief                            | 928-638-4591       | 928-239-0101 | jmoore@clarkdalefd.org            |
| Scott Ogden      | JE Fuller/ Hydrology & Geomorphology, Inc. |                            | Project Manager                  | 480-222-5717       | 602-299-3394 | scott@je fuller.com               |
| David Peck       | City of Sedona                             | Public Works               | Assistant Engineer               | 928-204-7108       |              | dpeck@sedonaaz.gov                |
| Larry Prentice   | Town of Prescott Valley                    | Public Works / GIS         | GIS Manager                      | 928-759-3126       |              | lprentice@pvalley.net             |



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|------------------|--|----------------------------|-------------------------------------|--------------|--------------|----------------------------------|
| Boyd Robertson   | Town of Prescott Valley                  | Public Works               | Deputy Public Works Director        | 928-759-3079 |              | brobertson@pvaz.net              |
| Troy Smith       | Town of Clarkdale                        | Police                     | Sergeant                            | 928-300-0108 | 928-300-0108 | troy.smith@clarkdale.az.gov      |
| Scott Stebbins   | Prescott Valley                          | Police                     | Disaster Plans Coord.               | 928-772-5112 | 928-237-0461 | sstebbins@pvaz.net               |
| Missile Stebbins | Yavapai County EM                        | Emergency Mgt              | Emergency Planner                   | 928-771-3321 | 928-925-4219 | mistle-stebbins@co.yavapai.az.us |
| John Sterling    | Yavapai-Prescott Indian Tribe            | Environmental              | Environmental Technician            | 928-515-7452 |              | jsterling@ypit.com               |
| Amber Tyson      | Yavapai-Prescott Indian Tribe            | Environmental              | Environmental Protection Specialist | 928-515-7453 | 928-713-7302 | atyson@ypit.com                  |
| Lynn Whitman     | Yavapai County Flood Control             | Flood                      | Senior Hyd.                         | 928-771-3197 | 602-296-9545 | lynn.whitman@co.yavapai.az.us    |
| Darrell Willis   | City of Prescott                         | Fire / Emergency MGT       | Division Chief                      | 928-777-1701 | 928-925-7311 | darrell.willis@prescott-az.gov   |
| Susan Wood       | Arizona Division of Emergency Management | Mitigation Office          | Program Manager                     | 602-464-6518 |              | susan.wood@azdema.gov            |
| Keith Self       | Arizona Water Co.                        | Verde Valley Div           | Manager                             | 928-282-7892 | 928-202-2555 | Kself@azwater.com                |
| Bill Parry       | UMI SOURCE ENERGY                        | VERDE DISTRICT             | Supervisor                          | 928-203-1212 | 928-607-7502 | bparry@UESAZ.COM                 |
| MARK GRACIA      | TOWN OF CHINO VALLEY                     | PD                         | CMO                                 | 928-436-4223 | 928-925-3968 | mgarcia@chinoaz.net              |
| Fred Barton      | Sedona-OakCreek School District          | Public School              | Plant Foreman                       | 928-204-4826 | 928-300-0956 | F.Barton@Sedona.K12.AZ.US        |



| Name           | Agency/Organization/Company | Title                             | Phone Number | E-Mail Address      |
|----------------|-----------------------------|-----------------------------------|--------------|---------------------|
| John Sterling  | YPTIT                       | Environmental Fed                 | 928 515 7452 | jssterling@ypit.com |
| A TYSON        | YPTIT                       | EP Specialist                     | 928-515-7453 | atyson@ypit.com     |
| Kelley Hunter  | YPTIT                       | Housing Mgr                       | 928-515-7452 | chunter@ypit.com    |
| Scott DeSandro | YPTIT                       | LT                                | 928-515-7366 | sdesandro@ypit.com  |
| Bob Reed       | YPTIT                       | Director                          |              | rreed@ypit.com      |
| Betty Hunter   | YPTIT                       | President - TEAC<br>Environmental |              |                     |
| Dwight Nield   | JE FULLER                   | HYDROLOGIST<br>CONSULTANT         | 480 222-5702 | dnight@jefuller.com |



**Memorandum**      **JE Fuller/ Hydrology & Geomorphology, Inc.**

**MEETING DATE:** October 26, 2010

**MEETING TIME:** 9:00 AM – 1:00 PM

**MEETING LOCATION:** Yavapai County Public Safety Complex  
Cottonwood, AZ

**DISTRIBUTION:** Meeting Attendees

**FROM:** W. Scott Ogden - JEF

**RE: Yavapai County Multi-Jurisdictional Hazard Mitigation Plan  
Planning Team Meeting No. 1**

**ATTENDEES:** Nick Angiolillo – Yavapai County Emergency Manager  
Kathy Bainbridge – Town of Clarkdale – Clerk/Finance Director  
Joel Berman – Town of Dewey/Humboldt – Town Engineer  
Rusty Blair – Town of Jerome Fire Chief  
Steve Burroughs – Town of Clarkdale Public Works Director  
Mike Casson – City of Cottonwood Fire Chief  
Charlie Cave – Yavapai County Flood Control Director  
Fernando Diaz – Yavapai-Apache Nation Public Safety Manager  
Ryan Gildehaus – City of Cottonwood Police Sergeant  
Paul Grasso – Town of Clarkdale Building Official  
Earl Huff – Town of Camp Verde Lieutenant Marshal  
Michael Jenkins – Town of Camp Verde Community Dev. Director  
Ron Long – Town of Camp Verde Public Works Director  
Dan Lueder – City of Cottonwood Development Services General Mgr  
Jan Mazy – Town of Chino Valley – GIS Technician  
W. Scott Ogden – JE Fuller  
Larry Prentice – Town of Prescott Valley GIS Manager  
Boyd Robertson – Town of Prescott Valley Deputy Public Works Dir.  
Troy Smith – Town of Clarkdale Police Sergeant  
Scott Stebbins – Town of Prescott Valley Disaster Plans Coordinator  
Mistie Stebbins – Yavapai County Emergency Planner  
Lynn Whitman – Yavapai County Flood Control Senior Hydrologist  
Darrell Willis – City of Prescott Fire Division Chief  
Susan Wood – ADEM  
NOTE: No Representative from Sedona

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**AGENDA**

- 1. INTRODUCTIONS / GREETING**
- 2. MITIGATION PLANNING OVERVIEW**
- 3. CURRENT MITIGATION PLAN REVIEW**
- 4. PLANNING PROCESS**

- a. MJ Planning Team Roles
- b. Public Involvement Strategy
5. RISK ASSESSMENT
  - a. Hazard Identification / Profiling
  - b. Asset Inventory
6. PREVIOUS MITIGATION PROJECTS
7. OTHER DATA NEEDS
8. NEXT MEETING DATES

#### ACTION ITEM SUMMARY

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### DISCUSSION

#### Agenda Item 1:

- Introductions were made for each member of the planning team. S. Wood explained the role of JEF and ADEM.
- It was noted that nobody representing the City of Sedona was in attendance. N. Angiolillo confirmed that an invitation had been sent. N. Angiolillo and S. Wood will follow up with Sedona to ensure they either attend future meetings or confirm their desire not to participate.

#### Agenda Item 2:

- S. Wood distributed a mitigation planning folder with miscellaneous mitigation related materials, brochures, fact sheets and meeting handouts to each team member. She then presented an overview/review of the DMA2K mitigation process and purpose for preparing a mitigation plan. The discussion included a review of impacted grant eligibility.

#### Agenda Item 3:

- S. Wood led a section by section review of the 2006 Hazard Mitigation Plans for each jurisdiction within Yavapai County (2006 Plans). Highlights of the discussion and comments included:
  - All of the individual jurisdictional plans will be discontinued and a single, multi-jurisdictional plan will be prepared.
  - Plan format will change slightly to reflect a version that is more compatible to the format of the current State of Arizona Mitigation Plan.
  - Some folks were returning members from the 2006 Plan effort, but most were new to the process
  - During the review of the community profile descriptions, S. Wood indicated that drafts of that section (new Plan Section 4) will be provided for editing and customizing by each jurisdiction. Each jurisdiction was encourage to edit the existing text and make it reflect their community. She also encourage each jurisdiction to add some text discussing the agricultural, mining, and tourism aspects.

- Details of Sections 4, 5, and 6 and their updates will be discussed later in the meeting today and in subsequent meetings.

**Agenda Item 4a:**

- S. Ogden led a discussion / presentation of the planning team roles and responsibilities including:
  - The primary point of contact (PPOC)
  - The community representative
  - The local planning resources (other staff, outside agencies, business, school, non-profit reps, etc. contacted or referred to).
- N. Angiolillo was identified as the PPOC. Nick also requested that Mistie Stebbins be copied on all his correspondence . The community representatives were identified as follows:
  - Unincorporated Yavapai County – N. Angiolillo and M. Stebbins
  - Town of Camp Verde – Ron Long
  - Town of Chino Valley – Jan Mazy (for now)
  - Town of Clarkdale – Kathy Bainbridge
  - City of Cottonwood – Dan Lueder
  - Town of Dewey-Humboldt – Joel Berman
  - Town of Jerome – Candace Gallagher (Not at this meeting)
  - City of Prescott – Darrell Willis
  - Town of Prescott Valley – Boyd Robertson
  - City of Sedona – Undetermined
  - Yavapai Apache Nation – Fernando Diaz
- S. Ogden presented the planning team with a list of possible local resources that should be considered for invitation to future planning team meetings. The planning team discussed appropriate contacts and concluded that invitations to local businesses, schools, non-profits, and others, should occur at the local level. Each jurisdiction will have the responsibility to make these contacts. JEF will provide a template invitation letter or language for use by the local jurisdictions.
- S. Ogden presented a template for each jurisdiction to use during the planning process for documenting the local resources involved in the plan update outside of the main planning team.

**Agenda Item 4b:**

- S. Ogden led a discussion/presentation of the public involvement requirements of DMA2K.
- N. Angiolillo provided a recap of the 2006 Plan public meetings. Two were held and total of 3 people showed up. None of the 3 individuals were very interested in the hazard mitigation process, but only wanted to complain about the lack of FEMA recovery money. The planning team unanimously chose to not pursue public meetings again.
- The planning team discussed various options for pre-draft public involvement including newspaper notices, general public announcements, council/board briefings

at a working session, and web page postings. A decision was made to do the following:

- Yavapai County (N. Angiolillo and M. Stebbins) will prepare a webpage with a public notice announcing the planning process and providing contact information for further inquiries.
- Each local jurisdiction with a website will develop a similar posting with a link to the county's website.
- Yavapai County (N. Angiolillo and M. Stebbins) will submit a public notice to a newspaper with a county-wide circulation. Information will be similar to the website posting.
- Local jurisdictions will include a printed public notice in utility bill inserts and local newspapers as appropriate.
- Once the draft plan is ready, a second round of newspaper announcements will be used and the website notice will be updated with specific instructions for obtaining a draft of the plan.
- ADEM has developed template language for the county to use in the web and newspaper announcements. JEF will provide the template to the planning team via email.

**Agenda Item 5a:**

- S. Ogden presented an overview of what a risk assessment is and its purpose in the overall scheme of mitigation planning. He discussed the approach that the planning team will ultimately step through.
- The planning team reviewed the list of hazards previously evaluated in 2006 Plan as well as a comprehensive list of hazards identified in the 2010 State Plan.
- S. Ogden presented the results of a historic hazard event search and database compilation performed by ADEM and JEF that looks at declared and undeclared hazard events. JEF will provide copies of the Excel spreadsheets to the planning team for updating and closer review.
- The planning team reviewed the hazard lists and historic records and discussed which hazards could be eliminated off-hand and which should be evaluated further. The following is a brief summary of that discussion:
  - HAZMAT in the 2006 Plan was dropped from the list in order to focus the plan on natural hazards and recognizing that FEMA mitigation grant funds cannot be used for typical HAZMAT mitigation efforts.
  - Transportation Accidents are still a major concern and especially when they occur on I-17 and the freeway closes during the hot summer months. The team realized this is more of a response and preparedness issue and not really mitigation. The team chose to drop transportation accidents.
  - R. Blair noted that Jerome would be interested in looking at landslide/mudslide due to the town's location on a hillside and the potential for those kinds of events.
  - Several people on the team wanted to add earthquake, and especially given that occurred near Chino Valley in the recent past.
  - Winter storm will also be added as a new hazard.

- Following the State Plan lead, the 2006 Plan thunderstorm/high winds will be replaced with the state’s Severe Wind category to address microbursts, seasonal winds, and tornados.
- Flooding/flash flooding and wildfire will be retained
- The resulting list of hazards to be carried forward to profiling and a vulnerability analysis are:
  - Earthquake
  - Flooding / Flash Flooding
  - Landslide / Mudslide
  - Severe Wind
  - Wildfire
  - Winter Storm
- S. Ogden presented information regarding application and development of the Calculated Priority Risk Index (CPRI). The planning team worked through an example using a preformatted spreadsheet and a handout with guidance on selecting CPRI parameters. JEF will send the CPRI spreadsheet to the community representative for each jurisdiction for them to complete and get back to JEF.

**Agenda Item 5b:**

- S. Ogden presented an overview of the asset inventory data that was developed for the 2006 plan and how it was used in the 2006 Plan vulnerability analysis. Classification of some items in the list regarding “critical” versus “non-critical” status (e.g. – schools that are also identified as evacuation shelters) was discussed and the planning team was encouraged to decide what was critical and non-critical for their communities using the definitions of critical facilities spelled out in Section 4.3.1 of the 2006 Plans.
- S. Ogden will provide the 2006 Plan list of identified assets to each respective jurisdiction for review, editing, completing and updating.

**Agenda Item 6:**

- The planning team briefly reviewed the current list of mitigation actions/projects (A/Ps) listed in the 2006 Plans.
- S. Ogden explained that a part of the plan update process will include an evaluation of the 2006 Plan’s mitigation actions/projects.
- S. Ogden provided evaluation worksheets to each participating jurisdiction listing all of the 2006 Plan A/Ps for that community, and explained to the planning team the evaluation parameters and appropriate responses. Each jurisdiction will complete the worksheet and provide to JEF at the next meeting.

**Agenda Item 7:**

- The planning team verified that several of the city boundaries have definitely changed from the 2006 Plan and Dewey-Humboldt has since incorporated. L. Whitman will coordinate with Yavapai County GIS to get updated city/town boundaries to JEF. JEF will make verification plots for each community.
- No other data collection has been identified at this time.

**Agenda Item 8:**

- Next meetings are scheduled as follows:
  - Planning Team Meeting No. 2, December 14<sup>th</sup>, 9am to 1pm, TBD (Prescott Valley Facility)
  - Planning Team Meeting No. 3, January 11<sup>th</sup>, 2011, 9am to 1pm, Cottonwood Public Safety Complex
  - Planning Team Meeting No. 4, February 15<sup>th</sup>, 9am to 1pm, TBD (Prescott Valley Facility)

**ACTION ITEM SUMMARY:**

| <b>ITEM NO.</b> | <b>DESCRIPTION</b>   | <b>RESPONSIBILITY [DUE DATE]</b>        |
|-----------------|--|---|
| 1               | N. Angiolillo and S. Wood will follow up with Sedona officials to confirm participation status   | N. Angiolillo / S. Wood [11/12/10]      |
| 2               | JEF to provide a template for use by the local jurisdictions to invite additional participation.   | JEF [11/5/10]                           |
| 3               | All jurisdictions are to extend participation invitations to their local community's businesses, academia, non-profits, and others as the community sees fit. Entities contacted and means used shall be documented and provided to JEF. | All Jurisdictions [12/3/10]             |
| 4               | JEF will email Community Descriptions to each jurisdiction for review and updating.  | JEF [11/5/10]                           |
| 5               | All jurisdictions are to review and update the Community Descriptions as appropriate and desired. Jurisdictions are encouraged to consider including Agriculture, Mining, Manufacturing, and Tourism to their descriptions               | All Jurisdictions [12/14/10]            |
| 6               | JEF will email electronic version of Local Resources List template to each jurisdiction to track contributors to the plan update.  | JEF [11/5/10]                           |
| 7               | Each jurisdiction shall record and document all people contacted or involved as a planning resource at the local level, using the template provided by JEF   | All Jurisdictions [prior to draft]      |
| 8               | JEF will provide a sample public notice prepared by ADEM to the planning team for use in the website and newspaper announcements.  | JEF [11/5/10]                           |
| 9               | N. Angiolillo and M. Stebbins will submit the public notice to the newspapers and get the posting to the Yavapai County website.   | N. Angiolillo and M. Stebbins [12/3/10] |
| 10              | All local jurisdictions will coordinate a posting of the public notice to the city's website with a link to the county's webpage.  | All Local Jurisdictions [12/3/10]       |
| 11              | JEF will provide digital copies of the historic hazard database files to the planning team for review and update as needed.  | JE Fuller [10/22/10]                    |

| <b>ITEM NO.</b>   | <b>DESCRIPTION</b>  |                    | <b>RESPONSIBILITY [DUE DATE]</b> |
|-------------------|---|--------------------|----------------------------------|
| 12                | All team members are to review and update the historic hazard database as appropriate and desired by the community.                           |                    | All Jurisdictions<br>[11/10/10]  |
| 13                | JEF to provide CPRI worksheet to each jurisdiction for completion prior to the next meeting.  |                    | JE Fuller<br>[11/5/10]           |
| 14                | All jurisdictions shall complete the CPRI respective to their jurisdiction and return to JEF.   |                    | All Jurisdictions<br>[11/29/10]  |
| 15                | JEF to provide asset inventory data sets to each community for update, correction, or provision of missing data.                              |                    | JEF<br>[11/5/10]                 |
| 16                | All jurisdictions shall review the 2006 asset inventory and make updates, corrections, and/or provide missing data such as replacement costs. |                    | All Jurisdictions<br>[12/3/10]   |
| 17                | JEF will provide the Existing Mitigation Action/Project Evaluation worksheet to each respective jurisdiction for completion.                  |                    | JEF<br>[11/5/10]                 |
| 18                | All jurisdictions shall complete the Existing Mitigation A/P Evaluation worksheet and return to JEF.  |                    | All Jurisdictions<br>[12/3/10]   |
| 19                | L. Whitman to get with Yavapai County GIS and provide latest city/town boundary coverage to JEF   |                    | L. Whitman<br>[11/5/10]          |
| 20                | JEF to plot city/town boundary verification maps and distribute to each jurisdiction for approval.  |                    | JEF<br>[11/12/10]                |
| <b>STATUS KEY</b> | <b>Not Complete</b>   | <b>In Progress</b> | <b>Complete</b>                  |

**Memorandum**      **JE Fuller/ Hydrology & Geomorphology, Inc.**

**MEETING DATE:** December 14, 2010

**MEETING TIME:** 9:00 AM – 1:00 PM

**MEETING LOCATION:** Prescott Valley Library, Crystal Room  
Prescott Valley, AZ

**DISTRIBUTION:** Meeting Attendees

**FROM:** W. Scott Ogden - JEF

**RE: Yavapai County Multi-Jurisdictional Hazard Mitigation Plan  
Planning Team Meeting No. 2**

**ATTENDEES:** Kathy Bainbridge – Town of Clarkdale – Clerk/Finance Director  
Joel Berman – Town of Dewey/Humboldt – Town Engineer  
Rusty Blair – Town of Jerome Fire Chief  
Steve Burroughs – Town of Clarkdale Public Works Director  
Debbie Calkins – Yavapai College Emergency Mgmt Coordinator  
Art Castricone – Dewey-Humboldt Citizen  
Wayne Debrosky – Town of Clarkdale Utilities Director  
Paul Grasso – Town of Clarkdale Building Official  
Jan Grogan – Camp Verde Sanitary District Manager  
Valerie House – Town of Camp Verde Special Projects Coordinator  
Todd Hyslip – Town of Chino Valley Police Officer  
Ken Krebbs – Sedona Fire District Firefighter  
William Loesche – Sedona Fire District Marshal  
Ron Long – Town of Camp Verde Public Works Director  
Joe Moore – Clarkdale Fire District Fire Chief  
Scott Ogden – JE Fuller  
David Peck – City of Sedona Assistant Engineer  
Larry Prentice – Town of Prescott Valley GIS Manager  
Boyd Robertson – Town of Prescott Valley Deputy Public Works Dir.  
Scott Stebbins – Town of Prescott Valley Disaster Plans Coordinator  
Mistie Stebbins – Yavapai County Emergency Planner  
John Sterling – Yavapai-Prescott Indian Tribe Environmental Tech.  
Amber Tyson – Yavapai-Prescott Indian Tribe Env. Protection Spclst  
Lynn Whitman – Yavapai County Flood Control Senior Hydrologist  
Darrell Willis – City of Prescott Fire Division Chief  
NOTE: No Representative from Yavapai Apache Nation

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**AGENDA**

- 1. ACTION ITEM REVIEW/STATUS**
- 2. HAZARD PROFILE MAP/INFORMATION REVIEW**
- 3. CAPABILITY ASSESSMENT**

- a. **Jurisdictional Capabilities**
- b. **Prior Mitigation Activities**
- c. **NFIP Participation and Status**
- d. **Repetitive Loss Properties**
4. **PLAN MAINTENANCE STRATEGY**
  - a. **Review/discuss activity for last plan cycle**
  - b. **Strategize new monitoring schedule**
  - c. **Documentation of activity**
  - d. **Responsibility**
5. **PLAN UPDATE**
  - a. **Review scope and schedule in current plan**
  - b. **Revise/Update scope and schedule for new plan**
6. **PLAN INCORPORATION**
  - a. **Discuss past ways of incorporation**
  - b. **Discuss challenges/successes/obstacles**
  - c. **Formulate future mechanisms for incorporation**
7. **CONTINUED PUBLIC INVOLVEMENT**
  - a. **Discuss past public involvement**
  - b. **Identify future public involvement opportunities**
8. **PLAN IMPLEMENTATION**
9. **MEETING ENDING**
  - a. **Review of action items**
  - b. **Next meeting reminder/verification**

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## DISCUSSION

### Agenda Item 1:

- Action Items from Meeting No. 1 were reviewed and discussed. A summary of the disposition of those items as of December 9, 2010 was provided to the planning team via an email. The modified status as of the December 14, 2010 meeting is provided below.

### Agenda Item 2:

- S. Ogden presented draft hazard profile maps/data for drought, earthquake, flood, landslide/mudslide, wildfire, and winter storm to the planning team for feedback. The coverages presented will be used for the vulnerability analysis.
  - Drought – presented maps to depict estimated drought conditions for various time periods and scenarios. The latest version of the maps will be included in the Plan.
  - Earthquake – presented maps depicting peak ground acceleration, MMI, and historic occurrences. Mostly, the risk is low to slightly moderate. The Team discussed dropping earthquake due to the low risk. All were in favor except Chino Valley, which T. Hyslip wanted to go back and discuss with other town staff.
  - Flood – hazard areas were determined using DFIRM data. D. Peck noted that Sedona had extra floodplains delineated that are not reflected on the DFIRMs and would like to use those. D. Peck and L. Whitman will check

their files and provide the supplemental mapping in GIS format. Prescott Valley may also have additional mapping to add similar to Sedona's. B. Robertson will check and provide if available. Other jurisdictions will do so as well.

- Landslide/Mudslide – little available in the way of risk mapping. Jerome is mostly concerned. R. Blair will provide more detail on a recent landslide event for the profile write up. Mostly worried about landslides that would occur if the watershed were to have a wildfire.
- Wildfire – the profile map will use the 2004 Statewide coverage. Team also chose to add a second map to profile that shows locations for pre 2002 wildfire locations.
- Winterstorm – provide two profile maps showing maximum 1-day and 3-day snow depths.
- JEF will use the approved profiles to perform the vulnerability analysis and will present the results at the next meeting.

**Agenda Item 3a:**

- S. Ogden led the planning team in a review of the 2006 Plan's capability assessment and distributed worksheet examples for discussing. He explained that the new Plan will include the same material, but will be reformatted somewhat to combine the information in current Tables 5-1 and 5-4 into a single table. The format of current Tables 5-2 and 5-3 will remain unchanged except for new table numbers. S. Ogden will distribute pre-populated tables to each jurisdiction using the 2006 Plan information as a starting point. Each jurisdiction was directed to review and revise/update each table as necessary.

**Agenda Item 3b:**

- S. Ogden led the planning team in a discussion of prior mitigation activities.
- The Capability Assessment portion of the updated Plan will be expanded to include 2 new sets of data will be added to.
  - The first will be a paragraph summarizing prior mitigation activities involving HMGP or PDM funds that are currently tracked by ADEM.
  - The second will be a table summarizing past mitigation activities that have been completed by each jurisdiction over the past 5-10 years.
  - JEF will provide a worksheet for each jurisdiction to document past mitigation activities. May include past projects, outreach, studies, etc., funded by any source (not just grants).

**Agenda Item 3c:**

S. Ogden presented a table showing NFIP participation statistics and actuarial data that was current as of August 2010. Jerome and the two tribes are the only jurisdictions not participated in the NFIP program. S. Ogden went through each jurisdiction to determine management roles.

**Agenda Item 3d:**

- S. Ogden presented a summary of NFIP repetitive loss property information that was provided by FEMA through ADEM and was current as of January 2010.

**Agenda Item 4:**

- S. Ogden led the planning team in a review of Section 6 in the 2006 Plans. This information will be in Section 7 of the new Plan.
- A poll of the jurisdictions was conducted regarding past plan monitoring and evaluation. All except Sedona reported that none was accomplished. Sedona had performed all the annual reviews as documented in the Plan. Reasons given by other jurisdictions for not doing the maintenance were mostly due to changes in personnel and the lack of communicating the maintenance needs to subsequent staff, lack of continuity to the 2006 planning team, limited resources, a lack of perceived value for the effort, and a lack of resources.
- A new monitoring and evaluation schedule was discussed with an acute awareness of the lack of action over the past 4 years. The following was the result:
  - ADEM will take a lead for initiating/prompting the review on or around the anniversary of the Plan approval date.
  - A prompting by ADEAM will also be initiated following a major disaster.
  - The County PPOC (currently the County Emergency Manager) will distribute a reminder at the end of February to all participating jurisdictions, to perform the plan maintenance evaluation.
  - Each jurisdiction will be given 30-days to respond with their evaluation memorandums.
- Similar to the 2006 Plans, the planning team chose to keep all maintenance and evaluation reviews documented in Appendix E over the course of the next planning cycle.

**Agenda Item 5:**

- The planning team reviewed the plan update strategy of Section 6 in the 2006 Plans and found it acceptable with one minor change. The time to initiate the update process will be changed from 6 months to 1-year in advance of the Plan expiration date. This information will be documented in Section 7 of the new Plan.

**Agenda Item 6:**

- S. Ogden led a discussion regarding ways in which the Plan can be incorporated into other planning documents or programs administered by the jurisdictions.
- A poll of the jurisdictions was conducted to identify ways in which the 2006 Plans were incorporated into other planning mechanisms within each jurisdiction. The responses were limited and the Team needed some time to think through possible responses. Reasons for the lack of incorporation success were discussed and were found to be similar to the reasons for the lack of plan maintenance. The planning team concluded that a greater awareness of the plan was needed and that hopefully a more regular review of the plan would help in the awareness and implementation of

the plan in other planning mechanisms. It was also noted that many of the jurisdictions within the county are very small and there is really not all that much other planning being done.

- Each jurisdiction will provide a report of the ways the 2006 Plan was incorporated (or not) into other planning mechanisms, to JEF.
- Each jurisdiction will also provide a list of anticipated future incorporation mechanisms to JEF.

**Agenda Item 7:**

- S. Ogden led a discussion on the continued public involvement element of the Plan and its requirements.
- Each jurisdiction was instructed to identify ways in which past public involvement opportunities were provided relative to the 2006 Plan cycle.
- All jurisdictions were also instructed to formulate a list of anticipated public involvement events or actions for the next 5 years and provide to JEF

**Agenda Item 8:**

- S. Ogden discussed the process for the formal implementation of the Plan so that the planning team will know what to expect once the Plan draft is completed.

**Agenda Item 9:**

- Action Items for this meeting are summarized below.
- The next meeting is confirmed for January 11, 2011 from 9am to 1pm at the Cottonwood Public Safety Complex, 191 S. 6<sup>th</sup> Street, Cottonwood, Arizona.

**ACTION ITEM SUMMARY:**

| <b>ITEM NO.</b> | <b>DESCRIPTION</b>   | <b>RESPONSIBILITY [DUE DATE]</b>  |
|-----------------|--|-----------------------------------|
| 2-1             | T. Hyslip to coordinate with other Chino Valley staff to determine if the town wants to keep earthquake in the mix.  | T. Hyslip<br>[12/21/10]           |
| 2-2             | D. Peck and L. Whitman to provide supplemental floodplain mapping for Sedona in GIS format.                          | D. Peck, L. Whitman<br>[12/21/10] |
| 2-3             | B. Robertson to check on supplemental floodplain mapping for Prescott Valley and provided if available               | B. Robertson<br>[12/21/10]        |
| 2-4             | R. Blair to provide a descriptive paragraph describing the recent landslide event in Jerome.                         | R. Blair<br>[12/30/10]            |
| 2-5             | JEF will perform the vulnerability analysis for review and discussion at the next meeting                            | JEF<br>[1/11/11]                  |
| 2-6             | JEF to provide digital files of the capability assessment tables for each jurisdiction to update/revise as necessary | JEF<br>[12/21/10]                 |
| 2-7             | All jurisdictions are to revise/update the capability assessment tables provided by JEF as needed and return to JEF  | All Jurisdictions<br>[1/4/11]     |
| 2-8             | JEF to provide a digital template file for each jurisdiction to use in documenting past mitigation activities        | JEF<br>[12/21/10]                 |

| ITEM NO. | DESCRIPTION   | RESPONSIBILITY [DUE DATE]  |
|----------|---|----------------------------|
| 2-9      | All jurisdictions are to fill in the table documenting past mitigation activities (5-10 years in the past).                                     | All Jurisdictions [1/4/11] |
| 2-10     | Each jurisdiction will provide a report of the ways the 2006 Plan was incorporated (or not) into other planning mechanisms                      | All Jurisdictions [1/4/11] |
| 2-11     | Each jurisdiction will provide a list of planning mechanisms that may provided a future incorporation opportunity over the next 5 years         | All Jurisdictions [1/4/11] |
| 2-12     | Each jurisdiction shall identify ways in which past public involvement opportunities were provided during the 2006 Plan cycle                   | All Jurisdictions [1/4/11] |
| 2-13     | Each jurisdiction shall identify future public involvement opportunities for disseminating hazard mitigation information over the next 5 years. | All Jurisdictions [1/4/11] |

| ITEM NO. | DESCRIPTION  | RESPONSIBILITY [DUE DATE]          | YAVAPAI COUNTY | CAMP VERDE | CHINO VALLEY | CLARKDALE | COTTONWOOD | DEWEY-HUMBOLDT | JEROME | PRESCOTT | PRESCOTT VALLEY | SEDONA | YAVAPAI APACHE NATION | YAVAPAI PRESCOTT TRIBE | EXPLANATION   |
|----------|--|------------------------------------|----------------|------------|--------------|-----------|------------|----------------|--------|----------|-----------------|--------|-----------------------|------------------------|---|
|          |  |                                    |                |            |              |           |            |                |        |          |                 |        |                       |                        |   |
| 1-1      | N. Angiolillo and S. Wood will follow up with Sedona officials to confirm participation status   | N. Angiolillo / S. Wood [11/12/10] | C              | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>Sedona and YPIT were contacted and both will be participating.</li> <li>11/16/10 - JEF performed a make-up session with Sedona and YPIT on</li> </ul>  |
| 1-2      | JEF to provide a template for use by the local jurisdictions to invite additional participation.   | JEF [11/5/10]                      | NA             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>11/2/10 – file provided to team in an email</li> <li>11/17/10 – file sent to Sedona and YPIT</li> </ul>  |
| 1-3      | All jurisdictions are to extend participation invitations to their local community’s businesses, academia, non-profits, and others as the community sees fit. Entities contacted and means used shall be documented and provided to JEF. | All Jurisdictions [12/3/10]        | C              | C          | C            | C         | NC         | C              | C      | NC       | NC              | C      | NC                    | IP                     | <ul style="list-style-type: none"> <li>11/16/10 – Camp Verde provided documentation of invites.</li> <li>12/3/10 – Dewey-Humboldt provided documentation of invites.</li> <li>12/7/10 – Sedona provided and email with a list of entities contacted via email.</li> <li>12/13/10 – Chino Valley provided list of contacts via an email.</li> <li>12/14/10 – Clarkdale provided paper copy of list and will send via email. Jerome will resend via email.</li> </ul> |
| 1-4      | JEF will email Community Descriptions to each jurisdiction for review and updating.  | JEF [11/5/10]                      | NA             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>11/2/10 – file provided to team via log-in to JEF ftp site</li> </ul>  |
| 1-5      | All jurisdictions are to review and update the Community Descriptions as appropriate and desired. Jurisdictions are encouraged to consider including Agriculture, Mining, Manufacturing, and Tourism to their descriptions               | All Jurisdictions [12/14/10]       | NC             | C          | C            | NC        | NC         | C              | NC     | NC       | NC              | NC     | NC                    | NC                     | <ul style="list-style-type: none"> <li>12/7/10 – Camp Verde sent email stating no changes are needed.</li> <li>12/13/10 – Chino Valley sent email stating no changes are needed.</li> </ul>   |
| 1-6      | JEF will email electronic version of Local Resources List template to each jurisdiction to track contributors to the plan update.  | JEF [11/5/10]                      | NA             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>11/2/10 – file provided to team in an email</li> <li>11/17/10 – file sent to Sedona and YPIT</li> </ul>  |
| 1-7      | Each jurisdiction shall record and document all people contacted or involved as a planning resource at the local level, using the template provided by JEF   | All Jurisdictions [prior to draft] | IP             | IP         | IP           | IP        | IP         | IP             | C      | IP       | IP              | IP     | IP                    | C                      | <ul style="list-style-type: none"> <li>11/29/10 – YPIT provided local resource list</li> <li>12/14/10 – Jerome provided list by email.</li> </ul>   |

|                   |                          |                         |                     |                          |
|-------------------|--------------------------|-------------------------|---------------------|--------------------------|
| <b>STATUS KEY</b> | <b>(NC) Not Complete</b> | <b>(IP) In Progress</b> | <b>(C) Complete</b> | <b>(NA) Not Assigned</b> |
|-------------------|--------------------------|-------------------------|---------------------|--------------------------|

| ITEM NO. | DESCRIPTION   | RESPONSIBILITY [DUE DATE]               | YAVAPAI COUNTY | CAMP VERDE | CHINO VALLEY | CLARKDALE | COTTONWOOD | DEWEY-HUMBOLDT | JEROME | PRESCOTT | PRESCOTT VALLEY | SEDONA | YAVAPAI APACHE NATION | YAVAPAI PRESCOTT TRIBE | EXPLANATION   |
|----------|---|---|----------------|------------|--------------|-----------|------------|----------------|--------|----------|-----------------|--------|-----------------------|------------------------|---|
| 1-8      | JEF will provide a sample public notice prepared by ADEM to the planning team for use in the website and newspaper announcements. | JEF [11/5/10]                           | NA             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>11/2/10 – file provided to team in an email</li> <li>11/17/10 – file sent to Sedona and YPIT</li> </ul>  |
| 1-9      | N. Angiolillo and M. Stebbins will submit the public notice to the newspapers and get the posting to the Yavapai County website.  | N. Angiolillo and M. Stebbins [12/3/10] | IP             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>11/23/10 – County website established</li> </ul>   |
| 1-10     | All local jurisdictions will coordinate a posting of the public notice to the city's website with a link to the county's webpage. | All Local Jurisdictions [12/3/10]       | NA             | C          | C            | C         | NC         | C              | C      | NC       | NC              | C      | NC                    | IP                     | <ul style="list-style-type: none"> <li>11/16/10 – Camp Verde provided website link</li> <li>11/17/10 – YPIT submitted language for newsletter announcement. JEF edited and sent back.</li> <li>11/30/10 – Chino Valley provided notice the website posting was up.</li> <li>12/3/10 – Dewey-Humboldt provided website link and copy of newsletter.</li> <li>12/14/10 – Clarkdale provided screen capture of website and copy of town newsletter. Jerome provided copy of public notice that was posted at official posting locations in the Town</li> </ul> |
| 1-11     | JEF will provide digital copies of the historic hazard database files to the planning team for review and update as needed.       | JE Fuller [10/22/10]                    | NA             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>11/2/10 – file provided to team in an email</li> <li>11/17/10 – file sent to Sedona and YPIT</li> </ul>  |
| 1-12     | All team members are to review and update the historic hazard database as appropriate and desired by the community.               | All Jurisdictions [11/10/10]            | NC             | C          | NC           | C         | NC         | C              | C      | NC       | NC              | C      | NC                    | C                      | <ul style="list-style-type: none"> <li>11/10/10 – Dewey-Humboldt provided an additional event</li> <li>11/15/10 – Camp Verde provided additional events.</li> <li>11/29/10 – YPIT has nothing to add.</li> <li>12/14/10 – Clarkdale and Jerome tried to send and will send again.</li> </ul>  |

|                   |                          |                         |                     |                          |
|-------------------|--------------------------|-------------------------|---------------------|--------------------------|
| <b>STATUS KEY</b> | <b>(NC) Not Complete</b> | <b>(IP) In Progress</b> | <b>(C) Complete</b> | <b>(NA) Not Assigned</b> |
|-------------------|--------------------------|-------------------------|---------------------|--------------------------|

| ITEM NO. | DESCRIPTION   | RESPONSIBILITY [DUE DATE]    | YAVAPAI COUNTY | CAMP VERDE | CHINO VALLEY | CLARKDALE | COTTONWOOD | DEWEY-HUMBOLDT | JEROME | PRESCOTT | PRESCOTT VALLEY | SEDONA | YAVAPAI APACHE NATION | YAVAPAI PRESCOTT TRIBE | EXPLANATION   |
|----------|---|------------------------------|----------------|------------|--------------|-----------|------------|----------------|--------|----------|-----------------|--------|-----------------------|------------------------|---|
|          |   |                              |                |            |              |           |            |                |        |          |                 |        |                       |                        |   |
| 1-13     | JEF to provide CPRI worksheet to each jurisdiction for completion prior to the next meeting.  | JE Fuller [11/5/10]          | NA             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>• 11/2/10 – file provided to team in an email</li> <li>• 11/17/10 – file sent to Sedona and YPIT</li> </ul>  |
| 1-14     | All jurisdictions shall complete the CPRI respective to their jurisdiction and return to JEF.   | All Jurisdictions [11/29/10] | NC             | C          | C            | C         | NC         | C              | C      | C        | NC              | C      | NC                    | NC                     | <ul style="list-style-type: none"> <li>• 11/16/10 – Camp Verde provided CPRI</li> <li>• 11/16/10 – Chino Valley provided CPRI</li> <li>• 12/13/10 – Prescott provided CPRI</li> <li>• 12/14/10 – Clarkdale, Dewey-Humboldt, Jerome and Sedona tried to send and will send again.</li> </ul>   |
| 1-15     | JEF to provide asset inventory data sets to each community for update, correction, or provision of missing data.                              | JEF [11/5/10]                | NA             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>• 11/2/10 – file provided to team in an email</li> <li>• 11/17/10 – file sent to Sedona and YPIT</li> </ul>  |
| 1-16     | All jurisdictions shall review the 2006 asset inventory and make updates, corrections, and/or provide missing data such as replacement costs. | All Jurisdictions [12/3/10]  | IP             | IP         | IP           | C         | NC         | C              | C      | NC       | NC              | C      | NC                    | NC                     | <ul style="list-style-type: none"> <li>• 11/30/10 – Chino Valley provided updated assets. JEF reviewed and requested more revisions.</li> <li>• 12/2/10 – Chino Valley provided updated assets. JEF reviewed and requested more revisions.</li> <li>• 12/3/10 – Dewey-Humboldt and Sedona provided updated assets. JEF reviewed and requested more revisions.</li> <li>• 12/9/10 – Sedona provided final asset file.</li> <li>• 12/13/10 – Prescott provided asset file.</li> <li>• 12/14/10 – Clarkdale and Jerome tried to send and will send again.</li> </ul> |
| 1-17     | JEF will provide the Existing Mitigation Action/Project Evaluation worksheet to each respective jurisdiction for completion.                  | JEF [11/5/10]                | NA             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>• 11/2/10 – file provided to team in an email</li> <li>• 11/17/10 – file sent to Sedona and YPIT</li> </ul>  |

|                   |                          |                         |                     |                          |
|-------------------|--------------------------|-------------------------|---------------------|--------------------------|
| <b>STATUS KEY</b> | <b>(NC) Not Complete</b> | <b>(IP) In Progress</b> | <b>(C) Complete</b> | <b>(NA) Not Assigned</b> |
|-------------------|--------------------------|-------------------------|---------------------|--------------------------|

| ITEM NO. | DESCRIPTION  | RESPONSIBILITY [DUE DATE]   | YAVAPAI COUNTY | CAMP VERDE | CHINO VALLEY | CLARKDALE | COTTONWOOD | DEWEY-HUMBOLDT | JEROME | PRESCOTT | PRESCOTT VALLEY | SEDONA | YAVAPAI APACHE NATION | YAVAPAI PRESCOTT TRIBE | EXPLANATION   |
|----------|--|-----------------------------|----------------|------------|--------------|-----------|------------|----------------|--------|----------|-----------------|--------|-----------------------|------------------------|---|
|          |  |                             |                |            |              |           |            |                |        |          |                 |        |                       |                        |   |
| 1-18     | All jurisdictions shall complete the Existing Mitigation A/P Evaluation worksheet and return to JEF. | All Jurisdictions [12/3/10] | NC             | IP         | C            | C         | NC         | C              | C      | NC       | NC              | C      | NA                    | NA                     | <ul style="list-style-type: none"> <li>11/30/10 – Sedona sent first cut. JEF reviewed, commented and returned for more info.</li> <li>11/30/10 – Chino Valley submitted completed form.</li> <li>12/8/10 – Camp Verde provided first cut on form. JEF reviewed, commented and returned for more info.</li> <li>12/9/10 – Sedona sent revised and complete file</li> <li>12/14/10 – Clarkdale and Sedona tried to send and will send again.</li> </ul> |
| 1-19     | L. Whitman to get with Yavapai County GIS and provide latest city/town boundary coverage to JEF      | L. Whitman [11/5/10]        | C              | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>11/2/10 – YCFCD provided the needed shapefiles.</li> </ul>   |
| 1-20     | JEF to plot city/town boundary verification maps and distribute to each jurisdiction for approval.   | JEF [11/12/10]              | NA             | NC         | NC           | C         | NC         | C              | C      | C        | NC              | C      | NA                    | NA                     | <ul style="list-style-type: none"> <li>11/2/10 – file provided to team in an email</li> <li>11/17/10 – file sent to Sedona and YPIT.</li> <li>12/13/10 – Prescott confirmed boundaries as OK.</li> <li>12/14/10 – Clarkdale provided paper map. Jerome has no changes. Dewey-Humboldt confirmed boundary was OK</li> </ul>  |

|                   |                          |                         |                     |                          |
|-------------------|--------------------------|-------------------------|---------------------|--------------------------|
| <b>STATUS KEY</b> | <b>(NC) Not Complete</b> | <b>(IP) In Progress</b> | <b>(C) Complete</b> | <b>(NA) Not Assigned</b> |
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**Memorandum**      **JE Fuller/ Hydrology & Geomorphology, Inc.**

**MEETING DATE:** January 11, 2011

**MEETING TIME:** 9:00 AM – 1:00 PM

**MEETING LOCATION:** Cottonwood Parks and Recreation Building  
Cottonwood, AZ

**DISTRIBUTION:** Meeting Attendees

**FROM:** W. Scott Ogden - JEF

**RE: Yavapai County Multi-Jurisdictional Hazard Mitigation Plan  
Planning Team Meeting No. 3**

**ATTENDEES:** Kathy Bainbridge – Town of Clarkdale – Clerk/Finance Director  
Fred Barton – Sedona-Oak Creek School District  
Joel Berman – Town of Dewey/Humboldt – Town Engineer  
Rusty Blair – Town of Jerome Fire Chief  
Steve Burroughs – Town of Clarkdale Public Works Director  
Debbie Calkins – Yavapai College Emergency Mgmt Coordinator  
Wayne Debrosky – Town of Clarkdale Utilities Director  
Mark Garcia – Town of Chino Valley Police Commander  
Ryan Gildehaus – City of Cottonwood Police Sergeant  
Paul Grasso – Town of Clarkdale Building Official  
Valerie House – Town of Camp Verde Special Projects Coordinator  
Ron Long – Town of Camp Verde Public Works Director  
Scott Ogden – JE Fuller  
Bill Parry – Unisource Energy Verde District Supervisor  
David Peck – City of Sedona Assistant Engineer  
Larry Prentice – Town of Prescott Valley GIS Manager  
Boyd Robertson – Town of Prescott Valley Deputy Public Works Dir.  
Keith Self – Arizona Water Company Verde Valley Division Mgr.  
Troy Smith – Town of Clarkdale Police Sergeant  
Mistie Stebbins – Yavapai County Emergency Planner  
John Sterling – Yavapai-Prescott Indian Tribe Environmental Tech.  
Amber Tyson – Yavapai-Prescott Indian Tribe Env. Protection Splst  
Lynn Whitman – Yavapai County Flood Control Senior Hydrologist  
Darrell Willis – City of Prescott Fire Division Chief  
NOTE: No Representative from Yavapai Apache Nation

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**AGENDA**

- 1. ACTION ITEM REVIEW/STATUS**
- 2. VULNERABILITY ANALYSIS REVIEW**
- 3. MITIGATION GOALS AND OBJECTIVES REVIEW/UPDATE**

4. MITIGATION ACTION/PROJECT FORMULATION AND IMPLEMENTATION STRATEGY
5. MEETING ENDING
  - a. Review of action items

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## DISCUSSION

### Agenda Item 1:

- Action Items from Meeting No. 2 were reviewed and discussed. A summary of the disposition of those items as of January 6, 2011 is provided at the end of these notes.
- S. Ogden noted that he was having some issues with emails, so if the status is marked incorrectly, please let him know.
- Noted that this was second meeting that YAN was not present and the tribe has not provided any of the task assignments. The Team agreed that YAN will be dropped from the Plan
- Cottonwood went through changes in staff assignments and R. Gildehaus will be working over the next week or so, to get the assignments turned in.
- Prescott Valley had been trying to send information via email and brought some of the information on a thumb drive.

### Agenda Item 2:

- S. Ogden presented tables and maps summarizing the loss estimation and exposure results from the vulnerability analysis for the flood and wildfire hazards. The team reviewed each set of numbers, hazard by hazard. Discussion during that review was as follows:
  - Clarkdale noted several discrepancies in locations of assets and will send corrected data to JEF.
  - YPIT noted a couple of minor edits to their asset inventory.
  - There were no specific comments regarding the exposure and loss numbers for either hazard. However, JEF will re-run the vulnerability analysis for the asset inventory to incorporate changes from Cottonwood, Clarkdale, YPIT, and Prescott Valley.

### Agenda Item 3:

- S. Ogden led the planning team in a review of the 2006 Plan's goals and objectives and also presented the 2010 State of Arizona MHMP's list of goals and objectives for reference and comparison. Discussions included:
  - The planning team generally liked the 2006 Plan's goals and objectives, and for the most part, felt they still represented the mitigation goals of the planning team, with a few needed edits.
  - The planning team appreciated the simplicity of the 2010 State of Arizona HMP goals and objectives and determined that the 2006 Plan goals and objectives were generally in agreement.
- After the discussion, S. Ogden took a poll of the planning team to determine one of three directions:

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1/11/2011

- Continue with the 2006 Plan goals and objectives, but make small edits to reflect the new Plan hazards.
- Use the 2010 State Plan goals and objectives as a basis and edit as needed.
- Scrap everything and start from scratch.
- The majority of the planning team chose to continue with the 2006 Plan goals and objectives, but make small edits to reflect the new Plan hazards.

**Agenda Item 4:**

- S. Ogden reviewed the process of updating the overall mitigation strategy and specifically the mitigation action/project formulation and implementation strategy.
- S. Ogden led a review/explanation of the various types of possible mitigation actions/projects and presented information from the 2010 State Plan summarizing various sources of grant funding that may be used for hazard mitigation.
- S. Ogden presented the table/worksheet that will be used to document the actions/projects and implementation strategy. JEF will provide a copy of the table with the actions/projects from the 2006 Plan designated as “Keep” or “Revise” already entered, as a worksheet for each jurisdiction to complete.

**Agenda Item 5:**

- Action Items for this meeting are summarized below.
- This was the last meeting. The next steps will be to finish all outstanding assignments, and get the draft of the Plan completed and in review with the State and Planning Team.

**ACTION ITEM SUMMARY:**

| <b>ITEM NO.</b> | <b>DESCRIPTION</b>  | <b>RESPONSIBILITY [DUE DATE]</b> |
|-----------------|---|----------------------------------|
| 3-1             | Clarkdale to provide revised asset inventory data.  | K. Bainbridge<br>[1/28/11]       |
| 3-2             | JEF to re-evaluate the asset inventory loss estimate portions of the vulnerability analysis using updated asset data from Clarkdale, Cottonwood, Prescott Valley, and YPIT.   | JEF<br>[2/11/11]                 |
| 3-3             | JEF to pre-enter the “Keep” and “Revise” designated projects from the Existing Mitigation A/P Evaluation into the Mitigation Action/Project and Implementation Strategy worksheet and send the worksheet to each respective jurisdiction. | JEF<br>[1/18/11]                 |
| 3-4             | Each jurisdiction shall complete the Mitigation Action/Project and Implementation Strategy worksheet and return it JEF  | ALL Jurisdictions<br>[2/28/11]   |
| 3-5             | JEF to compile all planning data, generate the first draft Plan, and make available to the planning team and ADEM for review.   | 3/14/11                          |

**Yavapai County MJHMP Update – Action Item Status Report  
as of January 6, 2011**

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|----------|--|------------------------------------|----------------|------------|--------------|-----------|------------|----------------|--------|----------|-----------------|--------|-----------------------|------------------------|--|
|          |  |                                    |                |            |              |           |            |                |        |          |                 |        |                       |                        |  |
| 1-1      | N. Angiolillo and S. Wood will follow up with Sedona officials to confirm participation status   | N. Angiolillo / S. Wood [11/12/10] | C              | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>Sedona and YPIT were contacted and both will be participating.</li> <li>11/16/10 - JEF performed a make-up session with Sedona and YPIT on</li> </ul>   |
| 1-2      | JEF to provide a template for use by the local jurisdictions to invite additional participation.   | JEF [11/5/10]                      | NA             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>11/2/10 – file provided to team in an email</li> <li>11/17/10 – file sent to Sedona and YPIT</li> </ul>   |
| 1-3      | All jurisdictions are to extend participation invitations to their local community’s businesses, academia, non-profits, and others as the community sees fit. Entities contacted and means used shall be documented and provided to JEF. | All Jurisdictions [12/3/10]        | C              | C          | C            | C         | NC         | C              | C      | NC       | NC              | C      | NC                    | C                      | <ul style="list-style-type: none"> <li>11/16/10 – Camp Verde provided documentation of invites.</li> <li>12/3/10 – Dewey-Humboldt provided documentation of invites.</li> <li>12/7/10 – Sedona provided and email with a list of entities contacted via email.</li> <li>12/13/10 – Chino Valley provided list of contacts via an email.</li> <li>12/14/10 – Clarkdale provided paper copy of list and will send via email. Jerome will resend via email.</li> <li>12/30/10 – YPIT sends a newsletter to all tribal members.</li> </ul> |
| 1-4      | JEF will email Community Descriptions to each jurisdiction for review and updating.  | JEF [11/5/10]                      | NA             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>11/2/10 – file provided to team via log-in to JEF ftp site</li> </ul>   |
| 1-5      | All jurisdictions are to review and update the Community Descriptions as appropriate and desired. Jurisdictions are encouraged to consider including Agriculture, Mining, Manufacturing, and Tourism to their descriptions               | All Jurisdictions [12/14/10]       | NC             | C          | C            | C         | NC         | C              | NC     | NC       | NC              | C      | NC                    | NC                     | <ul style="list-style-type: none"> <li>12/7/10 – Camp Verde sent email stating no changes are needed.</li> <li>12/13/10 – Chino Valley sent email stating no changes are needed.</li> <li>12/14/10 – Clarkdale provided edits at meeting and followed up with digital info later.</li> <li>12/21/10 – Sedona uploaded revisions to ftp.</li> </ul>   |
| 1-6      | JEF will email electronic version of Local Resources List template to each jurisdiction to track contributors to the plan update.  | JEF [11/5/10]                      | NA             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>11/2/10 – file provided to team in an email</li> <li>11/17/10 – file sent to Sedona and YPIT</li> </ul>   |

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|----------|--|---|----------------|------------|--------------|-----------|------------|----------------|--------|----------|-----------------|--------|-----------------------|------------------------|---|
|          |  |   |                |            |              |           |            |                |        |          |                 |        |                       |                        |   |
| 1-7      | Each jurisdiction shall record and document all people contacted or involved as a planning resource at the local level, using the template provided by JEF | All Jurisdictions [prior to draft]      | IP             | IP         | IP           | IP        | IP         | IP             | C      | IP       | IP              | IP     | IP                    | C                      | <ul style="list-style-type: none"> <li>11/29/10 – YPIT provided local resource list</li> <li>12/14/10 – Jerome provided list by email.</li> </ul>   |
| 1-8      | JEF will provide a sample public notice prepared by ADEM to the planning team for use in the website and newspaper announcements.                          | JEF [11/5/10]                           | NA             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>11/2/10 – file provided to team in an email</li> <li>11/17/10 – file sent to Sedona and YPIT</li> </ul>  |
| 1-9      | N. Angiolillo and M. Stebbins will submit the public notice to the newspapers and get the posting to the Yavapai County website.                           | N. Angiolillo and M. Stebbins [12/3/10] | IP             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>11/23/10 – County website established</li> </ul>   |
| 1-10     | All local jurisdictions will coordinate a posting of the public notice to the city's website with a link to the county's webpage.                          | All Local Jurisdictions [12/3/10]       | NA             | C          | C            | C         | NC         | C              | C      | NC       | NC              | C      | NC                    | C                      | <ul style="list-style-type: none"> <li>11/16/10 – Camp Verde provided website link</li> <li>11/17/10 – YPIT submitted language for newsletter announcement. JEF edited and sent back.</li> <li>11/30/10 – Chino Valley provided notice the website posting was up.</li> <li>12/3/10 – Dewey-Humboldt provided website link and copy of newsletter.</li> <li>12/14/10 – Clarkdale provided screen capture of website and copy of town newsletter. Jerome provided copy of public notice that was posted at official posting locations in the Town.</li> <li>12/30/10 – YPIT provided link to newsletter. No website to post to.</li> </ul> |
| 1-11     | JEF will provide digital copies of the historic hazard database files to the planning team for review and update as needed.                                | JE Fuller [10/22/10]                    | NA             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>11/2/10 – file provided to team in an email</li> <li>11/17/10 – file sent to Sedona and YPIT</li> </ul>  |

|                   |                                   |                          |                         |                     |                          |
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|----------|---|------------------------------|----------------|------------|--------------|-----------|------------|----------------|--------|----------|-----------------|--------|-----------------------|------------------------|--|
|          |   |                              |                |            |              |           |            |                |        |          |                 |        |                       |                        |  |
| 1-12     | All team members are to review and update the historic hazard database as appropriate and desired by the community.                           | All Jurisdictions [11/10/10] | C              | C          | NC           | C         | NC         | C              | C      | NC       | NC              | C      | NC                    | C                      | <ul style="list-style-type: none"> <li>11/10/10 – Dewey-Humboldt provided an additional event</li> <li>11/15/10 – Camp Verde provided additional events.</li> <li>11/29/10 – YPIT has nothing to add.</li> <li>12/14/10 – Clarkdale and Jerome tried to send and will send again.</li> <li>12/14/10 – Yav County responded and had no additional data to offer.</li> </ul>   |
| 1-13     | JEF to provide CPRI worksheet to each jurisdiction for completion prior to the next meeting.  | JE Fuller [11/5/10]          | NA             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>11/2/10 – file provided to team in an email</li> <li>11/17/10 – file sent to Sedona and YPIT</li> </ul>   |
| 1-14     | All jurisdictions shall complete the CPRI respective to their jurisdiction and return to JEF.   | All Jurisdictions [11/29/10] | NC             | C          | C            | C         | NC         | C              | C      | C        | NC              | C      | NC                    | C                      | <ul style="list-style-type: none"> <li>11/16/10 – Camp Verde provided CPRI</li> <li>11/16/10 – Chino Valley provided CPRI</li> <li>12/13/10 – Prescott provided CPRI</li> <li>12/14/10 – Clarkdale, Dewey-Humboldt, Jerome and Sedona tried to send and will send again.</li> <li>12/30/10 – YPIT provided CPRI</li> </ul>   |
| 1-15     | JEF to provide asset inventory data sets to each community for update, correction, or provision of missing data.                              | JEF [11/5/10]                | NA             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>11/2/10 – file provided to team in an email</li> <li>11/17/10 – file sent to Sedona and YPIT</li> </ul>   |
| 1-16     | All jurisdictions shall review the 2006 asset inventory and make updates, corrections, and/or provide missing data such as replacement costs. | All Jurisdictions [12/3/10]  | IP             | C          | C            | C         | NC         | C              | C      | C        | NC              | C      | NC                    | NC                     | <ul style="list-style-type: none"> <li>11/30/10 – Chino Valley provided updated assets. JEF reviewed and requested more revisions.</li> <li>12/2/10 - Chino Valley provided updated assets. JEF reviewed and requested more revisions.</li> <li>12/3/10 – Dewey-Humboldt and Sedona provided updated assets. JEF reviewed and requested more revisions.</li> <li>12/9/10 – Sedona provided final asset file.</li> <li>12/13/10 – Prescott provided asset file.</li> <li>12/14/10 – Clarkdale and Jerome tried to send and will send again.</li> <li>12/20/10 – Camp Verde and Chino Valley sent final asset file.</li> <li>1/3/11 – Prescott sent final asset file.</li> </ul> |

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|----------|--|--------------------------------|----------------|------------|--------------|-----------|------------|----------------|--------|----------|-----------------|--------|-----------------------|------------------------|--|--|
|          |  |                                | YAVAPAI COUNTY | CAMP VERDE | CHINO VALLEY | CLARKDALE | COTTONWOOD | DEWEY-HUMBOLDT | JEROME | PRESCOTT | PRESCOTT VALLEY | SEDONA | YAVAPAI APACHE NATION | YAVAPAI PRESCOTT TRIBE |  |  |
| 1-17     | JEF will provide the Existing Mitigation Action/Project Evaluation worksheet to each respective jurisdiction for completion. | JEF [11/5/10]                  | NA             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | NA   | <ul style="list-style-type: none"> <li>11/2/10 – file provided to team in an email</li> <li>11/17/10 – file sent to Sedona and YPIT</li> </ul> |
| 1-18     | All jurisdictions shall complete the Existing Mitigation A/P Evaluation worksheet and return to JEF.                         | All Jurisdictions [12/3/10]    | C              | C          | C            | C         | NC         | C              | C      | NC       | NC              | C      | NA                    | NA                     | <ul style="list-style-type: none"> <li>11/30/10 – Sedona sent first cut. JEF reviewed, commented and returned for more info.</li> <li>11/30/10 – Chino Valley submitted completed form.</li> <li>12/8/10 – Camp Verde provided first cut on form. JEF reviewed, commented and returned for more info.</li> <li>12/9/10 – Sedona sent revised and complete file</li> <li>12/14/10 – Clarkdale and Sedona tried to send and will send again.</li> <li>12/23/10 – County provided final completed file</li> </ul> |  |
| 1-19     | L. Whitman to get with Yavapai County GIS and provide latest city/town boundary coverage to JEF                              | L. Whitman [11/5/10]           | C              | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>11/2/10 – YCFCD provided the needed shapefiles.</li> </ul>  |  |
| 1-20     | JEF to plot city/town boundary verification maps and distribute to each jurisdiction for approval.                           | JEF [11/12/10]                 | NA             | C          | NC           | C         | NC         | C              | C      | C        | NC              | C      | NA                    | NA                     | <ul style="list-style-type: none"> <li>11/2/10 – file provided to team in an email</li> <li>11/17/10 – file sent to Sedona and YPIT.</li> <li>12/13/10 – Prescott confirmed boundaries as OK.</li> <li>12/14/10 – Clarkdale provided paper map. Jerome has no changes. Dewey-Humboldt confirmed boundary was OK</li> <li>12/20/10 – Camp Verde sent email to confirm boundary as OK</li> <li>12/23/10 – Clarkdale provided GIS files for Town.</li> </ul>  |  |
| 2-1      | T. Hyslip to coordinate with other Chino Valley staff to determine if the town wants to keep earthquake in the mix.          | T. Hyslip [12/21/10]           | NA             | NA         | C            | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | <ul style="list-style-type: none"> <li>12/22/10 – Received email from Chino Valley stating that it is OK to drop earthquake.</li> </ul>  |  |
| 2-2      | D. Peck and L. Whitman to provide supplemental floodplain mapping for Sedona in GIS format.                                  | D. Peck, L. Whitman [12/21/10] | C              | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | C      | NA                    | NA                     | <ul style="list-style-type: none"> <li>12/22/10 – YCFCD provided GIS shapefiles for Sedona's floodplains</li> <li>12/17/10 – Sedona sent digital copy of Sedona's floodplain map (link to ftp)</li> </ul>  |  |

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|----------|--|----------------------------|----------------|------------|--------------|-----------|------------|----------------|--------|----------|-----------------|--------|-----------------------|------------------------|---|-------------|
|          |  |                            | YAVAPAI COUNTY | CAMP VERDE | CHINO VALLEY | CLARKDALE | COTTONWOOD | DEWEY-HUMBOLDT | JEROME | PRESCOTT | PRESCOTT VALLEY | SEDONA | YAVAPAI APACHE NATION | YAVAPAI-PRESCOTT TRIBE |   |             |
| 2-3      | B. Robertson to check on supplemental floodplain mapping for Prescott Valley and provided if available                     | B. Robertson [12/21/10]    | NA             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NC                    | NA                     | NA  | •           |
| 2-4      | R. Blair to provide a descriptive paragraph describing the recent landslide event in Jerome.                               | R. Blair [12/30/10]        | NA             | NA         | NA           | NA        | NA         | NA             | NC     | NA       | NA              | NA     | NA                    | NA                     | •   |             |
| 2-5      | JEF will perform the vulnerability analysis for review and discussion at the next meeting                                  | JEF [1/11/11]              | NA             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | •   |             |
| 2-6      | JEF to provide digital files of the capability assessment tables for each jurisdiction to update/revise as necessary       | JEF [12/21/10]             | NA             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | • 12/27/10 – Sent files via email   |             |
| 2-7      | All jurisdictions are to revise/update the capability assessment tables provided by JEF as needed and return to JEF        | All Jurisdictions [1/4/11] | IP             | C          | NC           | C         | NC         | NC             | NC     | C        | NC              | C      | NC                    | C                      | • 12/28/10 – Sedona provided updated tables.<br>• 1/3/11 – Received information provided by YCFCD<br>• 1/3/11 – YPIT, and Prescott provided updated tables<br>• 1/4/11 – Clarkdale provided updated tables<br>• 1/5/11 – Camp Verde provided updated tables |             |
| 2-8      | JEF to provide a digital template file for each jurisdiction to use in documenting past mitigation activities              | JEF [12/21/10]             | NA             | NA         | NA           | NA        | NA         | NA             | NA     | NA       | NA              | NA     | NA                    | NA                     | • 12/27/10 – Sent files via email   |             |
| 2-9      | All jurisdictions are to fill in the table documenting past mitigation activities (5-10 years in the past).                | All Jurisdictions [1/4/11] | IP             | NC         | NC           | C         | NC         | NC             | NC     | NC       | NC              | C      | NC                    | NC                     | • 1/3/11 – Received information provided by YCFCD.<br>• 1/4/11 – Clarkdale and Sedona provided information  |             |
| 2-10     | Each jurisdiction will provide a report of the ways the 2006 Plan was incorporated (or not) into other planning mechanisms | All Jurisdictions [1/4/11] | IP             | C          | NC           | C         | NC         | NC             | NC     | C        | NC              | C      | NA                    | NA                     | • 1/3/11 – Received information provided by YCFCD.<br>• 1/3/11 – Received response from YPIT, Prescott<br>• 1/4/11 – Clarkdale and Sedona provided information<br>• 1/5/11 – Camp Verde provided information.   |             |

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**Yavapai County MJHMP Update – Action Item Status Report  
as of January 6, 2011**

| ITEM NO. | DESCRIPTION   | RESPONSIBILITY [DUE DATE]  | YAVAPAI COUNTY | CAMP VERDE | CHINO VALLEY | CLARKDALE | COTTONWOOD | DEWEY-HUMBOLDT | JEROME | PRESCOTT | PRESCOTT VALLEY | SEDONA | YAVAPAI APACHE NATION | YAVAPAI PRESCOTT TRIBE | EXPLANATION   |
|----------|---|----------------------------|----------------|------------|--------------|-----------|------------|----------------|--------|----------|-----------------|--------|-----------------------|------------------------|---|
|          |   |                            |                |            |              |           |            |                |        |          |                 |        |                       |                        |   |
| 2-11     | Each jurisdiction will provide a list of planning mechanisms that may provided a future incorporation opportunity over the next 5 years         | All Jurisdictions [1/4/11] | IP             | C          | NC           | C         | NC         | NC             | NC     | C        | NC              | C      | NC                    | C                      | <ul style="list-style-type: none"> <li>1/3/11 – Received information provided by YCFCD.</li> <li>1/3/11 – Received response from YPIT, Prescott</li> <li>1/4/11 – Clarkdale and Sedona provided information</li> <li>1/5/11 – Camp Verde provided information.</li> </ul>   |
| 2-12     | Each jurisdiction shall identify ways in which past public involvement opportunities were provided during the 2006 Plan cycle                   | All Jurisdictions [1/4/11] | IP             | C          | NC           | C         | NC         | NC             | NC     | C        | NC              | C      | NA                    | NA                     | <ul style="list-style-type: none"> <li>1/3/11 – Received information provided by YCFCD including a list of projects that included a PI element over the last 5 years.</li> <li>1/3/11 – Received response from YPIT, Prescott</li> <li>1/4/11 – Clarkdale and Sedona provided information</li> <li>1/5/11 – Camp Verde provided information.</li> </ul> |
| 2-13     | Each jurisdiction shall identify future public involvement opportunities for disseminating hazard mitigation information over the next 5 years. | All Jurisdictions [1/4/11] | IP             | C          | NC           | C         | NC         | NC             | NC     | C        | NC              | C      | NC                    | C                      | <ul style="list-style-type: none"> <li>1/3/11 – Received information provided by YCFCD.</li> <li>1/3/11 – Received response from YPIT, Prescott</li> <li>1/4/11 – Clarkdale and Sedona provided information</li> <li>1/5/11 – Camp Verde provided information.</li> </ul>   |

|                   |                                   |                          |                         |                     |                          |
|-------------------|-----------------------------------|--------------------------|-------------------------|---------------------|--------------------------|
| <b>STATUS KEY</b> | <b>Required for Plan Approval</b> | <b>(NC) Not Complete</b> | <b>(IP) In Progress</b> | <b>(C) Complete</b> | <b>(NA) Not Assigned</b> |
|-------------------|-----------------------------------|--------------------------|-------------------------|---------------------|--------------------------|

**YAVAPAI COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**

| <b>Name</b>         | <b>Jurisdiction/Agency/Organization</b> | <b>Department/Division/Branch</b> | <b>Title</b>                 | <b>Contributions</b>   |
|---------------------|---|-----------------------------------|------------------------------|--|
| <b>CAMP VERDE</b>   |   |                                   |                              |  |
| Ron Long            | Town of Camp Verde                      | Public Works Department           | Public Works Director        | All sections of the project requirements   |
| Valerie House       | Town of Camp Verde                      | Public Works Department           | Special Projects Coordinator | All sections of the project requirements   |
| Deborah Ranney      | Town of Camp Verde                      | Public Works Department           | Administrative Assistant     | All sections of the project requirements   |
| Barbara Rice        | Town of Camp Verde                      | Camp Verde Fire Department        | Fire Marshal                 | Existing Mitigatin Hazard Action Project List; Mitigation and Implementation Strategy 2011 |
| Earl Huff           | Town of Camp Verde                      | Camp Verde Marshal's Office       | Lieutenant                   | Existing Mitigatin Hazard Action Project List; Mitigation and Implementation Strategy 2011 |
| Dave Smith          | Town of Camp Verde                      | Camp Verde Marshal's Office       | Marshal                      | Existing Mitigatin Hazard Action Project List  |
| <b>CHINO VALLEY</b> |   |                                   |                              |  |
| Patricia Huntsman   | Town of Chino Valley                    | Police                            | Chief                        | Worked on all aspects of mitigation plan   |
| Charles Wynn        | Town of Chino Valley                    | Police                            | Commander                    | Worked on all aspects of mitigation plan   |
| Mark Garcia         | Town of Chino Valley                    | Police                            | Commander                    | Worked on all aspects of mitigation plan   |
| Ron Gritman         | Town of Chino Valley                    | Public Works - Town Engineering   | Director                     | Worked on all aspects of mitigation plan   |
| Pat Clingman        | Town of Chino Valley                    | Development Services              | Director                     | Worked on all aspects of mitigation plan   |

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| <b>Name</b>       | <b>Jurisdiction/Agency/Organization</b> | <b>Department/Division/Branch</b> | <b>Title</b>           | <b>Contributions</b>                                |
|-------------------|---|-----------------------------------|------------------------|---|
| <b>CLARKDALE</b>  |   |                                   |                        |   |
| Kathy Bainbridge  | Town of Clarkdale                       | Clerk/Finance                     | Clerk/Finance Director | Worked on all aspects of the Mitigation Plan Update |
| Wayne Debrosky    | Town of Clarkdale                       | Water and Sewer Utilities         | Utilities Director     | Worked on all aspects of the Mitigation Plan Update |
| Troy Smith        | Town of Clarkdale                       | Police Department                 | Sergeant               | Worked on all aspects of the Mitigation Plan Update |
| Joe Moore         | Town of Clarkdale                       | Fire District                     | Fire Chief             | Worked on all aspects of the Mitigation Plan Update |
| Paul Grasso       | Town of Clarkdale                       | Community Development             | Community Development  | Worked on all aspects of the Mitigation Plan Update |
| Steve Burroughs   | Town of Clarkdale                       | Public Works/Streets              | Public Works Director  | Worked on all aspects of the Mitigation Plan Update |
| <b>COTTONWOOD</b> |   |                                   |                        |   |
| Dan Lueder        | City of Cottonwood                      | Developmental Services            | Director               | Supervisor  |
| Mike Cason        | City of Cottonwood                      | Fire Department                   | Fire Chief             | All fire and flooding issues                        |
| Rick Contreras    | City of Cottonwood                      | Fire Department                   | Fire Marshall          | Fire and flooding issues                            |
| Morgan Scott      | City of Cottonwood                      | Engineering Department            | Engineering Tech       | Flooding and street issues                          |
| Ryan Gildehaus    | City of Cottonwood                      | Police Department                 | Sergeant               | Law enforcement issues                              |
| David Hausaman    | City of Cottonwood                      | Engineering Department            | Utilities Inspector    | Utility issues                                      |
| Tim Castello      | City of Cottonwood                      | Public Works                      | Airport Manager        | All Public Works issues. Streets and flooding.      |

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|----------------------------|---|-----------------------------------|--------------------------------|---|
| <b>DEWEY-HUMBOLDT</b>      |   |                                   |                                |   |
| Joel Berman                | Town of Dewey-Humboldt                  | Engineering                       | Town Engineer                  | MJHMP representative, General Plan Modifications          |
| Dennis Price               | Town of Dewey-Humboldt                  | Community Development             | Community Development Director | Plan Modifications in Respect to Property Modifications   |
| Judy Morgan                | Town of Dewey-Humboldt                  | Administration                    | Town Manager & Town Clerk      | Historic Records and General Local Knowledge              |
| Charlie Cook               | Town of Dewey-Humboldt                  | Central Yavapai Fire District     | Assistant Chief                | None  |
| Marc Schmidt               | Town of Dewey-Humboldt                  | Yavapai County Sheriff's Office   | Lieutenant                     | None  |
| Salvatore (Art) Castricone | Town of Dewey-Humboldt                  | Citizen                           | Interim Town Manager           | General Plan Modifications                                |
| <b>JEROME</b>              |   |                                   |                                |   |
| Candace Gallagher          | Town of Jerome                          | Administration                    | Town Manager                   | Primary Point of Contact                                  |
| Rusty Blair                | Town of Jerome                          | Fire Department                   | Fire Chief                     | Secondary POC   |
| <b>PRESCOTT VALLEY</b>     |   |                                   |                                |   |
| Larry Prentice             | Town of Prescott Valley                 | Town of Prescott Valley           | Public Works - GIS             | Main Team Member, involved in all processes.              |
| Larry Tarkowski            | Town of Prescott Valley                 | Town of Prescott Valley           | Town Manager                   | Directed Staff & discussed mitigation projects direction. |
| Ivan Legler                | Town of Prescott Valley                 | Town of Prescott Valley           | Town Attorney                  | Legal council for plan & Town Code.                       |
| Norm Davis                 | Town of Prescott Valley                 | Town of Prescott Valley           | Public Works Director          | Directed Staff & discussed mitigation projects direction. |
| Woody Lewis                | Town of Prescott Valley                 | Town of Prescott Valley           | Building Official              | Coordinated for all Building & Town Codes.                |
| Boyd Robertson             | Town of Prescott Valley                 | Town of Prescott Valley           | Deputy PW Director             | Main Team Member, involved in all processes.              |

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|-----------------|---|--|--|---|
| <b>PRESCOTT</b> |   |  |  |   |
| Mike Kabbel     | City of Prescott                        | Police Department                        | Police Chief                                   | Review of existing plan, in put on 2011 plan.   |
| Laurie Hadley   | City of Prescott                        | Administration                           | Deputy City Manager                            | Oversite and review of current and 2011 plan.   |
| Steve Norwood   | City of Prescott                        | Administration                           | City Manager                                   | Oversite and review of current and 2011 plan.   |
| Bruce Martinez  | City of Prescott                        | Fire Department                          | Fire Chief                                     | Review of existing plan, in put on 2011 plan.   |
| Mark Nietupski  | City of Prescott                        | Public Works Department                  | Public Works Director                          | Updated plans for Public works mitigation projects.                                     |
| Tom Guice       | City of Prescott                        | Community Development Department         | Community Development Director                 | Review codes, ordinances and COP plans.   |
| Ben Vardiman    | City of Prescott                        | Prescott Regional Airport                | Airport Manager                                | Review of existing plan, in put on 2011 plan.   |
| Jay Fillingim   | City of Prescott                        | Fire Department                          | Battalion Chief / Technical Rescue Team Leader | Review of existing plan, in put on 2011 plan. Specifically related to technical Rescue. |
| Chad McDowell   | City of Prescott                        | Field Operations (Streets and drainages) | Field Services Director                        | Review of existing plan input on 2011 plan specifically relating to low water crossings |
| Darrell Willis  | City of Prescott                        | Fire Department                          | Division Chief / Disaster Preparedness         | Community Point of Contact, Chairman of Committee                                       |

**YAVAPAI COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**

| <b>Name</b>   | <b>Jurisdiction/Agency/Organization</b> | <b>Department/Division/Branch</b>      | <b>Title</b>                    | <b>Contributions</b>  |
|---------------|---|--|---------------------------------|---|
| <b>SEDONA</b> |   |  |                                 |   |
| Mike Raber    | City of Sedona                          | Long Rang Planning - City of Sedona    | Senior Planner                  | Helped with getting population information for the City of Sedona |
| Lisa Luers    | City of Sedona                          | IT - City of Sedona                    | GIS Analyst                     | Developed the Sedona Special Flood Hazard Area Map                |
| Keith Self    | City of Sedona                          | Arizona Water Company                  | Manager - Sedona                | Provided updated information on local Water Company assets        |
| Phil Clay     | City of Sedona                          | Waste Water Division - City of Sedona  | Collections Operator            | Provided updated information on sewer lift station assets         |
| Brian Pearson | City of Sedona                          | Community Development - City of Sedona | Plans Examiner                  | Code information for the Capability Assesment Tables              |
| Andy Dickey   | City of Sedona                          | Public Works - City of Sedona          | Assistant City Engineer         | Provided lat and long information for critical assets             |
| Donald Bump   | City of Sedona                          | Sedona School District                 | Project Manager                 | Provided value information for the critical school assets         |
| John O'Brien  | City of Sedona                          | Community Development - City of Sedona | Community Development Director  | Helped with updating the Capability Assesment Tables              |
| Will Loesche  | City of Sedona                          | Sedona Fire District                   | Fire Marshall                   | Helped with documenting past mitigation activities                |
| Andy Dickey   | City of Sedona                          | Public Works - City of Sedona          | Assistant City Engineer         | Helped with documenting past mitigation activities                |
| Dan Neimy     | City of Sedona                          | Public Works - City of Sedona          | City Maintenance Superintendent | Helped with Mitigation Action/Project items                       |
| Will Loesche  | City of Sedona                          | Sedona Fire District                   | Fire Marshall                   | Helped with Mitigation Action/Project items                       |
| Andy Dickey   | City of Sedona                          | Public Works - City of Sedona          | Assistant City Engineer         | Helped with Mitigation Action/Project items                       |

**YAVAPAI COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**

| Name                                 | Jurisdiction/Agency/Organization | Department/Division/Branch | Title                               | Contributions                       |
|--------------------------------------|----------------------------------|----------------------------|-------------------------------------|-------------------------------------|
| <b>YAVAPAI-PRESCOTT INDIAN TRIBE</b> |                                  |                            |                                     |                                     |
| Amber Tyson                          | Yavapai-Prescott Indian Tribe    | Environmental Protection   | Environmental Director              | Member of the TERC                  |
| Ernest Jones Sr.                     | Yavapai-Prescott Indian Tribe    | YPIT Board of Directors    | Tribal President                    | Member of the TERC                  |
| Robert Ogo                           | Yavapai-Prescott Indian Tribe    | Construction Department    | Vice President & Facilities Manager |                                     |
| Jill Bury                            | Yavapai-Prescott Indian Tribe    | Environmental Health       | Environmental Health Specialist     | Member of the TERC                  |
| Robert Reed                          | Yavapai-Prescott Indian Tribe    | YPIT Tribal Police         | Chief of Police                     | Police services; Member of the TERC |
| Chris Moss                           | Yavapai-Prescott Indian Tribe    | Planning Department        | Tribal Planner                      |                                     |
| Prescott Fire Department             | Yavapai-Prescott Indian Tribe    | Fire Department            |                                     | Contracted fire/emergency services  |

**W. Scott Ogden**

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**From:** Deb Ranney [Deb.Ranney@campverde.az.gov]  
**Sent:** Tuesday, November 16, 2010 8:15 AM  
**To:** scott@jefuller.com  
**Cc:** Valerie House  
**Subject:** FW: Hazard Mitigation Meetings  
**Attachments:** hazards.pdf; preparedness\_kit.pdf

**Importance:** High

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Scott,  
This is a confirmation email of the organizations that were notified via email of the HMP update. I will also forward an inclusive list that you will be able to see who was notified via email and regular mail.

Deb Ranney  
Town of Camp Verde  
395 S. Main Street  
Camp Verde, AZ 86322

928-567-0534  
Fax: 928-567-1540

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***Effective January 10, 2010, Town offices are closed on Friday. Hours of operations are Monday - Thursday 7 am to 6 pm.***

All messages created in this system belong to the Town of Camp Verde and should be considered a public record subject to disclosure under the Arizona Public Records Law (A.R.S. 39-121). Town employees, Town public officials, and those who generate email to them, should have no expectation of privacy related to the use of this technology.

In addition, to ensure compliance with the Open Meeting Law, Council or Board/Commission members who are recipients of this message should not forward it to other members of the Council or Board/Commission of the Town of Camp Verde. Council Members or Board/Commission members may reply to a staff member regarding this message, but they should not send a copy of a reply to other Council or Board/Commission members.

**Please consider our environment before printing this email.** 

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**From:** Deb Ranney  
**Sent:** Wednesday, November 10, 2010 1:01 PM  
**Subject:** Hazard Mitigation Meetings  
**Importance:** High

In 2005-2006, Yavapai County, the Cities of Cottonwood, Prescott, and Sedona, and the Towns of Camp Verde, Chino Valley, Clarkdale, Jerome, and Prescott Valley conducted a year-long, multi-hazard mitigation planning effort that resulted in multi-hazard mitigation plans (2006 Plans) for each jurisdiction. The Town of Dewey-Humboldt used a similar process to prepare a plan in 2008-2009. The 2006 Plans were prepared in compliance with federal regulations set forth by the Disaster Mitigation Act of 2000 (DMA2K), which requires local, county, tribal and state governments to develop a multi-hazard mitigation plan for their respective jurisdiction in order to be eligible to receive certain hazard mitigation and public assistance funds. The 2006 Plans were submitted to and approved by the Federal Emergency Management Agency (FEMA) throughout 2006. The Yavapai County MHMP is set to expire in September 2011.

Yavapai County, the incorporated communities within the county, and the Yavapai-Apache Nation have organized a planning team and have begun an effort to review, update and consolidate the 2006 Plans into a single, multi-jurisdictional hazard mitigation plan. Each participating jurisdiction is a stakeholder in the Plan and the updated document will ultimately be

resubmitted to the Arizona Division of Emergency Management (ADEM) and FEMA for review and approval, and formally adopted by each jurisdiction.

The goal of this mitigation planning effort is to reduce or eliminate long-term risk to life and property from natural hazard events. Mitigation is not how we respond to natural disasters like floods and wildfires, but rather how we as a community can lessen or prevent the impact of such things in the first place. The mitigation planning process involves identifying and profiling the natural hazards most likely to occur in a community, assessing vulnerability to these hazards, and establishing goals, actions, and projects that mitigate the associated risks. The development of this mitigation plan will also ensure continued eligibility on the part of the county and communities for non-emergency, federal hazard mitigation grants.

As a prominent organization in Yavapai County, you are invited to attend the upcoming planning team meetings as a representative of the community at large. Public input on the mitigation planning process is important and residents are encouraged to educate themselves about the existing plan and offer comments on the update. The planning team anticipates having a plan draft in early 2011, at which time the public will be provided the opportunity to review the plan and comment.

If you are interested in attending the planning team meetings as a participant or just as an observer, please contact Valerie House in the Public Works Department at the Town of Camp Verde, 928-567-0534. Or by email:

[Valerie.house@campverde.az.gov](mailto:Valerie.house@campverde.az.gov)

Whether or not you are able to attend the meetings, please open the attachments which contain useful planning information for you, your family, friends and neighbors in the event of an emergency.

Deb Ranney  
Town of Camp Verde  
395 S. Main Street  
Camp Verde, AZ 86322

928-567-0534  
Fax: 928-567-1540

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In addition, to ensure compliance with the Open Meeting Law, Council or Board/Commission members who are recipients of this message should not forward it to other members of the Council or Board/Commission of the Town of Camp Verde. Council Members or Board/Commission members may reply to a staff member regarding this message, but they should not send a copy of a reply to other Council or Board/Commission members.

**Please consider our environment before printing this email.** 

### Participation Invitations

| BUSINESS/AGENCY                  | PHONE        | EMAIL  | ADDRESS                               |   |
|----------------------------------|--------------|--|---------------------------------------|---|
| CHASE BANK                       | 567-4111     | Attn: Branch Manager   | 402 Finnie Flat Rd.                   | X |
| NATIONAL BANK                    | 567-2404     | <a href="mailto:sherry.costello@nbaz.com">sherry.costello@nbaz.com</a>                             |                                       | X |
| WELLS FARGO                      | 567-1767     | <a href="mailto:ann.e.christy@wellsfargo.com">ann.e.christy@wellsfargo.com</a>                     |                                       | X |
| BASHAS                           | 567-4585     | <a href="mailto:store049@bashas.com">store049@bashas.com</a>                                       |                                       | X |
| STEVE COURY                      | 567-3399     |  |                                       |   |
| QWEST                            |              | <a href="mailto:rogg@qwest.com">rogg@qwest.com</a>   |                                       | X |
| ASSEMBLY OF GOD CHURCH           | 567-0451     |  |                                       | X |
| CALVARY CHAPEL                   | 567-2171     | <a href="mailto:webservant-campverde@calvarychapel.com">webservant-campverde@calvarychapel.com</a> |                                       | X |
| CHRISTIAN CHURCH                 | 567-9784     |  | 621 E Howard Rd. C.V 86322            | X |
| CHURCH OF CHRIST                 | 567-5317     |  | 2001 N. Arena Del Loma                | X |
| LDS                              |              |  | 360 S. 5th Street                     | X |
| METHODIST CHURCH                 | 567-3447     | <a href="mailto:campverdeumc@gmail.com">campverdeumc@gmail.com</a>                                 |                                       | X |
| NAZARENE                         | 567-8336     |  | 644 S. 7th Street                     | X |
| NEW HOPE BAPTIST                 | n/a          |  | n/a                                   |   |
| SEVEN DAY ADVENTIST CHURCH       | 567-4281     |  | 1406 Boothill Dr., C. V. 86322        | X |
| SOUTHERN BAPTIST                 | 567-3324     | <a href="mailto:office@campverdebaptist.com">office@campverdebaptist.com</a>                       |                                       | X |
| SPANISH SPEAK/ASSEMBLY OF GOD    | 567-8816     |  | 2480 N. Arena Del Loma                | X |
| CATHOLIC                         | 567-3543     | <a href="mailto:revclutz@yahoo.com">revclutz@yahoo.com</a>   |                                       | X |
| C.V.U.S.D.                       |              | <a href="mailto:dbrown@cvusd.k12.az.us">dbrown@cvusd.k12.az.us</a>                                 |                                       | X |
| C.V. CHRISTIAN SCHOOL            |              | <a href="mailto:rshowers@gwestoffice.net">rshowers@gwestoffice.net</a>                             | 903 W. Finnie Flat Rd.                | X |
| C.V. HEAD START                  | 567-3182     | <a href="mailto:campverde@nacog.org">campverde@nacog.org</a> (att: Sokie)                          |                                       | X |
| MONTESSORI                       | 567-1878     | <a href="mailto:jtaylor@yan-tribe.org">jtaylor@yan-tribe.org</a>                                   |                                       | X |
| CHESTER, NEWTON                  | 567-2363     | <a href="mailto:shirley.sullivan@cnsmontessori.org">shirley.sullivan@cnsmontessori.org</a>         |                                       | X |
| PACE PREPARATORY ACADEMY         | 567-1805     |  |                                       |   |
| YAVAPAI COLLEGE                  | 634-7501     |  | 601 Black Hills Dr., Clarkdale, 86324 | X |
| C.V. HEALTH CENTER               |              | Attn: Rick Peterson  | 269 S. Cany Lne, Cottonwood, 86326    | X |
| FIRE DISTRICT                    | 567-9401     | <a href="mailto:brice@campverdefire.org">brice@campverdefire.org</a>                               |                                       | X |
| PRESCOTT NAT. FOREST/C.V. OFFICE |              | <a href="mailto:ssandusky@fs.fed.us">ssandusky@fs.fed.us</a>                                       |                                       | X |
| FT. VERDE                        | 567-3275     | Sheila Stubbler  |                                       | X |
| AMERI GAS                        | 567-5102     | <a href="mailto:jessica.ortega@amerigas.com">jessica.ortega@amerigas.com</a>                       |                                       | X |
| FERRELL GAS                      | 567-3274     | Attn: Sean Murtaugh  | 5600 N. Hwy 89, Flagstaff, 86004      | X |
| FLAME                            | 567-4099     | <a href="mailto:dm5702@heritagepropane.com">dm5702@heritagepropane.com</a>                         |                                       | X |
| GRAVES                           | 567-2425     |  | P.O. Box 3625 C.V. 86322              | X |
| UNISOURCE GAS                    | 877-837-4968 |  |                                       |   |
| U.S. POST OFFICE                 | 567-3175     |  | Hand delivered - Post Master          | X |
| AZ. PUBLIC SERVICE               | 646-8462     | <a href="mailto:robert.witte@aps.com">robert.witte@aps.com</a>                                     |                                       | X |
| CAMP VERDE WATER                 |              | <a href="mailto:cvwsinc@yahoo.com">cvwsinc@yahoo.com</a>   |                                       | X |
| C.V. M.O.                        |              | Dave and Earl  |                                       | X |
| CV Sanitary Dist                 |              | <a href="mailto:cvsd2@swiftwireless.com">cvsd2@swiftwireless.com</a>                               |                                       | X |

## Deb Ranney

---

**From:** Deb Ranney  
**Sent:** Wednesday, November 10, 2010 1:01 PM  
**Subject:** Hazard Mitigation Meetings  
**Attachments:** hazards.pdf; preparedness\_kit.pdf

**Importance:** High

**Bcc:** 'rogg@qwest.com'; 'campverdeumc@gmail.com'; 'office@campverdebaptist.com'; 'reyclutz@yahoo.com'; 'dbrown@cvusd.k12.az.us'; 'sherry.costello@nbaz.com'; 'store049@bashas.com'; 'campverde@nacog.org'; 'jtaylor@yan-tribe.org'; 'shirley.sullivan@cnsmontessori.org'; 'jessica.ortega@amerigas.com'; 'dm5702@heritagepropane.com'; 'robert.witte@aps.com'; 'webservant-campverde@calvarychapel.com'; 'brice@campverdefire.org'

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Camp Verde, AZ 86322

928-567-0534  
Fax: 928-567-1540

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*Effective January 10, 2010, Town offices are closed on Friday. Hours of operations are Monday - Thursday 7 am to 6 pm.*

## Deb Ranney

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**From:** Deb Ranney  
**Sent:** Wednesday, November 10, 2010 3:12 PM  
**Subject:** Hazart Mitigation Information  
**Attachments:** hazards.pdf; preparedness\_kit.pdf  
**Bcc:** 'brenda.froonimckx@usps.gov'; 'pastor4321@cs.com'

In 2005-2006, Yavapai County, the Cities of Cottonwood, Prescott, and Sedona, and the Towns of Camp Verde, Chino Valley, Clarkdale, Jerome, and Prescott Valley conducted a year-long, multi-hazard mitigation planning effort that resulted in multi-hazard mitigation plans (2006 Plans) for each jurisdiction. The Town of Dewey-Humboldt used a similar process to prepare a plan in 2008-2009. The 2006 Plans were prepared in compliance with federal regulations set forth by the Disaster Mitigation Act of 2000 (DMA2K), which requires local, county, tribal and state governments to develop a multi-hazard mitigation plan for their respective jurisdiction in order to be eligible to receive certain hazard mitigation and public assistance funds. The 2006 Plans were submitted to and approved by the Federal Emergency Management Agency (FEMA) throughout 2006. The Yavapai County MHMP is set to expire in September 2011.

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[Valerie.house@campverde.az.gov](mailto:Valerie.house@campverde.az.gov)

Also, I have attached information that you, your family, and friends may find useful in preparing for or in the event of an emergency.

Deb Ranney  
Town of Camp Verde  
395 S. Main Street  
Camp Verde, AZ 86322

928-567-0534  
Fax: 928-567-1540

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## Deb Ranney

---

**From:** Deb Ranney  
**Sent:** Wednesday, November 10, 2010 2:04 PM  
**Subject:** Hazard Mitigation Meetings  
**Attachments:** hazards.pdf; preparedness\_kit.pdf

**Importance:** High

**Bcc:** 'sstubler@azstateparks.gov'; 'cvwsinc@yahoo.com'; 'cvsd2@swiftwireless.com'; David Smith; Earl Huff

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## Deb Ranney

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**From:** Deb Ranney  
**Sent:** Wednesday, November 10, 2010 3:22 PM  
**To:** 'brenda.frooninckx@usps.gov'  
**Subject:** FW: Hazart Mitigation Information  
**Attachments:** hazards.pdf; preparedness\_kit.pdf

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**Sent:** Wednesday, November 10, 2010 3:12 PM  
**Subject:** Hazart Mitigation Information

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Camp Verde, AZ 86322

928-567-0534  
Fax: 928-567-1540

## Deb Ranney

---

**From:** Deb Ranney  
**Sent:** Wednesday, November 10, 2010 3:44 PM  
**To:** 'scoury@hotmail.com'  
**Subject:** FW: Hazart Mitigation Information  
**Attachments:** hazards.pdf; preparedness\_kit.pdf

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**Sent:** Wednesday, November 10, 2010 3:12 PM  
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395 South Main Street, Camp Verde, Arizona 86322  
928-567-0534 Fax: 928-567-1540  
[publicworks@campverde.az.gov](mailto:publicworks@campverde.az.gov)

November 10, 2010

Church of Jesus Christ of Latter Day Saints  
360 S. 5<sup>th</sup> Street  
Camp Verde, AZ 86322

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Town of Camp Verde, Public Works Department  
395 South Main Street, Camp Verde, Arizona 86322  
928-567-0534 Fax: 928-567-1540  
[publicworks@campverde.az.gov](mailto:publicworks@campverde.az.gov)

November 10, 2010

Church of Christ  
2001 N. Arena Del Loma  
Camp Verde, AZ 86322

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November 10, 2010

Nazarene Church  
644 S. 7<sup>th</sup> Street  
Camp Verde, AZ 86322

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November 10, 2010

Assembly of God/Spanish  
2480 N. Arena Del Loma  
Camp Verde, AZ 86322

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November 10, 2010

Yavapai Community College  
601 Black Hills Dr.  
Clarkdale, AZ 86324

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November 10, 2010

Camp Verde Health Center  
Attn: Rick Peterson  
269 S. Candy Lane  
Cottonwood, AZ 86326

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November 10, 2010

Ferrell Gas  
Attn: Sean Murtaugh  
5600 N. Hwy 89  
Flagstaff, AZ 86004

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If you are interested in attending the planning team meetings as a participant or just as an observer, please contact Valerie House in the Public Works Department at the Town of Camp Verde, 928-567-0534. Or by email: [valerie.house@campverde.az.gov](mailto:valerie.house@campverde.az.gov)



Town of Camp Verde, Public Works Department  
395 South Main Street, Camp Verde, Arizona 86322  
928-567-0534 Fax: 928-567-1540  
[publicworks@campverde.az.gov](mailto:publicworks@campverde.az.gov)

November 10, 2010

Chase Bank  
Attn: Branch Manager  
402 Finnie Flat Rd.  
Camp Verde, AZ 86326

To Whom It May Concern:

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Town of Camp Verde, Public Works Department  
395 South Main Street, Camp Verde, Arizona 86322  
928-567-0534 Fax: 928-567-1540  
[publicworks@campverde.az.gov](mailto:publicworks@campverde.az.gov)

November 10, 2010

Camp Verde Christian Church  
P.O. Box 766  
Camp Verde, AZ 86326

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It's in your hands ~ "Build a stronger community – shop locally"

**AGENDA**

**REGULAR SESSION**

**MAYOR AND COUNCIL**

**COUNCIL CHAMBERS · 473 S. Main Street, Room #106**

**WEDNESDAY, DECEMBER 1, 2010**

**at 6:30 P.M.**

1. **Call to Order**
2. **Roll Call**
3. **Pledge of Allegiance**
4. **Consent Agenda** – All those items listed below may be enacted upon by one motion and approved as consent agenda items. Any item may be removed from the Consent Agenda and considered as a separate item if a member of Council requests.
  - a) **Approval of the Minutes:**
    - 1) Combined Regular/Council Hears P&Z Matters – November 17, 2010
  - b) **Set Next Meeting, Date and Time:**
    - 1) December 15, 2010 at 6:30 p.m. – Regular Session
    - 2) December 22, 2010 at 6:30 p.m. – Council Hears Planning & Zoning Matters – **CANCELLED**
    - 3) January 5, 2011 at 6:30 p.m. – Regular Session  
January 7, 2011 at 9:00 a.m. – Work Session – General Matters to include, but not be limited to Town Code amendments, policies & procedures, etc.
    - 4) January 12, 2011 at 6:30 p.m. – Work Session – Fireworks
    - 5) January 19, 2011 at 6:30 p.m. – Regular Session
    - 6) January 26, 2011 at 6:30 p.m. – Council Hears Planning & Zoning Matters
  - c) **Possible approval of Resolution 2010-824, amending Resolution 2010-820, adding Section "F" to Use Permit 2010-02, amending Use Permit PZ 96-02 for parcels 403-19-205, 403-19-013H, 403-19-013J, 403-19-013Q, and 403-19-207 to allow for the continued operation of the Camp Verde RV Resort and to continue with no time limit. Any changes to these uses must come before the Planning & Zoning Commission and Council for approval. The property is located at 1472 Horseshoe Bend Drive. Section F requires the owners to install signage, as required by Yavapai County Flood Control, at the lower section of the property indicated that it is located in a flood zone. Staff Resource: Mike Jenkins**
  - d) **Possible approval of the SFY 2011 LTAF II application for funding in the amount of \$9,316.25 as it relates to public transportation and authorization for the Mayor to sign contract documents for the Voucher Transit System. This is a budgeted item. Staff Resource: Ron Long**
  - e) **Possible approval of an Intergovernmental Agreement with Yavapai County Free Library District for Library Services and authorization for the Mayor to execute contract documents. This is a budgeted item. Staff Resource: Gerry Laurito**
5. **Special Announcements & Presentations** – There are no special announcements or presentations:
6. **Council Informational Reports.** These reports are relative to the committee meetings that Council members attend. The Committees are Camp Verde Schools Education Foundation; Chamber of Commerce, Intergovernmental Association, NACOG Regional Council, Verde Valley Transportation Planning Organization, Yavapai County Water Advisory Committee, and shopping locally. In addition, individual members may provide brief summaries of current events. The Council will have no discussion or take action on any of these items, except that they may request that the item be placed on a future agenda.
7. **Call to the Public for items not on the agenda.**
8. **Presentation by Steve Ayres relative to the activities of the Centennial Committee.**

9. **Presentation and discussion of the public outreach efforts relative to the update of the Town's Hazard Mitigation Plan that was adopted in 2006.** Due to the size of the document, it is not attached to the agenda packet. If you would like to see the document, please visit the Public Works website at [www.campverde.az.gov/government/public-works](http://www.campverde.az.gov/government/public-works) or the Public Works Department located at 395 S. Main Street. Staff Resource: Ron Long
10. **Discussion, consideration, and possible approval of and authorization for the Mayor to sign a letter of clarification relative to the Verde Valley Regional Trails Concept Plan clarifying that it was not the intent of the Council to approve the Plan as submitted, but rather to approve the Plan's objective to improve non-motorized trails and trails facilities in the Verde Valley region.** Staff Resource: Russ Martin
11. **Discussion, consideration, and possible direction to the Mayor relative to project proposals for the distribution of the Yavapai-Apache Gaming Revenue Sharing. Projects previously funded with Gaming Revenue Sharing include recreation programs, tutoring programs, Chamber of Commerce, and the pool.** Staff Resource: Mayor Burnside
12. **Call to the Public for Items not on the Agenda.**
13. **Advanced Approvals of Town Expenditures.** There are no advanced approvals.
14. **Manager/Staff Report** Individual members of the Staff may provide brief summaries of current events and activities. These summaries are strictly for informing the Council and public of such events and activities. The Council will have no discussion, consideration, or take action on any such item, except that an individual Council member may request that the item be placed on a future agenda.
15. **Adjournment**

Posted by:

*Sharon McCormick*

Date/Time:

*11-24-10 7:30 AM*

Note: Pursuant to A.R.S. §38-431.03.A.2 and A.3, the Council may vote to go into Executive Session for purposes of consultation for legal advice with the Town Attorney on any matter listed on the Agenda, or discussion of records exempt by law from public inspection associated with an agenda item.

The Town of Camp Verde Council Chambers is accessible to the handicapped. Those with special accessibility or accommodation needs, such as large typeface print, may request these at the Office of the Town Clerk.



**TOWN OF CAMP VERDE  
Agenda Action Form**

Meeting Date: December 1, 2010

Meeting Type: Regular Session

Consent Agenda     Regular Business

Reference Document: 2006 Hazard Mitigation Plan available on the Town's Public Works website

**Agenda Title** (be exact):

Presentation, discussion and public outreach regarding update to the Town's Hazard Mitigation Plan adopted in 2006.

**Purpose and Background Information:**

In 2005-2006, Yavapai County, the Cities of Cottonwood, Prescott, and Sedona, and the Towns of Camp Verde, Chino Valley, Clarkdale, Jerome, and Prescott Valley conducted a year-long, multi-hazard mitigation planning effort that resulted in multi-hazard mitigation plans (2006 Plans) for each jurisdiction. The Town of Dewey-Humboldt used a similar process to prepare a plan in 2008-2009. The 2006 Plans were prepared in compliance with federal regulations set forth by the Disaster Mitigation Act of 2000 (DMA2K), which requires local, county, tribal and state governments to develop a multi-hazard mitigation plan for their respective jurisdiction in order to be eligible to receive certain hazard mitigation and public assistance funds. The 2006 Plans were submitted to and approved by the Federal Emergency Management Agency (FEMA) throughout 2006. All of the Hazard Mitigation Plans for each jurisdiction are set to expire in 2011.

Yavapai County, the incorporated communities within the county, and the Yavapai-Apache Nation have organized a planning team and have begun an effort to review, update and consolidate the 2006 Plans into a single, multi-jurisdictional hazard mitigation plan. Each participating jurisdiction is a stakeholder in the Plan and the updated document will ultimately be resubmitted to the Arizona Division of Emergency Management (ADEM) and FEMA for review and approval, and formally adopted by each jurisdiction.

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It is each jurisdiction's responsibility to notify the public to provide an opportunity for involvement/comment on either the existing 2006 plan or the update process itself. *Staff did not attach a copy of the 2006 Hazard Mitigation Plan due to the size of the document; to view a copy, please visit the Public Works website.*

**Recommendation** (Suggested Motion):

No action required.

Finance Review:  Budgeted     Unbudgeted     N/A

Finance Director Comments/Fund: N/A

Attorney Review:         Yes                 No                 N/A

Attorney Comments: N/A

Submitting Department: Public Works

Contact Person: Ron Long

Action Report prepared by: V. House

**W. Scott Ogden**

---

**From:** Mark Garcia [mgarcia@chinoaz.net]  
**Sent:** Monday, December 13, 2010 9:02 AM  
**To:** W. Scott Ogden  
**Subject:** Yavapai County MJHMP - Chino Valley

Scott,

In reviewing the Community Description for Chino Valley, no changes are to be made.

In regards to the participation invitations, on November 30, 2010, I extended invitations to the public via a Press Release to the Chino Valley Review which was published in the December 8, 2010 edition. On that day, I also emailed the Chino Valley Chamber of Commerce and asked that they include the invitation in their monthly email updates to the Chamber participants. I have also emailed the invitation to the Administration of the Chino Valley Unified School District.

Thank you,

Mark Garcia, Commander  
Chino Valley Police Department

## NOTICE TO THE PUBLIC

In 2005-2006, Yavapai County and the cities and towns completed a year-long, multi-hazard mitigation planning effort that resulted in multi-hazard mitigation plans (2006 Plans) for each jurisdiction. The 2006 Plans were prepared in compliance with federal regulations set forth by the Disaster Mitigation Act of 2000 (DMA2K), which requires local, county, tribal and state governments to develop a multi-hazard mitigation plan for their respective jurisdiction in order to be eligible to receive certain hazard mitigation and public assistance funds. The Yavapai County MHMP is set to expire in September 2011.

Yavapai County, the incorporated communities within the county, and the Yavapai-Apache and Yavapai Prescott Nations have organized a planning team and have begun an effort to review, update and consolidate the 2006 Plans into a single, multi-jurisdictional hazard mitigation plan.

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As citizens, associations and communities in Yavapai County, you are invited provide input on this plan and are encouraged to offer comments on the update. The planning team anticipates having a plan draft in early 2011, at which time the public will be provided the opportunity to review the plan and comment.

If you are interested, please contact the following:

YAVAPAI COUNTY EMERGENCY MANAGEMENT

PHONE 928-771-3321 FAX 928-771-3323

OR EMAIL:

[web.EM@co.yavapai.az.us](mailto:web.EM@co.yavapai.az.us)



# Town of Clarkdale

P.O. Box 308  
Clarkdale, AZ 86324  
(928) 639-2400 phone  
(928) 639-2409 fax

---

November 23, 2010

Clarkdale Fire Department  
Attn: Chief Moore  
P.O. Box 1236  
Clarkdale, AZ 86324

RE: Multi-jurisdictional Hazard Mitigation Plan

Dear Chief Moore:

In 2005-2006, Yavapai County, the Cities of Cottonwood, Prescott, and Sedona, and the Towns of Camp Verde, Chino Valley, Clarkdale, Jerome, and Prescott Valley conducted a year-long, multi-hazard mitigation planning effort that resulted in multi-hazard mitigation plans (2006 Plans) for each jurisdiction. The Town of Dewey-Humboldt used a similar process to prepare a plan in 2008-2009. The 2006 Plans were prepared in compliance with federal regulations set forth by the Disaster Mitigation Act of 2000 (DMA2K), which requires local, county, tribal and state governments to develop a multi-hazard mitigation plan for their respective jurisdiction in order to be eligible to receive certain hazard mitigation and public assistance funds. The 2006 Plans were submitted to and approved by the Federal Emergency Management Agency (FEMA) throughout 2006. The Yavapai County MHMP is set to expire in September 2011.

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As a prominent organization in Yavapai County, you are invited to attend the upcoming planning team meetings listed below as a representative of the community at large. Public input on the mitigation planning process is important and residents are encouraged to educate themselves about the existing plan and offer comments on the update. The planning team anticipates having a plan draft in early 2011, at which time the public will be provided the opportunity to review the plan and comment.

The Historic Town of Clarkdale  
[www.clarkdale.az.us](http://www.clarkdale.az.us)

December 14, 2010 9:00 AM – 1:00PM  
Prescott Valley Library – Crystal Room (on 3<sup>rd</sup> floor of Library)  
7401 East Civic Circle  
Prescott Valley, AZ 86314

January 11, 2011 9:00 AM – 1:00 PM  
Cottonwood Public Safety Building  
191 S. Sixth Street  
Cottonwood, AZ 86326

February 15, 2011 9:00 AM – 1:00PM  
Prescott Valley Library – Crystal Room (on 3<sup>rd</sup> floor of Library)  
7401 East Civic Circle  
Prescott Valley, AZ 86314

If you are interested in attending the planning team meetings as a participant or just as an observer, please contact the following:

Kathy Bainbridge, Town Clerk/Finance Director  
39 N. Ninth Street  
Clarkdale, AZ 86326  
928-639-2445  
Kathy.bainbridge@clarkdale.az.gov

Thank you.

Sincerely,

*Kathy Bainbridge*

Kathy Bainbridge  
Clerk/Finance Director

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Sgt. Ryan Gildehaus,  
Cottonwood Police Department,  
[rgildehaus@ci.cottonwood.az.us](mailto:rgildehaus@ci.cottonwood.az.us)  
(928) 634-0186 ext 3314



**TOWN OF DEWEY-HUMBOLDT**  
**P.O. BOX 69**  
**HUMBOLDT, AZ 86329**  
**Phone 928-632-5074 • Fax 928-632-7365**

---

December 1, 2010

Mr. Charlie Cook  
Central Yavapai Fire District  
8555 East Yavapai Road  
Prescott Valley, Arizona 86314

**Re: Multi Jurisdiction Hazard Mitigation Plan**

Dear Mr. Cook,

In 2005-2006, Yavapai County, the Cities of Cottonwood, Prescott, and Sedona, and the Towns of Camp Verde, Chino Valley, Clarkdale, Jerome, and Prescott Valley conducted a year-long, multi-hazard mitigation planning effort that resulted in multi-hazard mitigation plans (2006 Plans) for each jurisdiction. The Town of Dewey-Humboldt used a similar process to prepare a plan in 2008-2009. The 2006 Plans were prepared in compliance with federal regulations set forth by the Disaster Mitigation Act of 2000 (DMA2K), which requires local, county, tribal and state governments to develop a multi-hazard mitigation plan for their respective jurisdiction in order to be eligible to receive certain hazard mitigation and public assistance funds. The 2006 Plans were submitted to and approved by the Federal Emergency Management Agency (FEMA) throughout 2006. The Yavapai County MHMP is set to expire in September 2011.

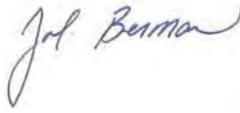
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If you are interested in attending the planning team meetings as a participant or just as an observer, please contact me. The next scheduled planning meeting is Tuesday, December, 14, 2010 from 9am to 1pm at the Prescott Valley Library (Crystal Room).

Regards,

A handwritten signature in cursive script that reads "Joel Berman".

Joel Berman, P.E.  
Town Engineer



**TOWN OF DEWEY-HUMBOLDT**  
**P.O. BOX 69**  
**HUMBOLDT, AZ 86329**  
**Phone 928-632-5074 • Fax 928-632-7365**

---

December 1, 2010

Mr. Marc Schmidt  
Southern Area Command  
Yavapai County Sheriff's Office  
255 East Gurley Street  
Prescott, Arizona 86301

**Re: Multi Jurisdiction Hazard Mitigation Plan**

Dear Mr. Schmidt,

In 2005-2006, Yavapai County, the Cities of Cottonwood, Prescott, and Sedona, and the Towns of Camp Verde, Chino Valley, Clarkdale, Jerome, and Prescott Valley conducted a year-long, multi-hazard mitigation planning effort that resulted in multi-hazard mitigation plans (2006 Plans) for each jurisdiction. The Town of Dewey-Humboldt used a similar process to prepare a plan in 2008-2009. The 2006 Plans were prepared in compliance with federal regulations set forth by the Disaster Mitigation Act of 2000 (DMA2K), which requires local, county, tribal and state governments to develop a multi-hazard mitigation plan for their respective jurisdiction in order to be eligible to receive certain hazard mitigation and public assistance funds. The 2006 Plans were submitted to and approved by the Federal Emergency Management Agency (FEMA) throughout 2006. The Yavapai County MHMP is set to expire in September 2011.

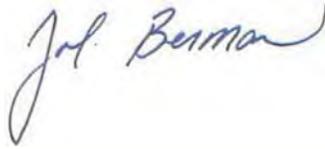
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If you are interested in attending the planning team meetings as a participant or just as an observer, please contact me. The next scheduled planning meeting is Tuesday, December, 14, 2010 from 9am to 1pm at the Prescott Valley Library (Crystal Room).

Regards,

A handwritten signature in blue ink that reads "Joel Berman". The signature is written in a cursive style with a large, looping initial "J".

Joel Berman, P.E.  
Town Engineer

**From:** Willis,Darrell  
**Sent:** Tuesday, January 11, 2011 2:36 PM  
**To:** Collier,Marsha  
**Subject:** Letter to go out

**Attachments:** Letter to Organizations.doc

Marsha, could you have Tiffany send this letter to the following organizations for me? Thanks, DW

Prescott Chamber of Commerce  
117 West Goodwin  
Prescott, AZ 86303

Yavapai College  
1100 East Sheldon  
Prescott, AZ 86301

Embry Riddle Aeronautical University  
3700 Willow Creek Road  
Prescott, AZ 86301

Darrell Willis, Division Chief  
Prescott Fire Department  
Wildland/Disaster Preparedness  
333 White Spar Road  
Prescott, AZ 86303  
(928)777-1701 Office  
(928)776-1890 Fax  
(928)925-7311 Cell  
Notice: My new e-mail address is [darrell.willis@prescott-az.gov](mailto:darrell.willis@prescott-az.gov)

**W. Scott Ogden**

---

**From:** Willis,Darrell [darrell.willis@prescott-az.gov]  
**Sent:** Tuesday, January 11, 2011 2:54 PM  
**To:** W. Scott Ogden  
**Subject:** Items 1-3 and 1-7  
**Attachments:** Letter to go out 1-3.htm; Organization Invitation Letter Text\_Yavapai County.docx

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Attached is our documentation for item 1-3. Also for 1-7 the planning team for Prescott consists of:

Mike Kabbel, Police Chief  
Laurie Hadley Deputy City Manager  
Steve Norwood City Manager  
Bruce Martinez, Fire Chief  
Mark Nietupski, Public Works Director  
Tom Guice, Community Development Director  
Ben Vardiman, Airport Manager  
Jay Fillingim, Battalion Chief, Technical Rescue Team Leader  
Chad McDowell, Field Services Director  
Darrell Willis, Division Chief, Disaster Preparedness, Chairman of Committee

Darrell Willis, Division Chief  
Prescott Fire Department  
Wildland/Disaster Preparedness  
333 White Spar Road  
Prescott, AZ 86303  
(928)777-1701 Office  
(928)776-1890 Fax  
(928)925-7311 Cell

Notice: My new e-mail address is [darrell.willis@prescott-az.gov](mailto:darrell.willis@prescott-az.gov)

**W. Scott Ogden**

---

**From:** David Peck [DPeck@sedonaaz.gov]  
**Sent:** Tuesday, December 07, 2010 9:39 AM  
**To:** scott@jefuller.com  
**Subject:** Sedona - Invitations to local businesses

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Scott,

Between yesterday and today, emails were sent with the text from the "Organization Invitation Letter Text\_Yavapai County.docx" (that you supplied) to the following:

Sedona Fire District  
Sedona School District  
Arizona Water Company  
Oak Creek Water Company  
Arizona Public Service  
Qwest Communications  
Unisource Gas

The public notice with the link to Yavapai County's Emergency Management is posted to the "News & Updates" section of our website located at: [www.SedonaAZ.gov](http://www.SedonaAZ.gov)

I believe I've completed all of my assignments for the City of Sedona to date.

Regards,

David Peck

## **Appendix C**

### **Public Involvement Records**

Home

Government

Community

Business

I Want To...

Town Services

Search



# YAVAPAI - APACHE NATION

## Welcome to Camp Verde, Arizona

A quiet, safe place to raise your children, with a small town atmosphere, a friendly relaxed, no-pressure way of life where practically everyone knows each other. Additionally, we have wide-open spaces, the Verde river, a mild 4-season climate and panoramic views from the vistas above our valley.

## Quick Links

- What's Going On?
- News
- Town Council Agenda
- P&Z Commission Agenda
- Board of Adjust./Appeals Agenda
- Meeting Posting Locations
- Town Code, General Plan, etc.
- Voter Information
- Get In Touch

## News & Announcements

### West Nile Virus

Verde Valley Mosquitoes Test Positive for West Nile Virus

[More information...](#)



### Volunteers Needed for Board & Commission

Letters of interest are now being accepted for volunteers needed to serve on the Board of Adjustments and Appeals and the Planning & Zoning Commission. Currently there are 3 seats available on the Board of Adjustments and Appeals and 2 seats available on the Planning and Zoning Commission. All successful applicants will act in an...

[Read more...](#)

## 10 Nov

### Hazard Mitigation Plan Update

Staff attended the first of a series of workshops regarding our Hazard Mitigation Plan that is required to be updated this coming year (2011). Originally, when adopted in 2006, representatives from the Town of Camp Verde, Yavapai County, the Cities of Cottonwood, Prescott and Sedona, and the Towns of Chino Valley, Clarkdale, Jerome and Prescott...

[Read more...](#)

## Events

Showing events after 12/9.  
[Look for earlier events](#)

### Saturday, December 11

Craft Bazaar

Parade of Lights

### Wednesday, December 15

6:30pm Council Regular Sessi

### Friday, December 24

Christmas Eve

### Saturday, December 25



[More »](#)

#### Need More Info?

- [Ask Us](#)

#### Town Employees

- [Employee Email Login](#)
- [Web CMS Login](#)

#### Stay Connected

- [Facebook](#)

#### Camp Verde's RSS feed

- [Volunteers needed for Board & Commission](#)
- [Hazard Mitigation Plan Update](#)
- [Hazard Mitigation Plan](#)

#### Camp Verde Arizona

473 South Main Street, Suite 102  
Camp Verde, Arizona 86322

Phone: (928) 567 - 6631  
Email: [webmaster@campverde.az.gov](mailto:webmaster@campverde.az.gov)  
<http://www.campverde.az.gov>

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- Home
- Government
- Community
- Business
- I Want To...
- Town Services

Search

## Hazard Mitigation Plan Update

[Home](#) » Hazard Mitigation Plan Update

**10 Nov**

News

Staff attended the first of a series of workshops regarding our Hazard Mitigation Plan that is required to be updated this coming year (2011).

Originally, when adopted in 2006, representatives from the Town of Camp Verde, Yavapai County, the Cities of Cottonwood, Prescott and Sedona, and the Towns of Chino Valley, Clarkdale, Jerome and Prescott Valley conducted a year-long planning effort that resulted in multi-hazard mitigation plans for each jurisdiction. The 2006 plans were prepared in compliance with federal regulations set forth by the Disaster Mitigation Act of 2000 (DMA2K), which requires local, county, tribal and state governments to develop a multi-hazard mitigation plan for their respective jurisdiction in order to be eligible to receive certain hazard mitigation and public assistance funds. The 2006 plans were submitted to and approved by the Federal Emergency Management Agency (FEMA) throughout 2006. The plans are set to expire in September 2011.

Beginning this year, planning will be done according to the multi-jurisdictional model. The process will result in one plan that includes the county and participating incorporated jurisdictions within the county boundaries. This multi-jurisdictional concept is new; however, is the most efficient and cost effective way to go.

The goal of this mitigation planning team will be to reduce or eliminate long-term risk to life and property from natural hazard events. Mitigation is not how we respond to natural disasters like floods and wildfires, but how we as a community can lessen or prevent the impact of such things in the first place. The mitigation planning process involves identifying and profiling the natural hazards most likely to occur in a community, assessing vulnerability to these hazards, and establishing goals, actions, and projects that mitigate the associated risks. The development of this mitigation plan will also ensure continued eligibility on the part of the county and communities for non-emergency, federal hazard mitigation grants.

For more information from Yavapai County [click here](#).

### Public Involvement

Public input on the mitigation planning process is important and residents are encouraged to educate themselves about the existing plan and offer comments on the update. The planning team anticipates having a plan draft in early 2011, at which time the public will be provided the opportunity to review the plan and comment.

The next MJHMP meeting will be December 14<sup>th</sup> at:

Prescott Valley Library - Crystal Room (on 3<sup>rd</sup> floor of Library)

7401 East Civic Circle

Prescott Valley, AZ 86314

If you are interested in attending the planning team meetings as a participant or just as an observer, please contact:

Valerie House

Town of  
Public Works Department



## Quick Links

- [What's Going On?](#)
- [News](#)
- [Town Council Agenda](#)
- [P&Z Commission Agenda](#)
- [Board of Adjust/Appeals Agenda](#)
- [Meeting Posting Locations](#)
- [Town Code, General Plan, etc.](#)
- [Voter Information](#)
- [Get In Touch](#)

## Events

*Showing events after 12/9.*  
[Look for earlier events](#)

|                               |
|-------------------------------|
| <b>Saturday, December 11</b>  |
| Craft Bazaar                  |
| Parade of Lights              |
| <b>Wednesday, December 15</b> |
| 6:30pm Council Regular Sessi  |
| <b>Friday, December 24</b>    |
| Christmas Eve                 |
| <b>Saturday, December 25</b>  |

(928) 567-0534

[valerie.house@campverde.az.gov](mailto:valerie.house@campverde.az.gov)

### Informational Brochures

Preparedness tips for:

- Hazards such as Earthquakes, Floods, Thunderstorms - high winds, Drought, Winter storms, Wildfires and Earth fissures
- Manufactured Homes, Recreational Vehicles, Park Trailers and Floodplains
- People with special needs, Family Emergency Plan, Pet information Utility Outages and Emergency Supply Kit

Comments are closed.

#### Need More Info?

- [Ask Us](#)

#### Town Employees

- [Employee Email Login](#)
- [Web CMS Login](#)

#### Stay Connected

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#### Camp Verde's RSS feed

- [Volunteers needed for Board & Commission](#)
- [Hazard Mitigation Plan Update](#)
- [Hazard Mitigation Plan](#)

#### Camp Verde Arizona

473 South Main Street, Suite 102  
Camp Verde, Arizona 86322

Phone: (928) 567 - 6631  
Email: [webmaster@campverde.az.gov](mailto:webmaster@campverde.az.gov)  
<http://www.campverde.az.gov>

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# Town Of Chino Valley Arizona

Home About our Town Town Government Departments/Divisions E-Services Search  Go

-  **Mayor and Council**
-  **Departments/ Divisions**
-  **Agendas**
-  **Minutes**
-  **Resolutions Ordinances**
-  **All Public Meetings**
-  **On-Line Info**
-  **Calendar**
-  **Employment**
-  **Magistrate Court**
-  **Town Directory**

Site Assistant Find It Fast!  Telephone Directory (928)



Memory Park

## WHAT'S HAPPENING

### HAZARD MITIGATION PLAN

*Chino Valley Begins Work on Hazard Mitigation Plan*

A planning team comprised of representatives from the Town of Chino Valley will be meeting regularly to participate in a hazard mitigation planning process. The team will develop a Multi-Jurisdictional Hazard Mitigation Plan for Chino Valley, according to The

1 2 3 4 5 6 7 8 9 Next

## CALENDAR

- Thursday, December 23, 2010**  
[NO Council Meeting](#)
- Thursday, January 6, 2011**  
[Council Study Session](#) (6:00pm)
- Tuesday, January 11, 2011**  
[Regular Council Meeting](#) (6:00pm)



1020 W. Palomino Rd.  
PO Box 406  
Chino Valley, AZ 86323  
(928) 636-2646  
fax (928) 636-2144

**"Looking To The Future"**



## TOWN OF CLARKDALE

# "SMALL TALK"

NOVEMBER 2010  
VOLUME 18

### FIREWORK REGULATIONS

New firework regulations go in to effect November 26, 2010 that prohibit the use of fireworks within the Town of Clarkdale, but allows for the use of novelty items (which are defined as "federally" deregulated novelty items that are known as snappers, snap caps, party poppers, glow worms, snakes, toy smoke devices, sparkers and certain toys as defined in A.R.S. 36-1601) and supervised public displays

The regulations also provide for the sale of fireworks in Clarkdale, but require that every person engaged in a sale must prominently display signs at each cash register and in each area where fireworks are displayed for sale stating:

1. That the use of fireworks, except novelty items, including permissible consumer fireworks, is prohibited in the Town of Clarkdale; and
2. Consumer fireworks may not be sold to persons under the age of 16. Penalties were set regarding specific violations.

For more information please contact Kathy Bainbridge, (928) 639-2445, or [kathy.bainbridge@clarkdale.az.gov](mailto:kathy.bainbridge@clarkdale.az.gov).

### CLARKDALE BEGINS WORK ON HAZARD MITIGATION PLAN

A planning team comprised of representatives from the Town of Clarkdale will be meeting regularly to participate in a hazard mitigation planning process. The team will develop a Multi-Jurisdictional Hazard Mitigation Plan for Yavapai County, according to The Disaster Mitigation Act of 2000 (DMA2K).

The DMA2K requires all local, county, tribal and state governments to have a FEMA approved hazard mitigation plan in order to be eligible for federal hazard mitigation funds. The plan will focus on the area's most threatening hazards to citizens and property and will provide a strategy to reduce or eliminate the risk from those hazards

The planning team anticipates having a plan draft in early 2011, at which time the public will be provided the opportunity to review the plan and comment.

For more information please contact Kathy Bainbridge at (928) 639-2445, or [kathy.bainbridge@clarkdale.az.gov](mailto:kathy.bainbridge@clarkdale.az.gov).

## Celebrate December in Clarkdale



**Made in Clarkdale Art Show**  
December 3 -12  
Clarkdale Clubhouse Auditorium

**Library Annual Book Sale**  
December 3 - 12  
Clarkdale Clubhouse Ladies Lounge



**Santa Comes to Clarkdale!**  
December 4, 11:00a.m. - 1:00p.m.  
Clarkdale Clubhouse Men's Lounge

Children of all ages can visit with Santa and have their photo taken, drink hot chocolate with cookies, and create an ornament to hang on the Town's Christmas tree! There is no cost for this special event. For information call 639-2490.

**Clarkdale Historical Society & Museum**  
**Historic Building Tour**  
December 11 -12, 9:00a.m. - 4:00p.m.

Tickets may be purchased for \$20.00 at the Clarkdale Historical Society and Museum, 900 First North St. For information call 649-1198.

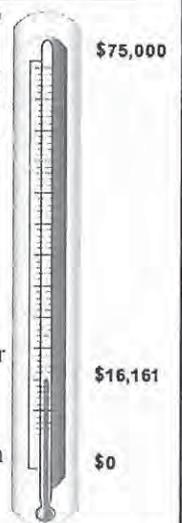


# Jump In! Open the Pool!



Help us reach our goal of \$75,000 by March 1, 2011. We can do it with your help. We have received many donations but we still have a ways to go to meet our goal.

Our hope is to offer to the residents of Clarkdale a fun-filled 2011 Pool Season. For information call Dawn Norman, 639-2490 or go to our website, [www.clarkdale.az.gov](http://www.clarkdale.az.gov). Thank you!





- Home
- About Us
- Government
- Town Meetings
- Mayor & Council
- Board & Committees
- Town & Zoning Code
- General Plan
- Community News
- Employment
- Volunteer
- Forms
- Photo Gallery
- Newsletter
- Press Releases
- Contacts
- Links
- Search
- Pay Utility Bill

Town Complex Hours:  
 8:00am- 5:30pm  
 Monday - Thursday  
 Closed Friday  
 Address:  
 P.O. Box 308  
 39 North Ninth Street  
 Clarkdale, AZ 86324  
 (928) 639- 2400  
 Fax: (928) 639-2459  
 TTY: 1-800-367-8939



[Current Clarkdale Weather](#)

[2010 Town of Clarkdale Fee Schedule](#)

We value your questions and comments. [Comments/Suggestion Form](#)



Click here to learn more on how you can help open the Clarkdale Pool for the 2011 Summer Season!



Now everyone can jump in and help by recycling! [Click Here for information.](#)



**Clarkdale Sustainability Park**

To learn more visit:  
[clarkdalesustainabilitypark.org](http://clarkdalesustainabilitypark.org)

### FINAL BUDGET FOR FISCAL YEAR 2011

Fiscal Year 2011 Final Budget

[Power Point Presentation](#)



### COMMUNITY CALENDAR OF EVENTS

|                 |  |
|-----------------|--|
| December 3 - 12 | Clark Memorial Library<br>Annual Book Sale<br>Clark Memorial Clubhouse<br>Ladies' Lounge   |
| December 3 - 12 | Made In Clarkdale<br>Clarkdale Chamber of Commerce<br>Clark Memorial Clubhouse<br>Auditorium   |
| December 9      | ADOT Public Open House<br>4:30-6:30<br>Brief presentation at 5:00 p.m.<br>Men's Lounge   |
| December 11-12  | 2nd Annual<br>Historic Building Tour & Luncheon<br>hosted by the<br><a href="#">Clarkdale Historical Society &amp; Museum</a><br>9 a.m. - 4 p.m. |



### GENERAL PLAN UPDATE

The General Plan Update Committee and Planning Commission seek the public's input on the update to the Town's General Plan. Please join them during the review and approval process. The scheduled meetings are posted on the Community Calendar of Events.  
 For more information contact Community Development at (928) 639-2500.



The Arizona Department of Transportation is conducting a study to produce a long-range transportation plan for the Town of Clarkdale. A public open house will be held on Thursday, December 9, from 4:30 pm to 6:30 pm with a brief presentation at 5:00 pm in the Men's Lounge located at 19 N. Ninth Street, Clarkdale. Join us to review a draft plan for improvements.

### CLARKDALE BEGINS WORK ON HAZARD MITIGATION PLAN

A planning team comprised of representatives from the Town of Clarkdale will be meeting regularly to participate in a hazard mitigation planning process. The team will develop a Multi-Jurisdictional Hazard Mitigation Plan for Yavapai County, according to The Disaster Mitigation Act of 2000 (DMA2K).

The DMA2K requires all local, county, tribal and state governments to have a FEMA approved hazard mitigation plan in order to be eligible for federal hazard mitigation funds. The plan will focus on the area's most threatening hazards to citizens and property and will provide a strategy to reduce or eliminate the risk from those hazards.

The planning team anticipates having a plan draft in early 2011, at which time the public will be provided the opportunity to review the plan and comment.

For more information regarding the hazard mitigation planning process/plan, please contact Kathy Bainbridge, 39 N. Ninth Street, Clarkdale, AZ, or [Kathy.bainbridge@clarkdale.az.gov](mailto:Kathy.bainbridge@clarkdale.az.gov).

**Attend an open air**  
talents the Verde Valley has to offer, as well as supporting local businesses.”

The Sunday marketplace will showcase unusual arts and crafts, local boutique wares, live music, face painting, farmers market and a place to sit down and get to know one another. A shaded picnic area will be available.

“Please come out and be a part of the fun. These events are always a great time. Enjoy the music, the food, have some free cookies, do a little shopping, and meet your Verde Valley neighbors,” Bridgnell stated.

The Sunday marketplace is located past the Verde River Bridge, 1.2 miles past Main Street in Camp Verde. For more information, contact Bridgnell at 567-5759.

ratory at the hospital to deliver a urine sample. She parked her car and was headed across the parking lot when she met their doctor friend. He noticed her uniform and said, “You’re a nurse. I didn’t know you were a nurse.”

panicked to think his family tried to leave him behind. After that, he stuck to Mom like glue when we were away from home.

One last story about Mom: When she was in college, a group of students took turns

husband moved from Phoenix to Bridgeport, near Cottonwood, in 1993. A retired nurse, her recipe collection includes those from her own family plus collections from three longtime residents of Northern Arizona.

## King Crossword

- handles  
38 Wan  
40 Canaanite's deity  
42 Mainlander's memento  
43 Wife of a links nut  
48 Bobby of
- 4 Small bundle  
5 Passenger's payment  
6 Rickey flavoring  
7 Commotion  
8 Storm  
9 Part of a mouse,  
24 Union fees  
26 Comical Caroline  
27 Ending for musket or market  
28 Insatiable desire  
29 Vanity

© 2011 King Features Synd., Inc.

## Cottonwood plans for hazard mitigation

A planning team comprised of representatives from the city of Cottonwood will be meeting regularly to participate in a hazard mitigation planning process. The team will develop a Multi-Jurisdictional Hazard Mitigation Plan for Yavapai County, according to the Disaster Mitigation Act of 2000.

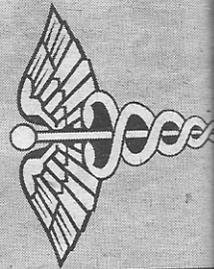
The Disaster Mitigation Act requires all local, county, tribal

and state governments to have a Federal Emergency Management Agency-approved hazard mitigation plan in order to be eligible for federal hazard mitigation funds.

The plan will focus on the area's most threatening hazards to citizens and property and will provide a strategy to reduce or eliminate the risk from those hazards, according to a

press release. The planning team anticipates having a plan draft in early 2011, at which time the public will be provided the opportunity to review the plan and comment.

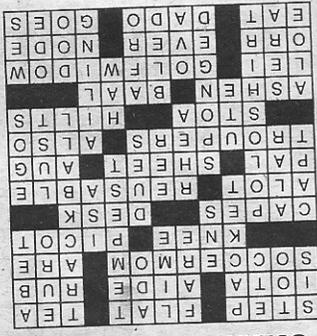
For more information regarding the hazard mitigation planning process/plan, contact Sgt. Ryan Gildehaus, Cottonwood Police Department, at 639-0186, or rgildehaus@ci.cottonwood.az.us.



**Health**  
**Wise**

## Houseplants — good for home and health

Bright blooms, the smell of fresh cut grass, and a warm breeze may be missing this time of year, but there are ways you can brighten up the indoors and bring summer gardening back into your life. Houseplants create a fantastic distraction for passing the winter doldrums as we eagerly await summer. In addition, they also provide valuable health benefits our harsh cold months. Most houseplants add oxygen and humidity back into the air and some can even rid an area of toxins expelled through materials used to decorate and furnish a house. Indoor plants are ideal to keeping the summer spirit alive, adding a splash of color or texture in your home and providing wonderful health benefits for you and your family. By following just a few simple steps, you can host healthy and beautiful houseplants in your living space. The first step in keeping your indoor plants healthy is their container. You'll need to find a well-drained container to hold your plants. This is essential for them. The first step in keeping your indoor plants healthy is their container. You'll need to find a well-drained container to hold your plants. This is essential for them.



**King Crossword**  
Answers  
Solution time: 21 mins.

City of Cottonwood - Natural Disaster Mitigation Plan - Windows Internet Explorer

http://cottonwoodaz.gov/mitigation.php

File Edit View Favorites Tools Help

Google Go Bookmarks 92 blocked Check Look for Map AutoFill Send to Settings

McAfee

Share Browser WebEx

Favorites Suggested Sites Free Hotmail Free AOL & Unlimited Internet Google Maps MapQuest Home Yahoo! Groups Web Slice Gallery

Integra Telecom Webmail City of Cottonwood - Nat... X

Page Safety Tools



# City of Cottonwood 50th Anniversary of Incorporation



Monday February 7, 2011

Google Custom Search Search

City Departments Codes/Policy/Plans City Council Boards & Commissions Forms/Jobs/Links Business & Development



## Natural Disaster Mitigation Plan

City of Cottonwood is currently updating the Natural Disaster Mitigation Plan and seeking public comments and input regarding this plan. Please make your comments to Sgt. Ryan Gildehaus at (928) 634-0186 ext 3314 or [rgildehaus@cottonwoodaz.gov](mailto:rgildehaus@cottonwoodaz.gov)

View the [Yavapai County Regional Alert Information](#)

City of Cottonwood is currently updating the Natural Disaster Mitigation Plan

Revenue & Expenditure Reports – Period ending September 30, 2010

Resolution Number 2550: English

Internet 115%



[Home](#) | [About D-H](#) | [Community](#) | [Government](#) | [Downloads](#) | [Calendar](#) | [Photos](#) | [Search](#) | [Contact](#) | [Finance](#)

### Search the Site

## Hazard Mitigation Plan

The Town of Dewey-Humboldt Begins Work on Hazard Mitigation Plan

[Read more...](#)

## Town of Dewey-Humboldt FY2010-2011 Budget

Town of Dewey-Humboldt Annual Budget 2010-2011

[Budget FY2010-2011](#)

## Open Space and Trails

[OSAT Master Plan Final Chapters 1 and 2](#)

[OSAT Master Plan Final Chapter 3](#)

[OSAT Master Plan Final Chapter 4](#)

## Community Issues Reporting

Need to report a pothole? How about some trees on the street that need trimming? Or maybe you spot some illegal dumping or simply want to contact your town staff to vent. Check out our new interactive map [here](#).

## Survey Results

[Click here](#) for the final report of the 2009 Citizen Survey.

## Vacancies

The Town is currently accepting applications for vacancies on the Planning and Zoning Commission, Board of Adjustment, the Groundwater Resources Advisory Committee, and Environmental Issues Advisory Committee. Please click to download an [application form](#).

## 2009 General Plan

[Frequently asked questions about the General Plan](#)

[2009 General Plan](#)

## Town Code

The Town's Code of Ordinances is now searchable. [Click here](#) for access.

### New on the Web Site

#### SIGN UP FOR EMAIL NEWS

Receive notices of Town Council meetings and other related Town news. **Sign Up Today!**



Receive community safety alerts instantly by text message and email. Registration is quick, easy and secure. [Sign up now!](#)

#### TOWN MEETING VIDEOS

Our Town Council and Planning and Zoning Meetings are available to view on our web site.

**Watch Video of recent Town meetings!**

**Community Issues Reporting**

### Popular Pages

- Photos
- About Dewey-Humboldt
- Contact
- Town History
- Town Council Meeting Documents 2009-2010

### Helpful Information

**JOB OPPORTUNITIES**

Town Manager  
Interim Town Administrator  
Accountant

**RFPs/RFPs/Contracts**

**TOWN NEWSLETTER**

[SUBMIT ARTICLE](#)

[January 2010 Issue](#)  
[March 2010 Issue](#)  
[April 2010 Issue](#)  
[May 2010 Issue](#)  
[June 2010 Issue](#)  
[July 2010 Issue](#)  
[August 2010 Issue](#)  
[September 2010 Issue](#)  
[October 2010 Issue](#)  
[November 2010 Issue](#)

**CONTACT INFO**

Town Staff  
Services in Town  
TTY Access Arizona Relay - 800-367-8939

**VOLUNTEERING**

[Volunteer Application](#)  
[Neighbor Helping Neighbor Volunteer Application](#)  
[Town Council, Commission and Committee Vacancy Application Form](#)

**OTHER AGENCIES**

- Elections Department
- Environmental Services
- Federal State and Local Environmental Resources

### What's Going On

- Hazard Mitigation Plan
- Town of Dewey-Humboldt FY2010-2011 Budget
- Open Space and Trails
- Finance
- User Fee Study




- Flood Control
- Central Yavapai Fire District Notice
- Yavapai County Sheriff's Office- Emergency Notification System

**MISCELLANEOUS**

- Water Budget Tool
- ADWR-Water Awareness Month (WAM)
- Xeriscape: Landscaping with Style

**SUPERFUND INFORMATION**

- EPA Update
- Solar Market Analysis Overview
- Repower Contaminated Land Fact Sheet
- Iron King Photo Log
- IKHS Renewable Energy Reuse Assessment June 2010
- FAQs June 2010
- April 27 2010 Community Meeting Presentation
- April 2010 Factsheet - Remediation Investigation
- Site Features Map for April 2010 Factsheet
- Iron King Mine and Humboldt Smelter Site website
- EPA Update

**NEED A RIDE?**

- Are you a resident of Dewey-Humboldt and without a means of transportation?
- Are you low-income, or have a disability?
- Apply for the Taxi Voucher Program. For more info call NACOG at (928) 778-1422



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Web Site by 3Tomboys Productions Admin


Dewey-Humboldt  
Arizona's Country Town

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Search the Site



## Hazard Mitigation Plan

**The Town of Dewey-Humboldt Begins Work on Hazard Mitigation Plan**

A planning team comprised of representatives from Camp Verde, Clarkdale, Chino Valley, Cottonwood, Dewey-Humboldt, Jerome, Prescott, Prescott Valley, Yavapai-Apache Nation, and Yavapai County will be meeting regularly to participate in a hazard mitigation planning process. The team will develop a Multi-Jurisdictional Hazard Mitigation Plan for Yavapai County, according to The Disaster Mitigation Act of 2000 (DMA2K).

The DMA2K requires all local, county, tribal and state governments to have a FEMA approved hazard mitigation plan in order to be eligible for federal hazard mitigation funds. The plan will focus on the area's most threatening hazards to citizens and property and will provide a strategy to reduce or eliminate the risk from those hazards.

The planning team anticipates having a plan draft in early 2011, at which time the public will be provided the opportunity to review the plan and comment.

For more information regarding the hazard mitigation planning process/plan, please contact Joel Berman at Town Hall (2735 South Highway 69) or [joelberman@dhaz.gov](mailto:joelberman@dhaz.gov) or <http://www.regionalinfo-alert.org/>.

New on the Web Site

**SIGN UP FOR EMAIL NEWS**

Receive notices of Town Council meetings and other related Town news.  
**Sign Up Today!**



Receive community safety alerts instantly by text message and email. Registration is quick, easy and secure. Sign up now!

**TOWN MEETING VIDEOS**

Our Town Council and Planning and Zoning Meetings are available to view on our web site.

**Watch Video of recent Town meetings!**

**Community Issues Reporting**

Popular Pages

- Photos
- About Dewey-Humboldt
- Contact
- Town History
- Town Council Meeting Documents 2009-2010

Helpful Information

**JOB OPPORTUNITIES**  
Town Manager  
Interim Town Administrator  
Accountant

**RFPs/RFQs/Contracts**

**TOWN NEWSLETTER**  
SUBMIT ARTICLE  
January 2010 Issue  
March 2010 Issue  
April 2010 Issue  
May 2010 Issue  
June 2010 Issue  
July 2010 Issue  
August 2010 Issue  
September 2010 Issue  
October 2010 Issue  
November 2010 Issue

**CONTACT INFO**  
Town Staff  
Services in Town  
TTY Access Arizona Relay - 800-367-8939

**VOLUNTEERING**  
Volunteer Application  
Neighbor Helping Neighbor  
Volunteer Application  
Town Council, Commission and Committee Vacancy Application Form

**OTHER AGENCIES**  
- Elections Department  
- Environmental Services  
- Federal State and Local Environmental Resources

What's Going On

- Hazard Mitigation Plan
- Town of Dewey-Humboldt FY2010-2011 Budget
- Open Space and Trails
- Finance
- User Fee Study




- Flood Control
- Central Yavapai Fire District Notice
- Yavapai County Sheriff's Office- Emergency Notification System

**MISCELLANEOUS**

- Water Budget Tool
- ADWR-Water Awareness Month (WAM)
- Xeriscape: Landscaping with Style

**SUPERFUND INFORMATION**

- EPA Update
- Solar Market Analysis Overview
- Repower Contaminated Land Fact Sheet
- Iron King Photo Log
- IKHS Renewable Energy Reuse Assessment June 2010
- FAQs June 2010
- April 27 2010 Community Meeting Presentation
- April 2010 Factsheet - Remediation Investigation
- Site Features Map for April 2010 Factsheet
- Iron King Mine and Humboldt Smelter Site website
- EPA Update

**NEED A RIDE?**

- Are you a resident of Dewey-Humboldt and without a means of transportation?
- Are you low-income, or have a disability?
- Apply for the Taxi Voucher Program. For more info call NACOG at (928) 778-1422



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Web Site by 3Tomboys Productions Admin

## 2 The Dewey-Humboldt Newsletter

### THE TOWN OF DEWEY-HUMBOLDT BEGINS WORK ON HAZARD MITIGATION PLAN

By Joel Berman

A planning team comprised of representatives from Camp Verde, Clarkdale, Chino Valley, Cottonwood, Dewey-Humboldt, Jerome, Prescott, Prescott Valley, Yavapai-Apache Nation and Yavapai County will be meeting regularly to participate in a hazard mitigation planning process. The team will develop a Multi-Jurisdictional Hazard Mitigation Plan for Yavapai County according to The Disaster Mitigation Act of 2000 (DMA2K).

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The planning team anticipates having a plan draft in early 2011 at which time the public will be provided the opportunity to review the plan and comment. For more information regarding the hazard mitigation planning process/plan, please contact Joel Berman at joelberman@dhaz.gov.



### MEXICAN FIESTA LUNCHEON RESULTS FOR ST. JUDE

By Margaret Davis

The benefit luncheon was a great success. We raised \$700 for St. Jude Children's Research Hospital. I would like to

### OPEN SPACE AND TRAILS (OSAT) COMMITTEE

By Dennis Price

The Town needs volunteers to participate as Executive Members and Associate Members of the new OSAT Standing Committee. The OSAT Standing Committee will work on implementing the OSAT Master Plan which was recently approved by the Town Council. The OSAT Master Plan serves as the basis for the physical creation of trails, trail heads, and other recreational opportunities within the Town. Copies of the OSAT Master Plan are available at the Dewey-Humboldt Library and online at the Town website, [www.dhaz.gov](http://www.dhaz.gov).

The scheduled meetings of the standing committee will be subject to Arizona Open Meeting Law and will be conducted under Robert's Rules of Order. The committee will be responsible to report to the Town Council on a regular basis. Only Executive Members will have the ability to vote on matters before the Committee, however, Associate Members may participate in discussions and with the preparation of the meeting agendas.

To be eligible as an Executive Member you must be a resident of Dewey-Humboldt and willing to serve a term of two years. The terms of Associate Members will be indefinite and they may reside anywhere.

If you have an interest in participating but also have questions, you can call the Community Development Director, Dennis Price at 928-632-7362. To be considered, you will need to submit a completed volunteer form to Town Hall. Volunteer forms are available online at the Town's website, [www.dhaz.gov](http://www.dhaz.gov), or at Town Hall. The final selection and appointment for these positions will be made by the Town Council

### WHO ARE THE ARIZONA RANGERS?



The Arizona Rangers were organized in 1901 to protect the Arizona Territory from outlaws and rustlers so that the Territory could apply for Statehood.

The Arizona Rangers are an unpaid, all volunteer, law enforcement support and assistance civilian auxiliary in this State who work cooperatively at the request of and under the direction, control, and supervision of established law enforcement officials and officers.

They also provide youth support and community service and work to preserve the tradition, honor, and history of the 1901-1909 Arizona Rangers.

If you are interested in joining the Arizona Rangers, send us an e-mail at:

[Recruitment@azrangers.us](mailto:Recruitment@azrangers.us)

### NEED A RIDE?



Are you a Dewey-Humboldt resident, who is disabled or low income?

Call NACOG at (928) 778-1422

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History

Schools

Weather

Natural Environment

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Vision Statement

Things to do!

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**What's New**

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Citizen's Guide

About PV

E-mail Print

## What's New

### Prescott Valley Begins Work on Hazard Mitigation Plan

**Posted Date:** 12/13/2010

A planning team comprised of representatives from the Town of Prescott Valley will be meeting regularly to participate in a hazard mitigation planning process. The team will develop a Multi-Jurisdictional Hazard Mitigation Plan for Yavapai County, according to The Disaster Mitigation Act of 2000 (DMA2K).

The DMA2K requires all local, county, tribal and state governments to have a FEMA approved hazard mitigation plan in order to be eligible for federal hazard mitigation funds. The plan will focus on the area's most threatening hazards to citizens and property and will provide a strategy to reduce or eliminate the risk from those hazards.

The planning team anticipates having a plan draft in early 2011, at which time the public will be provided the opportunity to review the plan and comment.

For more information regarding the hazard mitigation planning process/plan, please contact the Yavapai County Regional Alert Information website at [www.regionalinfo-alert.org](http://www.regionalinfo-alert.org) and click on "Notice to Public".

## CITY OF PRESCOTT, ARIZONA

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### Fire



### Fire Danger

#### Moderate

Burning is Allowed

- [Fire Danger Key](#)
- [Fire Restrictions](#)
- [NWS Fire Outlook](#)
- [Burn Permit Information](#)

### Information Downloads

- [PFD Strategic Plan 2006-2011](#) (pdf, 484.3 kb)  
Prescott Fire Department Strategic Plan 2006-2011
- [PFD 2009-2010 Annual Report](#) (pdf, 1987.2 kb)
- [PFD 2008-2009 Annual Report](#) (pdf, 3463.0 kb)
- [PFD 2007-2008 Annual Report](#) (pdf, 4404.5 kb)
- [PFD 2006 Annual Report](#) (pdf, 4702.2 kb)

### City of Prescott Begins work on updating the Hazardous Mitigation Plan

A planning team comprised of representatives from the City of Prescott will be meeting regularly to participate in a hazard mitigation planning process. The team will develop a Multi-Jurisdictional Hazard Mitigation Plan for Yavapai County, according to The Disaster Mitigation Act of 2000 (DMA2K).

The DMA2K requires all local, county, tribal and state governments to have a FEMA approved hazard mitigation plan in order to be eligible for federal hazard mitigation funds. The plan will focus on the area's most threatening hazards to citizens and property and will provide a strategy to reduce or eliminate the risk from those hazards.

The planning team anticipates having a plan draft in early 2011, at which time the public will be provided the opportunity to review the plan and comment.

For more information regarding the hazard mitigation planning process/plan, please contact Darrell Willis, Division Chief, Prescott Fire Department at 777-1701 or [via email](#)

### Prescott Fire Department Administration

1700 Iron Springs Rd  
Prescott, AZ 86305  
928-777-1700  
TDD 928-778-5680

**Sedona.Biz News Release**

# **City of Sedona Begins Work on Hazard Mitigation Plan**

**Sedona AZ (December 7, 2010)**

A planning team comprised of representatives from the Cities, Towns, and Tribes of Yavapai County will be meeting regularly to participate in a hazard mitigation planning process. The team will develop a Multi-Jurisdictional Hazard Mitigation Plan for Yavapai County, according to The Disaster Mitigation Act of 2000 (DMA2K).



The DMA2K requires all local, county, tribal and state governments to have a FEMA approved hazard mitigation plan in order to be eligible for federal hazard mitigation funds. The plan will focus on the area's most threatening hazards to citizens and property and will provide a strategy to reduce or eliminate the risk from those hazards.

The planning team anticipates having a plan draft in early to mid 2011, at which time the public will be provided the opportunity to review the plan and comment.

For more information regarding the hazard mitigation planning process/plan, please contact David Peck with the City of Sedona Public Works Department at 102 Roadrunner Drive, Sedona, AZ 86336, or email: [dpeck@sedonaaz.gov](mailto:dpeck@sedonaaz.gov)

# Hazard plan in works at city

By Patrick Whitehurst  
LARSON NEWSPAPERS

A team of representatives from Sedona and other nearby communities are in the process of developing a Multi-Jurisdictional Hazard Mitigation Plan for Yavapai County.

The team will meet regularly to discuss a process for the plan, which is required by the Disaster Mitigation Act of 2000. Under the act, all local, county, tribal and state governments are required to have a plan, approved by the Federal Emergency Management Agency, to be eligible for federal hazard mitigation funds. While the team is comprised of a number of communities, each plan will be tailored to fit them individually as well.

Scott Ogden, with a geology and geomorphology company, said Yavapai County and many communities therein are included in the planning process.

"The plan itself is a multi-jurisdictional mitigation plan that involves basically all of the incorporated communities and two Indian tribes within the geographic confines of Yavapai County, so Yavapai County establishes the multi-jurisdictional boundary of the plan if you will," Ogden said.

As a mitigation plan, Ogden said it focuses on the idea of identifying certain hazards within a specific location.

*Please see HAZARD, 13A*

## HAZARD: Projects will be identified to combat disaster

From Page 1A

"Mostly natural hazards within the county, and then identifying certain strategies to hopefully reduce risks of those hazards when they occur," Ogden said.

The Arizona Division of Emergency Management hired the company, based in Tempe, to assist the county and area communities in preparing the plan. Ogden has been involved in hazard mitigation plans for approximately 10 years. His company helped the city of Sedona develop its original hazard mitigation plan.

"My role is basically to facilitate and assist and walk the communities through this process, so they can get the plans updated and be approved back in Phoenix," Ogden said.

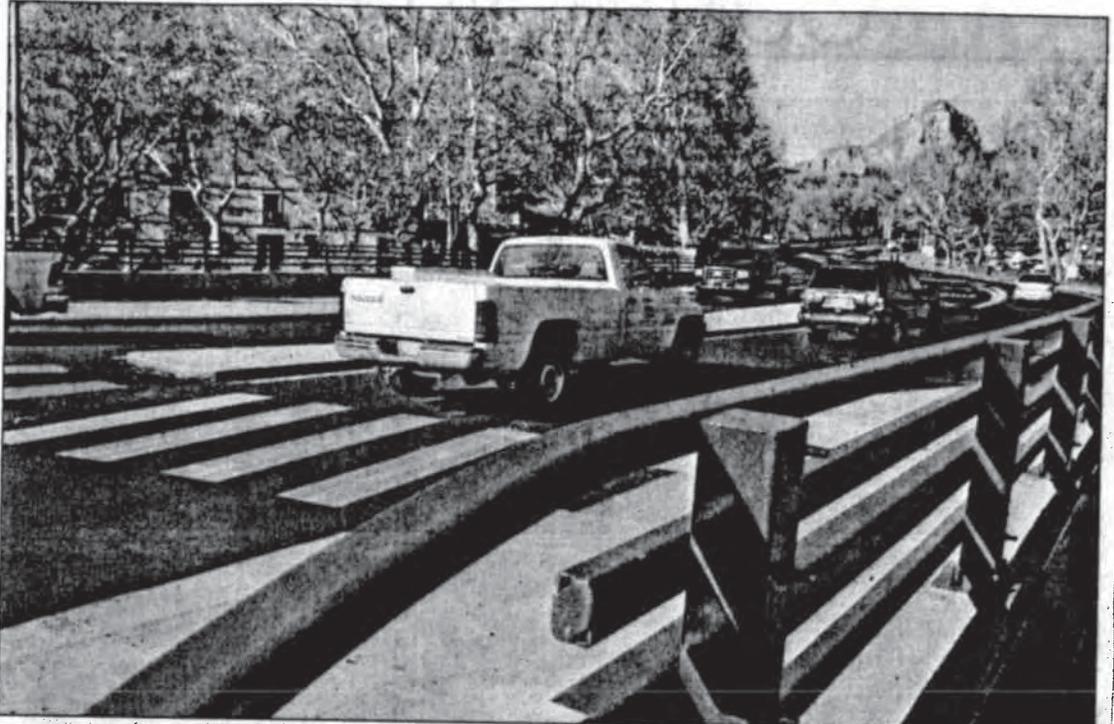
David Peck, with the city of Sedona Public Works Department, said the plan's purpose is to look at natural hazards, such as flooding and flash flooding, in the vicinity of Sedona.

"Flooding would be like Oak Creek in the wintertime, and then flash flooding would be like West Sedona or other areas with dry washes that flood in the monsoons," Peck said.

Severe wind, wildfires, winter storms, earthquakes, landslides and mudslides would also fall under the category of natural hazards, he said, adding landslides and mudslides are not typically considered a big issue unless there are extenuating circumstances, such as the slides resulting from the recent fire in Flagstaff.

"Once the fire burns all of the vegetation, then you have the mudslides, landslides," Peck said. "We have that natural hazards list, but we also evaluate in regards to community risk, so we are going to look at critical assets."

Those assets, he said, would include critical facilities and



Tom Hood/Larson Newspapers

**DEVELOPING A MULTI-JURISDICTIONAL** Hazard Mitigation Plan would include identifying critical facilities and infrastructure in Sedona including the importance of transportation networks such as the bridge across Oak Creek near Tlaquepaque.

infrastructure, such as communications, electrical power systems, gas facilities, water, government and emergency services, banking and finance institutions, and transportation networks.

"The main thing with transportation networks would be the bridge across Oak Creek," he said. "We [also] have three major lift stations for wastewater, so those would be critical facilities."

What we do is we have the natural hazards, we have the critical facilities and we'll be looking at trying to come up with actions and projects that will reduce the risk to those. If we have a wildfire that could pose a major threat to, like, an [Arizona Public Service] power station, a project might be to reduce that risk of fire

in that area."

Part of the team's goals is to come up with a list of recommended projects and proposed actions. Some of the projects and actions, he said, could become available for federal funding.

"We're meeting once a month at Yavapai County facilities. There will be people from all the different communities in Yavapai County," Peck said. "If we do get grant funding, then FEMA covers 75 percent and then the city of Sedona would cover the other 25 percent."

If Sedona did not participate in the plan, Peck said it would not be eligible for federal monies in non-disaster situations.

"It's mandated as eligibility for certain non-disaster mitigation grant programs," Peck said. "If

our community did not participate in the plan, we wouldn't be eligible for non-disaster grant programs. Of course, if there was a declared emergency there would still be money available. More importantly, as far as why it's important, is mitigation in regards to hazards is just good planning."

The plan is termed a living document, because it is updated every five years by city and county officials per FEMA requirements.

A draft plan is expected to be completed by the middle of 2011. Following the completion of the draft plan, a public process will be held for review and comment. Contact Peck via e-mail at [dpeck@sedonaaz.gov](mailto:dpeck@sedonaaz.gov) for more information.



**News & Updates**

**City of Sedona Begins Work on Hazard Mitigation Plan**

**Community Plan Update 2012**

**City Seeking Feedback from Citizens**

**Traffic Signal Project at SR 89A and Airport Road Nears Completion**

**State Route 89A Lane Restrictions in Uptown Sedona on December 12**

**Three Members Appointed To Historic Preservation Commission**

**City Accepting Proposals for Parks and Recreation Master Plan**

**Meetings & Events**

Dec 7

**Transit Task Force Meeting**

**City Council Budget Retreat**

Dec 9

**Citizens Steering Committee for Community Plan Update**

Dec 10

**GAMA (Greater AZ Mayor's Association)**

## News and Updates

### City of Sedona Begins Work on Hazard Mitigation Plan

**Posted** 12/6/2010 12:00 PM

**Date:**

A planning team comprised of representatives from the Cities, Towns, and Tribes of Yavapai County will be meeting regularly to participate in a hazard mitigation planning process. The team will develop a Multi-Jurisdictional Hazard Mitigation Plan for Yavapai County, according to The Disaster Mitigation Act of 2000 (DMA2K).

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For more information regarding the hazard mitigation planning process/plan, please contact David Peck with the City of Sedona Public Works Department at 102 Roadrunner Drive, Sedona, AZ 86336, or email: [dpeck@sedonaaz.gov](mailto:dpeck@sedonaaz.gov)

For information related to Yavapai County Emergency Management, please visit the following website: <http://www.regionalinfo-alert.org>



★ Agencies Providing Information      ★ Related Links      12/9/2010 10:22 AM

When there is vital, urgent or emergency public information in the Prescott, AZ, Metro Area and the rest of Yavapai County, you will find it on this website. Local government agencies will post alerts as quickly as possible on such events as wildfires, evacuations, prescribed burns, police emergencies, weather- induced road closures, water or gas main breaks and other notices of key importance to the public.



## ACTIVE ALERTS AND EVENTS



### Transportation [more](#)

NOV 23, 2010 4:49 PM      MOUNTAIN CLUB DR CLOSING 11/29/10



### Prescribed Burns [more](#)

DEC 1, 2010 9:13 AM      350 ACRE PRESCRIBED BURN PLANNED IN CORDES JUNCTION AREA  
MAY 7, 2009 11:15 AM      PRESCRIBED BURNS - FREQUENTLY ASKED QUESTIONS



### News [more](#)

NOV 23, 2010 3:13 PM      NOTICE TO PUBLIC  
MAY 27, 2010 7:43 AM      DOES YOUR SMOKE ALARM NEED TO BE REPLACED?

## Are You Prepared?

Swine Flu Preparedness [CDC Swine Flu Website](#) [Swine flu preparedness](#)  
Visit the CDC or Pandemic website for Swine Flu updates. 4/28/2009 4:20:00 PM

Basic Evacuation Procedures [Evacuation Procedures Brochure](#)  
Click on this link for basic evacuation procedures and information. 5/7/2009 4:15:00 PM

Yavapai County Special Needs Program [Special Needs Form](#)  
The purpose of the information requested in this form is to assist Emergency Response agencies in locating, providing warning to and if possible, evacuating PERSONS WITH SPECIAL NEEDS in case of emergency. 5/7/2009 4:10:00 PM

Community Emergency Response Team [CERT Brochure](#)  
CERT training promotes a partnering effort between emergency services and the people that they serve. If a disastrous event overwhelms or delays the community's professional response, CERT members can assist others by applying the basic response and organizational skills that they learned during training. These skills can help save and sustain lives following a disaster until help arrives. CERT skills also apply to daily emergencies. 5/7/2009 4:15:00 PM

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Email Emergency Management

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12/9/2010 10:23 AM

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## NEWS

▶ November 23, 2010 3:13 PM **NOTICE TO PUBLIC**

In 2005-2006, Yavapai County and the cities and towns completed a year-long, multi-hazard mitigation planning effort that resulted in multi-hazard mitigation plans (2006 Plans) for each jurisdiction. The 2006 Plans were prepared in compliance with federal regulations set forth by the Disaster Mitigation Act of 2000 (DMA2K), which requires local, county, tribal and state governments to develop a multi-hazard mitigation plan for their respective jurisdiction in order to be eligible to receive certain hazard mitigation and public assistance funds. The Yavapai County MHMP is set to expire in September 2011.

Yavapai County, the incorporated communities within the county, and the Yavapai-Apache and Yavapai Prescott Nations have organized a planning team and have begun an effort to review, update and consolidate the 2006 Plans into a single, multi-jurisdictional hazard mitigation plan.

The goal of this mitigation planning effort is to reduce or eliminate long-term risk to life and property from natural hazard events. Mitigation is not how we respond to natural disasters like floods and wildfires, but rather how, we as a community, can lessen or prevent the impact of such things in the first place. The mitigation planning process involves identifying and profiling the natural hazards most likely to occur in a community, assessing vulnerability to these hazards, and establishing goals, actions, and projects that mitigate the associated risks. The development of this mitigation plan will also ensure continued eligibility on the part of the county and communities for non-emergency, federal hazard mitigation grants.

As citizens, associations and communities in Yavapai County, you are invited to provide input on this plan and are encouraged to offer comments on the update. The planning team anticipates having a plan draft in early 2011, at which time the public will be provided the opportunity to review the plan and comment.

If you are interested, please contact the following:

YAVAPAI COUNTY EMERGENCY MANAGEMENT

PHONE 928-771-3321 FAX 928-771-3323

OR EMAIL:

[web.EM@co.yavapai.az.us](mailto:web.EM@co.yavapai.az.us)

[Go To Top](#)

▶ May 27, 2010 7:43 AM **DOES YOUR SMOKE ALARM NEED TO BE REPLACED?**

It's a FACT: All hardwired or battery-operated smoke alarms, installed before May 2000, should be replaced now!

A smoke alarm's lifespan is 10 years, which means any smoke alarm installed before May 2000 is too old and needs to be replaced. The smoke alarm is no longer reliable. Part of smoke alarm maintenance includes knowing when to replace the unit. The few minutes it takes to replace a smoke alarm can save the lives of roommates, family members, neighbors and firefighters. For more information go to: [www.usfa.dhs.gov/campaigns/smokealarms/](http://www.usfa.dhs.gov/campaigns/smokealarms/)

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## Welcome to Camp Verde, Arizona

A quiet, safe place to raise your children, with a small town atmosphere, a friendly relaxed, no-pressure way of life where practically everyone knows each other. Additionally, we have wide-open spaces, the Verde river, a mild 4-season climate and panoramic views from the vistas above our valley.

## Quick Links

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- [P&Z Commission Agenda](#)
- [Board of Adjust./Appeals Agenda](#)
- [Meeting Posting Locations](#)
- [Town Code, General Plan, etc.](#)
- [Voter Information](#)
- [Department Contact Information](#)
- [Flood Information](#)
- [Fees for Town Services](#)

## News & Announcements

### Notice to All Property Owners

This is a notice from the Yavapai County Assessor's Office to all property owners in Yavapai County regarding the coming changes dealing with property assessment and taxation. Please click here to view the complete notice.

[More Info](#)



### DRAFT – 2011 Yavapai County Multi-jurisdictional Hazard Mitigation Plan

A planning team comprised of representatives from Yavapai County, the Cities of Cottonwood, Prescott, and Sedona, and the Towns of Camp Verde, Chino Valley, Clarkdale, Jerome, and Prescott Valley has been meeting regularly to participate in a hazard mitigation planning process. The purpose of this process is to develop a multi-hazard mitigation plan for the...

[Read more...](#)

## Events

Showing events after 8/3.

[Look for earlier events](#)

**Saturday, August 6**

Pink Heals Tour - 2011 Kick off t

**Monday, September 5**

Labor Day

**Sunday, September 11**

Patriot Day

Showing events until 9/30.

[Look for more](#)



## 21 Jul

### Proposed 2011-12 Fee Schedule

On September 21, 2011 the Camp Verde Town Council will discuss, and possibly approve the 2011-12 Fee Schedule for Town Services. To view the complete proposed Fee Schedule, Click Here



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## DRAFT – 2011 Yavapai County Multi-jurisdictional Hazard Mitigation Plan

[Home](#) » [DRAFT - 2011 Yavapai County Multi-jurisdictional Hazard Mitigation Plan](#)

**02 Aug**

News

A planning team comprised of representatives from Yavapai County, the Cities of Cottonwood, Prescott, and Sedona, and the Towns of Camp Verde, Chino Valley, Clarkdale, Jerome, and Prescott Valley has been meeting regularly to participate in a hazard mitigation planning process. The purpose of this process is to develop a multi-hazard mitigation plan for the Town of Camp Verde according to The Disaster Mitigation Act of 2000 (DMA2K). The DMA2K requires all local, county, tribal and state governments to have a FEMA approved hazard mitigation plan in order to be eligible for certain federal disaster mitigation funds. This plan focuses on the area's most threatening hazards and provides a strategy to reduce or eliminate the risk from those hazards to the people and property of the Town of Camp Verde. The first draft of the Town of Camp Verde Hazard Mitigation Plan has been completed and is ready for public viewing and comment. The Plan may be viewed by [clicking here](#) or, at the Public Works Department, 395 S. Main Street, Camp Verde, AZ, Monday through Thursday from 7:00 a.m. until 6:00 p.m. until August 19, 2011. For more information please contact Public Works Director Ron Long at (928) 567-0534.

Comments are closed.

### Quick Links

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- [Town Council Agenda](#)
- [P&Z Commission Agenda](#)
- [Board of Adjust/Appeals Agenda](#)
- [Meeting Posting Locations](#)
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*Showing events until 9/30.*  
[Look for more](#)

#### Town Employees

- [Employee Email Login](#)
- [Web CMS Login](#)

#### Stay Connected

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#### Camp Verde's RSS feed

- [DRAFT - 2011 Yavapai County Multi-jurisdictional Hazard Mitigation Plan](#)
- [Proposed 2011-12 Fee Schedule](#)
- [2011-2012 TENTATIVE BUDGET](#)

#### Camp Verde Arizona

473 South Main Street, Suite 102  
 Camp Verde, Arizona 86322

Phone: (928) 567 - 6631  
 Email: [webmaster@campverde.az.gov](mailto:webmaster@campverde.az.gov)  
<http://www.campverde.az.gov>

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# City of Sedona Continues Work on Hazard Mitigation Plan

By [Publisher](#)

Thursday, August 18th, 2011

## Plan Required to Receive Federal Dollars



**Sedona, AZ** (August 18, 2011) - planning team comprised of representatives from the Cities, Towns, and Tribes of Yavapai County has been meeting regularly to participate in a hazard mitigation planning process. The purpose of this process is to develop an updated Multi-Hazard Mitigation Plan for the City of Sedona, according to The Disaster Mitigation Act of 2000 (DMA2K).

The DMA2K requires all local, county, tribal and state governments to have a FEMA approved Hazard Mitigation Plan in order to be eligible for certain federal disaster mitigation funds. The Plan focuses on the area's most threatening hazards and provides a strategy to reduce or eliminate the risk from those hazards to the citizens and property of the City of Sedona.

The first draft of the City of Sedona Hazard Mitigation Plan has been completed and is ready for public viewing and comment. The Plan may be viewed at: <ftp://ftp.sedonaaz.gov/Public Works/>

until the final viewing/comment date of September 9, 2011.

For more information regarding the hazard mitigation planning process/plan, please contact David Peck with the City of Sedona Public Works Department at 102 Roadrunner Drive, Sedona, AZ 86336, or email: [dpeck@sedonaaz.gov](mailto:dpeck@sedonaaz.gov).

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# Plan pinpoints city's hazards

By Patrick Whitehurst  
Lansan Newspaper

as Midley Bridge.

"We're looking at the urban-wildland interface. We also routinely to prepare for flash flooding by keeping sandbags available to the general public. We are also doing the Harmony-Windsong drainage project to address flooding and flash flooding, which has existed in the area for a while. That's an ongoing project that we're looking at this year in various phases," Mosley said.

City staff continues to enforce flood plain management practices as well, part of the National Flood Plain Insurance program, Mosley said.

"Those are some of the things we are doing with regards to mitigating hazards within the city," Mosley said.

According to Mosley, the areas considered for hazard risk profiles include fire, flash floods, floods, severe wind, wildfires and winter storms.

"We're focusing in two of those areas, wildfire and flash flood profile areas," Mosley said.

The Hazard Mitigation Plan is termed a living document, as it is updated every five years by city and county officials per FEMA requirements. Hazards in specific areas will be identified as part of the plan in an effort to reduce those risks.

The Arizona Division of Emergency Management hired J.E. Fuller, based in Tempe, to assist the county and area communities in preparing the plan. The firm helped the city of Sedona develop an original Hazard Mitigation Plan.

Contact Peck at [dpeck@sedonaaz.gov](mailto:dpeck@sedonaaz.gov) for more information on the plan.

The first draft of the city of Sedona's Hazard Mitigation plan is now available online for public viewing.

The plan, termed a multi-jurisdictional mitigation plan, involves all of the incorporated communities and two American Indian tribes within the geographic confines of Yavapai County.

The mitigation plan, which focuses on the idea of identifying certain hazards within a specific location, can now be viewed on the city's website.

David Peck, with the city of Sedona Public Works Department, said the public is invited to review the 200-plus-page document.

"The next step, once the draft is approved, is to finalize it. When they did a five years ago, each community had their own plan, but now each county has a plan and, within that county plan, the communities within the county are broken into separate sections within the plan," Peck said.

A team of representatives from Sedona and other nearby communities met regularly in 2010 to discuss a process for the plan, which is required by the Disaster Mitigation Act of 2000. Under the act, all local, county, tribal and state governments are required to have a plan, approved by the Federal Emergency Management Agency, to be eligible for federal hazard mitigation funds. While the team is comprised of a number of towns and cities, each plan will be tailored to fit individual communities as well.

Sedona City Engineer Charles Mosley said city staff has identified a number of areas related to hazard mitigation, including community access points, such



"We're looking at the urban-wildland interface."

Charles Mosley  
Sedona City Engineer



MIDLEY BRIDGE is the only access point for emergency personnel from Sedona to access Oak Creek Canyon in the event of a landslide, flood or other disaster. The Disaster Mitigation Act of 2000 requires all local, county, tribal and state governments to have a Federal Emergency Management Agency-approved Hazard Mitigation Plan to be eligible for certain federal disaster mitigation funds.

## Plan pinpoints city's hazards

Seum prepares for annual sale - 3A

Wednesday August 24, 2011

75¢

Supervising

Patrick Whitehurst can be reached at 252-7795, ext. 125, or email [pwhitehurst@lansan.com](mailto:pwhitehurst@lansan.com)

**W. Scott Ogden**

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**From:** Ryan Gildehaus [rgildehaus@cottonwoodaz.gov]  
**Sent:** Monday, August 15, 2011 11:48 AM  
**To:** 'W. Scott Ogden'  
**Subject:** RE: Yavapai County Multi-Juris Haz Mit Plan - DRAFT Completed

Scott,

I attached the comment notice to three of our local news papers and posted the notice in City offices as well.

I hope that this meets the requirements. Do I need to give you another contact person regarding this plan. I am retiring in Septemeber.

Sgt. Ryan Gildehaus, 554

Cottonwood Police Department

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**From:** W. Scott Ogden [mailto:scott@jefuller.com]  
**Sent:** Tuesday, August 02, 2011 11:06 AM  
**To:** Nick Angiolillo; Kathy Bainbridge; Rusty Blair; Charlie Cave; Mark Garcia; Ryan Gildehaus; Valerie House; William Loesche; David Peck; Larry Prentice; Boyd Robertson; John Sterling; Amber Tyson; Lynn Whitman; Darrell Willis  
**Cc:** 'Susan Wood'  
**Subject:** RE: Yavapai County Multi-Juris Haz Mit Plan - DRAFT Completed

Hello Again,

Sue at ADEM reminded me that now is the time to also get the second round of public involvement out as well. Per our discussions, the second of the two-part public involvement process requires that:

“...the public must have **opportunity to comment** on the plan at least once during development and **once after draft is completed prior to final adoption.**”

The Planning Team chose to accomplish this by sending out a second round of press releases and/or updating the current website notices/postings. A template announcement is attached hereto for your use. Please forward any comments requiring attention to me ASAP.

***ALSO – I AM EXTENDING THE DATE FOR COMMENTS TO COB AUGUST 19, 2011 SINCE SEVERAL TEAM MEMBERS ARE ON VACATION AND MAY NEED A COUPLE OF EXTRA DAYS TO REVIEW THE PLAN.***

Thanks,  
Scott

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**From:** W. Scott Ogden [mailto:scott@jefuller.com]  
**Sent:** Tuesday, August 02, 2011 10:06 AM  
**To:** Nick Angiolillo; Kathy Bainbridge ([kathy.bainbridge@clarkdale.az.gov](mailto:kathy.bainbridge@clarkdale.az.gov)); Rusty Blair ([blair@jeromefire.us](mailto:blair@jeromefire.us)); Charlie Cave ([charlie.cave@co.yavapai.az.us](mailto:charlie.cave@co.yavapai.az.us)); Mark Garcia ([mgarcia@chinoaz.net](mailto:mgarcia@chinoaz.net)); Ryan Gildehaus ([rgildehaus@ci.cottonwood.az.us](mailto:rgildehaus@ci.cottonwood.az.us)); Valerie House ([valerie.house@campverde.az.gov](mailto:valerie.house@campverde.az.gov)); William Loesche ([wloesche@sedonafire.org](mailto:wloesche@sedonafire.org)); David Peck ([dpeck@sedonaaz.gov](mailto:dpeck@sedonaaz.gov)); Larry Prentice ([lprentice@pvaz.net](mailto:lprentice@pvaz.net)); Boyd Robertson ([brobertson@pvaz.net](mailto:b Robertson@pvaz.net)); John Sterling ([jsterling@ypit.com](mailto:jsterling@ypit.com)); Amber Tyson ([atyson@ypit.com](mailto:atyson@ypit.com)); Lynn Whitman ([lynn.whitman@co.yavapai.az.us](mailto:lynn.whitman@co.yavapai.az.us)); Darrell Willis ([darrell.willis@prescott-az.gov](mailto:darrell.willis@prescott-az.gov))  
**Cc:** 'Susan Wood'  
**Subject:** Yavapai County Multi-Juris Haz Mit Plan - DRAFT Completed

Greetings All,

**W. Scott Ogden**

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**From:** Ryan Gildehaus [rgildehaus@cottonwoodaz.gov]  
**Sent:** Monday, August 15, 2011 11:49 AM  
**To:** 'W. Scott Ogden'  
**Subject:** RE: Yavapai County Multi-Juris Haz Mit Plan - DRAFT Completed

Sorry I forgot to attach the file..... I copied and pasted

Ryan

**LOCAL PUBLIC INVOLVMENT (2<sup>nd</sup> release at draft stage)**

**Multi-Hazard Mitigation Plan**

A planning team comprised of representatives from the City of Cottonwood and Yavapai County has been meeting regularly to participate in a hazard mitigation planning process. The purpose of this process is to develop a multi-hazard mitigation plan for the City of Cottonwood according to The Disaster Mitigation Act of 2000 (DMA2K). The DMA2K requires all local, county, tribal and state governments to have a FEMA approved hazard mitigation plan in order to be eligible for certain federal disaster mitigation funds. This plan focuses on the area's most threatening hazards and provides a strategy to reduce or eliminate the risk from those hazards to the people and property of Cottonwood. The first draft of the City of Cottonwood Hazard Mitigation Plan has been completed and is ready for public viewing and comment. The Plan may be viewed at 111 North Main Street in Cottonwood from 0800 till 5PM Monday through Thursday. For more information please contact Sgt Ryan Gildehaus (928) 634-0186 or (928) 634-0242.

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**From:** W. Scott Ogden [mailto:scott@jefuller.com]  
**Sent:** Tuesday, August 02, 2011 11:06 AM  
**To:** Nick Angiolillo; Kathy Bainbridge; Rusty Blair; Charlie Cave; Mark Garcia; Ryan Gildehaus; Valerie House; William Loesche; David Peck; Larry Prentice; Boyd Robertson; John Sterling; Amber Tyson; Lynn Whitman; Darrell Willis  
**Cc:** 'Susan Wood'  
**Subject:** RE: Yavapai County Multi-Juris Haz Mit Plan - DRAFT Completed

Hello Again,

Sue at ADEM reminded me that now is the time to also get the second round of public involvement out as well. Per our discussions, the second of the two-part public involvement process requires that:

“...the public must have **opportunity to comment** on the plan at least once during development and **once after draft is completed prior to final adoption.**”

The Planning Team chose to accomplish this by sending out a second round of press releases and/or updating the current website notices/postings. A template announcement is attached hereto for your use. Please forward any comments requiring attention to me ASAP.

**ALSO – I AM EXTENDING THE DATE FOR COMMENTS TO COB AUGUST 19, 2011 SINCE SEVERAL TEAM MEMBERS ARE ON VACATION AND MAY NEED A COUPLE OF EXTRA DAYS TO REVIEW THE PLAN.**



**News & Updates**

**City of Sedona and Film Festival Team Up To Present Free Film on August 21**

**Things To Know About Holding Events In Sedona**

**Sedona Arts Center Exhibition At City Hall**

**Street Sweeping in Sedona Starting August 21**

**City of Sedona Continues Work on Hazard Mitigation Plan**

**Sewer Backflow Valve Installation Deadline December 31, 2011**

**City Seeks Members for the Personnel Board**

**Meetings & Events**

Aug 22

**Historic Preservation Commission Site Visit**

**Historic Preservation Commission**

**Parks & Recreation Commission**

Aug 24

**Sustainability Commission**

**Community Outreach of the Citizens Steering Committee**

## News and Updates

### City of Sedona Continues Work on Hazard Mitigation Plan

**Posted** 8/17/2011

**Date:**

A planning team comprised of representatives from the Cities, Towns, and Tribes of Yavapai County has been meeting regularly to participate in a hazard mitigation planning process. The purpose of this process is to develop an updated Multi-Hazard Mitigation Plan for the City of Sedona, according to The Disaster Mitigation Act of 2000 (DMA2K).

The DMA2K requires all local, county, tribal and state governments to have a FEMA approved Hazard Mitigation Plan in order to be eligible for certain federal disaster mitigation funds. The Plan focuses on the area's most threatening hazards and provides a strategy to reduce or eliminate the risk from those hazards to the citizens and property of the City of Sedona.

The first draft of the City of Sedona Hazard Mitigation Plan has been completed and is ready for public viewing and comment. The Plan may be viewed at:

[ftp://ftp.sedonaaz.gov/Public Works/](ftp://ftp.sedonaaz.gov/Public%20Works/) until the final viewing/comment date of September 9, 2011.

For more information regarding the hazard mitigation planning process/plan, please contact David Peck with the City of Sedona Public Works Department at 102 Roadrunner Drive, Sedona, AZ 86336, or email: [dpeck@sedonaaz.gov](mailto:dpeck@sedonaaz.gov).

## **Appendix D**

### **Detailed Historic Hazard Records**

| 2010 State Plan<br>Hazard Categories | Arizona Declared Events That<br>Included Apache County<br>January 1966 to August 2010 |                    |                |
|--------------------------------------|---|--------------------|----------------|
|                                      | No. of<br>Events  | Total Expenditures |                |
|                                      |   | State              | Federal        |
| Drought                              | 3   | \$ 211,499         | \$ -           |
| Dam Failure                          | 3   | \$ 349,451         | \$ -           |
| Earthquake                           | 0   | \$ -               | \$ -           |
| Extreme Heat                         | 0   | \$ -               | \$ -           |
| Fissure                              | 0   | \$ -               | \$ -           |
| Flooding / Flash Flooding            | 7   | \$ 38,352,317      | \$ 322,023,270 |
| Flood / Sever Wind                   | 0   | \$ -               | \$ -           |
| Landslide / Mudslide                 | 0   | \$ -               | \$ -           |
| Levee Failure                        | 0   | \$ -               | \$ -           |
| Severe Wind                          | 0   | \$ -               | \$ -           |
| Subsidence                           | 0   | \$ -               | \$ -           |
| Wildfire                             | 17  | \$ 5,719,192       | \$ -           |
| Winter Storm                         | 4   | \$ 2,418,419       | \$ 5,109,724   |

NOTES:

- Damage Costs are reported as is and no attempt has been made to adjust costs to current dollar values.
- Only a portion of the reported expenditures were spent in the subject county.
- Flood / Severe Wind - this category included for declarations that have both elements

Source: ADEM - Recovery Section, October 2010

**State and Federally Declared Events That Included Apache County  
January 1966 to August 2010**

| Hazard                    | No. of<br>Declarations | Recorded Losses |          |                   |
|---------------------------|------------------------|-----------------|----------|-------------------|
|                           |                        | Fatalities      | Injuries | Damage Costs (\$) |
| Drought                   | 7                      | 0               | 0        | \$300,000,000     |
| Dam Failure               | 3                      | 0               | 0        | \$0               |
| Earthquake                | 0                      | 0               | 0        | \$0               |
| Extreme Heat              | 0                      | 0               | 0        | \$0               |
| Fissure                   | 0                      | 0               | 0        | \$0               |
| Flooding / Flash Flooding | 6                      | 36              | 1087     | \$879,750,000     |
| Landslide / Mudslide      | 0                      | 0               | 0        | \$0               |
| Levee Failure             | 0                      | 0               | 0        | \$0               |
| Severe Wind               | 0                      | 0               | 0        | \$0               |
| Subsidence                | 0                      | 0               | 0        | \$0               |
| Wildfire                  | 17                     | 0               | 0        | \$0               |
| Winter Storm              | 5                      | 0               | 0        | \$14,900,000      |

Notes:

- Damage Costs are reported as is and no attempt has been made to adjust costs to current dollar values. Sources: ADEM, FEMA, USDA

| State of Arizona Declaration |             | State PCA No. |              | Federal Presidential Declaration |         |               | Counties Affected   |   | Description |
|------------------------------|-------------|---------------|--------------|----------------------------------|---------|---------------|---|---|-------------|
| Date                         | Hazard      |               | Expenditures | Date                             | ID      | Expenditures  |   |   |             |
| 5/8/1978                     | Dam Failure |               | \$397        |                                  |         |               | Apache, Navajo  | Assist in the inspection of earthen dams  |             |
| 9/29/1978                    | Dam Failure | 28762         | \$4,888      |                                  |         |               | Apache  | County Tasilc Dam   |             |
| 4/19/2004                    | Dam Failure | 24104         | \$344,165    |                                  |         |               | Apache  | River Reservoir Emergency   |             |
| 5/18/2002                    | Disease     |               |              |                                  |         |               | Statewide   | the Arizona Game and Fish Department placed an emergency ban on the importation of live hoofed animals (e.g., deer and elk) into Arizona due to a fear of Chronic Wasting Disease (CWD). CWD is a disease closely related to "mad cow disease" in cattle and scrapie in domestic sheep and goats but affects deer and elk.  |             |
| 7/21/1989                    | Drought     | 32710         |              |                                  |         |               | Coconino, Gila, Navajo, Apache, Graham and Indian Reservation within the Counties                             | USDA drought declaration for the listed counties  |             |
| 06/07/1996                   | Drought     | 96005         | \$211,499    |                                  |         |               | Statewide   |   |             |
| 6/23/1999                    | Drought     | 99006         |              |                                  |         |               | Statewide   | PCA 99006: Statewide Drought Emergency, Declared June 23, 1999: Lack of precipitation had significantly reduced surface and ground water supplies and stream flows. The drought continues to endanger crops, property and livestock of the citizens of Arizona. This proclamation has been extended to June 23, 2003, as this is still a threatening situation. USDA Programs offer Arizona Ranchers Drought Relief, (Phoenix) - Federal officials this week announced three programs designed to ease the impact of Arizona's drought on the state's ranching industry and the state's natural resources. Gov. Jane Dee Hull in June issued a drought declaration for the state, initiating a federal review process that culminated in the U.S. Department of Agriculture's determination in the U.S. Department of Agriculture could qualify for drought assistance. The following are brief descriptions of the three assistance packages for which Arizona ranchers may qualify: Those ranching operations that earlier this year reduced herd sizes in response to poor pasture conditions and lack of water due to the drought can receive capital gains tax deferral if those herds are replaced within two years, according to the Internal Revenue Service. It is recommended that businesses consult their tax specialist or the IRS for further details. For more information, contact Joe Lane, Associate Director of Animal Services Division, at (602) 542-3629. The USDA Natural Resource Conservation Service has received an initial \$6 million through its Emergency Watershed Program (EWP) to treat short- and long-term damage to rangeland and cropland due to drought. Ranchers and farmers can receive financial assistance to implement recovery measures that will retard runoff and reduce the threat of future flooding and erosion hazards. For more information, contact Mike Sommerville, State Conservationist, at (602) 280-8810. The USDA Farm Services Agency has emergency drought assistance loans available. For more information, contact George Arredondo, USDA/FSA State Executive Director, at (602) 640-5200. Arizona's dry winter and low snowpack mostly impacted the state's ranching industry due to poor pasture conditions. Summer rains have improved rangelands throughout Arizona. According to the US Arizona Agricultural Statistics Service, as of Aug. 15, range and pasture condition was reported as percent poor, 21 percent fair, 39 percent good, and 34 percent excellent. As much as 99 percent of Arizona crops are irrigated, generally mitigating short-term drought impacts. |             |
| 8/13/1999                    | Drought     |               |              | 08/13/99                         | USDA    |               | Apache, Cochise, Coconino, Gila, Graham, Greenlee, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai | GLICKMAN DECLARES PENNSYLVANIA, 13 ARIZONA COUNTIES AS DISASTER AREAS AND ANNOUNCES ADDITIONAL DROUGHT ASSISTANCE Release No. 0334.99, WASHINGTON, August 13, 1999 Agriculture Secretary Dan Glickman today declared all of Pennsylvania and 13 counties in Arizona as agricultural disaster areas due to drought. The declaration makes farmers in those areas and all contiguous counties eligible for emergency low-interest loans and other assistance to help cover losses from the drought. In Arizona, today's disaster declaration applies to Apache, Cochise, Coconino, Gila, Graham, Greenlee, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, and Yavapai Counties. Also eligible, because they are contiguous, are La Paz and Yuma Counties. Glickman has already declared all or part of Arizona, Connecticut, Maryland, New Jersey, New Mexico, New York, Ohio, Pennsylvania, Virginia, and West Virginia as disaster areas. Due to the close proximity to these states, certain counties in California, Delaware, Indiana, Kentucky, Massachusetts, Michigan, Nevada, Rhode Island, Vermont, and Utah also qualify for emergency loan assistance.   |             |
| 07/21/2000                   | Drought     |               |              | 07/21/00                         | USDA    |               | Apache, Cochise, Graham, Greenlee, Pima, Pinal, Santa Cruz, Gila, Maricopa, Navajo, Yuma                      | GLICKMAN DECLARES 7 ARIZONA COUNTIES AGRICULTURAL DISASTER AREAS: Washington, July 17, 2000 - Agriculture Secretary Dan Glickman today declared seven of Arizona's 15 counties as agricultural disaster areas due to drought, making farmers in those areas and 12 neighboring counties, including counties in Utah, New Mexico and Colorado, eligible for emergency low-interest loans. "Farmers and ranchers in Arizona are experiencing real difficulties this year due to drought," said Glickman. "USDA emergency low-interest loans are available to help producers to cover some of their losses. Glickman's disaster declaration covers 7 of Arizona's 15 counties: Apache, Cochise, Graham, Greenlee, Pima, Pinal, and Santa Cruz. Four other contiguous Arizona counties also are covered by the declaration (Gila, Maricopa, Navajo and Yuma) and therefore are eligible for the same benefits. Other contiguous counties in New Mexico are Catron, Cibola, Grant, Hidalgo, McKinley, and San Juan counties. San Juan County in Utah and Montezuma county in Colorado are included in the declaration as contiguous counties. This designation makes qualified family-sized farm operators in both primary and contiguous counties eligible for emergency low-interest loans from USDA. Farmers in eligible counties have eight months to apply for the loans. Each loan application is considered on its own merits, taking into account the extent of losses, security available, repayment ability, and other eligibility requirements. USDA previously approved emergency hay and grazing on Conservation Reserve Program acreage, providing assistance to approved producers whose pastures have been decimated by drought. For further information, farmers may contact their local Farm Service Agency offices or visit website: <a href="http://www.fsa.usda.gov/pas/disasterassistance1.htm">http://www.fsa.usda.gov/pas/disasterassistance1.htm</a> .  |             |
| 05/17/2002                   | Drought     |               |              | 05/17/02                         | USDA    |               | Statewide   | VENEMAN DESIGNATES ARIZONA AS DROUGHT DISASTER AREA, Governor Hall and Veneman Tour Fire Areas and Assess Damage in Prescott National Forest Areas: PHOENIX, Ariz., May 17, 2002-- Agriculture Secretary Ann M. Veneman today designated the entire state of Arizona as a drought disaster area. This designation makes Arizona farmers and ranchers immediately eligible for USDA emergency farm loans due to losses caused by drought this year.  |             |
| 07/11/2002                   | Drought     |               |              | 07/11/02                         | USDA    |               | Statewide   | VENEMAN ANNOUNCES EXPANSION OF CRP EMERGENCY HAYING AND GRAZING PROGRAM FOR WEATHER-STRICKEN STATES, WASHINGTON, July 11, 2002 - Agriculture Secretary Ann M. Veneman today approved 18 states for Conservation Reserve Program emergency haying and grazing statewide, making all CRP participants in these states basically eligible for this emergency measure. Veneman also said USDA will waive rental reduction fees to encourage donation of hay to farmers and ranchers in immediate need. "Drought and severe weather conditions have depleted hay stocks and grazing lands across the country," said Veneman. "This approval provides immediate relief to livestock producers and encourages donations of hay to producers who need immediate assistance." The 18 approved states are: Arizona, Colorado, Georgia, Idaho, Kansas, Minnesota, Montana, Nebraska, New Mexico, North Carolina, North Dakota, Oklahoma, South Carolina, South Dakota, Texas, Utah, Virginia and Wyoming. ARIZONA FARMERS FACING CATASTROPHE ... Arizona officials are saying that the losses from the livestock industry alone last year will be upward of \$300 million. ...   |             |
| 3/2/1978                     | Flooding    |               | \$485,718    | 03/04/78                         | 550-DR  | \$67,122,627  | Statewide   | Warm temperatures accompanied by heavy rain filled reservoirs behind all of the dams on the Salt and Verde Rivers and forced large volumes of runoff to be released. This was the largest flow of water down Salt since 1891. The released water overflowed the channel and flooded residential areas and farmlands. During the same period storm fronts passing over the state caused flash flooding and destruction. 9.5 inches of rainfall occurred on Mt Lemmon. Overflows of the Gila River flooded Duncan and 1000-2000 acres of farmland in Safford Valley. The Rillito Creek, Pantano and Tanque Verde Creeks in Tucson were near bankfull. Total damage was approximately \$65.9 million, of which \$37 million was attributed to Maricopa County alone. Thousands of homes were damaged and 116 homes were destroyed. More than 7,000 people had to be sheltered and four people lost their lives.<br><br>For Maricopa County - the storm centered over the mountains north and east of Phoenix, 35 miles north at Rock Springs. Extrapolation of intensity-probability data: 5.73 in/ 24 hr. equates to a 400 yr. storm. Main source of flooding due to Verde River with runoff volume exceeding reservoir storage capacity above Bartlett Dam. Flooding also occurred along irrigation canals on north side of metro area, and along tributaries of the Gila River and Queen Creek. 1 death countywide. Total damage costs: \$77 million. \$3.1 million-residential, \$16 million-public, \$4 million-agriculture, \$7.8 million-industrial, \$0.75 million-commercial. "Flood Damage Report, 28 February-6 March 1978 on the storm and floods in Maricopa County, Arizona", U.S. Army Corps of Engineers, Los Angeles District, FCDMC Library #802.024.  |             |
| 12/16/1978                   | Flooding    |               | \$1,909,498  | 12/21/78                         | 570-DR  | \$113,561,122 | Statewide   | Following the spring flooding, Arizona was hit hard again in December 16th-20th. Total precipitation ranged from less than 1 inch in the northeastern and far southwestern portions of Arizona to nearly 10 inches in the Mazatzal Mountains northeast of Phoenix. A large area of the central mountains received over 5 inches. The main stems of the Gila, Salt, Verde, Agua Fria, Bill Williams, and the Little Colorado Rivers, as well as a number of major tributaries, experienced especially large discharges. The flooding areas with the most significant damages included the Little Hollywood District near Safford and major portions of Duncan, Clifton, Winslow, and Williams. Damages were estimated at \$39,850,000. 10 people die and thousands are left homeless. Severe damage to roads and bridges. For Maricopa County, 4 deaths, \$16.3 million-public and \$5 million-agriculture losses estimated. ("Flood Damage Report, Phoenix Metropolitan Area, December 1978 Flood", November 1979, U.S. Army Corps of Engineers, FCDMC Library #802.027)  |             |
| 01/08/1993                   | Flooding    | 93003         | \$30,072,157 | 01/19/93                         | 977-DR  | \$104,069,362 | Statewide   | During January and February 1993, winter rain flooding damage occurred from winter storms associated with the El Niño phenomenon. These storms flooded watersheds throughout Arizona by dumping excessive rainfall amounts that saturated soils and increased runoff. Warm temperature snowmelt exacerbated the situation over large areas. Erosion caused tremendous damage and some communities along normally dry washes were devastated. Stream flow velocities and runoff volumes exceeded historic highs. Many flood prevention channels and retention reservoirs were filled to capacity and so water was diverted to the emergency spillways or the reservoirs were breached, causing extensive damage in some cases (e.g., Painted Rock Reservoir spillway). Ultimately, the President declared a major federal disaster that freed federal funds for both public and private property losses for all of Arizona's fifteen counties. Damages were widespread and significant, impacting over 100 communities. Total public and private damages exceeded \$400 million and eight deaths and 112 injuries were reported to the Red Cross (FEMA, April 1, 1993; ADEM, March, 1998).   |             |
| 1/10/1995                    | Flooding    | 95006         | \$510,789    |                                  |         |               | Apache, Gila, Graham, Greenlee, and Navajo  | Heavy rains fell over much of central and southeastern Arizona. Some reports included Magma, 3.50 inches; Payson, 2.23 inches; Pinetop, 2.08 inches; Globe, 2.01 inches; and Sedona, 1.83 inches. Some unimproved road crossings in the Safford area were damaged. Total damages were estimated at \$2,000,000.   |             |
| 12/29/2004                   | Flooding    | 25004         | \$1,222,805  | 2/17/2005                        | 1581-DR | \$6,114,025   | Coconino, Yavapai, Gila, Navajo, Apache, Maricopa, Mohave   | Northern Arizona Winter Storm: A strong Pacific storm system moved across Arizona December 28th and 29th with heavy rainfall. The heavy rain and melting snow resulted in excessive runoff in many areas from Williams to Flagstaff to Winslow and south to Prescott and Black Canyon City. High water, mudslides, and rock slides resulted in numerous road closures and evacuations in the area. Many creeks experienced significant rises. Seventy people were evacuated in southwest Flagstaff when water over-topped an earthen flood control dam. A dozen neighborhoods (about 300 people) along Oak Creek were evacuated in the Sedona area and two neighborhoods down stream. A 14 mile section of Highway 89 between Flagstaff and Sedona was closed because of rock slides. High water on the Verde River forced evacuations in Conville and Bridgeport. Four RVs were lost in Oak Creek at the Page Springs RV park while 23 vehicles were removed before the water rose too high. About 100 people were evacuated in Black Canyon City in two different mobile-home parks. Portions of Navajo Route 71 and Old Navajo Route 2 were closed northeast of Winslow when the Little Colorado River overflowed the banks. Six families were evacuated near Bird Springs on the Navajo Reservation. All thirty-one low water crossings and seven other streets were closed in Prescott due to flooding. Two passengers were rescued from a stranded vehicle in Prescott. Preliminary counts indicate that as many as 150 homes may have sustained damages up to approximately one million dollars. Roads and bridges sustained an additional one million dollars damage.   |             |
| 9/2/1977                     | Infestation |               |              |                                  |         |               | Statewide   | Cotton Crop Pesticide Application   |             |
| 6/16/1980                    | Infestation | 29388         | \$67,773     |                                  |         |               | Coconino, Gila, Yavapai, Mohave, Apache, Graham, Navajo, Cochise  | AZ Executive Order 81-4: [Terminating the Declaration of a State of Emergency of June 16, 1980 (caused by the abundance of grasshoppers).   |             |
| 03/13/1996                   | Infestation | 96003         | \$796,456    |                                  |         |               | Statewide   | Wheat (karnal bunt)   |             |
| 01/20/1999                   | Infestation | 99001         | \$177,702    |                                  |         |               | Statewide   | Red Imported Fire Ant Emergency   |             |

| State of Arizona Declaration |             |            |          | Damage Estimates |                |               |   |                        |
|------------------------------|-------------|------------|----------|------------------|----------------|---------------|---|------------------------|
| Date                         | Hazard      | Fatalities | Injuries | Property         | Crop/Livestock | Total         | Sources   |                        |
| 5/8/1978                     | Dam Failure |            |          |                  |                | \$0           | ADEM, 2008  |                        |
| 9/29/1978                    | Dam Failure |            |          |                  |                |               |   |                        |
| 4/19/2004                    | Dam Failure |            |          |                  |                | \$0           | ADEM, 2008  |                        |
| 5/18/2002                    | Disease     |            |          |                  |                | \$0           | ADEM, 2008  |                        |
| 7/21/1989                    | Drought     |            |          |                  |                | \$0           | ADEM, 2008  |                        |
| 06/07/1996                   | Drought     |            |          |                  |                | \$0           | ADEM, 2008  |                        |
| 6/23/1999                    | Drought     |            |          |                  |                | \$0           | ADEM, 2008  |                        |
| 8/13/1999                    | Drought     |            |          |                  |                | \$0           | ADEM, 2008  |                        |
| 07/21/2000                   | Drought     |            |          |                  |                | \$0           | ADEM, 2008  |                        |
| 05/17/2002                   | Drought     |            |          |                  |                | \$0           | ADEM, 2008  |                        |
| 07/11/2002                   | Drought     |            |          |                  | \$300,000,000  | \$300,000,000 | ADEM, 2008  |                        |
| 3/2/1978                     | Flooding    |            | 4        | \$65,900,000     |                | \$65,900,000  | ADEM, 2008; Tucson NWS, 2008 at <a href="http://www.wrh.noaa.gov/twc/hydro/floodhis.php">http://www.wrh.noaa.gov/twc/hydro/floodhis.php</a> ; AFMA Flood Happens, Fall 2003 |                        |
| 12/16/1978                   | Flooding    |            | 10       | \$39,850,000     |                | \$39,850,000  | ADEM, 2008; Tucson NWS, 2008 at <a href="http://www.wrh.noaa.gov/twc/hydro/floodhis.php">http://www.wrh.noaa.gov/twc/hydro/floodhis.php</a> ; AFMA Flood Happens, Fall 2003 |                        |
| 01/08/1993                   | Flooding    |            | 8        | 112              | \$330,000,000  | \$70,000,000  | \$400,000,000   | ADEM, 2008; NCDC, 2010 |
| 1/10/1995                    | Flooding    |            |          | \$2,000,000      |                | \$2,000,000   | ADEM, 2008; NCDC, 2010  |                        |
| 12/29/2004                   | Flooding    |            |          | \$2,000,000      |                | \$2,000,000   | ADEM, 2009<br>NCDC, 2008  |                        |
| 9/2/1977                     | Infestation |            |          |                  |                | \$0           | ADEM, 2008  |                        |
| 6/16/1980                    | Infestation |            |          |                  |                | \$0           | ADEM, 2008  |                        |
| 03/13/1996                   | Infestation |            |          |                  |                | \$0           | ADEM, 2008  |                        |
| 01/20/1999                   | Infestation |            |          |                  |                | \$0           | ADEM, 2008  |                        |

| State of Arizona Declaration |                            |               | Federal Presidential Declaration |           |         |              | Counties Affected   | Description  |
|------------------------------|----------------------------|---------------|----------------------------------|-----------|---------|--------------|---|--|
| Date                         | Hazard                     | State PCA No. | Expenditures                     | Date      | ID      | Expenditures |   |  |
| 11/30/1978                   | Prison Problem             |               | \$425                            |           |         |              | Statewide   | Prison Break   |
| 6/10/1992                    | Prisoner Escape            | 92003         | \$100,000                        |           |         |              | Coconino, Yavapai, Navajo, Gila, Maricopa   | May 12-19, 1992  |
| 1/7/1974                     | Service Interruption       |               | \$199,028                        |           |         |              | Statewide   | Energy Shortage  |
| 9/12/2001                    | Terrorism                  | 22002         | \$3,070,329                      | 9/12/2001 |         |              | Statewide   | September Terrorism Incident, Declared September 12, 2001: Terrorist attacks inflicted in various locations across the United States posed significant threat to the citizens of this country causing us to heighten the level of security throughout the State of Arizona. This proclamation has been extended to November 12, 2002.  |
| 10/16/2001                   | Terrorism                  | 22003         | \$7,324                          |           |         |              | Statewide   | Military Airport Security  |
|                              |                            |               |                                  |           |         |              | Mohave, Apache, Yavapai, Gila, Graham, Greenlee, Pinal, Pima, Santa Cruz, Cochise, Navajo             | The autumn floods of 1983. Tropical storm remains, including those from Hurricane Octave, caused heavy rain over Arizona during a 10-hour period. Southeast Arizona and Yavapai and Mohave Counties are particularly hard hit. Severe flooding occurred in Tucson, Clifton and Safford. Fourteen fatalities and 975 injuries were attributed to the flooding. At least 1000 Arizonans were left temporarily homeless. Damages in Clifton alone were over \$20 million where approximately 41 businesses were destroyed and over 231 homes and 57 businesses suffered major damages. The Corps constructed an emergency dike in the Winkelman Flats area to try and protect 112 homes. There were floodfight activities at Florence to protect a sewage treatment plant and at Safford to protect critical arterial bridge embankment from severe damage.   |
| 9/28/1983                    | Tropical Storm / Hurricane |               | \$863,283                        | 10/05/83  | 691-DR  | \$13,446,148 |   |  |
| 4/28/1973                    | Wildfire                   |               | \$36,718                         |           |         |              | Statewide   |  |
| 4/22/1975                    | Wildfire                   |               | \$8,923                          |           |         |              | Statewide   |  |
| 4/21/1978                    | Wildfire                   |               | \$11,528                         |           |         |              | Statewide   |  |
| 4/16/1979                    | Wildfire                   |               | \$204,207                        |           |         |              | Statewide   |  |
| 6/2/1980                     | Wildfire                   |               | \$298,845                        |           |         |              | Statewide   |  |
| 6/26/1981                    | Wildfire                   |               |                                  |           |         |              | Statewide   | Fire suppression assistance  |
| 6/30/1981                    | Wildfire                   |               | \$256,904                        |           |         |              | Statewide   |  |
| 6/30/1982                    | Wildfire                   |               | \$492,635                        |           |         |              | Statewide   |  |
| 03/17/1987                   | Wildfire                   | EUZSLD        |                                  |           |         |              | Statewide   | Wildland fires statewide   |
| 03/17/1990                   | Wildfire                   | EUFIR         |                                  |           |         |              | Statewide   | Wildland fire contingency  |
| 09/09/1993                   | Wildfire                   | 94002         | \$200,000                        |           |         |              | Statewide   | Statewide wildfire suppression - State Land Department   |
| 10/14/1994                   | Wildfire                   | 95003         | \$600,000                        |           |         |              | Statewide   | Statewide wildfire suppression - State Land Department   |
| 05/16/1996                   | Wildfire                   | 96004         | \$1,000,729                      |           |         |              | Statewide   | Statewide wildfire suppression - State Land Department   |
| 05/06/1999                   | Wildfire                   | 99004         | \$4,894                          |           |         |              | Statewide   | Statewide wildland fire emergency  |
| 5/2/2003                     | Wildfire                   | 23003         | \$2,378,020                      |           |         |              | Statewide   | Forest Health Emergency - As a result of the on-going drought conditions the forests within our state have been infested with the Pine Bark Beetle. This proclamation will expedite the clearing of dead, dying and diseased trees and other vegetation that interfere with emergency response and evacuation needs.   |
| 7/15/2003                    | Wildfire                   | 24101         | \$33,358                         |           |         |              | Gila, Navajo, Apache  |  |
| 2/22/2006                    | Wildfire                   | 26006         | \$192,390                        |           |         |              | Statewide   | On February 22, 2006, the Governor declared an emergency due to the driest winter in recorded history coupled with above average temperatures and the earliest recorded start to a wildfire season. The entire state was threatened by extreme wildfire hazards. The 2006 state wildfire suppression resources strategy required additional financial support. The declaration provided \$200,000 for pre-suppression resources to the Arizona State Land Department, Office of State Forester and the Arizona Division of Emergency Management.   |
| 4/25/1983                    | Winter Storm               | 30349         | \$43,140                         |           |         |              | Navajo Nation, Coconino, Apache, Navajo   | Navajo Reservation Emergency - Severe winter conditions on portions of Navajo Nation, Coconino, Apache, and Navajo Counties.   |
| 1/22/1987                    | Winter Storm               | EUZ7FB 31799  | \$148,897                        |           |         |              | Navajo, Apache  | Severe Winter Storm.   |
| 2/25/1987                    | Winter Storm               | EUZJN 31810   | \$3,347                          |           |         |              | Apache, Navajo, Gila, Coconino, Yavapai   | Severe snowstorm.  |
| 2/12/1988                    | Winter Storm               | EUZ7AU 32184  | \$44,933                         |           |         |              | Apache, Navajo  | Isolated Citizens Airlift  |
| 1/21/2010                    | Winter Storm               | 20102         | \$4,497,895                      | 3/18/2010 | 1888-DR | \$14,210,904 | Apache, Coconino, Gila, Greenlee, La Paz, Maricopa, Mohave, Navajo, Yavapai, Hopi Tibe, Navajo Nation | <b>January 2010 Winter Storm Emergency:</b> About 10 inches of snow occurred in Northern Greenlee County around Rose Peak and Hannagan Meadow. A strong Pacific winter storm produced moderate valley rain and mountain snow to much of southeast Arizona. Heavy snow combined with strong winds to produce significant blowing and drifting at the higher elevations. Strong gusty winds also affected many valley locations during the evening hours of the 19th and the early morning hours of the 20th. Six inches of snow fell at 6700 feet 6 miles south of Prescott. A strong winter storm hit northern Arizona with widespread snow and rain. Heavy snow fell along the Eastern Mogollon Rim. Snowfall totals for this one storm include: Clints Well 16 inches, Heber 13 inches, Clay Springs 14 to 15 inches, and Forest Lakes 16 inches. The second in a series of strong Pacific storms moved across northern Arizona with widespread heavy precipitation. The snow level dropped down to between 5000 and 5500 feet elevation by the storm moved east. The Governor Jan Brewer signed a Declaration of Emergency and released \$200,000 to pay for emergency responses and and recovery expenses from the weather events. Declared that a State of Emergency in Apache, Coconino, Gila, Greenlee, La Paz, Maricopa, Mohave, Navajo, and Yavapai Counties due to the 2010 Winter Storm beginning January 21, 2010. President Obama approved the Governor's request for Emergency Declaration in support of life and property-saving operations on Hopi Tribe and Navajo Nation lands within Apache, Coconino and Navajo counties. Isolation of some communities and rough terrain, compounded with snow accumulations, has complicated delivery of assistance like fuel, food and medical provisions. An additional \$1 million was approved by Governor Brewer to cover state-share costs. Response efforts for the Hopi Tribe and Navajo Nation were named Operation Winter Storm and pooled the resources of federal, state and local agencies. Over nine days, 42,500 meals, 21,780 gallons of water, 279 cots, 5,475 blankets and over 800 wood bundles were delivered by air and ground transport. |
| 6/29/1998                    |                            | 98003         | \$311,394                        |           |         |              | Apache, Navajo  | Rainbow Family Gathering   |

| State of Arizona Declaration |                            | Damage Estimates |          |               |                |               |  |
|------------------------------|----------------------------|------------------|----------|---------------|----------------|---------------|--|
| Date                         | Hazard                     | Fatalities       | Injuries | Property      | Crop/Livestock | Total         | Sources  |
| 11/30/1978                   | Prison Problem             |                  |          |               |                | \$0           | ADEM, 2008   |
| 6/10/1992                    | Prisoner Escape            |                  |          |               |                | \$0           | ADEM, 2008   |
| 1/7/1974                     | Service Interruption       |                  |          |               |                | \$0           | ADEM, 2008   |
| 9/12/2001                    | Terrorism                  |                  |          |               |                | \$0           | ADEM, 2008   |
| 10/16/2001                   | Terrorism                  |                  |          |               |                | \$0           | ADEM, 2008   |
| 9/28/1983                    | Tropical Storm / Hurricane | 14               | 975      | \$370,000,000 |                | \$370,000,000 | ADEM, 2008; NCDC, 2010   |
| 4/28/1973                    | Wildfire                   |                  |          |               |                | \$0           | ADEM, 2008   |
| 4/22/1975                    | Wildfire                   |                  |          |               |                | \$0           | ADEM, 2008   |
| 4/21/1978                    | Wildfire                   |                  |          |               |                | \$0           | ADEM, 2008   |
| 4/16/1979                    | Wildfire                   |                  |          |               |                | \$0           | ADEM, 2008   |
| 6/2/1980                     | Wildfire                   |                  |          |               |                | \$0           | ADEM, 2008   |
| 6/26/1981                    | Wildfire                   |                  |          |               |                | \$0           | ADEM, 2008   |
| 6/30/1981                    | Wildfire                   |                  |          |               |                | \$0           | ADEM, 2008   |
| 6/30/1982                    | Wildfire                   |                  |          |               |                | \$0           | ADEM, 2008   |
| 03/17/1987                   | Wildfire                   |                  |          |               |                | \$0           | ADEM, 2008   |
| 03/17/1990                   | Wildfire                   |                  |          |               |                | \$0           | ADEM, 2008   |
| 09/09/1993                   | Wildfire                   |                  |          |               |                | \$0           | ADEM, 2008   |
| 10/14/1994                   | Wildfire                   |                  |          |               |                | \$0           | ADEM, 2008   |
| 05/16/1996                   | Wildfire                   |                  |          |               |                | \$0           | ADEM, 2008   |
| 05/06/1999                   | Wildfire                   |                  |          |               |                | \$0           | ADEM, 2008   |
| 5/2/2003                     | Wildfire                   |                  |          |               |                | \$0           | ADEM, 2008   |
| 7/15/2003                    | Wildfire                   |                  |          |               |                | \$0           | ADEM, 2008;<br><a href="http://earthobservatory.nasa.gov/NaturalHazards/view.php?id=11777">http://earthobservatory.nasa.gov/NaturalHazards/view.php?id=11777</a> |
| 2/22/2006                    | Wildfire                   |                  |          |               |                | \$0           | ADEM, 2008   |
| 4/25/1983                    | Winter Storm               |                  |          |               |                | \$0           | ADEM, 2008   |
| 1/22/1987                    | Winter Storm               |                  |          |               |                | \$0           | ADEM, 2008   |
| 2/25/1987                    | Winter Storm               |                  |          |               |                | \$0           | ADEM, 2008   |
| 2/12/1988                    | Winter Storm               |                  |          |               |                | \$0           | ADEM, 2008   |
| 1/21/2010                    | Winter Storm               |                  |          | \$14,900,000  |                | \$14,900,000  | ADEM, 2010<br>FEMA, 2010   |
| 6/29/1998                    |                            |                  |          |               |                | \$0           | ADEM, 2008   |

**Apache County Undeclared Events  
September 1960 to July 2010**

| Hazard                    | No. of Records | Recorded Losses |          |                   |
|---------------------------|----------------|-----------------|----------|-------------------|
|                           |                | Fatalities      | Injuries | Damage Costs (\$) |
| Dam Failure               | 0              | 0               | 0        | \$0               |
| Drought                   | 0              | 0               | 0        | \$0               |
| Earthquake                | 2              | 0               | 0        | \$0               |
| Fissure                   | 0              | 0               | 0        | \$0               |
| Flooding / Flash Flooding | 12             | 0               | 0        | \$1,000           |
| Landslide/Mudslide        | 0              | 0               | 0        | \$0               |
| Levee Failure             | 0              | 0               | 0        | \$0               |
| Severe Wind               | 39             | 12              | 26       | \$0               |
| Subsidence                | 0              | 0               | 0        | \$0               |
| Wildfire                  | 25             | 1               | 3        | \$75,000          |
| Winter Storm              | 3              | 6               | 9        | \$5,000           |

Notes: Damage Costs include property and crop/livestock losses and are reported as is with no attempt to adjust costs to current dollar values. Furthermore, wildfire damage cost do not include the cost of suppression which can be quite substantial. Sources: ADEM, NCDC, NWCG, NWS, USFS

| Date        | Hazard                         | Description  | Location             | Fatalities | Injuries | Damage Estimates |                |         | Data Source           |
|-------------|--------------------------------|--|----------------------|------------|----------|------------------|----------------|---------|-----------------------|
|             |                                |  |                      |            |          | Property         | Crop/Livestock | Total   |                       |
| 11/1/2001   | Civil Disobedience/Disturbance | Funeral of a rightwing radio host  | SPRINGERVILLE        |            |          |                  |                | \$0     | Town of Springerville |
| 6/1/2002    | Civil Disobedience/Disturbance | Navajo County evacuated several thousand residents to Springerville for Rodeo Chediski Fire  | SPRINGERVILLE        |            |          |                  |                | \$0     | Town of Springerville |
| Summer 1998 | Civil Disobedience/Disturbance | 25,000 Rainbow people camped on the National Forest  | SPRINGERVILLE        |            |          |                  |                | \$0     | Town of Springerville |
| 12/12/1916  | Earthquake                     | Modified Mercalli Intensity Scale: VI  | St. Michaels         |            |          |                  |                | \$0     | URS, October 2003     |
| 04/08/1937  | Earthquake                     | Modified Mercalli Intensity Scale: VI  | Ganado               |            |          |                  |                | \$0     | URS, October 2003     |
| 8/18/1996   | Flooding / Flash Flooding      | Heavy thunderstorm rain with small hail flooded several dirt county roads causing mud and water to wash across main roads in town  | GREER                |            |          |                  |                | \$0     | NCDC, August 2004     |
| 8/26/1997   | Flooding / Flash Flooding      | Several reports of flooding around the Chinle area. First reports were received northwest of Chinle near the community of Rough Rock where Reservation Route 59 was impassable due to floodwaters. The last reports were received near Chinle where Reservation Route 27 was also flooded over.  | CHINLE               |            |          |                  | \$1,000        | \$1,000 | NCDC, August 2004     |
| 7/15/2002   | Flooding / Flash Flooding      | A spotter two miles north of McNary reported 1.58 inches of rain in just one hour.   |                      |            |          |                  |                | \$0     | NCDC, August 2004     |
| 7/18/2002   | Flooding / Flash Flooding      | A wash was flowing over a road 10 miles north of Window Rock.  |                      |            |          |                  |                | \$0     | NCDC, August 2004     |
| 9/10/2002   | Flooding / Flash Flooding      | The Chinle Police Department reported flooding along the Chinle Wash from the confluence of the Canyon de Chelly Wash northward to Rock Point. People were evacuated as flood waters threatened homes along the Chinle Wash. One mobile home was washed off its foundations. Additional flooding was reported over the bridge on Nazlini Creek near Chinle.  | CHINLE               |            |          |                  |                | \$0     | NCDC, August 2004     |
| 9/10/2002   | Flooding / Flash Flooding      | Flooding made Indian Route 59 near Rough Rock impassible.  | ROUGH ROCK           |            |          |                  |                | \$0     | NCDC, August 2004     |
| 9/10/2002   | Flooding / Flash Flooding      | Arizona DOT reported flooding over Indian Route 15 in four places between Cornfield and Burnside. Pooling of water was reported in flat places on State Highway 191 and on State Route 264 between milepost 440 and 441.   |                      |            |          |                  |                | \$0     | NCDC, August 2004     |
| 9/10/2002   | Flooding / Flash Flooding      | Highway 61 flooded near St Johns.  | ST JOHNS             |            |          |                  |                | \$0     | NCDC, August 2004     |
| 9/18/2002   | Flooding / Flash Flooding      | Heavy rain caused street flooding and road closures in St Johns and Snowflake. Route 77 to Snowflake was closed due to flooding. Flooding was also reported on Route 191 near St Johns.  | ST JOHNS             |            |          |                  |                | \$0     | NCDC, August 2004     |
| 7/20/2003   | Flooding / Flash Flooding      | One inch of rain fell in only 15 minutes in Vernon. Pea sized hail was also reported.  | Vernon               |            |          |                  |                | \$0     | NCDC, August 2004     |
| 9/9/2003    | Flooding / Flash Flooding      | A large area of thunderstorms produced flash flooding in Apache county from Fort Defiance north to Chinle.   |                      |            |          |                  |                | \$0     | NCDC, August 2004     |
| 8/1/2004    | Flooding / Flash Flooding      | A 4" rain threatened to flood US 60 and damage private property in Springerville   | SPRINGERVILLE        |            |          |                  |                | \$0     | Town of Springerville |
| 4/9/1992    | Hazardous Materials Incident   | CHLORINATING SYSTEM/RUPTURED TUBING Hazardous Material Involved: CHLORINE. Amount: 45 POUND(S) Remedial Action: TEAM SECURED RELEASE & PERFORMED REPAIRS. Required evacuating 100 people.  | 10 mi N of ST. JOHNS |            |          |                  |                | \$0     | NRC, August 2004      |
| 8/18/1999   | Hazardous Materials Incident   | MATERIAL WAS SPILLED FROM A TRI AXLE TRUCK WHEN IT TURNED OVER CAUSING A LINE TO BREAK Hazardous Material Involved: HYDRAULIC OIL. Amount: 20 GALLON(S) Remedial Action: MATERIAL WAS CLEANED UP BY WASTE MANAGEMENT   | WINDOW ROCK          |            | 1        |                  |                | \$0     | NRC, August 2004      |
| 8/29/2001   | Hazardous Materials Incident   | A COMMERCIAL TRUCK STRUCK A CURB CAUSING THE SADDLE TANK TO RUPTURE AND SPILL DIESEL FUEL ONTO A SOIL SURFACE BEHIND A SCHOOL. Hazardous Material Involved: OIL: DIESEL. Amount: 110 GALLON(S) Remedial Action: FIRE DEPT. ISOLATED THE AREA AND APPLIED ABSORBENTS TO THE SOIL. Evacuated 40 people.  | CHINLE               |            |          |                  |                | \$0     | NRC, August 2004      |
| 11/9/2001   | Hazardous Materials Incident   | THE MATERIAL RELEASED OUT OF THE TANKER TRUCK DUE TO A ROLL OVER IN A SINGLE VEHICLE ACCIDENT. Hazardous Material Involved: GASOLINE: AUTOMOTIVE (UNLEADED). Amount: 8000 GALLON(S) Remedial Action: FIRE DEPT USED FOAM ON GAS, CONTRACTOR HAS BEEN HIRED AND WAS EN ROUTE  | 5 mi. E of GANADO    | 1          |          |                  |                | \$0     | NRC, August 2004      |
|             | Hazardous Materials Incident   | Fuel Truck rolled into Nutrioso Creek  | EAGAR                |            |          |                  |                | \$0     | Town of Eagar         |
| 4/29/1957   | Severe Wind                    | Tornado Length = 3 mi. Width= 120 Yds.   |                      |            |          |                  |                | \$0     | NCDS, August 2004     |
| 10/17/1962  | Severe Wind                    |  |                      |            |          |                  |                | \$0     | NCDS, August 2004     |
| 10/27/1974  | Severe Wind                    | Tornado Length = 0 mi. Width= 33 Yds.  |                      |            |          |                  |                | \$0     | NCDS, August 2004     |
| 8/7/1978    | Severe Wind                    |  |                      |            |          |                  |                | \$0     | NCDS, August 2004     |
| 11/2/1978   | Severe Wind                    |  |                      |            |          |                  |                | \$0     | NCDS, August 2004     |
| 8/14/1979   | Severe Wind                    | Tornado Length = 1 mi. Width= 50 Yds.  |                      |            |          |                  |                | \$0     | NCDS, August 2004     |
| 7/19/1990   | Severe Wind                    | 0.75 inch diameter hail  |                      |            |          |                  |                | \$0     | NCDS, August 2004     |
| 6/5/1991    | Severe Wind                    | Winds measured at 56 knots   |                      |            |          |                  |                | \$0     | NCDS, August 2004     |
| 9/13/1993   | Severe Wind                    | Winds measured at 56 knots 9 miles north of St. Johns  |                      |            |          |                  |                | \$0     | NCDS, August 2004     |
| 5/10/1994   | Severe Wind                    |  | St. Johns            |            |          |                  |                | \$0     | NCDS, August 2004     |
| 04/09/1995  | Severe Wind                    | 10 fatalities, 24 injuries. Strong gradient winds were responsible for dense blowing dust reducing visibility to a few feet along Interstate 10, near Bowie. The blowing dust resulted in four separate vehicle accidents, a total of 24 vehicles, 20 people injured, and 10 people killed. (M35V) (??V) High winds, estimated between 40-60 mph, resulted in the roof over the drive-in section of Bank One, in Thatcher, being blown to the ground. Also, some shingles were blown off the roof of a local church. | Bowie                | 10         | 24       |                  |                | \$0     | URS, October 2003     |
| 7/13/1995   | Severe Wind                    | Winds measured at 62 knots   | St. Johns            |            |          |                  |                | \$0     | NCDS, August 2004     |
| 9/18/1995   | Severe Wind                    | Winds measured at 64 knots   | St. Johns            |            |          |                  |                | \$0     | NCDS, August 2004     |
| 6/21/1996   | Severe Wind                    | Thunderstorm wind gust to 70 mph/61 kts at St. Johns Airport   | ST JOHNS MUNI ARPT   |            |          |                  |                | \$0     | NCDS, August 2004     |
| 10/7/1997   | Severe Wind                    | Thunderstorm wind gust of 56 kts/64 mph  | ST JOHNS MUNI ARPT   |            |          |                  |                | \$0     | NCDS, August 2004     |
| 10/22/1997  | Severe Wind                    | National Parks personnel reported a funnel cloud over the entrance of the Petrified Forest Wilderness. 28 Miles North West of Concho   |                      |            |          |                  |                | \$0     | NCDS, August 2004     |
| 7/31/1998   | Severe Wind                    | A park ranger at Petrified Forest National Park reported 1.75 inch diameter hail. They also reported 2.53 inches of rain in a two hour period that afternoon. 14 Miles South West of Navajo  |                      |            |          |                  |                | \$0     | NCDS, August 2004     |

|            |                         |   |                    |   |  |   |          |          |                               |
|------------|-------------------------|---|--------------------|---|--|---|----------|----------|-------------------------------|
| 8/21/1998  | Severe Wind             | A Chinle Police Department officer observed a funnel cloud between Fluted Rock and Sawmill. 8 Miles West North West of Sawmill  |                    |   |  |   |          | \$0      | NCDS, August 2004             |
| 8/5/1999   | Severe Wind             | Chinle Police Department officers reported a funnel cloud west of Highway 191. 4 Miles South West of Chinle   |                    |   |  |   |          | \$0      | NCDS, August 2004             |
| 10/7/2000  | Severe Wind             | The wind from a thunderstorm blew over a camper south of the town of Cross Canyon. A child in the camper was injured.   | CROSS CANYON       |   |  | 1 |          | \$0      | NCDS, August 2004             |
| 8/10/2001  | Severe Wind             | Saint Johns Airport observer reported a funnel cloud 5 miles north of airport   |                    |   |  |   |          | \$0      | NCDS, August 2004             |
| 4/7/2002   | Severe Wind             | An Apache County Sheriff's deputy reported golf ball (1.75 inch) sized hail on Highway 61 three miles southwest of Concho.  |                    |   |  |   |          | \$0      | NCDS, August 2004             |
| 5/18/2002  | Severe Wind             | A thunderstorm wind gust of 63 mph / 54 kts. was measured at the St Johns Airport at 11:37 AM.  | ST JOHNS MUNI ARPT |   |  |   |          |          | NCDS, August 2004             |
| 7/27/2002  | Severe Wind             | A thunderstorm at Canyon de Chelly produced 0.67 inches of rain in a hour with golf ball sized hail (1.75in. Diameter) at one time.   | Canyon de Chelly   |   |  |   |          | \$0      | NCDS, August 2004             |
| 8/28/2002  | Severe Wind             | One inch hail fell for six minutes in Alpine.   | ALPINE             |   |  |   |          | \$0      | NCDS, August 2004             |
| 9/10/2002  | Severe Wind             | Apache County Sheriffs reported 1.75 inch (golf ball) hail in St Johns.   | ST JOHNS           |   |  |   |          | \$0      | NCDS, August 2004             |
| 7/1/2003   | Severe Wind             | A microburst destroyed a warehouse and other private property in Springerville  | SPRINGERVILLE      |   |  |   |          | \$0      | Town of Springerville         |
| 8/14/2003  | Severe Wind             | Golf ball sized (1 1/4 inch diameter) hail was reported in Canyon de Chelly.  | Canyon de Chelly   |   |  |   |          | \$0      | NCDS, August 2004             |
| 8/14/2003  | Severe Wind             | Nickel sized (7/8 inch diameter) hail was reported at Lyman Lake.   | Lyman Lake         |   |  |   |          | \$0      | NCDS, August 2004             |
| 8/14/2003  | Severe Wind             | A funnel cloud was sighted near Canyon de Chelly.   | Canyon de Chelly   |   |  |   |          | \$0      | NCDS, August 2004             |
| 8/14/2003  | Severe Wind             | Two funnel clouds were reported by Department of Public Safety about 10 miles west of St Johns.   |                    |   |  |   |          | \$0      | NCDS, August 2004             |
| 8/15/2003  | Severe Wind             | Two funnel clouds were reported near St Johns.  |                    |   |  |   |          | \$0      | NCDS, August 2004             |
| 9/9/2003   | Severe Wind             | A tornado uprooted trees 12 miles west of Wide Ruins. Fujita Tornado Scale: F0 (40-72mph / 35-62kt) Tornado Length =1mi. Width= 100 Yds.  |                    |   |  |   |          | \$0      | NCDS, August 2004             |
| 8/20/2006  | Severe Wind             | Three people sought shelter under a tree during a thunderstorm. Lightning struck the tree. One person was killed and one person was injured. This happened about 8 miles south of McNary. ??UT  | McNary             | 1 |  | 1 |          |          | NCDC, April 2010              |
| 7/15/2007  | Severe Wind             | A 21-year-old man from the town of Nazlini was watching a rain swollen waterfall from a metal bridge. He was struck by a lightning bolt while standing on the bridge. He was transported to a Phoenix hospital where he later died. Other individuals in the vicinity of the strike were knocked over by the shock wave but were not seriously injured. Lightning struck and killed a man from the town of Nazlini. | Nazlini            | 1 |  |   |          |          | NCDC, April 2010              |
|            | Severe Wind             | In 1974 or 75 there was a severe storm on the west side of town roughly Harless to the west. Damage was done to homes in Eagar and Springerville and water was running over Central in every low spot   | EAGAR              |   |  |   |          | \$0      | Town of Eagar                 |
|            | Severe Wind             | Sometime in the mid 1980s there was a severe thunderstorm in the Robinson Hollow area and lots of homes on Butler St. mainly on the east side suffered bad damage   | EAGAR              |   |  |   |          | \$0      | Town of Eagar                 |
|            | Severe Wind             | 2004 we had a micro burst on the East side of town (roughly Eagar St. east, 4th St. north) that ran water over several roads and in several houses by the time all this hit. Springerville was hit even worse.  | EAGAR              |   |  |   |          | \$0      | Town of Eagar                 |
|            | Severe Wind             | 2001 we had a micro burst on the southwest part of town (roughly School Bus west) that filled the big ditch to capacity and ran over causing significant damage to some of the roads and some damage to homes.  | EAGAR              |   |  |   |          | \$0      | Town of Eagar                 |
| 1/1/1998   | Transportation Accident | FREIGHT TRAIN STRUCK TRESPASSER   | Chepo              | 1 |  |   |          | \$0      | NRC, August 2004              |
| 7/6/2000   | Transportation Accident | FREIGHT TRAIN STRUCK A TRESPASSER   |                    | 1 |  |   |          | \$0      | NRC, August 2004              |
| 10/1/2003  | Transportation Accident | Activity bus with football team rolled on Hwy 260   | EAGAR              |   |  |   |          | \$0      | Town of Eagar                 |
| 6/1/2010   | Transportation Accident | Plane crashed into Round Valley High School due to pilot error; surrounding residents evacuated, but nowhere to go as high school normally serves as evacuation center.   | Springerville      |   |  |   |          |          | Town of Springerville<br>2011 |
| 5/1/1987   | Wildfire                | 3,600 acre fire threatened Eagar and Springerville  | EAGAR              |   |  |   |          | \$0      | Town of Eagar                 |
| 03/19/1988 | Wildfire                | 300 acres burned.   |                    |   |  |   |          | \$0      | URS, October 2003             |
| 03/21/1988 | Wildfire                | 616 acres burned.   |                    |   |  |   |          | \$0      | URS, October 2003             |
| 05/22/1989 | Wildfire                | 350 acres burned.   |                    |   |  |   |          | \$0      | URS, October 2003             |
| 05/24/1989 | Wildfire                | 320 acres burned.   |                    |   |  |   |          | \$0      | URS, October 2003             |
| 06/23/1989 | Wildfire                | 150 acres burned.   |                    |   |  |   |          | \$0      | URS, October 2003             |
| 06/28/1989 | Wildfire                | 100 acres burned.   |                    |   |  |   |          | \$0      | URS, October 2003             |
| 07/06/1989 | Wildfire                | 240 acres burned.   |                    |   |  |   |          | \$0      | URS, October 2003             |
| 07/20/1989 | Wildfire                | 900 acres burned.   |                    |   |  |   |          | \$0      | URS, October 2003             |
| 04/29/1990 | Wildfire                | 4500 acres burned.  |                    |   |  |   |          | \$0      | URS, October 2003             |
| 03/10/1991 | Wildfire                | 300 acres burned.   |                    |   |  |   |          | \$0      | URS, October 2003             |
| 4/1/1995   | Wildfire                | 100 Acre fire burned one residence and displaced two occupants.   | EAGAR              |   |  |   | \$75,000 | \$75,000 | Town of Eagar                 |
| 06/09/1996 | Wildfire                | 650 acres burned.   |                    |   |  |   |          | \$0      | URS, October 2003             |
| 03/28/2002 | Wildfire                | "Cheney Wildland Fire > or = 100 acres, Southern Apache   |                    |   |  |   |          | \$0      | URS, October 2003             |
| 5/1/2002   | Wildfire                | Wildland fire threatened Eagar and Springerville  | EAGAR              |   |  |   |          | \$0      | Town of Eagar                 |
| 5/4/2002   | Wildfire                | The "Little Fire" burned 8800 acres of grass and brush 10 miles west of Springerville between Highway 260 and Highway 60.   |                    |   |  |   |          | \$0      | NCDS, August 2004             |
| 5/6/2002   | Wildfire                | Little Fire - a human caused fire that burned an area 1 mile west of Eagar, Arizona. The fire started May 6, 2002 and was controlled May 5, 2002 and burned a total of 8,800 acres with over \$85,000 in fire suppression costs.  |                    |   |  |   |          |          | NWGC, 2010                    |
| 6/1/2002   | Wildfire                | A grass fire damaged 15,000 acres including private property  | SPRINGERVILLE      | 1 |  |   |          | \$0      | Town of Springerville         |
| 6/1/2002   | Wildfire                | Evacuation of over 7,000 people to Eagar for Rodeo Chediski Fire  | RV High School     |   |  |   |          | \$0      | Town of Eagar                 |
| 06/28/2002 | Wildfire                | "CARRIZO Wildland Fire > or = 100 acres, North East Apache County   |                    |   |  |   |          | \$0      | URS, October 2003             |
| 07/02/2002 | Wildfire                | "CHAMBERS Wildland Fire > or = 100 acres, Central Apache County   |                    |   |  |   |          | \$0      | URS, October 2003             |
| 7/16/2002  | Wildfire                | Carrizo #1 Fire - a lightning caused fire that burned an area 15 miles south of Teec Nos Pos. The fire started June 28, 2002 and containment was anticipated on July 5, 2002 and burned 4,033 acres with over \$1,680,000 in fire suppression costs.  |                    |   |  | 1 |          |          | NWGC, 2010                    |
| 7/26/2004  | Wildfire                | Three Forks Fire - a human caused fire that burned an area 11 miles west of Alpine, AZ. The fire started July 26, 2004 and was controlled July 26, 2004 and burned 7,905 acres with over \$2,135,355 in fire suppression costs.   |                    |   |  | 2 |          |          | NWGC, 2010                    |
| 12/18/2009 | Wildfire                | Mud Springs Fire - a lightning caused fire that burned an area 17 miles south of White River, Arizona. The fire started December 18, 2009 and burned 1,149 acres with over \$67,000 in fire suppression costs.  |                    |   |  |   |          |          | NWGC, 2010                    |

|           |              |   |   |   |   |         |         |            |                   |
|-----------|--------------|---|---|---|---|---------|---------|------------|-------------------|
|           | Wildfire     | Several lightning strikes ignited the Carrizo Fire, which consumed 57,335 acres of Apache National Forest land.   |   |   |   |         |         | \$0        | URS, October 2003 |
| 10/6/2010 | Winter Storm | Golf ball sized (1.75 inches in diameter) knocked out several windshields on Highway 160 and in Four Corners National Monument.<br>EPISODE NARRATIVE: A strong low pressure center over California pushed abundant moisture over Arizona producing widespread thunderstorms with numerous severe storms. Strong vertical wind shear...with helicity in the 400-450 range...also provided an environment for supper cell development. There were eight confirmed tornadoes on October 6, 2010 across northern Arizona. This breaks the old record for the most tornadoes in Arizona for one day. The Arizona Governor signed a declaration of emergency for Coconino Country for \$200,000 to be used for emergency response and public infrastructure repair. | 1 Mile North West of Teec.Nos Pos Arprt |   |   | \$5,000 | \$5,000 | NCDC, 2011 |                   |
| 1/1/2006  | Winter Storm | In January 2006, a low pressure center moving into Arizona and a cold easterly flow into the Little Colorado River Valley, White Mountains, and Eastern Mogollon Rim caused widespread freezing drizzle and freezing rain. Law enforcement officers and the general public reported 47 wrecks and roll-overs between Winslow and the New Mexico State Line and south to Show Low. Five people died and many others were injured (NCDC, 2008).   |   | 5 |   |         |         | NCDC, 2008 |                   |
| 12/1/2007 | Winter Storm | In December of 2007, seventeen inches of snow fell at the Flagstaff Airport. Twenty-six inches of snow fell near Blue Ridge. Over 200 traffic accidents and slide offs were reported by law enforcement departments. Nine of those involved minor injuries and there was one fatality. A strong area of low pressure from the Pacific Northwest brought heavy rain, very windy conditions, and high elevation snow on Friday December 7th through Saturday December 8th. The next portion of the storm system began to move across the state on late Sunday December 9th and lasted through Tuesday December 11th. This brought heavy snow to many areas along and north of the Mogollon Rim and the White Mountains (NCDC, 2008).                            |   | 1 | 9 |         |         | NCDC, 2008 |                   |

## **Appendix E**

### **Plan Maintenance Review Memorandums**

**The City of Sedona  
Multi-Hazard Mitigation Plan  
Progress Report**

**Reporting Period:**

September 2006 to September 2007

**Background:** The City of Sedona has developed the Sedona Multi-Hazard Mitigation Plan (SMHMP) to provide its vision for reducing risk from all hazards by identifying resources, information and strategies for risk reduction. Responding to programmatic requirements defined under the Disaster Mitigation Act of 2000, the City embarked on a planning process that was scripted to provide as many tangible benefits for the City from this single planning effort. The plan was adopted by Sedona City Council on June 13, 2006, and was approved by FEMA Region IX for compliance with section 201.6, Chapter 44 of the Code of Federal Regulations (44CFR) on September 8, 2006. By completing this process the City has achieved compliance with the parameters of the Disaster Mitigation Act, and thus leveraged hazard mitigation grant funding opportunities afforded under the Robert T. Safford Act. The SMHMP is available for public viewing at the City of Sedona Clerk's office.

**Purpose:** The objective of this annual evaluation is to ensure that there is a continuing planning process that will keep the SMHMP dynamic and responsive to the needs and capabilities of the coalition partnership. This report will discuss the following:

- I. Natural or human-caused hazard events that have occurred within the last year
- II. Risk Assessment - changes in risk exposure within the planning area
- III. Public involvement/outreach
- IV. Mitigation Success stories
- V. Mitigation Strategy - review of the action plan(s)

**I. Natural or human-caused hazard events that have occurred within the last year**

There were no natural or human caused hazard events within Sedona during the reporting period; however, it is important to discuss the Brins fire that burned 4300 acres in June 2006 which potentially could have entered the Sedona City Limits, and did have economic and operational impacts within Sedona.

The Brins fire started on June 18, 2006 and burned for approximately ten days. On June 19<sup>th</sup>, the fire was declared to be a State of Emergency by State Governor, Janet Napolitano. Although the fire did not burn within the city limits, residents of Oak Creek Canyon, upper Soldiers Pass Road and upper Jordan Road were evacuated. Highway 89A through Oak Creek Canyon was closed for the duration of the fire. The command center for the incident was located within the city limits at the Sedona Red Rock High School. Although the early warning siren system for Oak Creek Canyon was not

complete at the time of the fire, it was partially utilized during this event. Amazingly, no structures were lost during this fire, and there was no loss of human life.

The Brins fire that stripped land of vegetation in June, cleared the way for rocks and debris, which fell on Highway 89A in Oak Creek Canyon in three slides on July 30, 2006. The rockslides, which were triggered by heavy monsoon rains, trapped 30 people in 14 cars (between Indian Gardens and the Rainbow Trout Farm) for three hours as heavy equipment cleared the road to make it possible for the trapped vehicles to drive out. None of the vehicles was damaged and nobody was injured.

In late August 2006, twelve rock and mudslides covered stretches of Hwy. 89A in Oak Creek Canyon with about 8” of mud, rock and debris. No vehicles were trapped and nobody was injured. The highway through this area was closed overnight.

In March/April of 2007, a small portion of the Northbound lane of Hwy. 89A caved in on the switchbacks in Oak Creek Canyon. This resulted in the closure of the switchbacks for a few days until it was determined that one lane could be open with flaggers through the impacted area. The switchbacks were closed again for approximately one week for the permanent repair to be made.

Due to lingering impacts from the Brins Mesa fire and to construction throughout Uptown along SR 89A from January 2006 through December 2007, the sales tax impact is flat. While typical sales tax growth hovers around 4% year-over year, with the exceptions of July through September 2006 being down \$166,278 or 5%, our sales tax collections continued to grow despite the human impacts.

## **II. Risk Assessment - changes in risk exposure within the planning area**

The SMHMP addressed the probable impact for the following hazard events within the City of Sedona:

### **Natural Hazards**

- Earthquake
- Monsoon
- Subsidence
- Thunderstorm/High Winds
- Wildfires
- Extreme Cold/Heat
- Flooding/Flash Flooding
- Landslides/Mudslides

### **Human-Caused Hazards**

- Explosion/Fire
- Fuel/Resource Shortage
- Hazardous Materials Incidents
- Building/Structure Collapse
- Power/Utility Failure
- Sabotage
- Transportation Accidents
- Special Events

The threat of rockslides in Oak Creek Canyon still exists, but as the vegetation reestablishes over the years, this risk exposure will diminish. Rockslides in Oak Creek Canyon pose economic impacts to Sedona.

### **III. Public involvement/outreach**

- Coconino County Emergency Services, SFD and the Coconino National Forest hosted a community meeting on July 10<sup>th</sup> and 12<sup>th</sup>, 2006 at the Elks Lodge on Airport Road in Sedona. The purpose of the meeting was to inform Oak Creek Canyon residents and business owners of the potential risk of rock and debris slides in Oak Creek Canyon following the Brins fire. Local agencies shared information as to what actions were needed in the event of a threatening storm in the canyon, particularly in the vicinity of the Brins fire.
- Held exhibits for the public at City Hall for Public Works Week on May 22, 2007. One of the exhibits covered FEMA's National Flood Insurance Program and flood awareness.
- Sedona Fire District (SFD) continuously conducts outreach on defensible space for wildfire. In May 2007, two weekends (three days each weekend) were available to residents of the SFD to bring in yard brush and tree cuttings. Fire Station No. 4 was the collection point for this free service. SFD employees had a chipper which all of the delivered material was fed into. During the 2007 event, 15 large capacity roll-off dumpsters were filled with the chipped debris.
- The SFD periodically runs their "In-Quarters" Fire & EMS News in the Sedona Red Rock Newspaper. In-Quarters Fire & EMS news topics include: Wild-land fire defensible space, rockslides, burn restrictions, fire code, and miscellaneous household safety topics. SFD also has brochures on "Fire-wise Communities" and "Oak Creek Canyon Fire Evacuation for Visitors & Travelers".
- On August 7, 2007, the Sedona Police Department hosted its annual "National Night Out" event. This event offers public safety displays and information. Firefighters were also there to display rescue equipment and hand out information.

### **IV. Mitigation Success stories**

- City Council adopted the Sedona Floodplain Ordinance on September 26, 2006. The ordinance incorporated Special Flood Hazard Areas (SFHA) delineated in the City of Sedona Floodplain Management Study as well as SFHA shown on the FEMA Flood Insurance Rate Maps.
- ADOT has maintained message boards north and south of the Brins Fire burned area on Hwy. 89A to warn motorists of potential rockslides during heavy rain events. SFD will close the highway if there are reports of heavy debris entering the roadway. Heavy equipment is staged at Indian Gardens during rainy seasons for quick response to roadway debris cleanup.
- The early warning siren system installation for Uptown and Oak Creek Canyon was completed on June 15, 2007. Signage throughout the canyon directs people to tune their radios to 92.9 FM for specific instructions. A total of nine sirens were installed, with the Southernmost siren located at the Arroyo Roble Resort and Northernmost siren located at Pine Flats.
- In July 2007, the City of Sedona Streets Maintenance Department, in coordination with Brewer Brothers Construction, completed a gabion bank-stabilization project to protect the banks at the Oak Creek crossing on Sycamore Road. The banks at this

crossing have notoriously had washout problems during Oak Creek flooding. The project received 75% FEMA Mitigation Funding, with the City of Sedona's share being 25% of the total project cost. *This project was not on the actions/projects list.*

- Participation in the Citizen's Emergency Response Team (CERT) Training through the SFD – More than 100 people have been certified in light search and rescue techniques, CPR, First Aide and disaster preparedness.
- In July and August of 2007, the City of Sedona Engineering Department, in coordination with Tiffany Construction, completed a gabion bank-stabilization project to protect the bank at the 179 Sewage Lift Station. The 179 Lift Station is responsible for pumping the sewage from most of the properties along Hwy. 179. This lift station was threatened of being undermined by the erosion process of Morgan Wash. The project also included raising the lift station equipment/controls to the Morgan Wash 100-year flood elevation.
- ADOT currently has plans to install a dynamic message sign in fiscal year 2008 at the North end of Hwy. 89A as it leaves the Sedona City Limits.

## **V. Mitigation Strategy - review of the action plan(s)**

This section will review the actions/projects plan and determine the status of each initiative. The following action plan table will provide the following information:

- Action identifier
- Whether or not action had been taken in the reporting year
- Brief description of the initiative
- Initiative status

Reviewers of this report should refer to Section 5 of the Plan for more detailed descriptions of each initiative and additional variables information. Under the "status" section of the following section, are the following comments with regards to each initiative:

- Was any element of the initiative carried out during the reporting period?
- If no action was completed, why?
- Is the timeline for implementation for the initiative still appropriate?
- If the initiative was completed, does it need to be changed or removed from the action plan?

| Action Identifier | Action Taken Yes/No | Initiative Description   | Status   |
|-------------------|---------------------|--|--|
| 5.B.2             | No                  | Remove debris and vegetation upstream of the Oak Creek/179 Bridge to maintain uninhibited conveyance under bridge during large flood events and prevent debris blockage that could force water over the bridge, scour bridge abutments, and cutoff traffic.<br>Responsible Party: City of Sedona | No action was taken on this initiative during the current plan year due to denial of FEMA Mitigation Funding. This area is also located on private property. The new bridge which will be built by A.D.O.T. in this location as part of the Hwy. 179 reconstruction may negate the need for this initiative (based on bridge design).  |
| 1.A.1             | Yes                 | Update and adopt the current fire code. Train officers, field assessments, update equipment to protect existing and future buildings and infrastructure from wildfire damage and other natural and human-caused disasters.<br>Responsible Party: Sedona Fire District                            | On 9/11/07, the public (residents within the Sedona Fire District) will vote to adopt the 2003 Fire Code. Training will be ongoing.  |
| 5.B.1             | Yes                 | Protect 179 sewage lift station from Morgan Wash 100-year floodplain.<br>Responsible Party: City of Sedona   | In July and August of 2007, the City of Sedona Engineering Department, in coordination with Tiffany Construction, completed a gabion bank-stabilization project to protect the bank at the 179 Sewage Lift Station. The project also included raising the lift station equipment/controls to the Morgan Wash 100-year flood elevation. This initiative is complete.  |
| 7.A.1             | Yes                 | Increase capability to inspect buildings and facilities to enforce building codes to protect existing and future buildings and infrastructure from wind damage and other natural and human-caused disasters. Including software, equipment and vehicle.<br>Responsible Party: City of Sedona     | New residential and commercial structures have been reviewed, inspected and built to meet snow, wind and seismic loads per building code since the City's incorporation in 1988. City Council adopted the Sedona Floodplain Ordinance on September 26, 2006. This allowed the City to regulate development within City designated floodplains as well as those designated by FEMA. No new software, equipment or vehicles were purchased during this plan year due to budgetary constraints. |
| 8.A.1             | Yes                 | Retain, train and certify personnel for a Haz Mat Unit. Acquire equipment and vehicle.<br>Responsible Party: Sedona Fire District  | Thus far, six SFD employees are certified Haz Mat Technicians. A Haz Mat tender truck has been procured for Station #1.  |
| 9.A.1             | Yes                 | Train, certify and retain personnel for commercial vehicle safety inspections.<br>Responsible Party: City of Sedona Police Dept.   | Starting in the Fall of 2007, one officer will be conducting commercial vehicle inspections for eight-hour shifts on Wednesdays and Thursdays.   |
| 2.A.1             | Yes                 | Civilian Emergency Response Team (CERT). Train and educate public on basic first response capabilities.<br>Responsible Party: Sedona Fire District   | More than 100 people have been certified in light search and rescue techniques, CPR, First Aide and disaster preparedness.   |

| Action Identifier | Action Taken Yes/No | Initiative Description   | Status   |
|-------------------|---------------------|--|--|
| 3.A.3             | No                  | To construct an alternate route between Sedona and the Village of Oak Creek which would enhance emergency service response times and would provide a secondary route should the Hwy. 179 bridge become impassable.<br>Responsible Party: City of Sedona & County | A study is currently underway to determine possible and feasible alternate routes.   |
| 6.A.2             | Yes                 | Adopt an urban wildland interface development code. Train officers, risk assessments.<br>Responsible Party: Sedona Fire District   | On 9/11/07, the public (residents within the Sedona Fire District) will vote to adopt the 2003 International Urban-Wildland Interface Code. Training will be ongoing.  |
| 3.A.1             | Yes                 | Install five sirens throughout the community to notify the public of impending hazards.<br>Responsible Party: Sedona Fire District   | This project was specifically for Uptown and Oak Creek Canyon. This initiative was completed on June 15, 2007. Signage throughout the canyon directs people to tune their radios to 92.9 FM for specific instructions. A total of nine sirens were installed, with the Southernmost siren located at the Arroyo Roble Resort and Northernmost siren located at Pine Flats. |
| 3.A.2             | Yes                 | Oak Creek Canyon condition announcements along 89-A north with variable message signs.<br>Responsible Party: A.D.O.T.  | A.D.O.T. has maintained message boards north and south of the Brins Fire burned area on Hwy. 89A to warn motorists of potential rockslides during heavy rain events.   |
| 6.A.1             | Yes                 | Propose wildland fire assessments to identify urban wildland interface.<br>Responsible Party: Sedona Fire District   | SFD advertises and offers free property assessment to homeowners and business owners. They've been following the 2003 International Urban-Wildland Interface Code for guidance/recommendations. More than 50 inspections were done in the plan year.   |
| 7.B.1             | No                  | Develop program to assess vulnerability of structures in the community likely to be vulnerable to the affects of thunderstorms and high winds.<br>Responsible Party: City of Sedona  | No action was taken on this initiative during the current plan year do to budgetary constraints. Per FEMA regulations, we only take action on flooding issues if a structure has at least 50% substantial damage.  |
| 2.C.1             | Yes                 | Engine Company Inspection Program - Promote hazard mitigation in the business and residential areas in the community. Install computer and communications equipment in existing facilities.<br>Responsible Party: Sedona Fire District                           | 10 inspections are conducted per captain per shift per station. This equates to 30 inspections per station per month for a total of 90 inspections per month (three stations participate). Commercial inspections are done on a routine annual basis. Residential inspections are by citizen request only and they are free.   |

November 5, 2007

Sedona City Council  
**Through: City Manager's Office**  
104 Roadrunner Drive  
Sedona, Arizona 86336

SUBJECT: SEDONA MULTI-HAZARD MITIGATION PLAN ANNUAL REVIEW

Honorable Council Members,

On behalf of the Multi-Hazard Mitigation Plan Planning Team, I am pleased to present the 2007 Annual Progress Report summary for the Sedona Multi-Hazard Mitigation Plan. Over the next four years, members of the planning team will reconvene to discuss public involvement, risk assessment and mitigation strategy in relation to the plan. The purpose of this process is to keep the plan dynamic and responsive to the needs of Sedona. At the end of five years (September 2011), any recommended changes may then be incorporated as the plan continues to be implemented.

Section 6 "Plan Maintenance Procedures" of the Sedona Multi-Hazard Mitigation Plan requires that a summary of the annual review be presented as an informational item to the Sedona City Council. To fulfill this obligation, I am providing the 2007 Annual Progress Report summary to you as an informational item. No action on the City Council's part is required at this time.

This five-page report summary includes the following sections:

- I. Natural or human-caused hazard events that have occurred within the last year
- II. Risk Assessment - changes in risk exposure within the planning area
- III. Public involvement/outreach
- IV. Mitigation Success stories
- V. Mitigation Strategy - review of the action plan(s)

Sincerely,

David Peck  
Assistant Engineer  
City of Sedona

DWP/ms

cc: Charles Mosley, City Engineer/Public Works Director  
Cullen Hollister, Assistant City Engineer/Assistant Public Works Director

**The City of Sedona  
Multi-Hazard Mitigation Plan  
Progress Report**

**Reporting Period:**

September 2007 to September 2008

**Background:** The City of Sedona has developed the Sedona Multi-Hazard Mitigation Plan (SMHMP) to provide its vision for reducing risk from all hazards by identifying resources, information and strategies for risk reduction. Responding to programmatic requirements defined under the Disaster Mitigation Act of 2000, the City embarked on a planning process that was scripted to provide as many tangible benefits for the City from this single planning effort. The plan was adopted by Sedona City Council on June 13, 2006, and was approved by FEMA Region IX for compliance with section 201.6, Chapter 44 of the Code of Federal Regulations (44CFR) on September 8, 2006. By completing this process the City has achieved compliance with the parameters of the Disaster Mitigation Act, and thus leveraged hazard mitigation grant funding opportunities afforded under the Robert T. Safford Act. The SMHMP is available for public viewing at the City of Sedona Clerk's office.

**Purpose:** The objective of this annual evaluation is to ensure that there is a continuing planning process that will keep the SMHMP dynamic and responsive to the needs and capabilities of the coalition partnership. This report will discuss the following:

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**I. Natural or human-caused hazard events that have occurred within the last year**

On December 31, 2007, there was a fatal semi-truck accident on southbound I-17, north of the Hwy. 179 exit. The truck that was involved in this incident was carrying drums of a hazardous materials substance, and these drums were scattered throughout the scene. I-17 detour options were posted on message boards along I-40; however, it appeared that most drivers chose to come down Hwy. 89A, through Oak Creek Canyon (with the exception of trucks over 50 feet in length). This traffic detour started at about 5 a.m. and lasted for approximately 12 hours.

This scenario was complicated by the fact that there were also two fairly serious accidents on Hwy. 89A (between Midgely Bridge and Uptown Sedona) during the time of the detour.

For most of this day, there was a two to four hour back up (10 to 15 miles) of cars coming down Oak Creek Canyon trying to get to or through Sedona.

In the future, delays of this magnitude could possibly be mitigated with a mutual aid effort that controlled Uptown pedestrian traffic, and used manual traffic control at the Uptown traffic signals.

Some of the Sedona Fire District response times have been negatively impacted by the SR 179 Project construction.

Economic Statement from Jodie Filardo: Over the past year from July 2007 through June 2008, the economy of Sedona has continued to hold its own despite the disturbing combinations of a weakened economy hitting our construction segment, construction on SR 179 disturbing our visitors' experiences and reducing retail sales and related taxes, and escalating gasoline prices reducing the number of visitors and overnight guests. Thanks to effective room management by our accommodation segment coupled with adjustments made in our retail and restaurant & bar segments, our tax collections over the period remain flat, growing at a meager .063%.

## **II. Risk Assessment - changes in risk exposure within the planning area**

The SMHMP addressed the probable impact for the following hazard events within the City of Sedona:

### **Natural Hazards**

- Earthquake
- Monsoon
- Subsidence
- Thunderstorm/High Winds
- Wildfires
- Extreme Cold/Heat
- Flooding/Flash Flooding
- Landslides/Mudslides

### **Human-Caused Hazards**

- Explosion/Fire
- Fuel/Resource Shortage
- Hazardous Materials Incidents
- Building/Structure Collapse
- Power/Utility Failure
- Sabotage
- Transportation Accidents
- Special Events

The threat of rockslides in Oak Creek Canyon still exists as a result of the 2006 Brins Fire, but as the vegetation reestablishes over the years, this risk exposure will diminish. Rockslides in Oak Creek Canyon pose economic impacts to Sedona.

## **III. Public involvement/outreach**

- On May 16, 2008, the Sedona Fire District (SFD) tested the emergency siren system that is designed to notify residents of Oak Creek Canyon and Uptown Sedona of severe emergencies that would require evacuation. The test served two purposes: (1) Assuring that the system is functioning properly; and (2) So that residents, business owners, and visitors become aware of what to expect in an actual emergency.

- Held exhibits for the public at the Teen Center for Public Works Week on May 20, 2008. One of the exhibits covered FEMA’s National Flood Insurance Program and flood awareness. The local water companies also provided their own displays.
- SFD continuously conducts outreach on defensible space for wildfire. In May 2008, SFD held their annual Sedona cleanup weekend. Three days were available to residents within the SFD to bring in yard brush and tree cuttings. Fire Station No. 4 was the collection point for this free service. SFD employees had a chipper which all of the delivered material was fed into. During the 3 days of the cleanup, the SFD received 127 loads of flammable vegetation from 75 different locations within the District. Seven 40-cubic yard capacity roll-off dumpsters were filled with the chipped debris. The City of Sedona contributed to the event by paying for the backhoe rental.
- The SFD periodically runs their “In-Quarters” Fire & EMS News in the Sedona Red Rock Newspaper. In-Quarters Fire & EMS news topics include: Wild-land fire defensible space, rockslides, burn restrictions, Fire Code, Community Emergency Response Team Training, and miscellaneous household safety topics. SFD also has brochures on “Fire-wise Communities” and “Oak Creek Canyon Fire Evacuation for Visitors & Travelers”.
- On August 5, 2008, the Sedona Police Department hosted its annual “National Night Out” event. This event offers public safety displays and information. Firefighters were also there to display rescue equipment (including a helicopter on Cardinal Lane) and to hand out information.

#### **IV. Mitigation Success stories**

- The City of Sedona Public Works Engineering Department has been working with Fann Construction to install 11,280 gallon bypass wet wells at the three major sewage pump stations; Brewer, Carol Canyon, and El Camino (these three stations pump approx. 95% of Sedona’s wastewater). The purpose of the new wet wells will be to bypass the existing primary wet wells for performing maintenance, and to evaluate their condition. The other purpose is to create additional storage capacity that could be used during emergency situations (i.e., pump failures, generator failures, and damaged force mains). This project should be complete by the summer of 2009.
- On November 17, 2007, the Sedona City Council approved and adopted the addition of a “Stormwater” Chapter to the Sedona City Code. The purpose of this new chapter is to provide for health, safety, and general welfare within the City of Sedona through regulation of non-stormwater discharges to the Municipal Separate Storm Sewer System, to the Maximum Extent Practicable, as required by federal and state law.
- The City of Sedona entered into an agreement with the City of Flagstaff that allows all Sedona residents to dispose of their household hazardous waste at the Flagstaff Hazardous Products Center, which is located at 6770 East Landfill Road in Flagstaff.
- As part of the IGA between the City of Sedona and the Sedona Fire District, seven Automated External Defibrillation (AED) units were installed in the Uptown rights-of-way. This brings the total number of AEDs in City of Sedona public places to 38.
- 150 fire hydrants have been installed within the City of Sedona since 2001 as part of the Franchise Agreement that exists between the City, Arizona Water Company, and

- A.D.O.T. has budgeted for two permanent variable message boards to be installed on Hwy. 89A during FY 2008-2009. One board will be near Lomacasi Cottages, and the other will be just south of Flagstaff.
- A.D.O.T. completed a rockslide stabilization project on the east side of Hwy. 89A directly across from the Garland's Lodge entrance.
- The Sedona Fire District now has an alternate route to the Village of Oak Creek. It passes through the La Marra Subdivision off Upper Red Rock Loop Road.
- The Insurance Services Organization (ISO) rating dropped from a Class 5 to a Class 3 within the city limits. This change should reflect lower rates for many homeowners on their home insurance policies.

**V. Mitigation Strategy - review of the action plan(s)**

This section will review the actions/projects plan and determine the status of each initiative. The following action plan table will provide the following information:

- Action identifier
- Whether or not action had been taken in the reporting year
- Brief description of the initiative
- Initiative status

Reviewers of this report should refer to Section 5 of the Plan for more detailed descriptions of each initiative and additional variables information. Under the "status" section of the following section, are the following comments with regards to each initiative:

- Was any element of the initiative carried out during the reporting period?
- If no action was completed, why?
- Is the timeline for implementation for the initiative still appropriate?
- If the initiative was completed, does it need to be changed or removed from the action plan?

| Action Identifier | Action Taken Yes/No | Initiative Description   | Status   |
|-------------------|---------------------|--|--|
| 5.B.2             | No                  | Remove debris and vegetation upstream of the Oak Creek/179 Bridge to maintain uninhibited conveyance under bridge during large flood events and prevent debris blockage that could force water over the bridge, scour bridge abutments, and cutoff traffic.<br>Responsible Party: City of Sedona | No action was taken on this initiative during the current plan year due to denial of FEMA Mitigation Funding. This area is also located on private property. The new bridge which will be built by A.D.O.T. in this location as part of the Hwy. 179 reconstruction may negate the need for this initiative (based on bridge design).  |
| 1.A.1             | Yes                 | Update and adopt the current fire code. Train officers, field assessments, update equipment to protect existing and future buildings and infrastructure from wildfire damage and other natural and human-caused disasters.<br>Responsible Party: Sedona Fire District                            | On 9/11/07, the public (residents within the Sedona Fire District) voted to adopt the 2003 Fire Code. The SFD hired two new Fire Inspectors that are Fire Code Certified.<br>Training will be ongoing.   |
| 5.B.1             | Yes                 | Protect 179 sewage lift station from Morgan Wash 100-year floodplain.<br>Responsible Party: City of Sedona   | In July and August of 2007, the City of Sedona Engineering Department, in coordination with Tiffany Construction, completed a gabion bank-stabilization project to protect the bank at the 179 Sewage Lift Station. The project also included raising the lift station equipment/controls to the Morgan Wash 100-year flood elevation. This initiative is complete.  |
| 7.A.1             | Yes                 | Increase capability to inspect buildings and facilities to enforce building codes to protect existing and future buildings and infrastructure from wind damage and other natural and human-caused disasters. Including software, equipment and vehicle.<br>Responsible Party: City of Sedona     | New residential and commercial structures have been reviewed, inspected and built to meet snow, wind and seismic loads per building code since the City's incorporation in 1988. City Council adopted the Sedona Floodplain Ordinance on September 26, 2006. This allowed the City to regulate development within City designated floodplains as well as those designated by FEMA. No new software, equipment or vehicles were purchased during this plan year due to budgetary constraints. |
| 8.A.1             | Yes                 | Retain, train and certify personnel for a Haz Mat Unit. Acquire equipment and vehicle.<br>Responsible Party: Sedona Fire District  | Thus far, six SFD employees are certified Haz Mat Technicians. A Haz Mat tender truck has been procured for Station #1. (No Changes for 2008)  |
| 9.A.1             | Yes                 | Train, certify and retain personnel for commercial vehicle safety inspections.<br>Responsible Party: City of Sedona Police Dept.   | Since the Fall of 2007, one officer has been conducting routine commercial vehicle inspections during his shifts. The current officer is Jerome Bilas.   |
| 2.A.1             | Yes                 | Civilian Emergency Response Team (CERT). Train and educate public on basic first response capabilities.<br>Responsible Party: Sedona Fire District   | More than 100 people were certified prior to 2008. No people were certified during this reporting period, due to lack of public interest.  |

| Action Identifier | Action Taken Yes/No | Initiative Description   | Status   |
|-------------------|---------------------|--|--|
| 3.A.3             | Yes                 | To construct an alternate route between Sedona and the Village of Oak Creek which would enhance emergency service response times and would provide a secondary route should the Hwy. 179 bridge become impassable.<br>Responsible Party: City of Sedona & County | A study was completed to determine possible and feasible alternate routes. Two possible locations of an alternate route are being included in the Verde Valley Transportation Study, which is being conducted by Yavapai County. No route has been finalized at this time. There is now a new emergency services route to VOC via the La Marra Subdiv. on Upper RR Loop Rd.                              |
| 6.A.2             | Yes                 | Adopt an Urban Wild-land Interface Development Code. Train officers, risk assessments.<br>Responsible Party: Sedona Fire District  | On 9/11/07, the public (residents within the Sedona Fire District) voted to adopt the 2003 International Urban-Wild-land Interface Code. The SFD hired two new Fire Inspectors that are Wild-land Evaluator Certified. Training is on-going.   |
| 3.A.1             | Yes                 | Install five sirens throughout the community to notify the public of impending hazards.<br>Responsible Party: Sedona Fire District   | This project was specifically for Uptown and Oak Creek Canyon. This initiative was completed on June 15, 2007. Signage throughout the canyon directs people to tune their radios to 92.9 FM for specific instructions. A total of nine sirens were installed, with the Southernmost siren located at the Arroyo Roble Resort and Northernmost siren located at Pine Flats.                               |
| 3.A.2             | Yes                 | Oak Creek Canyon condition announcements along 89-A north with variable message signs.<br>Responsible Party: A.D.O.T.  | A.D.O.T. has budgeted for two permanent variable message boards to be installed on Hwy. 89A during FY 2008-2009. One board will be near Lomacasi Cottages, and the other will be just south of Flagstaff.  |
| 6.A.1             | Yes                 | Propose wild-land fire assessments to identify urban Wild-land interface.<br>Responsible Party: Sedona Fire District   | SFD advertises and offers free property assessment to homeowners and business owners. They've adopted the 2003 International Urban-Wildland Interface Code. Inspections were done for all of Thunder Mountain Ranch, Foothills South, The Cottages at Coffee Pot, and the Jordan Historical Park in the plan year. SFD also developed a Sedona Wild-land Interface Map that shows priority threat areas. |
| 7.B.1             | No                  | Develop program to assess vulnerability of structures in the community likely to be vulnerable to the affects of thunderstorms and high winds.<br>Responsible Party: City of Sedona  | No action was taken on this initiative during the current plan year do to budgetary constraints. Per FEMA regulations, we only take action on flooding issues if a structure has at least 50% substantial damage.  |
| 2.C.1             | Yes                 | Engine Company Inspection Program - Promote hazard mitigation in the business and residential areas in the community. Install computer and communications equipment in existing facilities.<br>Responsible Party: Sedona Fire District                           | 10 inspections are conducted per captain per shift per station. This equates to 30 inspections per station per month for a total of 90 inspections per month (three stations participate). Commercial inspections are done on a routine annual basis. Residential inspections are by citizen request only and they are free.   |



October 9, 2008

Sedona City Council  
**Thru: City Manager's Office**  
104 Roadrunner Drive  
Sedona, Arizona 86336

**SUBJECT: SEDONA MULTI-HAZARD MITIGATION PLAN ANNUAL REVIEW**

Honorable Council Members,

On behalf of the Multi-Hazard Mitigation Plan Planning Team, I am pleased to present the 2008 Annual Progress Report summary for the Sedona Multi-Hazard Mitigation Plan. Over the next three years, members of the planning team will reconvene to discuss public involvement, risk assessment and mitigation strategy in relation to the plan. The purpose of this process is to keep the plan dynamic and responsive to the needs of Sedona. Five years after the plan inception date, or September 2011, the planning team and City of Sedona may incorporate any recommended changes into the plan as the plan continues to be implemented.

Section 6 "Plan Maintenance Procedures" of the Sedona Multi-Hazard Mitigation Plan requires that a summary of the annual review be presented as an informational item to the Sedona City Council. To fulfill this obligation, I am providing the 2008 Annual Progress Report summary to you as an informational item. No action by the City Council is required at this time.

This five-page report summary includes the following sections:

- I. Natural or human-caused hazard events that have occurred within the last year
- II. Risk Assessment - changes in risk exposure within the planning area
- III. Public involvement/outreach
- IV. Mitigation Success stories
- V. Mitigation Strategy - review of the action plan(s)

Sincerely,

David Peck, CFM  
Assistant Engineer  
City of Sedona

DWP/ms

cc: Eric Levitt, City Manager  
Alison Zelms, Assistant City Manager  
Charles Mosley, City Engineer/Public Works Director (electronically)  
Cullen Hollister, Assistant City Engineer/Assistant Public Works Director (electronically)

**The City of Sedona  
Multi-Hazard Mitigation Plan  
Progress Report**

**Reporting Period:**

September 2008 to September 2009

**Background:** The City of Sedona has developed the Sedona Multi-Hazard Mitigation Plan (SMHMP) to provide its vision for reducing risk from all hazards by identifying resources, information and strategies for risk reduction. Responding to programmatic requirements defined under the Disaster Mitigation Act of 2000, the City embarked on a planning process that was scripted to provide as many tangible benefits for the City from this single planning effort. The plan was adopted by Sedona City Council on June 13, 2006, and was approved by FEMA Region IX for compliance with section 201.6, Chapter 44 of the Code of Federal Regulations (44CFR) on September 8, 2006. By completing this process the City has achieved compliance with the parameters of the Disaster Mitigation Act, and thus leveraged hazard mitigation grant funding opportunities afforded under the Robert T. Safford Act. The SMHMP is available for public viewing at the City of Sedona Clerk's office.

**Purpose:** The objective of this annual evaluation is to ensure that there is a continuing planning process that will keep the SMHMP dynamic and responsive to the needs and capabilities of the coalition partnership. This report summary will highlight the following:

- I. Natural or human-caused hazard events that have occurred within the last year
- II. Risk Assessment - changes in risk exposure within the planning area
- III. Public involvement/outreach
- IV. Mitigation Success stories
- V. Mitigation Strategy - review of the action plan(s)

**I. Natural or human-caused hazard events that have occurred within the last year**

Some of the Sedona Fire District response times have been negatively impacted by the SR 179 Project construction.

Economic Statement from Jodie Filardo: The 2008/2009 fiscal year has been difficult for the City of Sedona as the impacts of the shrinking economy are being felt. Overall, sales tax collections declined -5.06% when compared with FY 2007/2008. While the accommodations and retail sectors were especially hard hit, a reduction in the sales tax dollars in the construction sector was softened by the collection of sales taxes related to the construction of Project 2 on State Route 179.

## **II. Risk Assessment - changes in risk exposure within the planning area**

The SMHMP addressed the probable impact for the following hazard events within the City of Sedona:

### **Natural Hazards**

- Earthquake
- Monsoon
- Subsidence
- Thunderstorm/High Winds
- Wildfires
- Extreme Cold/Heat
- Flooding/Flash Flooding
- Landslides/Mudslides

### **Human-Caused Hazards**

- Explosion/Fire
- Fuel/Resource Shortage
- Hazardous Materials Incidents
- Building/Structure Collapse
- Power/Utility Failure
- Sabotage
- Transportation Accidents
- Special Events

The threat of rockslides in Oak Creek Canyon still exists after the June 2006 Brins Fire, but as the vegetation reestablishes over the years, this risk exposure will diminish. Rockslides in Oak Creek Canyon pose economic impacts to Sedona.

## **III. Public involvement/outreach**

- On October 11, 2008, the City of Sedona, in conjunction with the Arizona Department of Environmental Quality, hosted a free household hazardous waste drop-off event for City of Sedona residents and City of Sedona employees. The drop-off site for the event was at the Sedona Red Rock High School.
- Held exhibits for the public at the Posse Grounds Community Park for Public Works Week on Earth Day in May 2009. One of the exhibits covered FEMA's National Flood Insurance Program and flood awareness. Another exhibit educated people on stormwater pollution prevention.
- In May 2009, the Sedona Fire District (SFD) tested the emergency siren system that is designed to notify residents of Oak Creek Canyon and Uptown Sedona of severe emergencies that would require evacuation. The test served two purposes: (1) Assuring that the system is functioning properly; and (2) So that residents, business owners, and visitors become aware of what to expect in an actual emergency.
- SFD continuously conducts outreach on defensible space for wildfire. In May 2009, SFD held their annual Sedona cleanup weekend. Three days were available to residents within the SFD to bring in yard brush and tree cuttings. Fire Station No. 4 was the collection point for this free service. SFD employees had a chipper which all of the delivered material was fed into. The City of Sedona contributed to the event by paying for the backhoe rental.
- The SFD periodically runs their "In-Quarters" Fire & EMS News in the Sedona Red Rock Newspaper. In-Quarters Fire & EMS news topics include: Wild-land fire defensible space, rockslides, burn restrictions, Fire Code, Community Emergency Response Team Training, and miscellaneous household safety topics. SFD also has brochures on "Fire-wise Communities" and "Oak Creek Canyon Fire Evacuation for Visitors & Travelers".

- In August 2009, the Sedona Police Department hosted its annual “National Night Out” event. This event offers public safety displays and information. Firefighters were also there to display rescue equipment (including a helicopter on Cardinal Lane) and to hand out information.

#### **IV. Mitigation Success stories**

- The City of Sedona Public Works Engineering Department has been working with Fann Construction to install 11,280 gallon bypass wet wells at the three major sewage pump stations; Brewer, Carol Canyon, and El Camino (these three stations pump approx. 95% of Sedona’s wastewater). The purpose of the new wet wells will be to bypass the existing primary wet wells for performing maintenance, and to evaluate their condition. The other purpose is to create additional storage capacity that could be used during emergency situations (i.e., pump failures, generator failures, and damaged force mains). All three of the new bypass wet wells were operational as of February 2009. This project is scheduled for completion in January 2011.
- The Sedona Chapel Area Sanitary Sewer and Drainage Project began in September 2008 and is scheduled for completion the Summer of 2010. The sewer portion of the project is to install mainline and 379 new service laterals to individual parcels. The storm drain portion is for improvements based on the 2005 Sedona Stormwater Master Plan, and to allow capacity for a 25-year storm event. The total cost of this combined project is \$10,184,008.
- The City of Sedona continues to have an agreement with the City of Flagstaff that allows all Sedona residents to dispose of their household hazardous waste at the Flagstaff Hazardous Products Center, which is located at 6770 East Landfill Road in Flagstaff.
- The total number of Automated External Defibrillation (AED) units in City of Sedona public places is 38. Ongoing training and certification takes place for those people responsible for the units at each location.
- 150 fire hydrants have been installed within the City of Sedona since 2001 as part of the Franchise Agreement that exists between the City, Arizona Water Company, and the SFD. The goal of the SFD is to have a fire hydrant within 500 ft. of every building within the City. As of 2008, the installation of approximately 150 more fire hydrants was needed in order to accomplish that goal. During this reporting year, 31 hydrants were installed as part of the SR 179 Project. This brings the total needed to 119.
- A.D.O.T. installed two permanent variable message boards north of Sedona on SR 89A. One of the boards was installed near Lomacasi Cottages, and the other one was installed just south of Flagstaff.
- The Sedona Fire District has an alternate route to the Village of Oak Creek. It passes through the La Marra Subdivision off Upper Red Rock Loop Road.
- An addition was made to City Code Chapter 13 “Wastewater”, that requires the installation of a backwater valve on a sewer service line where the lowest plumbed floor in the structure is lower than the nearest upstream sanitary sewer manhole. This was done to protect properties from sewage flooding in the event of a mainline clog.

- An addition was made to City Code Chapter 13 “Wastewater”, that requires businesses with grease traps to have them properly permitted with the City. This was done to get businesses to improve their grease trap maintenance program in an effort to reduce fats, oils, and greases from reaching the sewer mains.

## **V. Mitigation Strategy - review of the action plan(s)**

This section will review the actions/projects plan and determine the status of each initiative. The following action plan table will provide the following information:

- Action identifier
- Whether or not action had been taken in the reporting year
- Brief description of the initiative
- Initiative status

Reviewers of this report should refer to Section 5 of the Plan for more detailed descriptions of each initiative and additional variables information. Under the “status” section of the following section, are the following comments with regards to each initiative:

- Was any element of the initiative carried out during the reporting period?
- If no action was completed, why?
- Is the timeline for implementation for the initiative still appropriate?

If the initiative was completed, does it need to be changed or removed from the action plan?

| Action Identifier | Action Taken Yes/No | Initiative Description   | Status   |
|-------------------|---------------------|--|--|
| 5.B.2             | No                  | Remove debris and vegetation upstream of the Oak Creek/179 Bridge to maintain uninhibited conveyance under bridge during large flood events and prevent debris blockage that could force water over the bridge, scour bridge abutments, and cutoff traffic.<br>Responsible Party: City of Sedona | No action was taken on this initiative during the current plan year due to denial of FEMA Mitigation Funding. This area is also located on private property.   |
| 1.A.1             | Yes                 | Update and adopt the current fire code. Train officers, field assessments, update equipment to protect existing and future buildings and infrastructure from wildfire damage and other natural and human-caused disasters.<br>Responsible Party: Sedona Fire District                            | On 9/11/07, the public (residents within the Sedona Fire District) voted to adopt the 2003 Fire Code. The SFD has two Fire Inspectors that are Fire Code Certified. Training will be ongoing.  |
| 5.B.1             | No                  | Protect 179 sewage lift station from Morgan Wash 100-year floodplain.<br>Responsible Party: City of Sedona   | In July and August of 2007, the City of Sedona Engineering Department, in coordination with Tiffany Construction, completed a gabion bank-stabilization project to protect the bank at the 179 Sewage Lift Station. This initiative is complete.   |
| 7.A.1             | No                  | Increase capability to inspect buildings and facilities to enforce building codes to protect existing and future buildings and infrastructure from wind damage and other natural and human-caused disasters. Including software, equipment and vehicle.<br>Responsible Party: City of Sedona     | New residential and commercial structures have been reviewed, inspected and built to meet snow, wind and seismic loads per building code since the City's incorporation in 1988. City Council adopted the Sedona Floodplain Ordinance on September 26, 2006. No new software, equipment or vehicles were purchased during this plan year due to budgetary constraints. |
| 8.A.1             | Yes                 | Retain, train and certify personnel for a Haz Mat Unit. Acquire equipment and vehicle.<br>Responsible Party: Sedona Fire District  | Thus far, six SFD employees are certified Haz Mat Technicians. A Haz Mat tender truck has been procured for Station #1. A medium duty rescue truck went into service in April 2009.  |
| 9.A.1             | Yes                 | Train, certify and retain personnel for commercial vehicle safety inspections.<br>Responsible Party: City of Sedona Police Dept.   | Since the Fall of 2007, one officer has been conducting routine commercial vehicle inspections during his shifts. The current officer is Jerome Bilas.   |
| 2.A.1             | No                  | Civilian Emergency Response Team (CERT). Train and educate public on basic first response capabilities.<br>Responsible Party: Sedona Fire District   | More than 100 people were certified prior to 2008. No people were certified during this reporting period, due to lack of public interest. However, the certified people are still active.  |

| Action Identifier | Action Taken Yes/No | Initiative Description   | Status  |
|-------------------|---------------------|--|---|
| 3.A.3             | Yes                 | To construct an alternate route between Sedona and the Village of Oak Creek which would enhance emergency service response times and would provide a secondary route should the Hwy. 179 bridge become impassable.<br>Responsible Party: City of Sedona & County | In May 2009, the Verde Valley Multimodal Transportation Study was completed by Lima & Assoc. for Yavapai County. The study does not recommend a project for an alternate route between 2010 and 2030. However, there is an emergency services route to VOC via the La Marra Subdivision on Upper RR Loop Rd. Improvements were made to Brewer and Ranger Roads to ease pressure on the "Y" during the SR 179 Project. |
| 6.A.2             | Yes                 | Adopt an urban wildland interface development code. Train officers, risk assessments.<br>Responsible Party: Sedona Fire District   | On 9/11/07, the public (residents within the Sedona Fire District) voted to adopt the 2003 International Urban-Wild-land Interface Code. The SFD has two Fire Inspectors that are Wild-land Evaluator Certified. Training is ongoing.   |
| 3.A.1             | No                  | Install five sirens throughout the community to notify the public of impending hazards.<br>Responsible Party: Sedona Fire District   | This project was specifically for Uptown and Oak Creek Canyon. This initiative was completed on June 15, 2007. A total of nine sirens were installed, with the Southernmost siren located at the Arroyo Roble Resort and Northernmost siren located at Pine Flats.  |
| 3.A.2             | Yes                 | Oak Creek Canyon condition announcements along 89-A north with variable message signs.<br>Responsible Party: A.D.O.T.  | A.D.O.T. installed two permanent variable message boards on SR 89A during FY 2008-2009. One board is near Lomacasi Cottages, and the other is just south of Flagstaff. This initiative is complete.   |
| 6.A.1             | Yes                 | Propose wildland fire assessments to identify urban wildland interface.<br>Responsible Party: Sedona Fire District   | SFD advertises and offers free property assessment to homeowners and business owners. They've adopted the 2003 International Urban-Wildland Interface Code. Inspections were done for all of the Jordan Park Subdivision in the plan year. SFD has developed a Sedona Wild-land Interface Map that shows priority threat areas.   |
| 7.B.1             | No                  | Develop program to assess vulnerability of structures in the community likely to be vulnerable to the affects of thunderstorms and high winds.<br>Responsible Party: City of Sedona  | No action was taken on this initiative during the current plan year do to budgetary constraints. Per FEMA regulations, we only take action on flooding issues if a structure has at least 50% substantial damage.   |
| 2.C.1             | Yes                 | Engine Company Inspection Program - Promote hazard mitigation in the business and residential areas in the community. Install computer and communications equipment in existing facilities.<br>Responsible Party: Sedona Fire District                           | 10 inspections are conducted per captain per shift per station. This equates to 30 inspections per station per month for a total of 90 inspections per month (three stations participate). Commercial inspections are done on a routine annual basis. Residential inspections are by citizen request only and they are free.  |

**The City of Sedona  
Multi-Hazard Mitigation Plan  
Progress Report**

**Reporting Period:**

September 2009 to September 2010

**Background:** The City of Sedona has developed the Sedona Multi-Hazard Mitigation Plan (SMHMP) to provide its vision for reducing risk from all hazards by identifying resources, information and strategies for risk reduction. Responding to programmatic requirements defined under the Disaster Mitigation Act of 2000, the City embarked on a planning process that was scripted to provide as many tangible benefits for the City from this single planning effort. The plan was adopted by Sedona City Council on June 13, 2006, and was approved by FEMA Region IX for compliance with section 201.6, Chapter 44 of the Code of Federal Regulations (44CFR) on September 8, 2006. By completing this process the City has achieved compliance with the parameters of the Disaster Mitigation Act, and thus leveraged hazard mitigation grant funding opportunities afforded under the Robert T. Safford Act. The SMHMP is available for public viewing at the City of Sedona Clerk's office.

**Purpose:** The objective of this annual evaluation is to ensure that there is a continuing planning process that will keep the SMHMP dynamic and responsive to the needs and capabilities of the coalition partnership. This report summary will highlight the following:

- I. Natural or human-caused hazard events that have occurred within the last year
- II. Risk Assessment - changes in risk exposure within the planning area
- III. Public involvement/outreach
- IV. Mitigation Success stories
- V. Mitigation Strategy - review of the action plan(s)

**I. Natural or human-caused hazard events that have occurred within the last year**

Some of the Sedona Fire District response times have been negatively impacted by lane closures, traffic backups, and congested work areas during the SR 179 Project construction.

On September 10, 2009, an isolated and severe storm over the central portion of West Sedona produced approximately 2.5 inches of heavy rainfall within a 45-minute period. Major flooding with stormwater, mud, and debris was experienced in the Harmony/Windsong area, Western Hills Subdivision, Sedona West Subdivision, Coffee Pot Subdivision, Sunset Drive, Shelby Drive, and many other areas. Tlaquepaque and Los Abrigados Resort were flooded by flows breaking out of Soldiers Wash (several cars in the shared parking lot were destroyed). The flooding caused damage to public and private property in these areas. A Declaration of Emergency was issued by the State

Governor's Office, and \$200,000 in emergency funding was made available to the City of Sedona. Approximately 100 high school students volunteered in helping affected residents clean up their properties during the week following the event.

A.D.O.T. completed an emergency repair near the bottom of the switchbacks on SR 89A in Oak Creek Canyon after winter rains undermined the roadway and washed out half of the southbound lane. Through traffic was closed off at the switchbacks for a couple of weeks, and then one lane was open with a temporary traffic signal during the repair work.

For the second year in a row, overall sales tax collections are down year-over-year, declining -11.52% compared with FY 2009. All major economic sectors (retail, accommodations, construction, and restaurant & bar) each experienced a year-over-year downturn with relative year-over-year declines of -2%, -18%, -23%, and -7% respectively. As bad as this news is, the construction decline of -23% was softened once again due to sales tax received from the construction of State Route 179 and of the Sedona Red Rock High School performing arts center, new gymnasium, plus additional classrooms.

## **II. Risk Assessment - changes in risk exposure within the planning area**

The SMHMP addressed the probable impact for the following hazard events within the City of Sedona:

### **Natural Hazards**

- Earthquake
- Monsoon
- Subsidence
- Thunderstorm/High Winds
- Wildfires
- Extreme Cold/Heat
- Flooding/Flash Flooding
- Landslides/Mudslides

### **Human-Caused Hazards**

- Explosion/Fire
- Fuel/Resource Shortage
- Hazardous Materials Incidents
- Building/Structure Collapse
- Power/Utility Failure
- Sabotage
- Transportation Accidents
- Special Events

The threat of rockslides in Oak Creek Canyon still exists after the June 2006 Brins Fire, but as the vegetation reestablishes over the years, this risk exposure will diminish. Rockslides in Oak Creek Canyon pose economic impacts to Sedona.

## **III. Public involvement/outreach**

- In April 2010, a Water Wise Day event was held at the West Sedona School for 4<sup>th</sup> graders from Big Park and W. Sedona School (over 100 students). Presentations on water conservation, sanitary sewer system basics, and stormwater pollution prevention were given.
- In May 2010, the Sedona Fire District (SFD) tested the emergency siren system that is designed to notify residents of Oak Creek Canyon and Uptown Sedona of severe emergencies that would require evacuation. The test served two purposes: (1)

Assuring that the system is functioning properly; and (2) So that residents, business owners, and visitors become aware of what to expect in an actual emergency.

- SFD continuously conducts outreach on defensible space for wildfire. In May 2010, SFD held their annual Sedona cleanup weekend. Three days were available to residents within the SFD to bring in yard brush and tree cuttings. Fire Station No. 4 was the collection point for this free service. SFD employees had a chipper which all of the delivered material was fed into. The City of Sedona contributed to the event by paying for the backhoe rental.
- The SFD periodically runs their “In-Quarters” Fire & EMS News in the Sedona Red Rock Newspaper. In-Quarters Fire & EMS news topics include: Wild-land fire defensible space, rockslides, burn restrictions, Fire Code, Community Emergency Response Team Training, and miscellaneous household safety topics. SFD also has brochures on “Fire-wise Communities” and “Oak Creek Canyon Fire Evacuation for Visitors & Travelers”.
- In August 2010, the Sedona Police Department hosted its annual “National Night Out” event. This event offers public safety displays and information. Firefighters were also there to display rescue equipment (including a helicopter) and to hand out information. The event was held at the Posse Grounds Park for the first time this year.

#### **IV. Mitigation Success stories**

- City of Sedona CIP: The City of Sedona Public Works Engineering Department has been working with Fann Construction to install 11,280 gallon bypass wet wells at the three major sewage pump stations; Brewer, Carol Canyon, and El Camino (these three stations pump approx. 95% of Sedona’s wastewater). The purpose of the new wet wells will be to bypass the existing primary wet wells for performing maintenance, and to evaluate their condition. The other purpose is to create additional storage capacity that could be used during emergency situations (i.e., pump failures, generator failures, and damaged force mains). All three of the new bypass wet wells were operational as of February 2009. This project is scheduled for completion in January 2011.
- City of Sedona CIP: The Sedona Chapel Area Sanitary Sewer and Drainage Project began in September 2008, and it was completed in August 2010. The sewer portion of the project included installation of mainline and 379 new service laterals to individual parcels. The storm drain portion was for improvements based on the 2005 Sedona Stormwater Master Plan, and to allow capacity for a 25-year storm event. The total cost of this combined project was \$10,184,008.
- City of Sedona CIP: The Harmony/Windsong Drainage Project, Phase I of multiple phases, began construction in November 2009 and was completed in July 2010. This phase was for drainage improvements from the north side of SR 89A to a point just east of the Navajo Dr./Aria St. intersection. This design was based on the 2005 Sedona Stormwater Master Plan, and has capacity for a 25-year storm event. The total cost of this phase of construction was \$1,704,583.

- Backup power was installed to maintain power to communications and computer server equipment in the event of an emergency. Project installed a 150 KW natural gas-powered generator at the north end of Building 108 at City Hall.
- Changes to Land Development Code Chapter 8 “Grading and Drainage” November 2009 included items to mitigate the impacts of flooding.
- All of the utilities: sewer main, high pressure gas main, water main, and communications were placed on the new pedestrian bridge over Oak Creek in December 2009. These utilities are much better protected from the effects of floodwaters than they were in their past configuration on the old vehicular bridge. The new vehicular bridge at Oak Creek was complete and the old bridge was removed as of May 2010.
- As part of the SR 179 Project, ADOT has installed seven roundabouts (including one at the “Y” and one at Brewer Road/SR 89A) within the City of Sedona. Roundabouts have been proven to reduce traffic speed, delays, and severity of crashes. There are numerous studies that demonstrate the safety statistics of roundabouts. Paved shoulders are striped to accommodate bicycles, and they provide areas for motorists to pull over and allow emergency vehicles to pass. Medians have been added to provide a physical separation between opposing through lanes. The medians act as a traffic calming measure, and help to reduce head-on collision crashes.
- ADOT, with the help of some City and Federal funding, is installing a new traffic signal at Airport Rd. & SR 89A (const. started July 2010). The project also includes new sidewalk ramps at each corner of the intersection and a northbound right-turn lane on SR 89A.
- The total number of Automated External Defibrillation (AED) units in City of Sedona public places is 38. Ongoing training and certification takes place for those people responsible for the units at each location.
- 150 fire hydrants were installed within the City of Sedona between 2001 and 2008 as part of the Franchise Agreement that exists between the City, Arizona Water Company, and the SFD. The goal of the SFD is to have a fire hydrant within 500 ft. of every building within the City. As of 2008, the installation of approximately 150 more fire hydrants was needed in order to accomplish that goal. In 2009, 31 hydrants were installed as part of the SR 179 Project. In 2010, 13 hydrants were installed in the Western Hills area. This brings the total still needed to 106.
- Beginning in 2008, the Sedona Fire District has had an alternate route to the Village of Oak Creek. It passes through the gated La Marra Subdivision off of Upper Red Rock Loop Road.

## **V. Mitigation Strategy - review of the action plan(s)**

This section will review the actions/projects plan and determine the status of each initiative. The following action plan table will provide the following information:

- Action identifier
- Whether or not action had been taken in the reporting year
- Brief description of the initiative
- Initiative status

Reviewers of this report should refer to Section 5 of the Plan for more detailed descriptions of each initiative and additional variables information. Under the “status” section of the following section, are the following comments with regards to each initiative:

- Was any element of the initiative carried out during the reporting period?
- If no action was completed, why?
- Is the timeline for implementation for the initiative still appropriate?

If the initiative was completed, does it need to be changed or removed from the action plan?

| Action Identifier | Action Taken Yes/No | Initiative Description   | Status   |
|-------------------|---------------------|--|--|
| 5.B.2             | No                  | Remove debris and vegetation upstream of the Oak Creek/179 Bridge to maintain uninhibited conveyance under bridge during large flood events and prevent debris blockage that could force water over the bridge, scour bridge abutments, and cutoff traffic.<br>Responsible Party: City of Sedona | No action was taken on this initiative during the current plan year due to denial of FEMA Mitigation Funding. This area is also located on private property.   |
| 1.A.1             | Yes                 | Update and adopt the current fire code. Train officers, field assessments, update equipment to protect existing and future buildings and infrastructure from wildfire damage and other natural and human-caused disasters.<br>Responsible Party: Sedona Fire District                            | On 9/11/07, the public (residents within the Sedona Fire District) voted to adopt the 2003 Fire Code. The SFD has one Fire Inspector that is Fire Code Certified. One position was cut during this plan year due to budgetary constraints. Training is ongoing.  |
| 5.B.1             | No                  | Protect 179 sewage lift station from Morgan Wash 100-year floodplain.<br>Responsible Party: City of Sedona   | In July and August of 2007, the City of Sedona Engineering Department, in coordination with Tiffany Construction, completed a gabion bank-stabilization project to protect the bank at the 179 Sewage Lift Station. This initiative is complete.   |
| 7.A.1             | No                  | Increase capability to inspect buildings and facilities to enforce building codes to protect existing and future buildings and infrastructure from wind damage and other natural and human-caused disasters. Including software, equipment and vehicle.<br>Responsible Party: City of Sedona     | New residential and commercial structures have been reviewed, inspected and built to meet snow, wind and seismic loads per building code since the City's incorporation in 1988. City Council adopted the Sedona Floodplain Ordinance on September 26, 2006. No new software, equipment or vehicles were purchased during this plan year due to budgetary constraints. |
| 8.A.1             | No                  | Retain, train and certify personnel for a Haz Mat Unit. Acquire equipment and vehicle.<br>Responsible Party: Sedona Fire District  | Thus far, six SFD employees are certified Haz Mat Technicians. A Haz Mat tender truck has been procured for Station #1. A medium duty rescue truck went into service in April 2009. (No changes for 2010)  |
| 9.A.1             | Yes                 | Train, certify and retain personnel for commercial vehicle safety inspections.<br>Responsible Party: City of Sedona Police Dept.   | Since the Fall of 2007, one officer has been conducting routine commercial vehicle inspections during his shifts. The current officer is Jerome Bilas.   |
| 2.A.1             | No                  | Civilian Emergency Response Team (CERT). Train and educate public on basic first response capabilities.<br>Responsible Party: Sedona Fire District   | More than 100 people were certified prior to 2008. No people were certified during this reporting period, due to lack of public interest. However, the certified people are still active.  |

| Action Identifier | Action Taken Yes/No | Initiative Description   | Status  |
|-------------------|---------------------|--|---|
| 3.A.3             | No                  | To construct an alternate route between Sedona and the Village of Oak Creek which would enhance emergency service response times and would provide a secondary route should the Hwy. 179 bridge become impassable.<br>Responsible Party: City of Sedona & County | In May 2009, the Verde Valley Multimodal Transportation Study was completed by Lima & Assoc. for Yavapai County. The study does not recommend a project for an alternate route between 2010 and 2030. However, there is an emergency services route to VOC via the La Marra Subdivision on Upper RR Loop Rd. Improvements were made to Brewer and Ranger Roads to ease pressure on the "Y" during the SR 179 Project. |
| 6.A.2             | Yes                 | Adopt an urban wildland interface development code. Train officers, risk assessments.<br>Responsible Party: Sedona Fire District   | On 9/11/07, the public (residents within the Sedona Fire District) voted to adopt the 2003 International Urban-Wild-land Interface Code. The SFD has one Fire Inspector that is Wild-land Evaluator Certified. One position was cut during this plan year due to budgetary constraints. Training is ongoing.  |
| 3.A.1             | No                  | Install five sirens throughout the community to notify the public of impending hazards.<br>Responsible Party: Sedona Fire District   | This project was specifically for Uptown and Oak Creek Canyon. This initiative was completed on June 15, 2007. A total of nine sirens were installed, with the Southernmost siren located at the Arroyo Roble Resort and Northernmost siren located at Pine Flats.  |
| 3.A.2             | No                  | Oak Creek Canyon condition announcements along 89-A north with variable message signs.<br>Responsible Party: A.D.O.T.  | A.D.O.T. installed two permanent variable message boards on SR 89A during FY 2008-2009. One board is near Lomacasi Cottages, and the other is just south of Flagstaff. This initiative is complete.   |
| 6.A.1             | Yes                 | Propose wildland fire assessments to identify urban wildland interface.<br>Responsible Party: Sedona Fire District   | SFD advertises and offers free property assessment to homeowners and business owners. They've adopted the 2003 International Urban-Wildland Interface Code. Inspections were done for all of the Mystic Hills Subdivision in the plan year. SFD has developed a Sedona Wild-land Interface Map that shows priority threat areas.  |
| 7.B.1             | No                  | Develop program to assess vulnerability of structures in the community likely to be vulnerable to the affects of thunderstorms and high winds.<br>Responsible Party: City of Sedona  | No action was taken on this initiative during the current plan year due to budgetary constraints. Per FEMA regulations, we only take action on flooding issues if a structure has at least 50% substantial damage.  |
| 2.C.1             | Yes                 | Engine Company Inspection Program - Promote hazard mitigation in the business and residential areas in the community. Install computer and communications equipment in existing facilities.<br>Responsible Party: Sedona Fire District                           | 10 inspections are conducted per captain per shift per station. This equates to 30 inspections per station per month for a total of 90 inspections per month (three stations participate). Commercial inspections are done on a routine annual basis. Residential inspections are by citizen request only and they are free.  |



September 27, 2010

Sedona City Council  
**Thru: City Manager's Office**  
104 Roadrunner Drive  
Sedona, Arizona 86336

SUBJECT: SEDONA MULTI-HAZARD MITIGATION PLAN ANNUAL REVIEW

Honorable Council Members:

On behalf of the Multi-Hazard Mitigation Plan Planning Team, I am pleased to present the 2010 Annual Progress Report Summary for the Sedona Multi-Hazard Mitigation Plan. Over the next year, members of the planning team will reconvene to discuss public involvement, risk assessment and mitigation strategy in relation to the plan. The purpose of this process is to keep the plan dynamic and responsive to the needs of Sedona. Five years after the plan inception date, or September 2011, the planning team and City of Sedona may incorporate any recommended changes into the plan as the plan continues to be implemented.

Section 6, "Plan Maintenance Procedures", of the Sedona Multi-Hazard Mitigation Plan requires that a summary of the annual review be presented as an informational item to the Sedona City Council. To fulfill this obligation, I am providing the 2010 Annual Progress Report Summary to you as an informational item. No action by the City Council is required at this time.

This five-page report summary includes the following sections:

- I. Natural or human-caused hazard events that have occurred within the last year
- II. Risk Assessment - changes in risk exposure within the planning area
- III. Public involvement/outreach
- IV. Mitigation success stories
- V. Mitigation Strategy - review of the action plan(s)

Sincerely,

David Peck  
Assistant Engineer  
City of Sedona

DWP/ms

cc: Tim Ernster, City Manager  
Alison Zelms, Assistant City Manager  
Charles Mosley, Director of Public Works/City Engineer (e-copy)  
Andy Dickey, Assistant City Engineer (e-copy)

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