

**TOWN OF PRESCOTT VALLEY  
REQUEST FOR COUNCIL ACTION  
Date: December 8, 2011**

**SUBJECT:** North Plains Recharge Basins Project, Phase One, CIP # E226a - Design Agreement

**SUBMITTING DEPARTMENT:** Utilities Department

**PREPARED FOR:** John Munderloh - Water Resources Manager  
Kimberly J. Moon, P.E. - Capital Projects Coordinator  
Neil Wadsworth, P.E. - Utilities Director

**AGENDA LOCATION:** Comments/Communications , Consent , Work/Study ,  
New Business , Public Hearing , Second Reading

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**ATTACHMENTS:** a) Professional Services Agreement

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**SUMMARY BACKGROUND:** In 1980, the Arizona Ground Water Management Code was enacted in order to control removal of ground water faster than it was being replaced. The Code, as administered by the Arizona Department of Water Resources (ADWR), had three primary goals as follows: 1) control overdraft occurring in the state, 2) provide a means to allocate the state's limited ground water resources and 3) augmentation of Arizona's ground water through supply development.

ADWR created a framework based on three levels of water management to meet their goals and the most restrictive controls were applied to Active Management Areas (AMAs) where overdraft potential was high. One of those areas is referred to as the Prescott AMA and Prescott Valley (Town) falls within its boundaries.

The Town provides water to its customers from ground water aquifer and the amount that can be removed, assessed in acre-feet or gallons, is controlled by ADWR. One of the measures developed to ameliorate overdraft involves recharging the aquifer with effluent (reclaimed water).

In 1993, the Town began discharging reclaimed water from the Town's Advanced Treatment Facility (ATF) into a 2.2 mile stretch of the Aqua Fria River Channel, resulting in recharge of the regional aquifer system via infiltration through in-channel sediments. However, it wasn't until 2003 that the Town began accruing recharge credits for said discharge that could be applied against ground water removal through permits granted by ADWR and other government agencies.

The Town began budgeting funds beginning in year 2005/2006 via the Aqua Fria Recharge Project - CIP # E30wr, Water Recharge and Recovery Analysis Project - CIP # E206wr, and the North Plains Recharge Basins Project - CIP # E226a based on the need for professional services related to water reuse strategy for reclaimed water. There were a number of primary forces driving the projects as follows:

1. The Town was in need of additional water supply for an emergent housing and business climate.
2. The recharge capabilities of the Aqua Fria channel were not sufficient to handle additional reclaimed water being produced and the dampening berms built along the length of the channel to aid in recharge were susceptible to washout during storm events.
3. Credits for reclaimed water, applied against future groundwater removal, had been sold by the Town to a New York based investment group called Water Property Investors, LLC at an auction in year 2007.

The North Plains Recharge Basins Project is a plan to address these noted objectives by conveying reclaimed water to basins / depressions constructed on a 140.58 acre portion of land the Town has leased from the Arizona State Land Department. The basins are located approximately 1 mile north of the ATF and approximately 0.4 miles to the west of N. Fain Road as noted in the following photograph.

#### **North Plains Site - Looking Northeast**

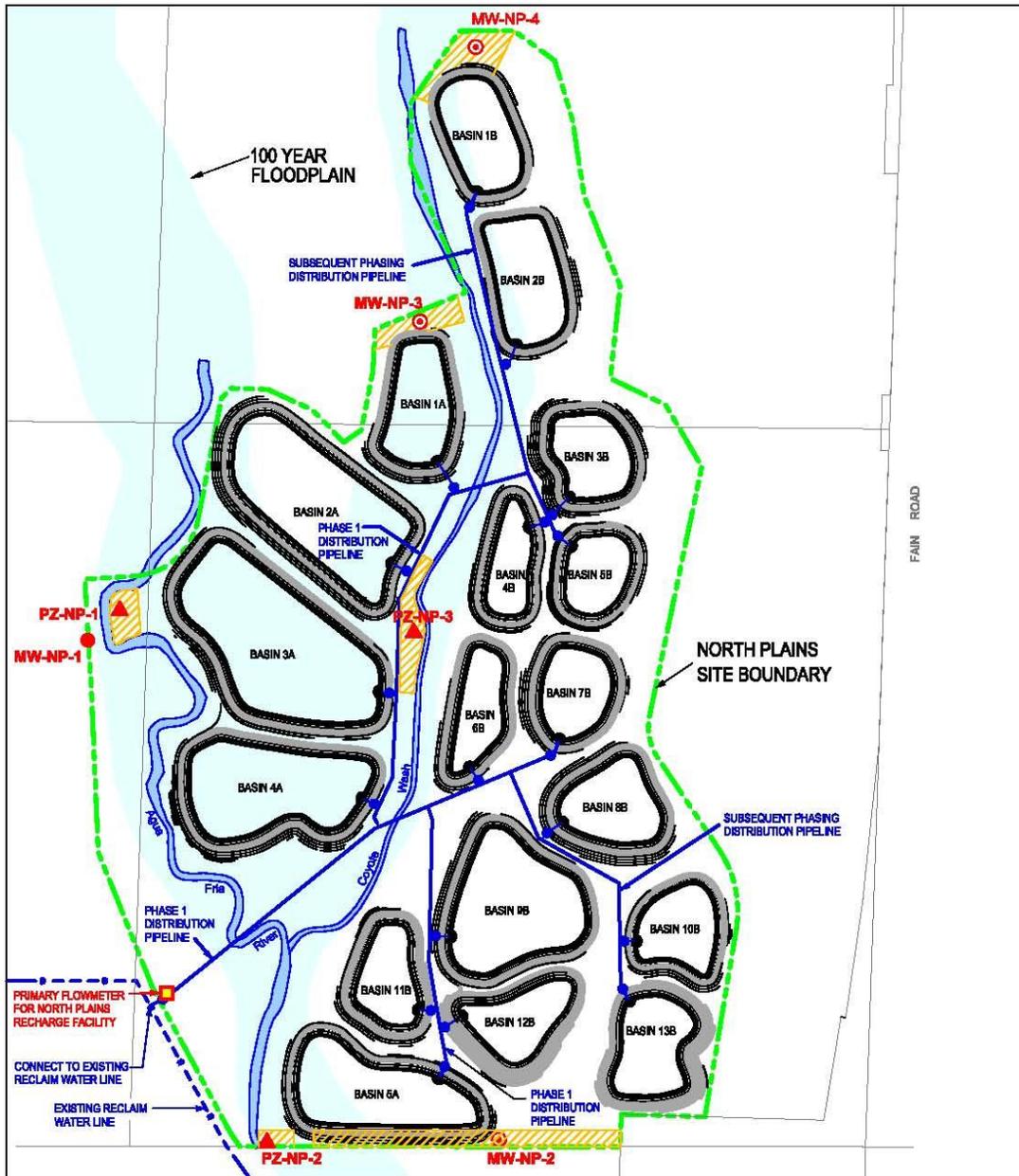
The conceptual design of the plan was developed by Montgomery & Associates per a professional services agreement with the Town and resulted in an April 14, 2011 document entitled “Hydrological



Report in Support of Applications for Constructed Underground Storage Facility Permit and Amended Aquifer Protection Permit”. The plan involves permitting applications, construction of eighteen (18) basins, three (3) monitoring wells, three (3) piezometers, fencing, piping and associated appurtenances in three (3) phases. This RFCA entails first phase work for construction of five (5) “A” basins along the west side of the site per Figure 7.

Professional services to provide base mapping, design, and bidding services are required and Town staff is requesting approval to retain WestLand Resources, Inc. for their recharge engineering expertise. WestLand is intimately familiar with the project due to their subcontractor role under Montgomery for the noted report. WestLand, located in the Tucson area, will also be assisted by CivilTec Engineering, Inc., a Prescott based firm for local presence and experience in recharge design/construction.

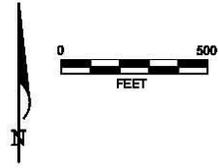
Table 1 summarizes a negotiated Agreement and offers it to the Council for consideration.



Modified from Westland Resources, Inc. (Appendix D)

**EXPLANATION**

- MW-NP-2 Proposed Monitor Well and Identifier
- MW-NP-1 Existing Monitor Well and Identifier
- PZ-NP-1 Proposed Vadose Zone Piezometer and Identifier
- Area within which Monitor Well and/or Vadose Zone Piezometer will be Constructed



**FIGURE 7. NORTH PLAINS RECHARGE FACILITY CONCEPTUAL DESIGN AND PROPOSED MONITORING POINTS**

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**OPTION ANALYSIS:** The Council may vote to:

- 1.) Approve this Agreement, **OR**
- 2.) Not approve this agreement, **AND/OR**
- 3.) Direct staff to pursue other options

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**ACTION OPTION:** Motion to approve this Agreement with WestLand Resources, Inc. to provide professional services for the North Plains Recharge Basins Project, Phase One - CIP # E226a in an amount of \$84,729 as outlined in the Fiscal Analysis, **OR** Motion not to approve this Agreement. **VOTE**

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**RECOMMENDATION:** Town staff recommends approval of this Agreement with WestLand Resources, Inc. due to the quality of services that the firm has provided to date, as well as their knowledge of the project.

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**FISCAL ANALYSIS:** The current status of the budget for this project is outlined in Table 1 below:

**Table 1**

North Plains Recharge Basins Project, CIP # E226a			
HTE Code(s): 541-7040-700-73.20		Finance Proj. # CC0701	
FISCAL YR 2011/2012	Approved Budget:	\$2,000,000.00	FISCAL YR 2011/2012
	Expended & Encumbered:	-\$71,528.36	
	Agreement:	-\$84,729.00 < (this action)	
	Balance:	\$1,843,742.64	

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**REVIEWED BY:**

Management Services Director \_\_\_\_\_

Town Clerk \_\_\_\_\_

Town Attorney \_\_\_\_\_

Town Manager \_\_\_\_\_

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**COUNCIL ACTION:**

Approved    Denied    Tabled/Deferred    Assigned to \_\_\_\_\_