

RESOLUTION NO. 06-029

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PASO ROBLES  
APPROPRIATING \$45,000 FOR AND AUTHORIZING THE CITY MANAGER TO AMEND  
THE INTEGRATED WATER AND WASTEWATER MASTER PLAN CONTRACT WITH  
BOYLE ENGINEERING

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WHEREAS, the City entered into a contract with Boyle Engineering to prepare an Integrated Water and Wastewater Master Plan; and

WHEREAS, City staff anticipated that unforeseen conditions/complications might be discovered during the course of the Integrated Plan; and

WHEREAS, City staff has identified additional field work and analysis that should be accomplished to provide a comprehensive plan.

NOW THEREFORE, BE IT RESOLVED by the City Council of the City of Paso Robles to:

1. Appropriate \$45,000 as follows:

Water Operations Fund	\$25,000	600-910-5224-770
Sewer Operations Fund,	\$20,000	601-910-5224-770
2. Authorize the City Manager to amend the contract with Boyle Engineers to include additional scope items as documented in their proposed budget revision.

PASSED AND ADOPTED by the City Council of the City of Paso Robles this 7<sup>th</sup> day of March 2006 by the following vote:

AYES: Nemeth, Picanco, Strong, and Mecham  
NOES:  
ABSTAIN:  
ABSENT: Heggarty

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Frank R. Mecham, Mayor

ATTEST:

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Cathy M. David, Deputy City Clerk

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Employee Owned

Brad Hagemann, P.E.  
Water Resources Manager  
CITY OF PASO ROBLES  
1000 Spring Street  
Paso Robles, CA 93446

February 23, 2006

## AIWRP - Budget Revision Request

Boyle Engineering Corporation (Boyle) is requesting a budget revision for the performance of additional and out of scope work items described below. These tasks will be performed under the AIWRP agreements dated January 19, 2005.

	Current Authorization	Amount Being Requested
<b>Water Source Evaluation</b>		<b>\$30,000</b>
Ground Water Source Assessment	\$49,600	
Nacimiento Treatment Evaluation	\$70,966	
<b>Recycled Water Study</b>		
Evaluate Additional Sites		
CPT Screening of Sites F&G		<b>\$31,100</b>
<b>Total</b>		<b>\$61,100</b>

## Water Source Evaluation

At the City's request, Boyle evaluated the cost and possible treatment methods that would result in wastewater effluent salt levels being lowered to levels currently found in the City's groundwater. This effort included the following:

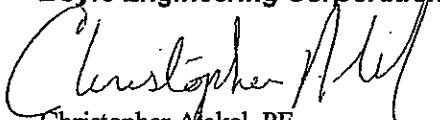
- Conceptual design flow diagrams for conventional reverse osmosis (w/o concentrate recovery)
- Conceptual design flow diagrams for advanced reverse osmosis (w/ concentrate recovery)
- Multiple surface and RO treated well water blending scenarios for existing, interim and build-out demands (a total of 18 scenarios were evaluated)
- Water quality (TDS and hardness) was estimated for all 18 scenarios
- Conceptual level construction and O&M costs opinions were prepared for the 18 scenarios

**Recycled Water Study**

Several sites along the Highway 46 West corridor were identified as possessing the greatest percolation potential for the construction of wastewater disposal ponds. This ongoing investigation is revealing that the most promising sites along the 46 West corridor have percolation rates too low to be considered suitable for this use. Additional sites located in southern end of the City, near the Thunderbird Well Field, are expected to provide percolation rates more suited for recharge, and may provide the added benefit direct recovery opportunities. The two sites combined contain roughly 142 usable acres. Boyle proposes performing a CPT screening level investigation of these sites to determine their suitability for percolation ponds. Before proceeding with preliminary plans or property acquisition, additional field work and testing will be required. The additional field work and testing should include subsurface drilling, laboratory testing, and flow modeling to determine actual percolation rates and residence time. This data will be necessary to size the ponds and assess the potential for interaction with the Thunderbird well field.

Compensation for Boyle's services as described in the above Work Tasks will be made on a time and materials basis and will not to be exceeded without written authorization by the City. If this budget revision request meets your approval, please sign below to authorize this work.

**Boyle Engineering Corporation**

  
Christopher Akel, PE  
Project Manager

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Brad Hagemann, PE  
Water Resources Manager

# IWRP Key Findings/Conclusions

## Phase I

- Maintenance expenses are relatively low – 3% of operating expenses for water – 4% for wastewater
- Adequate funds are being set aside in a depreciation fund to replace water and wastewater facilities.
- Water Rights Review –
  - City has requested a Salinas River Water Permit (4600AFY, 8CFS) extension thru December 2006; and
  - City is on track to perfect license for 4600AFY, 8CFS within the next 3 years.

## Phase II

### **Nacimientto Water Treatment Evaluation**

- Thunderbird Wellfield identified as preferred site
- Evaluated 3 treatment alternatives
- Membrane treatment recommended (Quality and \$)
- Disinfection alternatives evaluated
- Plant layouts, blending strategy and resultant water quality have been identified
- Initial plant size 6.6 MGD

### **Groundwater Source Assessment**

- Existing wells are theoretically capable of providing for summer drought conditions (assuming no operational problems or supply deficiencies)
- Utilize Salinas River underflow wells to maximum of allowed 4600 AFY
- Spread underflow pumping along river reach

### **Wastewater Pretreatment/Source Control**

Reduction of TDS, sodium, chloride, toxic contaminants and sulfate concentrations are needed to consistently meet effluent limitations. Reductions can be obtained by:

- Implementing an Industrial Waste Discharge Ordinance;
- Restricting use of on-site regenerated water softeners via an ordinance
- Using Lake Nacimientto water; and
- Recycling treated wastewater

### **Recycled Water Study Update**

- Initially identified Hwy. 46 E. corridor as preferred corridor for reuse and GW recharge
- Performed environmental screening for 4 potential recharge sites
- Identified two interested high use recycled water users
- Soils analyses ruled out East Side groundwater recharge sites.