

## CENTRAL AMADOR WATER PROJECT (CAWP)

# Project Update and Notice of Public Meeting: Water Transmission Options for CAWP

In the late 1980s, the Amador Water Agency and CAWP Districts began planning to replace CAWP's pumped water transmission system with a gravity flow system to greatly reduce the impacts of rising electricity costs of running the CAWP pumping stations.

Since 2003, AWA directors and the CAWP Districts have moved forward on the concept and approved paying for design and environmental review of a Gravity Supply Line (GSL), while looking for the best way to fund this major undertaking.

Now, the Agency has applied for a government grant and low interest loan to pay for a Gravity Supply Line for CAWP. In 2009, federal stimulus funding has increased the amount of grant money typically available to AWA for this project. Also, the current recession in the construction industry has driven construction costs to a historic low point in California. AWA directors will be considering whether now is the time to commit to building the GSL.

*This report is designed to update CAWP customers on options and costs of upgrading or replacing the current water transmission system. AWA is holding an informational meeting on this issue on January 7, 6:30 pm in the AWA board room.*

### What is the current water transmission system?

Currently, water for the CAWP system is pumped through a pipeline from the Tiger Creek Afterbay and lifted 1120 feet in elevation to the Buckhorn Water Treatment Plant. (See illustration at right.) Two pump stations are required to move CAWP's water to Buckhorn: one at Tiger Creek and one at Silver Lake Pines.

### How much does it cost to run CAWP's pumps?

CAWP's power bill for fiscal year 2008-2009 totalled \$256,718. Over the past twenty years, power costs have more than doubled -- in 1988-1989, the annual total was \$109,721. Power costs are about 18% of CAWP's annual operating budget.

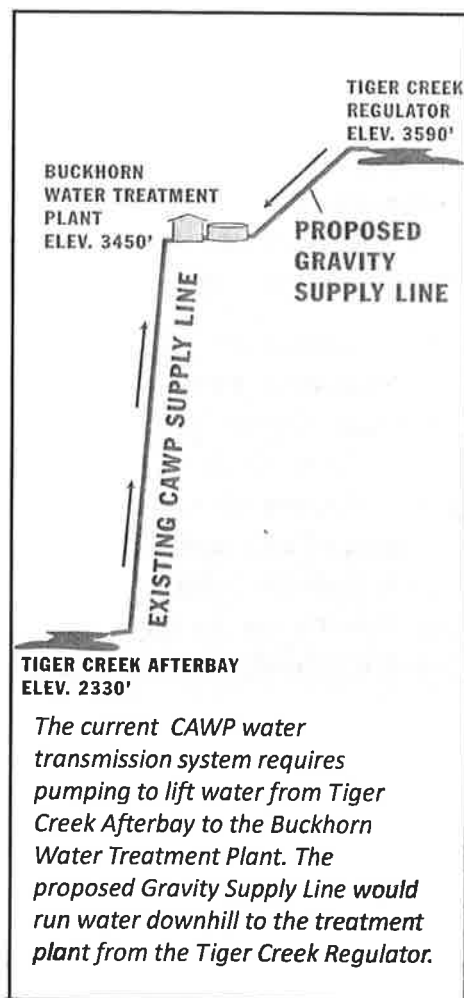
### What is the condition of the CAWP water transmission system?

The existing pumps at Tiger Creek and Silver Lake Pines are over 30 years old and will need substantial upgrades in the near future.

The pump stations were built to be operated at 1000 gallons per minute. At peak operation in the summertime, the pumps typically operate at 1400 - 1600 gallons per minute with no back-up in the event of a mechanical problem. The risk of pump failure increases every year that more is demanded of CAWP's aging pumps.

The current CAWP pipeline from Tiger Creek to Buckhorn is expected to reach its useful life expectancy in about 18 years.

Mechanical problems and power interruptions periodically shut down CAWP's pumps, halting water treatment and storage. So far, there hasn't been a water outage but on several occasions, CAWP storage tanks have come very close to running out of water.



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## **WHAT IS CAWP? WATER FOR AMADOR'S UPCOUNTRY:**

The Central Amador Water Project System (or CAWP) provides wholesale and retail treated water to upcountry customers and communities including:

Pine Grove  
Pine Acres  
Sunset Heights  
Fairway Pines  
Jackson Pines  
Pioneer  
Gayla Manor  
Ponderosa Ridge  
Ranch House Estates  
Sierra Highlands  
Silver Lake Pines  
Ridgeway Pines  
Rabb Park  
Mace Meadows

The Central Amador Water Project (CAWP) system was built in 1977-1978. There are 4020 parcels on the CAWP system. 2630 are AWA customers; the remaining customers receive CAWP water from a local community service district or mutual water company.

CAWP's original Buckhorn Treatment Plant was upgraded in the late 1970s and replaced in 2005. It is designed to treat up to 3 million gallons of water per day, and can be expanded to 5 million gallons per day. Each CAWP district has its own treated water storage – today there are 25 individual water tanks.

## **CAWP PROJECT UPDATE...**

### **How much would it cost to upgrade the pumps and replace the pipeline?**

Water Agency engineers estimate that it will cost \$4 million to replace and rehabilitate the existing Tiger Creek and Silver Lake Pines stations, which would include emergency generators (approximately \$500,000). This estimate is based on a 2001 consultant analysis.

Replacing the pipeline is estimated at \$5 million, assuming an "in-kind" replacement of the existing 12-inch pipeline.

### **How would the pump upgrade be financed?**

If we are to depend on the existing system, the Agency plans to secure a forty-year, 3.3% loan to pay for the \$4 million pump station upgrade. Annual payments for this loan would be about \$184,000. Over the life of the loan, total interest paid would total about \$3.3 million.

With this option, AWA must begin collecting funds to upgrade the current pump stations. The Agency will also investigate possible grant opportunities, but staff is not aware of any significant funding available for these improvements at this time.

In December, 2009, the AWA Board of Directors will be developing a financial plan for AWA customers on the CAWP system to reduce current operating deficits and invest in CAWP's water transmission system.

## **What is the Gravity Supply Line (GSL)?**

The GSL would replace the existing pumped transmission system. Instead of pumping water from Tiger Creek Afterbay for CAWP's water supply, water would be diverted at the Tiger Creek Regulator Reservoir. This reservoir (owned by PG&E) is at an elevation where water can flow downhill through a 6.6 mile pipeline to CAWP's Buckhorn Water Treatment Plant. *(See illustration on facing page.)* This proposed gravity pipeline would greatly reduce energy costs and power interruptions.

### **How would the GSL reduce electricity costs?**

The proposed gravity-fed system does not rely on pumps or mechanical equipment to move water through the pipeline. Once completed, the new Gravity Supply Line would greatly reduce the current system's annual energy demand, now equal to the amount of electricity used by about 100 homes.

### **Are there other benefits to the GSL?**

Currently, storm water drainage from the Buckhorn area enters the Tiger Creek Afterbay, muddying the water supply and increasing costs to treat the water to state standards. The Tiger Creek Regulator is distant from residential areas and provides a higher quality of water that would cost less to treat than water from the Afterbay.

If the gravity supply line is built, the existing pumps and pipeline will remain on standby for use during PG&E system maintenance and in case of any unforeseen failure of the GSL system.

## How much would the GSL cost to build?

A 2009 study by AWA engineers estimates the GSL will cost \$13.4 million to construct, including design, environmental review, and construction of the pipeline.

## How will the GSL be funded?

Several sources could provide funding, including USDA's Rural Development Program, PG&E's Customized Energy Efficiency Incentive Program, and the California Energy Commission. The Agency has applied to the USDA for a \$5.1 million grant (38% of the project cost) and PG&E has offered up to a \$500,000 rebate. These grants are "first-come, first-served," and will not be available indefinitely.

A 3.3% loan, 40-year USDA loan would pay the remaining \$8.3 million in costs. Annual payments would be about \$382,000. Over the life of the loan, total interest paid would total about \$6.9 million. Additionally, the Agency estimates PG&E will charge \$70,000/year in account and "power-foregone" fees for their loss of water for power production at the Tiger Creek Powerhouse.

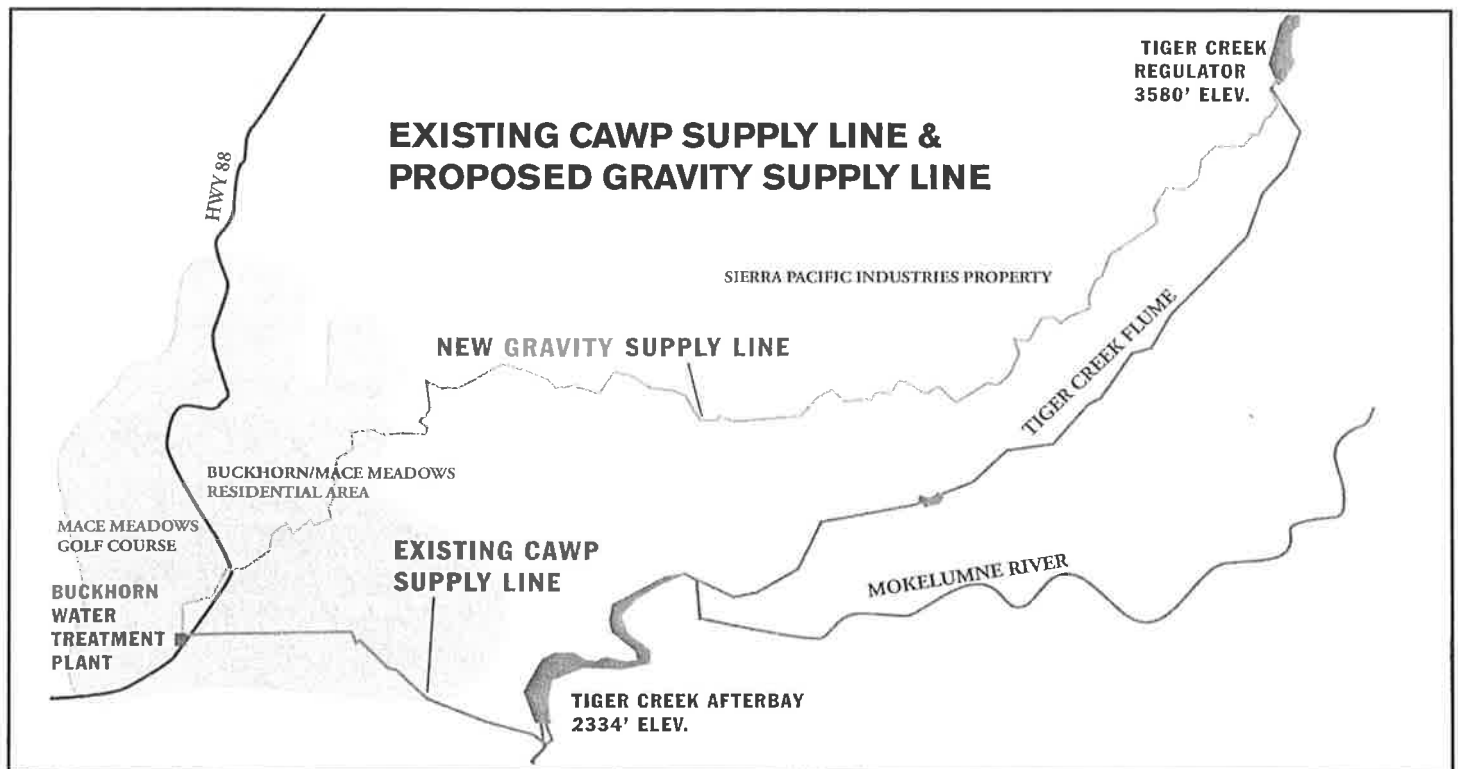
## How much work has been done on the GSL project to date?

Since 2003, Amador Water Agency directors and the CAWP Districts have moved forward on the GSL concept and approved paying for the design and environmental review of the GSL, while looking for an affordable way to pay for the construction.

Federal stimulus legislation has opened up new opportunities for state grants for water projects, and AWA has applied for grant funding for building the Gravity Supply Line. If funding is awarded and AWA directors approve the project, the GSL could be ready for competitive construction bidding in 2010.

Plans and specifications for the project are near completion. Environmental documents were released for public review and comment in November, and will be considered by the AWA Board on January 14, 2010.

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*The proposed Gravity Supply Line would be about 6.6 miles of 20- and 24-inch pipe. The proposed route starts at the Tiger Creek Regulator, follows Tiger Creek Road, over Sierra Pacific Industry property, and then along residential roads ending at the Buckhorn Water Treatment Plant.*

## **AMADOR WATER AGENCY**

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[www.amadorwater.org](http://www.amadorwater.org)

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### **CAWP PROJECT UPDATE...**

#### **Is this the time for a major construction project on the CAWP system?**

AWA staff and directors recognize that these are challenging economic times. AWA's engineers have estimated project costs and future savings to the best of their ability; better grant opportunities could come along but are unknown at this point -- no one has a crystal ball to be certain what the future will bring. However, current conditions in the construction industry and federal stimulus funds have created an opportunity that could save CAWP customers money if the GSL is built soon.

#### **How can CAWP ratepayers be part of the decision-making process?**

The AWA Board of Directors will be holding public meetings before any decision is made on the Gravity Supply Line (see info below). The CAWP districts will also have to authorize the Agency to move forward on any new debt service to improve the CAWP system.

We will continue to keep CAWP customers updated on this proposed project and we welcome your questions on this important issue.

**GSL PROJECT INFORMATIONAL MEETING:  
January 7, 6:30 pm Amador Water Agency Board Room**

#### **CAWP Customers -- We would like to hear from you.**

Dist. 1	Bill Condrashoff: Jackson Area	257-1208	<a href="mailto:bcondrashoff@amadorwater.org">bcondrashoff@amadorwater.org</a>
Dist. 2	Gary Thomas: Lone and Camanche	274-4024	<a href="mailto:gthomas@amadorwater.org">gthomas@amadorwater.org</a>
Dist. 3	Don Cooper: Pioneer and the Upcountry	295-1566	<a href="mailto:dcooper@amadorwater.org">dcooper@amadorwater.org</a>
Dist. 4	Debbie Dunn: Sutter Creek and West Pine Grove	296-5435	<a href="mailto:ddunn@amadorwater.org">ddunn@amadorwater.org</a>
Dist. 5	Terry Moore: Plymouth, Fiddletown, Sunset Hts	245-6175	<a href="mailto:tmoore@amadorwater.org">tmoore@amadorwater.org</a>

#### **If you are a customer of Pine Grove CSD, Rabb Park CSD, or First Mace Meadows Water**

**Association:** You are represented by your Community Service District board of directors. Impacts of any decision on the CAWP water transmission system on the CAWP districts will vary. Contact your CSD office for more information.