



WATER NEWS

AMADOR WATER AGENCY

www.amadorwa.com



Quarter One
2008

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Recycled Water, What Is It?

Water Agencies and communities throughout the state are beginning to feel the pressure on their water supply from factors such as population growth, climate change, depletion of groundwater resources, and other impacts that have the potential to diminish their supply. Since 2000, the Amador Water Agency completed numerous studies and found that by the year 2030 Amador County will have exhausted its existing water supply. The Agency began to investigate the available new water supply possibilities and found that recycling or reusing is a practical and efficient use of Amador County's existing water supply. As water supplies become scarcer throughout the state and U.S. - the reuse of high quality reclaimed or recycled water will increase significantly .

"Recycling" is not a term most would associate with water, but it is a natural process that occurs every day in nature. However improved technology has allowed for the "planned" recycling of water, which is the use of former wastewater treated and purified at a high level for reuse. While there are a variety of treatment options, studies indicate that tertiary treatment effectively eliminates all bacteria to very low or immeasurably low levels. Using this type of treatment, recycled water can be treated to levels cleaner than standard drinking water. Although it is not intended to be used for drinking, recycled water has been used for over a hundred years for crop irrigation and the uses have only begun to expand. Recycled water can be used for a variety of non-potable water uses, such as industrial processes, fire protection, toilet flushing, water for contained wetlands or for ornamental ponds and fountains. According to the WaterReuse Foundation there are now more than 200 water reclamation facilities in the U.S. providing recycled water to more than 1600 parks, playgrounds, and schoolyard sites.

With the variety of uses only expanding the Amador Water Agency has found that recycling wastewater is viable to help conserve Amador County's prized resource - water. With the clock ticking, the Agency will be evaluating and inventorying areas within Amador County that could use recycled water. Local ideas have included irrigation for parks, cemeteries, agricultural land, and industrial uses. The Agency hopes to work cooperatively with the County and Cities through the Regional Recycled Water Master Plan to expand the use of recycled water. The Amador Water Agency Board of Directors have committed to exploring ways recycled water can be used in Amador County by adopting a Recycled Water Use policy as well as endorsing public education campaigns about recycled water use. In the near future the Agency will be leading a study on Regional Wastewater Treatment and Recycling in 2008 will begin a Regional Reclamation Master Planning process.



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Buckhorn Treatment Plant Membrane Installation

The Amador Water Agency has increased the capacity at the Buckhorn Treatment Facility by adding six new membranes. Each membrane offers an additional capacity of 25,000 million gallons per day (mgd) of extra capacity increasing the plants capacity by 150,000 mgd. The facility was originally designed to produce 5 million gallons per day at build out with 64 membranes per rack. However, water demands have not yet required that the plant operate at full capacity, so it has been yielding 3 million gallons per day at 40 membranes per rack. The plant design allows for an inexpensive way of increasing capacity with the ability to easily install more membranes. In November Agency employees increased the capacity by installing the new membranes and used the opportunity to train employees on how to install the modules. In the future this could present a significant cost savings as the Amador Water Agency is exploring using the design of the Buckhorn Treatment Plant for expanding the Tanner Plant, on Ridge Road. Agency personnel will now have the experience necessary for installation instead of having to hire an outside company.



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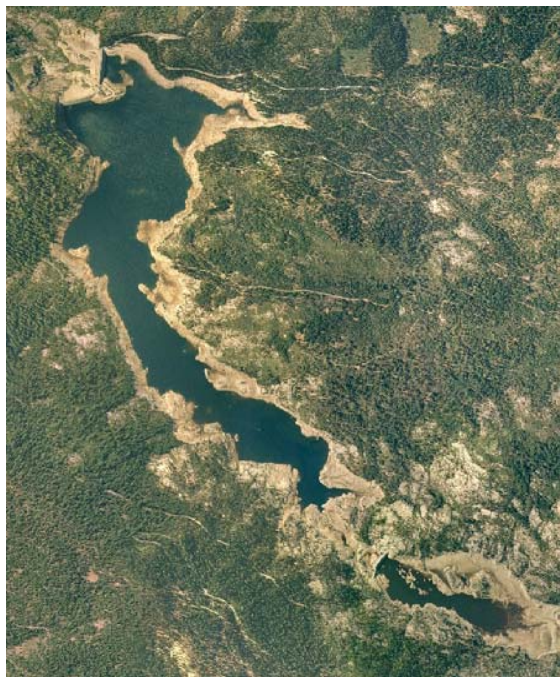
Are You Ready For Winter?

Winter will be here soon. Are you prepared? Every year people are caught off guard and are inconvenienced by not having water or having to contend with broken water pipes from freezing. The Agency suggests doing the following to avoid problems.

- ◇ Wrap and insulate all water lines that are exposed or subject to freezing. Outside faucets and pipes, including those in unheated garages and crawl spaces, are most vulnerable. Wrap with insulating material and/or electrical heat tape, then cover with plastic and secure with string or wire. Extremely cold weather can freeze even insulated or underground pipes.
- ◇ Drain and winterize your irrigation system.
- ◇ Drain and properly store all your hoses.
- ◇ Don't forget your pets. Make sure their water dish does not freeze—even if it's in the garage.
- ◇ Don't put antifreeze in your toilet if you are going to be away from home for an extended period of time. If you have a septic system, you run the risk of causing groundwater contamination.
- ◇ If your water bill seems unreasonably high, check for a broken service line. If you discover a problem call the Agency Customer Service Department for assistance at 209-223-3018. If a pipe breaks, you can stop excessive water loss and flooding quickly. Look for the main valve in the basement, garage, or outdoors by the foundation. It may be worthwhile to install a shut-off valve at your meter. Remember...the Amador Water Agency is not responsible for water loss or damage caused by water leaks and/or high pressure.



Integrated Regional Water Management Plan (IRWMP)

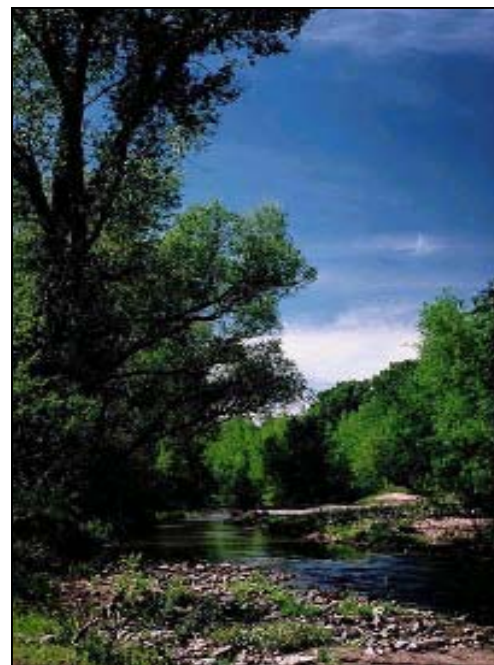


Lower Bear Reservoir

The Amador Water Agency in partnership with Amador County, the Amador Regional Sanitation Authority (ARSA), the Calaveras County Water District (CCWD), the East Bay Municipal Utility District, and the Cities of Jackson, Plymouth and Sutter Creek have developed a Mokelumne, Amador, Calaveras Integrated Regional Water Management Plan (IRWMP) known as "MAC IRWMP." The planning effort addressed common issues related to water supply, water quality, flood protection and environmental enhancement. The Agency strongly believes that regional planning integrates all aspects of water management, including water quality, local surface water, groundwater, conservation, recycled water, conveyance, ecosystem restoration, and imported supplies. It also makes better use of existing local resources and provides for coordination and improved efficiency and flexibility in the actions of local agencies and governments within a region.

As part of the development of this plan, five regional goals were identified as follows:

- o Water Supply Goal- Improve regional water supply reliability, reduce dependence on imported water, promote water conservation, water reuse, and protect watershed communities from drought with a focus on interagency conjunctive use of regional water resources.
- o Flood protection Goal- Ensure flood protection strategies are developed and implemented through a collaborative and watershed-wide approach and are designed to maximize opportunities for comprehensive management of water resources.



Board of Directors

Heinz Hamann, District 1

John Swift, District 2

David Thomas, District 3

Paul Scott, District 4

Terry Moore, District 5

Jim Abercrombie, General Manager

**Meetings held at 9 a.m. on the
2nd and 4th Thursdays of the month at the
Amador Water Agency Office
12800 Ridge Road, Sutter Creek**

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- o Water Quality Goal – Protect and improve water quality for beneficial uses consistent with regional community interests and the Regional Water Quality Control Board (RWQCB) Basin Plan through planning and implementation in cooperation with local and state agencies and regional stakeholders.
- o Environmental Protection and Enhancement Goal- Work with the community and environmental stewards to preserve the environmental wealth and well-being of the Mokelumne and Calaveras River Watersheds by identifying opportunities to assess, restore and enhance natural resources of streams and watershed when developing water supply, water quality, and flood protection strategies.
- o Regional Communication and Cooperation Goal – Develop a forum for regional communication, cooperation, and education, including models for partnerships and inter-basin cooperation, protocols for reducing inconsistencies in water management strategies between regional entities, and strategies for maintaining resource costs within the local socioeconomic environment.

Several projects were identified to help meet these goals included in the MAC IRWMP. One specific project that could assist Amador and Calaveras in meeting their future water supply needs is raising lower Bear Reservoir. The Agency has studied this project since the mid 1990's. As with any water infrastructure project, many of these projects take many years of effort and planning before the project is approved, financed, and constructed. Amador Water Agency projects the need for additional water supplies in 2030; therefore it is time to begin planning for additional supply sources.

As the Agency and its partners begin implementation of the plan, future-planning meetings will be held. Also, public meetings will be scheduled to review the plan and provide input to the Agency and its partners on the specific elements of the plan. If you are interested in participating in this effort, please email the Amador Water Agency at amadorwa.com.

