



U.S. Environmental Protection Agency
Pacific Southwest/Region 9



Serving Arizona, California, Hawaii, Nevada, the Pacific Islands and 148 Tribes

Water Division
Tribal Water Office • February 2016

75 Hawthorne Street, San Francisco, CA 94105
866-EPA-WEST • www.epa.gov/region9

EPA Program Managers

Karl Banks
Nevada, Owens Valley tribes
(415) 972-3557
banks.karl@epa.gov

Jason Gambatese
Ukiah, Western Phoenix tribes
(415) 972-3571
gambatese.jason@epa.gov

Bessie Lee
Navajo and Hopi tribes
(415) 972-3776
lee.bessie@epa.gov

Helen McKinley
California tribes
(415) 972-3559
mckinley.helen@epa.gov

Emmanuelle Rapicavoli
Border tribes
(415) 972-3969
rapicavoli.emmanuelle@epa.gov

Andrew Sallach
Arcata and Eastern AZ tribes
(415) 972-3503
sallach.andrew@epa.gov

Jeffrey Tsai
Gila River and Ak Chin
(415) 972-3459
tsai.yun-jui@epa.gov

Tribal Drinking Water Monitor

Bacteriological Contamination, EPA Notification, and Boil Water Notices

Did you know that if you detect *E. coli* in your treated or source water, you are required to notify EPA by the end of the business day or the next day if you get the results after hours? If you are not able to reach your designated EPA program manager (PM) on the phone, you must talk to another program manager at EPA. You can do this by pressing '0' on your phone after hearing your PM's outgoing message. PMs do not work on the weekends or federal holidays, so we encourage drinking water systems to take samples early in the week and not right before a holiday. In addition, if you have a positive coliform sample in your distribution system, you have only 24 hours (from the time the lab notified you) to take your repeats. If you need more time, you must get prior approval from an EPA PM to extend that deadline without incurring a violation.

We also require quick notification from systems for other situations such as:

- Line breaks that lead to localized or widespread depressurization of the distribution system
- Failure to meet required disinfection contact time requirements for surface water systems and for groundwater systems that have EPA-approved 4-log virus treatment
- Exceeding the "never to exceed" turbidity level for surface water systems
- Discovery of animals (alive or dead) in a finished water storage tank or reservoir
- Discovery of any tampering with the system that could impact finished water quality

All of the above incidents could potentially lead to the need for a boil water notice, and EPA should be involved as early as possible in these cases. There are several situations that would lead to a mandatory boil water notification, and in those instances EPA will provide direction for the appropriate wording of the notice, the manner and duration of notice distribution, and the specific criteria to be met before the boil water notice may be lifted.



Reporting Lead Results to Test Site Occupants

As a result of recent events in Flint, Michigan and other U.S. cities, EPA is taking immediate steps to ensure proper implementation of the Lead and Copper Rule (LCR). One important aspect of LCR implementation, finalized by EPA in 2007, is a new requirement for water systems to send lead sampling results to persons who are receiving the water that was sampled. This requirement took effect in April 2008. Here are the details:

- All water systems must provide a notice of individual lead results to the persons served at the specific sampling site from which the sample was taken (e.g., the occupants of the residence where the tap was tested).
- The notice must be provided as soon as practical, but no later than 30 days after the lab sends you the results.
- The notice must include the following:
 - The lead results
 - An explanation of the health effects of lead (using mandatory EPA wording)
 - Steps consumers can take to reduce exposure to lead
 - Contact information for the water system
 - The MCLG and action level for lead and the definition of both terms
- The notice can either be delivered by mail or hand delivered. In certain circumstances, the notice could just be posted at the sample site with prior approval from your EPA program manager.

EPA requires systems to fill out the certification form and include a copy of one customer notification that was distributed during each sampling cycle and send it to their program manager within 10 days after the month you send out the notices.

If you do not have a copy of a certification form or if you need a template to develop your notice, please contact your program manager.

Failure to provide notices to the residences and submit the certification to EPA on time will result in a violation of the Safe Drinking Water Act.

Monitoring and Reporting

EPA reporting requirements stipulate that monitoring data be submitted to us (datamanager@epa.gov) by the 10th day of the month following either the end of the monitoring period or the month the data was received (whichever is shortest). The most common data we deal with is coliform data, which systems send in monthly by the 10th of the following month. While we have a deadline for submitting the results, we do not always get the results on

time. Sometimes the systems send it in late and sometimes it's the lab who is late. Regardless of who is in charge of sending the data, the ultimate responsibility for on-time submittal lies with the water system.

Starting in April 2016, in conjunction with the effective date of the Revised Total Coliform Rule, systems who do not submit data by the regulatory deadline (10th day of the month following either the end of the monitoring period or the month the data was received, whichever is shortest) will be subject to a finding of violation. When data are submitted late, EPA will return the system to compliance once the data are received. However, the system will still receive a violation letter and the system is required to conduct public notification (this could be done in the consumer confidence report, if applicable).

Here are some examples of reporting due dates:

**Monthly coliform sampling –
due 10 days after the end of each month**

**Annual lead and copper monitoring –
due by the 10th of the month after the results
are received or October 10th each year,
whichever is sooner**

**Annual chemical monitoring –
due by the 10th of the month after the results
are received or January 10th of the next year,
whichever is sooner**

In order to help ensure meeting the reporting deadlines, we recommend you sample early in the monitoring period. If you are expecting your lab to email the results to EPA, please ask them to copy you as well, so you can verify timely data submission.

While labs can often complete a coliform sample analysis fairly quickly, it can take them up to two weeks to enter the results into their computer system and generate a document to submit to EPA.

We also request that you write your PWSID number on your chain of custody form, so when the data comes to EPA, our staff can properly enter the results.

Disinfection Residual Monitoring and Reporting

We have had a good track record on reporting disinfection residual results with each coliform sample. However, we want to remind operators that if you disinfect your water or purchase water that has a disinfectant in it, you are required to sample for disinfection residual (usually free chlorine) every time you take a distribution system coli-

form sample (routine and repeat). The results of these tests should be included on the chain of custody form so they can be submitted to EPA.

Failure to test for disinfectant residual and report the results to EPA is a violation.

Big Valley Rancheria's Adoption of Demand Side Management (DSM) Model for Water Conservation is Paying Dividends

By John Gichuki, Manager, Big Valley Rancheria Water District, Lake County, California; Email: jgichuki@big-valley.net

Big Valley Band of Pomo Indians of Big Valley Rancheria is a federally recognized tribe with approximately 350 acres of land in Lake County, California, two miles south of Lakeport on Clear Lake. This is the largest natural freshwater lake in California and the oldest lake in North America. It is an enormous lake with more than 43,000 surface acres and 100 miles of shoreline. Clear Lake boaters enjoy unparalleled scenery, and as the home to several nationally renowned bass tournaments, there is always great fishing on Clear Lake, earning it the nickname the "Bass Capital of the West." Visitors can enjoy the lake and shop at the reservation, stay at the hotel or RV Park, and visit Konocti Vista Casino. The tribe has a total population estimated at 1,023 members, with about 190 members currently living on reservation. Big Valley Rancheria Water District operates two water treatment systems and an onsite waste water treatment facility serving 38 homes on the tribal housing subdivision, in addition to tribal business enterprises.

Since January 2013, Big Valley Rancheria Water District (BVRWD) implemented numerous water policy reforms targeting Demand Side Management (DSM), a water resource management tool to reduce demand and conserve water. It is now widely recognized that a shift from the traditional supply-orientated mindset towards one of water conservation and demand management is essential for the sustainability of water resources and the environment, as well as economic efficiency and sustainable development. The DSM policies were implemented by Big Valley

Rancheria Tribal Business Committee, through a multifaceted approach of price and alternative "non-price" DSM policies (water efficiency improvement technologies, a retrofit program aimed at supplying existing homes and buildings with water-saving

devices, public education campaigns and prompt leak repairs).

The best efforts at managing water demand are known to take place in crisis situations, such as during periods of drought, when consumers can see for themselves the importance of managing water resources effectively. In March 2014, the tribe used a participatory process, assisted by technical assistance provider Rural Community Assistance Corporation (RCAC), to implement a water rate structure modeled on an escalating block-rate tariff, which effectively communicates the true value of water (See Rural Matters, 2014, Issue 1; pg. 17). Additionally, support was provided by NINISAAN, a non-profit operating from Hoopa in California, with grant funding for retrofits of 32 homes with Ultra-High Efficiency Toilets using only 0.8 gallons per flush, meeting EPA WaterSense criteria and complying with the Adults with Disabilities Act. This was buttressed by public education campaigns and a robust leak repair program. Toilets and fixtures with the EPA WaterSense certification are tested to ensure they save water without sacrificing performance or quality. All this was implemented during the current California drought, with reported annual water savings estimated at over 550,000 gallons in 2014 compared to the same period in 2013 (See Fig. 1; Fig. 2). The grant project also supported leak repairs in tribal homes by purchasing assorted leak repair items including glue, gaskets and piping materials. On average, 10 leaks were repaired every month by tribal staff (the leaks averaged 30 drips per minute), resulting in water savings of 130 gallons/month. Currently efforts have shifted to water recycling (from the tribal waste water treatment system) for non-potable use on the reservation.



Figure 1. New Retrofits: Niagara Stealth 0.8 (Gallons per Flush-GPF Toilet – Elongated model # N7717 Bowl – N7714 tank) with ADA compliant and EPA WaterSense seal.

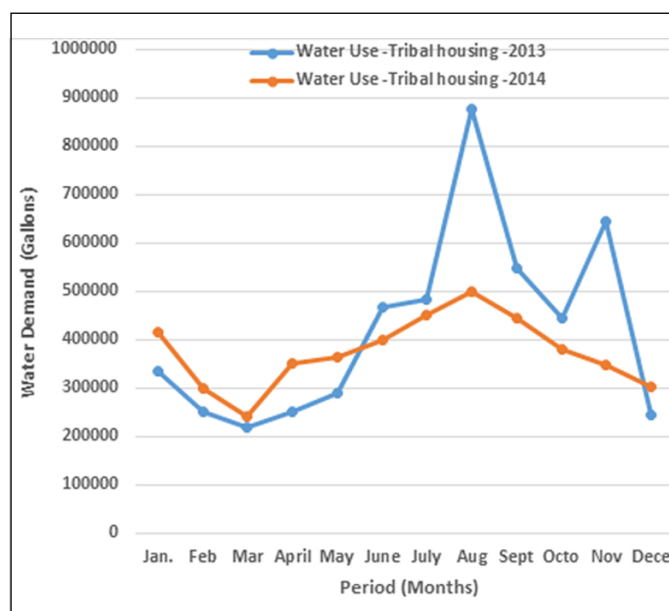


Figure 2. Reductions in water demand at Big Valley Rancheria Tribal housing sub-division after implementation of an escalating block-rate tariff and retrofitting plumbing fixtures with water-saving devices. A total of 559,609 gallons of potable water was saved in 2014.



Figure 3. Tribal housing subdivision homes.

Drawing from Big Valley Rancheria's experience, DSM presents a water resource best management tool to reduce demand and conserve water, that can be replicated by communities confronted by extreme drought to boost their water supplies. Additionally, we have learned that managing water demand can save water and help to delay or avoid costly expenditures on new infrastructure and new water sources – by best utilizing water that is already available.

