

Statewide Drinking Water System Forum


Professionals in a Collaborative Approach to Safe Drinking Water

Abstract of the Program – Placer County's Environmental Health Division created and funded a drinking water training workshop in October 2017 that brought industry and regulatory professionals together in a unique collaborative and much needed forum to help solve future challenges faced by all of California in the availability of safe drinking water. Placer County EH is one of thirty counties to implement the California Safe Drinking Water Act for small public water systems. Most EH Departments are underfunded for this program with insufficient annual permit fees leaving little to no resources available for training and community outreach. As new drinking water sources in California become harder to find and regulations become more complex, county environmental health staff and water system industry personnel need ongoing technical training and collaboration to find solutions. The water system industry also faces the difficult challenge of providing safe water sources while working with residential communities who do not have the financial or technical capacity to adapt to the new requirements. Placer County recognized the best way to find solutions to these challenges was to create a forum that provides the needed training and information in a collaborative solution driven approach that would benefit the regulators, the water system operators, and the residential and commercial communities that must meet the new requirements. The first annual forum and workshop provided four days of technical training and open discussion hosted by a regulated system operator that included a tour and review of a their water system. The statewide event was the first of its kind bringing together regulators, industry professionals and water system owners who have a common goal in ensuring safe drinking water is delivered to the public.

Problem or Need for the Program – The State Water Resources Control Board is the lead agency in enforcing the California Safe Drinking Water Act for large water systems such as city water supplies. Oversight at the state level is accomplished by Professional Engineers who work full time regulating and providing technical assistance to these large water systems. At the county level oversight is provided to small water suppliers frequently from groundwater sources who are typically owned by a residential neighborhood through a homeowners association. The responsible parties for these systems generally have no real training in operating a drinking water system and have very limited budgets to hire water system operators, or funding to upgrade their systems to meet rapidly changing requirements. Furthermore, the dwindling groundwater resources that are available and the increasing levels of contaminants in groundwater require more high tech infrastructure to produce, store, and treat the water in compliance with current standards. County inspectors who are charged with ensuring compliance standards are typically Registered Environmental Health Specialists who, in

addition to implementing the Safe Drinking Water Act, also implement other environmental health programs such as the retail food program and the hazardous materials compliance programs making it difficult to find the time to keep current on the new requirements and developing technology without a formal training structure. The State provides limited grant money to the counties that is generally inadequate to pay for any training or outreach to the regulated community. It became evident to Placer County that the success of the local regulatory program is dependent upon a close collaborative working relationship between local water suppliers and county inspectors to effectively respond to the increasing challenges of dwindling water resources across the state, and the complexity of the system components and frequently changing regulatory requirements. The development of new subdivisions in rural areas that are dependent on this type of system are becoming more difficult to approve slowing development in many areas. In the absence of a statewide training and support system, Placer County created a forum to collaborate with the operators and owners of these small groundwater dependent residential systems to work together to ensure compliance standards are achieved and safe drinking water is available into the future.

Description of the Program – Placer County designed an annual forum to share ideas and provide educational opportunities for county inspectors and small water system suppliers that was hosted by a water system owner to ensure all of the stakeholders were represented. The event was hosted by Squaw Valley LLC who is a regulated partner in Placer County. The Squaw Valley High Camp water system had been contaminated with surface water bacteria just prior to last winter threatening to close down the upper part of the valley during the ski season. Placer County worked with Squaw Valley and a water system design contractor to find a solution that allowed the



FREE WORKSHOP OCTOBER 2-5

COUNTY OF
Placer
Environmental Health
Presents....

Drinking Water Workshop

at Squaw Valley October 2-5, 2017

ATTENTION Regulators and Operators:
Earn up to 24 FREE Hours of Continuing Education Units!

Training presented by American Water Works Association

Groundwater Rule	Disinfection	Corrosion Control
Wellhead Protection	Sanitary Survey	Cross Connection Control
	Total Coliform Rule	Backflow Prevention Devices

OPTIONAL GUIDED INSPECTION TOUR

Ride a scenic gondola to the upper mountain of Squaw Valley for a tour of the water system's wells, storage tanks, pumps and filters


Complimentary Lunch Provided on Tuesday, Wednesday and Thursday


American Water Works Association
California-Nevada Section

Limited Space Available. Reserve your spot EARLY! Click [here](#) for registration form, workshop agenda, and lodging information. You may also visit www.placer.ca.gov and navigate to the Health and Human Services Department page.

- Priority Registration for Environmental Health Specialists: Now through Friday, July 28
- Open Registration: Begins Saturday, July 29

Discounted Lodging Available at the Village at Squaw Valley
First 61 rooms available at a 25% discount. All other rooms are discounted 10%.
(Attendee is responsible for lodging fees)

 THE VILLAGE AT SQUAW VALLEY

 COUNTY OF **Placer**

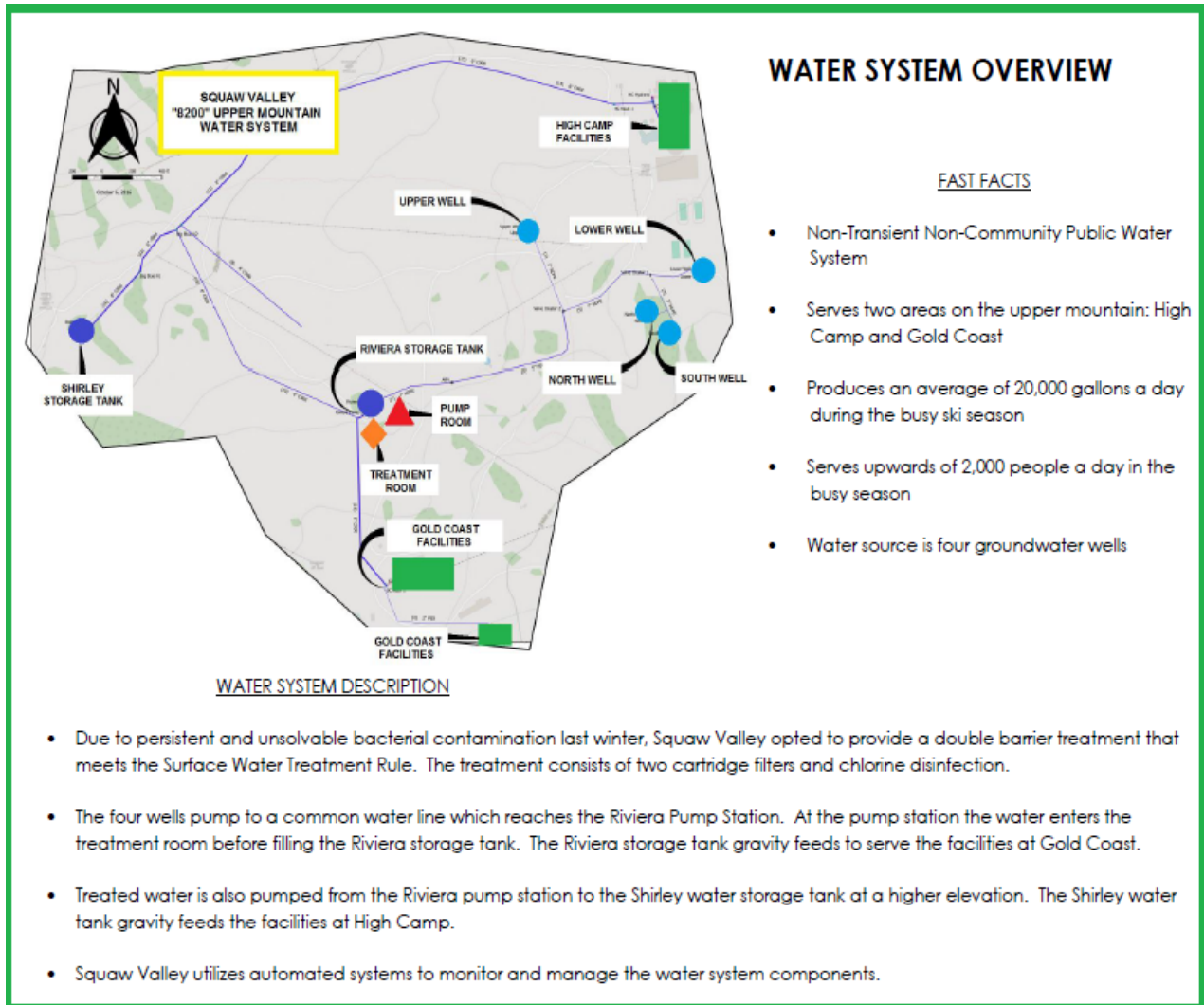
resort to fully open and ensure the protection of public health. The concept to present technical material in both a classroom and interactive forum and to facilitate a platform for creative solutions was discussed with Squaw Valley staff during that incident to share with the rest of the state the successful approach and the lessons learned by personnel at the Resort, Placer County Environmental Health, and the contractors involved in redesigning the system. The primary goal was that attendees would not only learn new water treatment concepts but see them in action and discuss them with others from both sides of the drinking water equation. Placer County determined that since this type of approach had never been implemented before, it would be necessary for the County staff to design the forum content and plan the event with relevant industry partners. The county partnered with the American Water Works Association (AWWA) who provided experts on technical components available to filter and disinfect water, prevent backflow infiltration, protect the wellhead and surface features and corrosion protection methods, as well as demonstrations and hands-on learning of other equipment and technology currently available. Placer County chose the training topics and worked closely with AWWA in the development of the educational materials. Placer County staff and other Environmental Health Specialists from across the state presented some of the changing regulatory information.

It took about six months for Placer County to budget and develop the details of the forum. Advertising for the event was rolled out in two phases allowing priority registration for county environmental health specialists and industry professionals. The second phase was an open registration allowing small water system owners and other interested stakeholders to sign up for the event. The workshop flyer was sent out through various mailing groups to reach local and state regulators, retired water professionals, and those currently in the drinking water industry. Personal invitations were sent out to the small water suppliers of Placer County as well as neighboring El Dorado and Nevada Counties.

One of the benefits to the attendees of the Drinking Water Workshop was continuing education units were awarded at no cost. Both registered environmental health specialists and California certified drinking water operators were able to earn up to 24 continuing education units. Unlike most training events which charge fees to process continuing education units, the Drinking Water Workshop was a free event with no charge to receive units or attend the forum. In order to renew their prospective certifications, both regulators and industry professionals are required to submit proof of continuing education. Placer County staff handled the attendance tracking and documentation required so that American Water Works Association could award a certificate to each participant at the end of the training.

There were a variety of topics presented at the workshop ranging from new regulation overviews, water system maintenance, water supply disinfection and filtration plus cross connection control. The training modules were designed to include presentations, videos, practice exercises and group discussions. Regulators and operators had the opportunity to discuss aspects specific to their systems and receive feedback from the instructors and others in the room. The training took place in a large conference room where breakfast and lunch was paid for by Placer County. The environment promoted networking amongst the regulators and operators. On the last day of the workshop a regulatory update meeting for county environmental health specialist was held. Regulatory updates were discussed among county environmental health specialists. Those unable to attend the event were able to call in to the meeting from across the state.

One of The highlights of this first event was the guided water system tour that was offered on the last day of the workshop. In planning the event, Placer County chose to hold the workshop at Squaw Valley Resort, a world renowned ski resort in eastern Placer County. The facilities at the top of the ski mountain are supplied by the Squaw Valley 8200 water system which is regulated by Placer County Environmental Health. County staff worked closely with the engineers and operators who maintain and run the upper mountain water system to solve complex problems encountered over the last year. Squaw Valley agreed to host the event and design a guided tour with their personnel to share ideas learned with the attendees and neighboring water system owners. The participants got to ride the gondola to the upper mountain areas to view the components of their water system and discuss the changes and upgrades that allowed them to stay in compliance. The topics discussed in the classroom were brought to life as the Squaw Valley operators demonstrated the features of the wellhead, the water filtration/disinfection delivery systems, water storage tanks, and the real-time testing of the backflow prevention devices. Placer County staff helped facilitate the tour by providing detailed handouts which showed the features of the water system and discussed how compliance was achieved and maintained. The tour was not only a unique hands-on learning experience but a demonstration of Placer County's excellent relationships with local businesses. The partnership between regulator and operator was evident in the planning and presentation of the drinking water workshop. With the success of the 2017 Drinking Water Workshop, Placer County Environmental Health will be funding and organizing annual workshops to help small water system regulators, operators and owners find collaborative solutions in the future



The Cost of the Program – The cost of the first program forum was \$21,500 that included the instructors and equipment provided by AWWA and the food and supplies provided by Squaw Valley. The funding was provided through a grant that was primarily focused on developing a database for reporting requirements of the regulatory programs. Placer County had previously developed that program and was the first in the state to be in full compliance with the reporting requirements so the County elected to use part of the funding to enhance the local drinking water program statewide.

The Results/Success of the Program – This forum and the first Drinking Water Workshop was extremely successful. Over one hundred drinking water professionals and stakeholders traveled from all over the state to Squaw Valley Resort for the workshop. Approximately 75% that attended were regulators from county environmental health departments. The other 25% were drinking water operators many which were from small water systems across the state. The attendance represented stakeholders from

across the spectrum. Participants from the southern half of the state had to fly into Sacramento and then drive over two hours to the Lake Tahoe region. Government sponsored training events are typically held in government buildings or urban hotels. Choosing a venue nestled in the Tahoe National Forest, allowed the workshop participants to enjoy the activities of the beautiful destination during the event.



Survey results from the Drinking Water Workshop were extremely positive. Participants found the topics pertinent and the instructors engaging. Reviewers were impressed with the organization and the collaboration of the event. The water system tour put together by Placer County Environmental Health and Squaw Valley 8200 water system operators was very popular as it demonstrated the latest technology available to ensure compliance with drinking water standards with an in the field hands on learning opportunity. The opportunity to see a disassembled backflow device and the components of a water system by its operators was a unique educational experience. As drinking water regulations quickly evolve, it will be necessary for both regulators and industry professionals to continue their education in the field. Placer County is gratified and proud to have established an annual workshop which will bring together regulators and industry professionals to increase knowledge, strengthen relationships and achieve a common goal of ensuring safe drinking water. The next forum event planned for this fall will focus on the future of the local programs and sustainable practices presented by the California Conference for Directors of Environmental Health and the State Water Resources Control Board. Technology training and hands on demonstrations will be provided by the California Rural Water Association. Funding has already been secured for this year's forum. Placer County Environmental Health is pleased to have created this much needed forum for the future safety of small drinking water systems and we are proud to submit the Statewide Drinking Water System Forum for consideration of an

Excellence in Environmental Health award. Please click on the link below to view a short video presentation of the first workshop created as part of this program.

Link: <https://vimeo.com/243396151/bc515dbeee>

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