Baywork Creates North Bay Cross-Training Series

Catherine Curtis, Steve Miksis, Veronica Siwy, and Jeff Tucker

Baywork, a consortium of water and wastewater utilities in the San Francisco Bay Area in California, focuses on improving workforce reliability through candidate development, outreach, and training. In fall 2017, Baywork leaders realized some of its members needed help. After assessing consistent feedback, North Bay utility representatives felt like they were being left behind—there weren’t many Baywork activities in their area, and members often had to fight traffic when driving across a bridge and back to attend training events and career fairs.

Baywork responded by introducing a North Bay pilot program. The group first created a survey to get more detailed information about its members’ training needs. Baywork leaders felt it was important to go to member utilities and ask questions in person instead of e-mailing a survey, and this face-to-face contact also allowed Baywork to introduce its new manager to utility representatives and get a sense of whether people would participate in the pilot program.

Results from the survey helped generate an agenda for a kickoff meeting in August 2018 at the Ross Valley Sanitary District in San Rafael, Calif. At the meeting, 18 people from seven utilities discussed their issues and generated ideas for the North Bay region. They decided to hold two training events: Training À La Carte (a light version of Baywork’s annual Training Buffet event) and a new cross-training event. Allowing stakeholders to select these events helped with their initial buy-in and overall commitment to the process.

Cross-Training Planning
As its members requested, the Cross-Training Committee focused on providing hands-on training and in-field demonstrations that were considered more engaging, led to better retention, and were more applicable to real work environments. However, liability and logistics issues could make such training difficult to produce.

Representatives of three relatively small wastewater utilities—Ross Valley Sanitary District, Napa Sanitation District (NapaSan), and the town of Windsor’s wastewater department—believed their small size and corporate culture could be leveraged to overcome the inherent obstacles. The three utilities agreed to host a North Bay cross-training event at each of their facilities, at which a small number of outside trainees could observe demonstrations and actual process operations. Trainees weren’t allowed to operate equipment, but they observed and asked questions of the host agency’s staff. This approach resolved the issues regarding regulatory requirements, and the development of a waiver form signed by the trainee’s agency representative provided clarity regarding liability and workers’ compensation insurance.

Each utility decided that multiday engagements with staff from other utilities provided a better forum for teaching and engagement. By having the same staff from other utilities show up for two, three, or even four days, it was possible to delve into detailed demonstrations of specific work processes and equipment as well as to talk about...
their advantages and disadvantages as they related to operations, maintenance, and safety.

**NapaSan**

NapaSan’s front-line staff of operators, mechanics, and safety personnel proved that cutting-edge programs and methods could be found at a small utility. The utility’s three-day experience included the following:

- An in-depth demonstration of confined-space entry
- A new “self-cleaning” trough wet-well pump station configuration
- The district’s biosolids dewatering system
- An innovative process for storing biosolids in the winter for land application in the summer

Participants also learned about many of the design and operational issues involved with NapaSan’s recent efforts to replace all of the equipment in the district’s headworks and minimize operational interruptions.

**Town of Windsor**

The Town of Windsor had the most personal training, with only two trainees in each session. Although the training initially focused on how a small agency maintains regulatory compliance with minimal staffing, the intimate nature of the training allowed the trainees to ask specific questions.

The town hosted three separate small groups in two-day sessions. The town’s operations and engineering staff organized and presented the training material. Each session started with a plant tour followed by discussions on equipment maintenance, laboratory processes, and recycled water management.

The session’s second day focused on capital improvement plan projects, including the town’s state-of-the-art floating solar panel project, which was completed in fall 2019. Operators also presented nutrient-reduction strategies that allow the town to achieve low levels of phosphorus and nitrogen. The training program was considered a success, and staff appreciated the hands-on training provided to attendees, who also benefited from seeing the town’s unique operations.

**Ross Valley Sanitary District**

Ross Valley Sanitary District’s cross-training initiatives tackled many of the subjects and workflows that every agency faces. Over the years, the district has developed many unique capabilities and techniques to handle almost any emergency. A four-day agenda was created to convey the importance of various systems and how Ross Valley improved situational awareness for every department. Class time was kept to under 45 minutes so participants could spend more time in the field observing live operation of various tools. Topics included line maintenance, pumps, trenchless technology, and condition assessment.

The agenda was developed with good intentions, but trainers soon realized they had to be flexible to address topics in which the participants were really interested. Trainers quickly learned that trainees wanted to see how real-world problems were solved with Ross Valley’s tools and systems. There was particular interest in how the district tests nozzles and provides condition assessment for siphons. The district also demonstrated its cured-in-place point repair process and how the installation process was modified for the district’s service area.
According to attendee feedback, all of Ross Valley’s events were a success, and its staff is more involved than ever with local utilities. The district hopes to make such training an annual event.

**Cross-Training Success**

The North Bay initiative achieved several goals. Baywork expanded its membership in the North Bay, provided mechanisms for North Bay utilities to collaborate in their region to produce events, and collaborated with educational institutions to expand externship and internship programs. The following elements and results were key to the initiative’s success:

- Leaders emerged from the North Bay to run the events.
- Participants took the initiative to plan and collaborate with others to solve problems along the way.
- The events adhered to a well-planned timeline prepared up to six months in advance (see Figure 1).
- Everyone was accountable and the trainings were well designed.
- Participants especially enjoyed their time in the field.
- The training sessions generated interest in using new methods and machinery.
- Flexibility was key in scheduling and handling the varying skill levels of participants.
- Staff benefited from making presentations and responding to questions.

Baywork is continuing North Bay planning meetings and identifying options for collaboration and networking. The utility leaders who stepped up and managed these events, and those to come, are to be commended.

Catherine Curtis is Baywork’s chair and workforce reliability manager at Wastewater Enterprise, San Francisco Public Utilities Commission (www.sfwater.org), San Francisco; ccurtis@sfwater.org.

Steve Miksis is operations and maintenance manager at Ross Valley Sanitary District (www.rvsd.org), San Rafael, Calif.; smiksis@rvsd.org.

Veronica Siwy is environmental program manager at the town of Windsor (www.townofwindsor.com), Windsor, Calif.; vsiwy@townofwindsor.com.

Jeff Tucker is Baywork’s treasurer and director of finance at Vallejo Flood & Wastewater District (www.vallejowastewater.org), Vallejo, Calif.; JTucker@vallejowastewater.org.

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Ross Valley Sanitary District’s nozzle demonstration showed attendees how to achieve optimal efficiency. © 2020 Baywork

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**Cross-Training Road Map**

Figure 1

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Graphic designed by Stephanie Turnipseed