

**City of Napa**  
**EIB/Jamieson Canyon Water**  
**Treatment Plant**  
**270 Kirkland Ranch Rd., American Canyon, CA**

**I. Respondent:**

Erin Kebbas – Water Quality Manager

**II. Presenter:**

Dave Hight – Collections Systems Administrator

**III. Treatment Plant Characteristics:**

- Water Treatment Plant
- 26 employees
- 88,000+ customers served

**IV. Innovation: Ozone Closed-Loop Cooling System**

**A. Description**

City staff designed and constructed dual closed-loop cooling systems for our ozone generators

## **B. Type of Innovations**

- Increased use of Information Technology
- New treatment processes
- Optimization of existing resources

## **C. Motivation for Innovations**

After years of operation and resulting critical equipment failures, it was determined by staff that the original open-loop cooling system needed to be replaced with a closed-loop system.

## **D. Barriers/Challenges**

The budget allocated for the project was about half of the cost of outsourcing the design and construction of a new system. The system required was also outside of the core expertise of city staff.

## **E. Benefits**

We got a system that worked effectively as soon as it was commissioned. The project was completed entirely by city staff, well within the budget allotted. Staff has benefitted by gaining new knowledge and experience in designing and constructing a system from the ground up.

## **F. Effect on Staff Training:**

One result of doing the project completely using our staff is that all parties involved have an intimate knowledge of the system, it's components, and operation.

## **G. Lessons Learned:**

We learned that we have a team that can collaboratively design, construct, and implement complex systems.