

**Las Gallinas Valley Recycling Plant
Marin Municipal Water District/Las Gallinas Valley Services
District Partnership
300 Smith Ranch Road
San Rafael, CA**

- I. Presenter:** Gary Wettstein, Water Treatment Operator, Las Gallinas Valley Recycling Plant

Presenter: James Kenney, Superintendent of Water Treatment, Marin Municipal Water District

II. Treatment Plant Characteristics:

- Water treatment recycling
- 350 service connections
- Two employees, excluding supervisor and remote monitoring

III. Innovation:

A. Description

Marin County is not a very industrialized part of the state so the use of recycled water can be limited. Taking this into consideration, we have been able to expand the use for recycled water beyond that of just irrigation. Some of the other uses for our recycled water include toilet flushing in residential as well as commercial buildings, including the county jail and the new EOC building, a small commercial laundry, three car-washes, and the commercial building cooling towers.

B. Type of Innovations

- Optimization of existing resources

C. Motivation for Innovations

The major motivation for this recycling facility was to conserve potable water. Currently the Las Gallinas Recycling Plant serves Marin Municipal Water District about 600-acre feet of potable water annually.

D. Barriers/Challenges

Aside from the capital costs of the plant and the distribution system, we had the challenge of working in partnership with another utility run by an entirely different Board. Our agency was out in front of the regulatory bodies and had to petition for permission for many of our alternative uses, beyond irrigation. We also had to petition to allow our operators to work under their California Department of public Health licenses at a tertiary wastewater facility.

E. Benefits

The district saves 600-acre feet of potable water annually.

F. Effect on Staff Training

The recycling plant is a conventional tertiary treatment plant. The processes for the treatment are the same as at our drinking water facilities, but due to the size of the facility, processes more much faster. This plant requires substantial training for the operators since the equipment is not standardized to the other facilities, due to its design and size. This facility is not manned 24 hours-a-day, so the operator must be trained to forecast production requirements. This plant is a real challenge to operate and a great training-ground for new operators. With proper training, the operators will have the required competency to operate it effectively and efficiently.

The District has created a Water Treatment Operator IV position. One of the requirements of this promotional position is the proven ability and competency to operate this facility. In order to receive this promotion the operators agree to work two weeks a year at this facility to maintain their operational competency.

G. Lessons Learned

Training and having complete Standard Operating Procedures available to the operator are very important to the success of operating this facility.

IV. Information Sharing:

- Willing to host on-site tour
- Willing to visit another regional water/wastewater facility to provide presentation on innovation

- Willing for staff member from other utility to conduct a follow-up visit to learn more about innovations
- Interested in on-line forum to discuss water/recycling/wastewater treatment issues