

# **Mt. View Sanitary District Martinez, California**

## **I. Respondent:**

Mike Roderick, Wastewater Operations Supervisor

## **II. Treatment Plant Characteristics:**

- Secondary Wastewater Treatment
- 19,000 people served
- 14 employees

## **III. Innovation:**

### **A. Description**

When the district first constructed a wetland in 1974, the public was just starting to become aware of the value of wetlands. However, the idea of creating wetlands using treated wastewater was unheard of at that time. In 1974, the district took a risk and began by constructing a small wetland adjacent to the treatment plant. Plant effluent was discharged through the wetland to Peyton Slough. This initial wetland gained the acceptance of the Mt. Diablo Audubon Society and the California Department of Fish and Wildlife. Ultimately, the California Regional Water Quality Control Board (RWQCB) became convinced that the use of treated wastewater to create wetlands constituted reclamation and beneficial reuse of the wastewater and they adopted our wetland policy.

## **B. Motivation for Innovations**

In 1972, the state adopted the Basin Plan, which prohibited discharge of effluent to shallow and confined waterways, regardless of the degree of treatment. The Basin Plan required that all discharge to the San Francisco Bay system achieve 10:1 dilution. This meant that the district would have to discharge treated effluent to the deep waters of the bay. However, the Basin Plan provided an exception to this dilution requirement, which involved reclamation and beneficial reuse.

## **C. Barriers/Challenges**

Winning the acceptance and approval of the California RWQCB to construct the wetland for reclamation and beneficial reuse of the effluent

In a Peyton Slough survey conducted in 1986-87, more ammonia removal was required to continue to discharge to the wetlands. Our proposal was to provide 60 percent removal of influent ammonia. The district constructed the bio-tower in 1989, which is used for nitrification. Typical influent ammonia removal is now 99.7 percent.

## **D. Benefits**

The district was given an exception to the shallow water discharge prohibition. The district has been able to continue serving the small community – we serve without consolidation.

## **E. Lessons Learned**

Although the district meets all National Pollution Discharge Elimination System (NPDES) permit effluent discharge limits before discharging to the constructed wetlands, we have learned that wetlands continue to treat and polish the reclaimed water to further reduce nutrients and conventional pollutants.

#### **IV. Drought Response:**

We have taken no direct steps for this or any other drought. Because of our wetlands, all of our effluent is considered beneficial to the environment. We have been using reclaimed water for district landscape irrigation for decades.

#### **V. 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

**Contact:** Mike Roderick