

City of Sunnyvale
221 Commercial Street, Sunnyvale, CA

I. Presenter: Dan Stevenson, Wastewater Operations Manager

II. Treatment Plant Characteristics:

- City of Sunnyvale Collection System: Water distribution and treatment, wastewater collections and treatment, and recycling
- 41 employees in Water and Sewer Division
- 145,000 customers served

III. Innovation:

The installation of storm water trash capture devices is consistent with the National Pollution Discharge Elimination System (NPDES) requirements. Sunnyvale has participated in a pilot project and has installed several styles of trash capture devices throughout the city.

A. Description

I am most proud of our organization staying on top of and actually being out in front of regulatory requirements. The city of Sunnyvale was a pioneer in storm water trash capture devices in the South Bay. The city participated in a pilot project sanctioned by Santa Clara Valley Urban Runoff Pollution Prevention that attempted to look at trash loading and quantifying organic and inorganic materials.

Sunnyvale was instrumental in assisting the Regional Water Board assess and quantify the amount of trash loading occurring locally, and storm water drainage systems.

B. Type of Innovations

- New treatment process
- Modification of workflow processes or classifications
- Inter-agency agreements or other administrative changes
- New approach to documentation, technical training, staff development, or knowledge management
- Optimization of existing resources

C. Motivation for Innovations

Regulatory compliance was a primary factor; however, Sunnyvale has always been an industry leader in environmental integrity. The city continues to be a leader in issues that can lead to environmental sustainability.

D. Barriers/Challenges

Funding is typically the primary challenge faced by local agencies, and this issue is no different. Any time there are massive changes for regulatory compliance, they usually come with resource costs. Government functioning on limited funding always faces unfunded mandate challenges.

E. Benefits

The reduction of trash entering local waterways and the Bay

F. Effect on Staff Training

Staff has needed to be retrained on the importance of trash capture devices and how to clean and maintain them on a regular basis. Staff "buy-in" was critical to facilitate an industry sea-change.

G. Lessons Learned

We learned that the small local trash capture devices are maintenance-intensive and not sustainable to install in every storm drain inlet. There are over 3,800 storm drain inlets in Sunnyvale, and after installing 77 screen devices inside catch basins, we quickly learned that we would not be able to install them everywhere in town. We have begun installing larger trash capture units called "vortex separators." These devices can be installed on large diameter pipes and collect trash from many storm drain inlets at once. There is a much larger upfront capital cost, but much lower long-term maintenance.

IV. Information Sharing:

Yes No

Willing to host on-site tour	X	
Willing to visit another regional water/wastewater facility to provide presentation on innovation	X	
Willing for staff member from other utility to conduct a follow-up visit to learn more about innovations	X	
Interested in on-line forum to discuss water/recycling/wastewater treatment issues		X