

Valley Water
5750 Almaden Expressway
San Jose, California

I. Respondent and Presenter:

Luz Penilla, Associate Engineer, Civil

II. Treatment Plant Characteristics:

- Water Treatment/Distribution, Advanced Wastewater
- Watersheds
- ~750 employees

III. Innovation:

A. Description

The workshop will cover the problems encountered and process used for monitoring and rebuilding centrifugal pumps above 50 hp.

B. Type of Innovation

- Recommissioning

C. Motivation for Innovation

Pump rebuilds were taking longer than expected, and in some cases the pumps would fail soon after they were rebuilt.

D. Barriers/Challenges

Lack of resources and communication between engineering groups are the biggest challenges in implementing the pump program.

E. Benefits

The program is on its second year. Since then, we've identified weaknesses in our pump rebuild specifications and made changes to strengthen them. In addition, we now provide reports that rank the overall condition of our critical pumps. The reports help Asset Management determine which pumps need to be rebuilt first, regardless of age.

F. Lessons Learned

It's helpful to have in-house vibration analysts to review alarm settings and data. Contractor's vibration data has not always been reliable.