BACWA – Engineering Information Sharing Group
Meeting Minutes
April 23, 2009
10-1 at SF PUC

ATTENDEES
Rolf Ohlemutz, VSFCD
Brian Henderson, SF
John Powell, SF
Marla Jurassic, SF
Gail Chesler, CCCSD
Ba Than, CCCSD
Dana Lawson, CCCSD
Ed McCormick, EBMUD
Vince DeLange, EBMUD
Garry Lee, DSRSD
Kevin Rahman, SMCSD
Jesse Gill, USD
Sami Ghossain, USD
Paul Winnicki, WCWD
Ken Cooke, WCWD
Mike Barnes, Kennedy/Jenks Consultants

DISCUSSION

SF PUC Asset Management Program
John Powell gave a presentation of the SF PUC asset management program. Key points he made were:

- They have just started to develop their asset management plan. This planning phase is scheduled to last for 2 years.
- They are using a consultant as a facilitator which has been very helpful. They have surveyed staff on level of service and have facilitated numerous workshops
- Defining service levels is a critical component. These should be tied into the entity's mission statement.
- They have an asset management committee with multiple departments, including IT, Finance, and engineering.
- A challenge is overcoming internal resistance to change
- They are currently dedicating 3 in house staff to AM
- John said that if all O&M staff know about AM in 2 years then the program will be a success. He also hopes that the process will be so ingrained that there will be no need of an AM group.
- They have assumed a 140 year life span of their collection system.

Asset Management

EBMUD**.** Have completed criticality assessments which concluded that 15% of their assets are critical. They have focused their CIP on these assets. They have been able to reduce the scope of some of their CIP elements, which has resulted in savings. They have also been using reliability centered maintenance (RCM) to strategically reduce maintenance of assets

Vallejo. They have good data collection that they store in their Hansen system. This is linked to their GIS so that they can click on a pipe to access info. They have scanned many documents so they are accessible electronically. They have laptops in their trucks to access info. They use an informal process for risk assessment and failure analysis. Staff has been resistant to using a formal process because of perceived lack of control of the decisions.

CCCSD. They have silos of info that they would like to link. The collections system data is linked to their GIS. They have an RFP out for a condition assessment of about 1000 mechanical assets.

DSRSD. They have an RFP for a needs assessment out now. They would like to link their CMMS and GIS. They have a newer system, so rehabilitation is not currently a major issue, but they would like to develop a plan for the future. AM is part of their recently completed strategic plan, and they have formed a user's group that meets monthly to work on AM.

WCWD. They complete condition and risk assessments and use Hansen to manage assets. They prioritize CIP projects based on fund availability.

USD. They defined levels of service in 2004 and then completed gap analyses based on the level of service. They have been working on updating their asset inventory, and have been looking at the age of their assets. They use 100-120 years for service life of clay pipe. The joints are the weak link. Pre 1963 joints are rigid, and they assume a 66 year life. The life for rubber gasket joints is greater. Their condition assessments are linked to their GIS. Their master plans are the basis of their CIP. They review their CIP with the O&M group. The master plan for the plant addresses criticality. In 2005 their assumptions for asset replacement resulted in costs that were too high.

Master Planning

- USD. They have 800 miles of sewers in 3 basins with 3 pump stations. 90% of their pipe is clay, about 9% PVC, and most of the remainder is concrete. They have twin force mains from the south. They clean and TV their system every 6 years, and update their condition assessment and their master plan after completing this 6 year cycle. They have not had any capacity deficiencies in recent years. In 2005, they completed their first WWTP master plan. They have also completed master plans for odor control and electrical. The maintenance staff reviews the master plans. They plan to complete a pump station master plan in the future. In February of each year, they begin their CIP update process for

presentation to their board and inclusion in their budget. They also review finances as a part of the update process. O&M staff participates in this process.

- Master Planning Horizons
  - SF 30 years
  - EBMUD 20 years, with an update every 10 years. 30 years for Water Supply Master Plans.
  - CCCSD 20-40 years for the collection system

Bay Area CIP

Mike distributed the latest version of the compilation of CIPs of the major Bay Area dischargers. The total budget is almost $3 billion for the next five years.

The group discussed adding flow to the info to get a general benchmarking value of CIP$/mgd. In addition, the group will make an estimate of the percentage of the CIP that is for rehabilitation and expansion. The rehabilitation value can be used as a general benchmarking value for asset maintenance. It was noted that even investing 1% of an agency's asset value annually could be too much money to be politically acceptable. It was also noted that this level of investment implies an average 100 life span for assets, which is too long for most plant assets. Mike will send out an email to request the additional info.

Flow Decreases

- USD has seen its flow decrease from 30 to 25 mgd; primarily due to manufacturing leaving.
- WCWD. Flow has decreased from 8 to 7 mgd, even though the area has been growing.
- EBMUD. Flow has decreased about 10% in the past 10-15 years. Water conservation has likely influenced this, coupled with food processors that have left the area.. Water consumption in the area has decreased from 200 to 170 mgd during the current drought.
- CCCSD has seen its flow decrease from about 45 to 39 mgd.
- SF flows have held steady.
- The VSFCD flow decreased 10% due to all their collection system improvements, which reduced I/I. A major source of the decrease was rehabbing pipes in a marsh area.
- DSRSD. Has seen a slight decrease in flow, although they have been growing.

Bidding Climate

Ba Than distributed a spreadsheet he has developed to that indicates that actual bid prices have come in an average of 23% under the engineer's estimates. Other impacts of the slow economy include more bid protests and slow (or no) payment by general contractors to their subs.

Next meeting date

July 23, 2009 from 10am to 1pm. At the WCWD plant to look at the recently installed solar power system. The general focus of the meeting will be alternative energy/sustainability

July 23, 2009 Tentative Agenda Items

- WCWD Solar Power Project
- DSRSD Fuel Cell Project (GL to discuss)
- Sustainability analyses (BH 4/09)
- Stimulus money pursuits (BT 4/09)
- Budget impacts of the recession (EM 4/09)
- Bay Area CIP update (including new info)

Future Discussion Items

- Project information management (for example, electronic project management/tracking tools. (TH) (Some discussion as part of CIP discussion)
- GIS or Accessing Data Graphically (BT 1/09)
- Food waste digestion (CMSA, SF, and EBMUD either have projects or a specific interest in this.)
- Succession Planning
- Standard specifications
- Standard details
- Development and/or implementation of major maintenance projects
- Completing small CIP projects
- Project delivery approaches (design build, etc.)
- Maintaining record drawings
- Engineering organization structure
- Use of newer technologies (UV, screw press, etc)
- Rehabilitation of assets
- Process performance