

No.	From	Date
1	Samuel A. Smalley, PE/DWSD Asset Manager	10/14
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3	VYTO KAUNELIS, PE/OHM	10/29

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Question/Comment

The Meldrum sewer connection to the Conant Mt. Elliot Sewer has multiple benefits to the regional sewer system. First, as written in the CIP, it can increase the wet weather use of the Lieb CSO facility that has been underutilized, thereby reducing the amount of untreated CSO discharge from B007. According to GLWA's Consolidated Annual CSO Report, B007 discharged an estimated 2.1 MG in FY 2017 – 2018 over 12 separate events, although there is mention of instrumentation issues during this period. This is a very low volume of discharge that may be preventable or addressable with regulator adjustment, as identified as part of the IWOP project. Another added benefit of the Meldrum sewer connection is the ability to divert NIEA flow into the Meldrum – this seemed to be the primary project driver through discussions in the wastewater master plan. As

Proposed cost allocation of the Rouge River in system storage devices is listed as 83/17. The existing ISD's throughout the system were allocated CTA. I can provide more documentation if needed. Seems worthy of discussion. Further, just a reminder that some high level discussions/negotiations would be warranted for

A number of projects are showing a steep increase in the project cost as study or design activities are completed. Given the age of the system, this trend could have a major impact on the long-term financial projections. It is important to understand what is causing these sharp increases and what actions are being implemented to prevent such steep increases in the future (e.g. do we need better studies up-front as projects are being scoped for inclusion in the CIP). Further, what incentives are in place to ensure that those performing the studies and design are obtaining the longest life possible from existing facilities before recommending significant improvements?

Work products are being developed that are helpful in understanding the existing system condition and in recommending future actions. Unfortunately, most of these products are not available to those outside GLWA (both customers and consultants). It would be very helpful to have a library of these documents available through a secure portal for review. For example, a comprehensive assessment was recently performed on the water booster pumping stations. It would be very beneficial to review the report in order to ask good questions about the proposed improvements as part of the CIP process to make sure the scope and schedule for these projects are appropriately considered.

Improvement P
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 /5/2019

Question & Comment Type
Financial Information & Procurement (CIP Chapter III)
Financial Information & Procurement (CIP Chapter III)
Project Information (Condition Assessments to Inform CIP, BCE versus RFP scope of work, O&M Projects)

CIP Format &
Information Provided

Response

Appropriate cost allocations for this project and other projects proposed in the Wastewater Master Plan project are planned to be discussed in a working group known as the Sewer Shares Think Tank group which is part of our Member Outreach program. As such, the allocation that is shown in the CIP is preliminary at this point in time. Once the discussions in the Sewer Shares Think Tank group have occurred, concepts will be brought back to the larger Sewer Shares Work Group, GLWA Administration and eventually to the Board of Directors for further consideration.

Because the installation of additional Rouge River In-System Storage Devices (ISDs) are also proposed in the Wastewater Master Plan, their cost allocation will also be discussed in the Sewer Shares Think Tank group as is noted in question 1 above.

Our top priority is alignment with the financial plan and we have achieved that this year. We understand your concern and see it; we see both the increases and the decreases and are watching this variability. Although we cannot point to a simple cause for all of it, we have identified a few common contributing factors along with our approach to each. **Cost Estimating Variability and Accuracy:** Because the plan has a long duration, it has some projects that only have concept-level cost estimates whereas others have design-level estimates. We have added cost estimating classification rating for each phase of every project in the Business Case Evaluation that are in-line with AACE international system for classifying estimates. Also, we are now populating and utilizing an internal database of actual project costs. This will dampen the variability. **Increased Knowledge of the State of the Assets:** We are performing more condition assessments and studies than in the past. This information allows better scoping of the more complex projects which in-turn yields fewer changes in the project through the construction phase. This allows us to sharpen our cost estimates at an earlier phase of the project. We plan to continue this practice and anticipate better cost estimating of projects as they are placed in the plan. This will reduce year-to-year variability. **Increased Support:** As the CIP Program Management Delivery Project is moving from startup to full implementation, more support is being provided to our engineering teams which is aimed at improving all aspects of CIP development and execution, including identification, scoping and estimating projects. Regarding encouraging utilization of full useful life of current assets: Currently, our typical request for proposals specify a required life expectancy of the asset renewal and require life-cycle cost comparisons for alternative evaluation. Value engineering is an option we use on a case-by-case basis. This is a second opportunity for an evaluation of alternatives based on optimizing life-cycle costs. Utilization of asset management principles is becoming a way of doing business at GLWA. With this comes an inherent focus on the identification of remaining asset useful life. Also with asset management principles comes the concept of using a total cost of ownership approach to asset renewals. This allows consideration of the operations and maintenance cost, in addition to construction costs, of assets as they age when making decisions. Going forward, these principles will be emphasized even more than they are currently in the direction given to designers and constructors in our solicitation documents.

As a matter of best practice, GLWA does not publish details of many of its assets and/or condition assessments. This best practice is for security reasons. If there are specific reports or projects in which Member Partners have particular interest, a request may be made to GLWA's Member Outreach team and GLWA will consider how best to deliver an appropriate level of detail to fulfill the request in the form of a presentation at one of the Member Outreach work groups. At present, the work groups that most commonly have specialized presentations such as this are the Water Analytical Work Group, the Wastewater Analytics Task Force and the Capital Improvement Program Work Group.