



CITY OF MERCER ISLAND UTILITY BOARD VIDEO MEETING

Tuesday, May 11, 2021 at 5:00 PM

BOARD MEMBERS:

Chair Tim O'Connell, Vice Chair Tom DeBoer
Board Members: Stephen Majewski
George Marshall, Stephen Milton,
William Pokorny, and Brian Thomas

LOCATION & CONTACT

Mercer Island City Hall – Zoom Meeting
9611 SE 36th Street | Mercer Island, WA 98040
Phone: 206.275.7706 | www.mercerisland.gov

In compliance with the Americans with Disabilities Act, those requiring accommodation for meetings should notify the Staff Liaison at least 24 hours prior to the meeting at 206.275.7706.

Virtual Meeting Notice

The virtual meeting will be broadcast live on Zoom and recorded and saved on the City Council's [YouTube Channel](#)

Registering to Speak: Individuals wishing to speak live during Appearances will need to register their request with the City Clerk at **206.275.7793** or email the [City Clerk](#) and leave a message before 4 PM on the day of the Utility Board meeting. Each speaker will be allowed three (3) minutes to speak.

Join by Telephone at 5:00 PM: To listen to the meeting via telephone, please call **253.215.8782** and enter Webinar ID **825 9151 1028** and Password **600314** when prompted.

Join by Internet at 5:00 PM: To watch the meeting over the internet via your computer, follow these steps:

- 1) Click [this link](#)
- 2) If the Zoom app is not installed on your computer, you will be prompted to download it.
- 3) If prompted for Webinar ID, enter **825 9151 1028**; Enter Password **600314**

CALL TO ORDER & ROLL CALL, 5:00 PM

PUBLIC APPEARANCES

REGULAR BUSINESS

1. Risk and Resilience Assessment (RRA) & Emergency Response Plan (ERP) Project Updates
Recommended Action: Receive presentation (to be provided).
2. Review Utility Board 2021 Workplan
Recommended Action: Receive updated Workplan and provide input.

OTHER BUSINESS

3. Public Works Department Update
4. Board Member Reports

ADJOURNMENT



Memorandum

CITY OF MERCER ISLAND, PUBLIC WORKS DEPARTMENT

9611 S.E. 36th St. • Mercer Island, WA 98040-3732
 (206) 275-7608 • FAX: (206) 275-7814 • www.mercerisland.gov

Date: May 6, 2021

To: Utility Board

From: Jason Kintner, Chief of Operations/Public Works Director
 Patrick Yamashita, City Engineer/Deputy Public Works Director
 Rona Lin, Utilities Engineer

Re: Risk and Resilience Assessment (RRA) & Emergency Response Plan (ERP) Update
 Project Updates

BACKGROUND

The 2018 America's Water Infrastructure Act (AWIA) requires all utilities in the United States serving over 3,300 customers to complete a comprehensive evaluation of their water systems to better manage risks and increase resilience. The assessment requires evaluation of "all hazards" including malevolent acts, natural hazards, cyber security, and more. The AWIA also outlines the requirements for utilities to prepare and/or update their Emergency Response Plan (ERP). This update is a follow up to the information presented on March 16th in the joint City Council & Utility Board study session. Refer to [AB5830](#) (attached).

RRA & ERP PROJECT UPDATE

The City hired Carollo Engineers in November 2020 to perform a Risk and Resilience Assessment (RRA). To this date, Carollo and City staff have completed data collections, site visits, and two workshops. Risk analysis of City's water system assets were concluded at the end of the second workshop. Currently, Carollo is finalizing Resiliency study with focus on the operation and financial resilience over the identified risks. Prior to the final conclusion of the RRA, the team will begin working on ERP updates with information developed from the RRA.

The AWIA requires completion of the Risk & Resiliency Assessment by June 30, 2021 and the Emergency Response Plan update by December 31, 2021. The project team is on track to meet these deadlines. The RRA will identify capital projects to address identified risks. Staff will include these projects in future CIP budget proposals starting in 2023-2024.

On Tuesday night, staff will provide an update on the project and discuss the upcoming project schedule.



**BUSINESS OF THE CITY COUNCIL
CITY OF MERCER ISLAND**

**AB 5830
March 16, 2021
Study Session**

AGENDA BILL INFORMATION

TITLE:	AB 5830: Joint City Council & Utility Board Study Session to discuss upcoming Utility Capital Improvement Projects.	<input checked="" type="checkbox"/> Discussion Only
RECOMMENDED ACTION:	Discussion only.	<input type="checkbox"/> Action Needed: <input type="checkbox"/> Motion <input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution

DEPARTMENT:	Public Works Jason Kintner, Chief of Operations/Public Works Director Patrick Yamashita, Deputy Public Works Director Alaine Sommargren, Deputy Public Works Director		
STAFF:	Utility Board: Tim O’Connell, Chair Stephen Milton William Pokorny Tom DeBoer, Vice Chair George Marshall Brian Thomas Stephen Majewski		
COUNCIL LIAISON:	Lisa Anderl		
EXHIBITS:	n/a		
CITY COUNCIL PRIORITY:	2. Articulate, confirm, and communicate a vision for effective and efficient city services. Stabilize the organization, optimize resources, and develop a long-term plan for fiscal sustainability.		

SUMMARY

The City operates three separate utilities (Water, Sewer, and Storm Water), with customer charges funding all operating/maintenance costs and capital investments. Based on this “pay as you go” financing strategy, the City Council adopts incremental rate increases each year to ensure utility systems and infrastructure are well managed, maintained, and when appropriate, replaced.

The City Council adopted the 2021-2022 Biennial Budget on December 1, 2020, which included utility rates based on the operating budget, funding for the first two-years of the six-year Capital Improvement Program, as well as anticipated utility-related debt financing needs. The purpose of this joint meeting with the Utility Board and the City Council is to provide an update on several capital improvement projects and to answer questions about project scope, timelines, and different funding strategies. This discussion will inform next steps and equip staff to return to the Utility Board and City Council in Fall 2021 with specifics regarding future capital program funding and debt financing strategies.

METER REPLACEMENT PROJECT

The water distribution system currently has a wide array of water meter manufacturers, types, and reading technologies of varying age. More than 60% of the City's existing 7,866 water meters are 15 years or older. Water meter accuracy is the greatest at the beginning of the meter's life and degrades with age and use. This is important because any water that cannot be accounted for is considered distribution system leakage, equating to lost utility revenue. A standardized replacement program is needed given that most of the water meter infrastructure is at or past the end of its useful life.

In June 2019, the City issued a Request for Proposals to furnish/install meters and transmitter units, collect and manage data, and integrate with the City's utility billing system. Each proposal was to be designed to an expected useful life of at least 20 years.

The City received nine proposals. An Evaluation Committee, which included department representatives from Public Works, Finance, Community Planning & Development, and Information Services, reviewed each proposal, completed interviews, and performed reference checks with other jurisdictions. In November 2019, two vendors were selected to complete a small pilot installation to test their meter and data platforms.

While many proposals demonstrated an ability to provide a standardized meter replacement program for Mercer Island, Ferguson/Sensus was identified as the preferred vendor. Specifically, the Ferguson/Sensus platform integrated with the City's Utility billing system and they have successfully completed numerous meter replacement projects within the region. Contract negotiations are currently underway.

The estimated construction cost for the Meter Replacement Program is \$4.85 million and was preliminarily identified as a candidate for debt financing. Staff anticipates program implementation will take two years, with construction beginning in Q3 2021 and concluding in FY 2022.

SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) PROJECT UPDATE

City water distribution and sewer collection are monitored and controlled remotely by two separate systems collectively referred to as Supervisory Control and Data Acquisition ("SCADA"). Due to the varied age and condition of both systems, the technology is obsolete, causing the systems to be unreliable and unable to meet the City's needs.

At its February 2, 2021 meeting, the City Council awarded the SCADA Water Equipment Replacement Project to Bainbridge Island Electric (see [AB 5805](#)). The City will issue the Notice to Proceed at the end of March and the contractor is scheduled to start work in April. The project is expected to be completed by August 2021.

As a component of the SCADA-Sewer Equipment Replacement Project, the City recently completed a ventilation study for the sewer pump stations. Brown and Caldwell (Engineer of record) is working on the sewer system design. The City is expected to bid this project in Q4 2021 with construction anticipated to begin in 2022 and conclude in 2023. An updated engineer's cost estimate has not yet been completed but was budgeted between \$1.65 and \$3.3 million. This project is preliminarily identified as a candidate for debt financing.

RESERVOIR IMPROVEMENT PROJECT

The City's water distribution system includes two, 4-million-gallon reservoir tanks. The interior and exterior coatings have an expected lifespan of 20 years and these tanks were last recoated in 1999. Ideally, the tank

recoating work will occur in separate calendar years, to take one reservoir off-line during the non-peak water season. Design of the tank relining was scheduled to begin in 2021, with construction anticipated in 2022 and 2023, respectively.

However, as design began this year, staff learned that beginning in January 2023, new federal coating and lining standards will be implemented. The new standards will likely increase construction costs significantly. As such, staff is working to expedite the project to include the recoating of both reservoir tanks by the end of 2022, prior to the new federal standards. The estimated construction cost for this project is \$4.0 million. This project was not originally identified as a candidate for debt financing but could be included as it aligns with the necessary debt financing construction completion requirements.

RISK & RESILIENCY ASSESSMENT & EMERGENCY RESPONSE PLAN PROJECT UPDATE

The 2018 America's Water Infrastructure Act (AWIA) requires all utilities in the United States serving over 3,300 customers to complete a comprehensive evaluation of their water systems to better manage risks and increase resilience. The assessment requires evaluation of "all hazards" including malevolent acts, natural hazards, cyber security, and more.

The City hired Carollo Engineers in November 2020 to perform this evaluation. The City must complete the Risk & Resiliency Assessment by June 30, 2021 and the Emergency Response Update by December 31, 2021. Staff and the project consultant will brief the Utility Board and City Council in the coming months, and it is anticipated that the FY 2023-2024 preliminary Capital Improvement Program will include future capital projects resulting from this assessment.

FUNDING & NEXT STEPS

When the FY 2021 utility rates were reviewed and approved by the Utility Board and City Council in the fall of 2020, utility rates models assumed \$3.5 million debt issuance in 2022 to support capital projects tied to the Water Fund, and \$2.5 million debt issuance in 2022 to support capital projects tied to the Sewer Fund. The FY2021 approved rate increase was 5.25% for Water and 4.00% for Sewer.

The City has deliberately issued a very modest amount of debt over the years, maintaining a sizable debt service capacity, and consistently following a conservative fiscal management policy as reflected in the City's budget policies. Given the size, expected useful life, and importance of these upcoming Utility Capital Improvement projects, staff determined debt financing would smooth year-to-year utility rate increases and spread the costs for services to current and future rate payers for these capital infrastructure investments.

Staff is seeking early input from the Utility Board and City Council on the potential debt issuance for the capital projects previously described. A discussion on debt financing specifics for these projects is tentatively scheduled for Fall 2021, to coincide with the Utility Board rate discussions.

RECOMMENDATION

Receive presentation, discuss, and provide input on the Utility projects and process.



Utility Board

2021 Work Plan

2nd Tuesday

Meeting Date	Agenda Item
January 12	Recess
February 9	Code of Ethics Discussion
	Adopt 2021 UB Work Plan
	Water Meter Replacement Contract & Project Update
March 16	Joint Utility Board & City Council Meeting
	Risk & Resiliency, Meter Replacement and SCADA Project Updates
April 13	NPDES Annual Report
	Sustainability Work Plan Update & PW Projects
May 11	Risk & Resiliency & ERP Report
June 8	Board Elections
	SPU Infrastructure Update
	Booster CL2 Project Update
July 13	PW Facilities Tour
	2021 CIP Updates
August 10	Recess
September 14	Stormwater & EMS Rate Discussion/Recommendation
October 12	Sewer & Water Rate Discussion/Recommendation
November 9	Recology Solid Waste Annual Report
December 14	Recess
To Be Scheduled:	COVID/EOC Lessons Learned
	SPU Wholesaler Contract Ammendment Updates
	KC Metro Rate Updates