

Customer Review Panel

Seattle Public Utilities

March 14, 2022



City of Seattle

Welcome & SPU Updates

Andrew Lee

Interim CEO and General Manager, SPU



City of Seattle

Public Comment

Moderator: Karen Reed

Committee Business

Presenters: Karen Reed, Kate Morrison

Other Updates

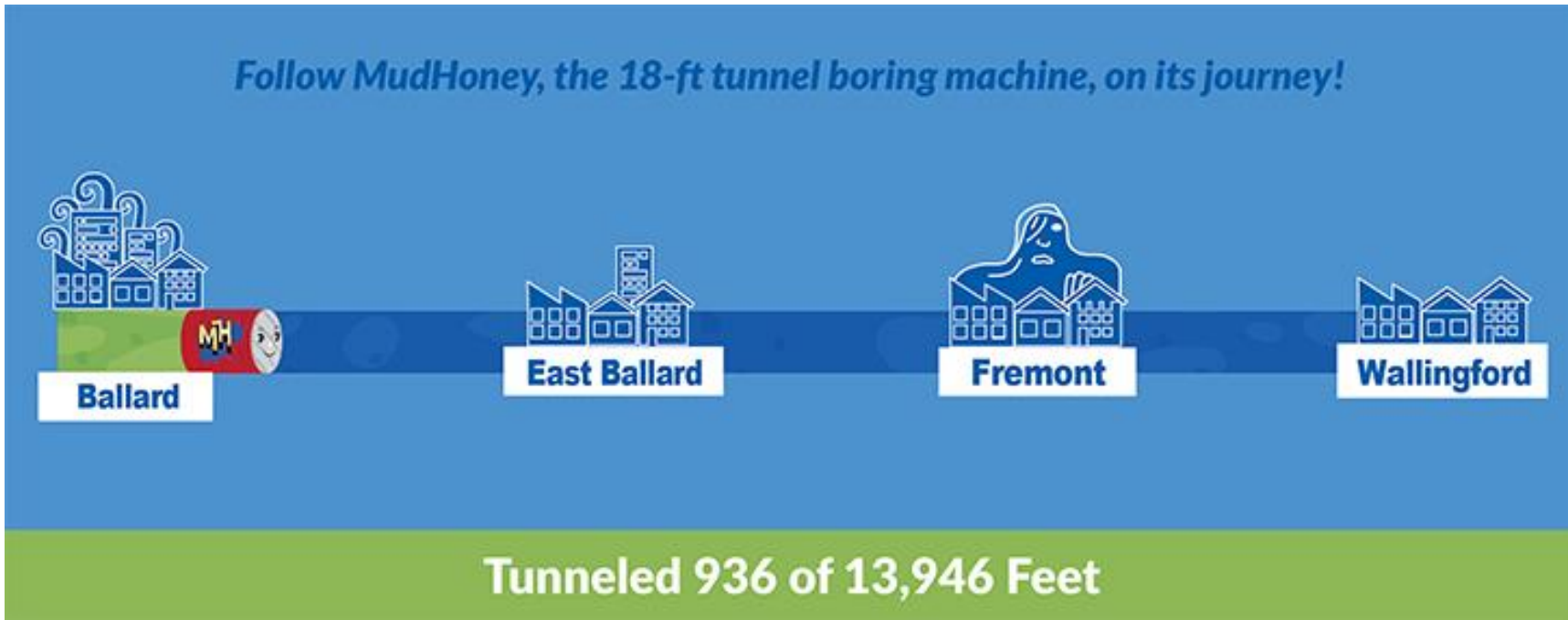
- **Recruitment Starts Soon!**
 - DON will lead effort to recruit Cohort 2 this Spring
- **Facilitation RFP Nearly Wrapped Up**
 - We are in the final stages of interviewing candidate firms
 - New facilitator will begin in June
 - Thanks to Karen for continuing through the March meeting!





Ship Canal Water Quality Project Tour

MudHoney Progress



SBP Rate Path Progression

ADOPTED (4/21)	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2021-26</u>
Water	0.0%	2.7%	4.7%	3.6%	4.2%	5.5%	3.4%
Wastewater	7.3%	3.1%	5.9%	0.5%	7.8%	3.6%	4.7%
Drainage	7.4%	8.6%	7.2%	3.9%	6.5%	6.7%	6.7%
Solid Waste	2.9%	2.9%	2.2%	2.3%	2.1%	2.1%	2.4%
Combined	4.5%	3.9%	5.0%	2.2%	5.4%	4.2%	4.2%
UPDATE (9/21)	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2021-26</u>
Water	0.0%	2.6%	3.8%	4.0%	4.7%	3.6%	3.1%
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Drainage	7.4%	6.0%	6.2%	6.0%	6.2%	6.2%	6.3%
Solid Waste	2.9%	2.9%	2.2%	2.3%	2.1%	2.1%	2.4%
Combined	4.5%	3.0%	3.9%	3.5%	4.3%	4.0%	3.9%
UPDATE (3/22)	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2021-26</u>
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Drainage	7.4%	6.0%	6.3%	6.5%	6.7%	5.9%	6.5%
Solid Waste	2.9%	2.9%	2.2%	2.3%	2.1%	2.1%	2.4%
Combined	4.5%	3.0%	4.2%	3.9%	4.6%	4.2%	4.1%

Approved rate legislation that is currently in effect

Proposed King County Treatment Rate increase

SBP Rate Path Discussion

King County Wastewater Treatment

O&M cost increases

- Central rate
- Wage increases negotiated with unions
- New staff – 96 FTEs – Asset management, nutrients, regulatory, engineering and project management, operations

Capital cost increases

- CSOs
- Asset management
- Capacity – plants and pipes
- West Point power quality
- Nutrients



SPU feedback for King County Wastewater

- **Seek efficiencies** in operations and personnel
 - Adding 96 FTEs is significant – concerned that “nice to haves” are being included
- **Preserve important capital** programs, e.g. asset management and CSOs
- Concerned that this rate path **assumes a successful Consent Decree modification**
- Support greater investment in asset management but would like to see **more rigorous/industry standard analysis** supporting the planning
- Need **more information about capacity improvements** – surprised that it exceeds asset management and CSO costs
- **Need holistic investments** that solve multiple problems, build resilience, address asset management, and that result in the greatest environmental and community value



Performance Reporting Update

March 14, 2022



Overview

- Essential Service Metrics and Focus Area Progress
 - Performance Highlights: NPDES Permitting
- Capital Accomplishment Rates & Capital Improvement Projects
- Financials
- Winter Storm Service Impacts – South Park
- Annual Update to Appendix B



NPDES Data Highlight



- **What is an NPDES permit?**

- The Clean Water Act prohibits anybody from discharging "pollutants" through a "point source" into a "water of the United States" unless they have an NPDES permit.
- The permit will contain limits on **what you can discharge, monitoring and reporting requirements**, and other provisions to ensure that the discharge does not hurt water quality or people's health.
- In essence, the permit translates general requirements of the Clean Water Act into specific provisions tailored to the operations of each person discharging pollutants.



NPDES Data Highlight



- **National Pollutant Discharge Elimination System**

- Permits ensure a state's mandatory standards for clean water and the federal minimums are being met.
 - Both stormwater and wastewater
 - Required if you discharge from a point source into the waters of the US
- SPU met monthly requirements throughout 2021, save for December, due to snow and ice and the **inability to street sweep**



2021 SBP PERFORMANCE SUMMARY

CRP Quarterly Meeting

March 14, 2021



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2021 Q4 Equitable Essential Services Metrics

Delivering Equitable Essential Services

We are committed to supporting our community, customers, and employees in building an equitable, sustainable, and just future.

Best In Class	5.8% Distribution System Leakage Annual Target: ≤10%	11 Utility Discount Program Target: Meet the Need	.80 lbs Residential Garbage** Annual Target: <1lb/pers/day	100% Clean City Collection Target: ≥95%	2.85 Sewer Overflows Target: ≤4 per100 miles		
Reliable and Rewarding Experiences	97% Water & DWW response* Target: ≥ 90%	1.0 Missed waste pick-up Target: ≤1 per 1000 stops	96% Customer call response Target: ≥ 80% in 3 mins	92% Customer satisfaction Target: ≥ 90%			
Expectations, Requirements, and Commitments	62% CSO Outfalls Annual Target: ≥ 62%	2.27 lbs Garbage, Recycle, Organics** Target: < 2.5 lbs./person/day	79% Customer Effort Target: ≥ 80%	23% WMBE Purchasing Target: ≥ 17%	20% WMBE consultants Target: ≥ 22%	Met Drinking Water Quality Target: Regulation met	Met NPDES*** Target: Requirements met

* More details about the performance of these service areas below

**Metrics for Residential Garbage and Garbage, Recycle, Organics reporting is annual, and there is a lag in obtaining the data. Current annual metric available is from 2020.

*** National Pollution Discharge Elimination System permits requirements for Seattle's Drainage and Wastewater systems



2021 SBP Investments: Successes and Opportunities



Focus Area	Successes	Opportunities
Delivering Equitable Essential Services	Best in Class; Reliable and Rewarding Experiences met all targets Q1-Q4	Customer Effort; WMBE Consulting did not meet targets in 2 of the quarters.
Stewarding Environment and Public Health	Green Stormwater Infrastructure on track each quarter	SCWQP had a minor delay in Q4 due to impacts of vaccine mandates
Empowering our Customers, Community and Employees	DWW Recreational Vehicle (RV) Mobile Pump Out Program on track all quarters in 2021	SPU Support Services had minor delay in Q4, due to loss of personnel
Strengthening Our Utility's Business Practices	Water Asset Management and Opportunity Work on track all 4 quarters	DWW Asset Management and Opportunity Work, minor delay Q3 & Q4, due to soil contamination at FM 35

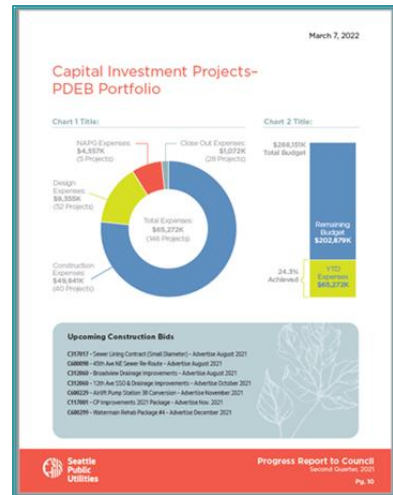
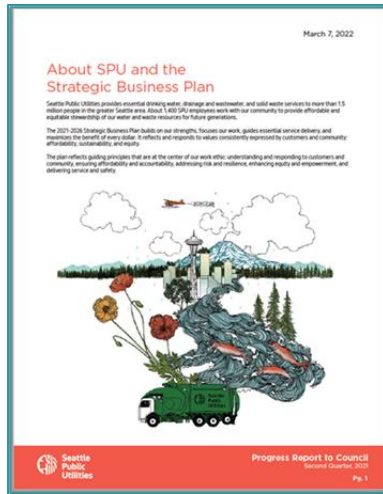
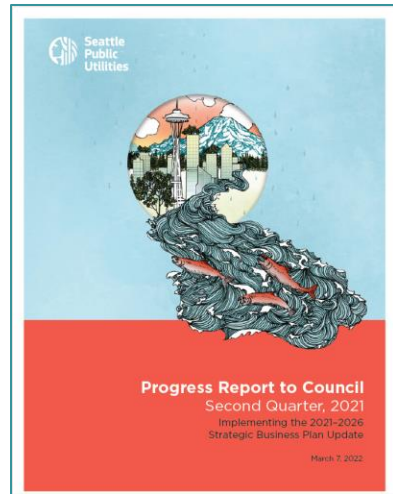


2021 SBP Initiatives: Successes and Opportunities

Focus Area	Successes	Opportunities
Stewarding Environment and Public Health	Waste Diversion; completed work on projects to meet the commitments for 2021, including partnerships with food grocers	Waste Prevention; adjusted timeline for Strategic Plan due to limited staff resources in 2021
Empowering our Customers, Community and Employees	Customer Affordability Programs; assisted approx. 2600 households with \$2.1M in assistance towards their utility bills.	SPU Workforce Development; Internal trainings and Performance Management will require additional time to complete
Strengthening Our Utility's Business Practices	Accountability and Affordability Strategy Plan; Initiated actions across 6 practice areas, including improved budget monitoring and spending	Risk and Resilience Strategic Plan; Staffing has been an issue for comprehensive oversight in 2021



Preview 2022 SBP Performance Reporting



- Updated report format and layout for 2022
- Aligned with Strategic Business Plan design and illustrations
- Collaborating with SBP design consultant on layout
- More opportunities for visual displays of performance
- Coming Q1 2022

2021 SBP CIP REPORTING

CRP Quarterly Meeting

March 14, 2021



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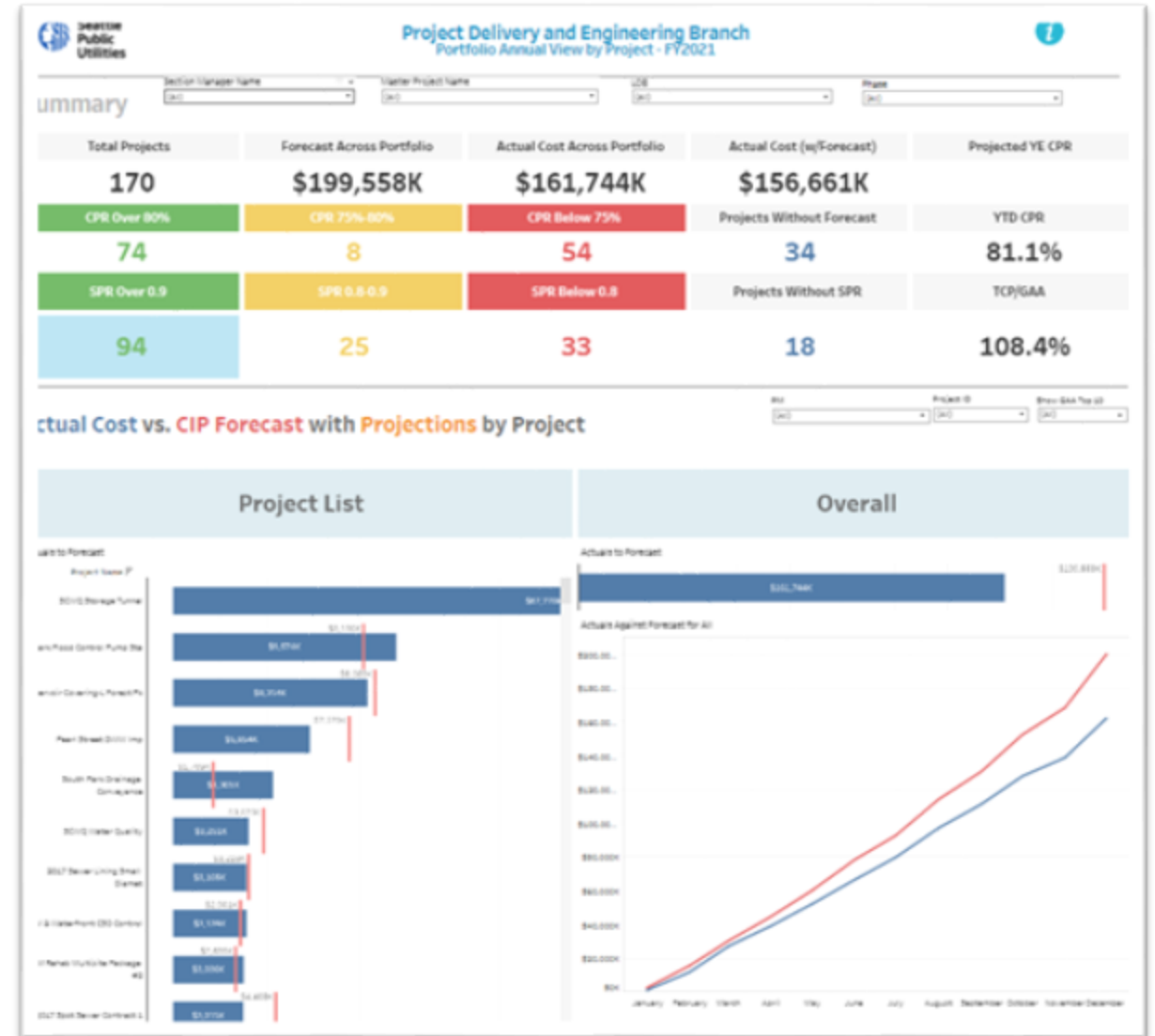
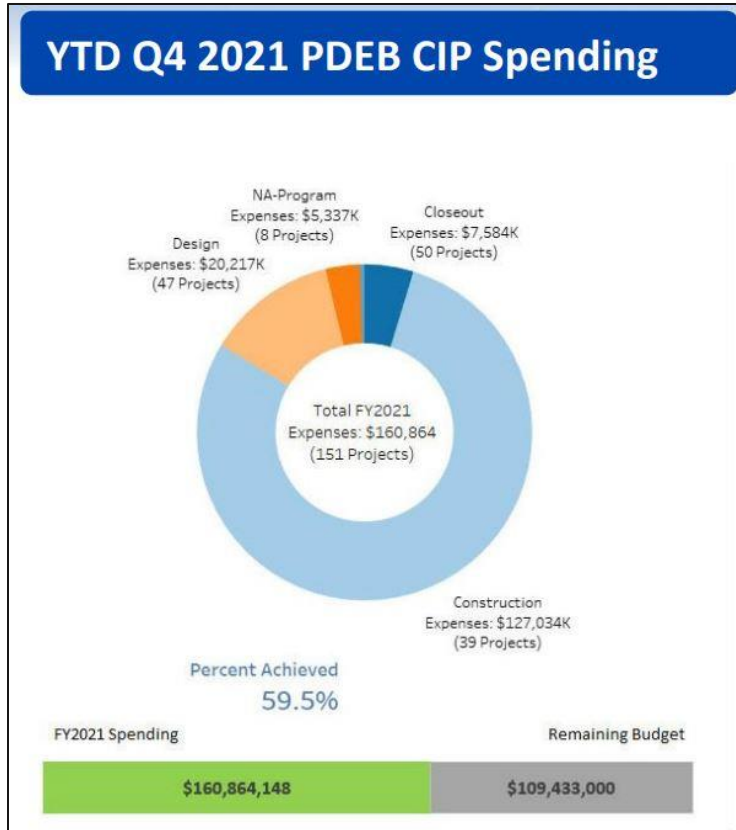


CIP Accomplishment Rates

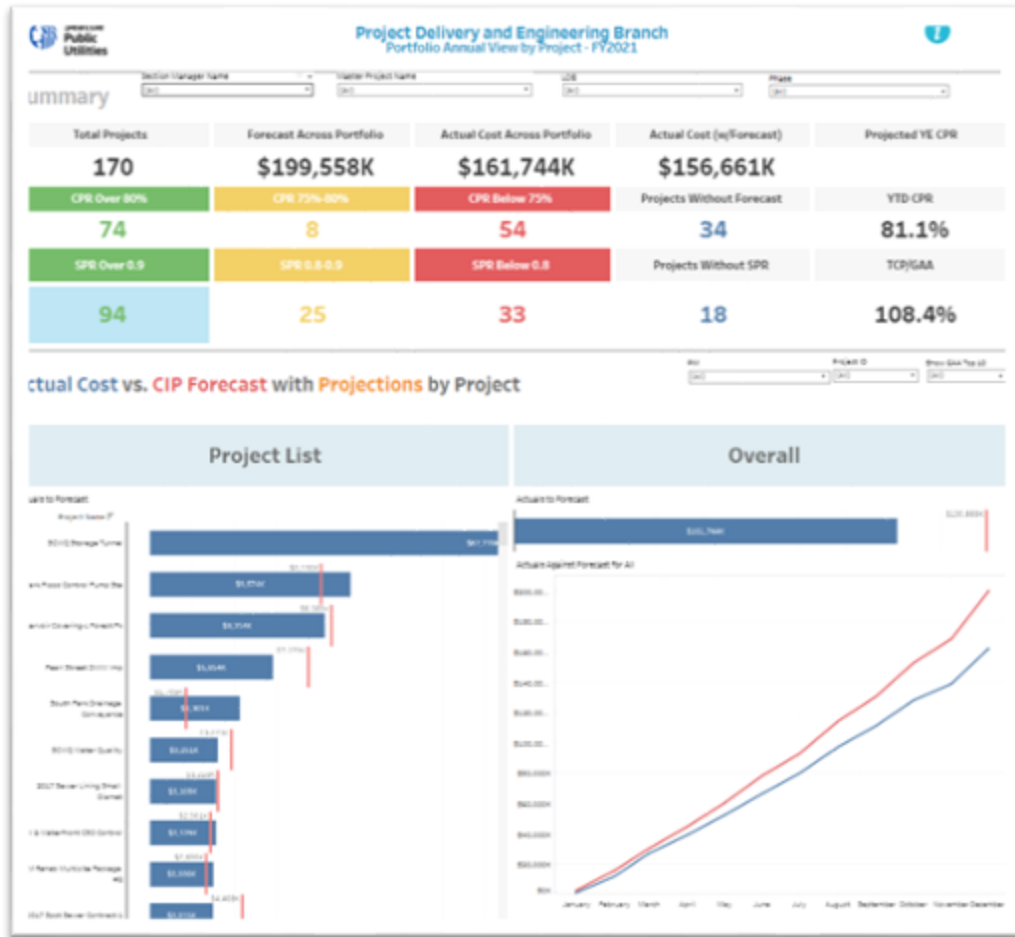
Fund	Plan to Spend	Annual Spend	% Accomplishment
Water	\$117M	\$65M	55%
DWW	\$278M	\$167M	60%
Solid Waste	\$25M	\$16M	64%
2021 Overall	\$420M	\$248M	59%



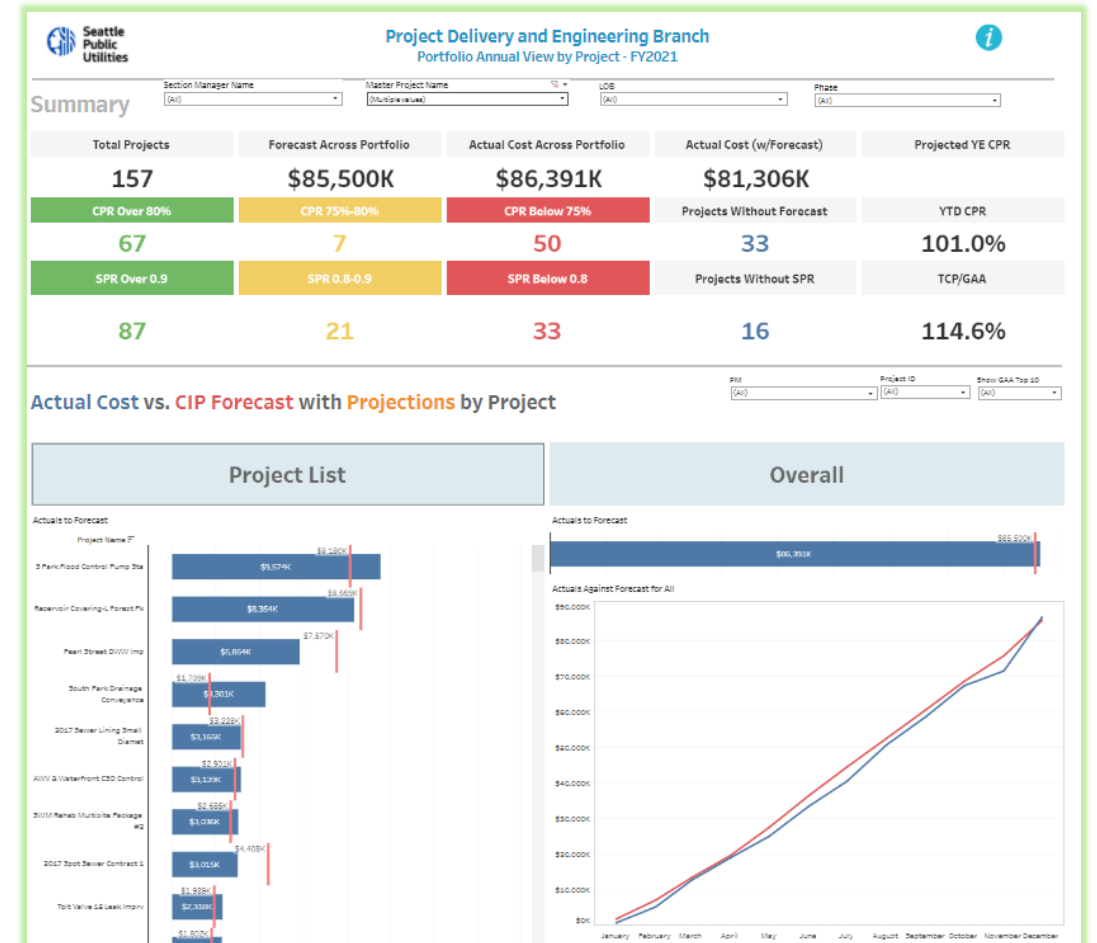
PDEB Reporting



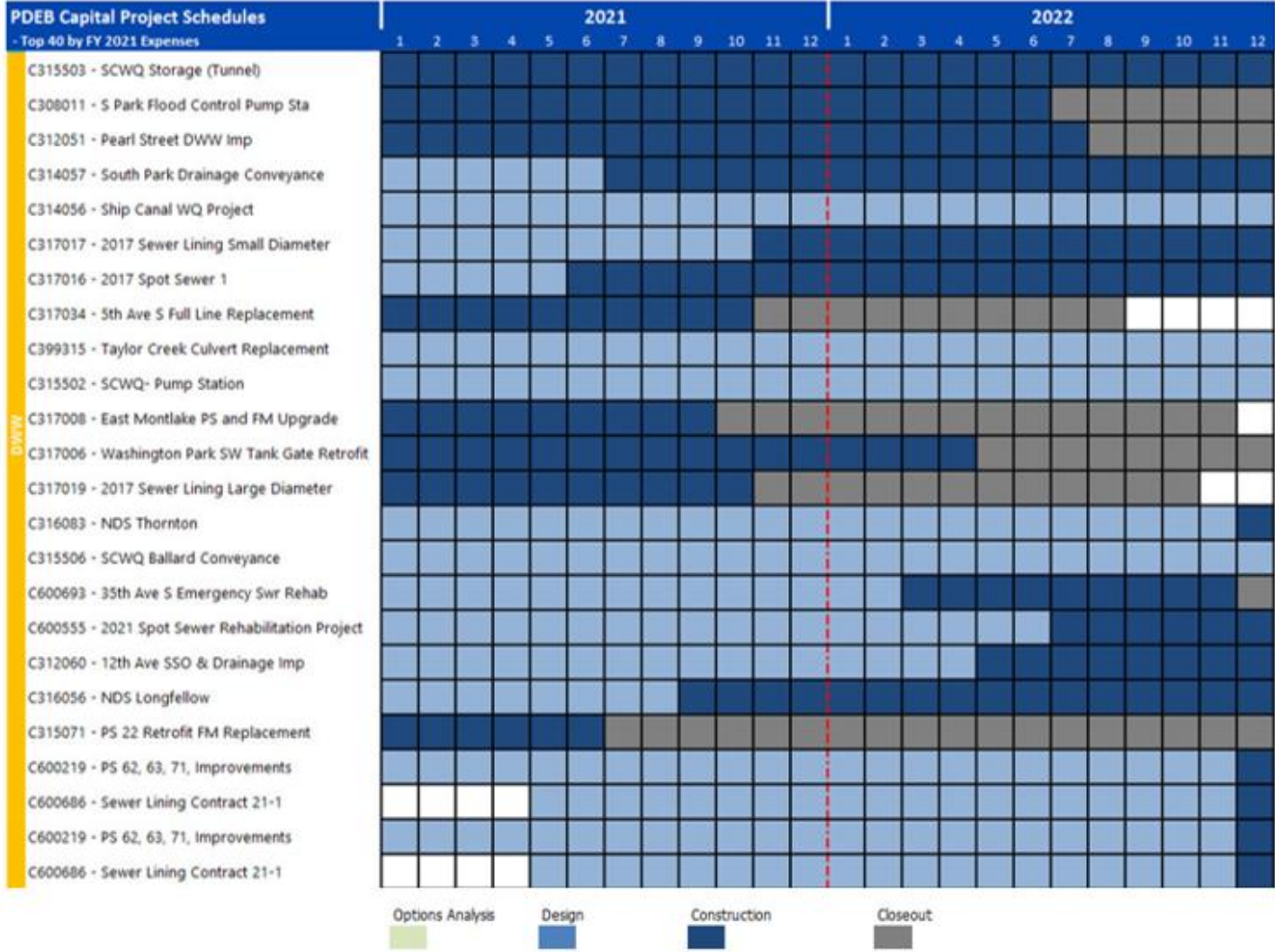
2021 TOTAL PDEB FORECAST



2021 PDEB FORECAST (w/o SCWQP)



Q4 CIP Schedule - Drainage and Wastewater



SPU QUARTERLY FINANCIAL UPDATE

Fourth Quarter 2021

March 14, 2021



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Water Fund 2021 Q4 Financial Results

(\$ in millions)

	2021 Annual			
	Annual Plan to Spend	Annual Spent	Year-end Variance	% Spent
Expenditures				
Operating**	\$273	\$327	(\$54)	120%
Capital	\$117	\$65	\$53	55%
Total Expenditures	\$390	\$391	(\$1)	100%

	Annual Planned Revenue	Annual Received	Year-end Variance	% Received
	Operating Revenue			
Retail Customer Rev.	\$208	\$213	(\$5)	103%
Wholesale Customer Rev.	\$56	\$57	(\$1)	103%
Other Revenue	\$12	\$33	(\$21)	271%
Total Operating Revenues	\$276	\$303	(\$27)	110%

*Negative number means over-spend in the case of expenses, and over-recovery in the case of revenue.

**O&M YTD overspent due to bond defeasance of \$79M, which was addressed in the 3Q supplemental.

DWW Fund 2021 Q4 Financial Results

(\$ in millions)

	2021 Annual			
	Annual Plan to Spend	Annual Spent	Year-end Variance	% Spent
Expenditures				
Operating	\$465	\$464	\$1	100%
Capital	\$278	\$167	\$111	60%
Total	\$743	\$631	\$112	85%

	Annual Planned Revenue	Annual Received	Year-end Variance	% Received
	Operating Revenue			
Wastewater Revenue	\$315	\$333	(\$18)	106%
Drainage Revenue	\$165	\$165	\$0	100%
Other Revenue	\$6	\$8	(\$2)	125%
Total	\$486	\$506	(\$20)	104%

*Negative number means over-spend in the case of expenses, and over-recovery in the case of revenue.

**O&M YTD overspent due to bond defeasance of \$51M, which was addressed in the 3Q supplemental.

Solid Waste Fund 2021 Q4 Financial Results

(\$ in millions)

	2021 Annual			
	Annual Plan to Spend	Annual Spent	Year-end Variance	% Spent
Expenditures				
Operating	\$217	\$206	\$11	95%
Capital	\$25	\$16	\$9	64%
Total	\$242	\$222	\$20	92%

	Annual Planned Revenue	Annual Received	Year-end Variance	% Received
	Operating Revenue			
Residential	\$145	\$151	(\$6)	104%
Commercial	\$58	\$62	(\$4)	107%
Other Revenue	\$18	\$25	(\$7)	139%
Total	\$221	\$238	(\$17)	108%

*Negative number means over-spend in the case of expenses, and over-recovery in the case of revenue.

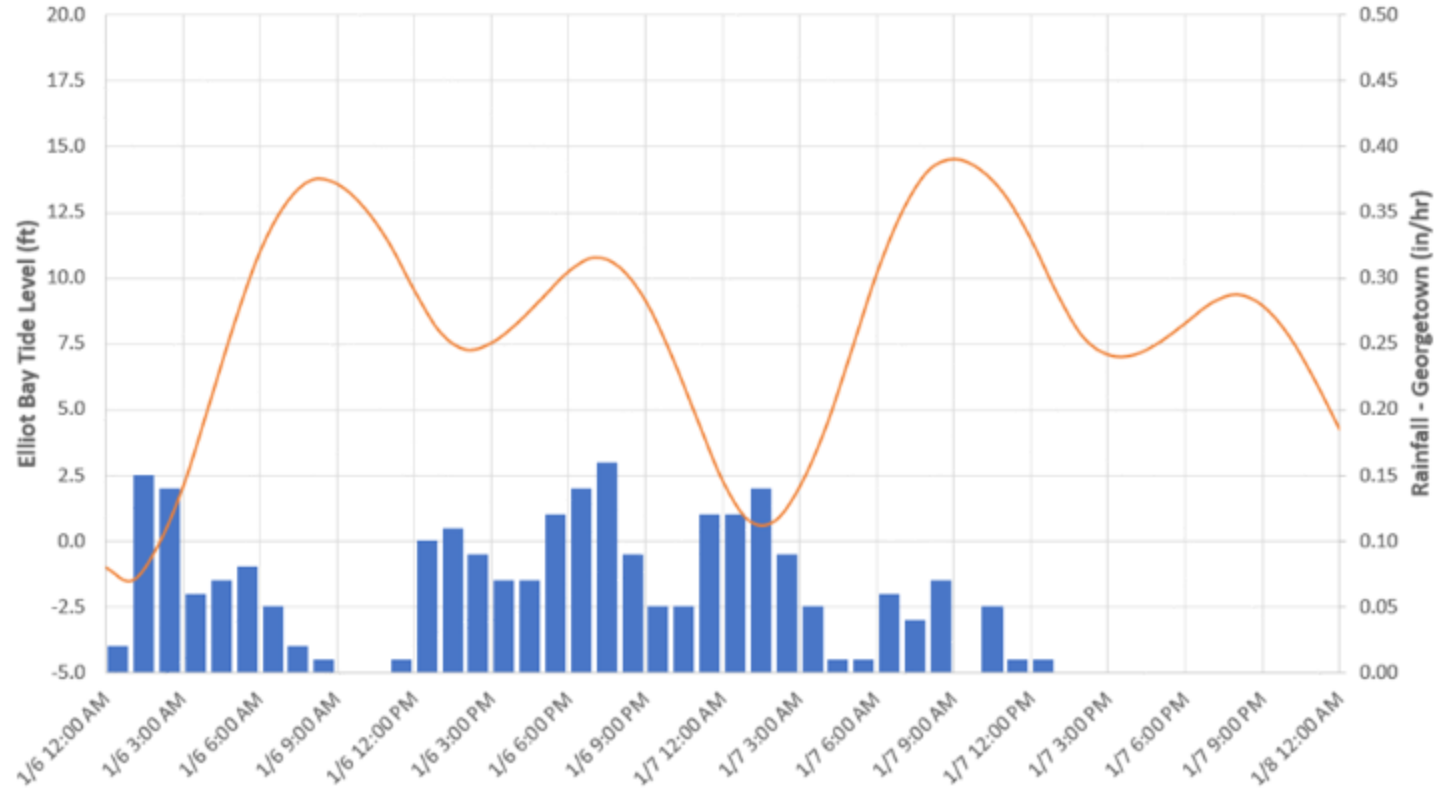
Winter Storm Service Impacts

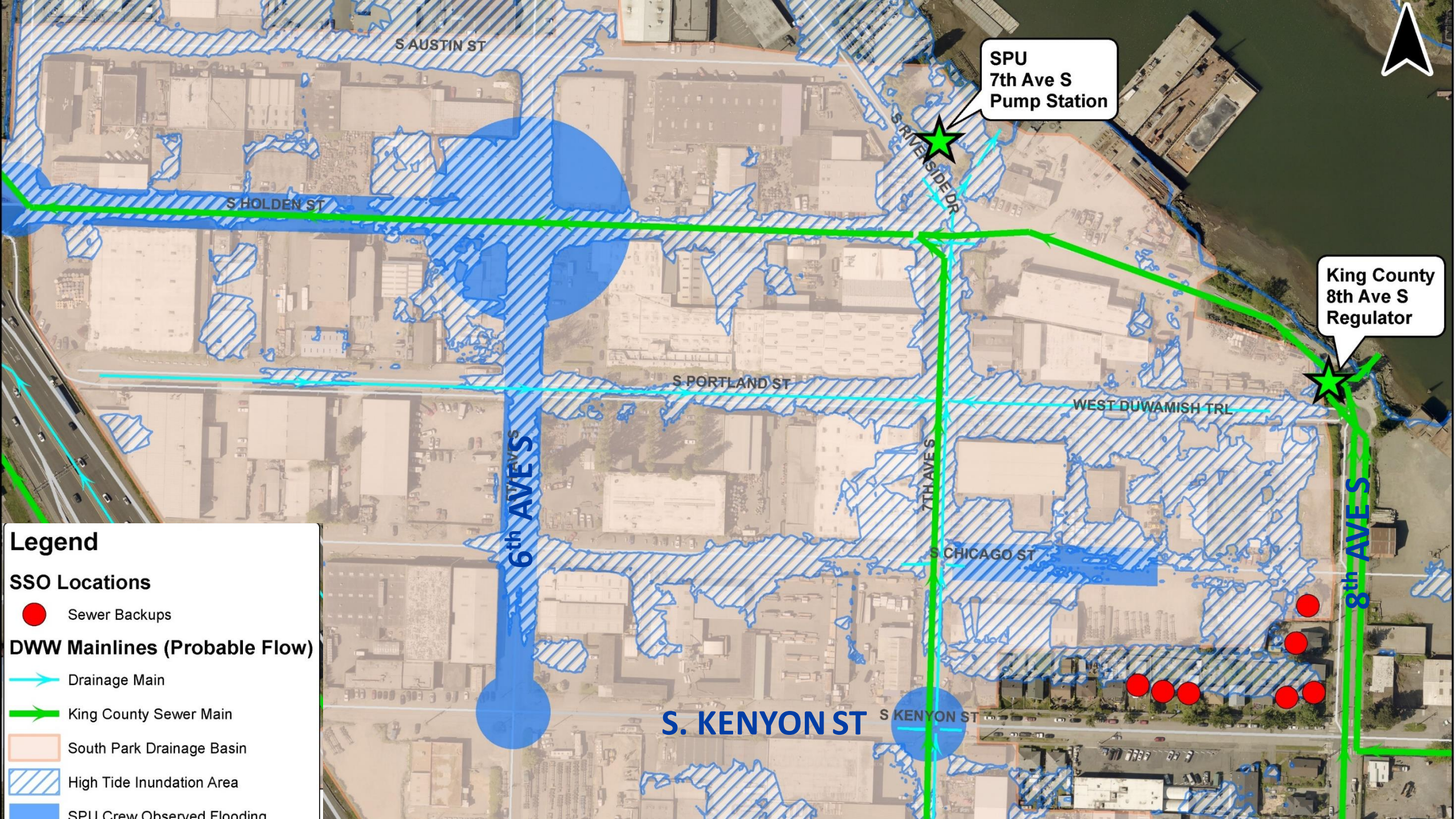
South Park



Snow melt + Storm + King Tide

January 1-7: Drainage and Wastewater impacts





S AUSTIN ST

SPU
7th Ave S
Pump Station

S HOLDEN ST

S RIVE SIDE DR

King County
8th Ave S
Regulator

S PORTLAND ST

WEST DUWAMISH TRL

6th AVE S

7TH AVE S

8th AVE S

S CHICAGO ST

S. KENYON ST

S KENYON ST

Legend

SSO Locations

- Sewer Backups

DWW Mainlines (Probable Flow)

- Drainage Main
- King County Sewer Main

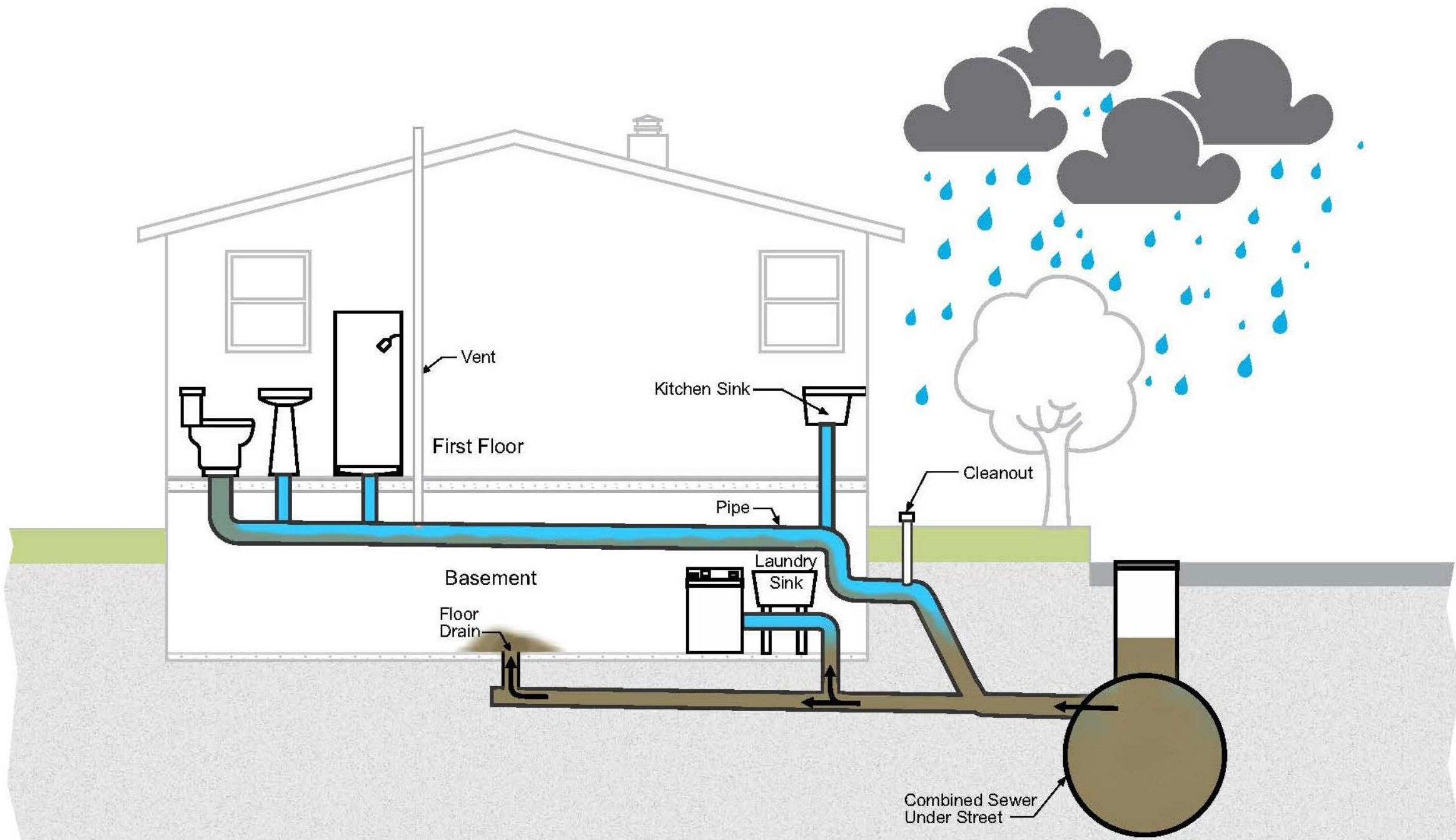
South Park Drainage Basin

- High Tide Inundation Area
- SPU Crew Observed Flooding

Next Steps

- Major South Park flooding reduction investments: \$90+M
 - Pump station (2022)
 - Roadway and drainage improvements w/SDOT (2023)
 - Water quality facility (options analysis)
- Resilience District: Addressing infrastructure gaps and sea level rise
- King County partnership: Sewer capacity assessment and improvements
 - Wet weather preparedness plan for South Park
 - Operational and capital improvements





Annual Update to Appendix B

1. Shape Our Water: A Drainage and Wastewater Plan for A Water Resilient Future

Focus Area	Stewarding Environment and Public Health
Goals	Develop One Water resilience
Strategy	Invest in key water, stormwater, and wastewater projects
Type	Initiative template
SPU Branch/Line of Business	Drainage and Wastewater
Executive Sponsor	Andrew Lee
Project Manager/Lead	Leslie Webster
Reporting	Annual
Funding	Currently funded with continued funding for 2021-2026
Last Update	January 2021

Part 1. Summary of the Initiative

Given uncertainty related to climate change, growth, and increasingly stringent regulations, SPU is developing an integrated system plan called ‘Shape Our Water.’ The plan includes a long-term vision and a short-term implementation plan and will guide investments, policies, programs, and projects that will improve the performance and resilience of our drainage and wastewater systems while optimizing social and environmental benefits for the city.

Part 2. 2021-2023 Commitment

Major Milestones	Timing
Engage community, SPU staff, City departments, community-based organizations, and environmental organizations in the effort	Ongoing
Collaboratively develop a vision for Drainage and Wastewater (DWW) that will guide near and long-term investments	Q2 2021
Identify and prioritize drainage and wastewater challenges and opportunities	Q2 2021
Develop a toolbox of innovative solutions to drainage and wastewater challenges	Q4 2021
Develop and evaluate alternatives to address drainage and wastewater challenges and select preferred alternative	Q4 2022
Complete the Shape Our Water Integrated System Plan	2023

SBP Focus: Strengthening Our Utility's Business Practices

Enhancing rate payer affordability while being adaptive and innovative in delivering services and managing assets and risk

Presenters: Amanda Bidwell, Teli Puloka, Tanya Treat



City of Seattle

DWW System Maintenance Continuous Improvement

Amanda Bidwell & Teli Puloka

March 14th, 2022

Why are we doing this work?



Improve employee engagement

Increase participation & communication



Utilize our best assets

Solicit ideas from a field perspective

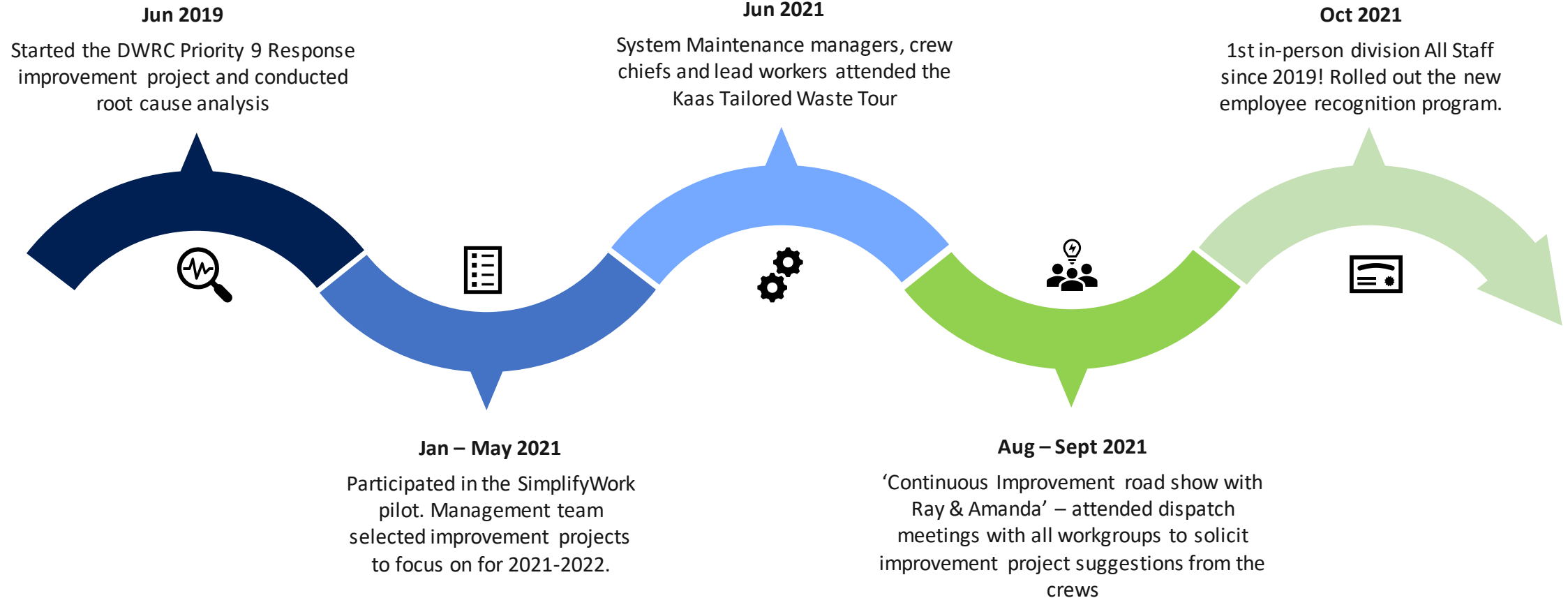


Evolve as an organization

Survival. Edge. Reputation.



How did this work start?



Kaas Waste Tour

*major takeaways
to apply to DWW*

- QR codes for training videos
- QR codes for digital copies of SOPs
- 'Team Clean' for shared vehicles by crew
- Weekly 'Team Train' at dispatch
- Employee improvement suggestion box

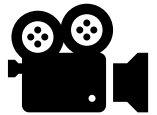


Improvement Projects in the works...



CCTV equipment downtime project

- Scheduled troubleshooting training with CUES Nov-Dec 2021
- Soldering troubleshooting video 75% complete
(in partnership w/ Line & Grade crew members Joo Kim, Ruby Edwards, Jeff Erfle, Jacob Matthews)
- Soliciting crew input for additional troubleshooting guides
- Creating CCTV camera inventory document to track lifecycle analysis of equipment



Instructional Video Content Team

- There is a HUGE need for easily accessible training videos



Improvement Projects in the works...



QR Code




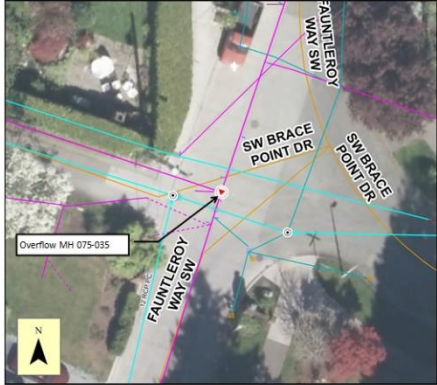
- Goodwin Pumps manuals/SOPs



Waterproof QR code sticker linked to Godwin pump manual for easy access in the field

- NPDES Overflow Structure troubleshooting documents (in partnership w/ Kevin McCracken)





NPDES 95
Fautleroy Way SW & SW Brace Pt Dr
Overflow MH: 075-035 (Asset: 786764)



Troubleshooting?
NPDES 95 is monitored by SCADA, and has no CSO storage facilities associated with it.



What's next?

Training	People	Data	Collaboration
			
Kaas Pass trial	Continuous Improvement road show round 2 to see what items the crews want to tackle next	Performance dashboard creation	Partner with DWW Planning



Where can SPU focus future continuous improvement efforts?

DISCUSSION

A+A CIP Project Planning and Delivery Accomplishments

Tanya Treat

Accountability + Affordability Strategy Goals

- Capital Planning and Delivery:
 - Increase the speed and efficiency of planning and delivering of capital improvement projects while maximizing community value.



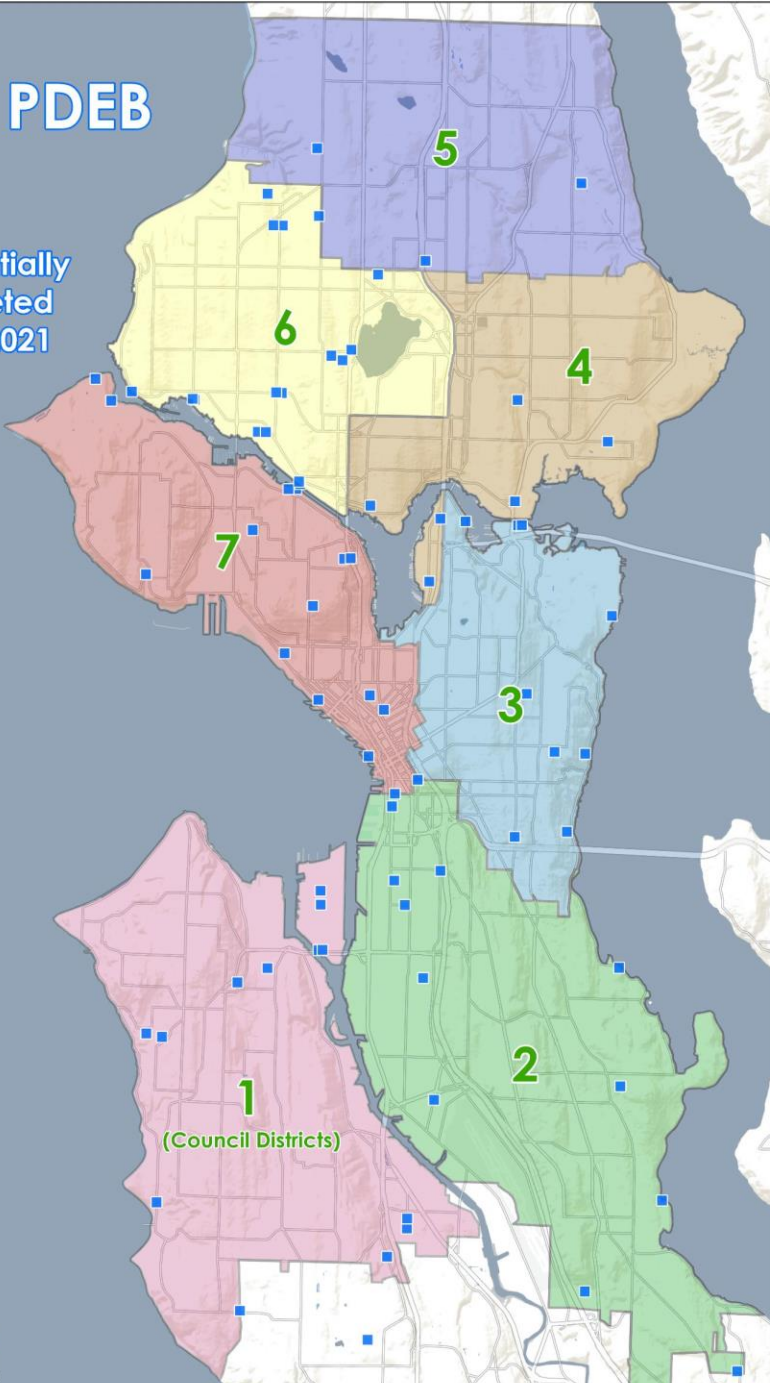
Project Delivery Accomplishments

- During the 2019-2021 period, Project Delivery Branch delivered 37 capital projects totaling \$139 million throughout the city.
- 32 of the projects had governance approved budgets totaling \$150M. Total project cost was \$139M or 90% of approved budgets
- Project Delivery Branch is responsible for approximately 40% of SPU's capital spending over the 2019-2021 period



SPU PDEB CIP

Substantially
Completed
2019 - 2021



(Council Districts)

SPU Utility GIS: City of Seattle, King County, WA State Parks GIS, Etri Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land

SPU CIP Completed 2019-2021

- Projects Completed by Council District

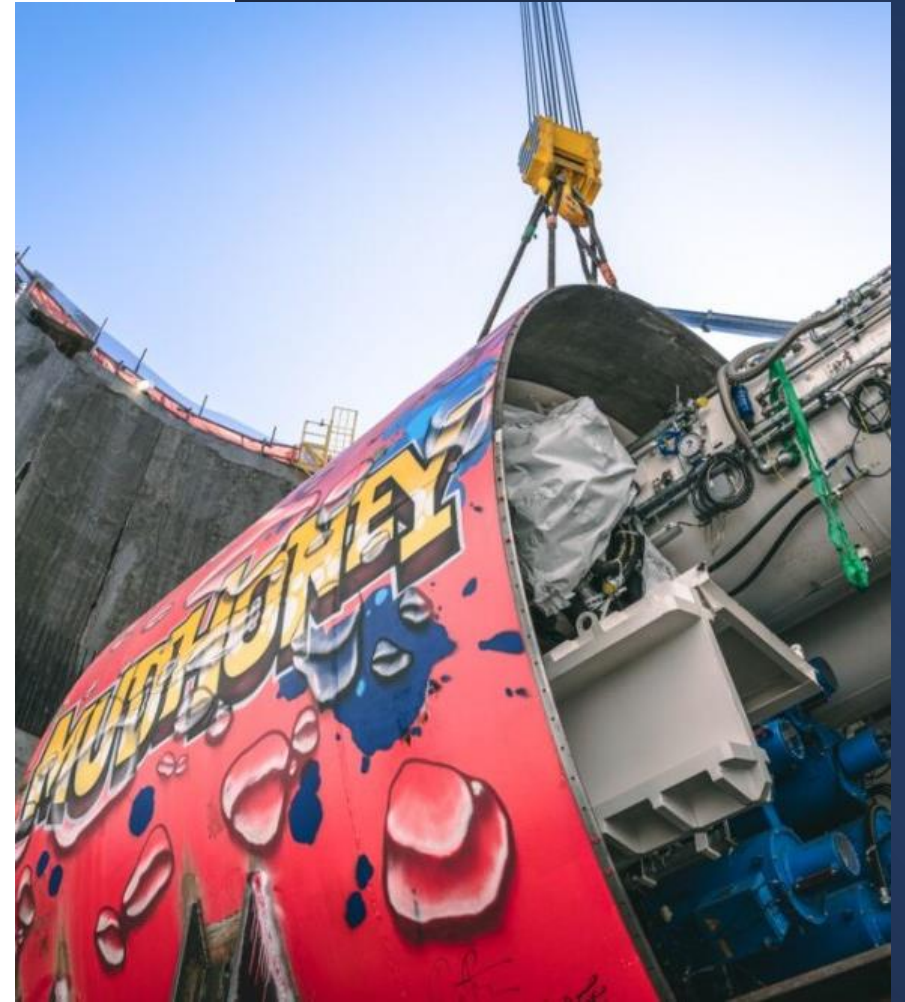
Council District	# of Projects/Sites
1	12
2	12
3	9
4	7
5	3
6	14
7	14

- Some projects were in multiple Council Districts
- Five projects were outside City Limits

Project Delivery

Accomplishment: SCWQP

- The \$570 million **Ship Canal Water Quality Project** (SCWQP, Seattle's largest capital project ever) is on schedule and budget.
- Instituted cost confidence level forecasting and monitoring for the project enabling mid-project course correction
- Successfully completed 5 deep drop shafts in 5 neighborhoods
- Delivered, assembled, and launched two tunnel boring machines
- Significantly advanced designs for the pump station and 2 conveyance projects



Other Accomplishments

Initiated monthly capital planning coordination in common geographies (DWW/Water).

Developed and approved plan to improve CIP program planning and delivery coordination, standardization, and output.

Streamlined project approval processes to reduce time and align approval authorities.

Established capital project expensing, rescoping, and monitoring procedures.

Eliminated duplication of project management data entry and systems maintenance activities.

Reduced total \$ amount of project management reserves through pooling.

Increased efficiency and speed of consultant procurement processes.

Develop Drainage and Wastewater capital planning guidance framework to consistently value multiple community and environmental benefits in CIP options analysis.

Completed a mapping viewer for SPU capital project information and geographic locations.

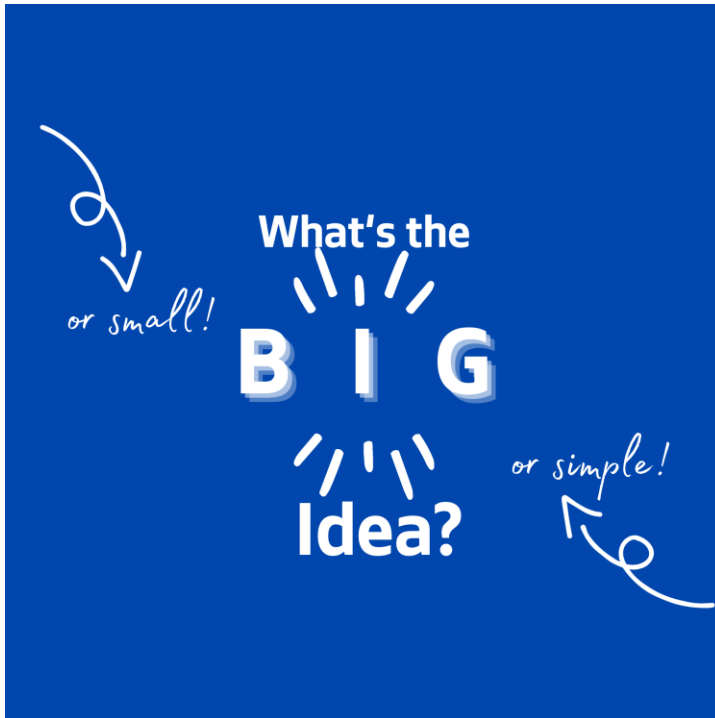
Revamped Asset Management Committee Review process to save time and money.

Developed and began quarterly Capital Improvement Program (CIP) reporting for SPU's customer review panel.

**Are there ways SPU can
improve communications
related to capital
project delivery?**

DISCUSSION

The Big Idea



- Employee challenge to generate ideas for continuous improvement at the utility
- Collecting ideas through March 18
- Winners selected by peer review
- Up to \$70k in available funding to realize ideas



Closing & Wrap Up



Upcoming Meetings

June 13 –
Next
quarterly
CRP meeting
(in-person)



March Evaluation

Linked on
your agenda