



# Environmental Services Commission

City of Tacoma | Environmental Services Department

**Environmental Services Commission**

**April 7, 2022**



# ● ● ● Agenda



- Welcome
- LIHWAP Overview
- 2021 Year End Financial Results
- Overview of Wastewater Management
- Overview of Stormwater Management
- Overview of Solid Waste Management
- Overview of OEPS
- Other Items of Interest
- Adjournment



# Presentation



## Overview of LIHWAP Program:

Presenter:

Francine Artis, TPU Customer Service Assistant Manager

Email: [fartis@cityoftacoma.org](mailto:fartis@cityoftacoma.org)

Phone: 253.720.0607



# Presentation

## 2021 Financial Results

Presenter: Christina Curran, Assistant Division Manager,  
ES Rates & Budget

Email: [ccurran@cityoftacoma.org](mailto:ccurran@cityoftacoma.org)

Phone: 253.691.9285



# 2021 Year-End Financial Position

Fund		2021 Plan	2021 Actuals	% Variance
4200 – Solid Waste	<b>Revenue</b>	<b>(74,928,482)</b>	<b>(84,909,726)</b>	<b>13%</b>
	<b>Expense</b>	<b>84,165,468</b>	<b>81,990,884</b>	<b>3%</b>
	Operating	65,606,921	70,069,191	-7%
	Capital	18,558,547	11,921,693	36%
4300 - Wastewater	<b>Revenue</b>	<b>(82,526,431)</b>	<b>(87,761,735)</b>	<b>6%</b>
	<b>Expense</b>	<b>131,225,575</b>	<b>112,690,053</b>	<b>14%</b>
	Operating	79,129,390	76,814,364	3%
	Capital	52,096,185	35,876,027	31%
4301 – Stormwater	<b>Revenue</b>	<b>(41,337,817)</b>	<b>(40,548,334)</b>	<b>-2%</b>
	<b>Expense</b>	<b>74,005,290</b>	<b>47,149,886</b>	<b>36%</b>
	Operating	34,381,378	33,102,529	4%
	Capital	39,623,912	14,047,357	64%



# 2021 Change from 2020 – Solid Waste

**City of Tacoma  
Environmental Services Department  
Solid Waste Management**

**Statements of Revenues, Expenses, and Changes in Net Position (Unaudited)**

	Year-to-Date December 31,		% Chg	\$ Change
	2021	2020		
<b>OPERATING REVENUES</b>				
Residential collection	\$ 34,106,454	\$ 32,193,018	6%	\$ 1,913,436
Commercial collection	36,074,211	32,954,928	9%	3,119,283
Disposal revenues	11,978,283	9,758,808	23%	2,219,475
Salvage revenues	763,095	290,620	163%	472,475
Other operating revenues	446,127	394,191	13%	51,936
Total operating revenues	<u>83,368,170</u>	<u>75,591,565</u>	10%	<u>7,776,605</u>
<b>OPERATING EXPENSES</b>				
Commercial collection	5,582,573	5,180,091	8%	402,482
Onsite operations	8,559,056	8,335,523	3%	223,533
Residential collection	10,908,215	10,110,239	8%	797,976
Other collection services	17,398,754	15,635,047	11%	1,763,707 <sup>6</sup>
Support services	15,712,492	16,428,358	-4%	(715,866)
Total operating expenses	<u>58,161,090</u>	<u>55,689,258</u>	4%	<u>2,471,832</u>



# 2021 Change from 2020 – Sewer

**City of Tacoma, Washington**  
**Environmental Services Department**  
**Wastewater and Surface Water Management**  
**Statements of Revenue, Expenses, and Changes in Net Position (Unaudited)**

	For Year ended December 31		\$ Change	% Change
	2021	2020		
<b>OPERATING REVENUES</b>				
Wastewater residential	\$ 55,680,516	\$ 52,822,791	\$ 2,857,725	5%
Wastewater commercial and public authorities	25,063,853	23,366,944	1,696,909	7%
Surface water residential	18,787,968	18,835,178	(47,210)	0%
Surface water commercial	19,759,436	20,261,316	(501,880)	-2%
Other revenues	3,929,619	3,740,186	189,433	5%
Total operating revenues	<u>123,221,392</u>	<u>119,026,415</u>	<u>4,194,977</u>	4%
<b>OPERATING EXPENSES</b>				
Business operations	28,454,873	25,762,591	2,692,282	10%
Operations and maintenance	30,321,322	30,323,439	(2,117)	0%
Science and engineering	18,561,319	19,305,171	(743,852)	-4%
Total operating expenses	<u>77,337,514</u>	<u>75,391,201</u>	<u>1,946,313</u>	3%

# 2020 Financial Forecast



## 2021-2026 Six-Year Revenue Plan

Year	Solid Waste	Wastewater	Surface Water
2021	1.5%	1.5%	1.5%
2022	2.0%	2.0%	2.0%
2023	4.0%	4.0%	3.0%
2024	4.0%	4.0%	3.0%
2025	3.5%	4.0%	3.0%
2026	3.5%	4.0%	3.0%

\*To help offset rate increases in out years, added \$15M in debt to Solid Waste and decreased Wastewater and Surface Water capital spending by \$26M.





# 2022 Financial Forecast

## 2023-2028 Preliminary\* Six-Year Revenue Plan

Year	Solid Waste	Wastewater	Stormwater
2021	1.5%	1.5%	1.5%
2022	2.0%	2.0%	2.0%
2023	3.0 % (-1%)	7.0% (+3%)	5.0% (+2%)
2024	3.0 % (-1%)	7.0% (+3%)	5.0% (+2%)
2025	3.0 % (-0.5%)	6.0% (+2%)	4.0% (+1%)
2026	3.0 % (-0.5%)	6.0% (+2%)	4.0% (+1%)
2027	3.0 %	5.0%	3.5%
2028	3.0 %	5.0%	3.5%

*\*Subject to change based upon 2022 performance and updated 2023-2024 plan*



# Next Steps

- Baseline 2023-2024 revenue requirement
  - Updated operating expenses
  - Update Capital Improvement Plan
- Report back to ESC June 9<sup>th</sup>
  
- Updated 2023-2024 revenue requirement
  - Includes budget proposals
- Report back to ESC July 14<sup>th</sup>
  
- Final revenue requirement and rates August/September

# Department Organization



- **Three Utilities**

- Wastewater
- Stormwater
- Solid Waste

- **Five Divisions**

- Solid Waste
- Science & Engineering
- Operations and Maintenance
- Business Operations
- Office of Environmental Policy & Sustainability



# Overview of Wastewater Management

Presenter:

Hugh Messer, Division Manager

Email: [hmesser@cityoftacoma.org](mailto:hmesser@cityoftacoma.org)

Phone: 253.594.7825



# Wastewater Comprehensive Plan

- Develop an equitable plan that addresses:
  - Impacts of Population Growth & Regulatory Requirements
  - Needs of Replacing Aging Infrastructure
  - Community/Stakeholder Expectations
  - Financial Constraints

- Timeline



- ESC Update - November 2022.





# Nutrient Removal

- Puget Sound Nutrient General Permit
  - Effective January 1, 2022
  - First Permit Cycle (2022 -2026)
    - Monitoring & Sampling
    - Optimization Study
      - Annual Reports
      - Study Potential Options
    - Nutrient Reduction Evaluation
    - AKART Analysis (**A**ll **K**nown, **A**vailable and **R**easonable methods of prevention, control and **T**reatment)







# Treatment Plant Projects

- Electrical Redundancy Project – Project will be wrapping up in August of 2022.
- Gas Utilization Program – Started selling gas in March 2022
- Digester 1 Mixing upgrade – Project is complete, increased gas production by approximately 25% after installation.
- Implemented use of drop boxes at solids dewatering, which reduced the need for dump trucks
- Boiler Upgrade – Project has been completed, boilers now run on digester gas, natural gas or a combination of these two.





# Treatment Plant Projects

- Replacing all relief valves on pressure tanks/vessels at CTP, due to supply chain challenges these took almost a year to source.
- Sedimentation & Clarifier Tank Coating – Two tanks have completed- remaining tanks scheduled over the next 8 years.
- New trickling filter & disinfection treatment for NETP- project out to bid. Will be starting this year.
- NETP grit tank coating & weir replacement – Project completed.





# Operations & Maintenance



- AN2101 South Tacoma Pump station: Phase 1 of rehab to replace pumps and piping to start in 2022, phase 3 to complete rehab to be finished in 2023
- Updated CTP Lab fixtures to remove asbestos and provide for more efficient workflow.
- Replacing Lab Information System to current day technology, Hach WIMS, for DMR reporting and Process Control/ data logging.



# Operations & Maintenance

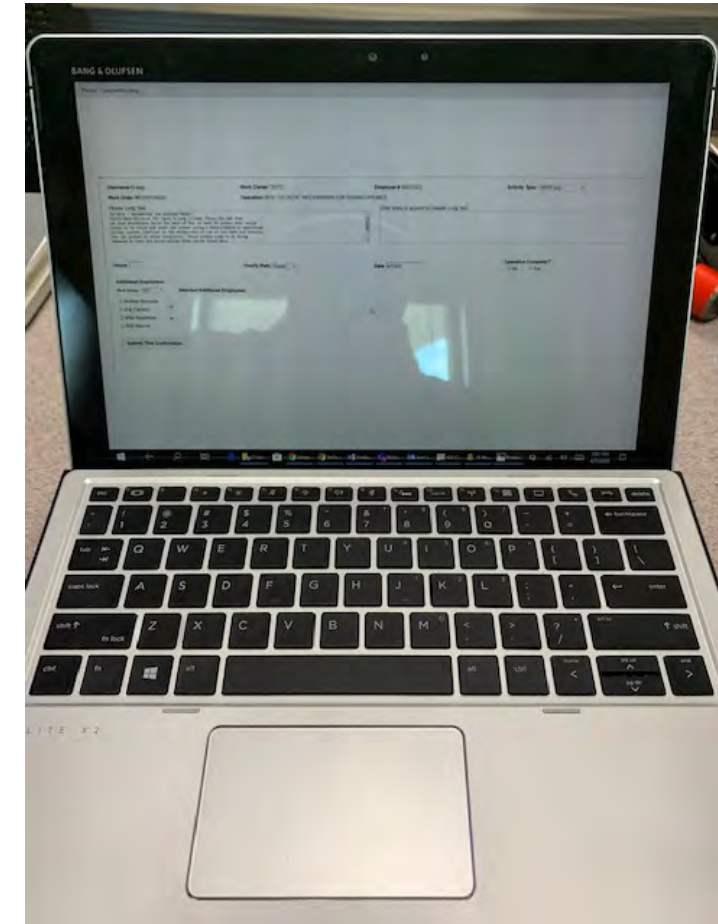


## Work Management Improvements

### Mobile dispatch

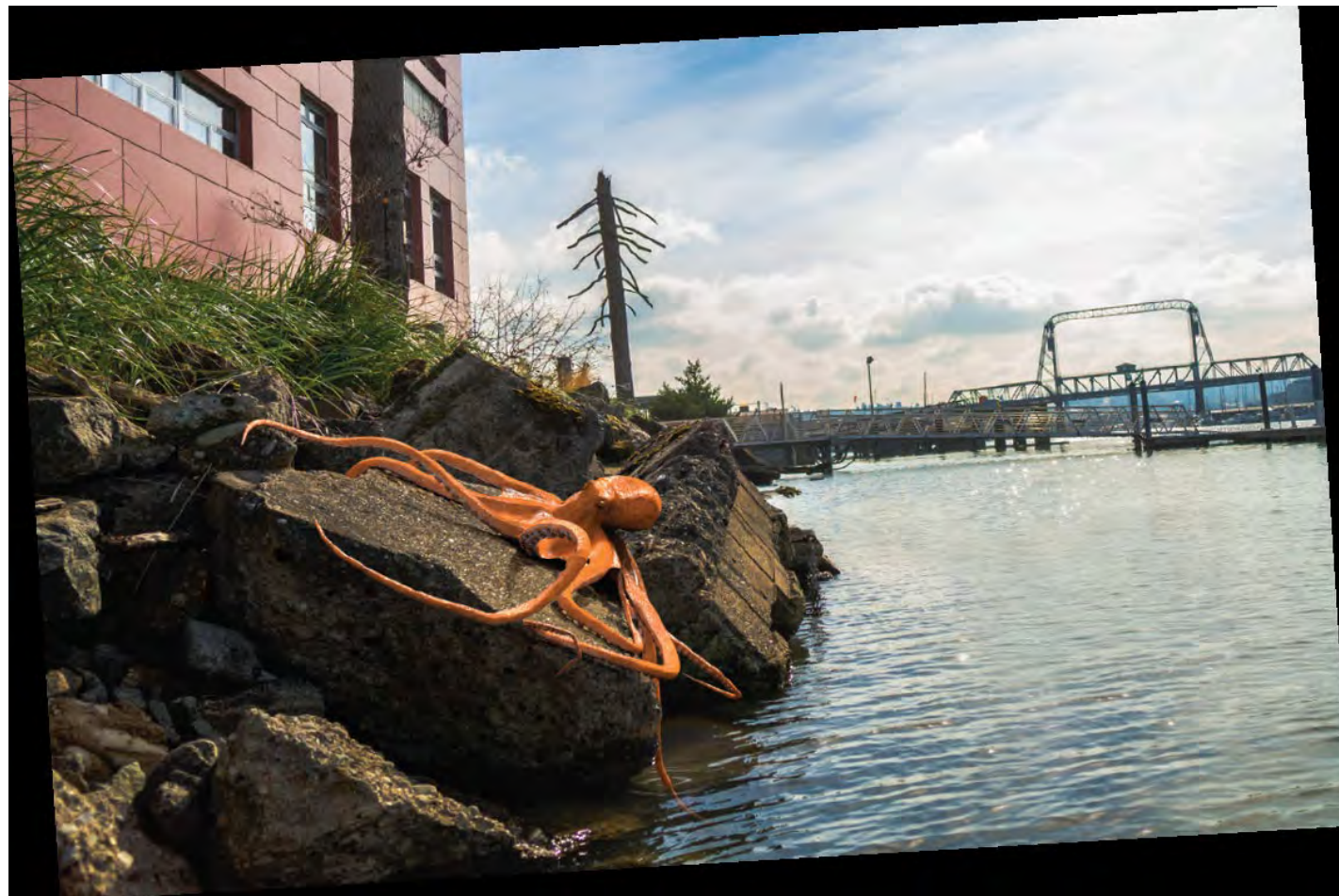
Over the last two years the team has developed and implemented an “insourced” mobile dispatch program that allows users in the field to input relevant work order information into a web-based application, which is then sent onto SAP. This program continues to be refined in an effort to allow the users to push more information to SAP.

Currently all the Maintenance staff have tablets assigned to them and are completing most of their work documentation via the application. In doing so the group has greatly reduced their paper consumption and has the goal that by the end of 2023, the team will no longer need to print work orders or requests.





# Questions?





# Overview of Stormwater Management

Presenter:

John Burk, Division Manager, ES Science & Engineering

Email: [jburk@cityoftacoma.org](mailto:jburk@cityoftacoma.org)

Phone: 253.495.8737





# ORGANIZATIONAL STRUCTURE

The Surface Water utility has three divisions:

- Science and Engineering
- Operations and Maintenance
- Business Operations

Full-Time Equivalent Employees

- 2021 Actuals\*     77.50 FTEs
- 2021 Budget        79.75 FTEs
- Difference           -2.25 FTE

- 2021 Labor Budget: \$10,931,162

- Note\*: Filled positions vary due to departures, transfers, and retirements.



# Science & Engineering



- Capital Delivery Group
- Laboratory Group - (Accredited for numerous analyses)
- Asset Management Group – Asset Assessments, Capital Planning, GIS & Application Development Services
- Administrative Group – Administrative & Contract Management Services, to include Budget and Purchases
- Field Operations Services – Construction Inspection, Field Survey, & Constructability Review Services
- Environmental Programs – Stormwater NPDES / Superfund / Sampling & Metering / Open Space / Watershed Planning / ES Homeless Outreach
- Special Programs – Collection System (CS) Support Services/Investigations, Minor CS Work, & Lead/Arsenic Sampling



# Business Operations

Environmental Compliance Source Control provides the following services to the surface water utility:

- Business Inspections at Potential Pollution Generating Sources
- Education & Outreach
- Private & Public Stormwater BMP Inspections
- Spill & Complaint Investigations
- Customer Consultation for Claims for Flooding Damages
- Escalating Enforcement to Compel Compliance with Stormwater Regulations
- Utility billing and customer interactions for the surface water utility as a whole

