DEPARTMENTAL OVERVIEW

• Three Utilities
  • Wastewater
  • Stormwater
  • Solid Waste

• Five Divisions
  • Operations & Maintenance
  • Science & Engineering
  • Solid Waste Management
  • Business Operations
  • Office of Environmental Policy & Sustainability*
BUSINESS OPERATIONS

• Providing public-facing & department-wide shared services:
  • Billing & Technical Services
  • Environmental Compliance
  • Systems & Performance Management
  • TAGRO
  • Administrative Services
Presenter:

Hugh Messer,
Operations & Maintenance Division Manager
Email: hmesser@cityoftacoma.org
Full-Time Equivalent Employees
- 225 FTEs across Engineering, Business Operations and Operation & Maintenance Divisions.
- 2023 Labor Budget = $30,088,169
• Planning for growth based on Puget Sound Regional Council projections, plus anticipated growth from Home In Tacoma (HIT).

• Collection system & facilities will need upgrades to handle growth. Evaluating various scenarios to best plan for upcoming changes.

• Likely mitigation strategies
  • Increased funding (e.g. System Development Charge)
  • Update Interlocal Agreements with neighboring jurisdictions
  • Increase tracking of where development occurs & flow monitoring in selected areas
• Develop an equitable plan that addresses:
  • Impacts of Population Growth & Regulatory Requirements
  • Needs of Replacing Aging Infrastructure
  • Community/Stakeholder Expectations
  • Financial Constraints
• Anticipated Completion in 2025
• ESC Updates provided Nov 2021, Dec 2022, & Nov 2023
• CTP NPDES Draft Permit
  • Currently being reviewed by City
  • Factual Comments due by April 19
  • Public Comment Next
  • Effective once issued (tentatively Q3 2024)

• Notable Changes
  • BOD testing moved to cBOD
  • PWW testing requirements removed
  • New parameter added (Enterococci)
Replaced existing Lab Information System with Hach WIMS.

• New system provides Operators with quick access to key information needed to operation the treatment plants.

• System is used for DMR reporting & Process Control/data logging.
UPCOMING FACILITY PROJECTS

• CTP Outfall Cathodic Protection Improvements ($1 M) - construction underway

• Misc. Roof Replacements ($3M) - construction underway

• Clarifier Upgrades - One complete, two planned for 2024 rehabilitation ($3.5M). Remaining in future years.

• New trickling filter & disinfection treatment for NETP ($11.8M) - planned construction 2025

• South Tacoma Pump Station ($10.9M) - Project to rehab wet well & pumps. Phase 1 complete; Phase 2 under construction.
• Digester #3 cleaned & external mixing addition completed. Digester #2 cleaning & mixing project planned this year.
• Administrative offices remodel Building B & locker room Building A upgrades for Transmission section.
• Completion of asbestos survey for the CTP.
• Replacement of Hypo Tanks
• PWW hypo pump replacement
- Replacement of Mixed Liquor Channel spray system
- Multiple pump station rehabs
QUESTIONS?
Presenter:

John Burk,
Science & Engineering Division Manager
Email: jburk@cityoftacoma.org
Nine Watersheds: 70% of the city drains to marine waters of Puget Sound in particular Commencement Bay, the Lower Puyallup River (a salt-wedge estuary), & the Narrows.

Environmental Services oversees more than 66,000 stormwater accounts.

The stormwater system consists of approx. 562 miles of public stormwater pipe, 18,840 catch basins, 4 pump stations, & 128 detention ponds/structures.

The system was originally designed to prevent flooding & get the rainwater from lawns/streets to the Puget Sound.

Approximately 10% of the stormwater is treated.
The Stormwater Utility has three divisions:

• Science & Engineering
• Operations & Maintenance
• Business Operations

Full-Time Equivalent Employees

• 97 FTEs
• 2023 Labor Budget = $12,620,962
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 & Purchases
- Field Operations Services - Construction Inspection, Field Survey, & Constructability Review Services

- Environmental Programs - Stormwater NPDES /Superfund /Sampling & Metering /Natural Systems Management /Watershed Planning /ES Homeless Outreach

- Special Programs - Collection System (CS) Support Services/Investigations, Minor CS Work, & Lead/Arsenic Sampling
• Capital (Biennium)
  • Budgeted – $77.7 Million (2023 - 2024)
  • Installed Pipe – 10,930 LF (2023)

• Treatment & Green Projects in Construction or Completed
  • Madison District – Approx. 28 acres infiltrated in the Flett Creek Watershed
  • Manitou Neighborhood – Approx. 10 acres infiltrated in the Flett Creek Watershed
  • Larchmont District – Approx. 28 acres infiltrated in the Flett Creek Watershed
  • Upper Buckley – Basic stormwater treatment for approx. 340 acres

• Asset Management
  • 92% of system inspected & ranked (by length)
PUYALLUP AVE INTERCEPTOR PROJECT

- Reduce severe flooding in Pacific Ave, S Tacoma Way & 26th St
- Upsize & Replace 4,700 LF of Aging 24” to 66” diameter Stormwater & Wastewater Sewer Pipes
- Removes 350 LF Puyallup Ave Bridge & replaces with fill & retaining walls
- Estimated cost $60M
- Utilizing Progressive Design Build Process
- Estimated Schedule:
  - Selection of Design Build Team – 2024
  - Design & Sub-surface investigations - 2025 through mid-2026
  - Construction - mid-2026 through 2027
PLANNING EFFORTS

• Flett Basin Stormwater Infiltration Feasibility Study 2023-2024
• Flett Pond Assessment for Capacity & Plant Management 2023. Pursuing grants for additional investigation.
• Urban Waters Protection Plan Role out in summer 2024 (Tacoma’s Watershed Plan)
• Stormwater Facility Prioritization: Tool completed in 2023, draft list developed in 2024
• Stormwater Comprehensive Plan: May 2024-June 2025
Objectives

• Implement Open Space Management Plans
• Increase Restoration Volunteer Opportunities
• Leverage Metro Parks Partnership
• Acquire Open Space Properties 17.2 acres acquired
• Provide Public Education
• Support Urban Forestry & Climate Action Plan Goals
• Total 80.2 acres in active restoration in 2023
• Adding more restoration acres in 2024
STORMWATER MANAGEMENT

NPDES Stormwater Phase 1 Permit Compliance

• City’s SWMM equivalent to Ecology's Stormwater Manual July 2021.
• TMC 12.08 - separate code section for Stormwater.
• Continuing Stormwater NPDES Phase I Permit compliance activities.
• Received a $50,000 capacity grant from Ecology for compliance activities.
• Developed & distributed an Illicit Discharge Awareness training for all staff.
NPDES Stormwater Phase 1 Permit Compliance

- Stewardship program for education & outreach. Adopt-a-Drain program has over 174 participants.
- Dumpster Lid Campaign, a behavior change program, evaluation completed.
- 1st Year of Inter-Departmental Coordination Plans for NPDES compliance
- EPA NPDES Stormwater Permit for discharge to Tribal Waters issued in 2+ years. EPA is reviewing our comments. Next Steps is Federal Biological Assessment before issuance.
ANTICIPATED NEW NPDES PERMIT REQ’S

• Mapping Tree Canopy
• New development & redevelopment
  • WQ treatment threshold reduced from 5,000 sf to 2,000 sf of new or replaced pollution-generating hard surfaces
• Stormwater retrofits for existing development
  • Increasing retrofit/habitat project points from 300 to 750 points
• Street sweeping requirements
  • New program requirement to sweep 90% of high priority areas each year
• Actions to address PCBs, PFAS, & 6PPD
  • Develop policies, practices & procedures for PCB capture from building washing, demolition debris, etc. for buildings 1950-1980
• Environmental Justice
  • Overburdened communities participate in the decision-making around the development, implementation, & update of the Permittee’s SMAP & SWMP
• Planning for growth based on Puget Sound Regional Council projections, plus anticipated growth from Home In Tacoma (HIT).

• Evaluated various scenarios & widespread collection system flooding would increase.

• Likely mitigation strategies
  • Increased funding (e.g. System Development Charge)
  • Build regional flow control/treatment facilities, where feasible, & use In-Lieu of Fees for development
  • Maintain stormwater onsite, use green stormwater infrastructure where applicable, use pervious pavement or build-out system where no services exist
Foss Waterway

- Monitoring of Stormwater Discharges
  - 98% of trends, all decreasing
  - Maintaining improvements

- In-Waterway Long Term Monitoring Plan in place through 2028
  - Monitoring events will occur 2028
  - Working with EPA on final approval of the remedial action & delisting of this portion of the Commencement Bay Superfund Site. Monitoring will continue.
1 FTE in Natural Systems

*includes all outreach efforts including those on ES open space sites

- **3,021** Individual Contacts Made
- **1,429** persons interested in shelter/resources
- **262** persons placed into temporary shelter
- **1.4M** lbs. of garbage/debris collected
- **8,800** Purple bags distributed/collection

**2023* OUTREACH EFFORTS - HEAL**

*Before* | *After*
ENHANCED STORMWATER MAINTENANCE GRANTS

- Two Ecology grants to perform enhanced stormwater maintenance for stormwater line cleaning & street sweeping. The grants cover 75% of the cost (labor, equipment, & disposal).
- The total grant value is roughly $1.3M. Over $820K in reimbursement was received in 2023 for these two grants.

2023 Totals:
- 1600 additional miles swept
- 88,000 LF additional pipe cleaned
QUESTIONS?
Presenter:

Lewis Griffith,
Solid Waste Management Division Manager
Email: lgriffit@cityoftacoma.org
ESD STRATEGIC PLAN FOCUS

CUSTOMERS
Partner with our community on customer-valued services to meet the diverse needs of our neighborhoods.

EMPLOYEES
Foster a safe culture built on trust, conversation and equity.

OPERATIONS
Operate using best practices and innovation to meet changing environmental and community needs.

HEALTHY NEIGHBORHOODS + THRIVING PUGET SOUND = A BETTER TACOMA
CUSTOMERS

- 57,192 residential customers
  - Single family residences & duplexes
  - Bundled garbage, recycling, & yard waste
  - Two Call-2-Hauls per year

- 5,258 commercial customers
  - Garbage – City of Tacoma franchise
  - Recycling & yard/food – open market

### CUSTOMER BASE

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<th>Customer Class</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
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<td>Residential</td>
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<td>Commercial</td>
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<td>5,310</td>
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<td>Total Customers</td>
<td>61,323</td>
<td>61,873</td>
<td>62,332</td>
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EMPLOYEES

Solid Waste Management

On-Site Operations
52 employees

Collections Operations
109 employees

Support Services
13 employees

Tidy Up Tacoma
12 employees
OVERALL DISPOSAL & RECYCLING TONNAGES 2023

- **Disposal Tons**: 207,708
- **Recycling Tons**: 24,235
- **Yard/Food Waste Tons**: 26,397

2023 Tons

Disposal Tons, 207,708
Recycling Tons, 24,235
Yard/Food Waste Tons, 26,397

**OPERATIONS**
### 2023 Budget Actual Variance

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<th>Budget</th>
<th>Actual</th>
<th>Variance</th>
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**FACILITIES**

- Tacoma Recovery & Transfer Center
  - Recycle Center
  - Household Hazardous Waste
  - Transfer Center
  - Landfill Environmental Systems
- Collection Operations
  - Truck parking lot
  - Fleet Maintenance Shop
  - Container Storage & Maintenance
  - CNG Fueling Infrastructure
- Site Master Plan in development
• 7 CNG trucks added in 2022-23 for a total of 54 CNG trucks
• $3M savings for CNG vs DGE potential cost since 2021
• Landfill disposal contract with LRI Landfill ends February 2030
• Evaluating rail haul options to regional landfills
• Need to identify sites for rail yard
• Potential to collaborate with Pierce County & JBLM
• Contracting process should start within next 2-3 years
QUESTIONS?