

CITY OF TACOMA SUSTAINABLE TACOMA COMMISSION MEETING

DRAFT AGENDA

THURSDAY, JUNE 27, 2019 4:30 PM TO 6:30 PM

TACOMA MUNICIPAL BUILDING 747 MARKET STREET, ROOM 243

- I. ROLL CALL & WELCOME NEW COMMISSIONER
- II. APPROVAL OF APRIL AND MAY 2019 MEETING NOTES
- III. REVIEW OF AGENDA
- IV. SUB-COMMITTEE & STC-CITY COUNCIL ENGAGEMENT UPDATES
- V. STAFF UPDATES
- VI. SUSTAINABLE MATERIALS MANAGEMENT PLAN UPDATE STAFF PRESENTATION
- VII. TACOMA WATER CONSERVATION PLAN UPDATE STAFF PRESENTATION
- VIII. UWT EAST THEA FOSS RESEARCH PROJECT NICHOLAS CARR
- IX. OTHER PUBLIC COMMENT
- X. OBJECTIVES FOR NEXT MEETING
- XI. ADJOURNMENT



City of Tacoma Sustainable Tacoma Commission Meeting Minutes

Date: June 27th, 2019

Commission Members Liberty Evans-Agnew, Lexi Brewer, Jade Monroe, Chris Karnes, **Present:** Matthew Benedict, Kenny Coble, Todd Hay, Suzanna Stoike

Commission Members Phil Coughlan, Grace Sullivan, Emily Pinckney

Excused:

Commission Members

Absent:

Others Present: Pat Babbitt, Crystal Komenda, Nicholas Jay Carr (UWT), Erica Tucci (TPU), Phet

Sinthavong, Rachelle Gandour-Rood (Water), Sam Lake, Dan Corum, Shane

Pettit, Jessica Oh, Kristin Lynett , Jim Parvey

Roll Call & Welcome New Commissioner

The meeting was called to order by Chris Karnes at 4:36 pm.

Approval of April and May 2019 Meeting Notes

Amendment to May meeting notes: Clarify question around the City's investment in EAP. Motion to approve April and May Meeting Notes by Chris Karnes, motion passed.

Review of Agenda

Motion to approve agenda made by Chris Karnes, motion passed.

Sub-committee Updates & STC-City Council Engagement Updates

<u>Infrastructure</u>, <u>Planning</u>, and <u>Sustainability</u> – <u>Jade Monroe</u> Nothing to report.

<u>Transportation – Chris Karnes & Matt Benedict</u>

Sound Transit presentation for Tacoma Dome Extension – concern around level of investment in bicycle/pedestrian access. Discussion regarding third-party funding to improve.

<u>Planning – Lexi Brewer</u>

Three meetings between last meeting and now. The SMP comments indicated interest in Sea-Level Rise. Their suggestion was to send a letter to Council due to timeline.

TPU – Todd Hay

Commissioner absent. Erica noted EAP was updated at TPU.

Outreach - Liberty Evans-Agnew & Jade Monroe

Nothing to report.

Port – Kenny Coble

Nothing to report.

Staff Updates

Pat Babbitt thanks those involved with City Council engagement efforts. Kristi would like to address the concerns of individual Council Members. Pat proposes an official debrief in the future. More engagement events are to come. They have been going well and Council has given feedback that they are enjoying them.

Follow up on Steve Atkinson's Tideflats Subarea Planning meeting: the team is tasked to choose stakeholders to engage. STC was unable to provide a letter with important talking points for the Tide Flats Subarea Planning Effort.

Kristi Lynett updated that Pierce County Council Member Young proposed new Public Works group to deal with sustainability issues. County Council will vote July 16th and invites STC members to comment on this matter.

Just and Healthy Food came to discuss equity lens in May – Council members discussed further discussion and engagement. Pat has committed to follow up on this.

Sustainable Materials Management Plan Update - Phet Sinthavong, Shane Pettit

Background: The City of Tacoma Climate 2008 Action Plan, 2008 Tacoma-Pierce County Solid Waste Management Plan and City of Tacoma Resolution No. 38907 formed the roots of this plan. The current waste diversion goal is 70% or more by 2028 – note that this goal is under development as part of the Tacoma-Pierce County Solid Waste Management Plan due to the market changes affecting solid waste operations. The first step to update the Sustainable Materials Management Plan was to establish a baseline metric of 55% waste diversion as of 2014. There is a significant amount of private recycle hauling to consider in this metric. Chris asks if there are additional numbers to indicate volume versus weight. Shane explained volume is more difficult to measure and is not always the most reliable indicator of diversion.

Plan Development: Cascadia began with outreach and stakeholder input from the public and private sector. Cascadia performed a Waste Stream Characterization Study that helped establish diversion goals,

metrics, and target. The City was then able to identify reduction and diversion strategies to meet the established goals.

Strategy: Phase I of the strategy plan involved Waste Reduction and Extended Producer Responsibility and includes continued support of Northwest Product Stewardship Council. Education and Outreach includes the hiring of a Green Building Advocate, workshops and events in the community, multifamily recycling toolkit in development, recycling changes campaign reached over 10,000 customers. Operations and programs include the Commercial Food waste program, 6th Ave District Big Belly Pilot Program, evaluating purchasing policies, and recycling changes anticipated to go before Council (satellite recycling stations and replacing glass collection with drop off stations). Currently a 25% setout rate for glass collection with manual collection. It is then reloaded into a separate 30-yard box and hauled 64 miles to Seattle where it is recycled. It is an inefficient system and prone to employee risk. Incentives and Rates includes foundry waste sand to go to TAGRO, wood waste (12% of the waste stream) grinder is scheduled for delivery in 2019, and the need to develop markets for these materials to be diverted. Jade recommends looking into BioChar. Regulations include a revision to Chapter 12.09 for new construction to provide space for garbage and recycling containers. Does not include composting — Matthew asks why this could not be included. Shane responded there is less need, but there is active stakeholder engagement aimed at discovering actual need for composting services. Shane offered to follow-up with more information from appropriate staff members.

Diversion Update to the Tacoma system: there has been a 2.4% decrease in diversion tons and 4.6% increase in disposal tons between 2017 and 2018. There are some seasonal fluctuations to expect, but prolonged monitoring will help understand what the actual trends look like. The disposal increase is significant and seems to follow economic uptrends. There is a static hold on resident tonnage, but increase in self-haul and commercial tonnage. Clarification that anything over a duplex is considered commercial. There are charts that normalize this data with population growth factored in.

There are challenges with evolving goals. The Department of Ecology is changing the key solid waste management metric for the recycling rate to overall waste generation to encourage waste reduction.

Next steps: once hired, the Green Building Advocate will help develop a C&D Program, complete a Waste Composition Study in 2020 (includes commingled recycling), target outreach and education (recycling changes and multifamily), and the establishment of a new Tacoma-Pierce County Solid Waste Management Plan to help provide a blueprint to developing goals and strategies moving forward.

Lexi asks how feasible it is to hit 70% target given the current market challenges. Shane acknowledges it is a lofty goal regardless, but first priority is to focus on quality over quantity and waste reduction. Phet hopes to be able differentiate between diversion and recovery. Waste energy was not considered due to past City experiences, but waste energy facilities have been toured to understand options and technology available. The projected lifespan of the LRI landfill varies; one estimate puts it at 2040, while another suggests there may only be 8-10 years remaining. However, the landfill lifespan is prone to change, especially contingent on the City of Tacoma's actions.

Tacoma Water Conservation Plan Update – Rochelle Gandour-Rood

The Eagle Gorge Reservoir provides 95% of Tacoma's drinking water. Enough water is expected for both people and fish this fall even though some parts of Washington State are experiencing drought conditions. Encouraging folks to use water wisely is paramount as part of the Tacoma Water Conservation Plan. Rochelle helps encourage youth to save water by demonstrating how much water is used in daily activities like flushing the toilet and showering.

The Tacoma Water Conservation Plan was developed to span 2018-2027. The goals are centered on reducing water usage per capita. There is a focus on peak water usage in the summertime, largely contributed to irrigation efforts. New and continued programs include numerous rebates and free services. These include the Smart Outdoor Watering Kit consisting of spray nozzles and hose timers. Extremely high interest and 1,000 have been given away to date. TPU has intentionally coordinated and collaborated with other conservation and assistance teams to make information easy to access and develop consistent messaging. There has been installation of bottle filling stations called H2O To Go. Two units have been installed so far, and more are planned. It cost between \$5,000-7,000 to install and there are also maintenance costs involved. There has been the development of rebate program for smart irrigation controllers. TPU is also rolling out a multifamily fixture giveaway to install water-saving devices like faucet heads and aerators. A communication plan is currently in the works. Continued programs include efficient showerheads and aerators for residential customers, kitchen appliance and water saving project rebates for commercial customers. There are not currently incentives for commercial customers to build with water conservation in mind, but TPU is hoping to incorporate incentives the future.

What works? All households that utilize water conservation kits are recorded and then compared with water meter data. Provides metric collection methodology to demonstrate programs that actually do help conserve water. Water conservation is tied to weather – more water is used when there are hot, dry summers. Water conservation goals are aimed at increasing water conservation despite the weather.

Rochelle asks to keep outdoor efficiency ideas and programs in mind and please provide any feedback from the public you are hearing.

Questions and Comments: Some HOAs and CCRs have rules around keeping green lawns. There is a push for messaging around allowing lawns to go dormant, including native plants that require less water. The Integrated Resource Plan could help clarify details around water supply. If conservation targets are met, how much would water users save? Can a dollar figure be placed on it to show Tacomans where those funds could be diverted to? There is some balance to strike, but ultimately conservation does lead to positive impacts on the utility itself. Can customers compare their consumption against the median or goals? Not currently, but it is effective messaging. Outreach around irrigation controllers would be useful, especially having onsite consultation to analyze spray patterns or systems. The plan does call for an irrigation system audit and is planned.

UWT Sustainable Urban Design Program – Nicholas Carr

This project is a plan for urban manufacturing and ecological engineering on the East Thea Foss created by the UWT Masters in Community Planning. This program is in its third year. This project was spawned from the Tide Flats Subarea Plan as an offer to the Port to help the Port. The plan development began with collecting what is known about the area centered on environmental perception, the World Port Sustainability Program, the Port's environmental commitment, and broad environmental challenges. The project team was sure to adopt an equity and inclusion lens using social determinants of health and the 2018 Pierce County Community Health Assessment. They focused on civic engagement values and variation, the challenges around engagement, and the opportunities and tools available for more effective outreach activities, noting different strategies and resources are required to reach all communities.

The research the project team conducted included professional interviews with Environmental Services Science & Engineering division (Mike Slevin and John Burk) and the Sustainable Tacoma Commission, literature review of industrialization and its ramifications, urban manufacturing and planning encroachment, and global ports and sustainable operations, and finally case studies were considered including Green Stormwater Infrastructure projects, ecological engineering projects, and recycling programs.

The Wheeler-Osgood Waterway is the focus of this plan, a section of land off the Thea Foss Waterway. BNSF owns a portion of the land while the Port owns the rest. High visibility to the public and provides many advantages to development. It contains an outfall and is not in the best of conditions, providing a good opportunity for the Port.

The proposal involves a stormwater reef – incorporating public access, renewed habitat and urban development. The project has the potential for educational activities, restoration of the oyster population and the establishment of reef. As part of the project, the economic development aspect involves the establishment of a recycling incubation community to encourage plastic recycling and reuse by the community (reference Precious Plastics video). This design illustrates a meaningful move towards sustainability and environmental focus.

There is potential for lasting impact from this project to demonstrate how the Port and the City are confronting environmental challenges in an impactful way. It helps build partnerships, acknowledge the recycling crisis, promotes education and youth engagements, provides equitable access, and improves water quality among other benefits. There are many organizations and entities to engage and provide support for this proposal.

There is interest by the Port, but there is some work to do. It is difficult to know how far this could go. This project could mostly be funded through grants, but the City would likely have to help facilitate. There is no cost analysis as of yet, but costs could be low to just begin with recycling incubation aspect. This project is not meant to impede on the Tide Flats Subarea Plan, but it is a suggestion to help guide

development of a small portion of land that has been underutilized for many years in a way that is meaningful and scalable.

Other Public Comment

Ban Styrofoam! Shawn with Sunrise Movement requests movement towards Styrofoam ban. Kristi remarked the plastic bag ban started with the STC.

Objectives for the Next Meeting

- Sustainability Small Grant
- Recycling Changes Implementation
- Urban Forest Management Plan
- Regional Clean Fuel Standard Rules

There being no further business, the meeting adjourned at 6:31 p.m.

The next meeting of the Sustainable Tacoma Commission will be Thursday, July 25th, 2019 from 4:30 to 6:30 p.m., Tacoma Municipal Building, 747 Market Street, Room 243.

Lexi Brewer, Chair	
Crystal Komenda, Staff	



Sustainable Materials Management Plan

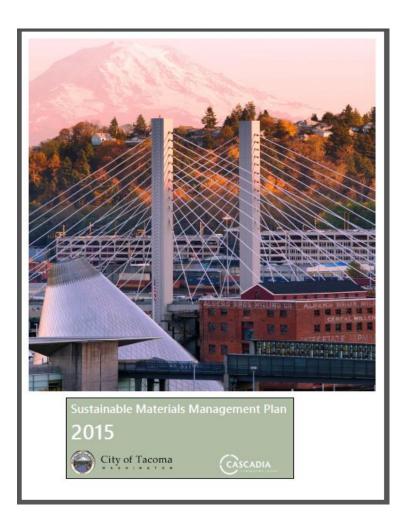
City of Tacoma | Environmental Services Department

Sustainable Tacoma Commission June 27, 2019

••••OVERVIEW



- History and development
- Overview of the plan
- Progress update





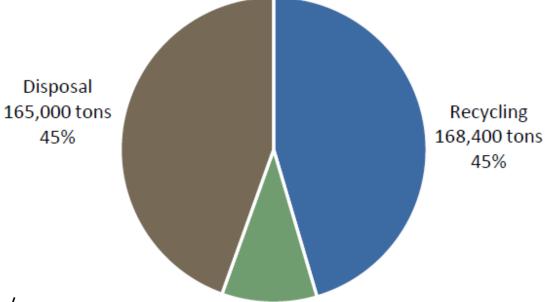


- City of Tacoma Climate 2008 Action Plan
 - Maximizing commercial and residential recycling and reuse, and proper deconstruction of buildings.
- 2008 Tacoma-Pierce County Solid Waste Management Plan
 - *Current waste diversion goal of 70 percent or more by 2028
- City of Tacoma Resolution No. 38907
 - Reaffirmed 70% Goal on May 13, 2014
 - Required development of a Sustainable Materials Management Plan (SMMP).

BACKGROUND

SE CITY OF THE CITY OF THE COMA

• 2014 Tacoma baseline is 55% diversion



diversion rate =

total tons of recoverable material collected

total tons of recoverable material collected + total tons of garbage collected

Composting 37,200 tons 10%



PLAN DEVELOPMENT

- Outreach and stakeholder input
- Waste Stream Characterization Study
- Established diversion goals, metrics, and targets
- Identify diversion/reduction strategies





- Recover additional 68,300 tons in 4 phases over the next 12 years
- Phase I (2017-2020): 22,800 tons, 62% diversion
- Phase II (2021-22): 54,600 tons, 68% diversion
- Phase III (2023 On): 67 68,300 tons, 71% diversion
- Phase IV (2028 On): Beyond waypoint of initial 70% diversion goal





STRATEGY - PHASE I

- Waste Reduction/Extended Producer Responsibility
- Education & Outreach
- Operations & Programs
- Incentives & Rates
- Regulations

PROGRESS – Waste Reduction and Extended Producer Responsibility

- Continued support of Northwest Product Stewardship Council
- Bills passed in the 2019 Legislative Session:
 - Plastic Packaging Management
 - Sustainable Recycling
 - Food waste Reduction
 - Compostable Products Labeling
 - Paint Stewardship

• • • PROGRESS – Education & Outreach







- Hiring a Green Building Advocate
- Workshops and events in the community
- Multifamily recycling toolkit being developed
- Recycling Changes campaign reached over 10,000 customers

PROGRESS – Operations & Programs



- Evaluating Commercial Food Waste program
- 6th Ave district Big Belly Pilot Program
- Evaluating purchasing policies
- Recycling Changes anticipated to go before Council:
 - Satellite recycling stations
 - Replace glass collection with drop off stations



PROGRESS – Operations & Programs Continued

SUSTAINABILITY - Curbside Glass Collection



25% setout rate



Manual collection



Reloaded into 30 yard box



64 mile haul to Seattle

- Collection impacts offset environmental benefits: Net benefit estimated of 38 tons CO2/year avoided = \$20,000/ton CO2 avoided
- Inefficient system: Annual net cost of \$765,000 to recycle 1663 tons = \$460/ton
- Employee injury risk: 11 driver injuries from 2015-2018 related to glass collection





- Foundry waste sand to Tagro
- Wood waste grinder scheduled for delivery in 2019
- Markets need to exist for materials to be diverted







Regulations

• Chapter 12.09 revisions

Diversion Update (Tacoma system)

Diversion Disposal

2017: 64,300 tons 193,200 tons

2018: 62,700 tons 202,100 tons

Change: -1,600 tons 8,900 tons

2.4% decrease in diversion tons

4.6% Increase in disposal tons





Washington's New Solid Waste Metrics



Ecology is changing the key solid waste management metric from the recycling rate to overall waste generation to encourage waste reduction.

Focusing on the recycling rate is not helping reach waste reduction goals.

While recycling has many environmental benefits, waste reduction, or not producing waste in the first place, is far more impactful.





- Green Building Advocate
 - C&D Program
- Waste Composition Study complete in 2020
 - Includes Commingled Recycling
- Target outreach and education
 - Recycling Changes and Multifamily
- New Tacoma-Pierce County Solid Waste Management Plan



Sustainable Materials Management Plan

City of Tacoma | Environmental Services Department

Sustainable Tacoma Commission June 27, 2019

TACOMA WATER CONSERVATION PLAN

2019 UPDATE



FOR PEOPLE & FISH

ADEQUATE WATER SUPPLY EXPECTED IN 2019





WHAT USES THE MOST WATER?





A 21-minute shower uses:

42

gallons of water

Show

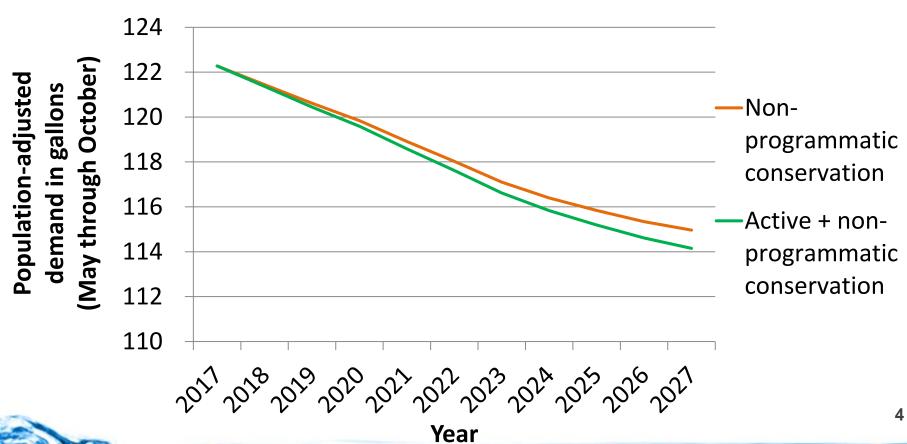
REALLY long.

3



DEVELOPED FOR 2018-2027

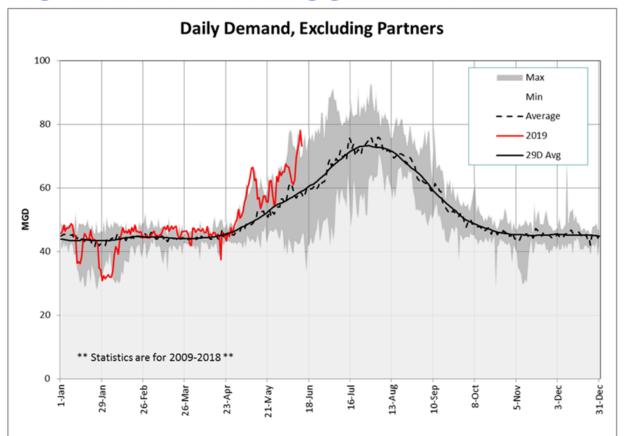
TIED TO INTEGRATED RESOURCE PLAN





FOCUS ON THE PEAK

SAVING WATER IN THE SUMMERTIME



5

WHAT REALLY USES THE MOST WATER?

ENCOURAGING OUTDOOR WATER EFFICIENCY



iarres) of aqua meer, meersed ander of b

NEW & CONTINUED PROGRAMS

CONSERVATION PROGRAM 2019-2027



Numerous rebates and free services

geared towards reducing customers' water use

"All customer classes, all times of year"





SPRAY NOZZLES AND HOSE TIMERS

POPULAR OUTDOOR CONSERVATION KIT



INCLUDES:

- 7-pattern, 2.5 gpm spray nozzle
- Mechanical hose timer
- Rain/watering gauge

AVAILABLE AT:

- TPU lobby
- EnviroHouse
- Community events

Pick up your FREE outdoor smart watering kit

Get up to three free items that will help you save water outdoors and money on your utility bills if you are a Tacoma Water customer. The kit includes a seven-pattern spray hose nozzle, a hose timer that does not need batteries, and a rain gauge that can measure up to 2 inches

Stop by the TPU lobby (3628 S. 35th St., Tacoma) and select one, two or all three items. You can also visit Tacoma Water's booth at any community event we visit this year – watch our calendar of events at MyTPU.org/Calendar. Renters, if you do not pay your water bill directly, you can still get a free kit. The kits are limited to one per household. U*



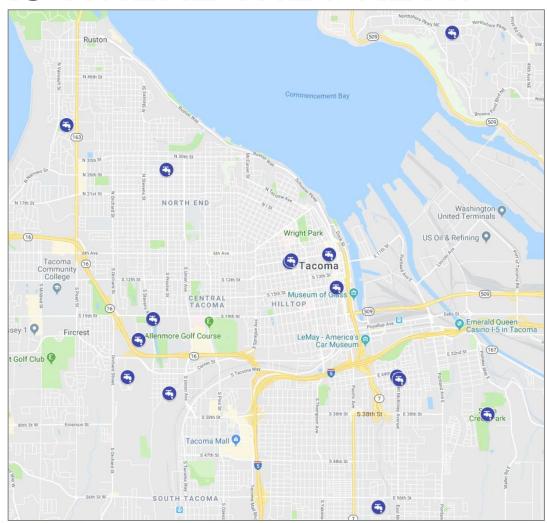
8



MEETING FOLKS WHERE THEY'RE AT

OUTREACH

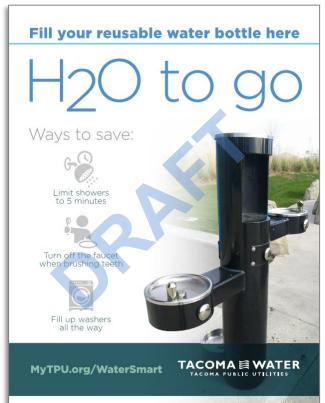


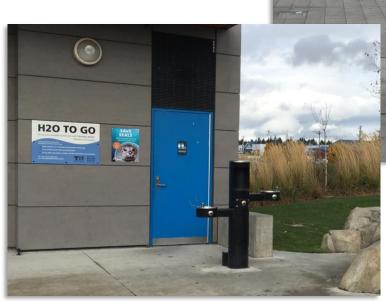




MEETING FOLKS WHERE THEY'RE AT

BOTTLE FILLING STATIONS







HEN DONG



SMART IRRIGATION CONTROLLERS

DEVELOPING A REBATE PROGRAM

New!

Smart watering no matter the weather

Do you have an irrigation system at home?

Replace an old-fashioned timer with a weather-based controller that will:

- Automatically adjust your watering amount based on local weather.
- Integrate current weather data into scheduled watering for more convenience.
- Apply irrigation only when needed to maintain healthy plants.
- Eliminate overwatering to save you money and reduce water waste.



Watch for rebates on controllers with WaterSense label, coming soon at MyTPU.org/WaterSmart.

TACOMA S WATER





REFRESHING A WHOLE BUILDING

MULTIFAMILY FIXTURE GIVEAWAY



Install water-saving devices.

Instalar dispositivos de ahorro de agua.

Cài đặt thiết bị tiết kiệm nước.

ឌំឡើងឧបករណ៍ទឹកស នុរុំ។

Установка водосберегающих устройств.





INDOOR FIXTURES & HOME AUDITS

CONTINUING RESIDENTIAL PROGRAMS



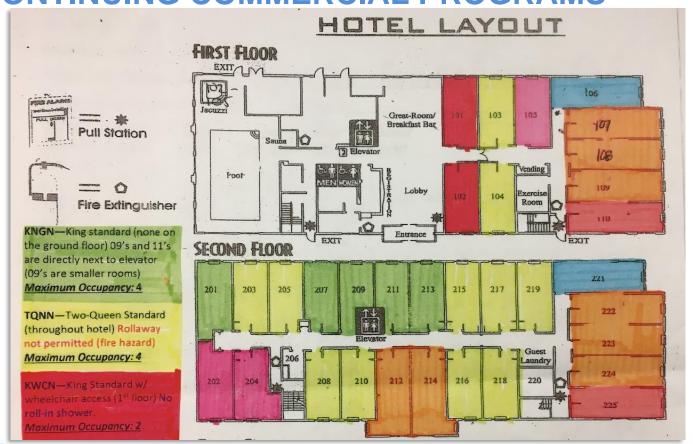






KITCHEN & CUSTOM REBATES

CONTINUING COMMERCIAL PROGRAMS

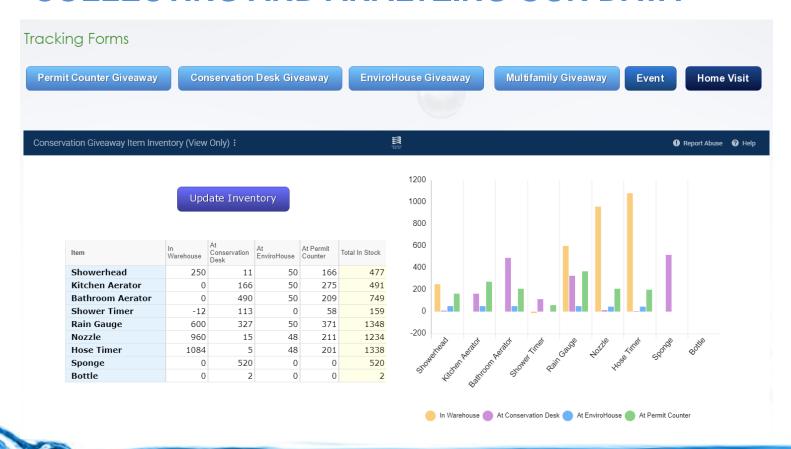


14



SO, WHAT WORKS?

COLLECTING AND ANALYZING OUR DATA





15

COMMUNITY WATER CONSERVATION

IN OUR ENVIRONMENTAL ACTION PLAN

Decrease peak water use by 1,419 gallons per account.*

2017 Baseline: 64,576 gal/acct.

2018: 66,334 gal/acct.



2020 Goal: 63,157 gal/acct.

*This target was updated and added in 2018.

Reduce water use at City & TPU facilities by 10%.

2013-15 Baseline: 105,759 CCF

2016: 98,573 CCF

2017: 104,393 CCF

2018: 100,662 CCF



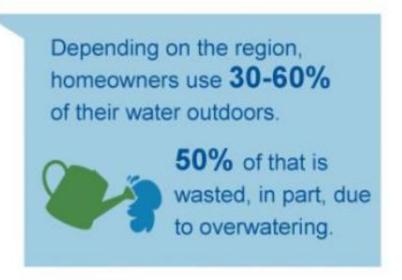
2020 Goal: 95,183 CCF





FOCUS ON OUTDOOR EFFICIENCY

WHAT DO YOU HEAR FROM THE PUBLIC?





Numerous rebates and free services

geared towards reducing customers' water use





THANK YOU

QUESTIONS, THOUGHTS, REQUESTS?

Rochelle Gandour-Rood rgrood@cityoftacoma.org 253-502-8191

Water Conservation conservation@cityoftacoma.org 253-502-8723



Don't be a drip.

Bring home the savings by installing efficient faucets and fixing leaks.

MyTPU.org/HomeRun







THE WATERWAY

A plan for Urban Manufacturing and Ecological Engineering on the East Thea Foss

Nicholas Jay Carr Haile-Anne McKeen Rafael Saucedo

UWT MA Community Planning

What We Know

Environmental Perception

World Port
Sustainability
Program

Port's Environmental Commitment

Broad Environmental Challenges

- Industrialization
- "Grit City"
- "Aroma of Tacoma"

"As a result, ports must respond to worldwide, regional and local challenges, such as climate change, mobility, digitalisation, migration and social integration. change, mobility, digitalisation, migration and social integration."

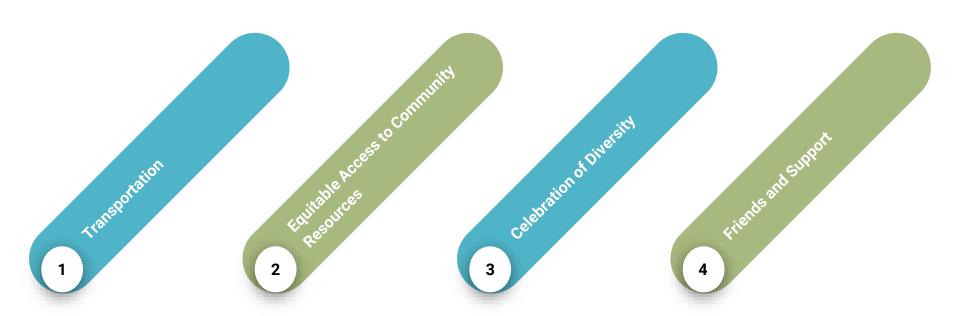
"Committed to responsible and sustainable growth."

- StormwaterManagementPlan
- Bay PatrolProgram
- Northwest PortsClean Air Strategy

- Climate Change
- Sea-level Rise
- Plastic
- Clean Air/Water

Local Context

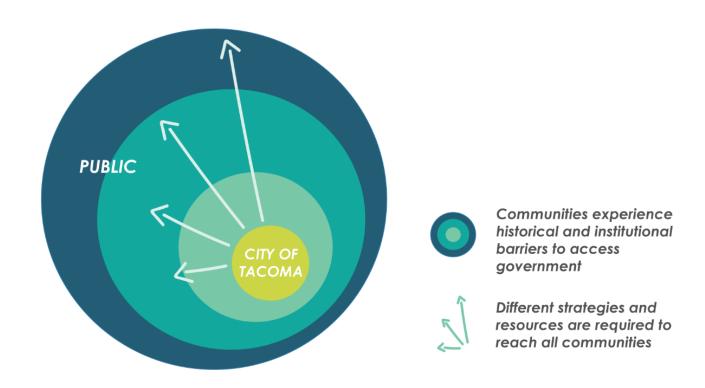
- Equity and Inclusion
- Social Determinants of Health
- 2018 Pierce County Community Health Assessment



Civic Engagement

- Values and Variation
- Challenges
- Opportunities and Tools

ACCESS & REPRESENTATION



Research Overview

Professional Interviews

Environmental Services

Science and Engineering

Sustainable Tacoma Commission



Literature Review

Industrialization and Ramifications

Urban Manufacturing/Planning Encroachment

Global Ports and Sustainable Operations



Green Stormwater Infrastructure: Pt. Defiance GSI & Manchester GSI

Ecological Engineering: Scape & Billion Oyster Project

Recycling: Precious Plastics





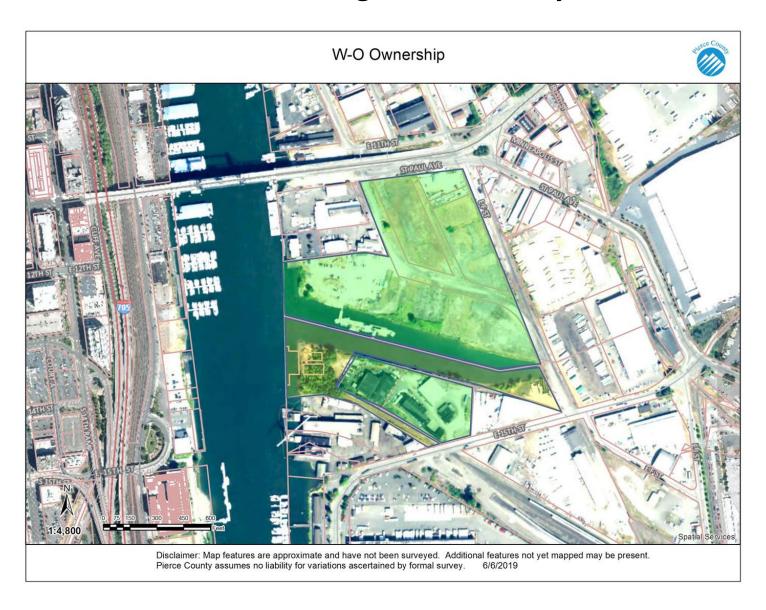






THE WATERWAY

Wheeler-Osgood Waterway

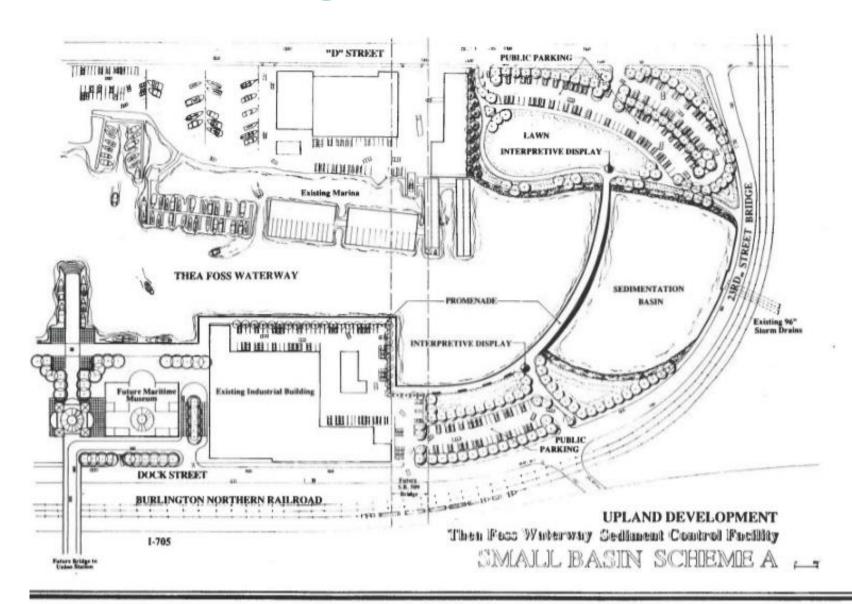


THE WATERWAY

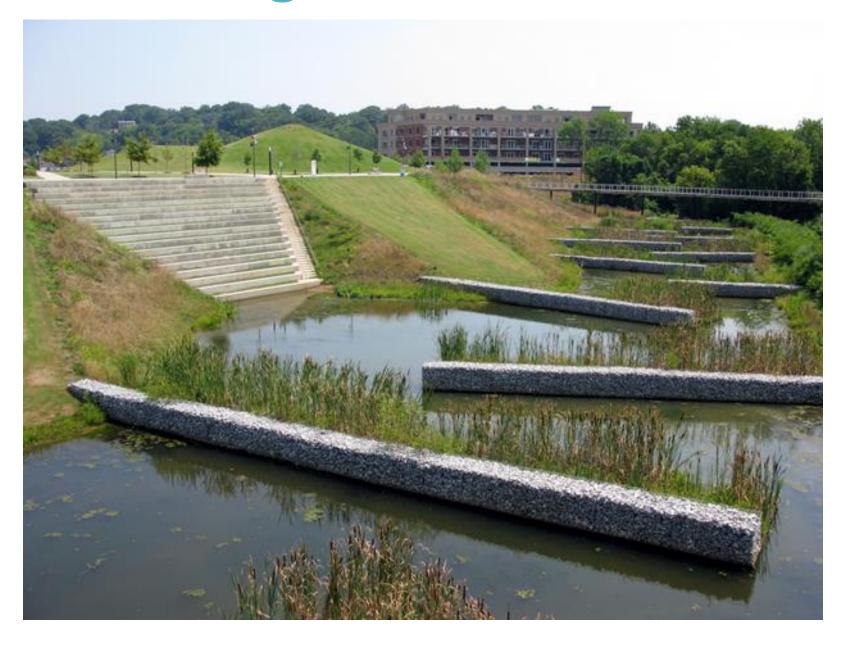
Wheeler-Osgood Waterway



Wheeler-Osgood Stormwater Reef



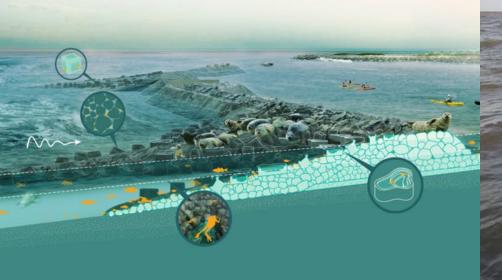
Wheeler-Osgood Stormwater Reef



Wheeler-Osgood Stormwater Reef

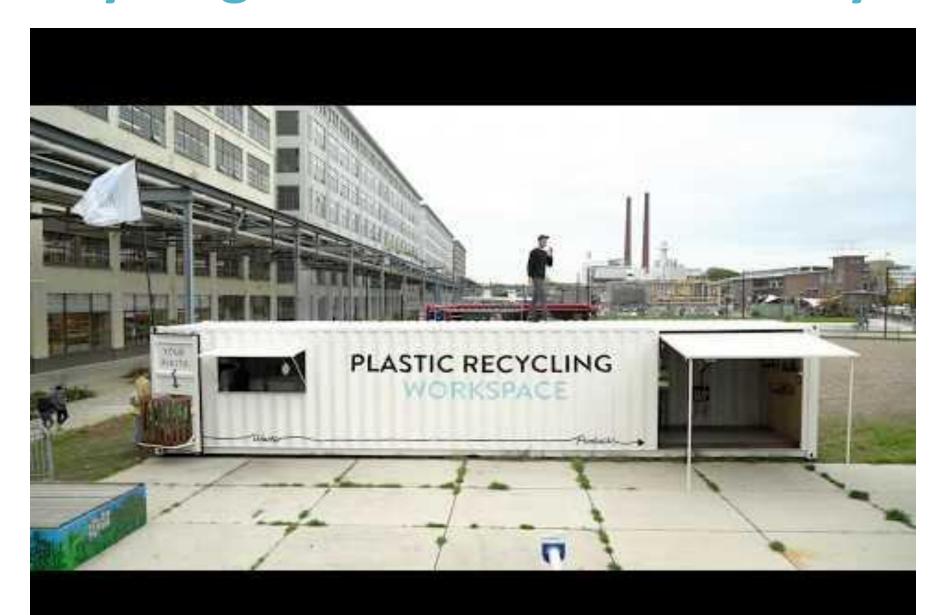




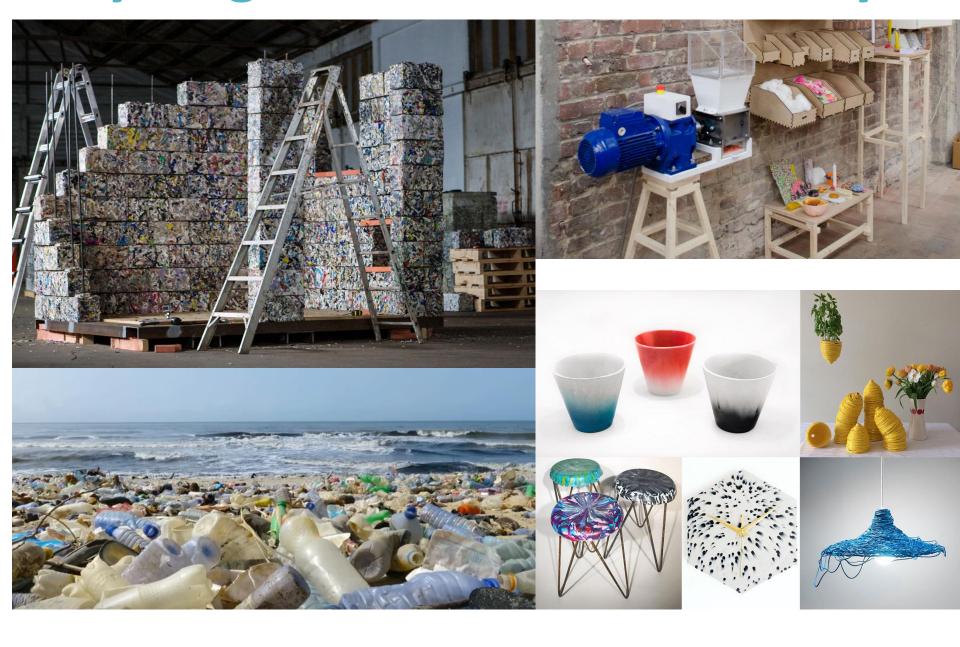




Recycling Incubation Community



Recycling Incubation Community



Global Reach: Critical Momentum



Potential for Lasting Impact

With the community, you can make this happen NOW:

Demonstrate how the Port and the City are confronting environmental challenges in impactful ways.

