DATE: April 4, 2022

TO: Clean Water Services Advisory Commission Members
and Interested Parties

FROM: Mark Jockers, Chief of Staff

SUBJECT: **REMINDER AND INFORMATION FOR APRIL 13, 2022, CWAC MEETING**

This is a reminder that a Clean Water Services Advisory Commission (CWAC) meeting is scheduled for **Wednesday, April 13, 2022.**

In support of best practices for preventing the spread of the coronavirus, CWS has adopted the following format for the April meeting:

- The meeting will be held virtually using the Webex platform.
  - Webex offers the option to connect to video, slides and audio via a device with internet access, or an audio-only connection through any telephone line.
  - CWAC members should watch for an email containing Webex connection details.
  - Interested parties should register for this meeting by April 12 by following the instructions on the website.
- The meeting will begin at 5:30 p.m. Please plan to establish your connection to the meeting 10-15 minutes before the start time to allow the meeting to begin promptly.
- Dinner will not be provided.

The CWAC meeting packet will be mailed to Commission members on Monday, April 4, and posted to the CWAC section of the Clean Water Services' website.

Please call or send an email to Stephanie Morrison (morrisons@cleanwaterservices.org; 503.681.5143) by April 12 to advise about your attendance at this meeting.

Enclosures in this packet include:

- April 13 Meeting Agenda and Materials
- February 9 Meeting Summary

Clean Water Services Advisory Commission

April 13, 2022

AGENDA

5:30 p.m. **Welcome and Introductions**

5:40 p.m. **Review and Approve Summary of February 9, 2022, Meeting**

5:50 p.m. **CWS Budget Overview**
Staff will provide an overview of the CWS Fiscal Year 2021-22 Budget and highlight the drivers and key investments shaping the current budget.

- Kathleen Leader, Chief Financial Officer

Requested Action: *Informational*

6:25 p.m. **CWS Strategic Planning Overview**
Staff will guide the Commission through the CWS Strategic Plan, including the district's background on strategic planning, the strategic approach, and the performance excellence program.

- Diane Taniguchi-Dennis, Chief Executive Officer
- Jack Liang, Chief Strategy Officer

Requested Action: *Informational*

7:15 p.m. **Invitation for public comment**

7:20 p.m. **Announcements**

7:30 p.m. **Adjourn**

Next Meeting: June 8, 2022

BUDGET PRESENTATION

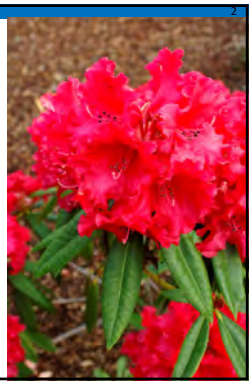
April 13, 2022

Clean Water Services Advisory Commission

Kathleen Leader, Chief Financial Officer

AGENDA

- Budget overview
- Investment priorities
- Financial assumptions
- Revenues
- Rates: increases, history and comparisons
- Expenditures
- Programs and services investments



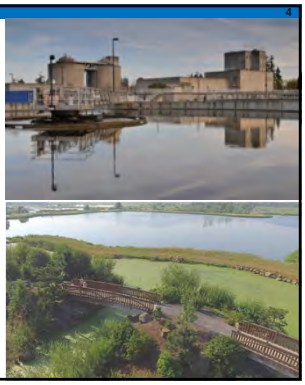
BUDGET PROCESS

- Oct-Jan: Develop Capital Improvement Plan request
- Feb-Mar: Develop Operating Budget request
- April: Prepare budget document for proposal
- May: Hold Budget Committee meeting for approval
- June: Hold budget hearing for adoption

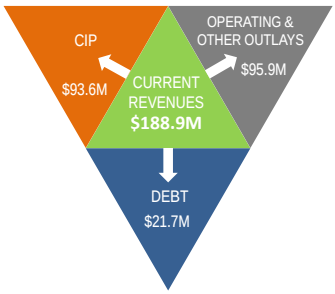
Prepared in accordance with Oregon Budget Law

INVESTING IN RESILIENCE

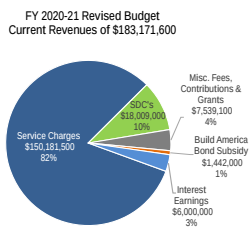
- Workforce
- Facilities
- Programs and services
- Grey and green infrastructure
- Natural environment

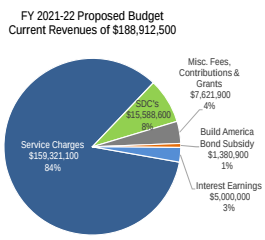


FINANCIAL ASSUMPTIONS (FY 2021-22)



CURRENT REVENUES (FY 2021-22)





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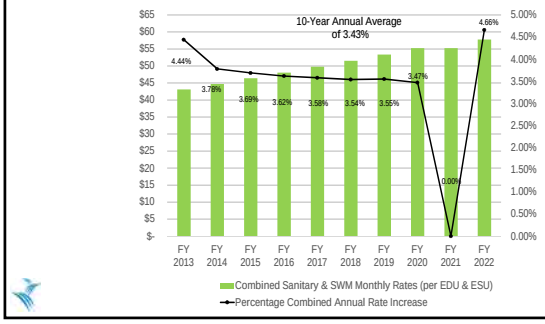
RATE INCREASES (FY 2021-22)

- 4.5% - regional and local sanitary sewer rate
- 5.4% - regional and local stormwater management fees
- $285 to $6,085 per Equivalent Dwelling Unit - sanitary System Development Charges
- $25 to $585 per Equivalent Service Unit - stormwater management System Development Charges

8

10-YEAR RATE HISTORY (2013-2022)



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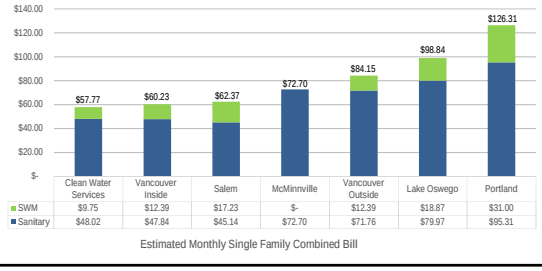
ESTIMATED COMPARABLE RATES (FY 2021-22)

(at 800 cubic feet per month usage)



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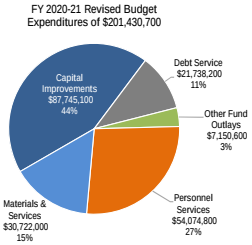
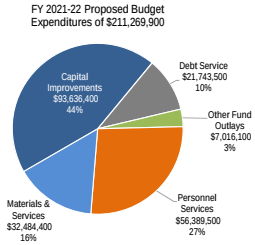
EXPENDITURES (FY 2021-22)





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INVESTMENTS IN PROGRAMS AND SERVICES

Business Services | Regulatory Affairs | Utility Operations & Services | Water Resource Recovery Operations & Services | Natural Systems Enhancement & Stewardship | Enterprise Asset & Technical Services | Regional Utilities Services

12

DEPARTMENTAL OPERATING BUDGET (FY 2021-22)

- $88.9 million: 4.8% increase
  - Personnel services: 4.3% increase
    - 5 new positions
    - 12 conversions of long-term temporary
  - Materials and services: 5.7% increase
    - $1 million: property and cyber insurance
    - Software licenses: $365,000

13

OUR INVESTMENTS IN PROGRAMS, SERVICES (FY 2021-22)

$27.1M	$13.0M	$22.9M	$7.3M	$7.0M	$5.7M	$5.7M
Water Resources Recovery 31¢	Utility Ops & Services 15¢	Business Services 26¢	Regulatory Affairs 8¢	Natural Systems 8¢	Regional Utilities 6¢	Enterprise Asset 6¢

14

INVESTMENTS IN GREY, GREEN AND NATURAL SYSTEMS

- Growth
- Aging infrastructure
- Regulatory requirements
- System expansion

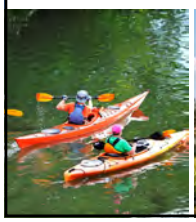
QUESTIONS?

Clean Water Services

CLEAN WATER SERVICES - STRATEGIC PLANNING

April 13, 2022

Clean Water Services Advisory Commission
Diane Taniguchi-Dennis, Chief Executive Officer
Jack Liang, Chief Strategy Officer

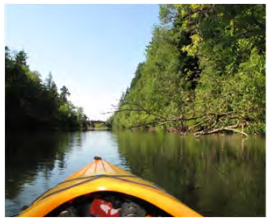


OVERVIEW

- CWS' strategic background
- Our Strategic Approach
- Performance Excellence
- Next steps for CWAC

CWS' STRATEGIC BACKGROUND


Historic


Now

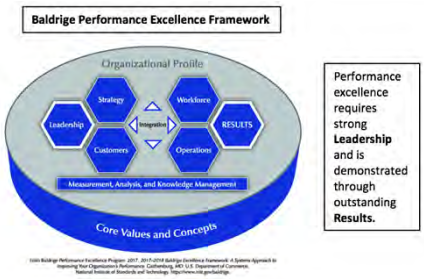
3

STRATEGIC APPROACH

System and philosophy that guide the work of the people of CWS as we contribute – with a common purpose – toward five Key Strategic Outcomes

4

IMPLEMENTATION OF THE STRATEGIC APPROACH



Performance excellence requires strong **Leadership** and is demonstrated through outstanding **Results.**

5

STRATEGIC APPROACH

- Message From the CEO
- Who We Are
- Mission, Vision, Promise, Values
- Working Together for the River
- Key Strategic Outcomes

6

A MESSAGE FROM THE CEO

- One Water
- Stewardship
- Water Resources Utility of the Future
- Strategic plan

7

WHO WE ARE

- Working for the river since 1970
- Clean Water Services today
  - Our River
  - Our Ratepayers
  - Our People
  - Our County
  - Our Permit
  - Our Assets

8

MISSION, VISION, PROMISE, VALUES

- Mission: We provide cost-effective services and environmentally sensitive management of water resources for the Tualatin River Watershed.
- Vision: Enhance the environment and quality of life in the Tualatin River Watershed through visionary and collaborative management of water resources in partnership with others.
- Promise: Beautiful clean water for today and tomorrow

9

5 KEY STRATEGIC OUTCOMES

- Organizational excellence
- Integrated water resource management & resilient watershed
- Research, innovation & resource recovery
- Catalyzing transformational partnerships
- Contributing to the region's environmental and economic vitality

10

ORGANIZATIONAL EXCELLENCE

CWS is a highly effective and transformative organization that maximizes the capabilities, talent and effectiveness of our employees to provide services and products that deliver on the values of the region we serve.

11

INTEGRATED WATER RESOURCE MANAGEMENT & RESILIENT WATERSHEDS

- In partnership with others, CWS creates resilient watersheds by optimizing and integrating the management of water resources for the benefit of the public and the environment.

12

RESEARCH, INNOVATION & RESOURCE RECOVERY

CWS provides services and products that deliver practical and pragmatic water solutions for our region to recover resources and to optimize our operations through innovation that is shared globally.

13

CATALYZING TRANSFORMATIONAL PARTNERSHIPS

CWS goes beyond organizational boundaries to create and sustain strategic partnerships in the region to accomplish more than any one organization can alone.

14

CONTRIBUTING TO THE REGION'S ENVIRONMENTAL & ECONOMIC VITALITY

CWS' sound planning, investment and stewardship in regional assets is essential to Washington County's continued appeal as a place to invest, live, work and play.

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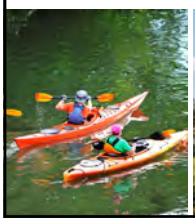
PERFORMANCE EXCELLENCE

- Performance Excellence Framework
  - Defining components
- Strategy Development
  - Roadmaps
- Strategy implementation

NEXT STEPS FOR CWAC

- Strategic Approach
  - Feedback and questions
  - Discussion
- Performance Excellence – roadmaps
  - Review
  - Feedback and questions

QUESTIONS? COMMENTS?



Clean Water Services Advisory Commission Meeting Summary

Date: February 9, 2022

Location: The meeting was conducted on Webex

CWAC MEMBERS PRESENT

- Terry Song (Business 1), Commission Chair
- Lori Hennings (Environment 2), Commission Vice Chair
- Alan Jesse (Agriculture 2)
- Alex Phan (District 1/Fai)
- Fatima Taha (At-Large/Harrington)
- George Marsh (Agriculture 1)
- Jan Wilson (Environment 1)
- Matt Wellner (Homebuilder-Developer 2)
- Mike McKillip (District 3/Rogers)
- Stu Peterson (Business 2)
- Tony Weller (Homebuilder-Developer 1)
- Diane Taniguchi-Dennis (Clean Water Services Chief Executive Officer/nonvoting)
- Sherilyn Lombos (Cities/nonvoting)

CWAC MEMBERS ABSENT

- Andy Duyck (District 4/Willey)

CWS STAFF

- Mark Jockers, Chief of Staff
- Gerald Linder, General Counsel
- Joe Gall, Chief Utility Relations Officer
- Jared Kinnear, Reuse Manager
- Stephanie Morrison, Office Manager
- Shannon Huggins, Public Involvement Coordinator
- Tracy Rainey, Senior Policy Analyst
- Jody Newcomer, Technical Editor & Communications Specialist
- Victor Davidson, Information Technology Analyst

MEMBERS OF THE PUBLIC

- Kathryn Harrington, Chair of Clean Water Services Board of Directors
- Dale Feik, Chair of Washington County Citizen Action Network

1. CALL TO ORDER

The meeting was called to order at 5:31 p.m. Morrison announced the meeting was being recorded and recognized all attendees.

2. REVIEW/APPROVAL OF MEETING NOTES

- The summary from the Jan. 12, 2022, meeting was approved.

3. PNW WATEREUSE REPORT AND OUR WATER REUSE ROADMAP

- Jared Kinnear, Reuse Manager

Clean Water Services has a long and successful history of producing high quality reuse water for irrigation. Now, CWS is working to expand water reuse opportunities within the Tualatin River watershed. The water reuse program helps protect the watershed, the community and the environment by improving the quality of the water in the Tualatin River, controlling temperature and reducing the use of drinking water for irrigation. The program can also help businesses, including agriculture, find a safe and sustainable alternative water supply resource.

Reuse water is the treated wastewater that comes out of our facilities that has beneficial uses other than returning it to the river. The major difference between treated wastewater and recycled water is disinfection. Recycled water is disinfected before it's delivered to land application sites. Water reuse, recycled water, reclaimed water are generally interchangeable terms. CWS mostly uses the term "water reuse."

Water reuse is not new. We depend on recycling our water, because water is not renewable. All the water we have on this Earth is the water we get. CWS started its reuse program in 1990 as a regulatory strategy to address phosphorus. The program has been fairly stable, and CWS has consistently reused about 1 million gallons per day (mgd) at the peak of the season for the past 30 years.

In 2013, Art Larrance, a former member of CWAC, suggested using reuse water to produce beer as a means to change the conversation about the nature of water and reuse. Today, beer continues to be part of the strategy to communicate the benefits of water reuse.

One of the drivers to expand the water reuse program is managing temperature. Treated effluent is warmer than the water in the river, and CWS is very careful about how much heat it discharges. One strategy to maintain cooler river temperatures is not discharging warmer water to the river in the first place and instead reusing it to irrigate golf courses, parks and athletic fields. CWS has an ambitious of goal of reusing 5 mgd by 2025 — 5 in 25 — during peak summer months. The peak is the hottest, driest days of the year when demand for irrigation is at its highest, generally in July and August. Those months are when the river is most vulnerable.

The water reuse program season is typically May 31 through October 31. Start and end dates vary depending on the amount of rainfall each year. Durham is the only CWS facility that produces reuse water and the current program of 1 mgd is adequate to irrigate about 200 acres. Those numbers illustrate the agronomic rate, which is the amount of water a plant or crop can take and use beneficially. There is no ponding, no surface water runoff, and no groundwater interference. Durham is capable of producing up to 4 mgd, but CWS needs to engage enough partners to apply the water. CWS is also working on a plan to produce reuse water out of the Rock Creek facility.

Most water reuse programs across the country are in dry, desert areas and are based on issues of scarcity. In Oregon, climate change, economy, innovation and water supply are driving reuse. It's less expensive to irrigate with reuse water than drinking water. Technology is available to

generate any quality of water for any purpose, and finding more uses for water reuse would help conserve potable drinking water.

In urban areas, a significant driver for water reuse is reducing the thermal load in the rivers — keeping the heat out. CWS has been able to mitigate the harm of discharging heated effluent through cold water releases from Hagg Lake and a robust program to plant trees. Strategies are shifting from mitigation to avoidance — avoid putting heat in river in the first place.

In rural areas, irrigation for agriculture is the driver for reuse.

In 2020, CWS drafted a water reuse roadmap to help align staff and partners. Staff assessed the current state and imagined the future state with three key goals:

- Water providers offer reuse as the best options for nonpotable needs and there is high demand from customers.
- CWS will restore properties to functional wetlands, providing additional streamflow into the mainstem Tualatin and lowering temperature.
- The agriculture community is a strong supporter of water reuse. In the future, CWS hopes to provide reuse water to Tualatin Valley Irrigation District in exchange for Hagg Lake releases.

Staff also identified program objectives:

- Keep thermal energy out of the river.
- Create retail and wholesale markets in urban settings to promote smart water use.
- Use transfers and exchanges to offset instream water rights.
- Land apply reuse water to restore wetlands.

CWS has several water reuse projects that could come online in 2023 and 2024 including the Jackson Bottom and Davis Tool properties, the Reserve Golf Course and Fernhill.

The water reuse team developed economic, environmental and social metrics to measure success.

- Economic measures.
  - Cost-benefit analysis of alternatives (cooling towers, chillers, membrane filtration).
  - Monetized value of agriculture or native seed production.
  - Support ratepayers.
- Environmental measures.
  - Acres of wetland restored.
  - Soil surveying and analysis.
  - Flow monitoring.
  - Amount of water reuse applied.
- Social measures.
  - Partners involved (environmental nonprofit organizations, government agencies, partner utilities, ratepayers, rural landowners).

- Regulatory support.
- Public awareness of “waste” as a resource.

There are numerous benefits to reuse water: protecting watershed, smarter potable water use, temperature compliance, cost savings. Reuse is a community effort with community benefits. There is a lot of support already and lots of partners. CWS wants to be a partner in trying to diversify the water portfolio for this basin to be sustainable in the future.

QUESTIONS, COMMENTS

What is the general water resource management in the basin for warm water, cold water, flow augmentation?

Kinnear said we use cold water flow releases from Hagg Lake to offset thermal loads. We recognize that our two mitigation strategies — cold water releases and shade planting — won’t be enough to keep pace with population growth. We can’t afford to put hot water in the river.

Jockers said about 50% of Hagg Lake water goes to agricultural application, 25% goes to drinking water and 25% is the water CWS releases in the summer for thermal management. Another way to look at water resource management is to look at the flow in the Tualatin in late summer. About 70% of the flow in the Tualatin immediately downstream of the Durham facility can be attributed to Clean Water Services — about 30-35% is water released from our facility and about 35-40% is water CWS releases from Hagg Lake. When we talk about budget management, we talk about instream flow, consumptive uses such as drinking water, and consumptive uses for agriculture.

I’m curious about the distribution of the water and what the infrastructure looks like. Are there gray water pipes in the ground? Do we need to put more pipes in the ground?

Taniguchi-Dennis said these are called these purple pipes. A separated system is necessary until the water is treated into drinking water or direct potable reuse when it can go direct into the existing water lines

Kinnear said we’re taking advantage of work done in the 1990s when we built a distribution system for recycled water. New customers will require new pipeline, maybe even new pump stations. Each project is unique. Proximity to treatment facilities is key to keeping projects cost-effective, as is proximity to existing pipes.

For example, King City wants to expand its reuse program. CWS has a pipeline in place for the King City golf course, so it’s fairly simple to tie into that line. It’s difficult and expensive to build new pipes in fully built-out urban areas. The alternatives are expensive as well, so we do a feasibility analysis. The economics are not linear. We look at how much reuse CWS can provide, proximity to treatment plants, thermal budgets and partnerships.

I know Beaverton put some gray water lines in the Cooper Mountain area for their own water. Did Hillsboro do anything like that for the South Hillsboro and King City's expansion? Are they looking at doing that for their planning area?

Kinnear said King City has some real champions of recycled water. CWS and King City applied for a grant to dedicate some funds from the American Rescue Plan Act to add purple pipe in some of the expansion areas.

He said we're having good conversations with Hillsboro, but there are no plans in place for new pipelines or projects. There's a real benefit to diversifying the drinking water portfolio with recycled water and a lot of city managers are starting to see those opportunities.

What's the difference in temperature between water reuse and water out of their pipes now for TVID customers?

Kinnear said reuse water would be warmer, but not significantly so. It also has residual nutrients that could be beneficial to crops. He asked Alan Jesse, who sits on the board of the Tualatin Valley Irrigation District (TVID), if warmer water is better for crops.

Jesse said warmer water is wonderful in the spring for frost control; reuse water is not warm enough to be detrimental. In the past, berry processors and canneries have not wanted to use reuse water, but treatment is so much better now, it might not be an issue. Nurseries would benefit from reuse, as would crops such as grass, seed and clover.

Economics — and getting past the ick factor — will drive reuse. We only want to treat the water for its intended use — fit for purpose. That approach saves energy and saves chemicals. It's not necessary to spend the time and energy to make drinking water and then use it to irrigate our lawns. We want to make sure we use the appropriate water for the appropriate use — fit for purpose.

Policy and regulatory changes, and perception, will take time. We need open communication and transparency and Kinnear lauded a partnership with TVID. There's a mutual benefit in water reuse for the agriculture community and CWS.

Are you intending to put water in Jackson Bottom and Fernhill to add water or to reduce temperature?

Kinnear said Fernhill is designed as a flow-through system to cool water before it gets to the river. Other projects are designed to irrigate native crops. The water in those projects doesn't flow through to the river. The cooling effect is not putting hot water in the river.

Taniguchi-Dennis said reuse is an exciting space to work in. It's good for the river and it's good for irrigation. We launched the beer project to inspire people to think about how water can be treated to drinking water standards and high purity water standards.

Today we need a purple pipe system to separate the water. Someday, if the technology is in place and the region desires it, we could actually put that water back into the drinking water lines. That's why we talk about fit for purpose.

We realized that more water from Hagg Lake isn't going to solve our problems, and planting more trees isn't going to solve our problems because the temperature of the water coming out of the pipeline at the treatment plant is reaching the limit. We need to increase water reuse in the community and thermal management inside our treatment facilities to reduce

temperature. It's a whole suite of solutions: water releases from Hagg Lake, tree planting program, advancing water reuse.

The agricultural community and its acceptance of water reuse is a big part of a broader acceptance of water reuse.

Is there concern about reduced summer flow by land-applying more water?

Kinnear said we have more water than the river needs now with the releases from Barney Reservoir and Hagg Lake, so we're not worried about minimum flows any more.

Weller said he was involved in the Cook Park project, which provided water to wetlands, parks, and sports fields. During the early years of water reuse the cost structure was very generous to customers.

Kinnear said CWS has raised prices a bit, but there's definitely economic benefit to reuse water compared to city potable water when you look at fit for purpose. Reuse appeals to people's pocketbooks, and it appeals to their hearts. It's the right thing to do to benefit the entire community.

I'm a believer in this, but at home I can't get reuse water. I can't make the choice to use reuse to flush my toilet. How far are we from bringing reuse into our homes?

Kinnear said he thinks we need to change building codes and we need to expand partnerships with businesses and developers. It's going to take time to build support and to expand the pipeline and build more pumps. There is a lot of research that can help build support for reuse.

Lombos said we don't have the scare of water scarcity to drive this as they do in southern California.

Jockers reminded the group that embedded in the East Basin Master Plan are opportunities to incorporate reuse strategies.

We have larger UGB expansion areas in Washington County. Is it possible to lay purple pipe along with other basic infrastructure to these areas before they're built out? Is there some longer-term federal funding available?

Yes. One example is the conversation we're having with the City of Tigard to get reuse water for the Lasich property that's being developed. It's a long run to lay pipe, but there are considerable opportunities along the pipeline for potential customers. We have to hedge our bets and spend the capital money now when we can because retrofit is expensive. We're having great conversations with the City of Hillsboro, Witch Hazel Village South, King City. We're a very willing partner and we look at every project on a case-by-case basis.

GENERAL COMMENTS

Chair Harrington said she is so grateful to all the CWAC members for serving on the advisory committee. She thanked members for the expertise they bring in collaborating with subject matter experts to "make sure we're being a good, responsible utility not just for all the businesses and residents in the urbanized area, but that we're being good partners with our surrounding land owners so we have a very healthy watershed."

4. PUBLIC COMMENT

Feik spoke about industries paying their fair share for water and PFAS and PFOA. He also said he'd like to hear about some of the challenges at Fernhill in addition to the benefits.

Kinnear said Fernhill is highly regulated by the Environmental Protection Agency and the Oregon Department of Environmental Quality. We take that seriously and we have a good record. We work hard to meet our limits and meet water quality requirements.

Taniguchi-Dennis said CWS is ahead of the curve when dealing with contaminants of concern. CWS has the most advanced wastewater treatment facilities in the state of Oregon, and an excellent track record of staying ahead of regulations. We are able to put strategies in place that we're going to need not only for the next five-year permit cycle, but the next two permit cycles after that. We look at all issues that impact the environment. We're finding a natural treatment system removes things from water that a treatment plant can't because of the sheer biodiversity that's found in a wetland. Nature doesn't want deionized water, it wants water that's naturalized and has the ability to support life.

5. ANNOUNCEMENTS, QUESTIONS, COMMENTS

- CWS discussed budget committee appointments at the Feb. 8 work session. The Board will take action on the appointments on Feb. 22.
- The next meeting is scheduled for March 9, 2022.

6. ADJOURNMENT

Adjourned at 6:55 p.m.

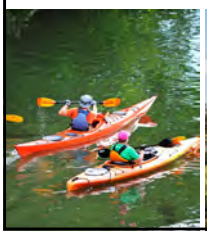
1

WATER REUSE PROGRAM ROADMAP

February 9, 2022

Clean Water Services Advisory Commission
Jared Kinnear, Reuse Manager

Clean Water Services



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AGENDA

- CWS water reuse history
- CWS Reuse Program
- Why reuse now?
- Reuse Program strategies & roadmap
- What's next

3

HOW WATER REUSE BEGAN AT CWS

- 1990 – Regulatory strategy, TMDL phosphorus
  - 1 MGD peak
  - Stable program for past 30 years
- 2013-2019 – Pure Water Brew moves from an idea to approved for commercial use
- 2020s – Regulatory strategy – thermal management
  - 5 MGD by 2025
  - Environmental restoration
  - Partnership-driven
  - Diverse water management




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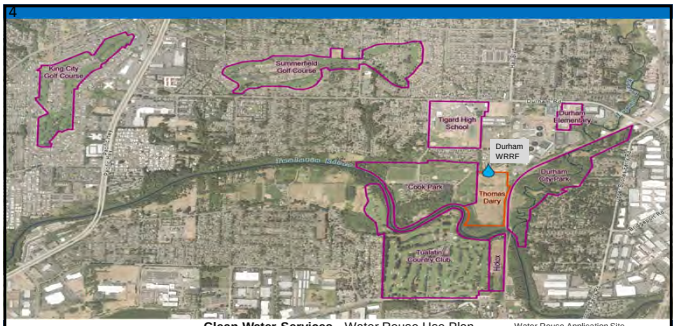


Clean Water Services - Water Reuse Use Plan
Class A Recycled Water from Durham Water Resource & Recovery Facility

Water Reuse Application Site
District-Owned Property
Water Reuse Customer

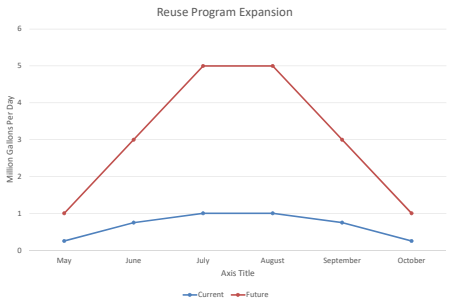
5

CWS REUSE FUN FACTS

- 2021: Distributed ~81 million gallons
- Could distribute ~550 million gallons
- CWS largest urban producer in Oregon
- Durham WRRF currently only supplier
- Customers: golf courses, schools, wetlands, meadow and athletic field, CWS (onsite irrigation)
- ~200 acres total area

6

5 IN 25



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WHAT IS DRIVING GROWTH OF WATER REUSE IN OREGON?

- Climate change
- Economy
- Innovation
- Water supply

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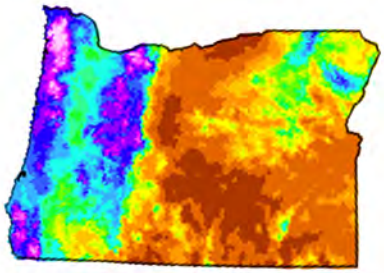
ANNUAL PRECIPITATION: 2020



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URBAN REUSE DRIVERS

RURAL REUSE DRIVERS

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ROADMAP AND STRATEGIES GUIDING REUSE PLANNING

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CURRENT STATE → FUTURE STATE VISIONING

Current State

What have we already accomplished…

Future State

Water providers offer reuse as the best use for their nonpotable needs and there is high demand from retail customers.

CWS will restore properties to functional wetlands, providing additional streamflow into the mainstem Tualatin and lowering temperature.

The agricultural community is a strong supporter of reuse water. CWS provides reuse water to TVID for exchange for Hagg Lake releases.

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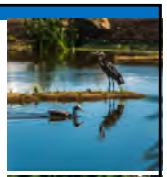
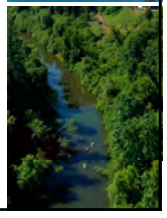
PROGRAM OBJECTIVES

- Keep thermal energy out of the river
- Urban: retail/wholesale
  - Smart water use
- Agriculture: transfer/exchanges
  - Supply farmers to offset instream water rights
- Environmental: land application
  - Restore wetlands that regulate mainstem water quality





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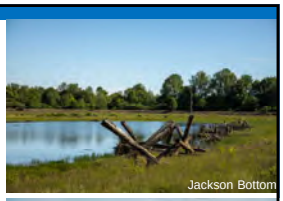
FUTURE PROJECTS

- Jackson Bottom and Davis Tool
  - 1.5 MGD
  - Summer 2023
- The Reserve Golf Course
  - 1.5 MGD
  - Summer 2023
- Fernhill properties
  - 2 MGD
  - Summer 2024


Jackson Bottom


Fernhill Wetlands

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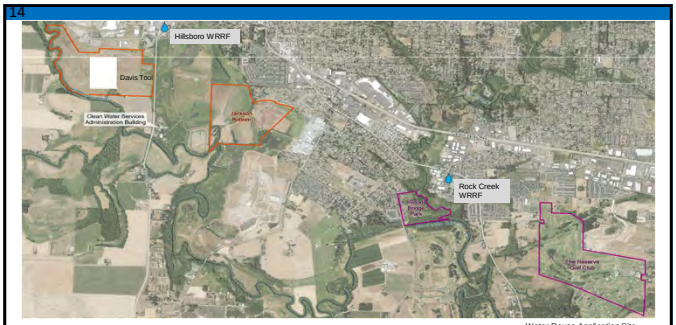

Clean Water Services - Water Reuse Use Plan
Class A Recycled Water from Rock Creek Water Resource & Recovery Facility

Water Reuse Application Site
District-Owned Property
Water Reuse Customer

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WATER REUSE PROGRAM STRATEGIC PERSPECTIVE

- If we succeed, what are the economic, environmental and social benefits?
- How will we measure success?

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ECONOMIC MEASURES

- Cost-benefit analysis of alternatives
- Monetized value of agriculture or native seed production
- Support of ratepayers

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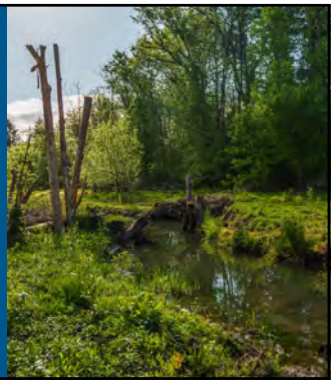
ENVIRONMENTAL MEASURES

- Acres of wetland restored
- Soil surveying and analysis
- Flow monitoring
- Amount of water reuse applied



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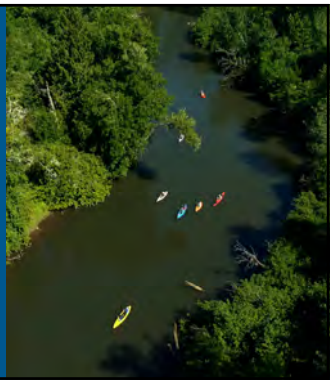
SOCIAL MEASURES

- Partners involved
  - Environmental nonprofit organizations, government agencies, partner utilities, ratepayers, rural landowners
- Regulatory support
- Public / internal awareness of “waste” as resource



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NUMEROUS BENEFITS

Watershed Protection

Smarter Potable Water Use

Temperature Compliance

Cost Savings

Restoring Natural Areas

Climate Impact Resilience

Protecting Habitat

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ARRAY OF STAKEHOLDERS AND PARTNERS

STATE LEGISLATORS

REGULATORS
Water Resources Department, Bureau of Reclamation

GENERAL
Social Equity Group, General Public, Industry/Professional Associations

AGRICULTURE
Tualatin Valley Irrigation District, Business

DISTRICT STAFF

URBAN
Partner Cities, TVWD, Business Associations / West Side Business Alliance, Golf Courses, County, JWC, Elected Officials

ENVIRONMENTAL
Water Watch Oregon, Tualatin River Watershed Council, Tualatin Riverkeepers, JWC, Army Corps, Environmental Interest Groups, DSL, NW Env. Advocates

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NEXT STEPS: ENGAGEMENT AND OUTREACH

Stakeholder Outreach Plans
Prioritized | Coordinated | Strategic | Tailored Messaging | Phased

Program Brand
Identity | Message | Broadcast

Outreach
Website | Signage | Forums/Presentations | Demonstration Sites | Multimedia | Polling

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QUESTIONS?

Clean Water Services