

# Clark County Clean Water Commission

*Joint Meeting of CWC & Vancouver Urban Forestry Commission*

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**Commissioners:** Ted Gathe, Chair & Glen DeWillie, Vice Chair

**Staff:** Devan Rostorfer, Division Manager & Alice Millward, CWC Liaison

**July 16, 2025**





# Clean Water Division

# What type of Clean Water do we work on?





# Why does Clark County have a Clean Water Division?







CLARK COUNTY  
WASHINGTON

CLEAN WATER



## How does Clark County provide Clean Water services?





# Capital Planning and Project Implementation



A white utility truck is parked on a street. The truck has various pieces of equipment mounted on its back, including a control panel with gauges and valves, and a large cylindrical tank. A worker in a yellow safety vest and hard hat is standing next to the truck, operating a green hydraulic jack. Another worker in an orange safety vest and hard hat is standing further back, holding a red bucket. The truck has a sign that reads "PUBLIC WORKS 564-397-2446 FOR OFFICIAL USE ONLY T90-2291".

# Maintenance and Operations



# Inspections, Operations, & Maintenance

- **\$321M** worth of infrastructure.
- **2,000+** public facilities.
- **50,000+** individual assets.
- **95%** inspected annually.
- **Required timeframes** to repair.



# Inspections, Operations, & Maintenance

- **600 bioretention facilities** need maintenance and repair.
- **500 stormwater ponds** need survey and maintenance.
- **500 miles of pipe** needs inspection, maintenance, and repair.
- **Approx. 100 properties** need more mowing.
- **1600 drywells** need inspection and maintenance.
- **1800+ private facilities** to inspect annually.
- **Approx. 200 facilities** over 30 years old.



# Stormwater Planning, Partnerships and Coordination







# Monitoring and Assessment





# Inspections



A photograph of two men in a workshop. The man on the left is wearing a blue shirt, blue jeans, and an orange safety vest with reflective yellow and white stripes. He is holding a yellow and black tool, possibly a screwdriver or a small saw, and is looking towards the other man. The man on the right is wearing a blue polo shirt and blue jeans, and is seen from the back. They are standing in front of a workbench. On the workbench, there is a red Milwaukee toolbox hanging on a pegboard, a black fan, and various other tools and materials. The background shows a white wall and a red curtain.

# Pollution Prevention and Source Control





# Mapping and Inventory





# Education and Outreach





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# What are some Clean Water challenges?





**REGULATIONS**

**COMPLIANCE**

**RULES**

**STANDARDS**

**POLICIES**







# New Regulatory Requirements





Infrastructure is aging



A photograph of a severe winter accident at night. A red car is completely overturned, its roof and side windows submerged in a large, turbulent pool of water that has burst through a layer of ice on the road. The scene is illuminated by the red and blue emergency lights of a fire truck and other vehicles in the background. Several people, including firefighters in gear, are standing near a red octagonal stop sign and a green street sign that reads 'Washington St'. Bare trees and a residential house are visible in the background under a dark sky.

Priority = underground pipes



A photograph of three construction workers walking away from the camera on a dirt path at a construction site. The worker on the left wears a yellow hard hat and an orange safety vest. The worker in the middle wears a white hard hat and a yellow safety vest with the word "ECOLOGY" printed on the back. The worker on the right wears a blue hard hat and a yellow safety vest, and is holding a set of white plans. In the background, there is a yellow excavator with "ERS" and "CAT" logos, and a yellow Deere roller. The scene is set against a backdrop of trees and a clear sky.

# Managing & planning for growth



An underwater photograph showing a large number of salmon swimming in a river. The fish are seen from below, moving over a bed of large, smooth, light-colored rocks. The water is clear, and the background shows more rocks and some green moss on the riverbank. A dark green rectangular box with white text is overlaid in the center of the image.

# Salmon Recovery needs increasing



An aerial photograph showing a significant flood event. A central road with double yellow lines runs vertically through the middle of the frame. To the left of the road, a large area of land is completely submerged in murky, brown floodwater, with some patches of dry, yellowish-brown vegetation visible. To the right of the road, there are several buildings, including a large commercial building with a red roof and a smaller house with a green roof. A parking lot with several cars is visible near the top of the road. The overall scene depicts the impact of rising sea levels or heavy rainfall on a coastal or low-lying area.

Climate is Changing





# Need for Lake Management





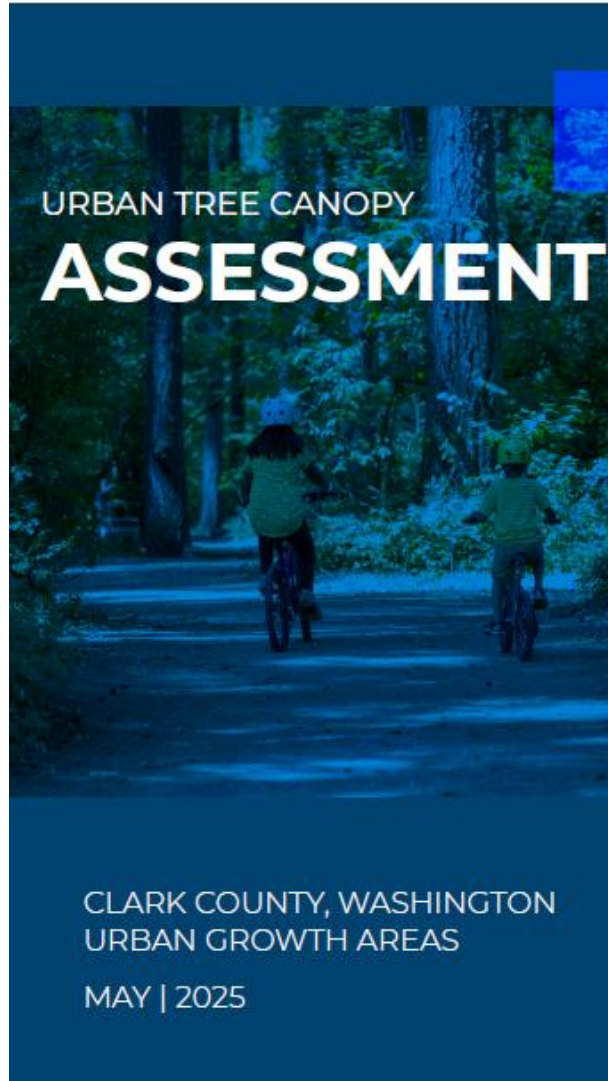
CLARK COUNTY  
WASHINGTON

CLEAN WATER

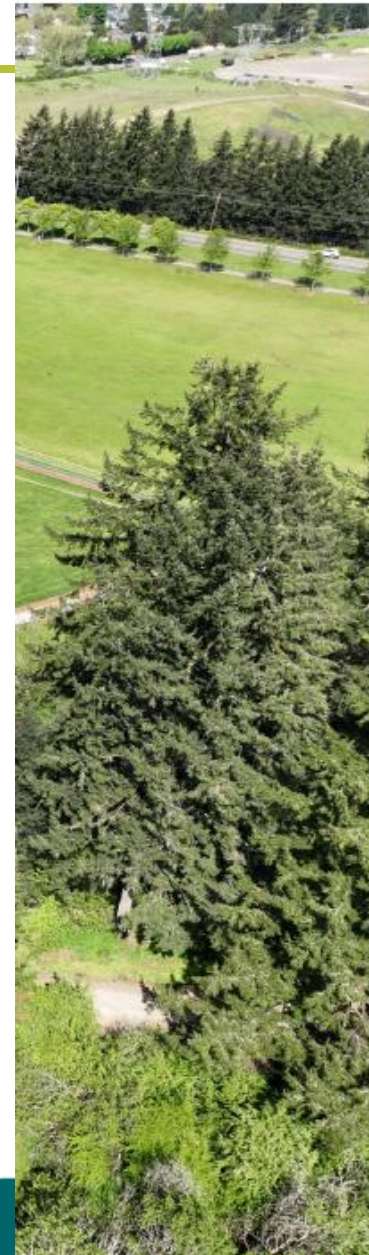


# Clark County's Urban Tree Canopy Assessment





Funding for this project was provided through an Urban & Community Forestry Grant to the Clark Conservation District, in cooperation with Clark County Public Works and the Washington Department of Natural Resources.



## CLARK COUNTY URBAN GROWTH AREAS

# URBAN TREE CANOPY ASSESSMENT

There are priceless benefits that trees provide across the urban landscape - cooling shade, cleansing our water and air, and moderating the impacts of extreme weather. On a human level, trees give us an immediate connection to the natural world as we note the changing seasons, smile at the return of our avian friends and feel a sense of hope for the future.

- SUE MARSHALL, CLARK COUNTY COUNCILOR



### PREPARED BY

PlanIT Geo, Inc., Arvada, Colorado

### PREPARED FOR

Clark Conservation District and Clark County Public Works

### COMPLETED

May 2025



# ASSESSMENT

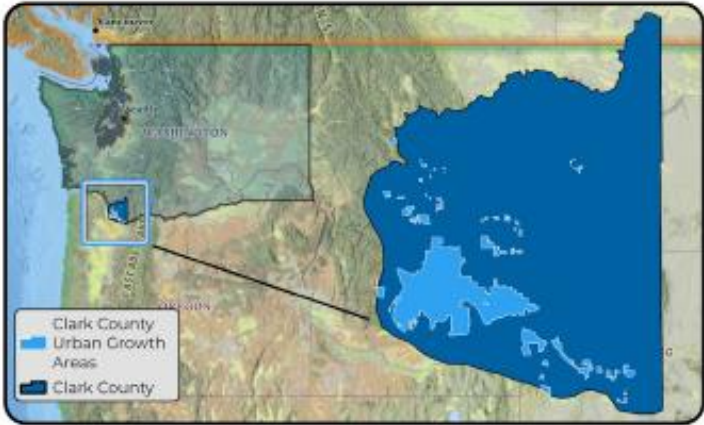
# INTRODUCTION

## STUDY AREA

The study area includes the eight (8) unincorporated urban growth areas (UGAs) of Vancouver, Camas, Battle Ground, Washougal, Ridgefield, La Center, Yacolt, and Woodland as of May 2025. These unincorporated UGAs are managed by Clark County until they are annexed by the cities. Urban growth areas are zones in Clark County's Comprehensive Plan where denser development and infrastructure can be built over the next 20 years to support population growth. Land outside the UGAs is mostly rural, with larger lots, more open space, farms, and natural areas like forests.

This assessment summarizes the status of urban tree canopy within Clark County UGAs using multiple assessment boundaries including:

1. Watersheds
2. Stream buffers
3. Public and private land ownership
4. Municipal jurisdictions
5. Zoning classifications
6. Census Blocks
7. Census Block Groups



Completion of this assessment enables Clark County stakeholders to develop new programs and priorities for protecting and expanding the urban forest. The key objectives of this Urban Tree Canopy Assessment include:

- ▶ Quantify the amount and location of tree canopy and other land cover types.
- ▶ Analyze the change in canopy cover from 2011 to 2023.
- ▶ Describe the ecosystem services tree canopy provides to the community, the environment, and the local economy.
- ▶ Identify areas where tree canopy can be expanded through an assessment of possible planting areas.
- ▶ Determine priority areas for tree preservation and planting initiatives based on socioeconomic, environmental, and climate-related factors.
- ▶ Provide data to inform future planning and to establish canopy coverage goals.



Public parks with available open space provide opportunities to plant more trees to increase urban canopy. This also helps reduce maintenance costs by decreasing lawn areas that need regular mowing.

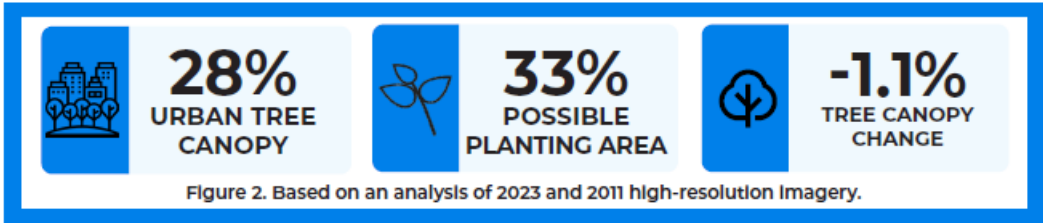


Table 2. Tree canopy potential (existing, possible, and unsuitable) in the urban growth areas of Clark County (percentages based on the land area excluding water bodies).

UTC Potential Class	Acres	% of Total
Existing Canopy	9,866	28%
Possible Planting Area	11,741	33%
Total Unsuitable (Impervious, Soil, Wetlands, and Vegetation)	14,103	39%



# ECOSYSTEM --- BENEFITS

## THE VALUE OF THE URBAN FOREST IN THE URBAN GROWTH AREA OF CLARK COUNTY



### TOTAL ANNUAL VALUE

\$6,987,027.88



### STORMWATER RUNOFF (AVOIDED RUNOFF)

301.53 million gallons/yr  
\$2,694,222.13/yr

### CARBON SEQUESTRATION



10,106.12 tons/yr  
\$1,723,595.56/yr



### AIR QUALITY TOTAL

505,227.64 total lbs.  
\$2,569,210.19

### CARBON STORAGE



440,432.21 tons  
\$75,116,030.98





## ■ MINNEHAHA NEIGHBORHOOD

- Planted and distributed over 850 trees across the Minnehaha neighborhood.
- We held three volunteer planting events.
- Our free yard tree giveaway provided over 200 free trees to residents in Clark County.
- Planted 30 trees in yard and right-of-way.
- Completed first Urban Tree Canopy Assessment for Clark County's Urban Growth Areas!



Figure 21. The Minnehaha neighborhood encompasses 1,092 acres in the southwestern part of the County urban growth areas.



**The Minnehaha area had a 23% tree canopy cover, which was 5% below the UGA-wide average of 28%.**

**This area also had above-average impervious cover (40%) and experienced a loss of canopy cover over the 12-year study period.**



# CONCLUSIONS AND RECOMMENDATIONS

## 1. Implement tree canopy requirements in the County's Municipal Stormwater Permit

By no later than December 2026, the County must use available, existing data to map tree canopy in support of stormwater management on Permittee-owned or operated properties. Additionally, by December 2028, Clark County must adopt and implement tree canopy goals and policies to enhance stormwater management. This includes establishing objectives for how the existing or future tree canopy can contribute to stormwater management and improve water quality in receiving waters. It also includes efforts to maintain the existing mature tree canopy, focusing on overburdened communities. Prioritizing efforts to increase tree canopy in these communities is a key aspect of the County's Stormwater Permit.

## 2. Integrate Tree Canopy Goals into Regional Planning

As parts of Clark County continue to grow and urbanize, it is essential to preserve the existing tree canopy. Since it can take decades for newly planted trees to mature and have a significant impact, protecting the current canopy is the best way to maintain stable coverage until future increases can be achieved. Use the data from this assessment to establish both short-term and long-term goals:

- ▶ Set annual tree planting targets.
- ▶ Implement regularly scheduled maintenance programs.
- ▶ Increase tree diversity by planting a wider variety of large stature tree species.
- ▶ Establish specific canopy coverage goals for designated target years.
- ▶ Review long-term land-use and development plans to include policies that protect mature trees and create canopy ordinances for new developments.

## 3. Once finalized and adopted, implement tree-related climate goals and associated policies outlined in Clark County's Comprehensive Climate Element as required by Washington State's Growth Management Act. Draft policy concepts include, but are not limited to:

- ▶ Protect and plant more trees in both rural and urban areas, with targeted efforts to equitably increase tree canopy cover and provide ongoing maintenance support.
- ▶ Increase, enhance, and protect county-owned plantings and greenspaces, while identifying, preserving, and rewilding critical areas such as riparian zones, wetlands, prairies, forests, and open spaces.
- ▶ Develop and implement a comprehensive plan for trees and greenspaces that advances climate resilience, ecosystem health, and equity, in alignment with relevant laws and best practices.
- ▶ Expand funding, policies, and community partnerships for tree planting, invasive species removal, restoration, and sustainable forestry, prioritizing native and climate-resilient species.
- ▶ Promote inclusive education, engagement, and volunteer opportunities around tree stewardship and natural areas, and advocate for long-term protection of forests and critical habitats.

## 4. Use this Urban Tree Canopy Assessment as a platform and framework to establish future Urban Forestry Programs in Clark County

This includes the completion of an official Urban Forestry Management Plan to serve as the backbone for all urban forestry efforts. It encompasses initiatives to continue mapping and inventorying tree canopy, complete assessments and planning, and develop programs. It also involves building resources for private landowners and working lands, as well as establishing technical and financial assistance and incentives for forest landowners. Additionally, identifying essential funding for long-term maintenance and stewardship is crucial to sustaining urban tree canopy programs. Efforts to build regulatory backstops are also critical in ensuring that forest practice requirements are met, that critical riparian and shoreline areas are protected, and that impacts on tree canopy are mitigated. The protection of essential riparian and shoreline areas remains crucial, along with creating new requirements to mitigate impacts on the tree canopy. Furthermore, enhancing staff capacity, expertise, and resources to develop new tree canopy programs is vital, as are efforts to foster new partnerships with local organizations dedicated to protecting and restoring the urban tree canopy in Clark County.

## 5. Establish partners and resources to engage the Community and Partner with Private Landowners

Since much of Clark County's plantable space is on private land, community involvement is key to increasing canopy and mitigating canopy losses. Develop outreach programs to engage residents, schools, and local businesses in tree planting and care. Initiatives like Arbor Day celebrations, workshops, and volunteer planting events can educate the public about the benefits of trees and encourage participation. Pairing these programs with tree giveaways, private property planting initiatives, and tree maintenance events to boost canopy growth on private land. Building financial and technical assistance resources to implement urban tree canopy programs on private property is an essential first step.

## 6. Expand and Protect Canopy in Underserved Areas

Direct tree-planting efforts toward neighborhoods identified in the planting prioritization analysis, especially those with high levels of impervious surfaces, low canopy cover, or significant concentrations of residents dealing with socioeconomic inequity. Planting new trees and/or preserving existing mature canopies in these areas can help reduce urban heat islands, lower energy costs, and create calming spaces that alleviate stress and promote community engagement. By prioritizing these underserved areas, we can maximize the impact of forest management resources and ensure a fair distribution of green infrastructure.

## 7. Promote a Resilient Urban Forest

The findings of this assessment offer valuable information that can help develop a more resilient urban forest in Clark County UGAs. This data can support state, county, and local budget requests, as well as grant applications aimed at enhancing the county's resilience. Urban forests play a crucial role in addressing regional challenges by managing stormwater to reduce the burden on infrastructure during heavy rains and improving water quality by filtering pollutants before they reach rivers in Clark County. Additionally, they provide shade that helps lower urban heat island effects and protect buildings and residences by acting as a buffer against high winds. Together, these efforts contribute to creating a more sustainable and livable community for both residents and visitors.

## 8. Monitor Progress and Adapt Strategies

To track progress, revise strategies, and stay informed about areas of canopy growth and loss, it is essential to conduct recurring canopy assessments using updated imagery every 2-3 years using imagery data, such as the NAIP Imagery used in this assessment. The 2025 NAIP Imagery data will be available sometime in 2026. Continuous monitoring will ensure that management efforts remain effective, aligned with Clark County Conservation District's goals, and maintain a thriving, resilient urban forest.





# Clark County

## Clean Water Commission

The Clean Water Commission is a nine-member volunteer citizen board serving in an advisory capacity to the Clark County Council on issues related to the Clean Water Division. The Clean Water Commission works with staff to review the program, implement stormwater treatment improvements, support water quality monitoring efforts, and enhance public education and outreach.





# Mission, Vision and Values

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## Mission

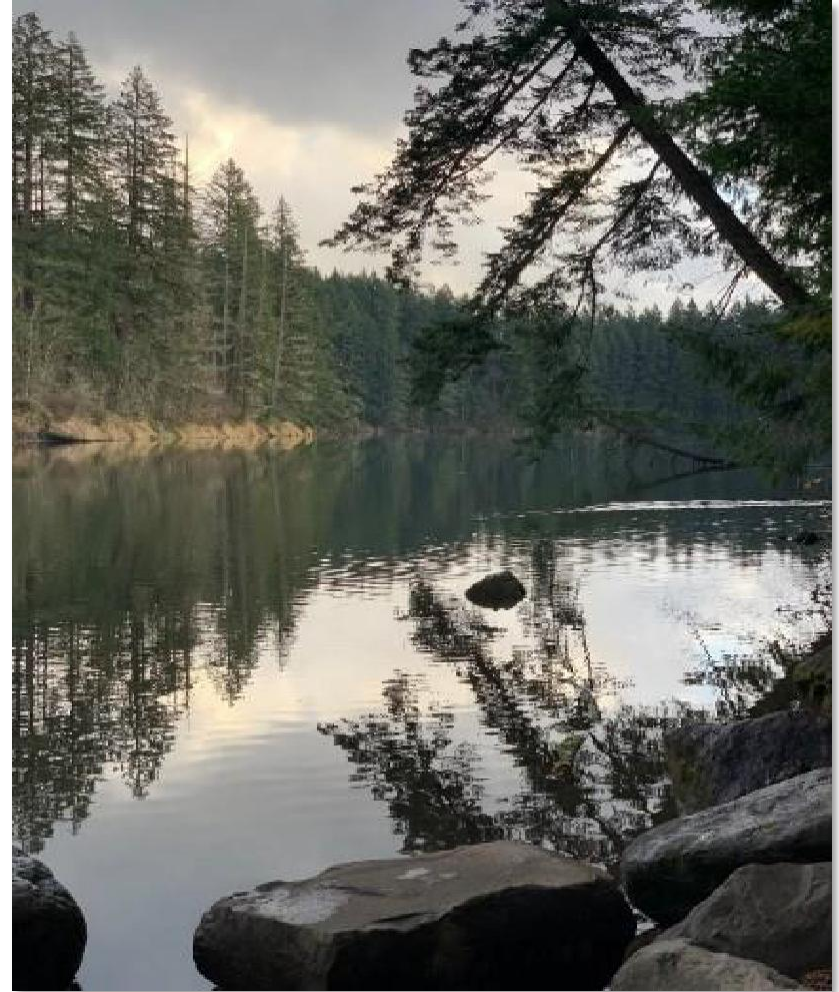
The Clean Water Commission's mission is to collaborate with Clark County residents, government entities, businesses, and non-profit organizations to enhance water quality, improve flow, and protect the ecological integrity of our watersheds.

## Vision

A Clark County with self-sustaining and healthy watersheds that benefit the county's human communities, wildlife, and environment.

## Core Values

- Stewardship
- Cooperation
- Transparency





## Commissioners

Name	Term Expires	Watershed
Glen DeWillie	12/31/27	Lacamas Watershed
Tracy Ceravolo	12/31/25	Gee Creek Watershed
Alejandra Cortes	12/31/26	Salmon Creek Watershed
Ruby Salakory	12/31/26	Vancouver Lake / Lake River Watershed
Vacant	12/31/27	TBD Watershed
John Chatel	12/31/27	West Slope Watershed
Alison Schweitzer	12/31/27	West Slope Watershed
Emily Hess	12/31/25	Lake Shore Watershed
Ted Gathe	12/31/25	Burnt Bridge Creek





# 2024 Highlights from Annual Report



## Clean Water Commission ANNUAL REPORT

Clean Water Division  
2024 REPORT  
Approved April 2, 2025





# CWC Accomplishments – Active in Community

- Vancouver Lake Technical Advisory Group
- Lower Columbia Estuary Partnership
- Camas Earth Day Society
- Stream Team
- Clark Conservation District
- Backyard Habitat
- Master Gardener's Program
- Friends of Vancouver Lake
- Lacamas Watershed Council
- Vancouver Sailing Club
- Vancouver Lake Rowing Club
- Women in Environment
- Mount St. Helens Institute
- Community Roots Collaborative

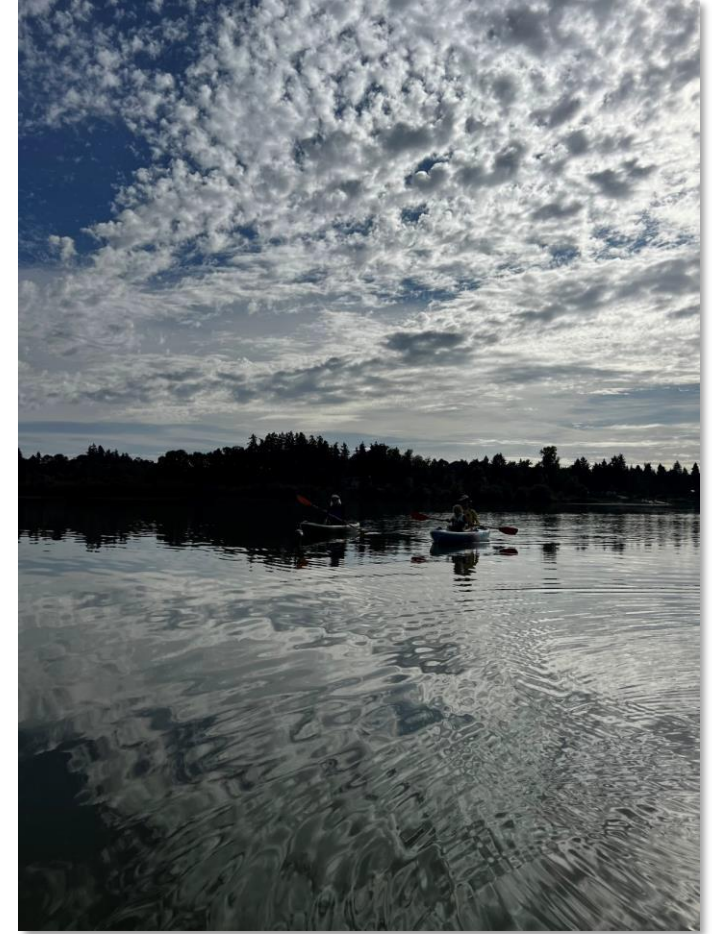




# 2024 CWC Accomplishments

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- Held 8 open hybrid public meetings.
- All members OPMA certified.
- Recruitment to better reflect county population.
- Discussed need for CWC county code update.
- Build partnerships and community involvement.
- Multiple letters of support for grants and rate study.





# 2024 CWC Accomplishments

- Supported Clean Water Rate Study.
- July Clean Water bus tour with Council.
- Successful Vancouver Lake Symposium with over 100 leaders.
- Annual report presented to Council.





# 2024 Bus Tour - Highlights





# 2024 Bus Tour – Specialized Equipment





# 2024 Bus Tour – Stream Monitoring

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# 2024 Bus Tour – Vault Inspection & Filter Replacement





# 2024 Bus Tour Participants

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# Bus Tour highlighting Clean Water Division

<https://www.youtube.com/watch?v=TDDjxUBiEAo>



## Protecting waterways with Clark County Clean Water



ClarkCoWa

2.9K subscribers

Subscribe

120 views Sep 13, 2024

Learn about the services Clark County Clean Water provides to protect and restore water quality by watching this recap of a bus tour given to county leaders.





# 2024 Accomplishments – Vancouver Lake Symposium

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- Focused on understanding complex challenges facing the lake and its diverse user groups.
- Over 100 participants.
- Local, county, state, federal, and tribal policy leaders attended.
- Presentations on history, science, stakeholders, issues.



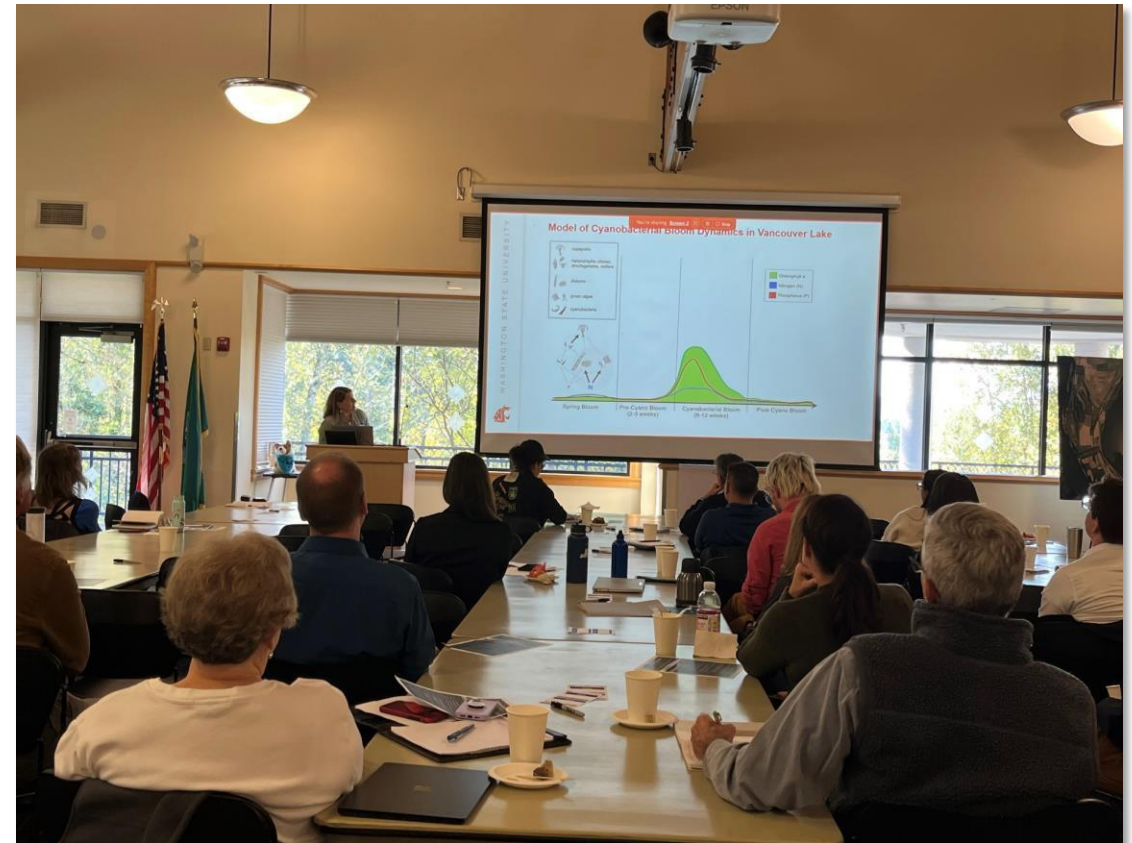
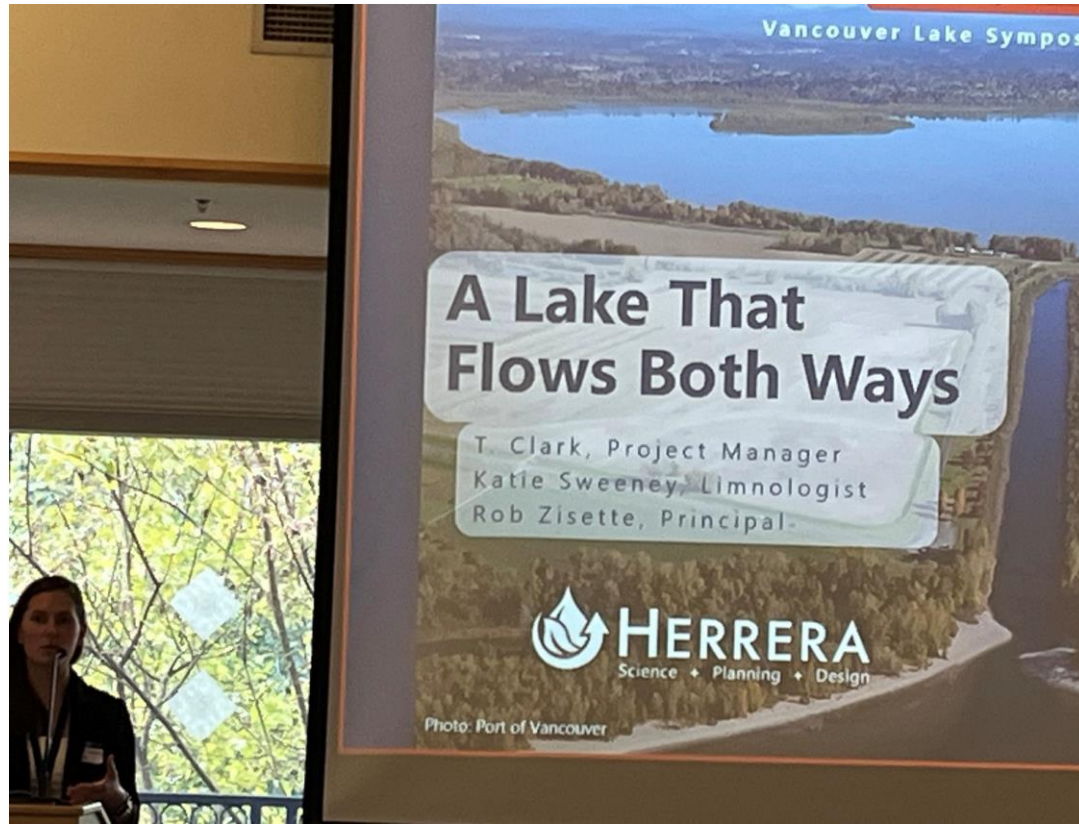


# 2024 Accomplishments – Vancouver Lake Symposium



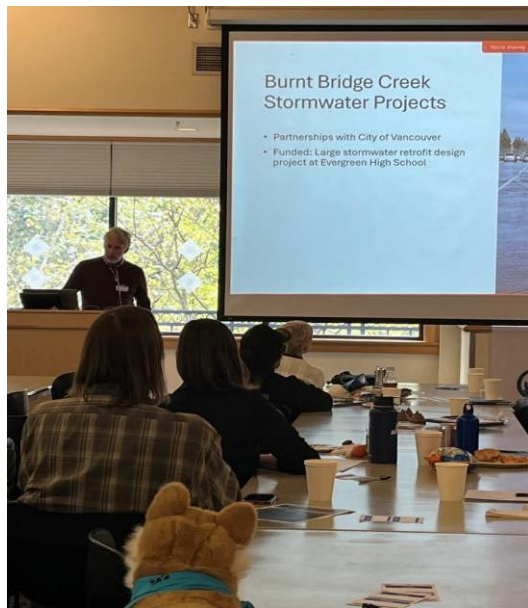


# 2024 Accomplishments – Vancouver Lake Symposium



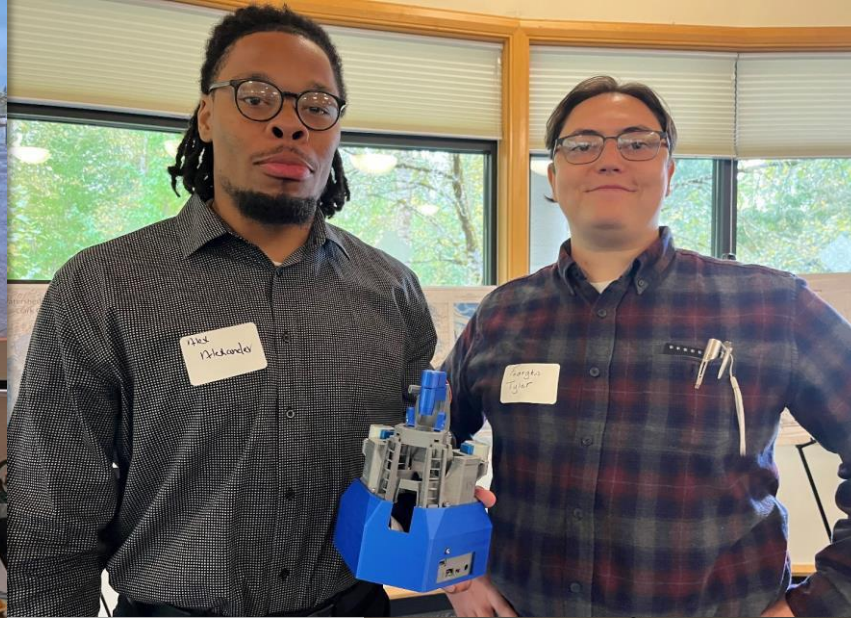


# 2024 Accomplishments – Vancouver Lake Symposium





# 2024 Accomplishments – Vancouver Lake Symposium





# 2024 Accomplishments – Vancouver Lake Symposium





# 2025 Commission Priorities

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1. Rate study implementation support.
2. Nonpoint Source Pollution Symposium on Oct. 28.
3. Stormwater Management Action Plan (SMAP).
4. Implementing climate change element in Comp Plan.
5. Community engagement and inclusion.
6. Collaboration with other boards and commissions.





# Save the Date! Nonpoint Source Pollution Symposium

**October 28, 2025**

**9:00 a.m. – 4:00 p.m.**

**Clark County Event Center**

**17402 NE Delfel Rd, Ridgefield, WA 98642**

*Hosted by the Clark County Clean Water Commission*



# Thank you!

## Clark County Clean Water Commission

Clark County Public Service Center

1300 Franklin Street • PO Box 5000

Vancouver, WA 98666-5000

