

# Utility Update

Port of Olympia

July 14, 2025

Matt Kennelly, P.E.  
*Executive Director*



**LOTT**™  
*Clean Water*  
**Alliance**



1. Our role as a regional utility

2. Our performance

3. Community connections

4. Our planning for the future



**LOTT**™  
*Clean Water*  
**Alliance**



# LOTT Clean Water Alliance

## Collaboration of four local governments

- Lacey
- Olympia
- Tumwater
- Thurston County

## Board of Directors

- One elected official from each jurisdiction
- Meet monthly to oversee LOTT business

Mission: Protect public health and the environment by cleaning water and restoring resources for our community.



*Dani Madrone, Olympia*



*Tye Menser, Thurston County*



*Leatta Dahlhoff, Tumwater*

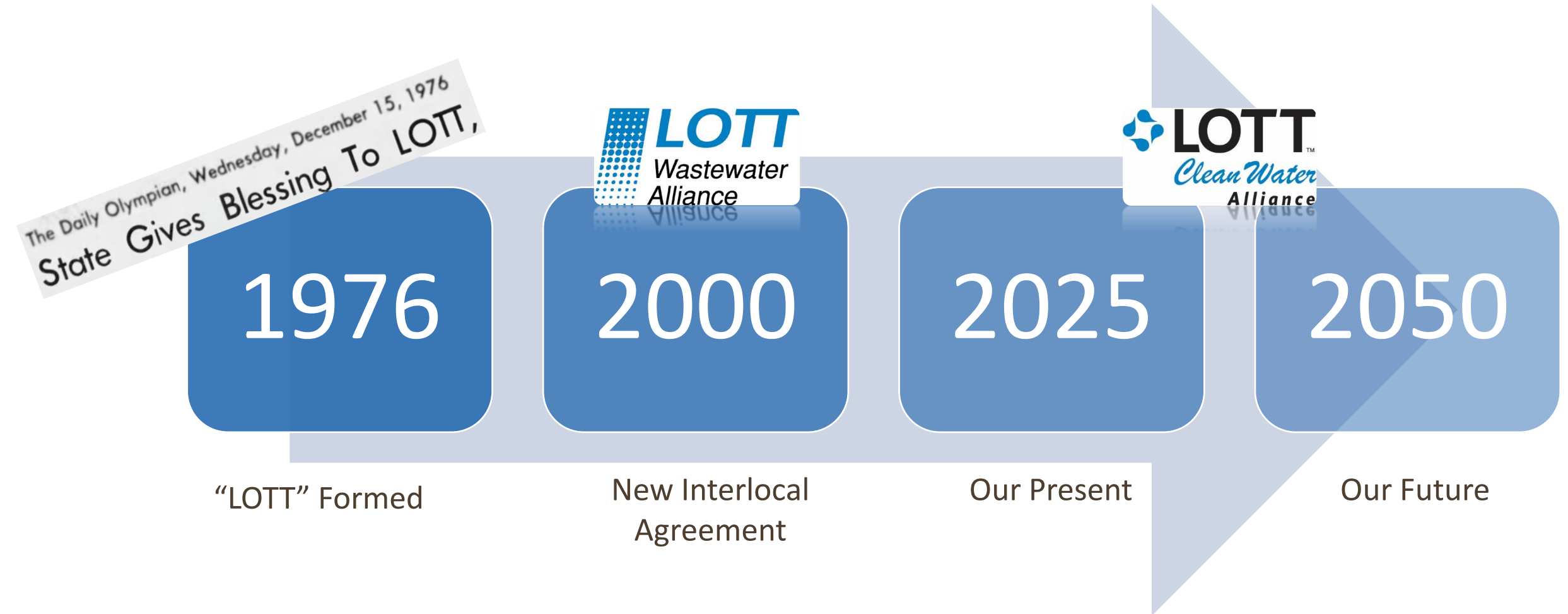


*Carolyn Cox, Lacey*





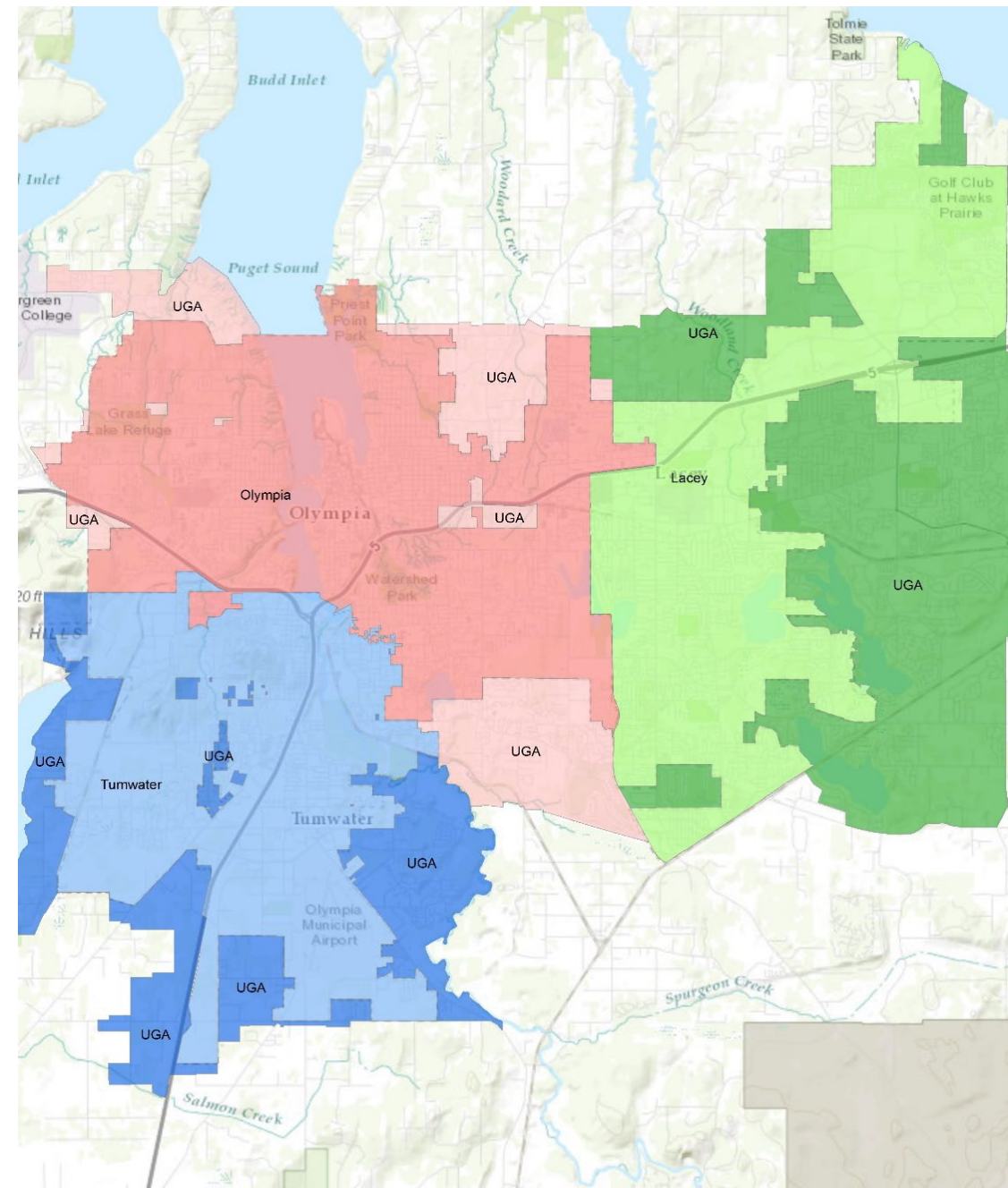
# Evolution of Service





# Service Area

- Population served ~ 140,000
- Ratepayers served through cities (some in urban growth areas)
- Cities build and maintain own collection piping





## Budd Inlet Treatment Plant

- Treats 13 million gallons per day
- Major process upgrade just completed

## Other Infrastructure

- Budd Inlet Reclaimed Water Plant
- Martin Way Reclaimed Water Plant
- Hawks Prairie Recharge Basins
- Three major pump stations
- 22 miles of sewer interceptor lines
- 11 miles of reclaimed water lines
- 1 million gallon storage tank





# LOTT is Highly Regulated

## National Pollutant Discharge Elimination System (NPDES) permit

- Issued by State Department of Ecology
- Authorized by U.S. Environmental Protection Agency

## Stringent regulatory requirements

- Discharge limits (treatment performance)
- Monitoring and reporting

## U.S. EPA requirement

- CMOM – Capacity, Management, Operations, and Maintenance

Page 1 of 66  
Permit No. WA0037061

Issuance Date: February 16, 2018  
Effective Date: April 1, 2018  
Expiration Date: March 31, 2023

**DEPARTMENT OF ECOLOGY**  
State of Washington

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**  
**WASTE DISCHARGE PERMIT NO. WA0037061**

State of Washington  
DEPARTMENT OF ECOLOGY  
Southwest Regional Office  
P.O. Box 47775  
Olympia, WA 98504-7775

In compliance with the provisions of the State of Washington Water Pollution Control Law, Chapter 90.48 Revised Code of Washington, and the State of Washington Reclaimed Water Act, Chapter 90.46 Revised Code of Washington, and The Federal Water Pollution Control Act (The Clean Water Act) Title 33 United States Code, Section 1342 et seq.


**LOTT Clean Water Alliance**  
**500 Adams Street Northeast**  
**Olympia, Washington 98501-6911**

And the Contributing Jurisdictions <sup>a</sup>

City of Lacey	City of Olympia	City of Tumwater	Thurston County
420 College St SE	PO Box 1967	555 Israel Road SW	2000 Lakeridge Dr SW
Lacey, WA 98503	Olympia, WA 98507	Tumwater, WA 98501	Olympia, WA 98502

are authorized to discharge in accordance with the Special and General Conditions that follow.

Plant Location: 500 Adams Street Northeast Olympia, WA 98501	Receiving Water: Budd Inlet/South Puget Sound
Treatment Type: Activated Sludge/Advanced Treatment and Class A Reclaimed Water	

  
Richard Doenges  
Southwest Region Manager  
Water Quality Program  
Washington State Department of Ecology

<sup>a</sup> While the LOTT Clean Water Alliance is the primary Permittee and has day-to-day responsibility for the treatment plant and all permit conditions, except as otherwise noted, the cities of Lacey, Olympia, and Tumwater and Thurston County as contributing jurisdictions collectively share responsibility for permit issues involving the treatment plant and discharge, as well as being responsible for their respective collection systems and lift stations, and the discharge of waste from their systems to the LOTT system.





## 2. Our performance







## Annual Report 2024

Protect public health and the environment by cleaning water and recovering resources for our community.



## LOTT's Performance in 2024

Each year, LOTT compares our performance with 10 key performance objectives and 20 priority activities identified in the Strategic Plan. The plan spanned the 2019-2024 planning period and can be found in full at [www.lottcleanwater.org](http://www.lottcleanwater.org). For 2024, LOTT met nearly all performance objectives and concluded this planning cycle.

Objective  
1

### Achieve permit compliance

LOTT met 100% of all the water quality permit requirements for wastewater treatment at the Budd Inlet Treatment Plant. These requirements include strict discharge limits April through October for nutrients (nitrogen) and biochemical oxygen demand.

LOTT is proud to report that there were no violations of these water quality permit requirements, which are measured two ways – average concentrations and total pounds discharged to Budd Inlet. LOTT also met all water quality permit requirements related to Class A reclaimed water production at the Budd Inlet Reclaimed Water Plant and the Martin Way Reclaimed Water Plant.

Most other treatment plants that discharge to Puget Sound do not have strict discharge limits for nutrients. For LOTT, the permit specifies a discharge loading limit of 338,000 pounds of total inorganic nitrogen annually. In 2024, we measured a total of 145,448 pounds – only 43% of the annual load limit.

LOTT was recognized with a Silver Peak Performance award for the Martin Way Reclaimed Water Plant and Gold Peak Performance awards for the Budd Inlet Treatment Plant and Budd Inlet Reclaimed Water Plant from the National Association of Clean Water Agencies.



### Permit Compliance

Budd Inlet Treatment Plant		
Type	Discharge Limits*	Performance
Biochemical Oxygen Demand (BOD)	7 mg/L 671 lbs/day	3.91 mg/L 291 lbs/day
Total Suspended Solids (TSS)	30 mg/L 5,265 lbs/day	6.62 mg/L 486 lbs/day
Total Inorganic Nitrogen (TIN)	3 mg/L 288 lbs/day	2.10 mg/L 158 lbs/day
Fecal Coliform Bacteria	200/100 mL	6.75/100 mL

\* Average monthly discharge limits for summer season June-September

Budd Inlet Reclaimed Water Plant		
Type	Discharge Limits	Performance
Total Nitrate	10 mg/L	3.77 mg/L
Turbidity	2.5 NTU	0.36-0.88 NTU
Total Coliform Bacteria	< 23 MPN/100 mL	0 MPN/100 mL

Martin Way Reclaimed Water Plant		
Type	Discharge Limits	Performance
Biochemical Oxygen Demand	20 mg/L	2 mg/L
Total Suspended Solids	30 mg/L	0.09 mg/L
Total Nitrogen	10 mg/L	2.26 mg/L
Turbidity	0.2-0.5 NTU	0.025-0.19 NTU
Total Coliform Bacteria	< 23 MPN/100 mL	< 0 MPN/100 mL

Abbreviation	Unit
mg/L	milligrams per liter
lbs/day	pounds per day
mL	milliliter
NTU	nephelometric turbidity unit
MPN	most probable number





## Your Wastewater Utility

The LOTT Clean Water Alliance is a non-profit corporation responsible for wastewater treatment in the urban areas of north Thurston County, Washington. L-O-T-T stands for the four government partners – the cities of Lacey, Olympia and Tumwater, and Thurston County – that formed and govern the regional utility.

In 2024, LOTT met nearly all our performance objectives for the year. Our dedicated staff worked hard to treat and clean the water you use every day and to plan for the future, ensuring we continue to protect water quality and public health for years to come.

91 staff members

3 treatment plants

23,275 laboratory tests

113 active contracts

139,848 people served

5,593 work orders

4.46 billion gallons of wastewater treated

157,826 therms recovered (biogas)

163.25 million gallons of reclaimed water produced

12,421 education program participants

### LOTT's Mission

To protect public health and the environment by cleaning water and recovering resources for our community.



500 Adams Street NE, Olympia, WA 98501 • [www.lottcleanwater.org](http://www.lottcleanwater.org)





# Continue to have zero instances where pollution discharge limits were exceeded.





# Highest Level of Treatment on Puget Sound



57 Other Treatment Facilities

## Wastewater Rate Comparisons

	2024 Rate	2023 Rate	Percent Change	Flat or Volume
City of Shelton	\$135.89	\$130.02	4.5%	V
City of Seattle	\$128.10	\$123.41	3.8%	V
City of Tenino	\$125.66	\$125.66	0.0%	F
Thurston County*	\$120.31	\$119.71	0.5%	F
City of Bonney Lake	\$113.53	\$129.01	-12.0%	V
City of Bellevue	\$110.90	\$103.70	6.9%	V
City of Chehalis (in city limits)	\$98.50	\$98.50	0.0%	V
City of Centralia (in city limits)	\$91.85	\$89.08	3.1%	V
City of Yelm	\$89.27	\$89.27	0.0%	F
City of Renton	\$88.78	\$84.80	4.7%	F
City of Everett	\$87.53	\$87.53	0.0%	F
Average 2024 Rate: \$87.38				
City of Auburn	\$85.15	\$80.05	6.4%	F
City of Sumner	\$84.46	\$80.83	4.5%	V
City of Snoqualmie	\$83.76	\$82.16	1.9%	F
City of Puyallup	\$77.62	\$73.38	5.8%	V
City of Bremerton (in city limits)	\$77.57	\$74.96	3.5%	V
<b>City of Lacey</b>	<b>\$76.39</b>	<b>\$72.43</b>	<b>5.5%</b>	<b>F</b>
City of Longview (in city limits)	\$75.28	\$75.28	0.0%	V
City of Tacoma	\$74.85	\$69.64	7.5%	V
<b>City of Olympia</b>	<b>\$72.95</b>	<b>\$70.59</b>	<b>3.3%</b>	<b>F</b>
City of Aberdeen	\$72.00	\$66.00	9.1%	F
City of Kelso	\$70.42	\$68.37	3.0%	F
<b>City of Tumwater</b>	<b>\$69.48</b>	<b>\$66.64</b>	<b>4.3%</b>	<b>F</b>
City of Orting	\$69.41	\$64.87	7.0%	F
City of Mount Vernon	\$63.03	\$60.23	4.6%	V
Pierce County Sewer	\$61.57	\$59.06	4.2%	F
Lakehaven Sewer District	\$60.60	\$52.24	16.0%	V
City of Bellingham (in city limits)	\$56.43	\$53.54	5.4%	F
City of Edmonds	\$53.06	\$53.06	0.0%	F
City of Vancouver	\$48.44	\$45.71	6.0%	V

Below the average



# Major Project Awards for our Plant Upgrade



Gold Award



National Environmental Achievement Award



WA Project of the Year



National Excellence in Engineering Grand Award







## Reuse of Biogas







## Reuse of Biosolids





# Water Reuse





### 3. Community connections





# Creating Community Connections

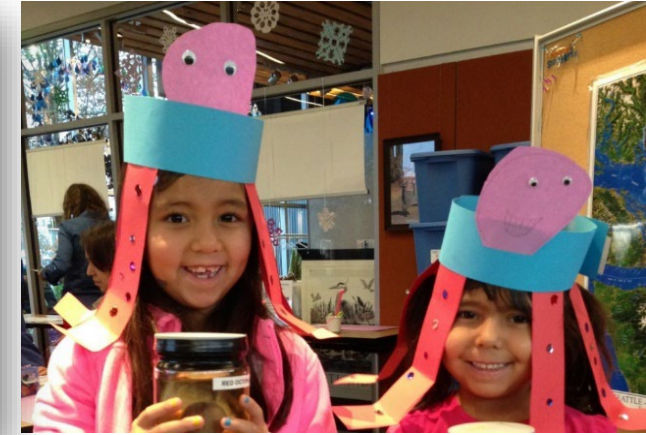




# Educating

- WET Science Center
- School field trips w/bus support
- New summer high school course
- Treatment plant tours

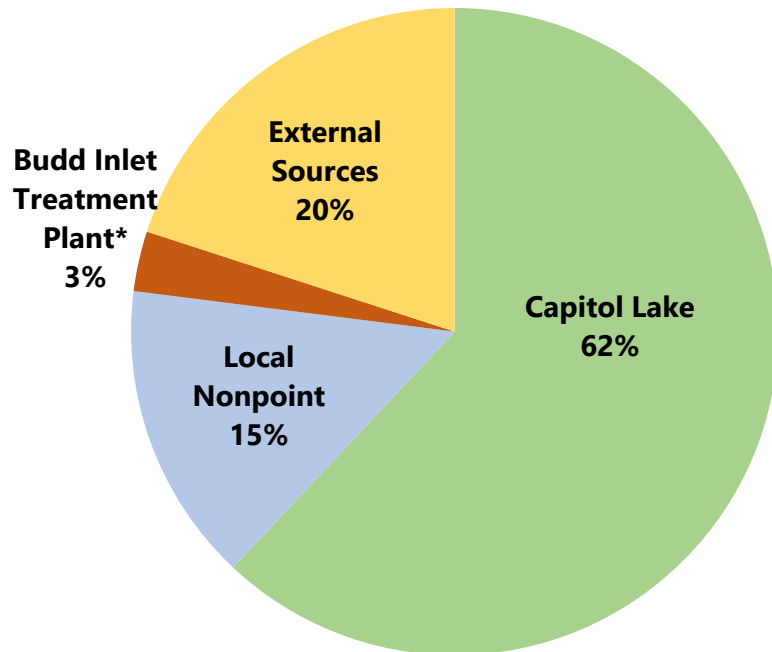
- Reached nearly 12,000 people last year
- ~ 3,000 students served
  - North Thurston School District
  - Olympia School District
  - Tumwater School District





# Community Approach to Water Quality Improvements

Sources of Oxygen Depletion  
in Budd Inlet



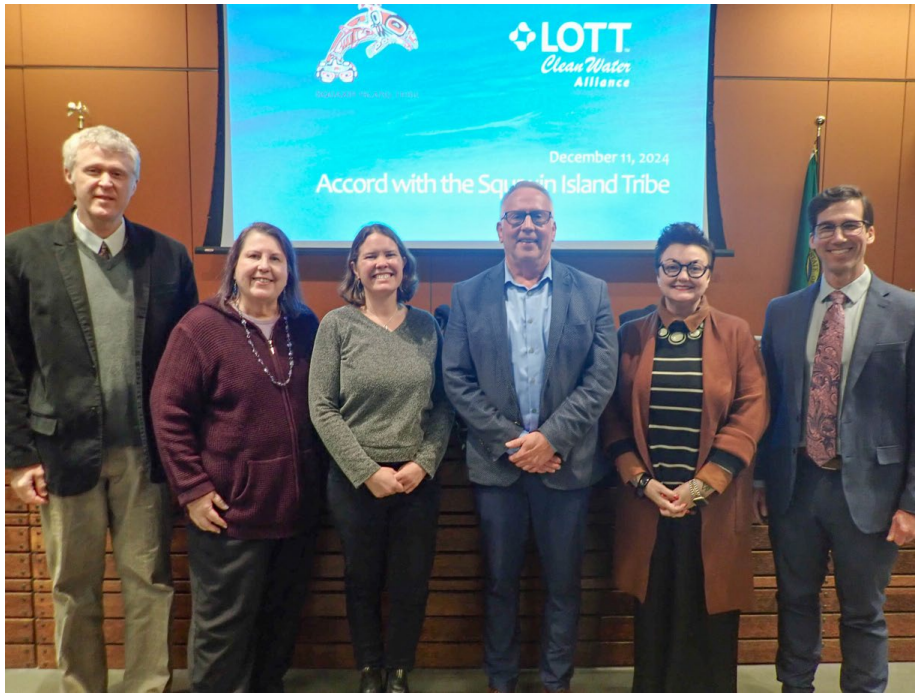
- High level of treatment at Budd Inlet Treatment Plant
- Support for further water quality regulations
- Maintenance of a restored Deschutes Estuary
- Incentivize septic to sewer conversion
- Reduce water quality impacts from unhoused population
  - Affordable housing connection fee rebates
  - Hygiene trailers/portable toilets

\*"Local WWTPs" per Ecology





# Squaxin Island Tribe Partnership



New Accord signed December  
2024

# Recent Award



**LOTT honored for  
'watershed collaboration' in  
receiving national award**

Environmental Achievement Award  
(National Association of Clean Water Agencies)





A close-up photograph showing a black plastic pipe being installed into a concrete wall. The pipe has a yellow-green ring near its end. Above the pipe, there is a green cylindrical object, possibly a vent or filter, surrounded by some brown material. The concrete wall is light grey and shows some signs of wear and cracking.

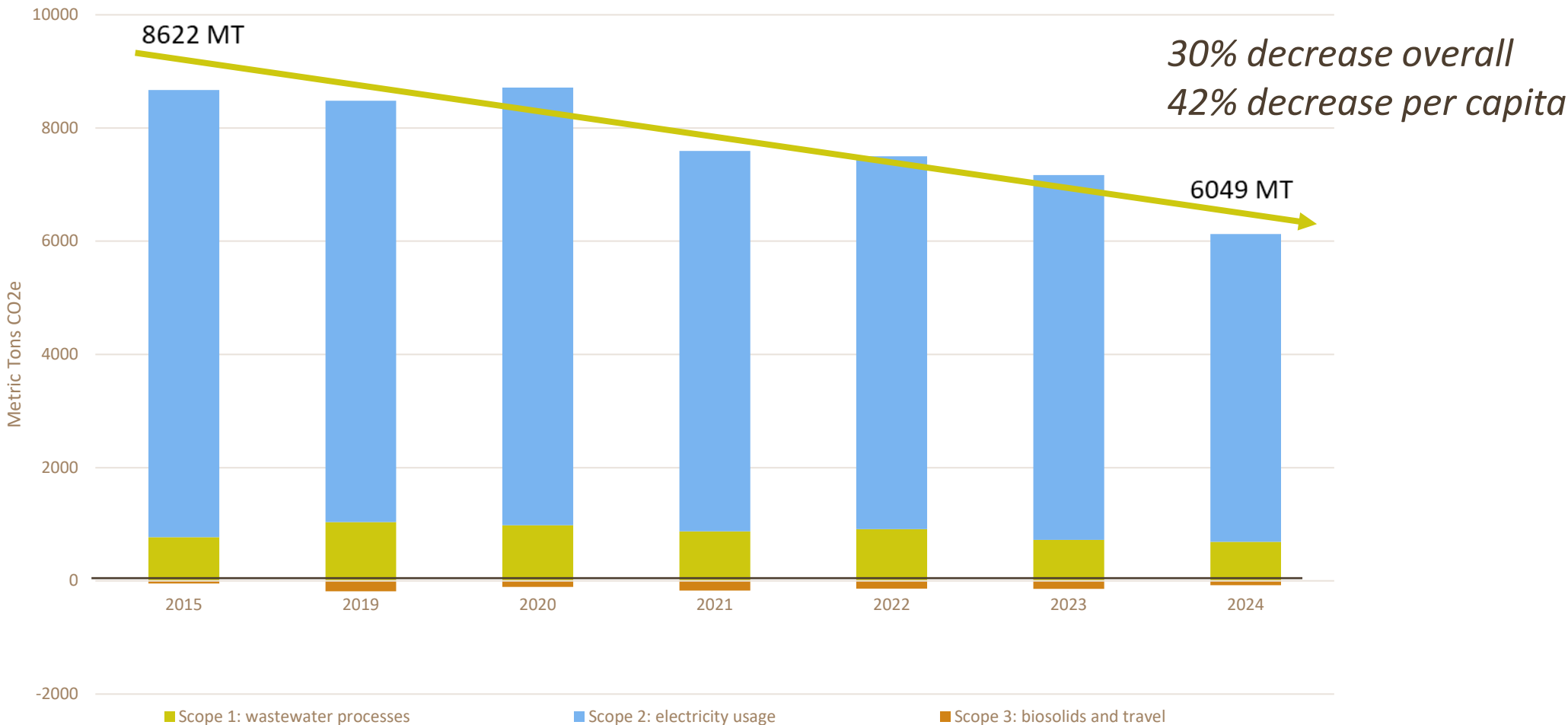
## Septic to Sewer Conversion Rebates

A photograph of a modern, multi-story apartment building. The building features a mix of white, green, and brown panels, with large windows. The ground floor is dark grey. There are small trees in front of the building, and a paved area. The sky is blue with some clouds.

## Affordable Housing Connection Fee Rebates



# Aligning with Regional Climate Goals





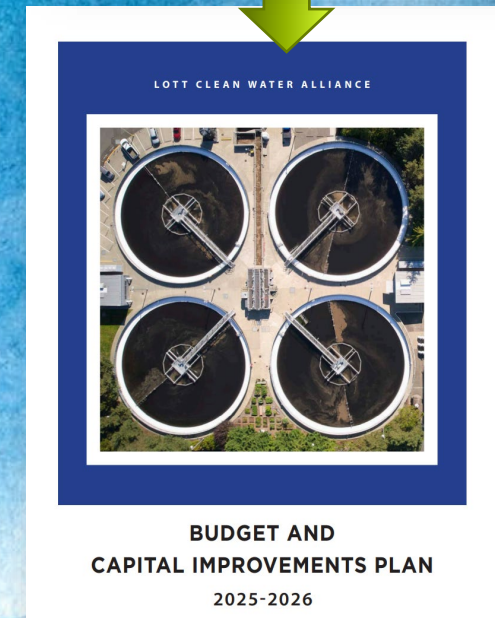
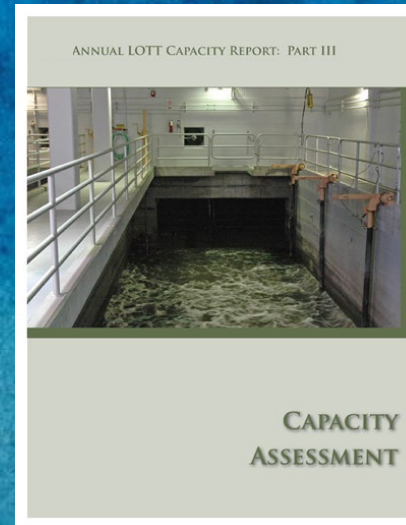
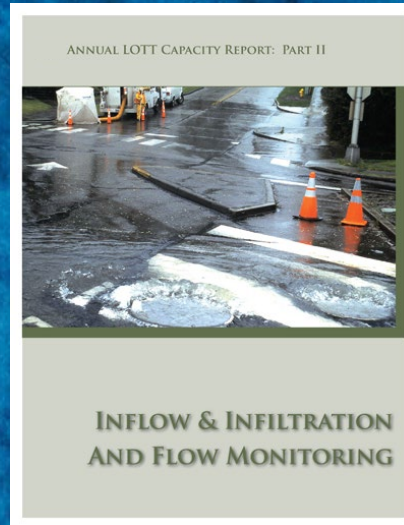
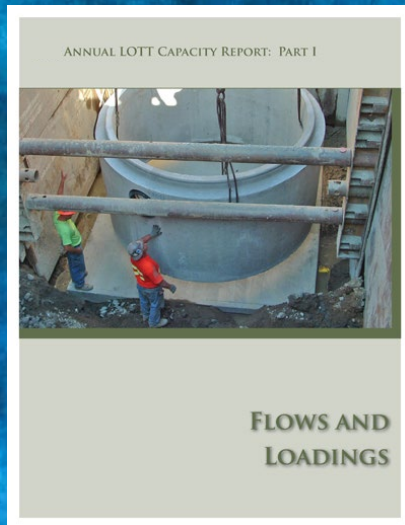
## 4. Our planning for the future





# How We Plan for Growth

Detailed annual planning in response to growth of partner cities





# Consistent Capital Project Efforts

e.g. Digesters Upgrade: \$34 million (2024-2028)





# Future Technologies Pilot Team





# Water Reuse





# Drinkable Water Demonstration Project

- First in Washington State
- Unique coalition
- LOTT's future capacity tied to re-using water



## Class A+ Reclaimed Water Demonstration Project

Unlocking Options for the Future of Water Recycling

### Project Vision

*First-ever Class A+ demonstration project in the state*

LOTT Clean Water Alliance is excited to demonstrate how we can safely clean and recycle used water to drinking water quality. This is referred to as Class A+ reclaimed water - the highest quality of recycled water as designated by the Washington State Departments of Ecology and Health.

This demonstration project will add treatment steps for advanced purification of water treated at the Budd Inlet Treatment Plant. We plan to use and compare two alternative multi-step treatment approaches to maximize learning opportunities for our staff, industry peers, state regulators, and the broader community. The finished water will be drinking water quality. At public outreach events, the community will have the opportunity to learn about Class A+ reclaimed water and to sample it as beer, root beer, or other consumable products.

Why is this project important now? LOTT is continuously innovating and exploring new treatment technologies to best meet our community's evolving needs. Demonstrating how to recycle water to drinking water quality is the next step in innovation.

Our partner jurisdictions of Lacey, Olympia, Tumwater, and Thurston County each manage drinking water utilities. While they have adequate water supplies now, they see a point in the future when that will likely change. Exploring the possibilities of Class A+ reclaimed water and fostering excitement now will encourage community conversations about long-term management options, well ahead of any future water crisis.

### Project Goals

- 1 Demonstrate how to safely clean used water to drinking water quality
- 2 Test and compare two different multi-step treatment methods
- 3 Foster curiosity and excitement about what is possible when it comes to water recycling
- 4 Encourage community conversations about the future of our precious water resources

### Collaborative Effort

*Coalition of local, state, tribal, and community partners*

LOTT is leading the demonstration project in collaboration with our four jurisdictional partners - the cities of Lacey, Olympia, and Tumwater, and Thurston County. The Washington State Departments of Health and Ecology are actively involved, as well as the State Board of Health.

Other community partners, such as the Squaxin Island Tribe, are participating. Additional partners are anticipated to join the effort as the project progresses.

We are working with the consulting firm Hazen and Sawyer on this project. They have experience supporting similar small-scale demonstration projects and large-scale potable water recycling projects for communities around the country. While this type of project is new to Washington State, we can build on what has been done elsewhere to ensure the safe and reliable production of high quality Class A+ reclaimed water.





# Project Goal



Demonstrate that  
water should be  
judged by its quality  
and not its history.





# 2050 Plan Outlines Future Infrastructure



- Focus on high level treatment at existing facilities
- Regional collaboration for:
  - Water quantity
  - Water quality
  - Resilience (e.g. Sea Level Rise)
  - Planning



# Property Sales



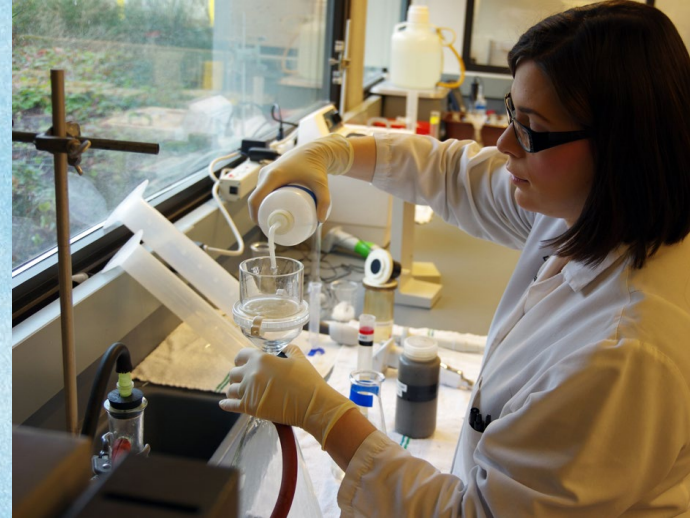


# Staff Make it Happen 24/7





# Staff Make it Happen 24/7





# The LOTT Way

## COLLABORATING

We work together and help each other as a team for common goals, beyond individual job duties, to achieve excellence in our work.



## TAKING RESPONSIBILITY

We are dedicated to, and take pride in, our work and the LOTT mission of cleaning water, and we accept responsibility for our individual role in its success.



## FOSTERING BELONGING

We are friendly, inclusive, and considerate of others, showing appreciation for each other's work and all of our important roles in this organization.



## SOLVING PROBLEMS

We are solutions-focused with a growth mindset, seeing challenges as opportunities and always learning for continuous improvement.



## BEING INNOVATIVE

We leverage our skills to be creative thinkers, developing new ideas and methods, and building on proven concepts to advance the future of LOTT.



## ENSURING HIGH STANDARDS

We set a high bar for quality work, integrity, and honesty, and commit to doing every part of the job to the best of our collective ability.

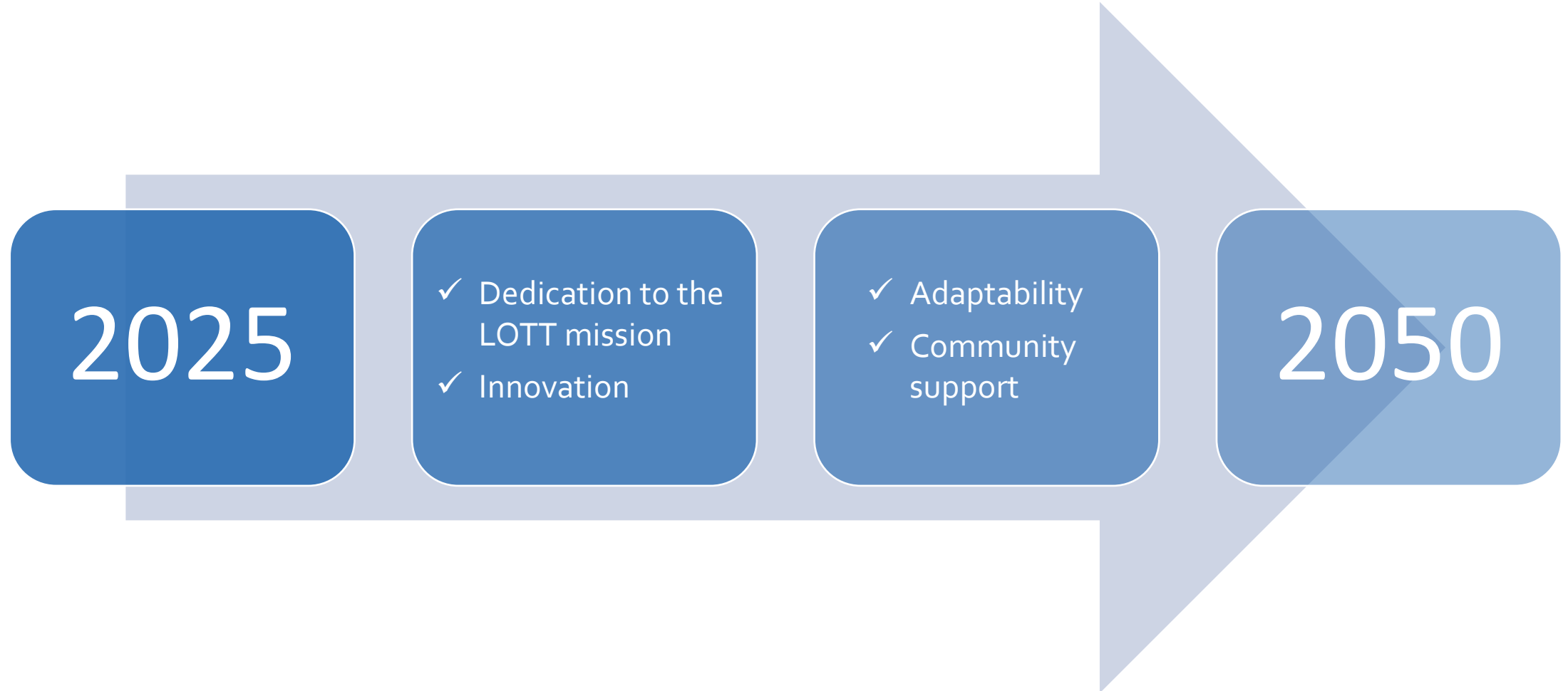


### Voluntary personnel turnover rate:

- 2024: 2%
- Year to date: 0%



# How We Meet Future Needs





# Questions?

Matt Kennelly, P.E., Executive Director  
[lottcleanwater.org](http://lottcleanwater.org)

