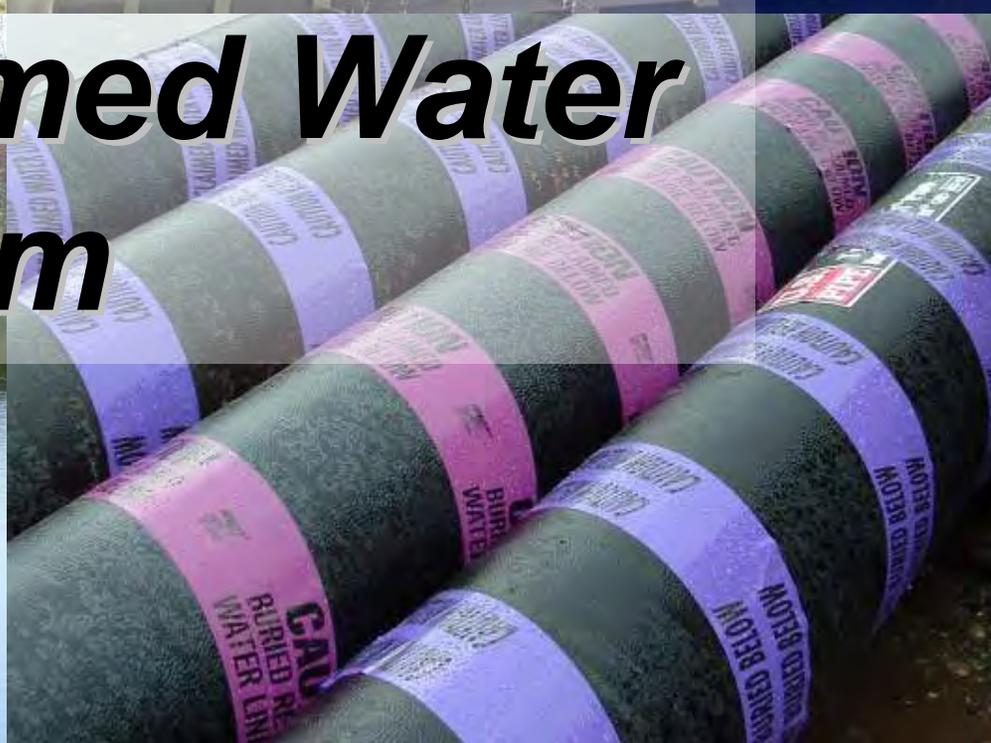


Cleaning and Restoring Water for our Community...

Karla Fowler

Idaho Wastewater Reuse Conference

June 18, 2008



***...LOTT's
Reclaimed Water
Program***

LOTT



Alliance

*Cleaning and restoring
water for our community*

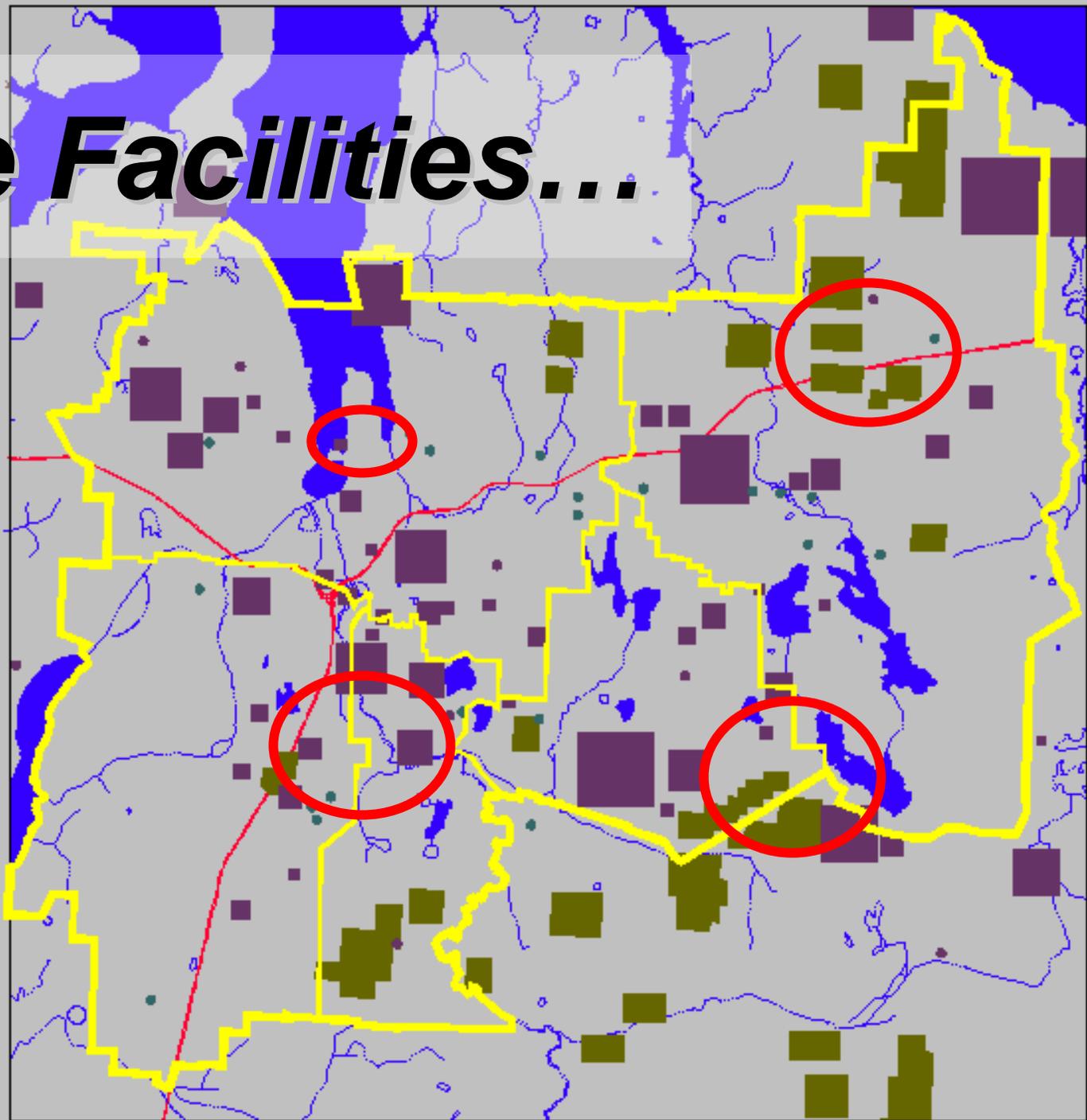
Budd Inlet Treatment Plant



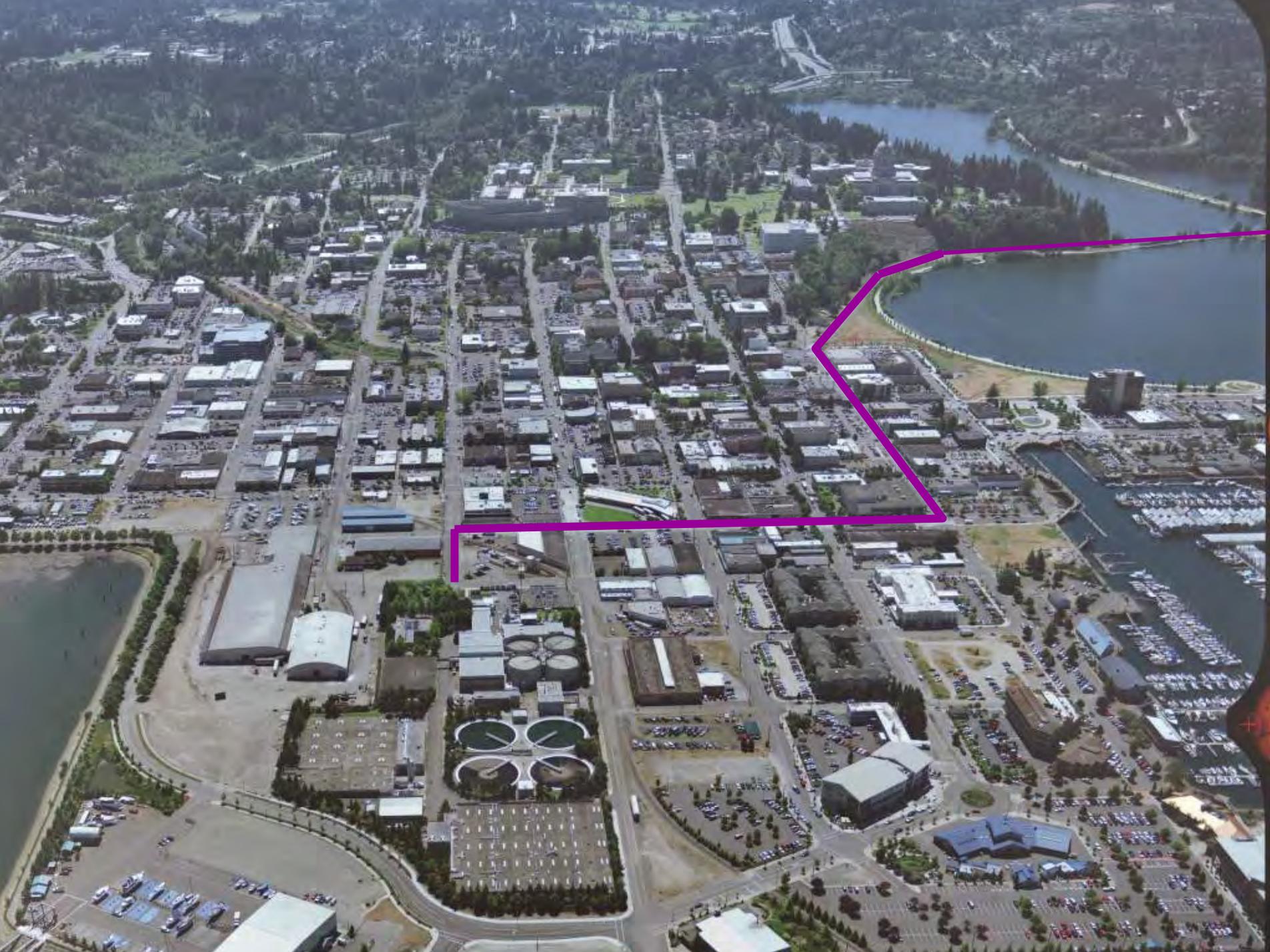
The Facilities...

Reclaim

Recharge







State Department of General Administration



Irrigation at:

- 💧 Heritage Park
- 💧 Marathon Park
- 💧 Deschutes Parkway
- 💧 Capitol Campus (next phase)



Port of Olympia



- 💧 Irrigation
- 💧 Dust suppression
- 💧 Landscaping pond

City of Olympia



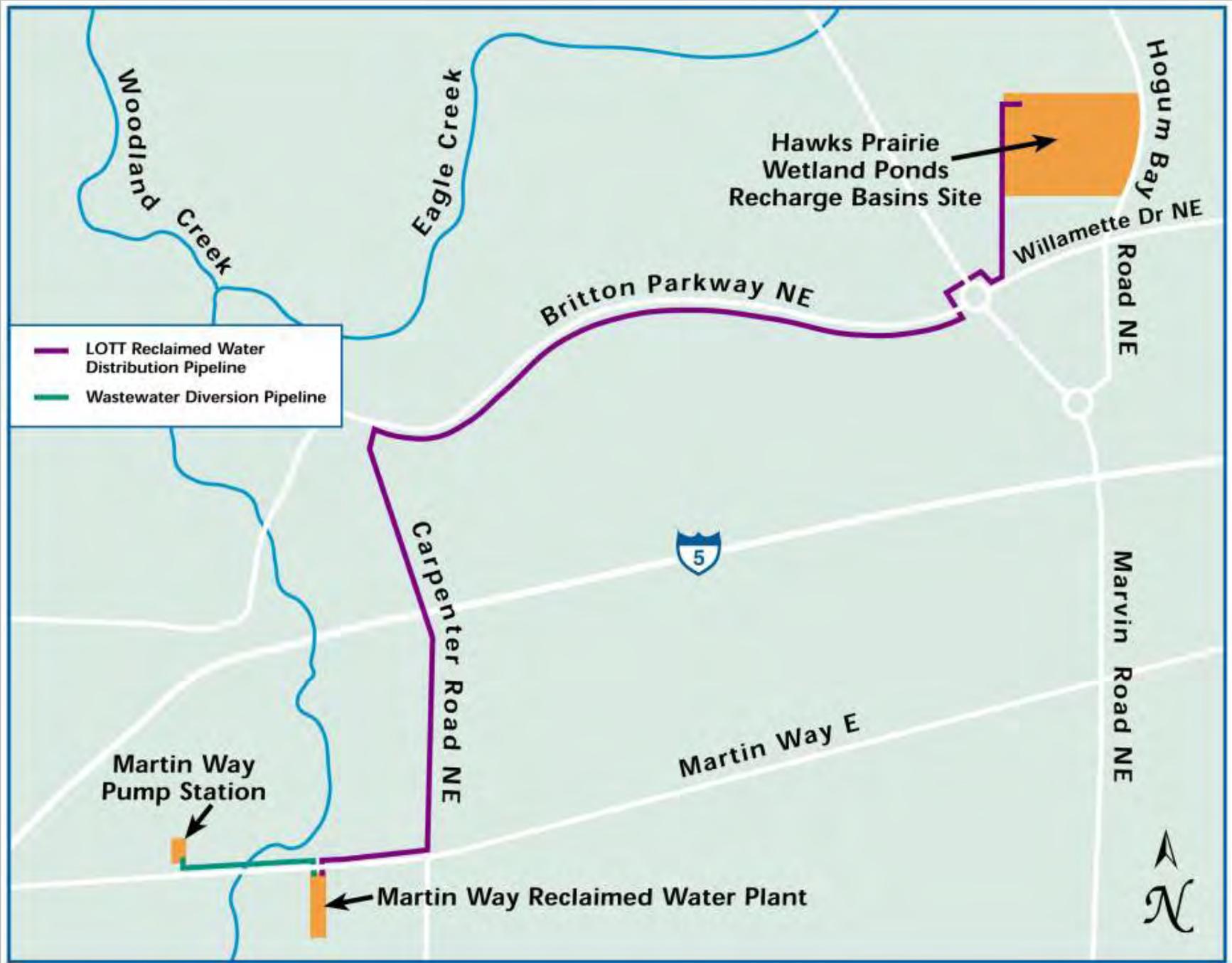
- 💧 Irrigation at Percival Landing
- 💧 Filling water trucks



Martin Way Reclaimed Water Plant











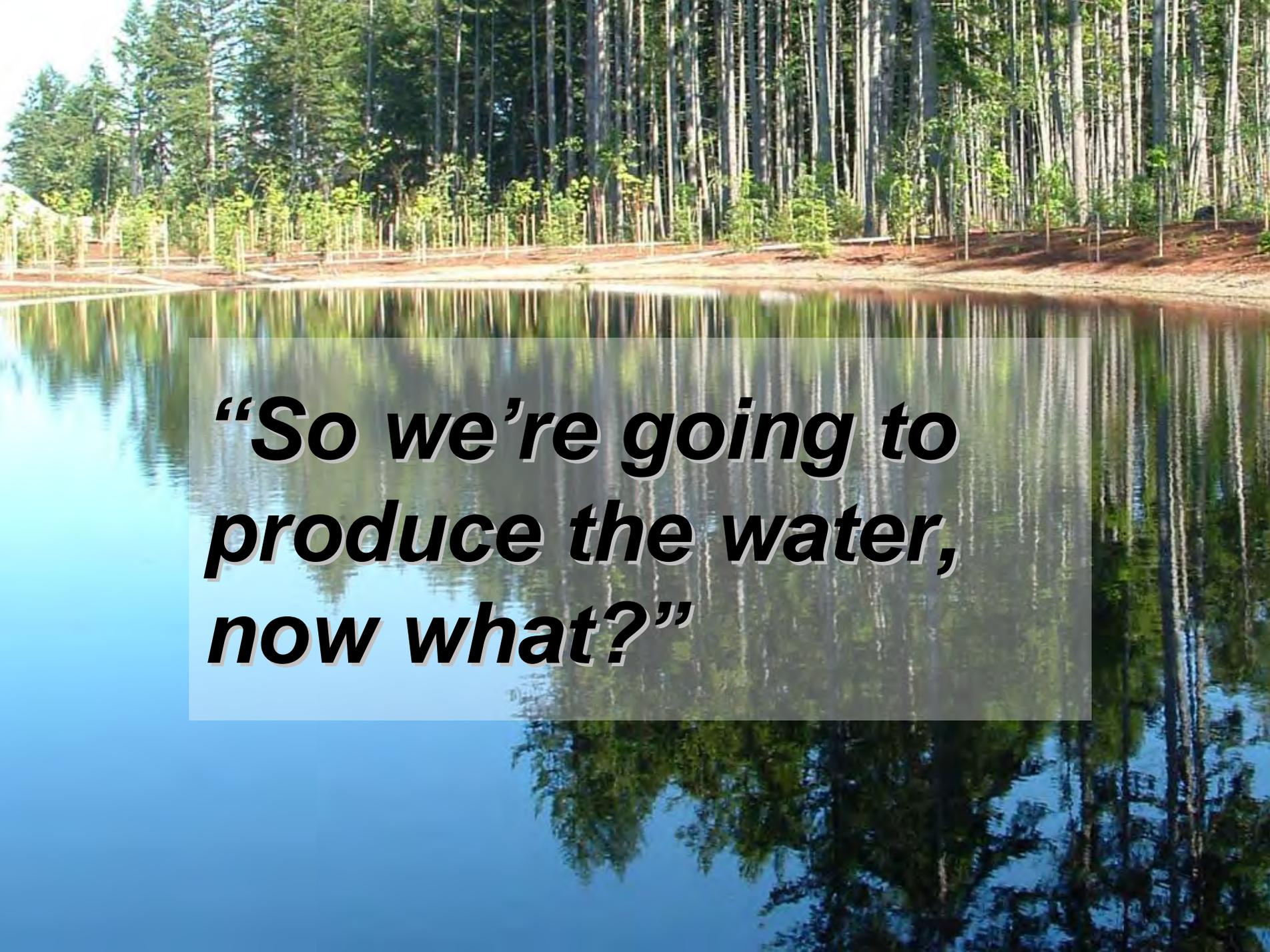




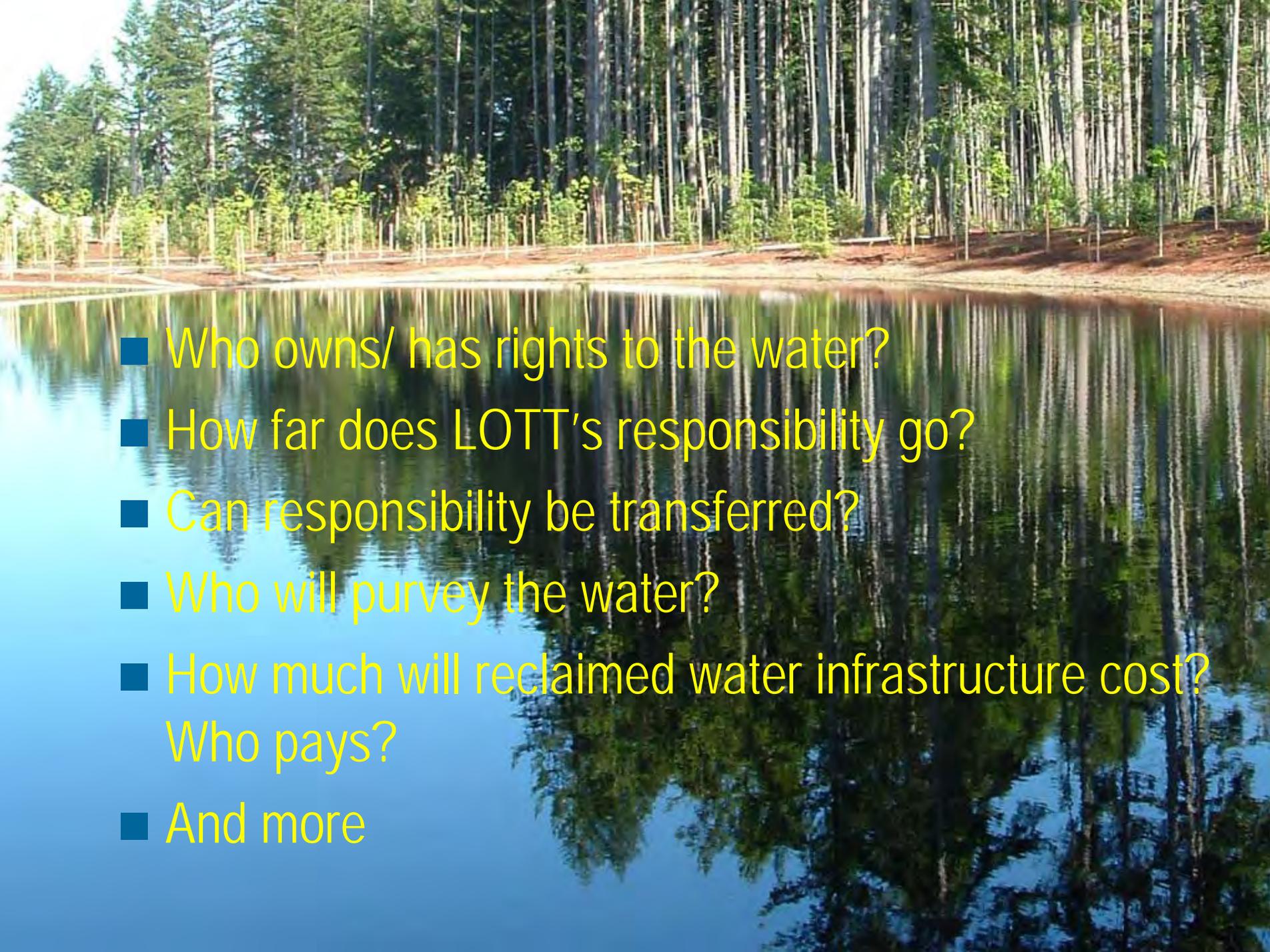




***The Policy
Infrastructure***



***“So we’re going to
produce the water,
now what?”***

- 
- Who owns/ has rights to the water?
 - How far does LOTT's responsibility go?
 - Can responsibility be transferred?
 - Who will purvey the water?
 - How much will reclaimed water infrastructure cost?
Who pays?
 - And more

DOE/DOH

LOTT + Partner Jurisdictions

Partners

State
Reclaimed
Water
Permit

General
Interlocal
Agreement
with
Distribution
Methodology

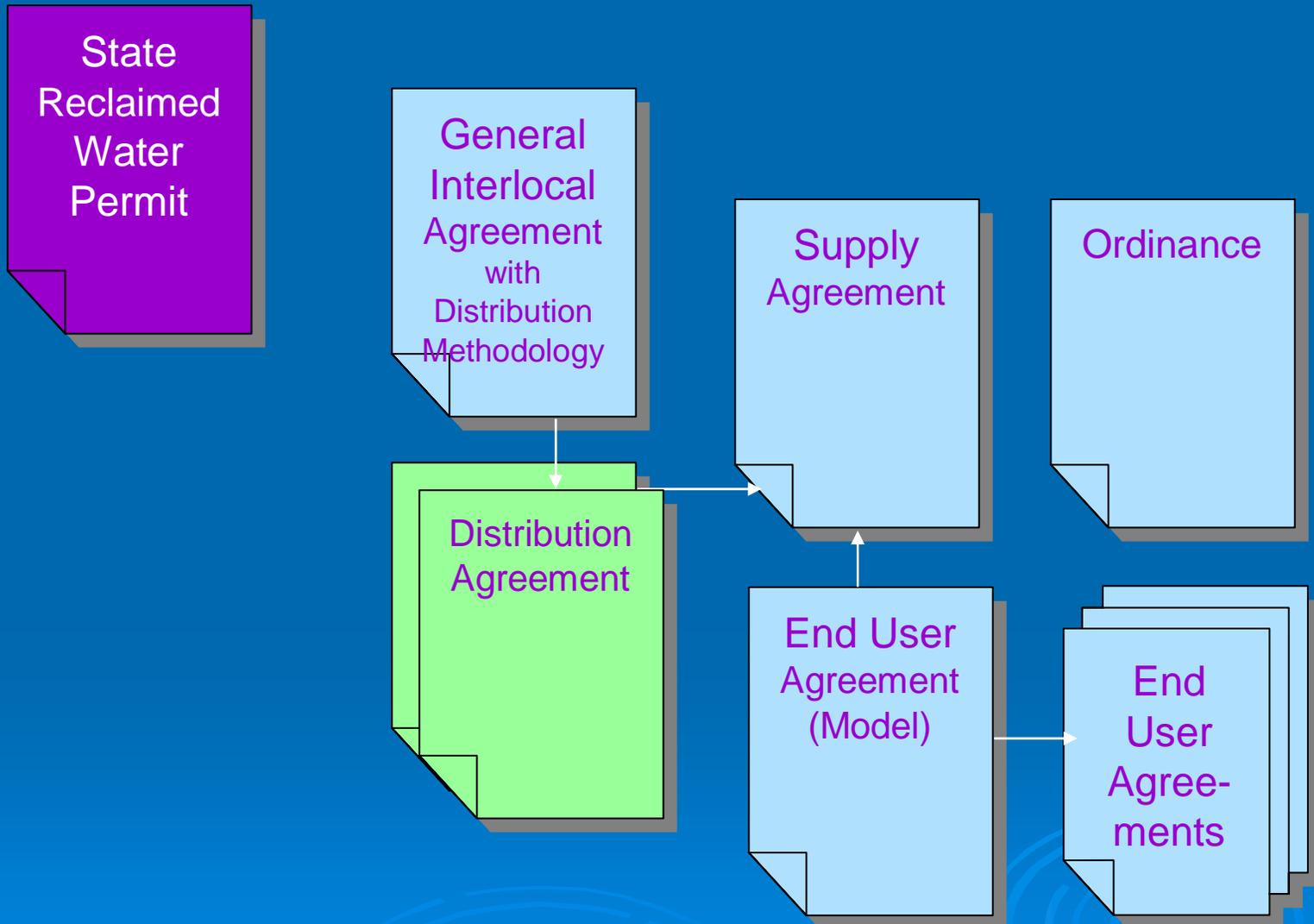
Supply
Agreement

Ordinance

Distribution
Agreement

End User
Agreement
(Model)

End
User
Agree-
ments



Public Communications Program





LOTT
Wastewater
Alliance

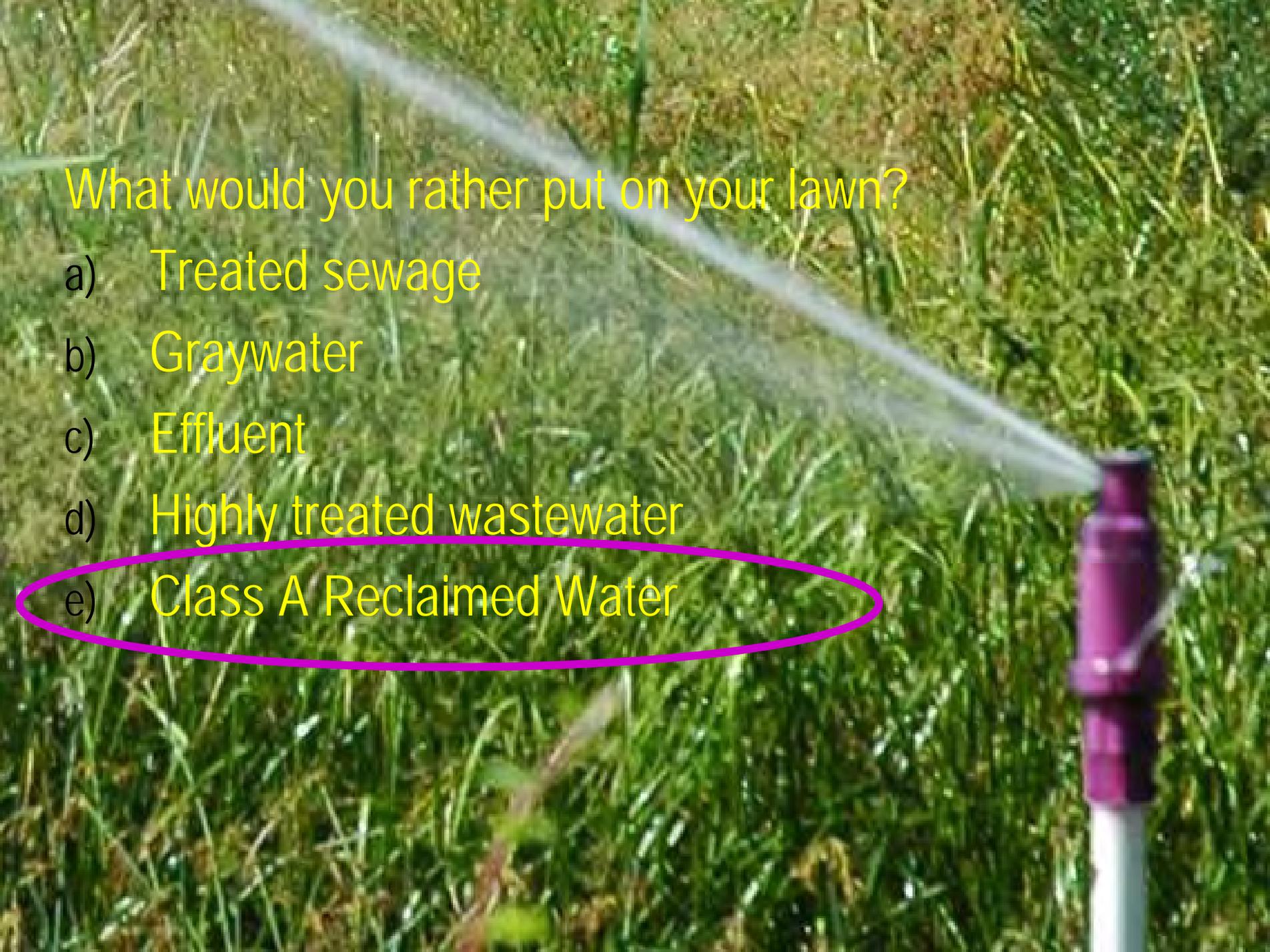
MAR 30 2005



RAW SEWAGE

FINAL EFFLUENT

RECLAIMED WATER



What would you rather put on your lawn?

- a) Treated sewage
- b) Graywater
- c) Effluent
- d) Highly treated wastewater
- e) Class A Reclaimed Water



The Right Water for the Right Use



100% recycled, 100% recyclable



We're using
water wisely by
irrigating with
reclaimed water

Do Not Drink
from the Irrigation System



Lott Alliance





Reclaimed Water at the Budd Inlet Treatment Plant

Bringing the First Reclaimed Water to the Budd Inlet Treatment Plant

The Budd Inlet Reclaimed Water Facility is the first of four facilities within the Lacey-Olympia-Tumwater urban growth system designed to clean water to Class A Reclaimed Water standards. The reclaimed water will be available to the City of Olympia, Port of Olympia, and State Capital Olympia. Uses of Class A Reclaimed Water include irrigation, toilet flushing, and cooling tower water supply.

How it Works

In LOTT's newest treatment process, the Budd Inlet Reclaimed Water Facility uses advanced secondary treatment and ultraviolet disinfection, before the treated water is pumped to the Budd Inlet Treatment Plant. A portion of the treated and disinfected water is pumped to the Budd Inlet Treatment Plant. The remaining water is pumped to the Budd Inlet Treatment Plant. The City of Olympia plans to distribute the water to users beginning in 2005.

The Budd Inlet Reclaimed Water Facility operates under a State Reclaimed Water Permit issued jointly by the Departments of Ecology and Health. The Permit has effect March 1, 2004.



Purple Coming Down the Pipe... Hawks Prairie Reclaimed Water Satellite

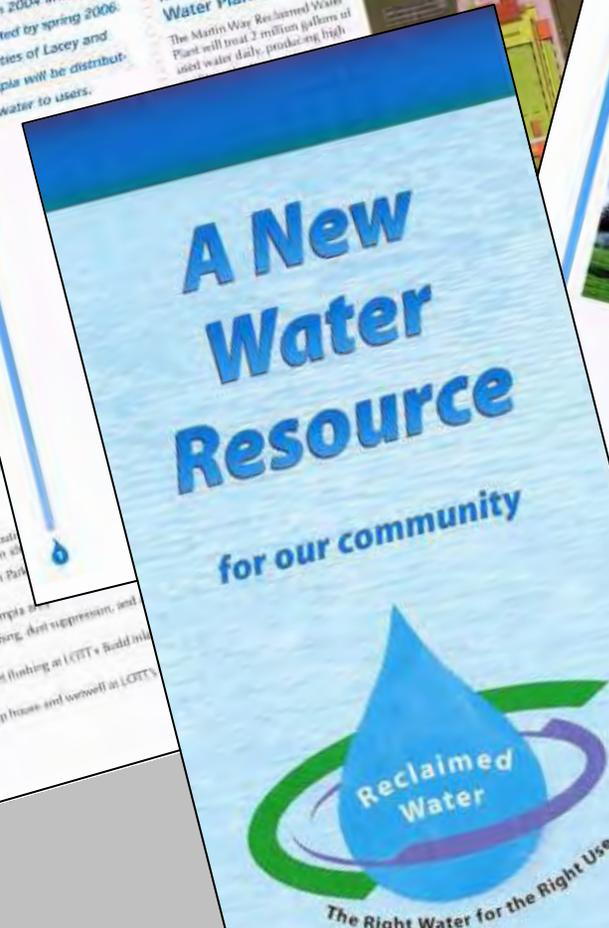
Providing New Treatment Capacity for LOTT and a New Source of Water for Our Community

The Hawks Prairie Reclaimed Water Satellite will provide the first increments of new treatment capacity under LOTT's Wastewater Resource Management Plan. A stream-bioreactor system will clean water to Class A Reclaimed Water standards so it can be beneficially used in the community. The project includes the Martin Way Reclaimed Water Plant, 30 acres of Constructed Wetland Ponds, ten acres of Groundwater Recharge Basins, and three miles of distribution pipelines.

Martin Way Reclaimed Water Plant

The Martin Way Reclaimed Water Plant will treat 2 million gallons of used water daily, producing high quality water for reuse.

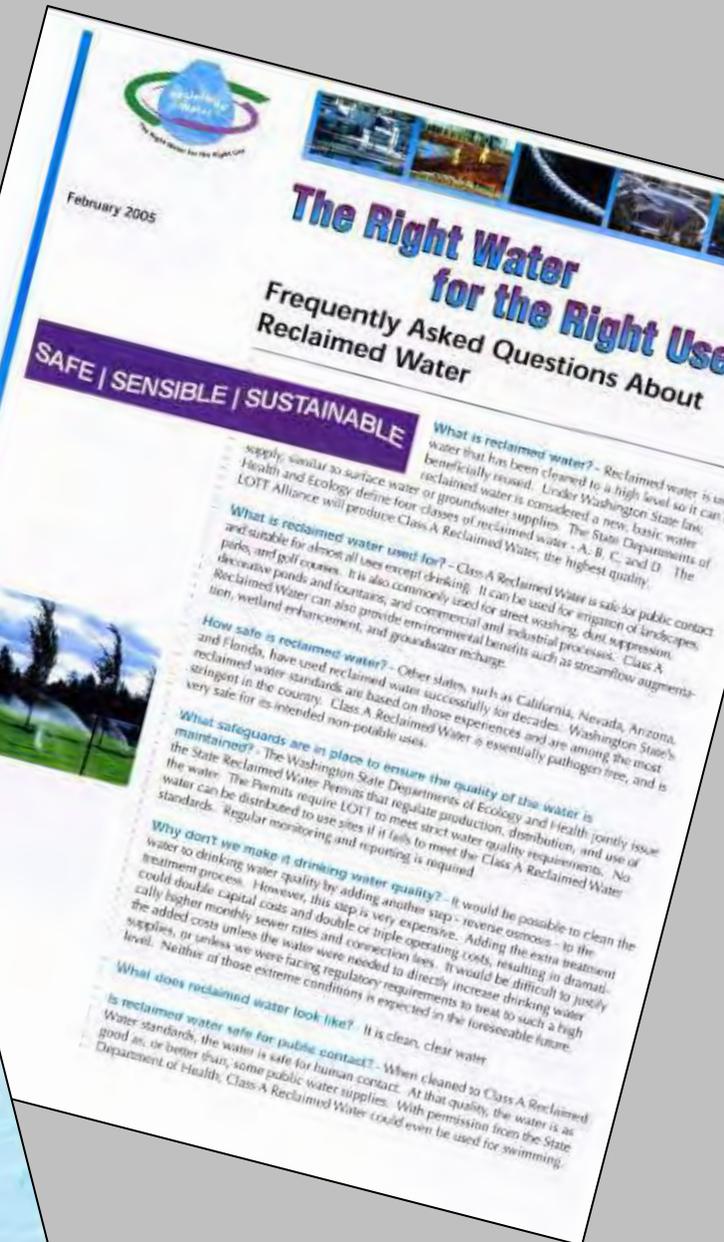
Construction of the LOTT Alliance's first Reclaimed Water Satellite begins in 2004 and will be completed by spring 2006. The Cities of Lacey and Olympia will be distributing water to users.



A New Water Resource for our community

Reclaimed Water

The Right Water for the Right Use



The Right Water for the Right Use

Frequently Asked Questions About Reclaimed Water

SAFE | SENSIBLE | SUSTAINABLE

February 2005

What is reclaimed water? - Reclaimed water is water that has been cleaned to a high level so it can be beneficially reused. Under Washington State law, reclaimed water is considered a new, basic water supply. The State Departments of Ecology and Health define four classes of reclaimed water - A, B, C, and D. The LOTT Alliance will produce Class A Reclaimed Water, the highest quality.

What is reclaimed water used for? - Class A Reclaimed Water is safe for public contact and suitable for almost all uses except drinking. It can be used for irrigation of landscapes, parks, and golf courses. It is also commonly used for street washing, dust suppression, decorative ponds and fountains, and commercial and industrial processes. Class A Reclaimed Water can also provide environmental benefits such as streamflow augmentation, wetland enhancement, and groundwater recharge.

How safe is reclaimed water? - Other states, such as California, Nevada, Arizona, and Florida, have used reclaimed water successfully for decades. Washington State's reclaimed water standards are based on those experiences and are among the most stringent in the country. Class A Reclaimed Water is essentially pathogen free, and is very safe for its intended non-potable uses.

What safeguards are in place to ensure the quality of the water is maintained? - The Washington State Departments of Ecology and Health jointly issue the State Reclaimed Water Permits that regulate production, distribution, and use of the water. The Permits require LOTT to meet strict water quality requirements. No water can be distributed to use sites if it fails to meet the Class A Reclaimed Water standards. Regular monitoring and reporting is required.

Why don't we make it drinking water quality? - It would be possible to clean the water to drinking water quality by adding another step - reverse osmosis - to the treatment process. However, this step is very expensive. Adding the extra treatment could double capital costs and double or triple operating costs, resulting in dramatically higher monthly sewer rates and connection fees. It would be difficult to justify the added costs unless the water were needed to directly increase drinking water supplies, or unless we were facing regulatory requirements to treat to such a high level. Neither of those extreme conditions is expected in the foreseeable future.

What does reclaimed water look like? It is clean, clear water.

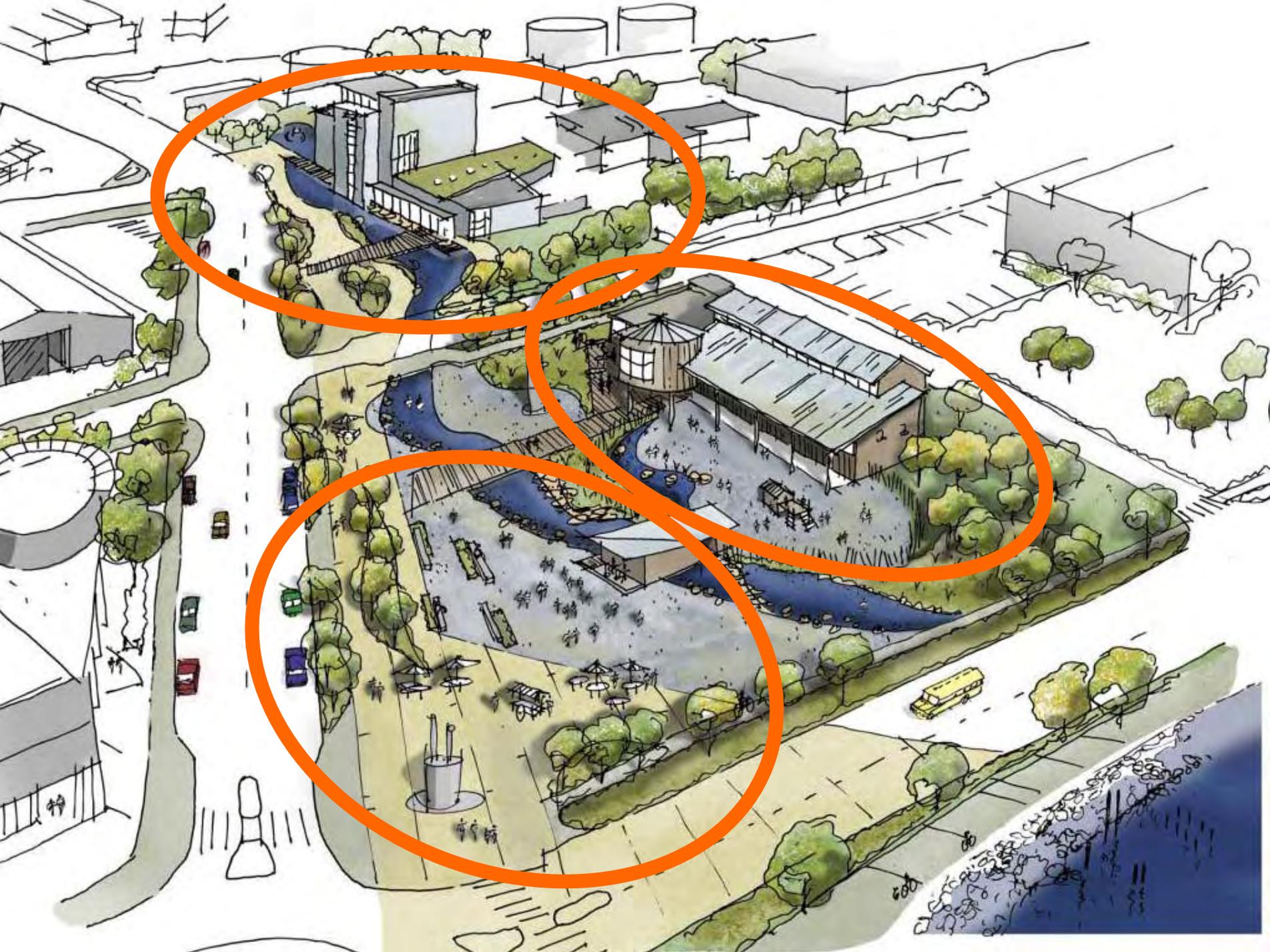
Is reclaimed water safe for public contact? - When cleaned to Class A Reclaimed Water standards, the water is safe for human contact. At that quality, the water is as good as, or better than, some public water supplies. With permission from the State Department of Health, Class A Reclaimed Water could even be used for swimming.



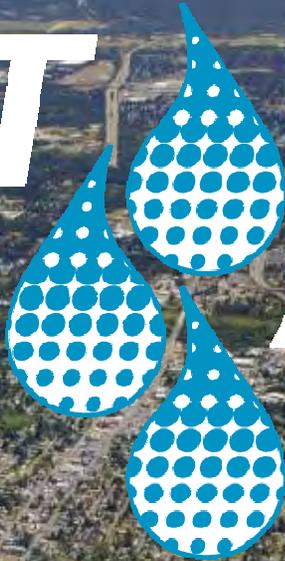
SPLASH!

Reclaimed Water: A New Water Resource





LOTT



Alliance

*Cleaning and restoring
water for our community*



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Future Plans...

WASTEWATER PROPOSAL CAUSES LITTLE STIR IN NEIGHBORHOOD

New LOTT satellite plant planned near Lacey school



Project engineer Eric Hielema on Tuesday points out the vegetative roof atop the aeration basins at the Martin Way satellite reclaimed water plant. The

LOTT sewer partners want to build the agency's second satellite wastewater treatment plant in Lacey next to Komachin Middle School.

Site near Komachin would treat liquid waste

BY JOHN DODGE
THE OLYMPIAN

LACEY — The LOTT Alliance has its eyes on a wooded piece of property near Komachin Middle School for its next satellite wastewater treatment plant. The 5.3-acre site in a residential area isn't be developed until

TO LEARN MORE

The LOTT Alliance has scheduled a public workshop for 6:30 to 8 p.m. Tuesday at Komachin Middle School, 3650 College St. S.E., Lacey, to discuss and answer questions about its proposed Chambers Prairie treatment plant.



...Chambers Prairie