

Wastewater to Water Resource: Washington State's Reclaimed Water Rule

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Water Quality
Rule Writer



Thank you for your interest in Washington State's new reclaimed water rule!



1992 WA Legislature enacted RCW 90.46 Reclaimed Water



WE DID IT!

**WAC 173-219
Reclaimed Water**

Adopted:
January 23, 2018

Effective date:
February 23, 2018



Reclaimed Water

- *Wastewater with a domestic component*
- *Adequately and reliably treated*
- *Put to beneficial use*



RECLAIMED WATER IS NOT A WASTEWATER



**Industrial and Agricultural process wastewater
w/o domestic component**

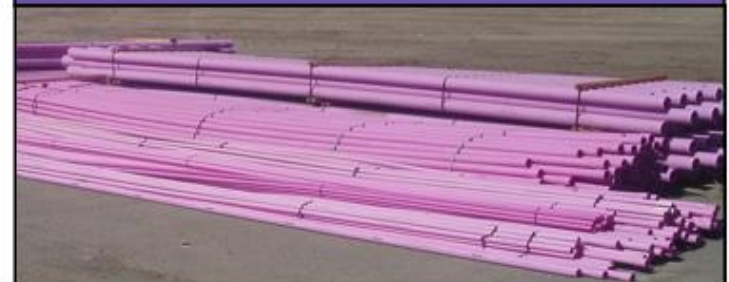
**Industrial and Agricultural Process
Water:**

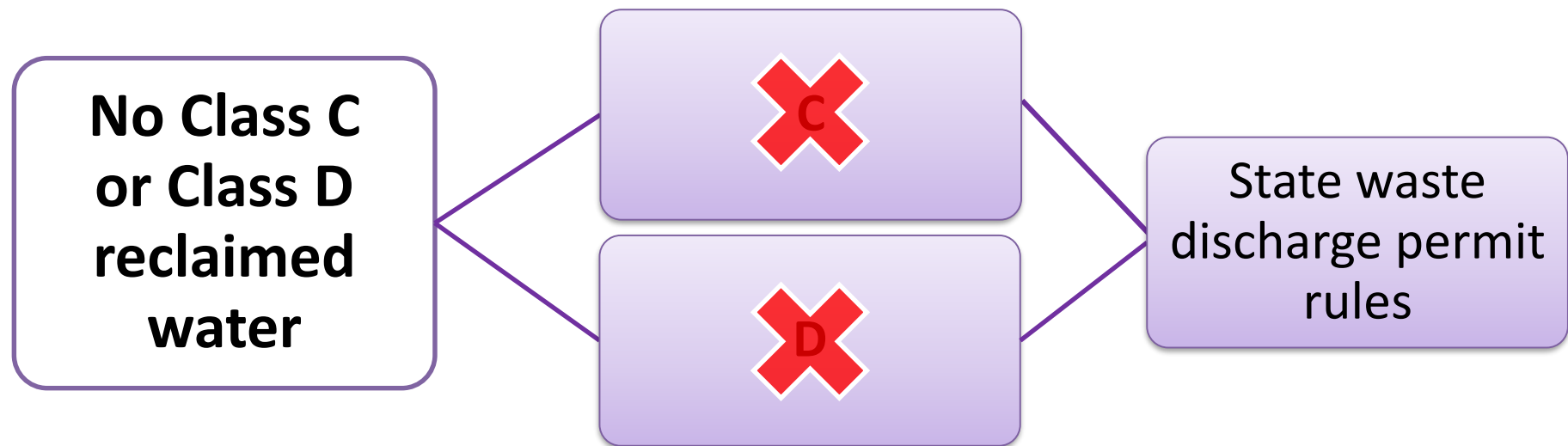
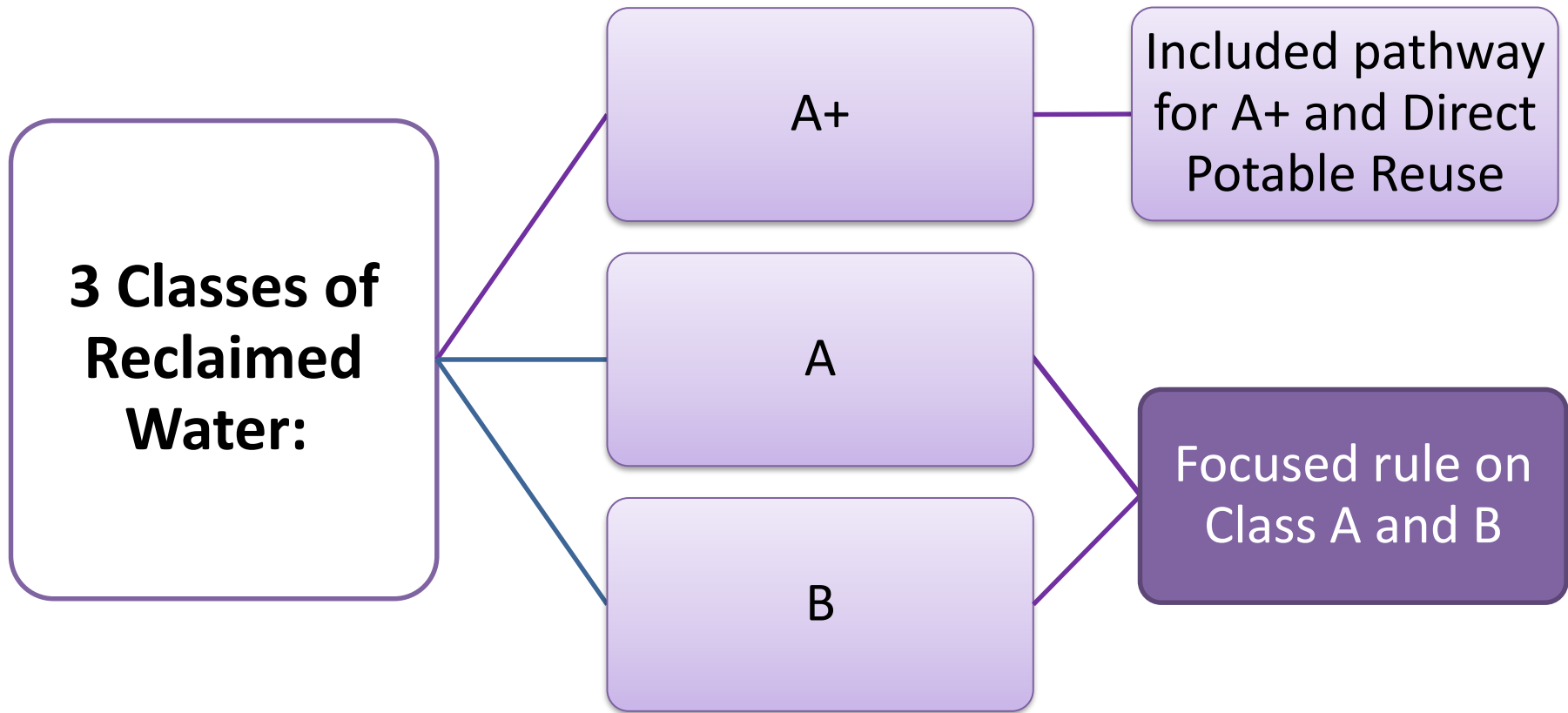
- **RCW 90.48 - WATER POLLUTION CONTROL**
- **WAC 173-216 - STATE WASTE DISCHARGE PERMIT PROGRAM**

**Wastewater
w/Domestic Component**

Reclaimed Water Use:

- **RCW 90.46 RECLAIMED WATER USE**
- **WAC 173-219 – RECLAIMED WATER**





Class A + Reclaimed Water

Meets the treatment requirements for Class A reclaimed water

Additional criteria determined necessary on a case-by-case basis by Department of Health for direct potable reuse.

Waiver from State Board of Health



Class A Reclaimed Water

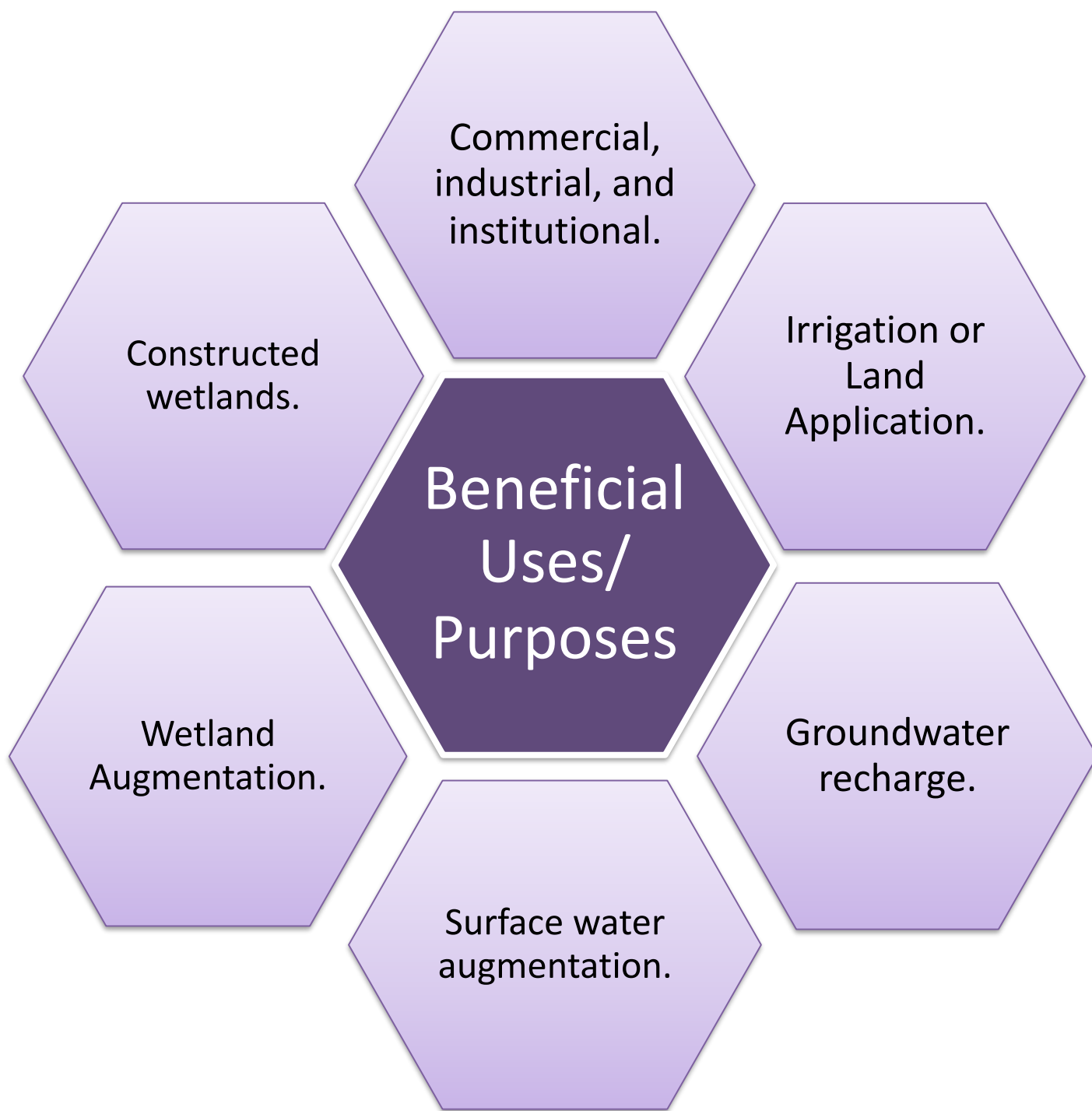
At all times an
oxidized,
condensed,
filtered, and
disinfected.



Class B Reclaimed Water

At all times
an oxidized
and
disinfected.







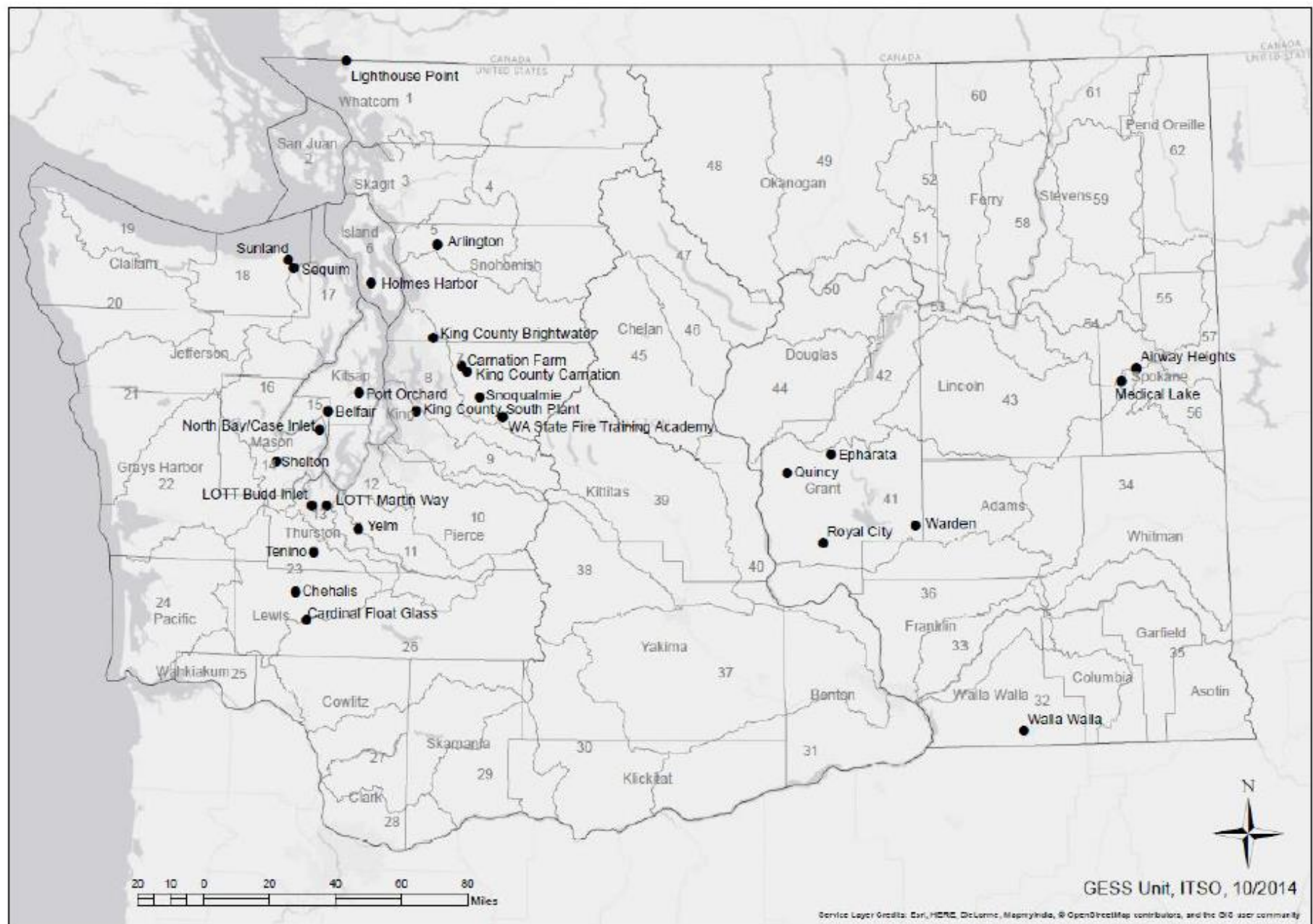
RECLAIMED WATER PERMITS

Reclaimed Water Permits



LOTT's Budd Inlet Water Reclamation Facility

RECLAIMED WATER FACILITIES - 2014





RECLAIMED WATER RULEMAKING

Ecology, in coordination with Department of Health, must adopt a rule to:



Encourage the use of Reclaimed Water



Preserve Potable Water



Contribute to Instream Flows and Wetlands

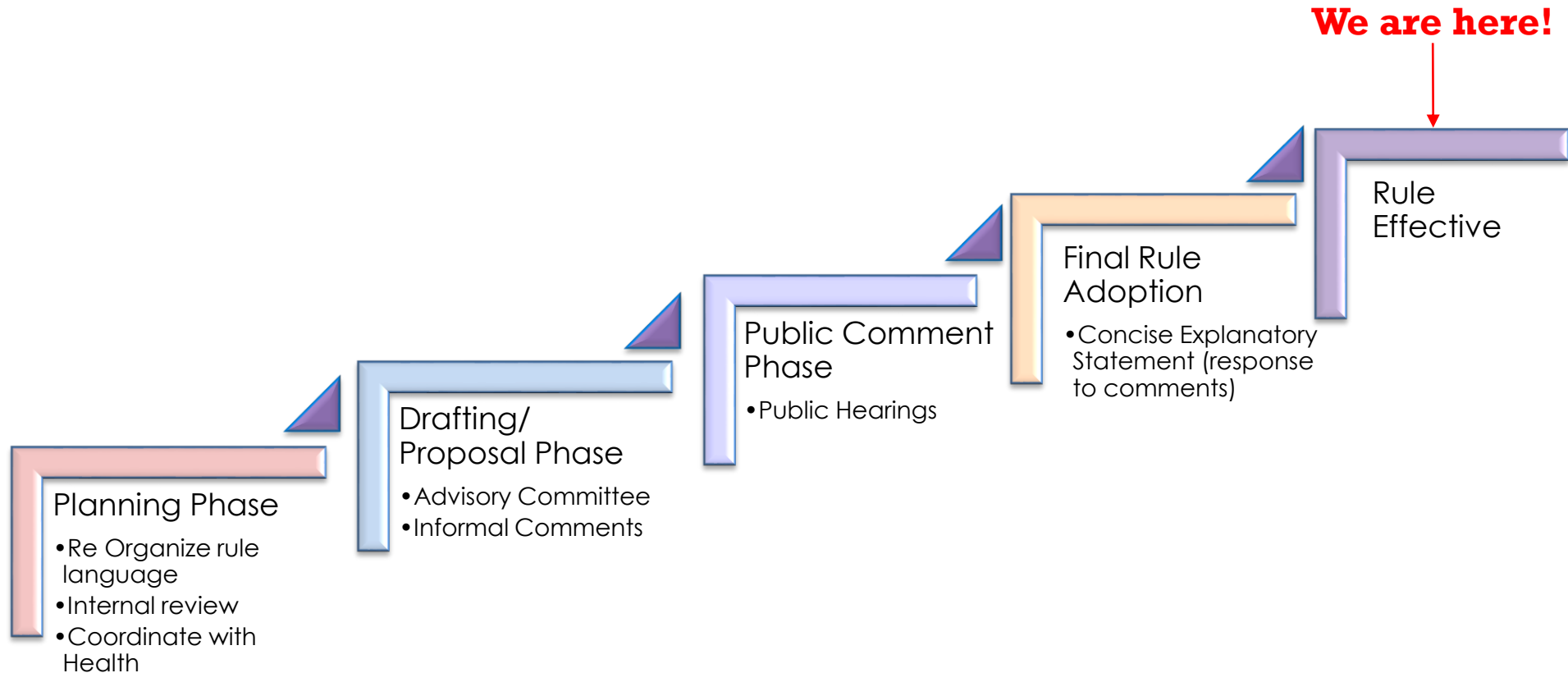


Reduce Discharges to Puget Sound



Respond to Growth and Climate Change

Rulemaking process



A long look back in time...

2006

- Rulemaking began in 2006

2010

- Rulemaking suspending by executive order in 2010

2014

- Restarted Rulemaking

2014

- Reconvened Rule Advisory Committee

2015

- Public comment period on draft rule language

Fall 2015

- Withdrew draft to reconsider draft rule language

Summer 2016

- Hired a new rule writer (me)

Winter 2017

- Reconvened Rule Advisory Committee (RAC)

Spring 2017

- Informal Public Comment Period

August - October 2017

- Formal Public Comment Period

January 23, 2018

- Rule Adopted

February 23, 2018

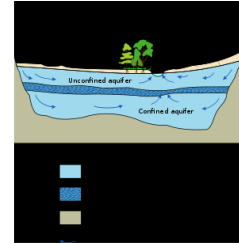
- Rule Effective





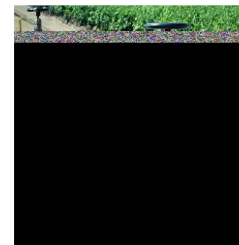
Water Rights/Impairment

Application of groundwater quality standards, including antidegradation



Impact of reclaimed water use on potable suppliers revenues

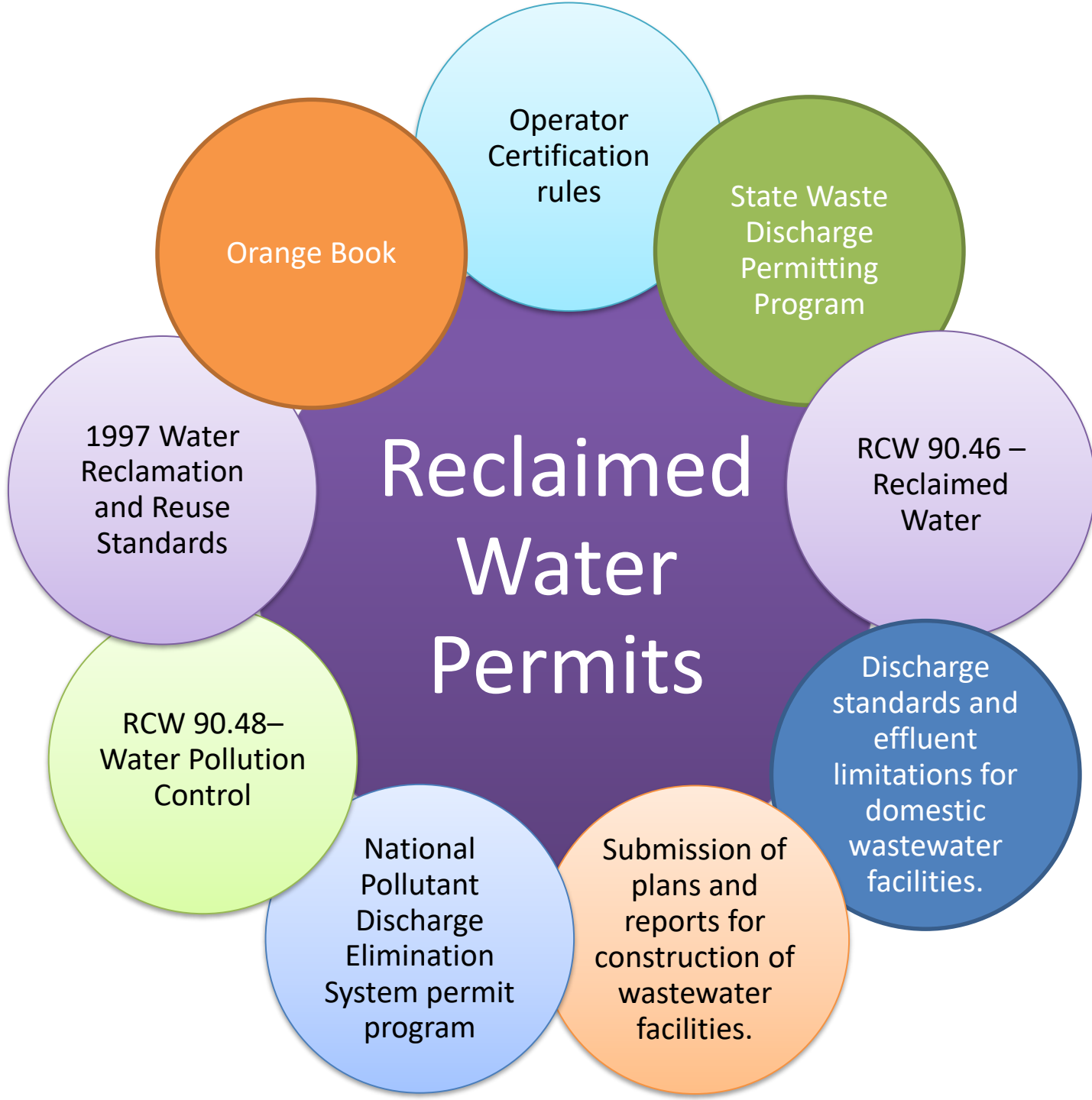
Cross-Connection Control

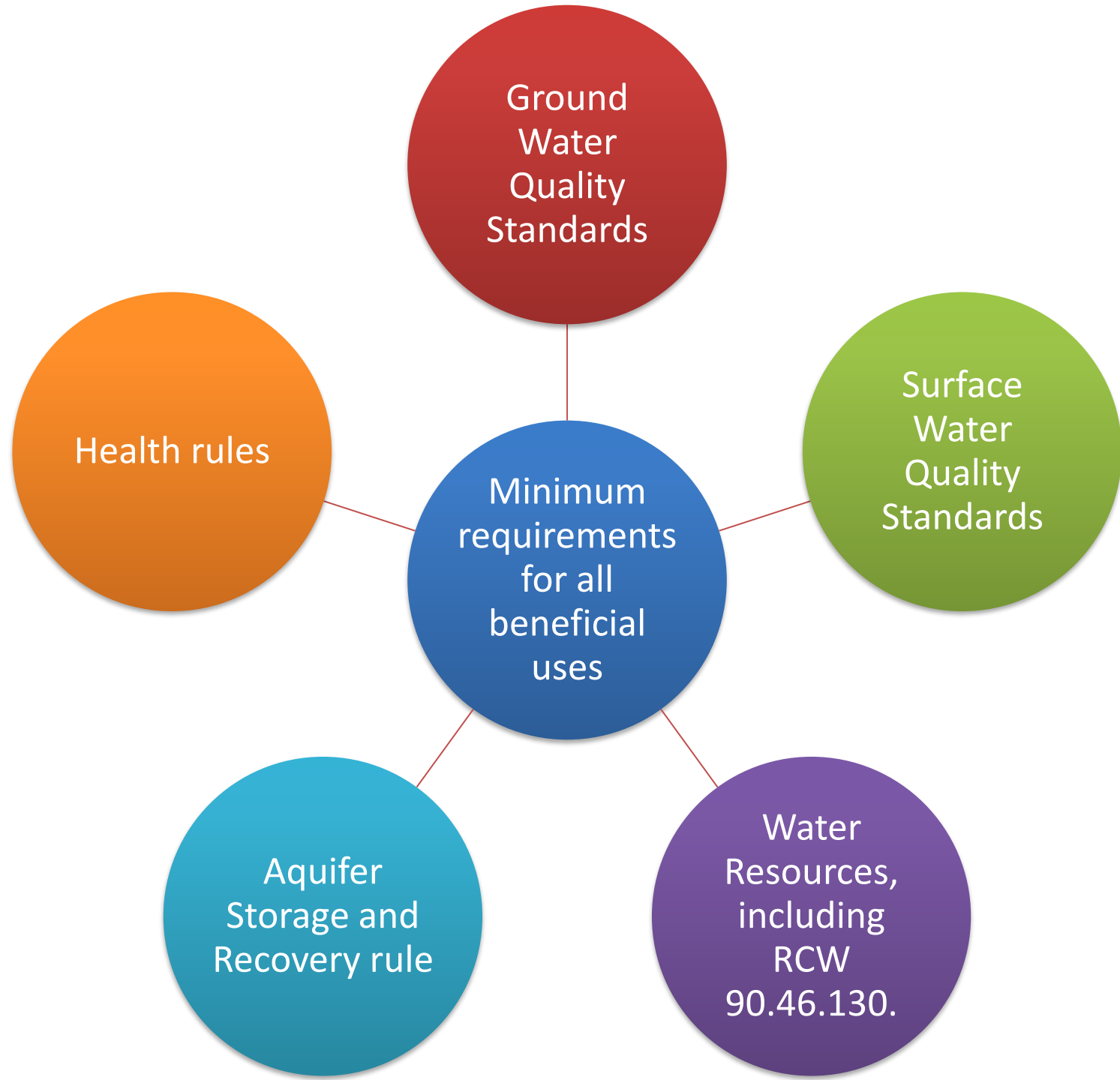


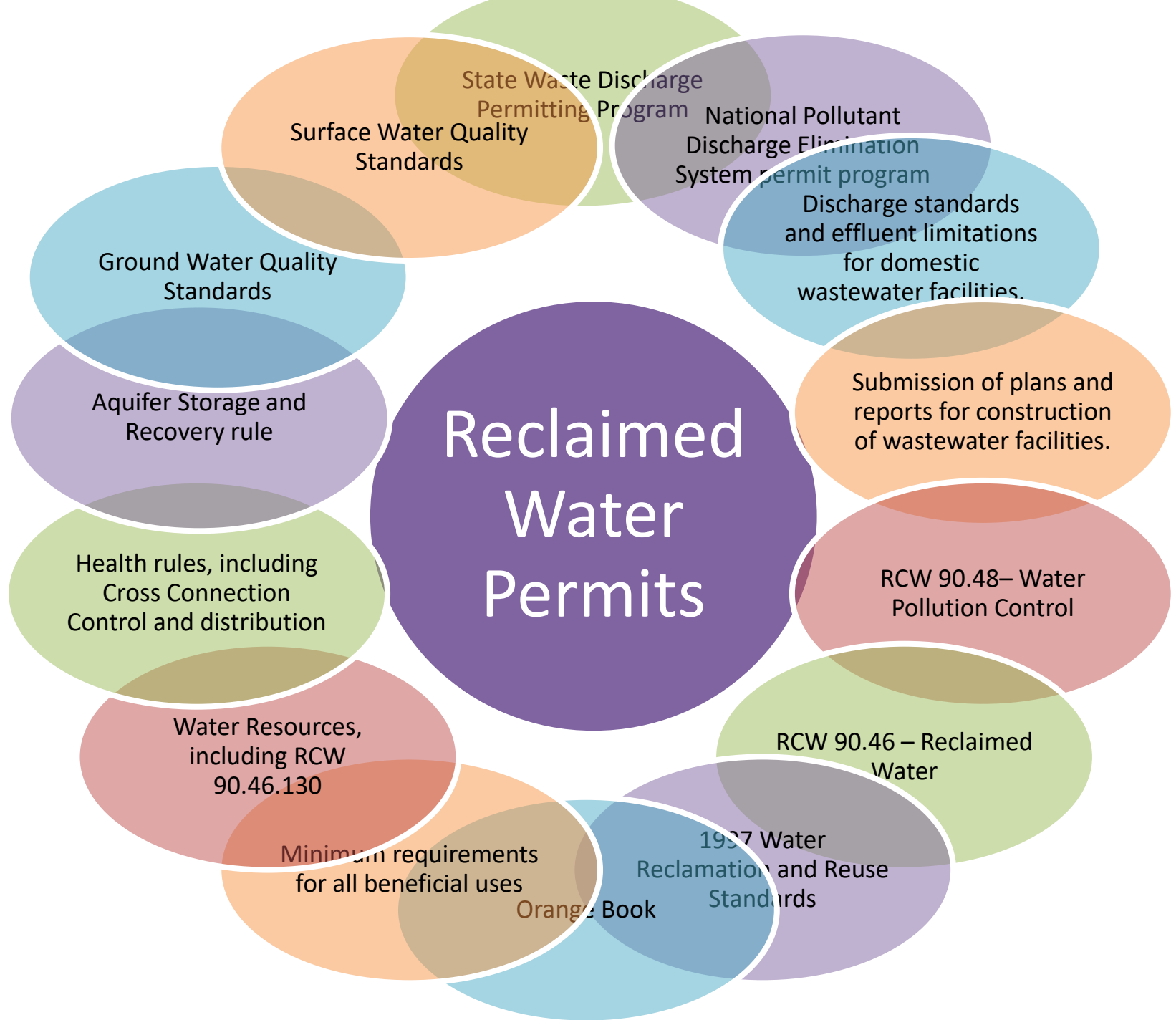
Operator Certifications

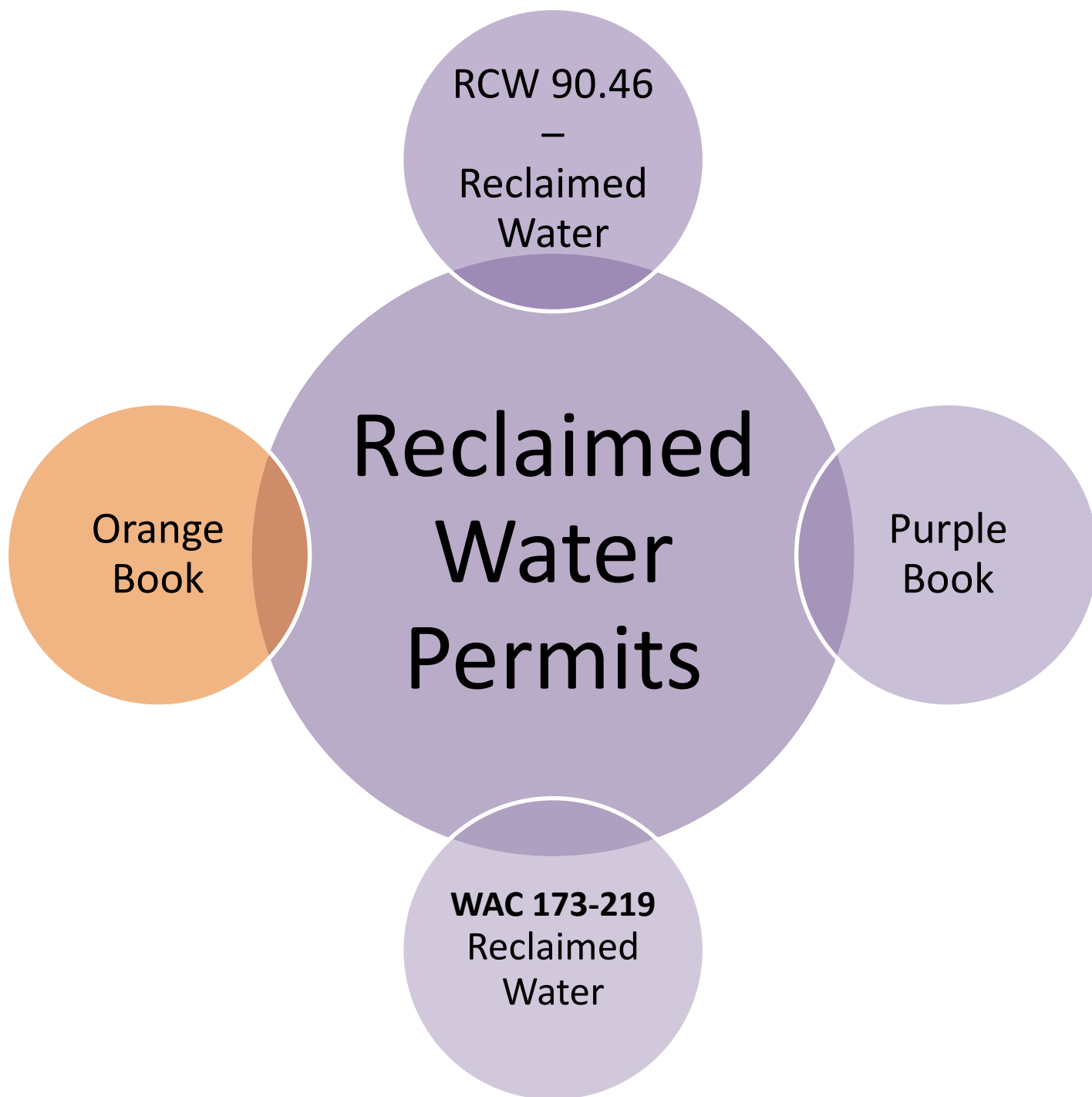


Treating Reclaimed Water like a Wastewater











GOALS AND OBJECTIVES

Goal and Objectives

**Provide a clear
regulatory and
permitting
framework**

Roles and
responsibilities.

Planning, permitting,
compliance, and
reporting
requirements.

Scientifically and legally
sound standards that
protect human health
and the environment.





WHAT DOES THIS RECLAIMED WATER RULE DO?

Roles and Responsibilities

Applicability

Direct
enforceability

Lead agency
designation

Agency
requirements and
responsibilities

Public
Notice/Comment
Period/Hearings

Appeals

Regulatory action
for
noncompliance

Relationship with
other Ecology or
Health permits

Public access to
information



Planning, permitting, and compliance

Permit
required

Preplanning
meeting and
project
application

Feasibility
analysis

Water rights
protection

Timing and
signature
requirements

Plan review
and review
standards

Engineering
report

Plans and
specification

Construction
and
declaration of
construction

Operations and
maintenance

Certified
operators

Cross-
connection and
control

Monitoring,
recording, and
reporting

Permit terms
and conditions

Fact sheet

Use
agreements



Scientifically and legally sound standards

Source control and
pretreatment
requirements

Class A and B
minimum
technology-based
treatment methods

Performance
standards

Disinfection process
standards

Treatment reliability
standards

Storage and
distribution system
requirements.

General use-based
requirements

Specific use-based
requirements





Next Steps

Update to Reclaimed Water Guidance

Orange Book (Criteria for Sewage Design)

- Primary Treatment
- Secondary Treatment
- Tertiary Treatment
- Disinfection

Purple Book (Reclaimed Water Facilities Manual)

- Permitting
- Distribution
- Cross Connection Control
- Operator Certification
- Storage
- Use
- Water Rights

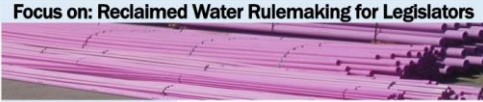




Water Quality Program

DEPARTMENT OF
ECOLOGY
State of Washington

Focus on: Reclaimed Water Rulemaking for Legislators



What is reclaimed water?
Water derived from domestic wastewater that has been treated to meet the permitted requirements, so that it can be used for beneficial purposes. Reclaimed water is not considered a wastewater.

**Reclaimed Water:
It's all part of the water cycle**
All water is 'reclaimed' or recycled through the water cycle that we learned about in elementary school. The water that was on the planet with the dinosaurs is the same water we have now. It has been used and recycled through the environment to be reused again and again. Reclaiming water just speeds up the natural water cycle by treating it using biological and chemical processes so it can be used again safely.

**Reclaimed Water
The right water for the
right use!**

Contact
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Ecology Adopts Chapter 173-219 WAC
Chapter 98.46 RCW directed Ecology to work with the Department of Health (Health) to develop a reclaimed water rule. On January 23, 2018, the Department of Ecology (Ecology) adopted Chapter 173-219 WAC - Reclaimed Water.

Who must comply with this rule?
Chapter 173-219 WAC applies to all existing and proposed facilities that are—or will be—designed, constructed, operated, and maintained to generate, distribute, and/or use reclaimed water. It does **not** apply to the following:

- Small, decentralized reuse systems.
- Greywater (e.g., water from sinks or showers).
- Agricultural industrial process water.
- Industrial reuse water.
- Wastewater applied to land for treatment.
- On-site sewage treatment systems, with no reclaimed water generation.

What does the rule do?

- Creates the regulatory framework for permitting the generation, distribution, and use of reclaimed water for beneficial uses, while protecting public health and the environment.
- Establishes clear roles and responsibilities for Ecology and Health.
- Requires compliance with RCW 90.46.130 - Impairment of Water Rights Downstream from Freshwater Discharge Points.
- Establishes requirements to ensure the reclaimed water meets water quality standards and protects drinking water.
- Requires professional certified operators manage day-to-day operations.
- Creates pathway for direct potable reuse. The State Board of Health must approve this use, and case-by-case standards must be developed, before it can be permitted.

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QUESTIONS



THANK YOU!

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