Oregon DEQ Three Basin Rule Advisory Committee Introductions and Ground Rules Review

Water Quality Standards Program

May 22, 2025
Virtual Zoom Meeting

Zoom Meeting Logistics

- Trina Mayberry – DEQ Admin. and Technical Support
- “Raise hand” to be recognized for questions or comments
- Feel free to post questions into the chat and we will respond
- If you are listening on the phone:
  - Press *9 To raise your hand
  - Press *6 Unmute/Mute your line
- Today’s meeting will be recorded

Agenda

1 p.m.	Introductions and Ground Rules (Kaegan Scully-Engelmeyer, DEQ facilitator)
1:15 p.m.	Follow up items from Meeting #1 (Aron Borok, DEQ rulemaking lead)
1:35 p.m.	Revisions to Draft Rule Language with Examples (Aron Borok)
2:30 p.m.	Break (10 min)
2:40 p.m.	Continue RAC discussion on proposed revisions
3:25 p.m.	Changes to Onsite Provisions (Sean Rochette)
3:45 p.m.	Wrap Up and Next Steps (Aron Borok and Kaegan Scully-Engelmeyer)
4 p.m.	Adjourn

Meeting Ground Rules

- “Primary” committee members representing each organization are active in committee discussions.
- Stay focused on the specific agenda topics for each meeting.
- Please mute your line when not speaking.
- Be respectful of each other.
- Raise virtual hand to speak.
- Limit background noise.
- Let others speak without interrupting.

Committee Members	Government Advisors
City of Salem	Oregon Department of Agriculture
City of Sandy	Oregon Department of Fish and Wildlife
Oregon Association of Clean Water Agencies	Oregon Department of Water Resources
Clackamas River Basin Council	Oregon Health Authority
Clackamas Water Providers	U.S. Environmental Protection Agency
Oregon Onsite Wastewater Association	
Confederated Tribes of Grand Ronde	
Eugene Water and Electric Board	
Lane County	
Marion County	
Willamette Riverkeeper (NEDC)	
Oregon Association of Water Utilities	
Oregon Business and Industry	

Rules Advisory Committee for Three Basin Rule Revision

Agenda Item #2: Follow up items from first RAC Meeting

Water Quality Standards

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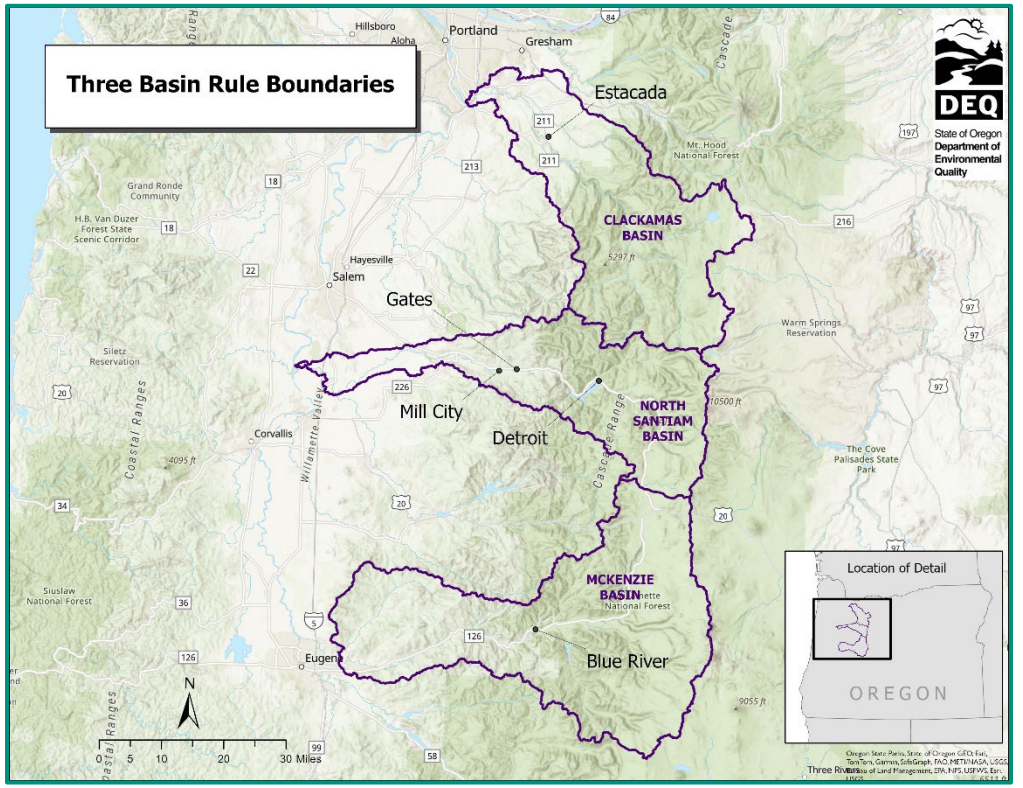
Why the rulemaking?

- Maintain protections for high quality waters.
- Implement the *Maui* decision.
- Allow improvements to treatment.



Follow up items

- Discharge that is “likely” or is functionally equivalent requires NPDES permit.
- Permits do not allow overflows unless it is beyond reasonable control.

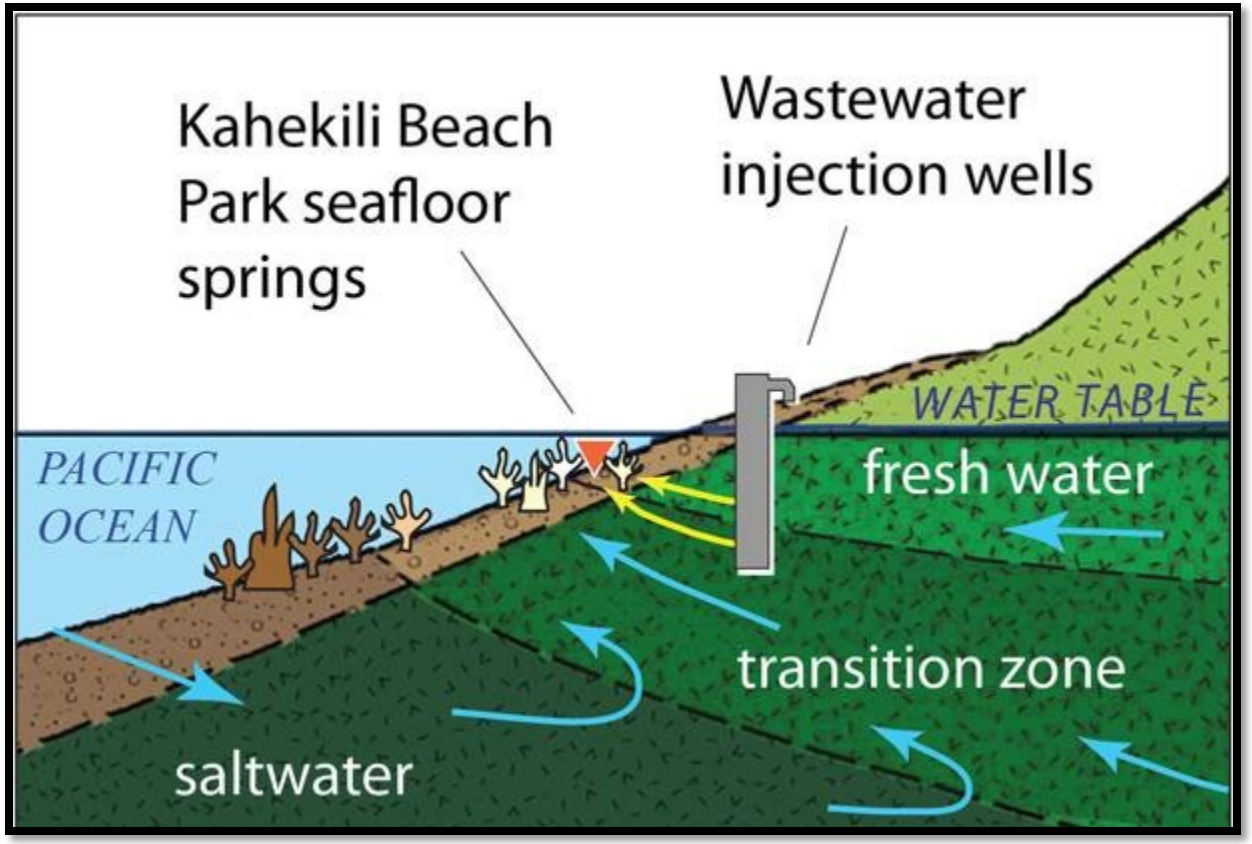


Image: USGS, public domain

Questions?

Photo Courtesy of Eugene Water and Electric Board

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Agenda Item #3: Hierarchical approach to issuing permits

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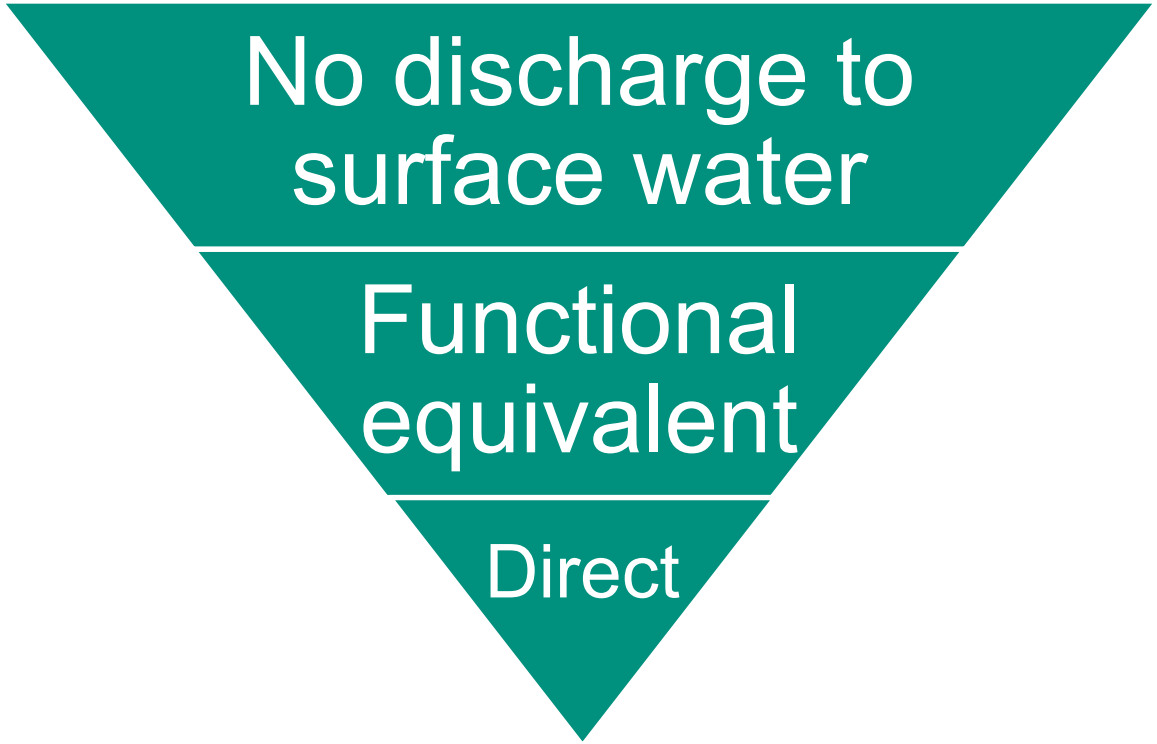
Objectives

- Discuss hierarchical approach for issuing permits.
- Provide examples.
- Obtain feedback from committee members.

Hierarchy for types of discharges

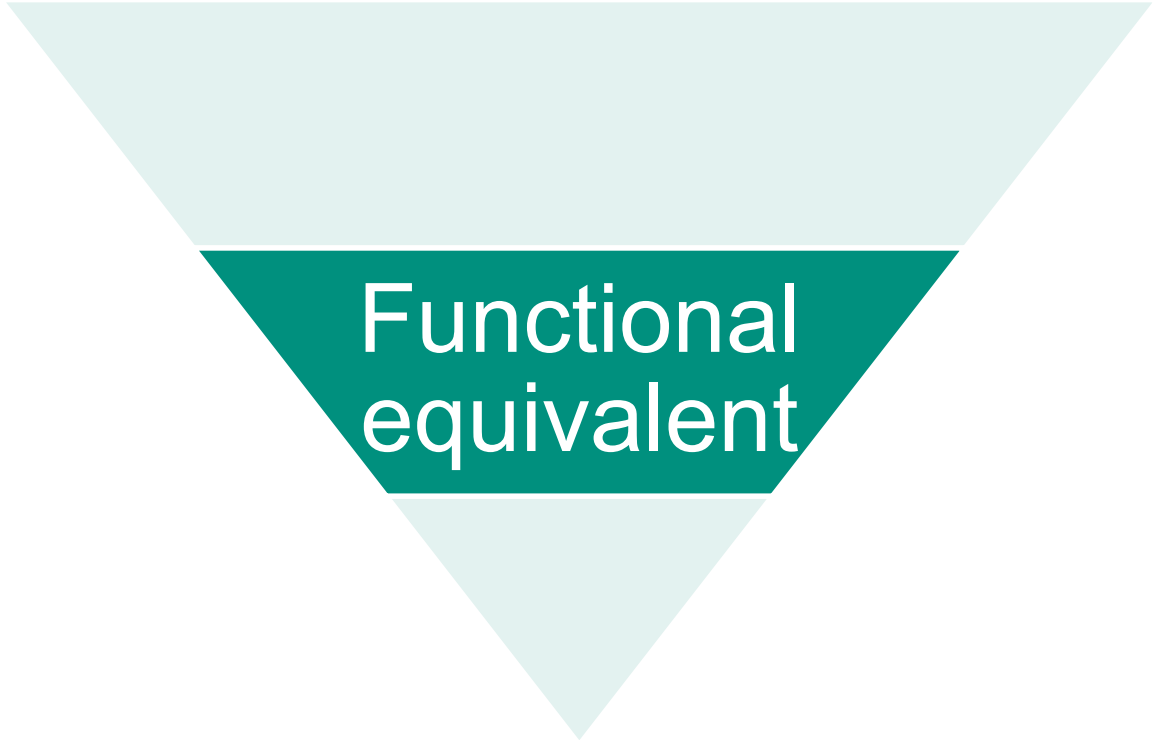


Level 1 – No discharge to surface water

- No discharge, or subsurface discharge with no functional equivalency preferable.

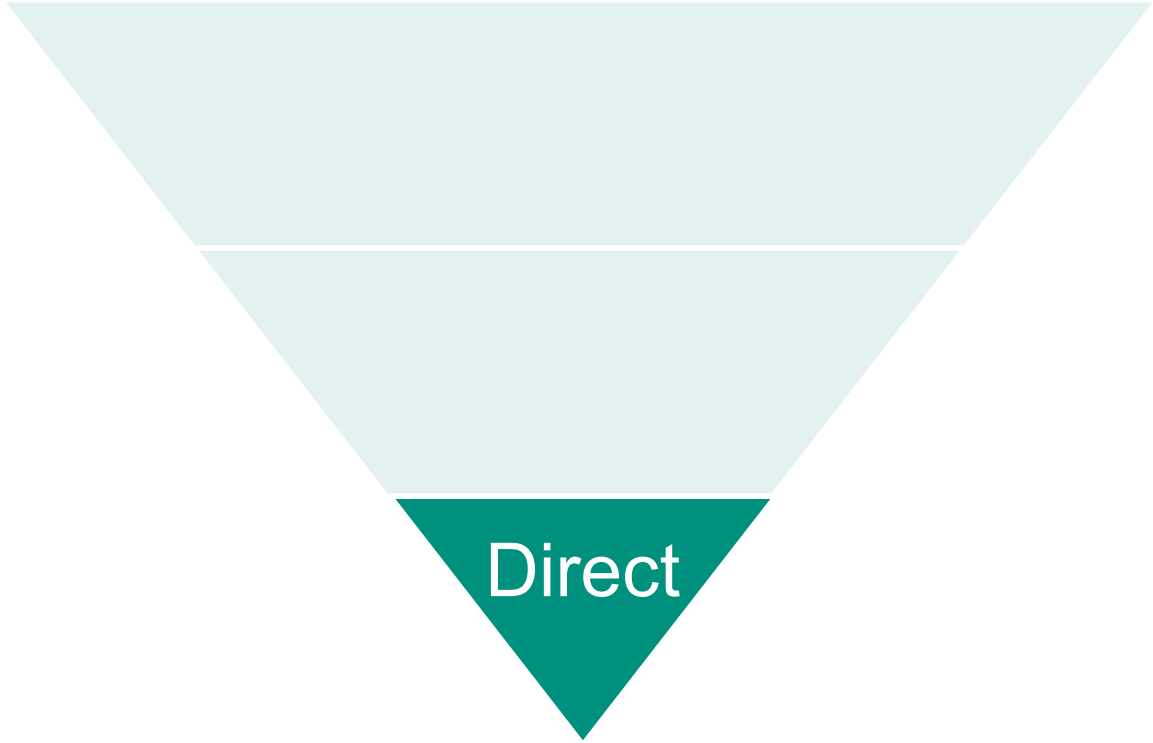
Level 2 - Functionally equivalent (NPDES)

- New facility: infeasible to avoid discharge to surface water.
- Existing facility: subsurface discharge is functionally equivalent.



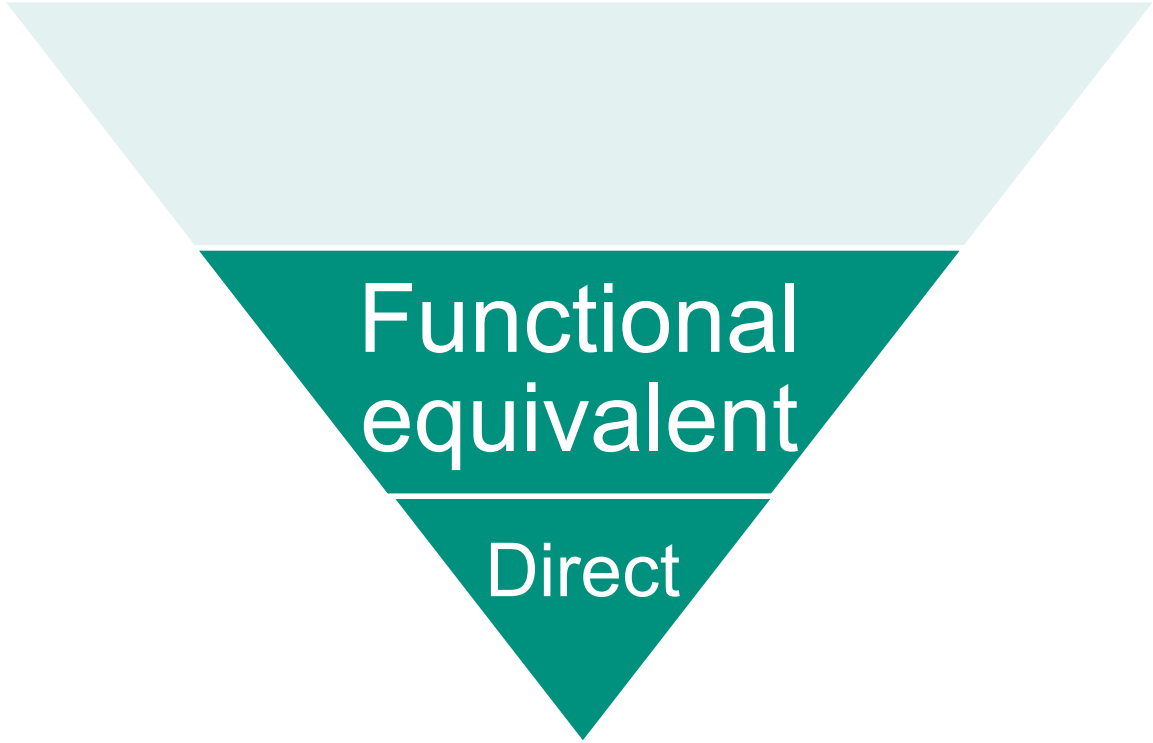
Level 3 – Direct discharge (NPDES)

- Existing direct discharges: no measurable lowering of surface water quality.
- New discharge: if ground discharge would impact drinking water, spawning beds or sensitive invertebrates.



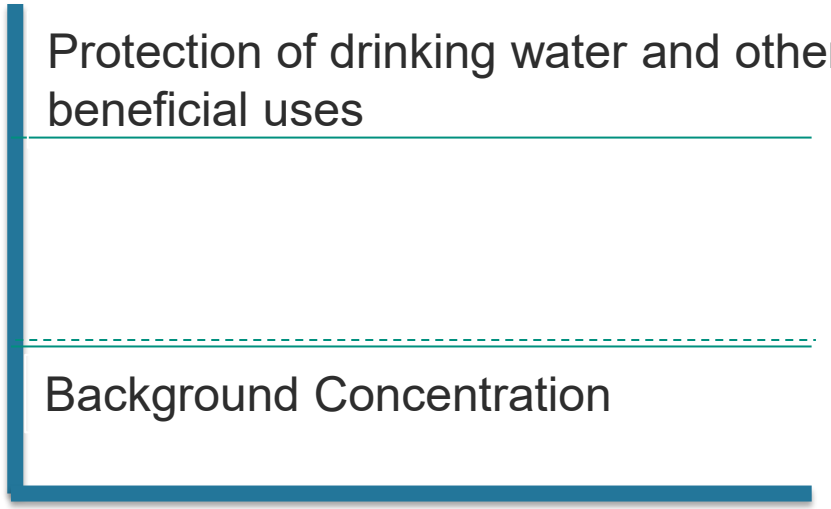
Requirements for NPDES permits

- Meet Groundwater Protection requirements.
- No measurable lowering of surface water quality, unless EQC determines socio-economic benefits outweigh environmental impacts.



Rule definition of “no measurable lowering”

- Minimal change from background.
- Temperature: <0.3 C.
- Dissolved oxygen: <0.1 mg/l change.



Additional protections

- Technology-based limits
- Limits to protect beneficial uses
- **Groundwater protection requirements**
- **No measurable lowering of water quality**

Socioeconomic analysis

- Weigh environmental costs
  - Loss of assimilative capacity
  - Impacts on fishing, recreation, drinking water, etc.
  - Energy usage
- Economic benefits and costs
  - Cost of treatment
  - Impacts to ratepayers
  - Growth

Source: Aron Borok

Questions for discussion

- What do you think of the hierarchical planning approach?
- Do you have any suggestions for the rule language?
- Are there any scenarios that the rule language does not address?

Photo Courtesy of Clackamas Water Providers

Rules Advisory Committee for Three Basin Rule Revision

Agenda Item #5: WPCF-Onsite Permitting & The Three Basin Rule

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Summary of Existing Rule (WPCF-Onsite)

- The Three Basin Rule currently requires any “New” Water Pollution Control Facility permit with a discharge of 5,000 gallons per day (gpd) or more be approved by the Environmental Quality Commission in the areas subject to the rule.

Description of the Issue (WPCF-Onsite)

- Many existing facilities currently served by onsite septic systems within Three Basin Rule areas
- Existing facilities not required to obtain new WPCF-OS permit until major repairs / upgrades to septic are needed or if facility expansions are proposed
- Existing facilities (with discharges of 5,000 gpd or more) simply looking to repair old / failed septic systems must go through EQC approval process for a “new” permit

Description of the Issue (WPCF-Onsite)

- Previous facilities affected by natural disasters looking to rebuild also subject to this process
- The process to obtain EQC approval takes extra time and resources from all parties, even when septic repairs may be urgent
- Septic repairs / upgrades approved by DEQ result in higher treatment and better environmental protection than older systems

Proposed Rule Change (WPCF-Onsite)

OAR 340-041-0350(3)(d)

(d) “New” NPDES and WPCF permits are defined to include permits for potential or existing discharges which did not previously have a permit, and existing discharges which have a permit, but request an increased load limitation~~;~~. Existing discharges from facilities served by an onsite sewage disposal system(s), that are not proposing to expand or increase flow or waste strength, and are required to obtain a new WPCF-Onsite permit as a result of a system failure or necessary repairs, are excluded from this definition;

Implications of Rule Changes (WPCF-Onsite)

- Existing facilities (with discharges of 5,000 gpd or more) that require a new WPCF-OS permit when only proposing to repair their septic system(s), would no longer need EQC approval first.
- Time and cost associated with permit process decreased
- Failing septic repairs would occur faster
- WPCF-OS permitting process in Three Basin Rule areas would be consistent with existing statewide processes.

Wrap up and next steps

- Follow up items for next time
- Technical work session
- Meeting #3 scheduling

Photo Courtesy of Clackamas Water Providers

Title VI and alternative formats

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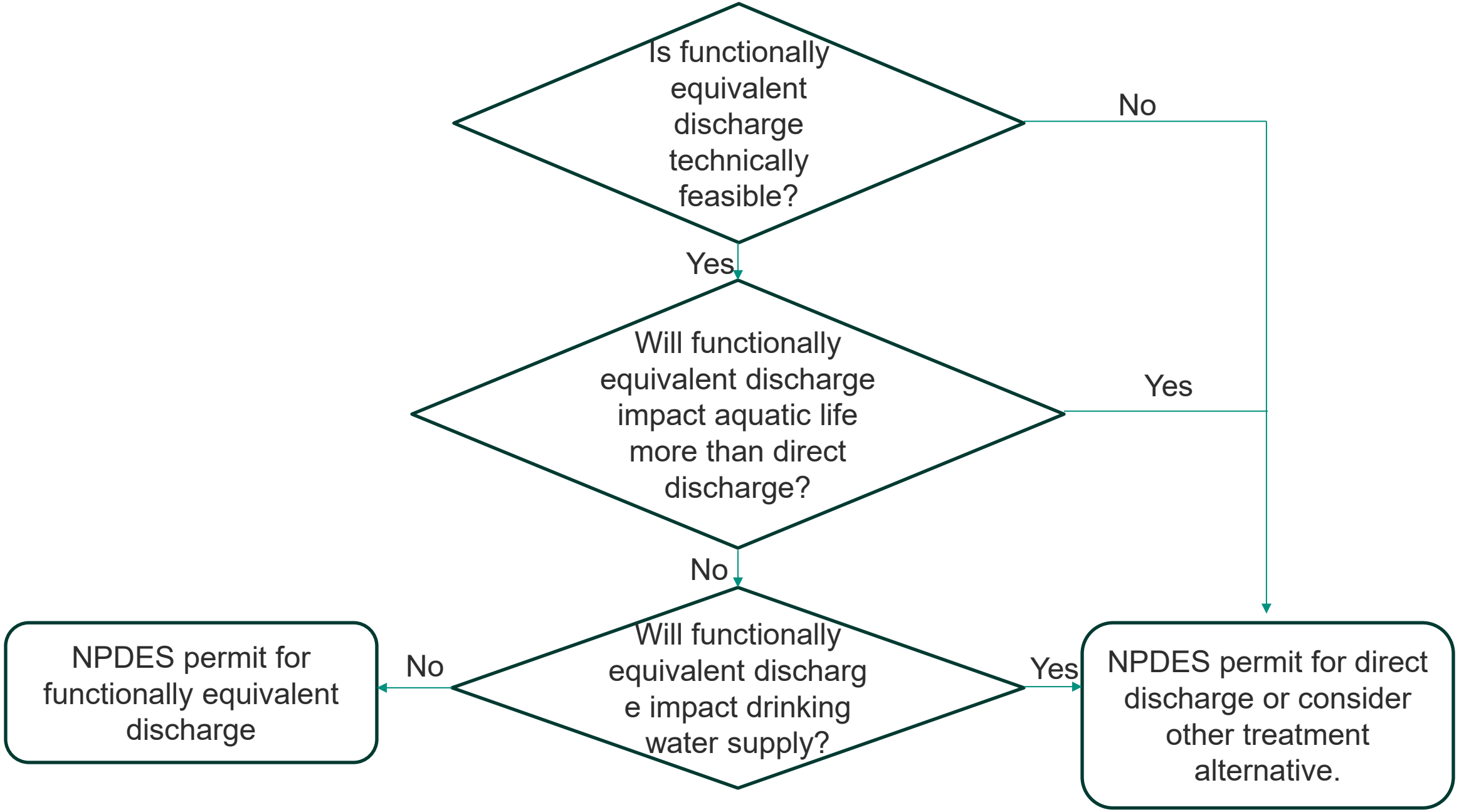
Calculating water quality-based permit limits

- Typical permit: meet water quality standard at
  - Edge of zone of initial dilution (acute aquatic life criteria)
  - Edge of mixing zone (chronic and human health criteria)
  - Different flow statistics depending on use
- Proposed revisions:
  - Also calculate limits to ensure no measurable lowering of water quality (max. of 1% of assimilative capacity).


Is functionally equivalent discharge technically feasible?
No
Yes
Will functionally equivalent discharge impact aquatic life more than direct discharge?
Yes
No
Will functionally equivalent discharg e impact drinking water supply?
No
NPDES permit for functionally equivalent discharge
Yes
NPDES permit for direct discharge or consider other treatment alternative.

Assimilative capacity calculation

Analyte	Criteria	Ambient value	Assim. Cap.	Eff. Conc. in Groundwater	Eff. Value at 100% mix	% of Assim. Cap.
Nitrate (mg/L)	10	0.2	9.8	3	0.006	0.06%

Assume dilution is 500:1 (wet weather flow:7Q10 flow)

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Agenda Item #4: Examples of Hierarchical Approach

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1. Permit renewal for existing WPCF

- DEQ will consider whether discharge is functionally equivalent.
  - If not functionally equivalent, maintain WPCF permit.
  - If functionally equivalent, issue NPDES.

Photo Courtesy of: Marion County

2. Upgrade or new facility

- Facility must consider options that are not functionally equivalent.
- If preferred option is subsurface discharge, DEQ will determine if it is functionally equivalent.
  - If not, facility applies for WPCF permit.
  - If so, facility applies NPDES permit and must demonstrate that other options that avoid discharge to surface water are infeasible.

2. Existing WPCF upgrade or new facility

- If direct discharge is preferred, facility must justify why it is more protective of aquatic life or environment than subsurface discharge.

Photo Courtesy of: Marion County

3. Upgrades to existing NPDES facility

- Current rule allows no mass load increase.
- Revised rule allows mass load increase if no mass load increase is economically or technically infeasible.
  - Mass load increase must result in no measurable lowering of water quality.
  - More than measurable lowering of water quality allowed if EQC finds that socioeconomic benefit outweighs environmental cost.

Revisions vs. typical permitting

	Proposed Three Basin Rule	Typical permitting
Types of permits	Preference for WPCF	No preference
Direct discharge	Only in limited circumstances	Allowed
Permit limits	Technology and water quality limits, no measurable lowering, groundwater protection	Technology and water quality limits
Socioeconomic analysis	EQC decision	EQC or DEQ decision

Question for discussion

- Are there any scenarios that the rule language does not address?

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