Temperature Total Maximum Daily Load replacement project
John Day River Basin

Jan. 15, 2026

Informational Webinar

Virtual meeting

Zoom logistics and meeting ground rules

Raise hand to be recognized for questions or comments

Use chat to:

- Ask questions
- Provide informational resources
- Second good ideas/issues

Mute when not speaking

If using phone: press *9 to raise hand, *6 to mute/unmute

Agenda

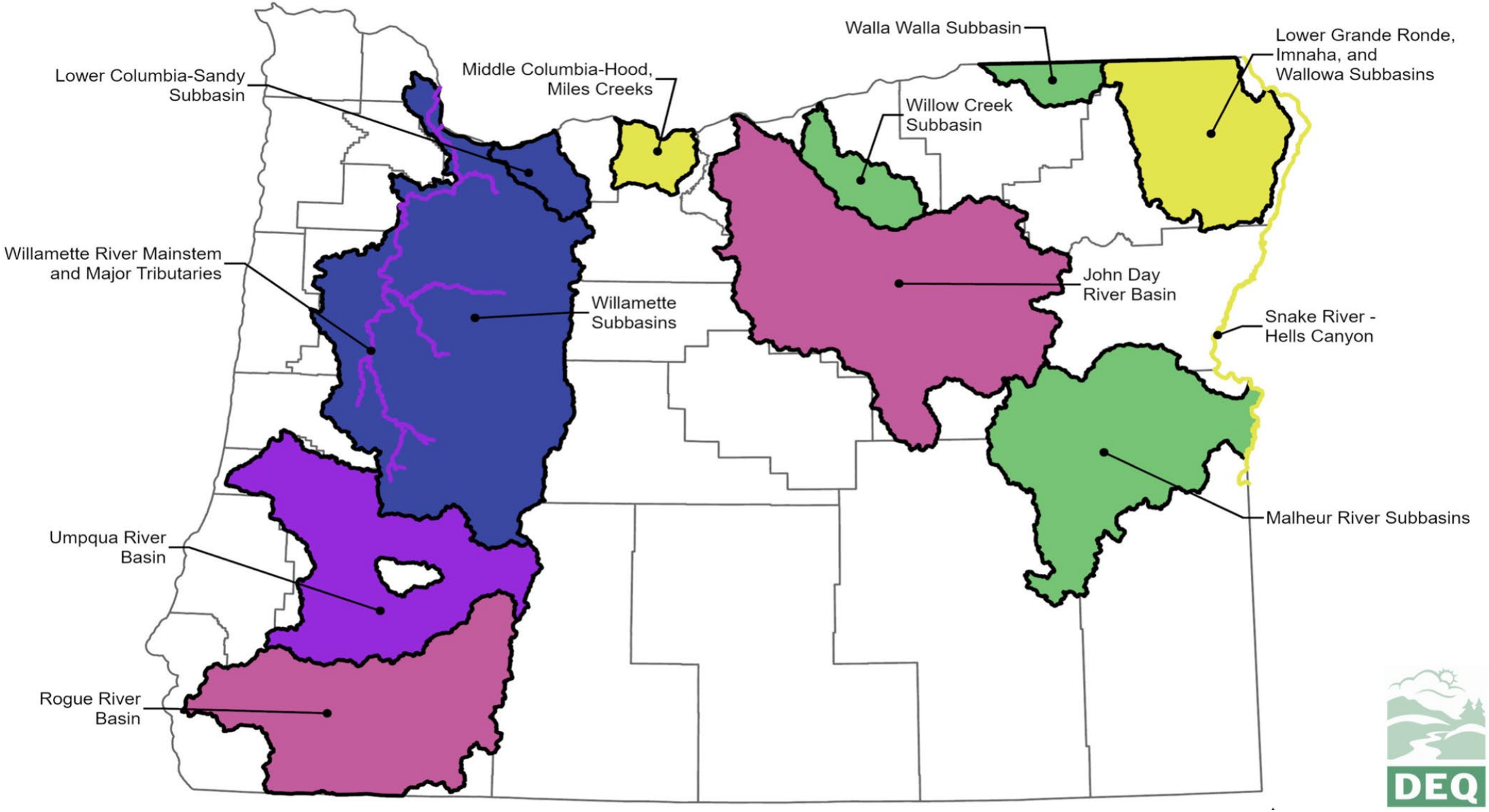
Time	Topic
10:30 a.m.	Welcome
10:35 a.m.	Zoom logistics, ground rules, and agenda review
10:40 a.m.	Project overview
10:45 a.m.	Total Maximum Daily Load
11:15 a.m.	Water Quality Management Plan
11:45 a.m.	Questions and Answers
12:30 p.m.	Adjourn

Legal drivers behind temperature TMDL replacements

- **2012: NWEA vs. USEPA, NMFS, USFWS**
  - Challenged EPA's approval of Oregon's water quality standards (including the Natural Conditions Criteria) and the Services' "no jeopardy" BiOp
  - Court found “EPA was unable to articulate a rationale [sic] basis for its approval of the NCC”
  - **Outcome:** EPA later disapproved the Natural Conditions Criteria
- **2019: NWEA vs. USEPA**
  - Claimed EPA unlawfully approved temperature TMDLs based on the disapproved Natural Conditions Criteria
  - **Outcome:** Court ordered DEQ and EPA to replace 15 temperature TMDLs using the remaining temperature criteria (excluding the Natural Conditions Criteria)

DEQ temperature TMDL replacement project web page

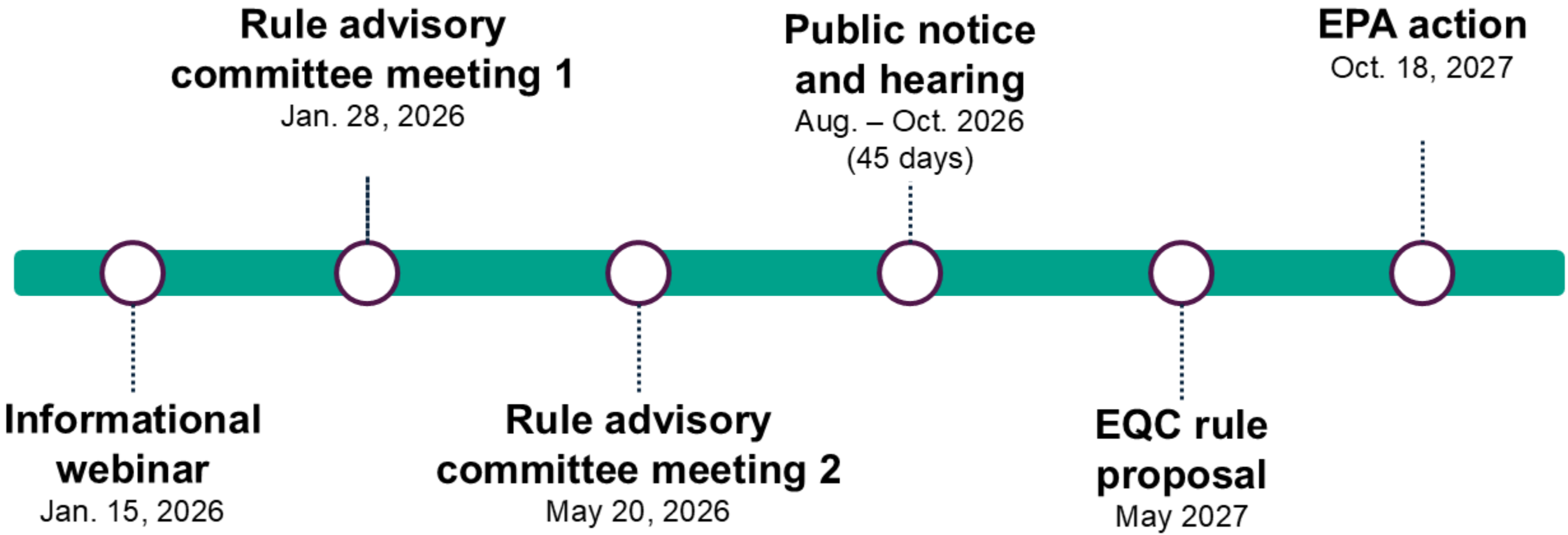
Project geographic scope



Key dates for EPA action

Sep. 15, 2024	June 28, 2025	Oct. 18, 2027	Dec. 4, 2028	Nov. 29, 2029
✓ Willamette Subbasins ✓ Lower Columbia-Sandy Subbasin	✓ Willamette River Mainstem and Major Tributaries ✓ Umpqua River Basin	• Rogue River Basin • John Day River Basin	• Snake River - Hell's Canyon • Lower Grande Ronde, Imnaha, and Wallowa Subbasins • Middle Columbia-Hood, Miles Creeks	• Walla Walla Subbasin • Willow Creek Subbasin • Malheur River Subbasins

John Day temperature TMDL project schedule

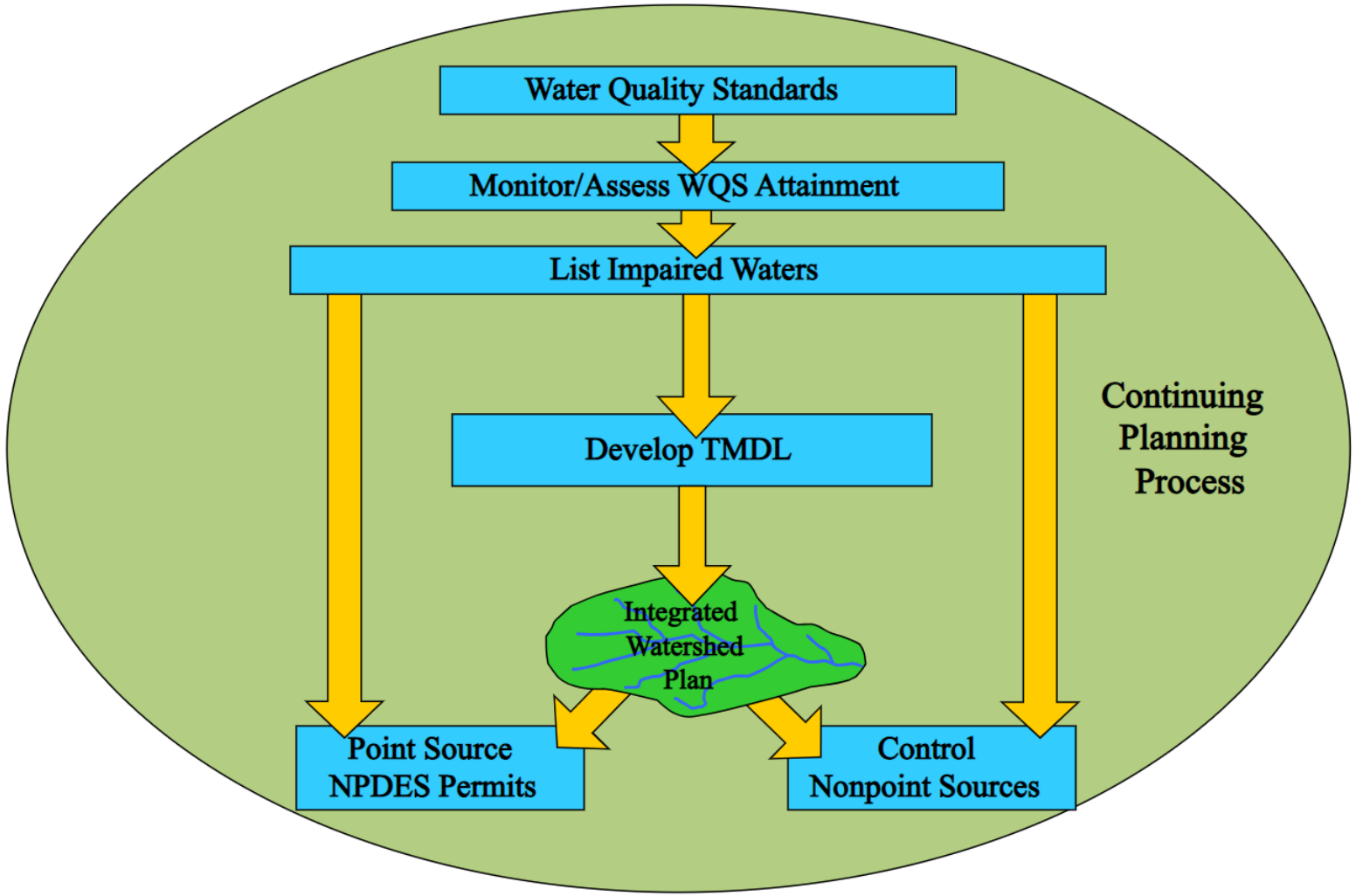


Total Maximum Daily Loads

A TMDL, or clean water plan, is a science-based approach to cleaning up polluted water so that it meets state water quality standards.

A TMDL is also a numeric value that represents the maximum amount of a pollutant a surface water body can receive and still meet the standards.

Clean Water Act framework



Oregon's Temperature Standard

Biologically Based Numeric Criteria (BBNC) 7-day average daily maximum

- 20°C (68.0°F) - Migration corridors
- 18°C (64.4°F) - Salmon & Trout Rearing and Migration
- 16°C (60.8°F) - Core cold water habitat
- 13°C (55.4°F) - Salmon and Steelhead Spawning
- 12°C (53.6°F) - Bull trout spawning and juvenile rearing use

Human Use Allowance (when temps > BBNC)

- 0.3°C (0.5°F) increase above the applicable standard

Protecting Cold Water (when temps < BBNC)

- 0.3°C increase above ambient for Non-point sources
- 0.5°C increase when 60-day rolling avg is 10°C - 12.8 °C
- 1.0°C increase when 60-day rolling avg is < 10°C

Reference: OAR 340-041-0028

TMDLs include the following elements:

- Waterbody Name and Location
- Pollutant
- Water quality standard and beneficial uses
- Loading Capacity
- Excess Load / Load Reduction
- Sources or Source categories
- Allocations
  - Wasteload Allocations (WLA)
  - Load Allocations (LA)
  - Surrogate Measures
  - Reserve Capacity (RC)
  - Margin of Safety (MOS)
- Seasonal Variation
- Water Quality Management Plan

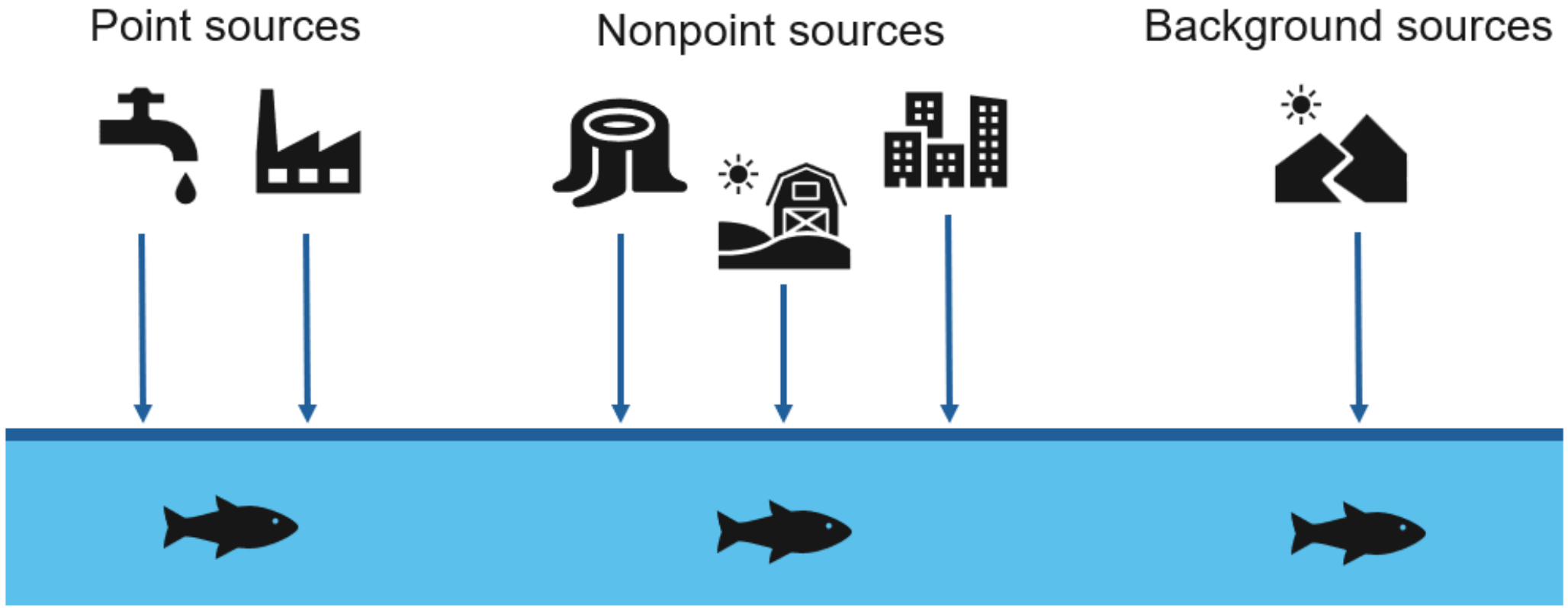
References: OAR 340-042-0040(4) and 40 CFR 130.2 and 40 CFR 130.7

TMDL process

1. Identify water quality concerns
2. Identify pollutant sources
3. Link pollutant sources to water body conditions
4. Calculate the pollutant reduction needed to restore water quality

DEQ employees visiting North Fork John Day River

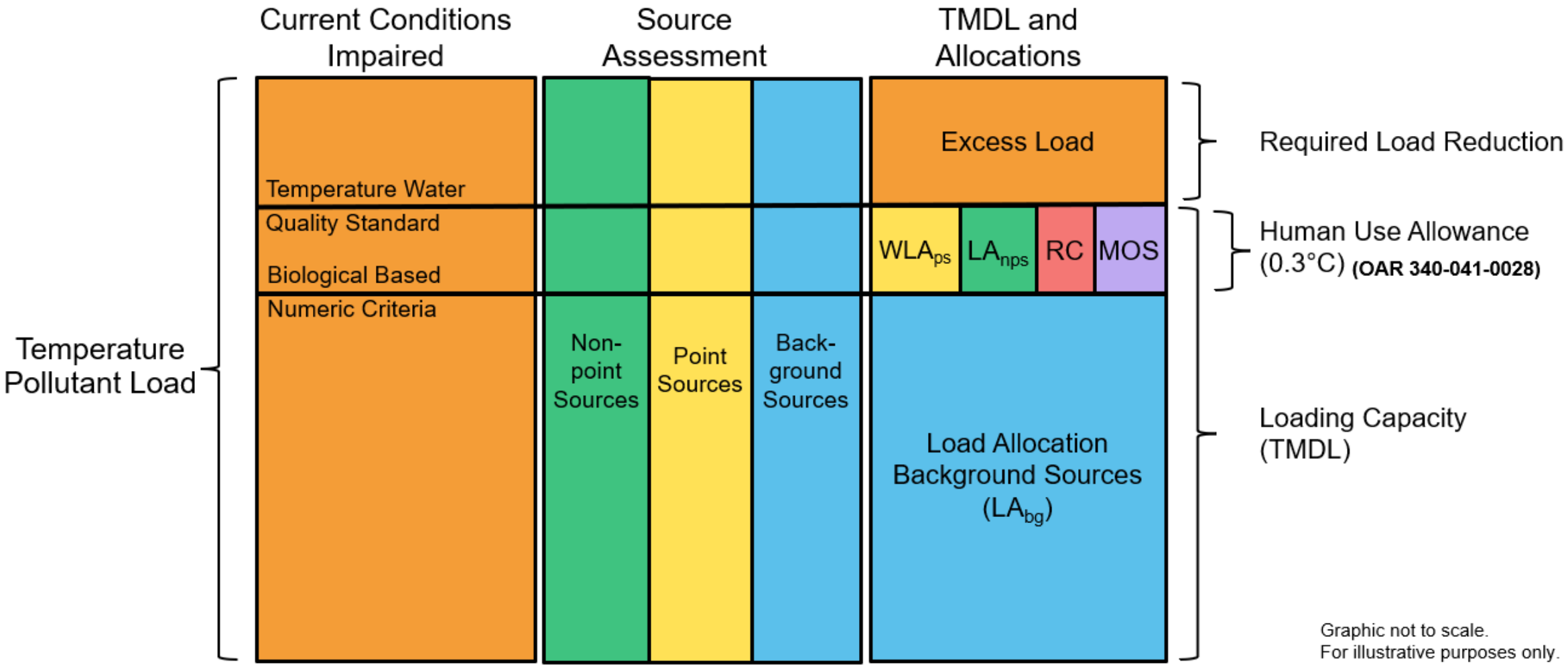
TMDL source assessment and calculation



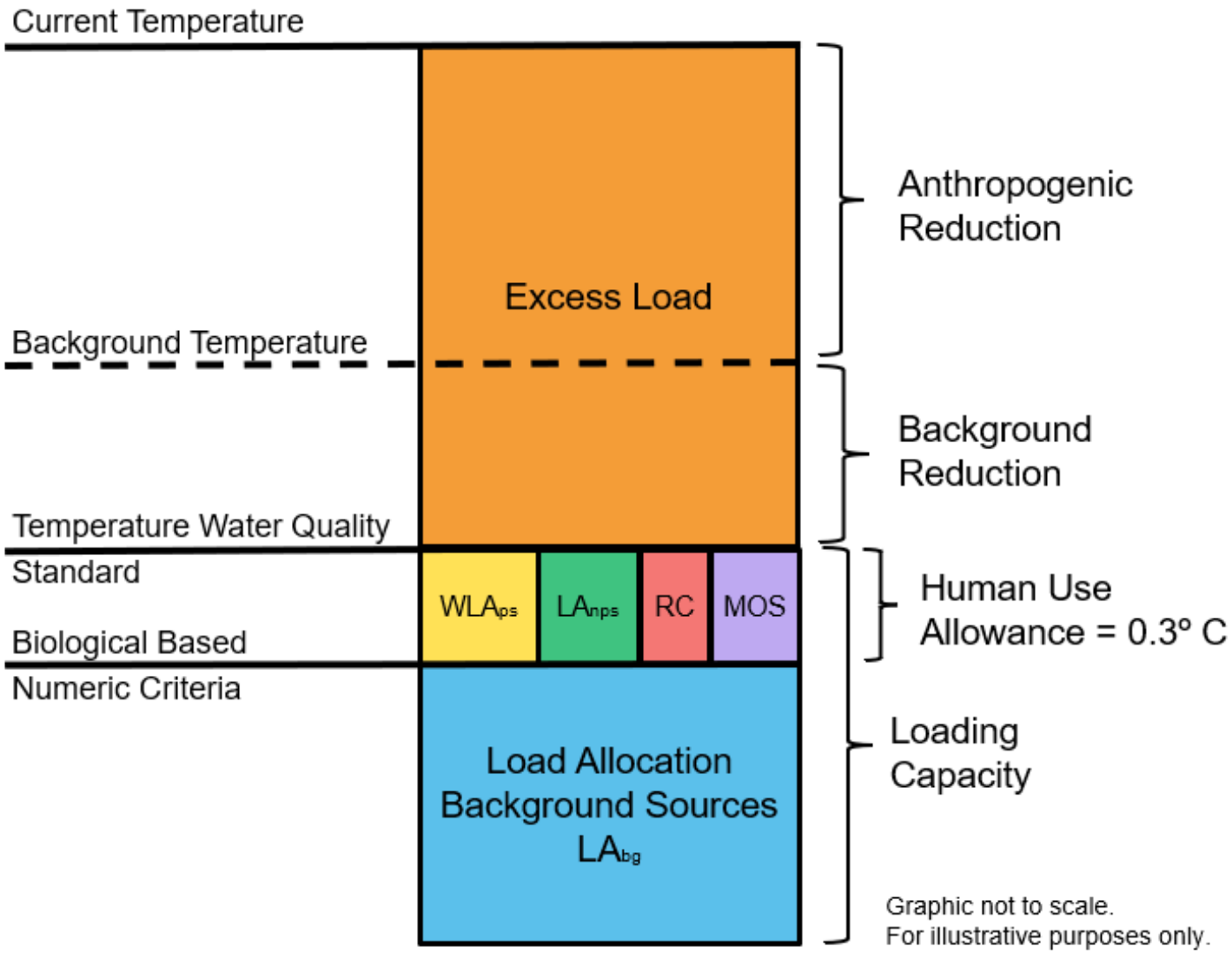
$$TMDL = WLA_{ps} + LA_{nps} + LA_{bg} + MOS + RC$$

- WLA_{ps}: Waste Load Allocation: point sources
- LA_{nps}: Load Allocation: nonpoint sources
- LA_{bg}: Load Allocation: background sources
- MOS: Margin of Safety
- RC: Reserve Capacity

$TMDL = WLA_{ps} + LA_{nps} + LA_{bg} + MOS + RC$



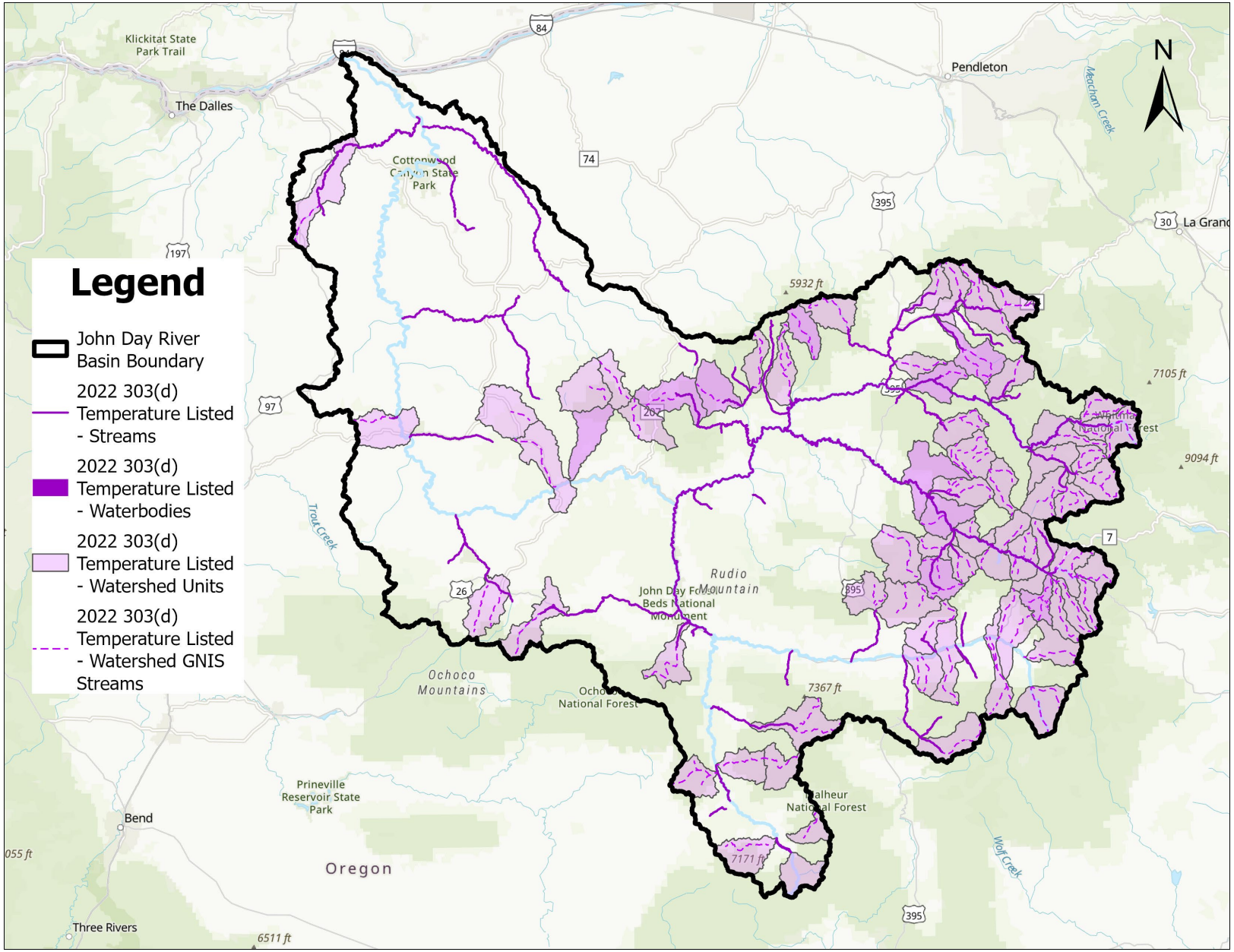
Temperature TMDL equation



Questions?

John Day River

John Day River Basin Temperature TMDL project area



[2022 Integrated Report]

Temperature Replacement TMDL development tasks

2019 - 2025 technical tasks for temperature replacement TMDL preparation

- Project planning
- Data gathering organization (data solicitation)
- Development of modeling Quality Assurance Project Plans (QAPPs)
  - QAPPs guide the technical work
- Mapping of Land Use and Ownership
- Implementation of modeling QAPPs

John Day River Basin temperature TMDL project web page

TMDL elements that may remain unchanged

- Current condition model calibrations
- Source identification
- Surrogate measure targets (some exceptions)

John Day River and John Day River Bridge

TMDL elements reviewed and updated

- Applicable temperature criteria
- Loading capacity and excess load
- Human use allowance assignments
- Allocations
- Model scenarios
- Seasonal Variation
- Water Quality Management Plan

John Day River at Muleshoe Campground

Sources of temperature warming

- NPDES point source discharges
- Vegetation removal or disturbance
- Water withdrawal activities
- Channel modification
- Background warming

John Day River at Picture Gorge

Allocation framework

- All individual NPDES **permitted sources** will receive a numeric Wasteload Allocation (WLA)
- Nonpoint source sectors, entities, or activities that have potential to contribute to stream warming will receive a Load Allocation (LA)
- Surrogate measures will be used for some Load Allocations

Questions about the TMDL?

John Day River

Water Quality Management Plan

“Water Quality Management Plan (WQMP)” means the required element of a TMDL describing strategies to achieve allocations identified in the TMDL to attain water quality standards.

The elements of a WQMP are described in OAR 340-042-0040(4)(l)

TMDL Water Quality Management Plan

- Oregon Administrative Rule 340-042-0040(4)(l)
- The WQMP is part of the TMDL document - it's the plan of action for implementing the TMDL pollutant allocations.
- The WQMP includes specific implementation information, including:
  - Identify responsible persons, including Designated Management Agencies, that must implement strategies to meet TMDL allocations.
  - Propose management strategies designed to meet the TMDL allocations.
  - Describe reasonable assurance that management strategies and sector-specific or source-specific implementation plans will be carried out through regulatory or voluntary actions.
- Some Designated Management Agencies will be required to write an implementation plan to describe how their specific jurisdiction plans to meet load allocations.

John Day River Basin Temperature WQMP

Elements that will not change for nonpoint source implementation plans

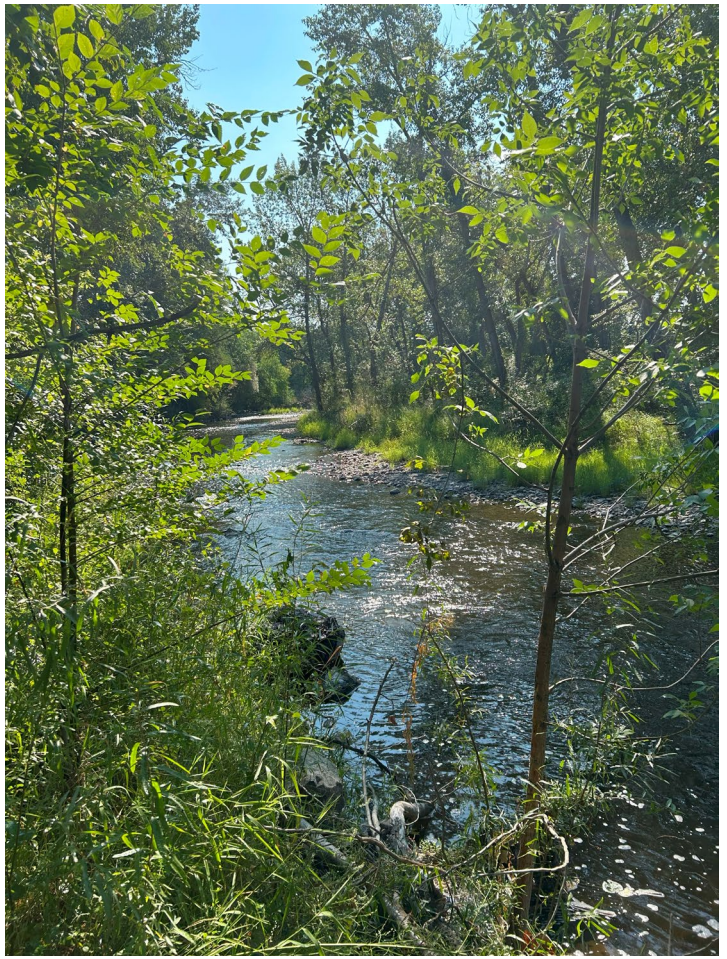
- John Day River Basin TMDL will cover temperature impairments for entire basin
- Same management strategies/BMPs as previous TMDLs within the basin
- Existing implementation plans will be evaluated and revised, as needed
- Most existing DMAs/RPs will continue to be responsible for implementing strategies
- DMAs/RPs will continue developing 5-year Implementation Plans, submitting annual reports, and submitting Year-Five updates

Note: For permitted sources TMDL temperature wasteload allocations and other management strategies may be changing and will be incorporated into permit requirements

Proposed implementation strategies

Examples: WQMP

- Riparian tree and shrub planting (increase site effective shade); vegetation management and invasive weed control, riparian protection, maintain plants until free to grow
- Stream restoration to restore altered bank and channel morphology; enhance floodplain interactions, large wood placement, bank stabilization etc.
- Protect and restore cold water refuges
- Stream flow protection measures
- Use regulatory programs and voluntary activities, including incentive-based projects, outreach and education



John Day River at Clyde Holliday State Park

John Day River Basin Temperature WQMP elements

WQMP elements under review to provide more specific guidance for what needs to be done to meet the temperature TMDL

- Improved tools to identify and prioritize gaps in shade for restoration
- Guidance on shade assessments. How to measure effective shade at the stream surface
- Streamside assessment

John Day River, Trout Farm Campground

John Day River Basin Temperature WQMP elements, continued

WQMP elements under review for adding specificity

- DEQ is providing site-specific shade gap analysis in limited areas
- Evaluating list of DMA and responsible persons for implementation plan submittals

John Day River Below Dayville

John Day River Basin Temperature WQMP expectations

- Update existing plan or develop plan as a DMA/RP
- Incorporate strategies in preceding slides or other appropriate actions
- Contain specifics on priorities and where strategies and practices will be applied based on identified tools
- Include measurable objectives and milestones for documenting implementation and gaging effectiveness
- Education, outreach, partnerships
- Temperature monitoring for identified DMAs
- Submit annual reports on progress, and conduct year-five reviews

Questions about the WQMP?

North Fork John Day River

Rule advisory committees

- Meetings are for RAC members to review information, ask questions, and provide feedback.
- Meetings are open to the public to observe
- Materials are posted online in advance for review
- RAC members provide input on fiscal impacts, TMDL revisions, and WQMP updates
- RAC meetings
  - Meeting 1: Jan. 28, 2026, 1 p.m. to 3 p.m. PT
  - Meeting 2: May 20, 2026, 9 a.m. to 11 a.m. PT
- Public notice with hearing then present final draft rule to EQC to adopt by rule

John Day TMDL Rulemaking web page

Online resources

Temperature TMDL Replacement project page

John Day TMDL Replacement project page

John Day TMDL Replacement project rulemaking page

John Day temperature TMDL contacts

TMDL Development

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- Victoria Avalos, Analyst, Victoria.avalos@deq.oregon.gov

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