Temperature Total Maximum Daily Load Replacement Project
Rogue River Basin

Feb. 12, 2026
In-person meeting at Rogue Valley Council of Governments in Central Point and online informational webinar

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

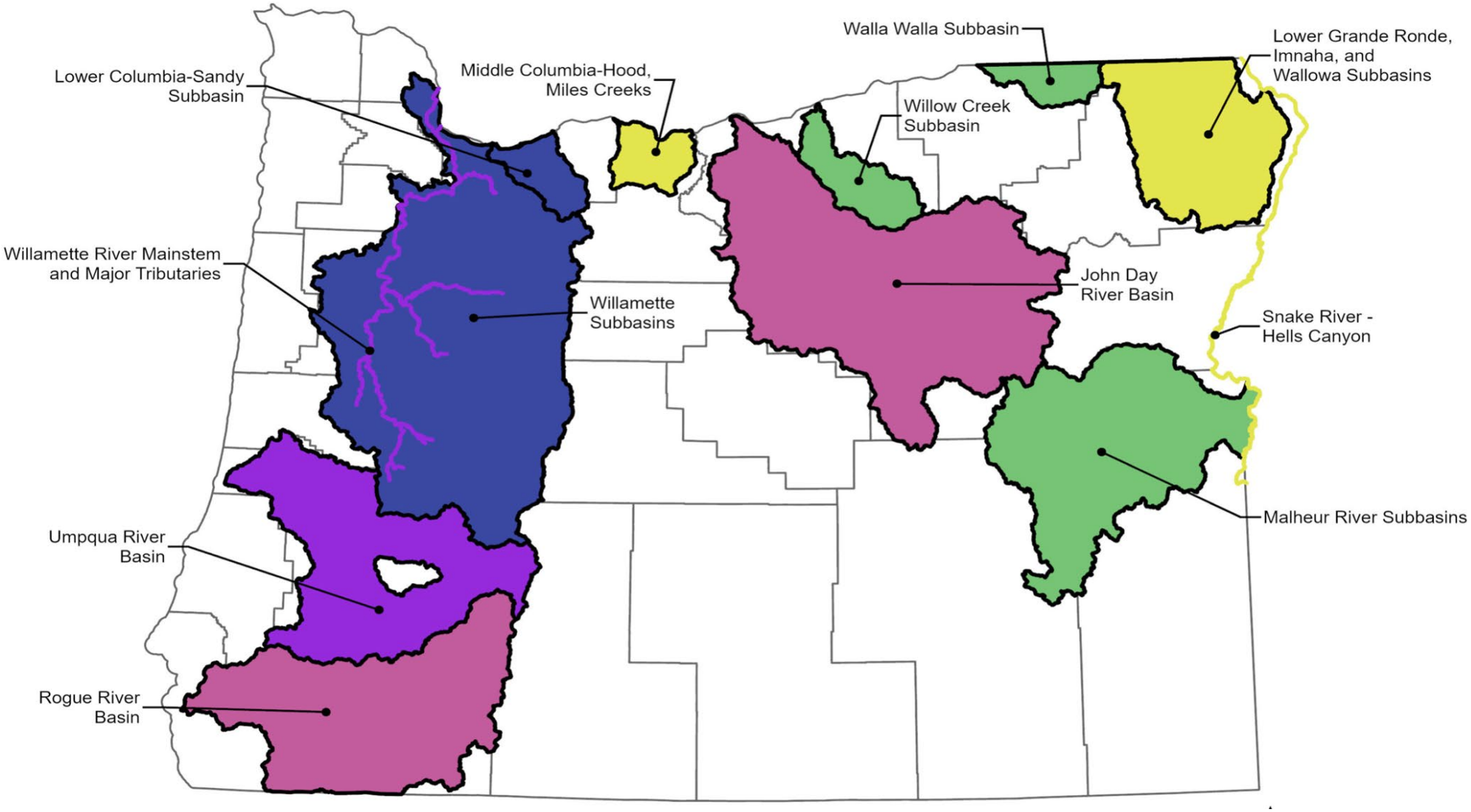
Time	Topic
1 p.m.	Welcome
1:05 p.m.	Agenda review; Zoom logistics and ground rules
1:10 p.m.	Project overview
1:15 p.m.	Total Maximum Daily Load
1:45 p.m.	Water Quality Management Plan
2:15 p.m.	Questions and answers
3 p.m.	Adjourn

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

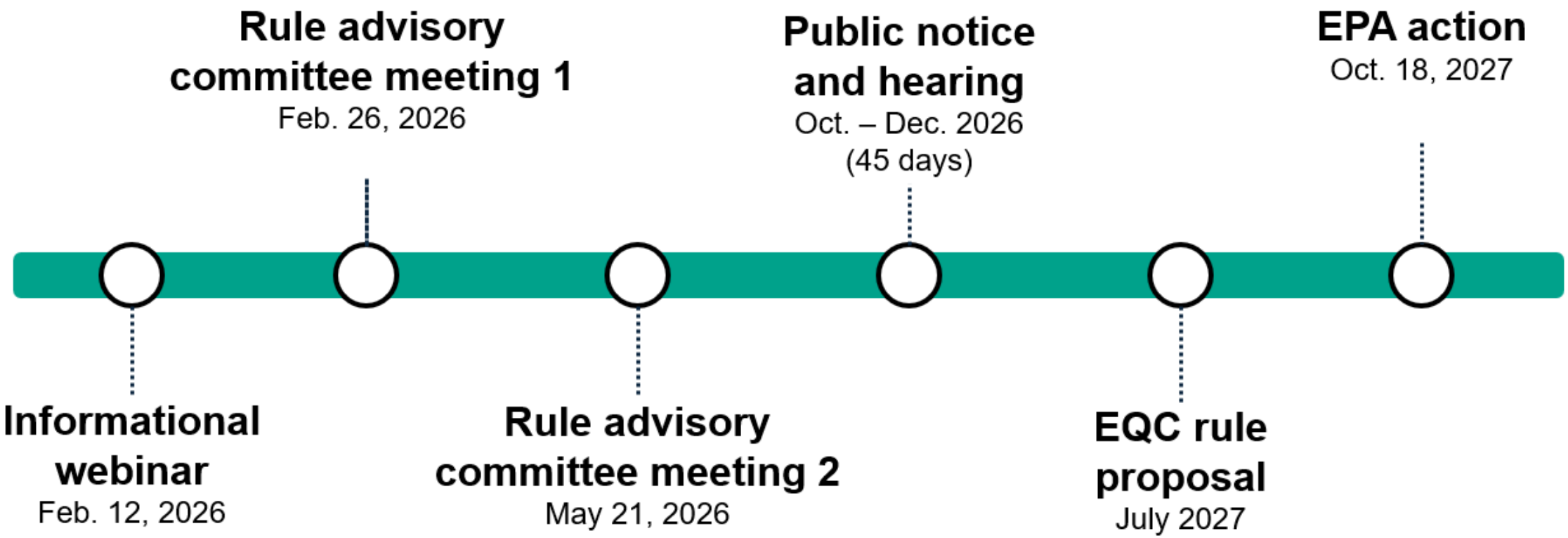
Project geographic scope



Key dates for EPA action

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

Rogue River Basin TMDL project schedule



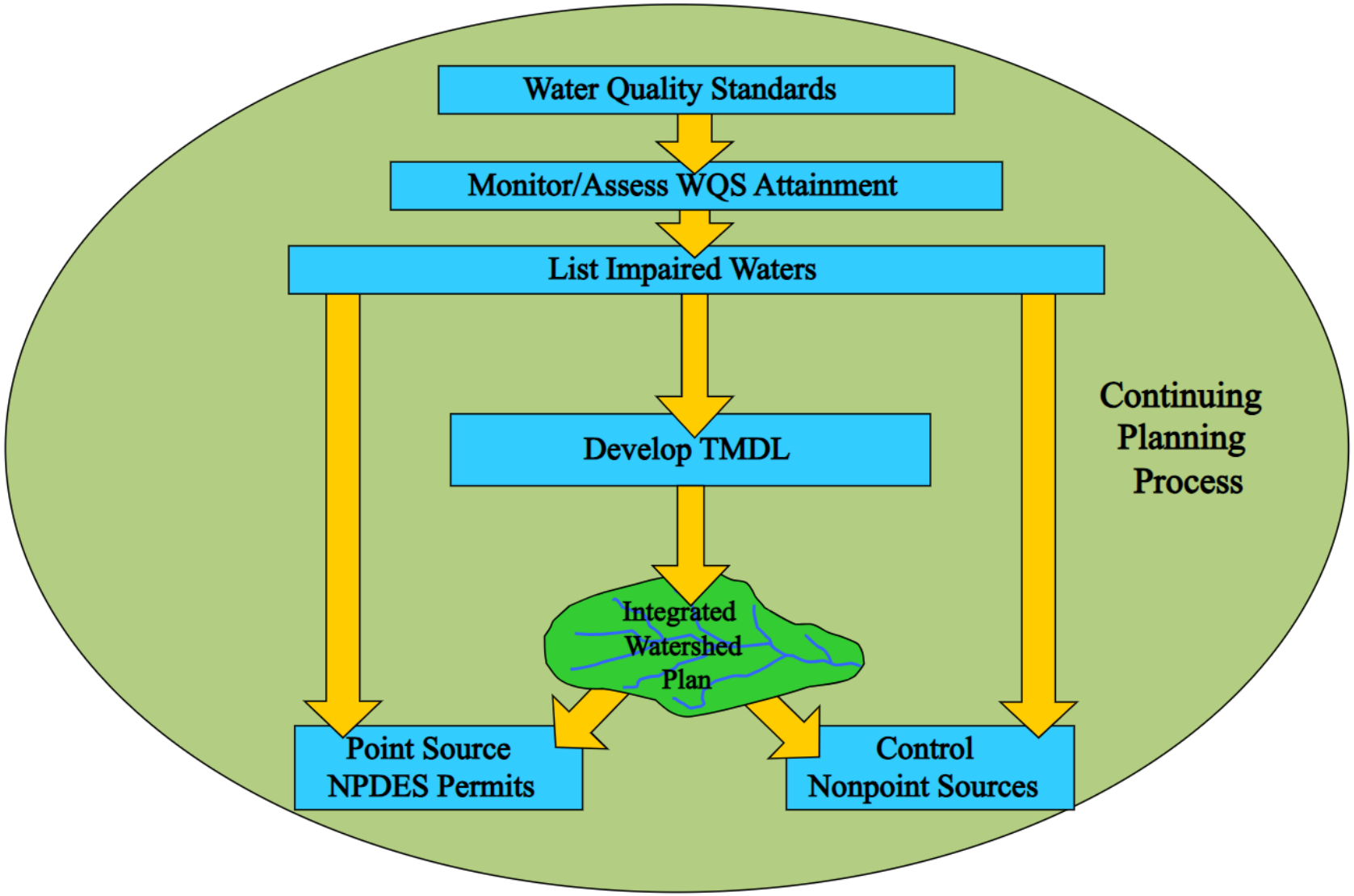
Total Maximum Daily Loads

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 highest amount of a pollutant a surface water body can receive and still meet the standards.

Soda Springs, South Fork Little Butte Creek, Oregon

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 and 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 temperatures > BBNC)

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

Protecting Cold Water (when maximum temperatures < BBNC)

- 0.3°C increase above ambient
- 0.5°C increase when 60-day rolling average is 10°C - 12.8°C
- 1.0°C increase when 60-day rolling average is < 10°C

Reference: OAR 340-041-0028

TMDLs include the following elements:

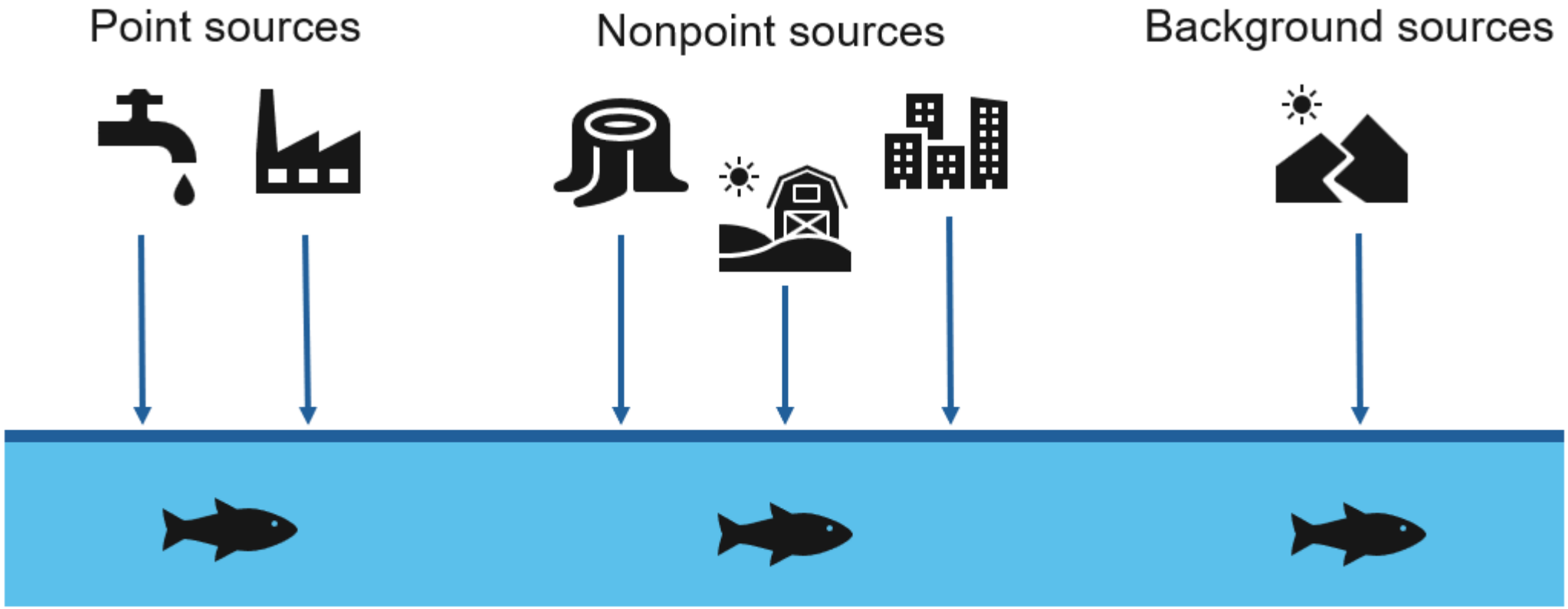
- Waterbody name and location
- Pollutant
- Water quality standard and beneficial uses
- Seasonal variation
- Loading capacity
- Excess load/load reduction
- Sources or source categories
- Allocations
  - Wasteload Allocations (WLA)
  - Load Allocations (LA)
  - Surrogate Measures
  - Reserve Capacity (RC)
  - Margin of Safety (MOS)
- Water Quality Management Plan

Reference: OAR 340-042-0040(4) and federal regulations: 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
5. Assign pollutant loadings to sources (allocations)

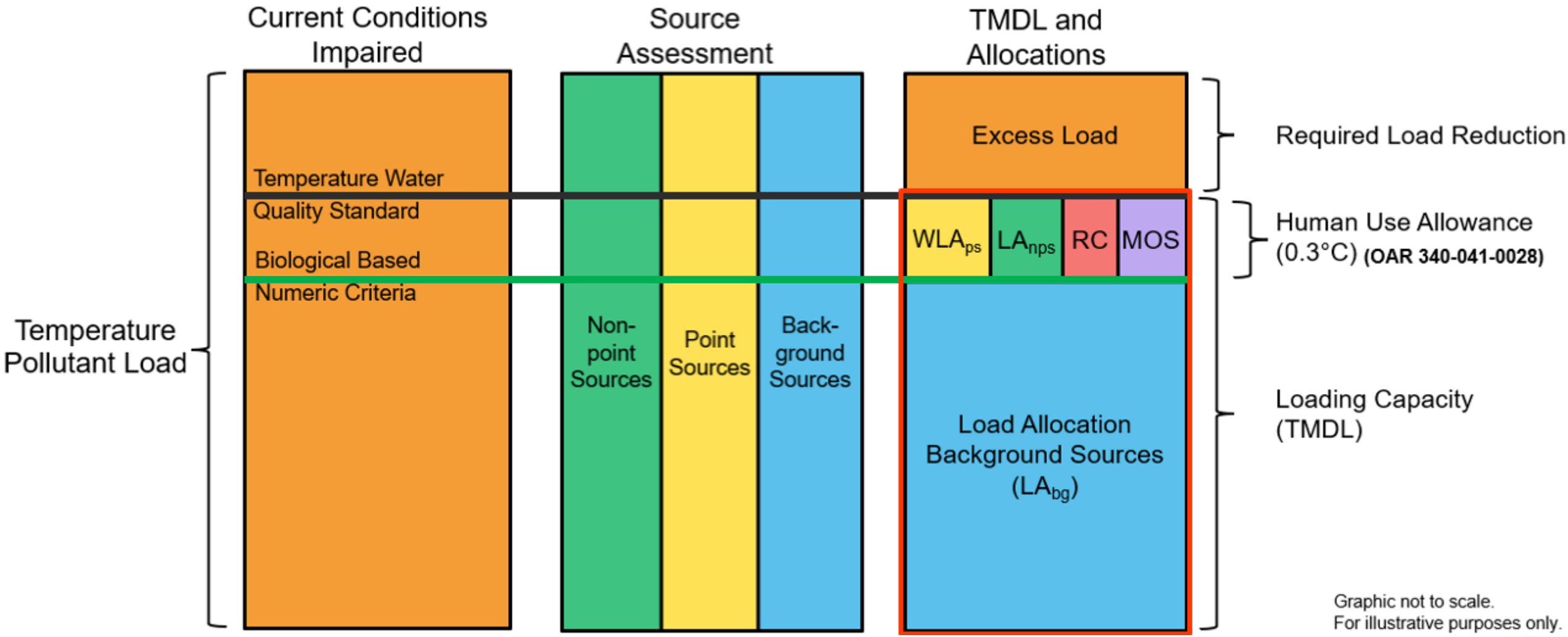
TMDL source assessment and calculation



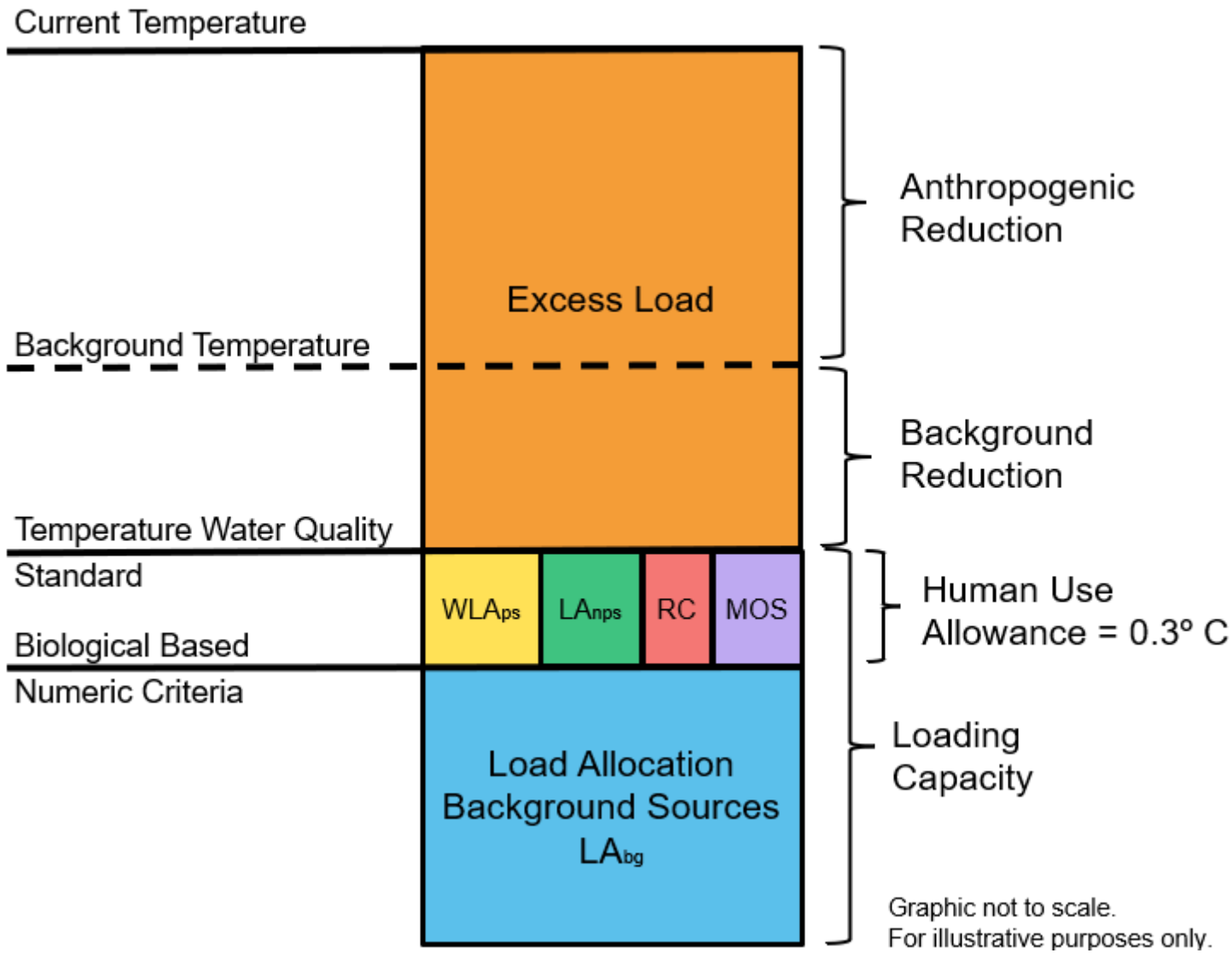
$$TMDL = WLA_{ps} + LA_{nps} + LA_{bg} + MOS + RC$$

- 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

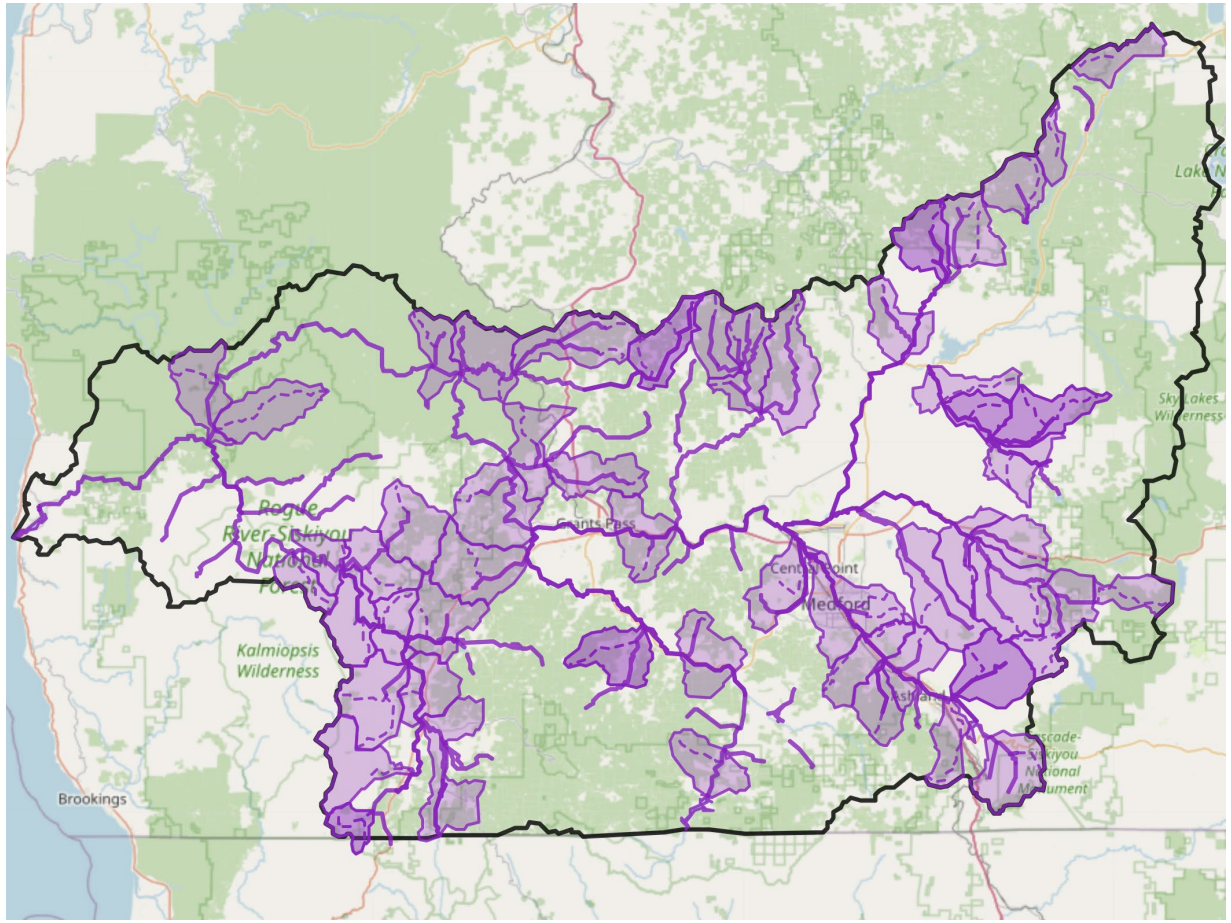


Questions?

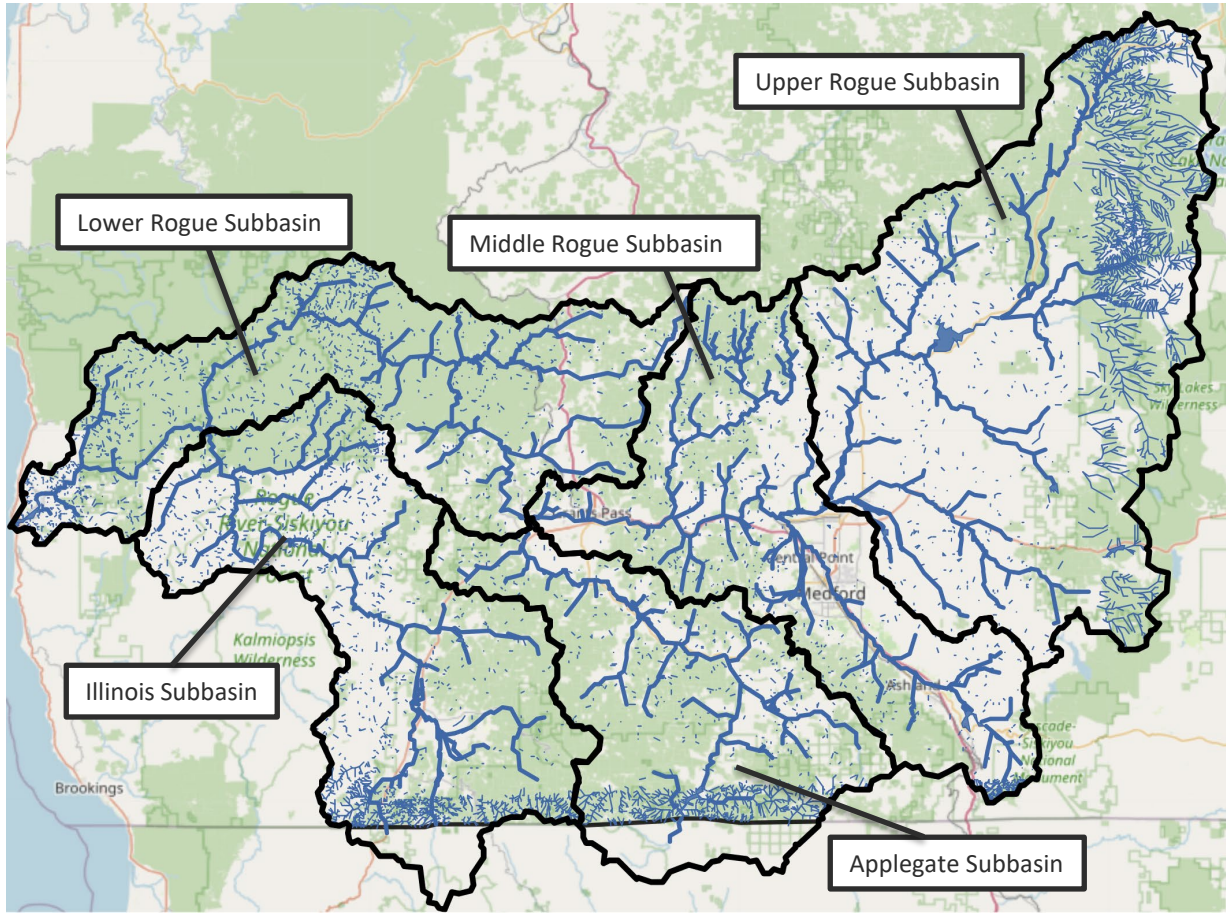
Rogue River in Grants Pass, Oregon

Rogue River Basin Temperature TMDL project area

2022 303(d) listed impairments in the Rogue River Basin



2026 Rogue River Basin Temperature TMDL project scope



[2022 Integrated Report]

Replacement Temperature TMDL development tasks

2023 - 2024 technical tasks

- Project planning
- Data gathering and organization (data solicitation)
- Development of modeling Quality Assurance Project Plans (QAPPs)
  - QAPPs guide the technical work
- Interactive map, includes mapping of land use and ownership

2025 technical tasks

- Completion of TMDL analysis
- Compilation, visualization, and interpretation of results

2026 technical and communications tasks

- Complete draft TMDL documents
- This webinar, meetings, public notice and comment period, DEQ compiles and responds to comments

Rogue River Basin temperature TMDL project page

TMDL elements that may remain unchanged

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

Rogue River Trail in Galice, Oregon

TMDL elements reviewed and updated

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

Sources of temperature warming

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

Rogue River above Hellgate Canyon, Oregon

This list is not exhaustive, and not all of these are quantified in all Replacement Temperature TMDLs.

Allocation framework

- All individual non-stormwater NPDES **permitted sources** receive a numeric wasteload allocation (WLA).
- NPDES sources covered under **general permits** receive WLAs based on their warming potential.
- Nonpoint source sectors, entities, or activities with the potential to contribute to stream warming receive a load allocation (LA).
- Surrogate measures are used to assess attainment for some LAs.

Questions about the TMDL?

Rogue River, Robertson Bridge, Oregon

Water Quality Management Plan

“Water Quality Management Plan” is 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

WQMP elements that will not change

Rogue River Basin Temperature WQMP elements that will not change for nonpoint source implementation plans:

- Rogue River Basin TMDL will cover temperature impairments for entire basin
- Same management strategies/best management practices 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 five-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; dam management strategies; removal of in-channel ponds, etc.
- Protect and restore cold water refuges
- Stream flow protection measures
- Use regulatory programs and voluntary activities, including incentive-based projects, outreach and education

Rogue River Watershed Council project on Bear Creek: River Mile 19, Talent, Oregon.

Rogue 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
- Current and anticipated restored riparian area shade comparisons (shade gaps)

Bear Creek in Talent, Oregon

Rogue River Basin WQMP elements updated

WQMP elements updated for additional guidance:

- Timeline projections for water quality restoration - interim targets for vegetation management to establish measurable objectives, milestones and implementation timelines

- Priority source or activity - percentage riparian areas with excess solar radiation due to riparian vegetation canopy cover significantly below site potential vegetation target

WQMP elements will add specificity

- DEQ is providing site-specific shade gap analysis in limited areas within the Rogue River Basin

- WQMP will identify DMAs and responsible persons required to submit implementation plans and implement other actions such as temperature monitoring

Rogue River in Grants Pass, Oregon

WQMP will provide timelines

- Specific timelines and measurable objectives for BMP implementation and completion
- **Example:** Years one to three after TMDL issuance: identify highest priority sites for planting riparian vegetation
    - Actively promote and support riparian planting at priority sites in years two to five, five to ten, and successive five-year increments until vegetation shade targets are estimated to be met
    - Track progress: monitor survival rates for 10-20 years at selected sites

Rogue River Basin Temperature WQMP expectations

- Responsible Persons or DMA to develop or update existing TMDL implementation plans
- Incorporate strategies listed in the WQMP 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
- Implement education, outreach, and partnerships
- Temperature monitoring for identified DMAs
- Submit annual reports on progress, and conduct year-five reviews in coordination with DEQ

Questions about the WQMP?

Mule Creek – Wild and Scenic Rogue, Oregon

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 will be held in-person with the option to attend virtually.
  - Meeting 1: Feb. 26, 2026, 10 a.m. to 12 p.m.
  - Meeting 2: May 21, 2026, 10 a.m. to 12 p.m.
- Public notice with hearing then present final draft rule to EQC to adopt by rule

Rogue River Basin TMDL Rulemaking web page

Online resources

Temperature TMDL Replacement project page

Rogue River Basin TMDL Replacement project page

Rogue River TMDL Replacement project rulemaking page

Rogue River Basin temperature TMDL contacts

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Sign up to receive GovDelivery notifications about the rulemakings online.

Lobster Creek Bridge, River Mile 11 Lower Rogue River, Oregon

Title VI and alternative formats

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