

Upper Yaquina River Watershed Total Maximum Daily Loads – Rule Advisory Committee Meeting #3

Watershed Management

March 22, 2023

1 p.m. – 3:30 p.m.

Virtual meeting



Meeting agenda summary

1. Welcome, introductions, agenda review and Zoom logistics
2. Updates since 2nd Rule Advisory Committee meeting
3. Orientation to Upper Yaquina River TMDLs documents
4. Overview of revised draft fiscal impact statement
5. RAC discussion of all documents
6. Rulemaking schedule review
7. Next steps, wrap-up and adjourn meeting

Upper Yaquina River TMDLs updates since 2nd Rule Advisory Committee meeting

1. Conducted focused Designated Management Agency coordination (Dec-Feb)
2. Scheduled 3rd RAC meeting for input on draft documents
3. Posted TMDLs documents for RAC for review
4. Developing interactive web map to assist with implementation planning
5. Provided informational session on Yaquina TMDLs to Environmental Quality Commission

Orientation to TMDLs documents

1. Oregon Administrative Rule language
2. TMDLs Rule
3. Water Quality Management Plan
4. TMDLs Technical Support Document
5. Revised Draft Fiscal Impact Statement
 - Environmental Justice Statement
 - Racial Equity Statement

Oregon Administrative Rule language

Division 42 TOTAL MAXIMUM DAILY LOADS (TMDLS)

OAR 340-042-0090

Total Maximum Daily Loads and Water Quality Management Plans

(1) The following TMDLs are adopted by EQC by reference in this rule on the dates indicated. The TMDL documents and supporting information for TMDLs adopted as rule or issued by order are available on DEQ's website.

(a) Upper Yaquina River Watershed, USGS Subbasin of the Northern Oregon Coastal Basin (HUC 17100204)

(A) TMDL: (date of EQC adoption)

(B) WQMP: (date of EQC adoption)

Upper Yaquina TMDL Rule

Organized by 12 required TMDL elements

1. TMDL name and location
2. Pollutant identification
3. Water quality standards and beneficial uses
4. Seasonal variation and critical conditions
 - *Water quality data evaluation overview*
5. Pollutant sources or source categories
6. & 7. Loading capacity and excess load
8. - 11. Allocations (wasteload allocations, load allocations, margin of safety, reserve capacity)
12. Water Quality Management Plan – with reasonable assurance of implementation determination

Upper Yaquina WQMP

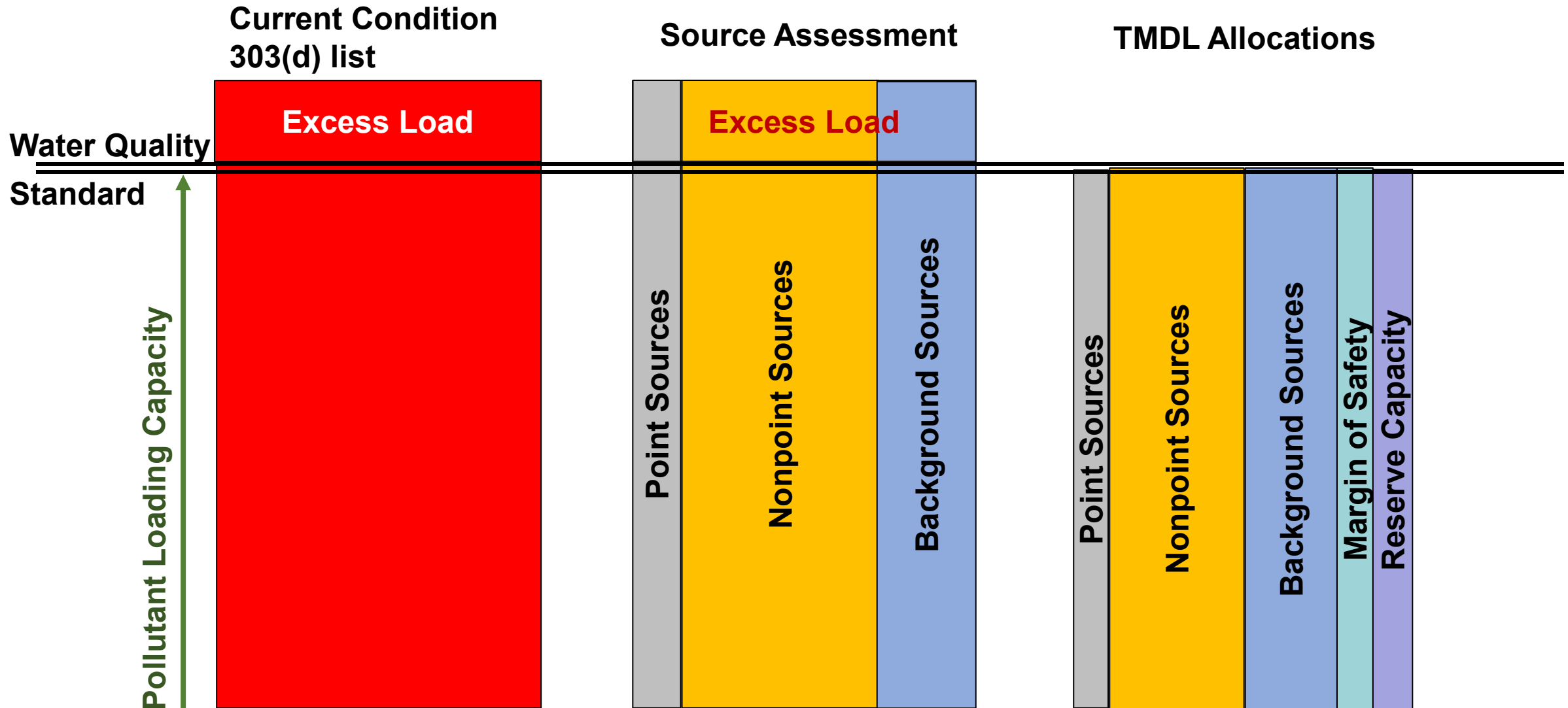
Organized by required WQMP elements

1. Condition assessment and problem description
2. Goals and objectives
3. Management strategies designed to meet allocations
4. Timeline for implementing strategies
5. How strategies will attain water quality standards
6. Timeline for attainment of water quality standards
7. Identification of responsible persons
8. Identification of existing implementation plans
9. Schedule for submittal of implementation plans
10. Demonstration of reasonable assurance of implementation
11. Plan for evaluating TMDL progress
 - Identification of persons responsible for monitoring
 - Schedule for review and revision
12. Plan for public involvement in strategy implementation
13. Efforts to maintain strategies
14. General discussion of implementation costs and funding
15. Citation of legal authorities

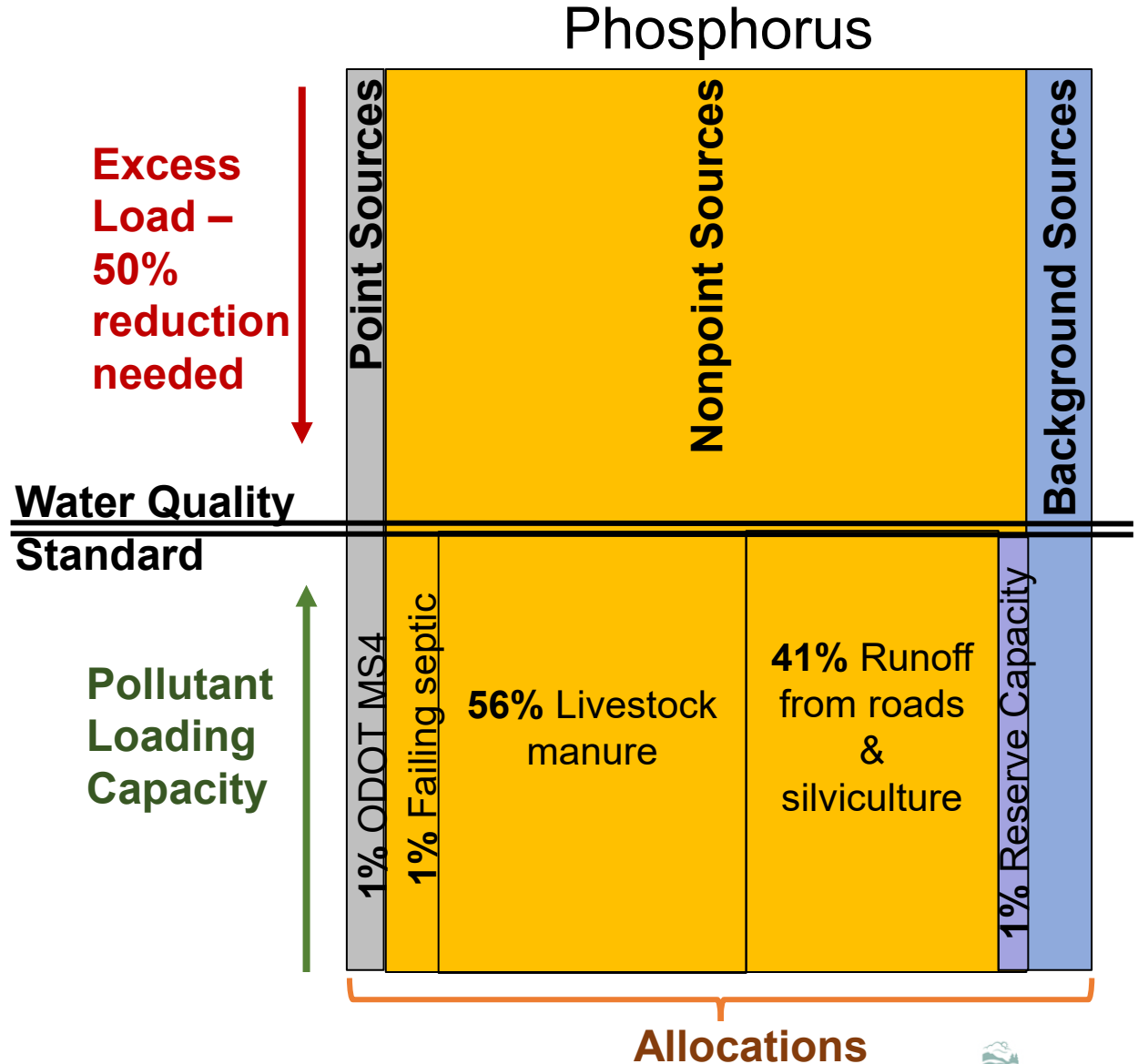
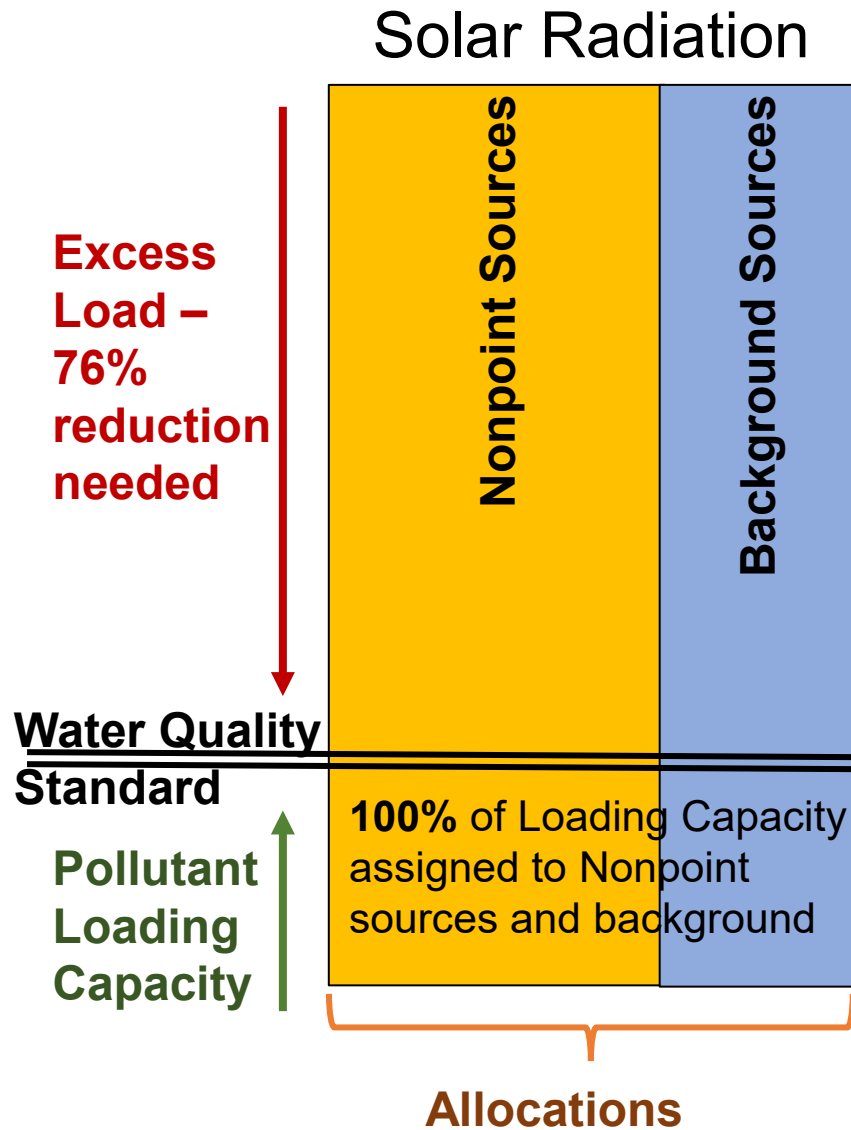
TMDLs Technical Support Document

- Information supporting each TMDL element, as needed
- Details of each analysis and appendices for modeling
- Expanded information about impairment history
- Source assessment
- Allocation approach for DO and bacteria TMDLs
- Water quality management plan support

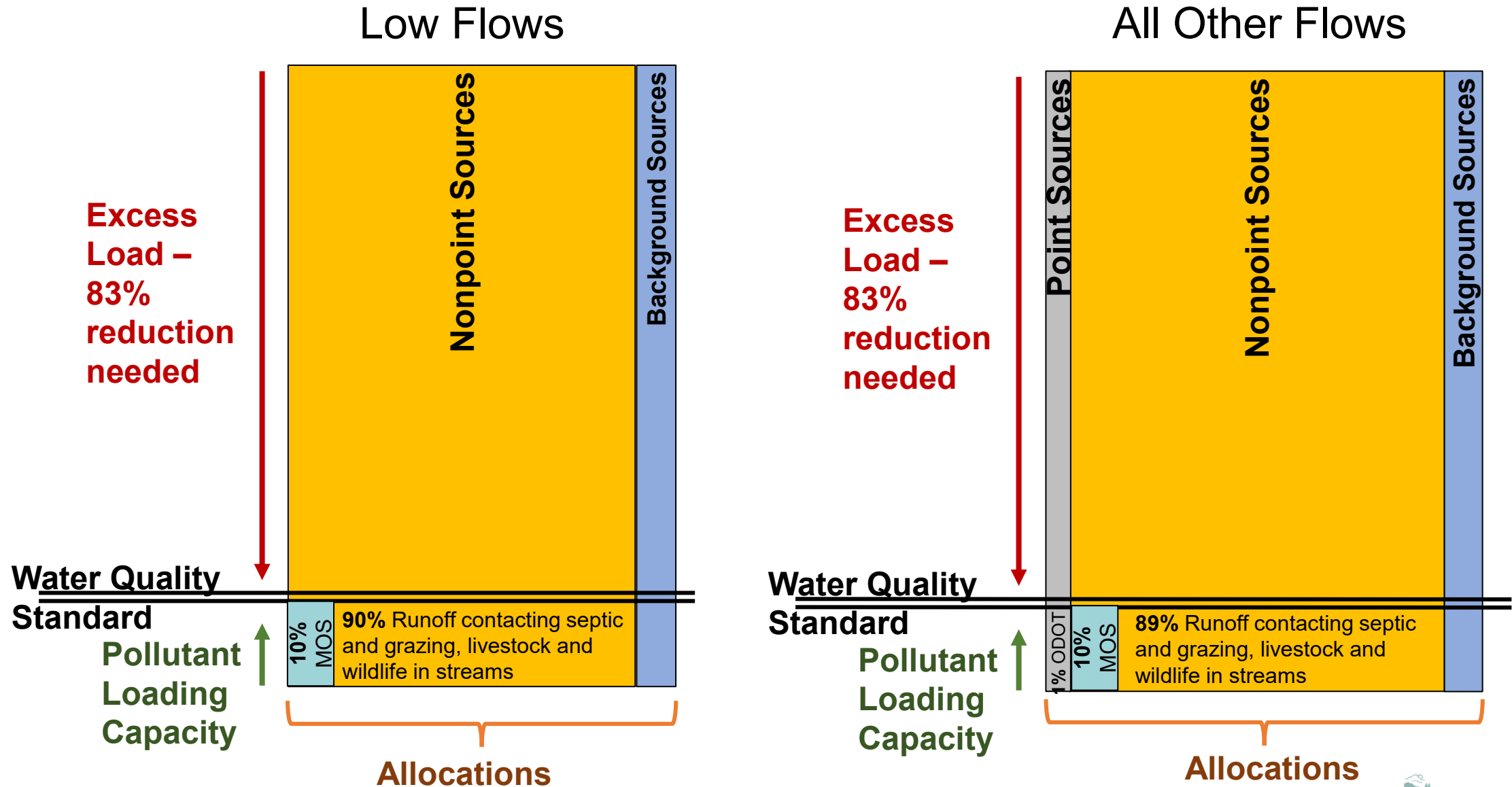
TMDL Approach - Refresher



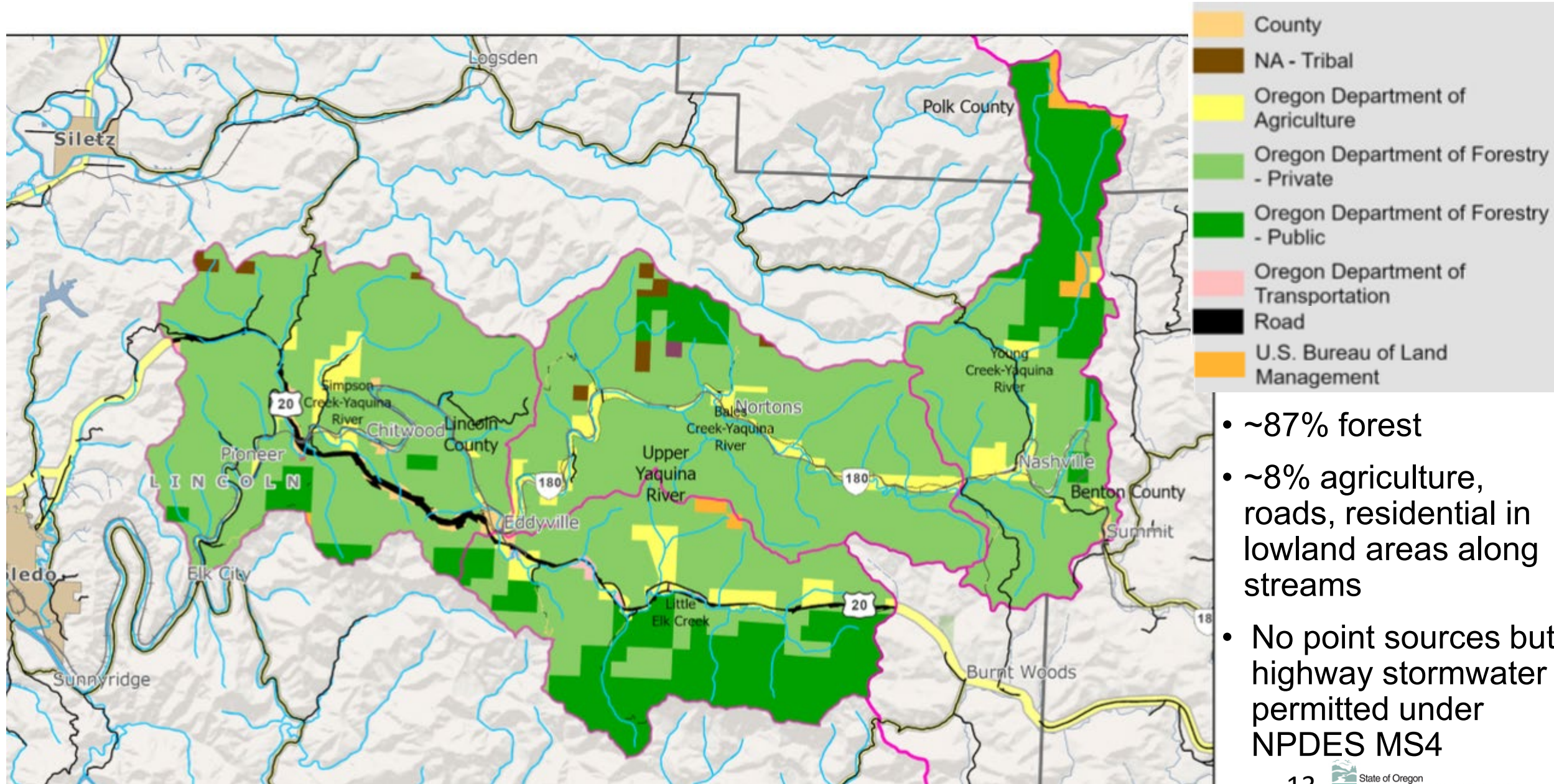
Dissolved Oxygen – pollutant contributions and allocations



Bacteria contributions and allocations



Upper Yaquina River Watershed Land Use or Jurisdiction

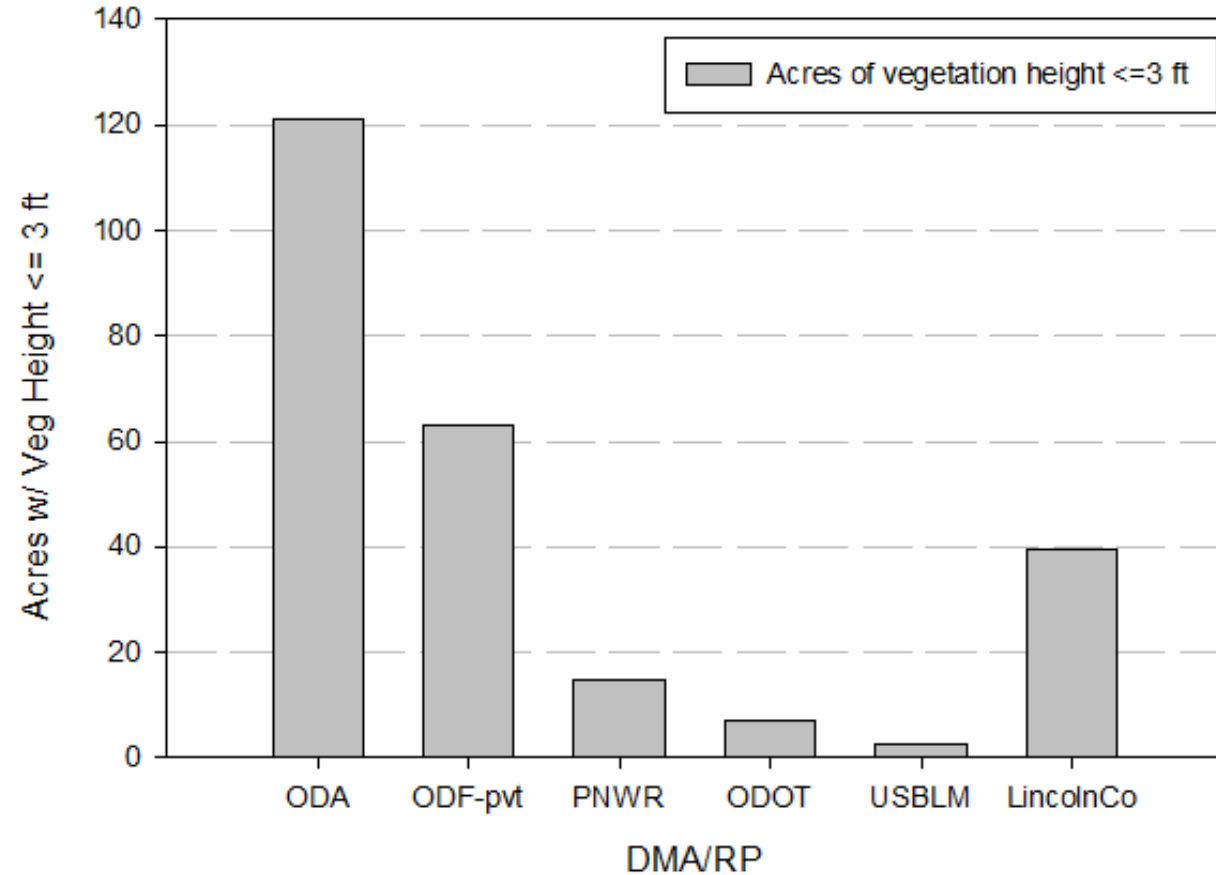


- ~87% forest
- ~8% agriculture, roads, residential in lowland areas along streams
- No point sources but highway stormwater permitted under NPDES MS4

Riparian area jurisdiction and condition

| Responsible Person | Approximate riparian acreage within 100-feet of Yaquina River | Approximate Percentage of Area |
|---|---|--------------------------------|
| Oregon Department of Agriculture | 336 | 41.2% |
| Oregon Department of Forestry - Private | 315 | 38.6% |
| Lincoln County | 90 | 11.0% |
| Portland & Western Railroad | 50 | 6.1% |
| Oregon Department of Transportation | 20 | 2.4% |
| U.S. Bureau of Land Management | 6 | 0.7% |
| Total | 816 | 100.0% |

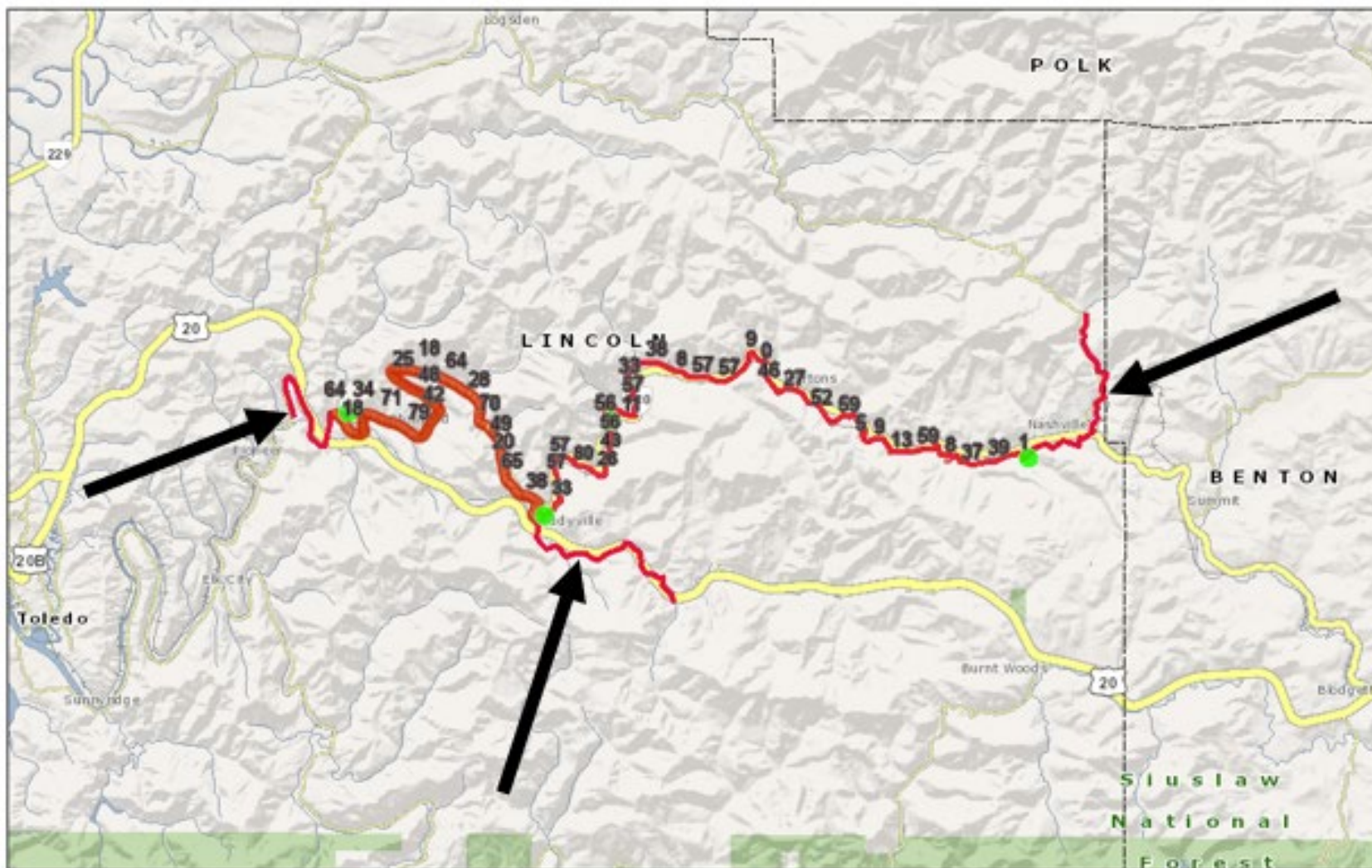
Yaquina River riparian acreage with vegetation < 3 feet high



Effective shade allocations - summary

- DEQ determined that preserving or establishing 100-feet of riparian overstory vegetation along the modeled portion of Yaquina River would meet the effective shade allocation – literature review summarized in TMDL Technical Support Document
- Other configurations may meet effective shade allocations based on site-specific assessment (considering topography, stream width, orientation)
- Options and methods to assess shade are identified in the Water Quality Management Plan and TMDL Technical Support Document
- Effective shade tables and curves are applicable to portion of Yaquina River without explicit site-specific shade targets and all of Little Elk Creek

Effective shade allocations – where shade tables apply



Shade tables apply to impaired portions of the Yaquina River and Little Elk Creek not within the dissolved oxygen model extent

3/21/2023

- UYR SIA monitoring sites
- UY Seg 3 ShadeGap Nodes adj
- UY Seg 2 ShadeGap Nodes adj
- UY Seg 1 ShadeGap Nodes adj
- UYR IR 2022 10590 LEC
- AUs 10591 10593 SPLIT

City Limits Labels
OR Unincorporated City Labels
Outside State City Labels

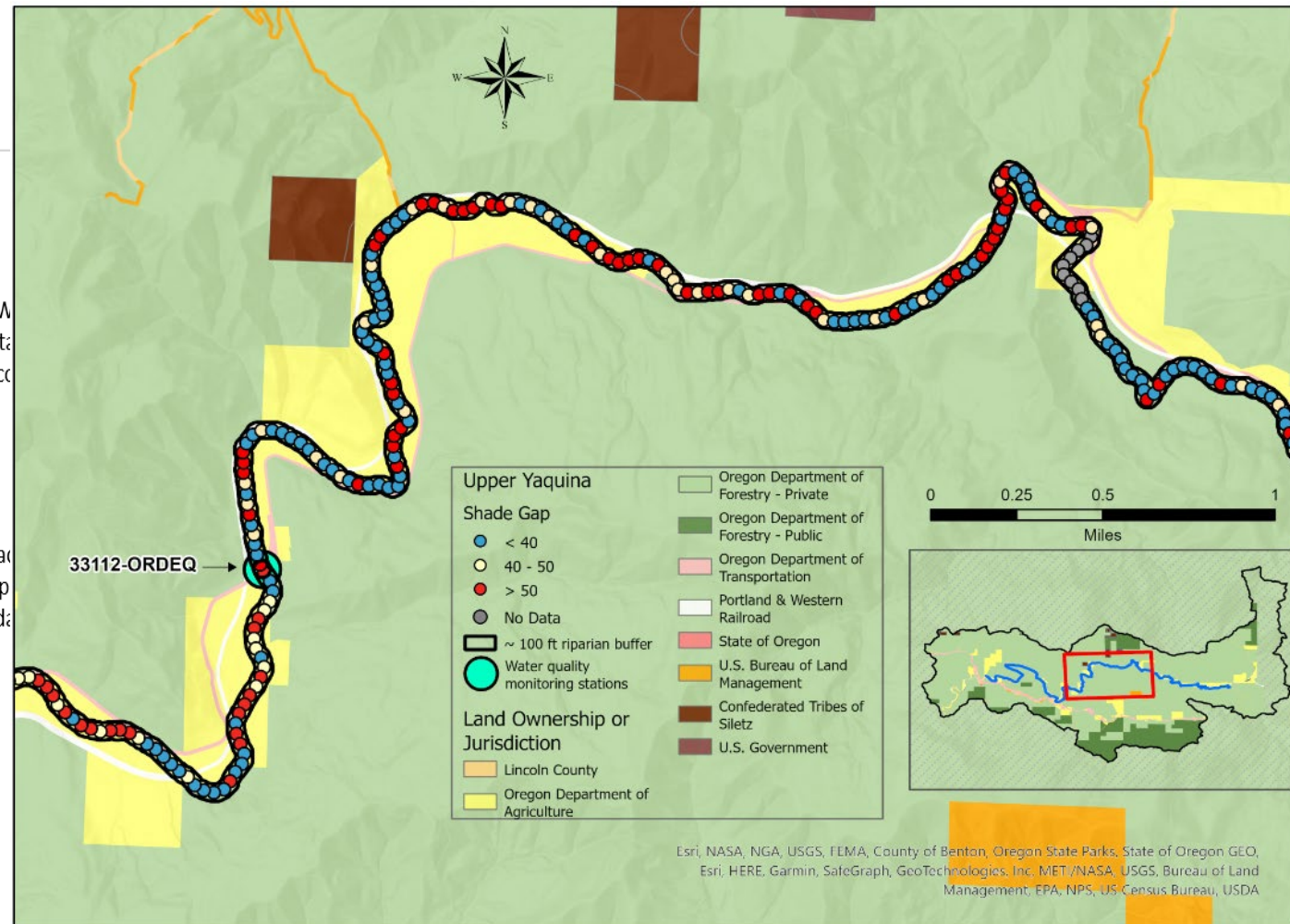
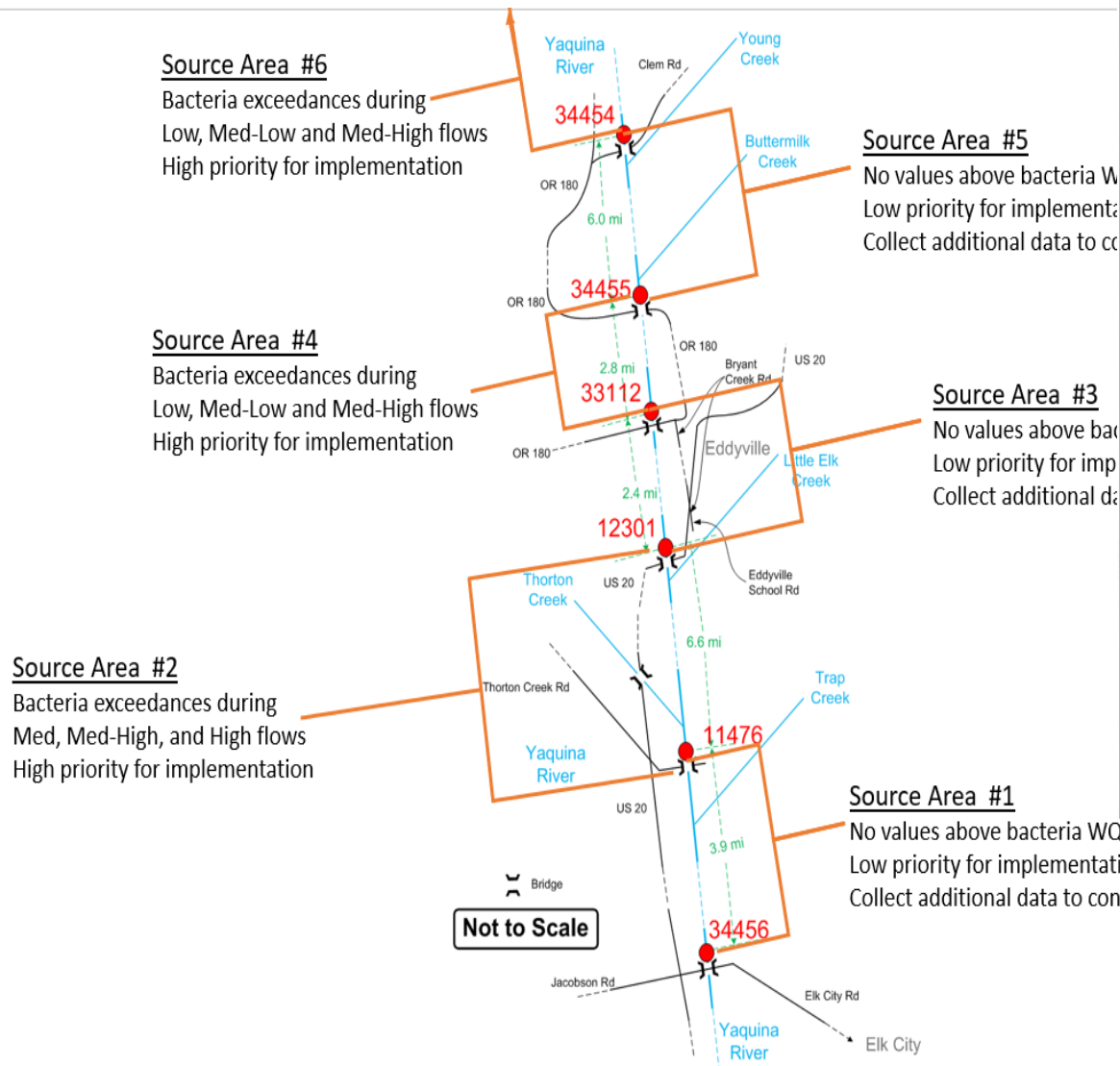
Schools
State Forest
State Park

Scale: 1:185,000
0 1 2 4 mi
0 1.75 3.5 7 km

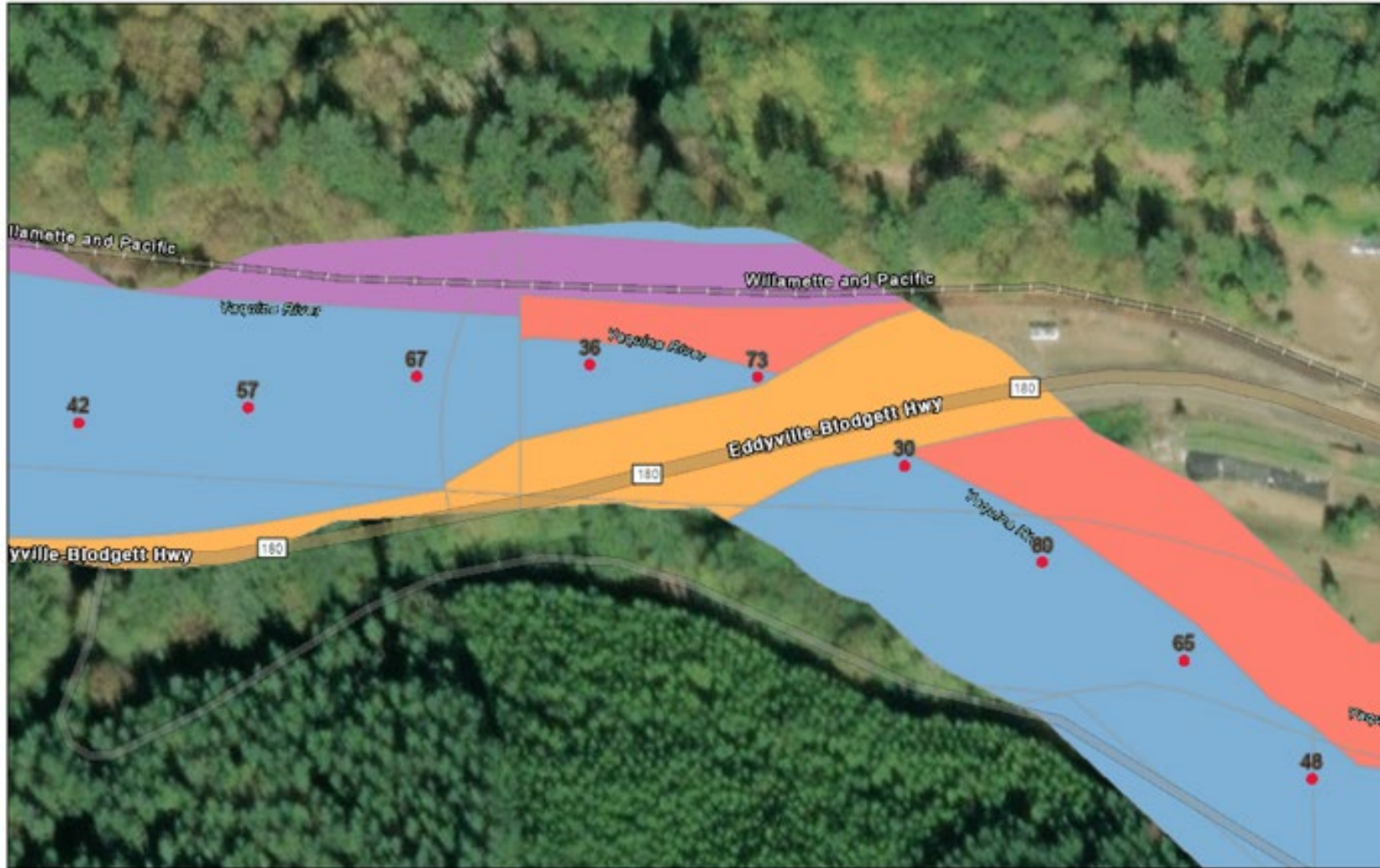
Oregon Department of Transportation, Geographic Information Services Unit

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Implementation Planning Tools: Shade Gap Maps and Pollutant Source Areas

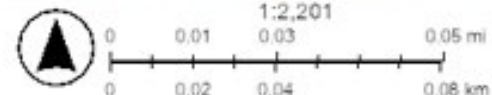


Site-specific riparian shade gap nodes and jurisdictions



3/16/2023

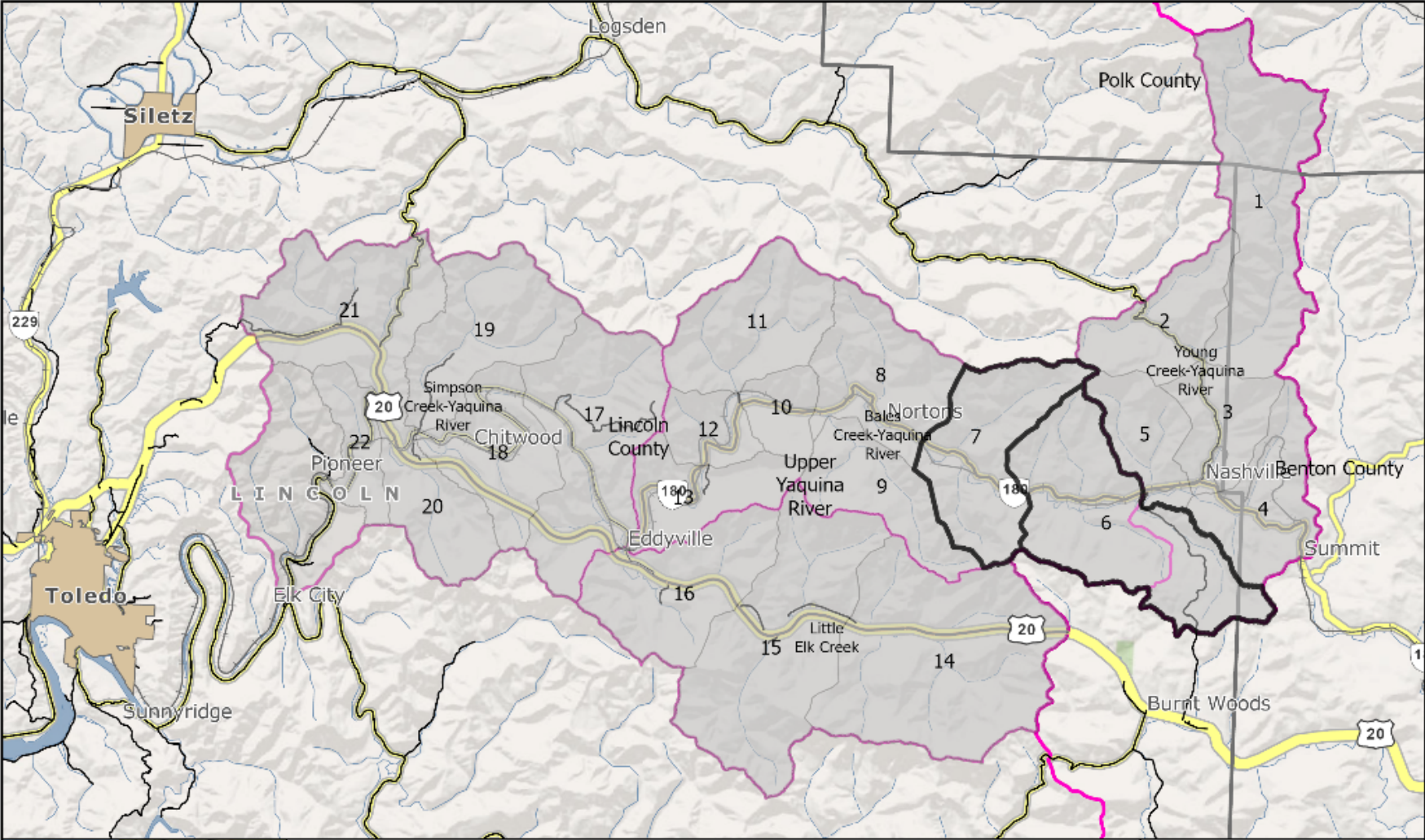
- UY Seg 1 ShadeGap Nodes adj
- Oregon Department of Forestry - Private
- U.S. Bureau of Land Management
- Oregon Department of Agriculture
- Portland & Western Railroad
- World Imagery
- Oregon Department of Transportation
- Low Resolution 15m Imagery



Maxar, Microsoft, Esri Community Maps Contributors, County of Benton, Oregon State Parks, State of Oregon GEO, © OpenStreetMap, Microsoft

ODEQ (Mar 2023)

High priority areas for phosphorus reduction



Upper Yaquina River Watershed - Highest priority catchments for phosphorus reduction based on loading estimates from HSPF model

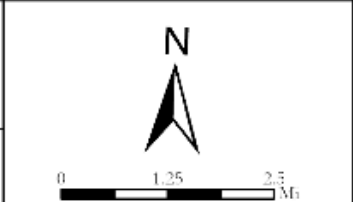
- citylim_2019
- UY_HSPF_Catchments_V3_TP
- OR_County
- railroads_2013
- UYR_ODOT_signed_rtes2019
- Lincoln Co_Rds
- Upper Yaquina_HUC12



**Upper Yaquina River Watershed
MidCoast Basin, Oregon**

Oregon Department of Transportation, Oregon Department of Transportation, Geographic Information Services Unit, National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

Oregon DEQ,
Nov. 2022



WQMP – Management strategies to attain load allocations and guide implementation planning

- Table 2.0: Management strategies by sources contains proven strategies and actions that will reduce or prevent pollutant loading
- Chapter 5 contains Sector-specific strategies to inform assessment, actions to reduce pollutant loading, fill key data gaps, track progress towards meeting allocations
- Includes timelines for initial activities to include in Sector Implementation Plan

Upper Yaquina TMDL updates and document orientation



Break (10 min)



Yaquina River at bridge on HWY 180 upstream of Eddyville

Draft fiscal impact statement - overview

- Purpose of the rule is to address bacteria and dissolved oxygen water quality impairments, as required by the federal Clean Water Act programs
- No fees or housing costs are involved
- On-going costs of water quality impairment are not quantified
- Economic impacts are anticipated for some farms/ranches, forestlands, railroad and road rights-of-way and county, state and federal lands that contribute to impaired DO and bacteria
- Costs vary widely by sources, but are not different for the TMDL issued by rule or order

Rulemaking focus of Fiscal Impact Statement

1. Determine if the rule imposes a **significant, adverse economic impact on small business**
2. If so, how can the rule be adjusted to reduce that impact and still meet the rule's purpose
3. How will the rule affect racial equity in OR?

Overview of FIS/doc revisions due to RAC input

- Acknowledged businesses may be affected that are not “registered”
- Adjusted language referring to ODA and ODF rules
- Added cumulative riparian restoration costs
- Added administrative costs affect all organizations responsible for sources
- Added large wood placement and beaver strategies to WQMP
- Added OR Coastal Coho Conservation Plan watershed-specific benefits estimates to the WQMP and TSD
- Added many references to FIS
- Summarized RAC input on fiscal impacts and extent with DEQ responses
- Summarized RAC input on potential for significant, adverse impact to small businesses and how to reduce impacts

Additional FIS revisions

- Minor language cleanup
- Removing footnotes and citing references instead
- Added Environmental Justice Statement

RAC Discussion of TMDL documents

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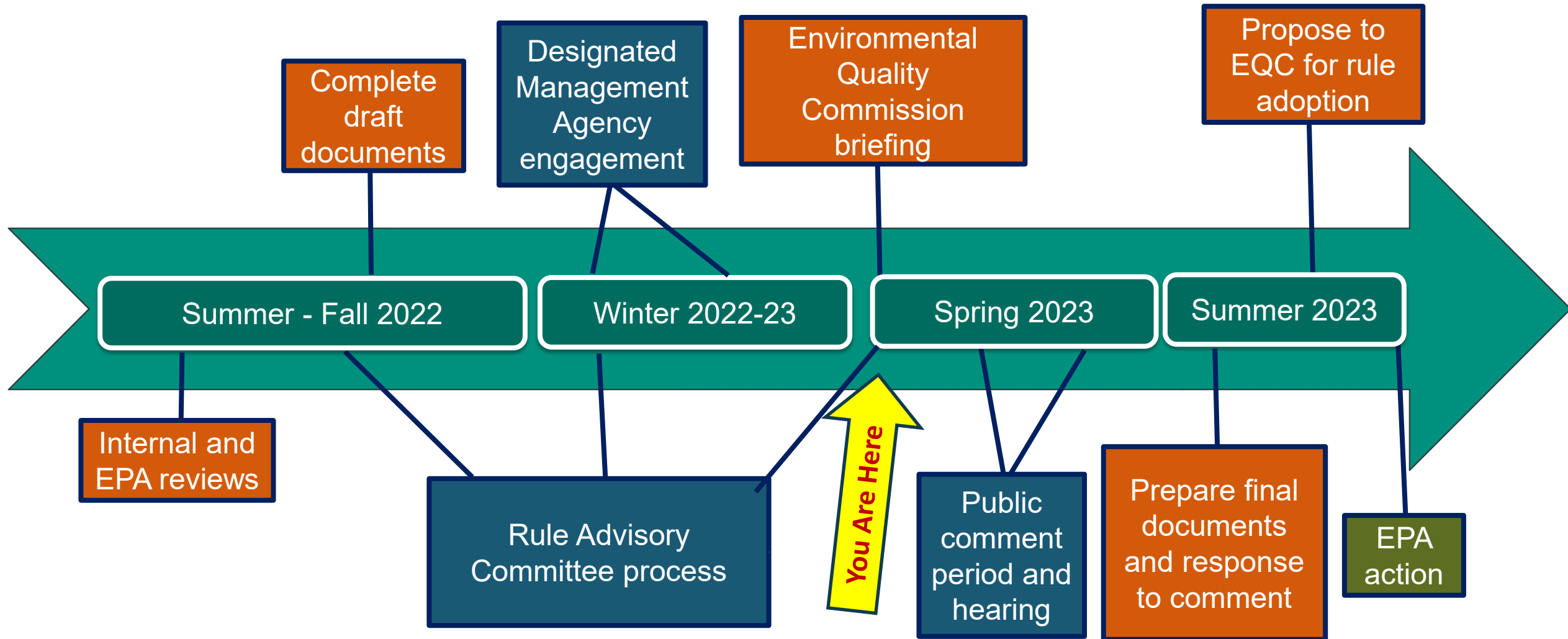
Request for Rule Advisory Committee input

1. Do you see input you provided reflected in the documents?
2. Do you have questions about material provided during the first two RAC meetings?
3. Do you have questions or comments about the documents provided for this meeting?

Next steps

- Please provide input on all TMDLs documents within four weeks of the meeting (by April 21st)
- DEQ will consider all input from the RAC for incorporation into the fiscal impact statement and draft TMDL documents
- DEQ will publish draft TMDL documents for public comment (anticipated in May-June)
- DEQ will consider all comments, finalize documents and prepare a response to comments
- DEQ will request rule adoption by EQC (anticipated in Sep)
- DEQ will submit the TMDLs for EPA action

Upper Yaquina Watershed TMDLs process



DEQ contacts

- Upper Yaquina TMDLs Rulemaking webpage:

<https://www.oregon.gov/deq/rulemaking/Pages/upperyaquinaTMDL.aspx>

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