

Oregon Agricultural Water Quality Program



Presenters:

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Key Messages

- Program:
 - Is outcome-based
 - Reflects the diversity of Oregon's landscape and agriculture
 - Is continuously improving with significant change in last 5 years
- Agency coordination:
 - ODA – regulatory compliance
 - DEQ – scientific and technical analysis, responsible for multiple nonpoint and point sources
 - OWEB – supports agency priorities to achieve uplift
- Top priorities moving forward:
 - Strategic Implementation Areas
 - Coordinated Streamside Management expansion

Ag Water Quality Program History

Year	Milestone
1993	Senate Bill 1010 authorizes Ag WQ Program
1997	Funding for ODA to develop and implement Area Plans and Rules; funding for tech assistance at SWCDs
1997-2004	38 Area Plans and Rules developed and adopted
2004-2012	Ag WQ regulatory efforts predominantly complaint-based; voluntary implementation ongoing
2012-present	ODA works with partners to pursue more comprehensive strategy to better document outcomes through SIA process and Conservation Effectiveness Partnership
2014-present	Coordinated Streamside Management approach providing additional support for monitoring and capacity at SWCDs in each SIA

Around the Watershed

State NR Agencies

Ag & Rural Lands
Non-federal Forests
Fisheries & Habitat needs

Education/Outreach

Soil & Water Conservation Dist.
Ag Extension
Watershed Councils

Funding Conservation

Oregon Watershed Enhancement Board
NRCS
USDA Farm Service Agency

Point Source Permittees

Urban and Rural NPS Management
Local Governments

Federal Land Management

Bureau of Land Management
US Forest Service
Corps of Engineers

Private Landowners

Private Land Management

Department of Agriculture

- Area Plan Biennial reviews with Local Advisory Committees
- Monitoring and evaluation
- Compliance and Enforcement

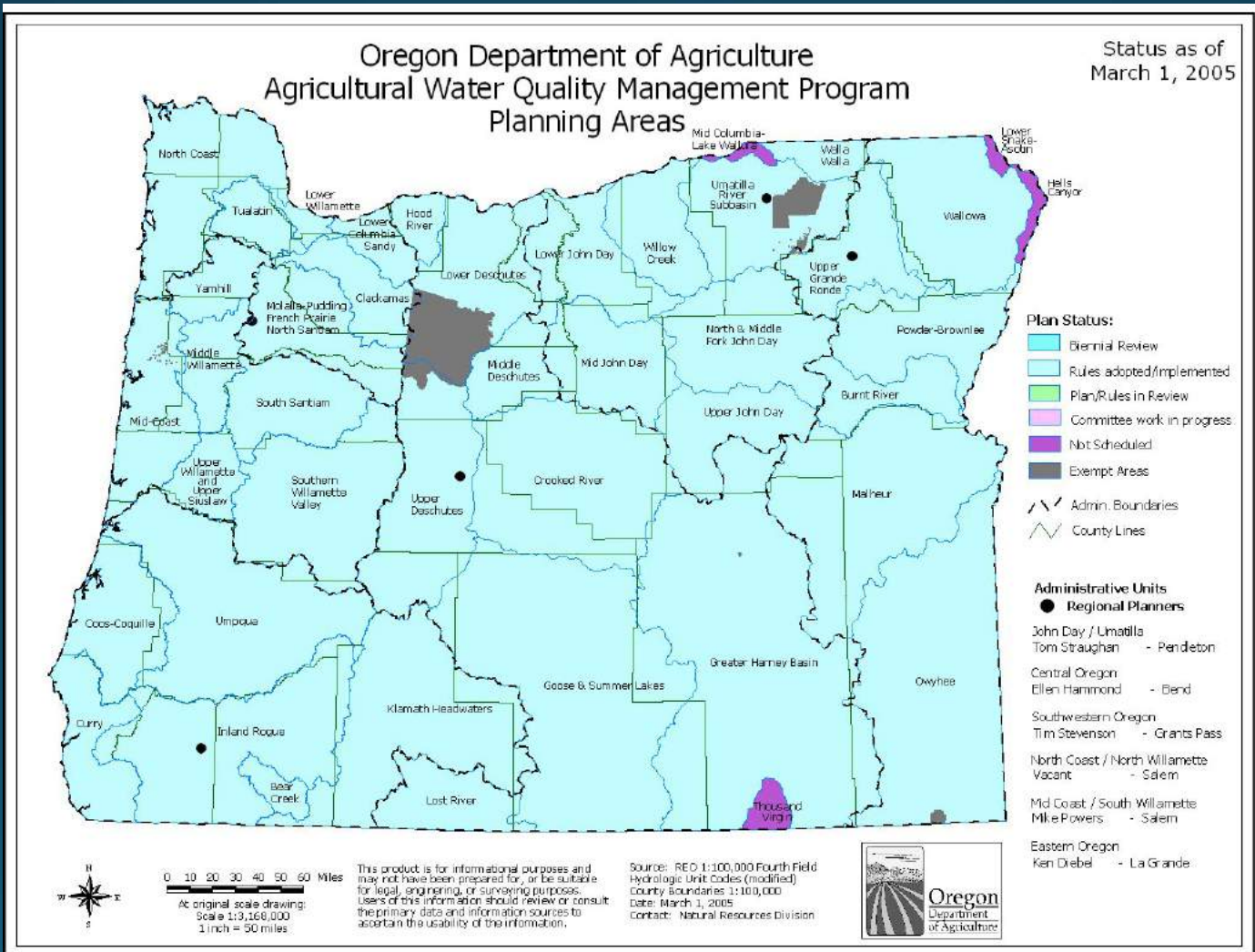
Department of Environmental Quality

- Technical and scientific analysis for identification of opportunities to improve water quality
- Work with ODA during biennial reviews
- Water quality status and trends
- CWA Programs

OR Watershed Enhancement Board

- Native fish and wildlife habitat and water quality focus
- Invest in priorities identified by natural resource agencies
- Convene and invest in interagency monitoring efforts
- Fund projects and initiatives that support “uplift”

Ag Water Quality Management Areas – 38 Basin-Wide Plans



Clean Water Act Framework

Water Quality Standards



Monitor & Assess WQS Attainment



List Impaired Waters



TMDL Development: An Integrated Watershed Plan



TMDL Implementation



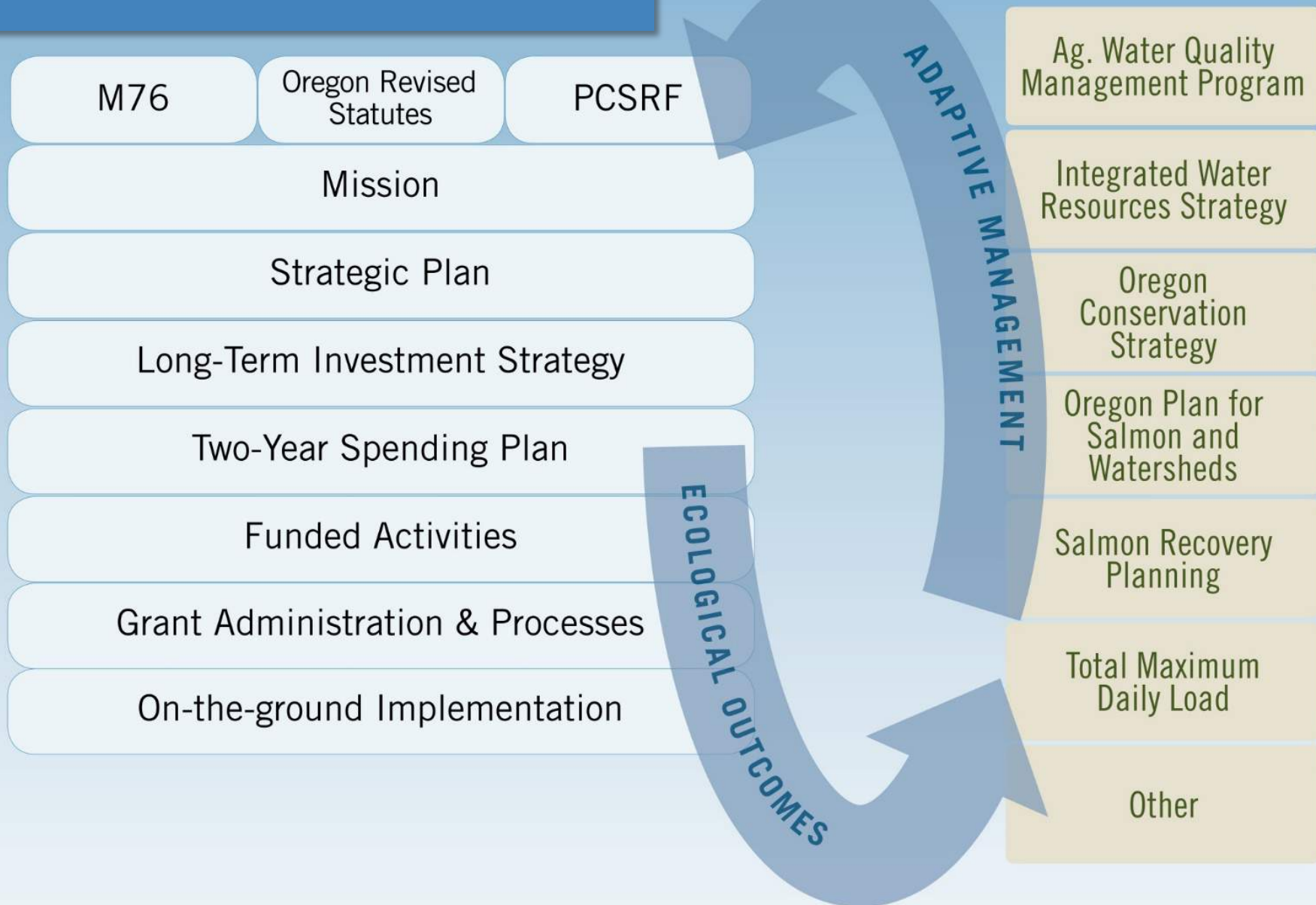
Point Sources:

NPDES Permits
POTW, Industrial,
Urban Stormwater

NonPoint Sources:

Urban,
Agriculture,
Forestry

OWEB Investment Approach



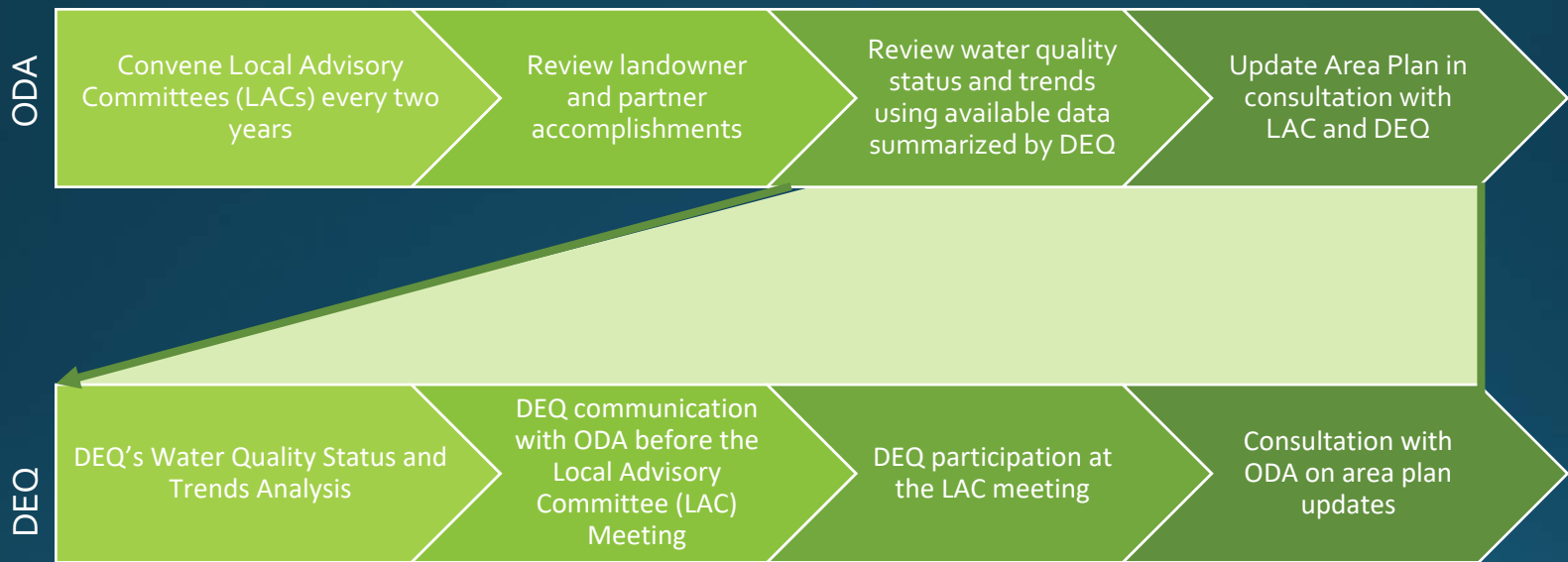
Ag Water Quality Compliance vs Local Area Plans

Ecological uplift is greater with full area plan implementation than with only area rule compliance



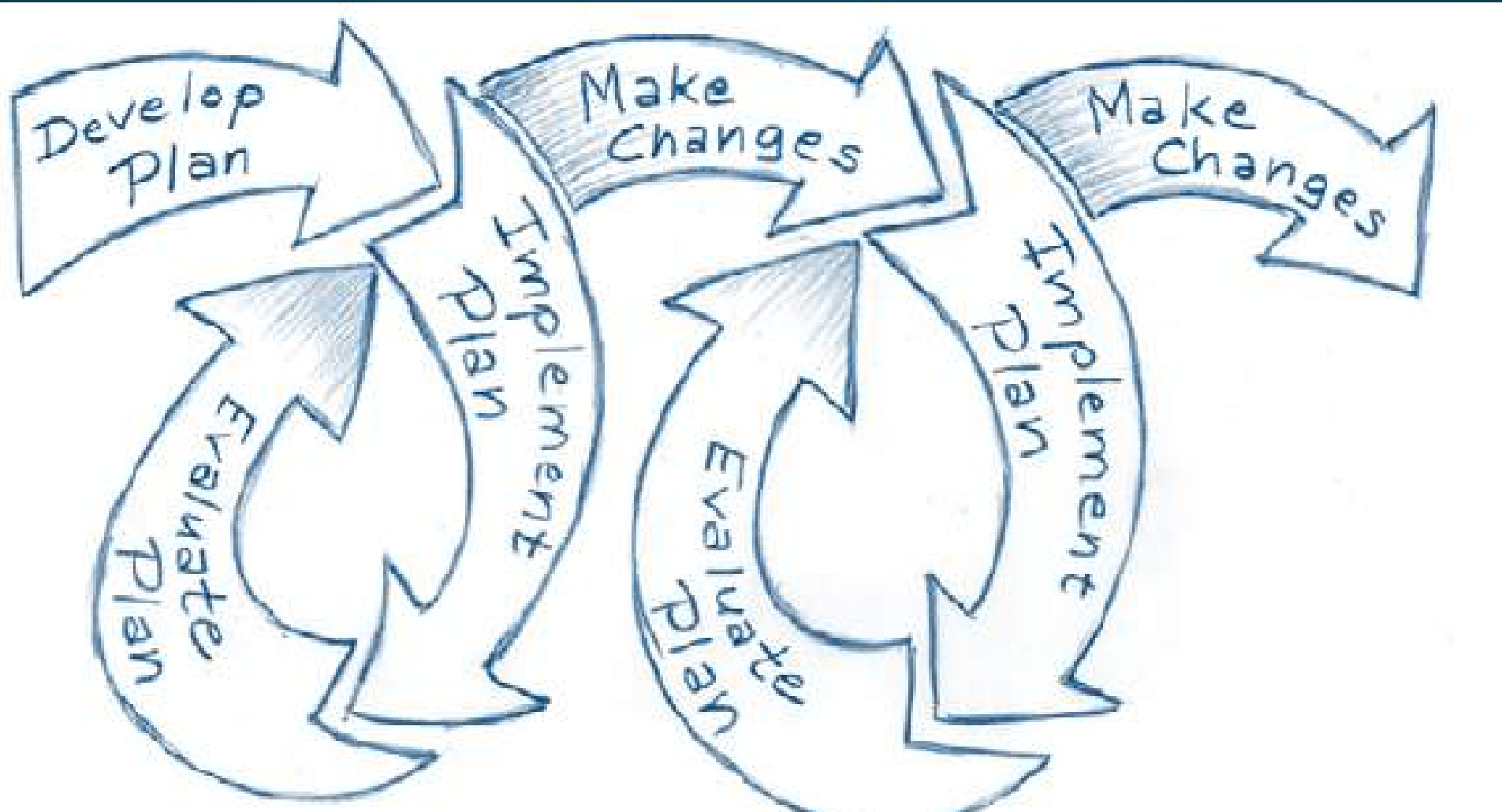
Biennial Review Process

38 Local Area Plans – 19 reviewed per year



Expected Outcome: The combination of meeting Area Rules (required) and implementing Area Plans (voluntary) will meet Water Quality Standards and TMDL allocations

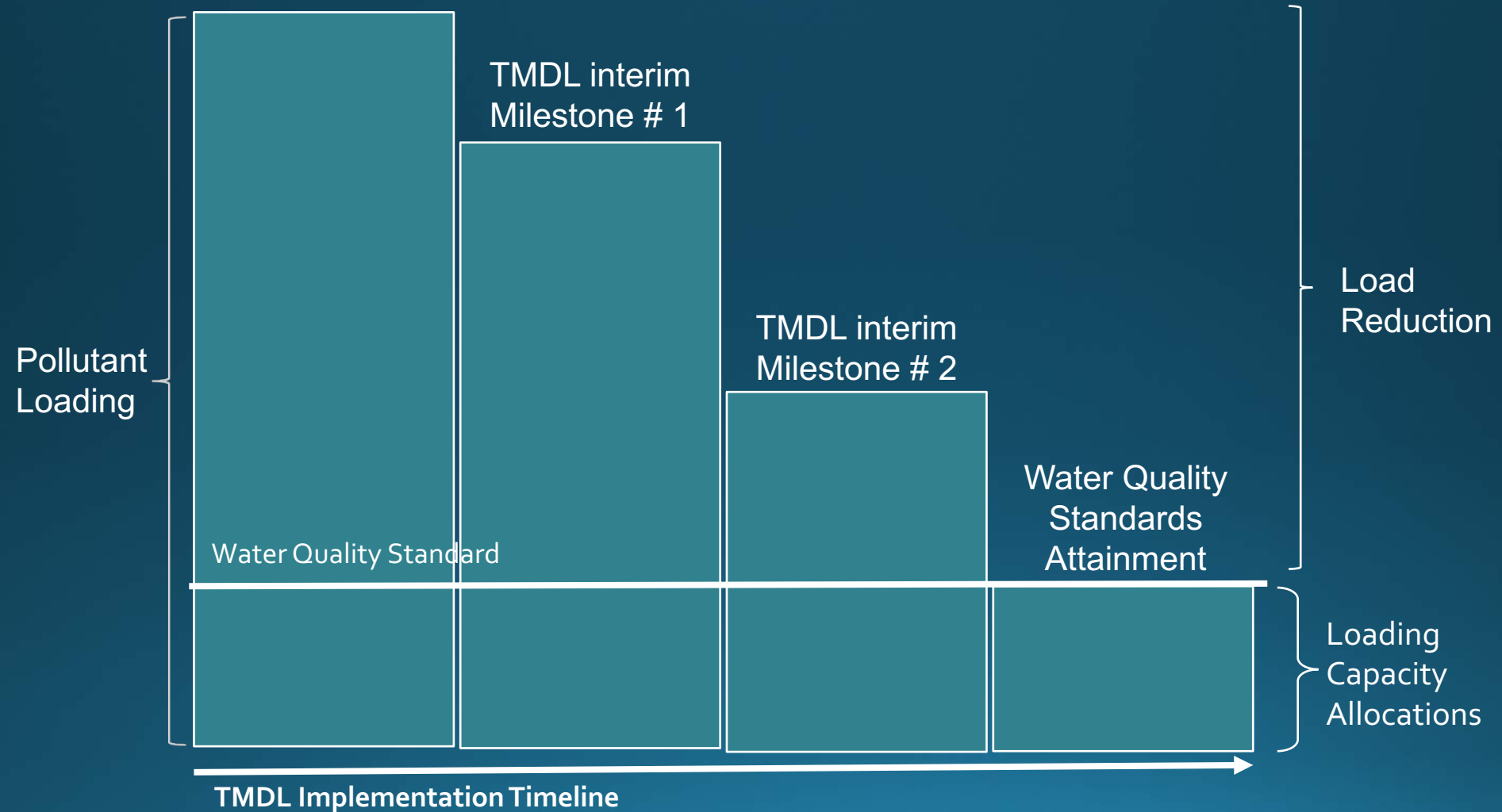
Watershed Management

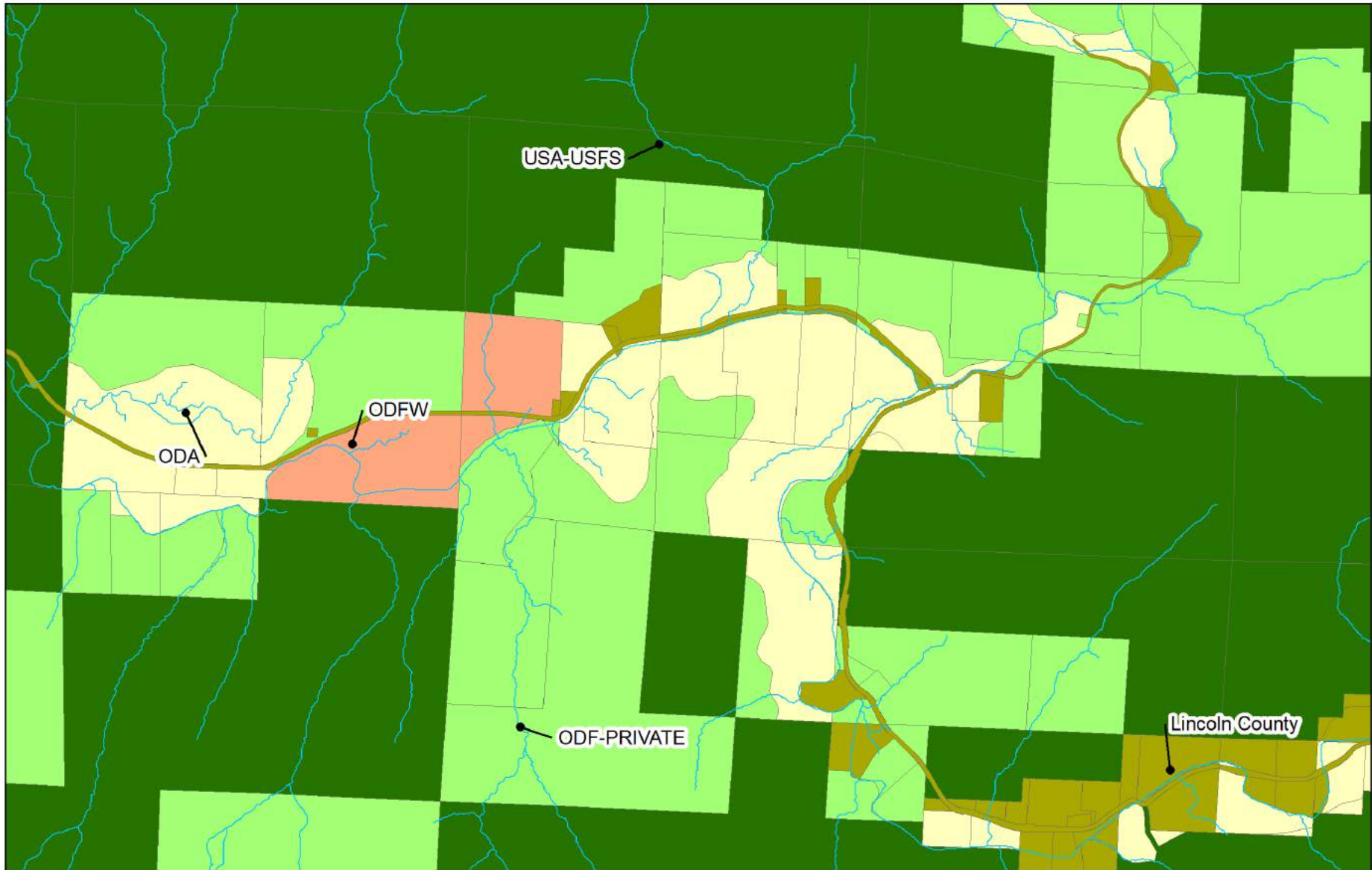


Adaptive management & WQ improvement

Current Conditions:
303(d) list, TMDL

Adaptive Management Process:
Implement - Monitor - Share Information - Learn - Improve





Legend

 Streams

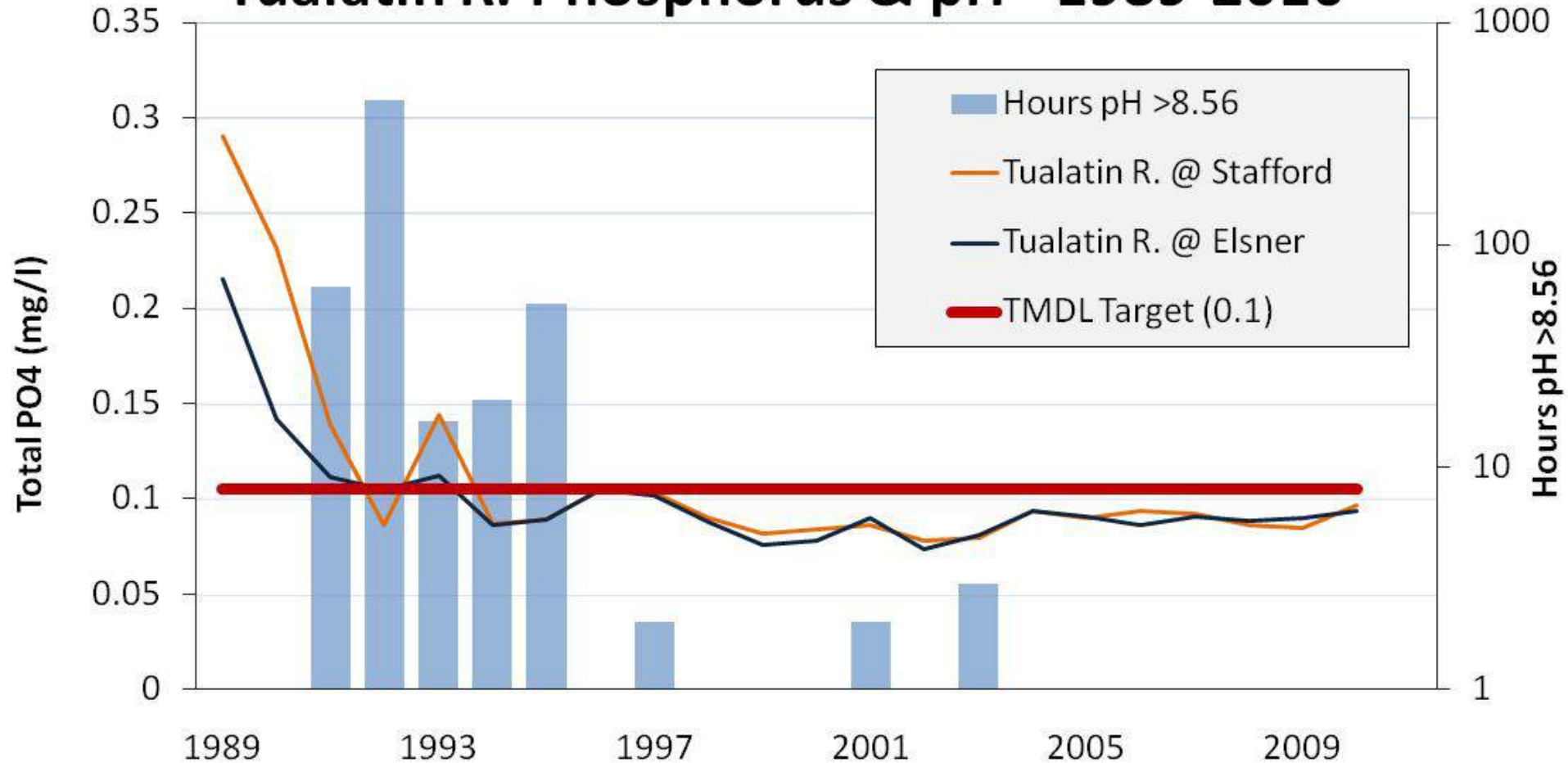
Designated Management Agencies

- | | |
|---|--|
|  City of Yachats |  ODFW |
|  Lincoln County |  ODOT |
|  ODA |  OPRD |
|  ODF-PRIVATE |  OR-DSL |
| |  USA-USFS |



Water Quality Improvements in the Tualatin River: pH & Total Phosphorous

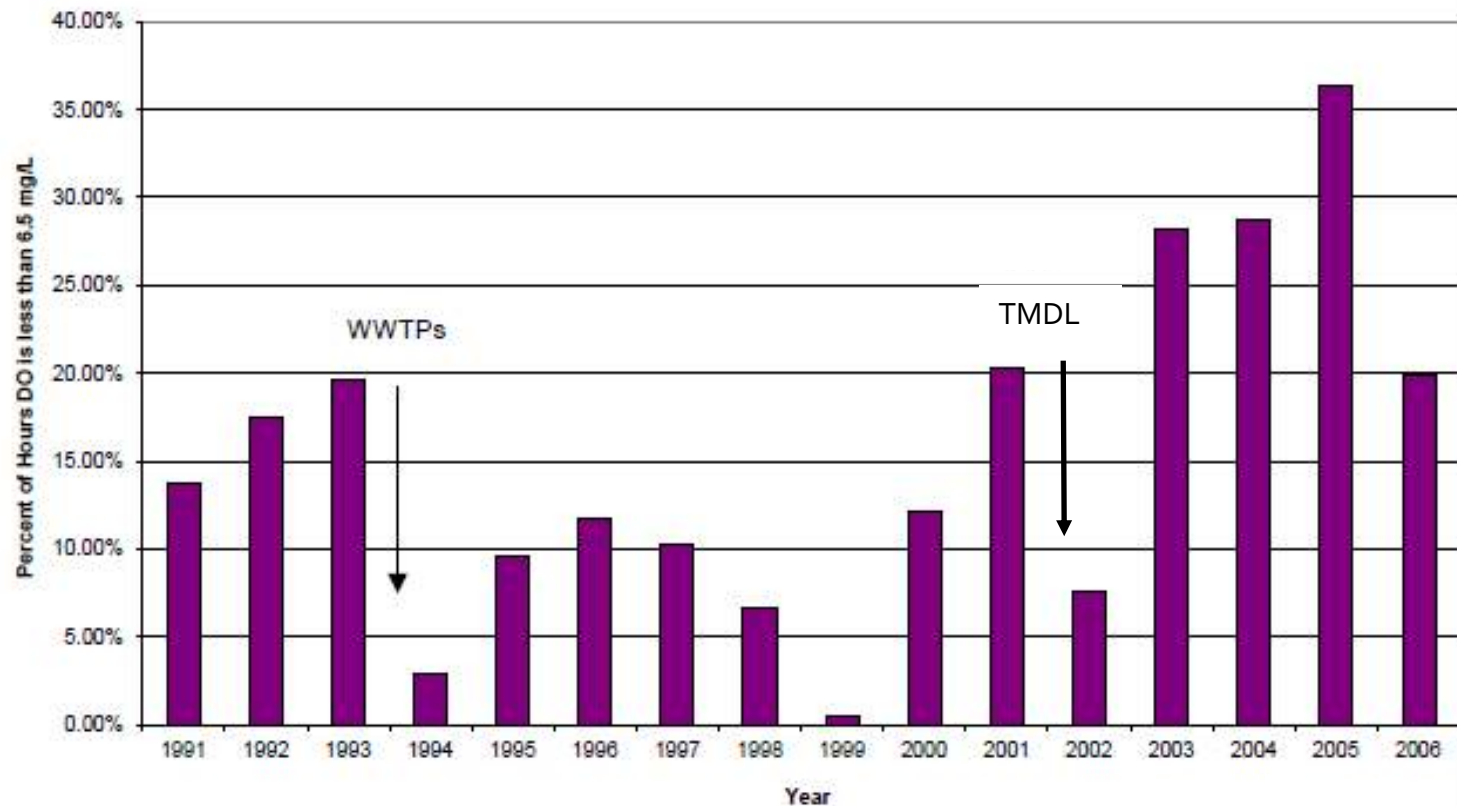
Tualatin R. Phosphorus & pH - 1989-2010



Water Quality Status and Trends in the Tualatin Basin: Dissolved Oxygen

Tualatin River @ Oswego Dam Diversion (river mile 3.4)

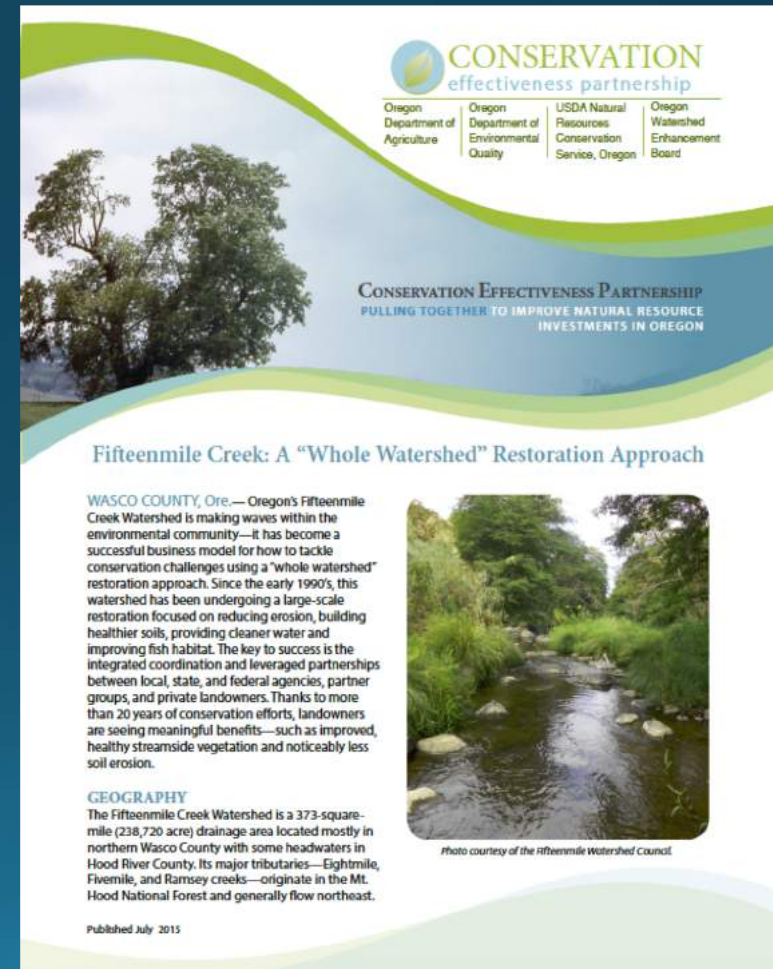
Hours Dissolved Oxygen is Less than the Water Quality Standard (6.5 mg/L)



Graph from DEQ 2012 Tualatin TMDL: 1993 WWTP Upgrades; 2001 2nd Revised Tualatin TMDL

Current initiatives to track progress toward and achieve outcomes

- Coordinated Streamside Management (CSM)
- Strategic Implementation Areas (SIAs)



The image shows the cover of a report titled "Fifteenmile Creek: A 'Whole Watershed' Restoration Approach". The cover features a green and blue wavy design at the top. The title "CONSERVATION effectiveness partnership" is prominently displayed in green and blue. Below the title, the logos of the Oregon Department of Agriculture, Oregon Department of Environmental Quality, USDA Natural Resources Conservation Service, Oregon, and Oregon Watershed Enhancement Board are listed. The main title of the report, "Fifteenmile Creek: A 'Whole Watershed' Restoration Approach", is centered. Below the title, there is a photograph of a stream flowing through a lush green landscape. To the right of the photograph, there is a short paragraph of text describing the restoration approach. At the bottom of the cover, there is a "GEOGRAPHY" section with a short paragraph of text. The date "Published July 2015" is printed at the very bottom.

CONSERVATION
effectiveness partnership

Oregon Department of Agriculture | Oregon Department of Environmental Quality | USDA Natural Resources Conservation Service, Oregon | Oregon Watershed Enhancement Board

CONSERVATION EFFECTIVENESS PARTNERSHIP
PULLING TOGETHER TO IMPROVE NATURAL RESOURCE INVESTMENTS IN OREGON

Fifteenmile Creek: A "Whole Watershed" Restoration Approach

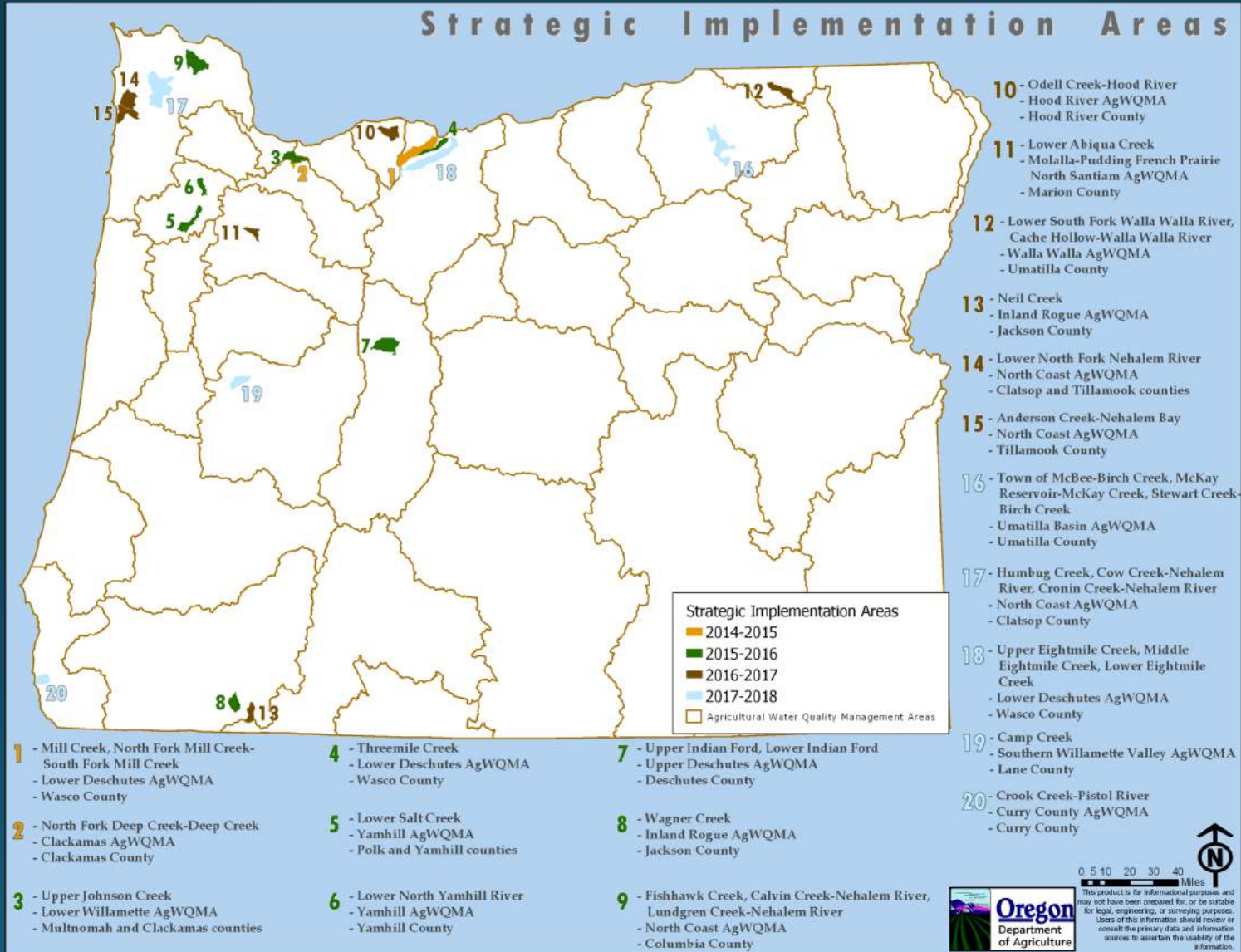
WASCO COUNTY, Ore.— Oregon's Fifteenmile Creek Watershed is making waves within the environmental community—it has become a successful business model for how to tackle conservation challenges using a "whole watershed" restoration approach. Since the early 1990's, this watershed has been undergoing a large-scale restoration focused on reducing erosion, building healthier soils, providing cleaner water and improving fish habitat. The key to success is the integrated coordination and leveraged partnerships between local, state, and federal agencies, partner groups, and private landowners. Thanks to more than 20 years of conservation efforts, landowners are seeing meaningful benefits—such as improved, healthy streamside vegetation and noticeably less soil erosion.

GEOGRAPHY
The Fifteenmile Creek Watershed is a 373-square-mile (238,720 acre) drainage area located mostly in northern Wasco County with some headwaters in Hood River County. Its major tributaries—Eightmile, Fivemile, and Ramsey creeks—originate in the Mt. Hood National Forest and generally flow northeast.

Published July 2015

Photo courtesy of the Fifteenmile Watershed Council.

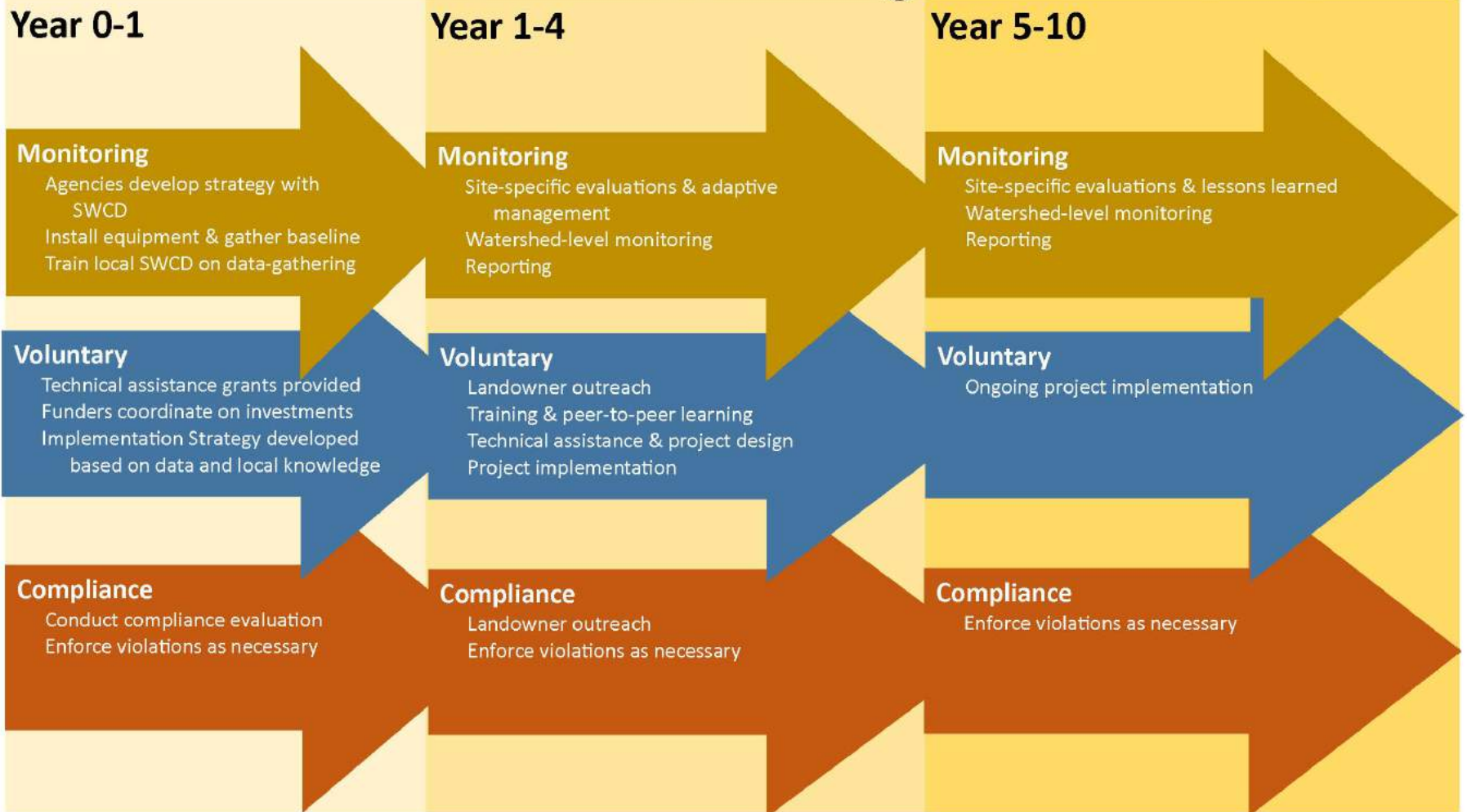
Strategic Implementation Areas



Example SIA Results: Mill Creek, Wasco County Tax lots in agricultural use 2013 to 2015

Evaluation Category	Pre Evaluation Results	Post Evaluation Results
Limited Opportunity for Improvement	305 tax lots	315 tax lots
Opportunity for Improvement	6 tax lots	0 tax lots
Violations	4 tax lots	0 tax lots
Totals	315 tax lots	315 tax lots

Coordinated Streamside Management Timeline



Coordinated Streamside Management Objectives

- Prioritized watersheds based on data analysis
 - (TMDL & 303d listings)
- Document and assure ag operators are complying with WQ program rules
- Accomplish uplift on the ground through partners
- Joint monitoring efforts to capture outcomes and instream response
- Use regulatory backstop where necessary

SIAs: Opportunities, Challenges & Barriers

Opportunities:

- Prioritization
- Focus on streamside
- Regulatory component
- Uplift opportunities

Challenges:

- Compliance vs uplift
- Ownership changes
- Legacy issues
- ODA capacity
- Partner capacity

Achieving outcomes – 15-Mile Watershed



August 1992



September 2013

Moving forward

- Prioritize work
- 19-21 agency request budget
- Continued work with partners
- Continual evaluation and maturity of program to address water quality issues

Thank you!