



Oregon Department of Environmental Quality
Dec. 9-10, 2015
Oregon Environmental Quality Commission meeting
Rulemaking, Action item M

Water Quality Trading Rulemaking

DEQ recommendation to the EQC

DEQ recommends that the Environmental Quality Commission adopt the proposed rules in Attachment A as part of Chapter 340 of the Oregon Administrative Rules.

Overview

Short summary

DEQ proposes new rules establishing a water quality trading program as a new rule division (039) in Chapter 340 of DEQ's administrative rules.

The rules are intended to address important and essential elements of DEQ's water quality trading program, with appropriate standards for accountability, enforceability and provisions to ensure transparency.

The proposed rules would:

- Clarify DEQ's authority to allow water quality trading as a voluntary compliance option in water quality permits and water quality certifications issued under the Clean Water Act
- Establish the mechanisms through which DEQ will evaluate and approve water quality trades and oversee implementation of water quality trades
- Require that a trade proponent develop a trading plan that includes specified essential elements of a proposed trade and submit that plan to DEQ for review and approval
- Require that a trading plan go through a public notice and comment period along with the permit or certification and, if approved, the elements of the approved trading plan are incorporated into the permit or water quality certification as enforceable conditions
- Require annual reporting to ensure that trading projects are implemented and verified and that credits are developed as intended under the trading plan and
- Provide consistency and regulatory certainty for eligible entities, other stakeholders and the public

The rules apply to many different types of trades and are written to be flexible enough so that trading may be authorized under various trading scenarios. Specifically, the rules account for both the current state of water quality trading program development as well as future scenarios that are reasonably likely to occur. As an example, the rules allow DEQ to develop and use "trading frameworks" that would guide trading within a watershed but currently DEQ does not have any such frameworks in existence outside of an established Total Maximum Daily Load.

Brief history

Water quality trading is one compliance option among several available to meet regulatory requirements under the federal Clean Water Act. Through a DEQ-approved water quality trading plan, entities may obtain credits to achieve reductions in pollutant loads necessary to comply with water quality-based regulations from landowners that have voluntarily implemented an activity or practice that generates a quantifiable water quality benefit.

The CWA does not explicitly address water quality trading as a compliance option. However, in 2003 EPA published a water quality trading policy that endorses trading as an economic incentive for voluntary pollutant reductions and as a way to achieve ancillary environmental benefits. In 2001, the Oregon Legislature passed the Willamette Watershed Improvement Trading Act requiring DEQ to "develop and implement a pollutant reduction trading program as a means of achieving water quality objectives and standards in this state." [ORS 468B.555\(1\)](#). Since then, DEQ has approved

three water quality trades as special conditions of water quality permits. Other regulated entities have expressed interest in trading but the absence of state regulations explicitly addressing water quality trading, along with a lack of clarity about the viability of trading as a compliance option, has discouraged permit holders from pursuing water quality trading.

Affected parties

Water quality trading is a voluntary compliance option. Industrial and municipal dischargers to state waters permitted under National Pollutant Discharge Elimination System permits and entities seeking water quality certifications under Section 401 of the CWA may propose water quality trading as a means of complying with effluent limits or water quality standards in those permits or certifications. These rules will only affect those entities that choose to engage in trading rules.

Key policy and technical issues

Through the rule development, public policy forum and public comment process, the issues that were the subject of the most discussion were whether the rules should:

- 1) Allow trading of toxic pollutants
- 2) Require the entire DEQ-approved trading plan to be incorporated by reference as an enforceable condition of the permit or certification
- 3) Prohibit or limit the use of credits generated by projects funded with public conservation funds
- 4) Include a baseline “backstop” provision expressly reserving DEQ’s authority to impose baseline requirements on proposed trades and
- 5) Require that all trades result in “additionality” (which means there are benefits above and beyond what is already required)

Summary of significant public comments and responses

- 1) Toxic Pollutants: The publicly noticed version of OAR 340-039-0015(2)(b) proposed prohibiting trading for “pollutants that are toxic and either persist in the environment or accumulate in the tissues of humans, fish, wildlife or plants.” Some commenters supported this prohibition stating that trading for toxics would be experimental and risky. Many commenters urged DEQ to revise the prohibition so as to allow trading for toxic pollutants as a pilot program or on a case-by-case basis.

DEQ proposed the prohibition because prohibiting trading for toxic pollutants aligns with EPA’s Water Quality Trading policy issued in 2003. In the final proposed rules DEQ has maintained the prohibition on trading but revised it slightly to clarify that the prohibition does not apply to trading that may occur as an element of a pollution reduction plan in a variance granted to a permittee pursuant to OAR 340-041-0059.

- 2) Trading plan as an enforceable condition of the permit: The publicly noticed version of OAR 340-039-0025(1) required a DEQ-approved trading plan be incorporated in its entirety as an enforceable condition of the permit or 401 water quality certification. Some commenters pointed out past DEQ practice of including only key elements of the trading plans within the permit conditions. Some commenters stated that making the entire trading plan enforceable

would result in trading plans having fewer details, which would result in less transparency. Some commenters also felt that it would make trading less enforceable.

DEQ revised the rule in response to comments. The revision aligns with DEQ's past practice of including the required elements from the approved trading plan as enforceable conditions in the permit or 401 water quality certification, as opposed to incorporating the entire DEQ-approved trading plan by reference.

- 3) Public conservation funds: The publicly noticed version of OAR 340-039-0040(4) stated that "Trading projects funded solely with public conservation funds may not be used to generate credits." The proposed rules also include a proposed definition of "public conservation funds" at OAR 340-039-0005(4).

DEQ received more comments on this rule provision than any other. Some commenters stated that DEQ should not include any prohibition on the use of public conservation funds and stated that it was the funding organization's concern how its money is spent and that placing any prohibition on funding complicates trading and creates a disincentive for collaborative projects among public and private partners. Comments supporting the prohibition or a limitation on the use of public conservation funding stated that DEQ should align itself with existing inter-agency recommendations signed by state and federal agencies in 2008 limiting the use of public funds for regulatory obligations. Commenters stated that placing a limitation on the use of public conservation funds would assure "additionality" in the trade – that the trading project benefits would be "in addition to" what already would have been implemented without trading.

DEQ believes it is important to align with sister state agency policies on the use of public conservation funds for regulatory obligations and that doing so will protect the long-term legitimacy of approved water quality trades and the overall program by helping to ensure that trading results in benefits that would not have otherwise been secured. DEQ revised this proposed rule to state that "Credits generated under an approved trading plan may not include water quality benefits obtained with public conservation funds. Where public sources of funding are used for credit-generating activities, it is the regulated entity's responsibility to demonstrate compliance with this requirement." DEQ has added a provision to the proposed annual reporting rule at OAR 340-039-0017(3)(f) requiring a demonstration of compliance with OAR 340-039-0040(4), if applicable, and has added more examples of "public conservation funds" to the definition at OAR 340-039-0005(4).

- 4) Baseline "backstop:" The publicly noticed rules proposed, as part of the rule addressing baseline requirements, an express reserve of authority known informally as the "backstop." This rule stated, that "If DEQ finds that additional requirements beyond the regulatory requirements described in OAR 340-039-0030(1)(j) are necessary to demonstrate progress towards achieving pollutant load reductions, DEQ may impose additional baseline requirements in the trading plan, consistent with assumptions of any applicable TMDL or water pollution control plan." The vast majority of commenters opposed inclusion of the provision. The majority of these comments pointed to the "high degree of uncertainty" the proposed rule would bring to the trading program, uncertainty that could discourage entities from participating in trading. Some commenters pointed out that DEQ has the authority to effectively do what the backstop expressly says it can do: impose additional requirements on the trade, within the permit or the trading plan, to achieve water quality goals.

In light of the comments received, and the fact that DEQ may indeed achieve the objectives of the backstop through existing authority if needed, DEQ is proposing to delete this provision from the baseline rule at OAR 340-039-0030.

- 5) **Additionality:** A requirement that trading result in “additionality,” or water quality benefits that would not have otherwise occurred without trading, was not included in the publicly noticed version of the trading rules. DEQ received several comments encouraging DEQ to expressly require “additionality” as a “purpose and policy” of the trading rules at OAR 340-039-0001 or as one of the objectives of trading at OAR 340-039-0003 which must be met before DEQ may approve a trade.

DEQ has declined to include additionality as a separate requirement of the trading rules. For the majority of trades, the proposed rule requirement that trading entities first meet baseline requirements (legal requirements that apply to the trading project site) will ensure that trading projects occur above and beyond that which is already required, thereby ensuring additionality. Similarly, the proposed prohibition on the use of the public conservation funds for meeting regulatory compliance obligations will ensure additionality in projects that receive some public conservation funding. For some trades, such as point to point source or intra-plant trading, there may be no additionality in terms of water quality benefit but the trade is desirable nonetheless because it may result in a significant cost savings to the regulated entity with no adverse impact to water quality. DEQ declines to make additionality a requirement in all trades so as to not preclude trading in such a situation.

Outreach efforts:

At its Aug. 12, 2015, meeting in Astoria, the commission requested that DEQ do outreach to communities in the eastern part of the state. During the public comment period, DEQ staff phoned or e-mailed the following communities to inform them of the proposed rules and water quality trading as a compliance option: The Dalles, Lakeview, Klamath Falls, Pendleton, La Grande, Baker City, Huntington, Umatilla, Hood River and the Biggs Service District.

Stakeholder and public involvement is discussed in more detail in that section, below.

Statement of Need

What need would the proposed rule address?

Rulemaking is needed to better ensure water quality trading is administered consistently and transparently while also meeting federal Clean Water Act requirements. The absence of clear authority and consistent criteria for approving water quality trades has resulted in uncertainty for regulated entities and has dissuaded them from pursuing trading as a compliance option.

How would the proposed rule address the need?

If adopted, these rules will clarify DEQ's authority to allow water quality trading and provide clarity and certainty for regulated entities interested in pursuing water quality trades. The rules will establish the required elements of an approvable trade and, in doing so, will provide consistency and transparency with respect to DEQ's approval of proposed trades.

Without clear authority for water quality trading established by the rulemaking, the regulated community does not have assurance that proposed trades will be approvable and the public has no assurance that trading will be a viable compliance option to offset pollutant discharges. Likewise, DEQ staff requires a consistent set of criteria and guidelines by which to evaluate and approve proposed trades.

How will DEQ know the rule addressed the need?

DEQ will know the rules have addressed the need if more permittees and operators choose to pursue trading as a compliance option. DEQ will continue to evaluate the water quality trading program and continue to work with stakeholders to identify improvements or changes necessary to improve the program.

Rules affected, authorities, supporting documents

Lead division, program or activity

Water Quality Division, Water Quality Trading

Chapter 340 action

Adopt	OAD 340 Division 039 OAD 340-039-0001 OAD 340-039-0003 OAD 340-039-0005 OAD 340-039-0015 OAD 340-039-0017 OAD 340-039-0020 OAD 340-039-0025 OAD 340-039-0030 OAD 340-039-0035 OAD 340-039-0040 OAD 340-039-0043
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Statutory authority

ORS 468.020, 468B.020, 468B.030, 468B.035, 468B.555

Other authority

n/a

Statute implemented

ORS 468B.555

Legislation

n/a

Documents relied on for rulemaking

Document title	Document location
2003 U.S. EPA Water Quality Trading Policy	EPA Water Quality Trading Policy (2003)
2009 U.S. EPA Water Quality Trading Toolkit for Permit Writers	EPA Water Quality Trading Toolkit (2009)
Regional Recommendations for the Pacific Northwest on Water Quality Trading (Draft)	Regional Recommendations for the Pacific Northwest on Water Quality Trading (Draft)

<p>“Building a Water Quality Trading Program: Options and Considerations,” Version 1.0, A Product of the National Network on Water Quality Trading</p>	<p><u>Building a Water Quality Trading Program: Options and Considerations</u></p>
<p>Oregon Interagency Recommendations: Public Funds to Restore, Enhance, and Protect Wetland and At-Risk Threatened and Endangered Species Habitats: Appropriate Uses of These Funds in Species and Wetland Mitigation Projects.</p>	<p>Available from: <u>http://www.fws.gov/oregonfwo/LandAndWater/Documents/PublicFunding-final.pdf</u></p>

Fee Analysis

This rulemaking does not involve fees.

Statement of fiscal and economic impact

Fiscal and Economic Impact

The proposed rules establish a water quality trading program that is voluntary. Water quality trading is one of several compliance options available to regulated entities. Traditional compliance methods involve intensive capital improvements or constructing “gray infrastructure” treatment such as effluent chillers. This “gray infrastructure” is often expensive and resource-intensive once in operation. In contrast, trading projects involve implementing land-based or in-water conservation or restoration actions, which are “best management practices,” that do not require complicated technology or construction. For regulated entities that choose to engage in trading, the proposed rules are expected to result in a less-expensive compliance option than traditional compliance methods and will not result in an adverse fiscal and economic impact.

Statement of Cost of Compliance

State and federal agencies

Direct Impacts

To state and federal agencies that hold DEQ-issued water quality permits or certifications there are no direct fiscal impacts as a result of the water quality trading rules because the rules propose a voluntary program. Only if a state or federal agency chooses to engage in water quality trading will there be direct fiscal impacts and those impacts are expected to be positive as trading is expected to be a less-expensive compliance option than existing compliance methods.

To DEQ there is little adverse fiscal impact beyond this rulemaking as a result of the proposed rules because DEQ is already engaged in evaluating and regulating water quality trades. The proposed rules clarify DEQ’s authority to continue the status quo and outline the criteria and processes by which the agency will continue to implement trading in its regulatory mechanisms. The rules provide greater transparency for when and under what circumstances DEQ will approve water quality trading. The rules also codify some processes that are already being implemented.

Indirect Impacts

As regulators of entities that wish to engage in water quality trading, there may be a small adverse fiscal impact to state and federal agencies when water quality trading projects are developed. Specifically, landowners who want to develop and sell water quality trading credits to a DEQ-regulated buyer must first be deemed in compliance with all applicable local, state, tribal and federal laws and rules. The proposed rules require that credits may only be sold above this “trading baseline.” DEQ expects that in most cases, landowners will document compliance with applicable requirements, allowing it to determine trading baselines. However, when an agency’s rules and laws are vague or unclear in determining compliance for a particular location, and if determining compliance for a particular site is complicated or difficult, state and federal agencies that administer the relevant legal requirements may be asked to provide information to landowners and DEQ relative to

compliance with that agency's existing rules and laws. The rules do not require an agency to respond or participate in a compliance determination, but agencies may find it in their best interests to do so as it may involve interpreting an agency's rules and statutes. In this regard agency staff time may be necessary to make those determinations and this may result in a small adverse fiscal impact to the state or federal agency. The fiscal impact will depend on the number of project sites involved in a proposed trade, the complexity of the applicable regulations and travel time, if necessary. In most situations it's expected that a typical compliance determination would require no more than one full-time employee a maximum of a day's worth of work.

Local governments

Direct Fiscal Impacts

To local governments that hold DEQ water quality permits or certifications, there are no direct fiscal impacts as a result of the water quality trading rules because the rules propose a voluntary program. Local governments that operate wastewater treatment facilities that hold DEQ water quality permits or that hold 401 certifications of a federal license or permit may choose to participate in water quality trading as an alternative means of complying with their regulatory obligations. In many cases water quality trading is a less expensive alternative to installing and operating "gray infrastructure" treatment which are often resource-intensive and expensive.

The City of Medford is engaged in water quality trading to meet requirements of its DEQ-issued NPDES permit for its municipal wastewater treatment plant. Medford contracted with a third party to help develop and implement its trading program. In total, Medford estimates the trading program will cost approximately \$5.1 million in initial capital improvement costs and operation and maintenance over 20 years. It was charged \$200,000 in program set-up costs for watershed analysis, contractor recruitment, vetting and training, development of contract templates for landowner agreements, and landowner outreach. This is approximately \$10 million less than Medford's estimated cost of implementing the other viable compliance options, effluent storage and chilling, which the city estimated to cost approximately \$15 million each. Water quality trading represented a significant cost savings over traditionally available compliance options.

Likewise, Clean Water Services, the public wastewater utility district for the Tualatin watershed in Washington County, implemented a temperature trading program that included riparian planting and flow augmentation programs. Estimated costs for the riparian planting program were \$10 to \$15 million from 2004 to 2014. The capital and operation costs of traditional compliance options at their Rock Creek and Durham facilities were estimated to be \$150 million. As with the City of Medford, Clean Water Services found that water quality trading represented a significant cost savings over traditionally available compliance options.

Indirect Fiscal Impacts

A landowner (the buyer) who wants to develop and sell water quality trading credits to a DEQ-regulated entity must first be deemed in compliance with all applicable local, state, tribal and federal laws and rules. Credits may only be sold above this "trading baseline." Local governments that have land use ordinances or other legal requirements that affect

water quality or riparian areas may be called upon to provide information to trading project developers and/or DEQ, regarding compliance with the local legal requirements. In this case, local government staff time may be needed to make those determinations resulting in a small adverse fiscal impact to the local government.

Public

Direct Fiscal Impacts

There are no direct fiscal impacts to the public because the rules propose a voluntary program available to regulated entities. If a member of the public holds a DEQ permit or 401 water quality certification, they may choose to engage in water quality trading. Only if an individual chooses to engage in water quality trading will there be fiscal impacts and those impacts are expected to be positive. Water quality trading is expected to save money over traditional compliance methods that require capital improvements or “concrete and steel” treatment measures. Ratepayers in jurisdictions participating in water quality trading would likely pay less for water-related services than they would if the utility were required to make major facility upgrades to comply with water quality standards.

Indirect Fiscal Impacts

The economic impacts of ecological restoration projects and the growth of a restoration economy specifically in Oregon is the subject of research by the University of Oregon’s Institute for a Sustainable Environment (Nielsen-Pincus, Max and Cassandra Mosely, “The Economic and Employment Impacts of Forest and Watershed Restoration.” *Restoration Ecology* Vol. 21, No.2 (2013), 207-214). This research concludes that “on average 16.3 jobs were supported in Oregon per million grant dollars [used for restoration projects], generating \$589,000 in total wages and \$2.3 million on overall economic activity.” Additionally, riparian projects, such as those that could be eligible for water quality trading under the proposed rules, “which tend to involve labor-intensive plantings and fencing, supported the most overall economic activity.” For every \$1 million of grant funding toward riparian projects, 23 jobs are supported. Economic impacts of this restoration work were higher in non-metropolitan counties. Based on this research there appears to be a positive fiscal impact to the public on job creation and local economic growth through restoration activities such as those that may be authorized by the proposed water quality trading rules.

Public utility ratepayers may see a positive fiscal impact if their local utility chooses to engage in water quality trading over traditional “gray infrastructure” wastewater treatment methods. In most cases trading is expected to be a more cost-effective compliance option and the avoided costs would result in smaller or avoided rate increase to the public. There would likely be a positive fiscal impact on the public resulting from water quality trading in these situations.

Large businesses - businesses with more than 50 employees

Currently in Oregon there are 76 active individual NPDES major permits. This includes municipal separate storm-sewer “MS4” permittees, 282 active individual NPDES minor permits, and 1,932 entities registered for coverage under a general NPDES permit. Currently, 50 active projects operate under individual 401 water quality certifications in the state.

Information is not available to determine if the holders of these permits and certifications are large or small businesses.

The proposed rules establish a water quality trading program that is voluntary and that DEQ expects entities will pursue when it represents the least expensive, or lower cost, compliance option when compared with traditional compliance methods that require extensive capital improvements or “concrete and steel” treatment measures. A large business that holds a DEQ-issued water quality discharge permit or 401 water quality certification may find water quality trading a more economical compliance tool than traditional treatment options. Therefore the proposed rules are not expected to result in an adverse direct or indirect fiscal and economic impact to large businesses.

Small businesses – businesses with 50 or fewer employees

The proposed rules would establish a water quality trading program that is voluntary and that DEQ expects entities will pursue when it represents the least expensive, or lower cost, compliance option when compared with traditional compliance methods that require capital improvements or “concrete and steel” treatment measures. A small business that holds a DEQ-issued water quality discharge permit or water quality certification may find water quality trading a more economical compliance tool than traditional treatment options. Therefore the proposed rules are not expected to result in an adverse direct or indirect fiscal and economic impact to small businesses.

Research on the restoration economy in Oregon concludes that the vast majority of businesses involved in ecological restoration work in Oregon, 178 businesses of which 75 percent were family-owned, fit the Small Business Administration’s definition of small business. Many of these businesses were once logging businesses that have shifted their work focus to forest and watershed restoration.

a. Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule.	The proposed rules create a program that is voluntary. No small business will be subjected to the proposed rules.
b. Projected reporting, recordkeeping and other administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule.	The proposed rules create a program that is voluntary. No additional activities will be required for small businesses to comply with the proposed rule.
c. Projected equipment, supplies, labor and increased administration required for small businesses to comply with the proposed rule.	The proposed rules create a program that is voluntary. No equipment supplies or labor will be required for small businesses to comply with the proposed rule.
d. Describe how DEQ involved small businesses in developing this proposed rule.	The proposed rules create a program that is voluntary. DEQ did not involve small businesses in developing the proposed rules.

Documents relied on for fiscal and economic impact statement

Document title	Document location
City of Medford Regional Water Reclamation Facilities Plan 2012	All documents are located at: DEQ – Northwest Region 700 NE Multnomah St., Suite 600 Portland, OR 97232
Clean Water Services 2005 Temperature Management Plan	
Thermal Credit Contract Number EM-MF-11-001, The Freshwater Trust, The City of Medford	
Nielsen-Pincus, Max and Cassandra Mosely, “The Economic and Employment Impacts of Forest and Watershed Restoration.” <i>Restoration Ecology</i> Vol. 21, No.2 (2013), 207-214. Print	

Advisory committee

DEQ did not convene an advisory committee for this rulemaking and did not have an advisory committee review the fiscal impact statement. To develop these rules and the fiscal impact statement, DEQ convened six policy forums to solicit feedback from interested stakeholders and the public on DEQ’s draft rules and water quality trading policy revisions. Policy forum participants reviewed the draft fiscal impact statement and DEQ incorporated their feedback into the statement above.

Housing cost

To comply with [ORS 183.534](#), DEQ determined the proposed rules would have no effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel. The proposed rules propose a voluntary program to offset point source discharges permitted under an NPDES permit and in-water work projects certified under 401 water quality certifications. A 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single family dwelling on that parcel are unlikely to be regulated by an NPDES permit or 401 water quality certification.

Federal relationship

"It is the policy of this state that agencies shall seek to retain and promote the unique identity of Oregon by considering local conditions when an agency adopts policies and rules. However, since there are many federal laws and regulations that apply to activities that are also regulated by the state, it is also the policy of this state that agencies attempt to adopt rules that correspond with equivalent federal laws and rules..." [ORS 183.332](#)

Relationship to federal requirements

This section complies with [OAR 340-011-0029](#) and [ORS 468A.327](#) to clearly identify the relationship between the proposed rules and applicable federal requirements.

Oregon implements the federal Clean Water Act under ORS 468B.035. The proposed rules create a voluntary program that offers a compliance tool that is "in addition to" the requirements of the federal Clean Water Act. By offering an alternative compliance tool by which regulated entities may comply with CWA requirements, the proposed rules are consistent with and further the act's goals.

The federal Clean Water Act is silent on the subject of water quality trading. Yet the federal Environmental Protection Agency has a written policy that supports and encourages water quality trading as an approach to achieving the act's water quality goals:

"The purpose of this policy is to encourage states, interstate agencies and tribes to develop and implement water quality trading programs for nutrients, sediments and other pollutants where opportunities exist to achieve water quality improvements at reduced costs. More specifically, the policy is intended to encourage voluntary trading programs that facilitate implementation of TMDLs, reduce the costs of compliance with CWA regulations, establish incentives for voluntary reductions and promote watershed-based initiatives." (2003 U.S. EPA Trading Policy)

What alternatives did DEQ consider if any?

DEQ considered the alternative of not issuing rules establishing a water quality trading program. This alternative would carry on the status quo whereby DEQ evaluates and approves proposed trades without clear authority established in rule and under the Internal Management Directive on water quality trading to DEQ staff. The IMD is a policy document which is not binding on regulated entities and DEQ staff may deviate from the IMD with managerial approval.

Land Use

Land use considerations

In adopting new or amended rules, ORS 197.180 and OAR 340-018-0070 require DEQ to determine whether the proposed rules significantly affect land use. If so, DEQ must explain how the proposed rules comply with state wide land-use planning goals and local acknowledged comprehensive plans.

Under OAR 660-030-0005 and OAR 340 Division 18, DEQ considers that rules affect land use if:

- The statewide land use planning goals specifically refer to the rule or program, or
- The rule or program is reasonably expected to have significant effects on:
 - Resources, objectives or areas identified in the statewide planning goals, or
 - Present or future land uses identified in acknowledged comprehensive plans

To determine whether the proposed rules involve programs or actions that affect land use, DEQ reviewed its Statewide Agency Coordination plan, which describes DEQ programs that have been determined to significantly affect land use. DEQ considers that its programs specifically relate to the following statewide goals:

Goal	Title
5	Open Spaces, Scenic and Historic Areas, and Natural Resources
6	Air, Water and Land Resources Quality
9	Ocean Resources
11	Public Facilities and Services
16	Estuarial Resources

Statewide goals also specifically reference the following DEQ programs:

- Nonpoint source discharge water quality program – Goal 16
- Water quality and sewage disposal systems – Goal 16
- Water quality permits and oil spill regulations – Goal 19

Determination

DEQ determined that the proposed rules affect land use to the extent that they will be used by sources regulated in the existing NPDES permitting program, the TMDL program, and sources holding 401 water quality certifications. In those contexts, the existing State Agency Coordination Program provisions for ensuring compliance with the land use goals and compatibility with local land use plans and regulations are applicable and effective.

Stakeholder and public involvement

DEQ did not appoint an advisory committee. However, DEQ convened six policy forums beginning in December 2014 through the summer of 2015 to engage interested members of the public and stakeholders on important water quality trading issues. The goals of the forums, as stated on each forum agenda, were to: “solicit informed feedback from interested stakeholders and public participants on DEQ’s proposed water quality trading rulemaking package and draft internal management directive revisions. Through informed feedback from the forum participants, DEQ aims to integrate relevant practical, technical and regulatory considerations into the program and make water quality trading clear, consistent and predictable throughout the state, yet adaptable to watershed-specific applications.”

Three of the six policy forums were at DEQ Headquarters in downtown Portland; one was in Springfield; one in Salem-Keizer and one at the DEQ laboratory in Hillsboro. DEQ broadcast all of the forums as webinars, allowing interested persons throughout the state to listen in and participate. DEQ prepared policy forum meeting summaries and posted them to its policy forum webpage within a week after each meeting. DEQ has also posted all background materials and PowerPoint presentations presented during the meetings.

Participants at the policy forums included representatives from other Oregon natural resource agencies and key stakeholder groups including Clean Water Services, city of Medford, Oregon Association of Clean Water Agencies, EPA, watershed councils, environmental advocacy organizations, industry representatives, private citizens and industry consultants, as explained in detail below.

The policy forum website is available at: [WQ Trading Policy Forums](#).

Policy Forum #1, Dec. 4, 2014, DEQ headquarters, Portland:

The goal of the first policy forum as stated on the agenda was to: “establish a common foundation of knowledge and understanding among participants regarding water quality trading, in general, and with regard to specific concepts at issue in Oregon’s trading program. The policy forum will closely examine two trades that occurred in the NPDES program and provide input on substantive and programmatic issues raised via those case studies.” Given the wide range of experience and knowledge among the anticipated audience members DEQ felt it was important to establish this common foundation through an examination of two successful trades that have occurred in the state. In addition to DEQ presentations on the Medford and Clean Water Services trades, there was discussion and Q&A on specific trading issues as well as issues not directly related to trading such as the rulemaking’s timing, the purpose of the policy forum and DEQ’s policy revision process.

At the meeting’s conclusion DEQ requested that participants submit written feedback suggesting revisions that should be made to DEQ’s existing water quality trading policy document or IMD. DEQ followed up on this verbal request with a written memo e-mailed to all participants as well as to the GovDelivery list subscribers. The email requested specific input on the IMD revisions and stated that DEQ would send out via GovDelivery a draft of the water quality trading rules for participant review in advance of the second policy forum.

The participants at the first policy forum were:

In Person Attendee Names:	Affiliation:
1. Elaine Payne	City of Junction City
2. Alex Johnson	The Freshwater Trust
3. Walt Meyer	West Yost Associates
4. Melanie Bocianowski	SLR International Corporation
5. Ken Williamson	Clean Water Services
6. Joe Furia	The Freshwater Trust
7. Rob Kirschner	The Freshwater Trust
8. Bret Bruhn	Viasystems
9. Tim Wigington	The Freshwater Trust
10. Margaret David	Portland General Electric
11. Janet Gillaspie	ACWA
12. Danette Faucera	ODFW
13. Todd Miller	Springfield MWMC
14. Sheila Sahu	Geosyntec Consultants
15. Rick Glick	Davis Wright Tremaine
16. Krista Reininga	Brown & Caldwell
17. Mark Yeager	City of Albany
18. Kara Goodwin	Depart. Of Environmental Quality
19. Dale Feik	citizen
20. Larry McAllister	Depart. Of Environmental Quality
21. Jane Hickman	Depart. Of Environmental Quality
22. Sarah Dyrdaahl	NSNC
23. David Primozych	The Freshwater Trust
24. Alice Brawley-Chesworth	City of Portland
25. Josh Newman	City of Springfield MWMC
26. Carrie Sanneman	Willamette Partnerships
27. Nina Bell	Northwest Environmental Advocates
28. Stephanie Eisner	City of Salem
29. Greg Everly	City of Salem
30. Connie Schrandt	City of Salem
31. Wade Peerman	Depart. Of Environmental Quality
32. Jason Smesrud	CH2MHILL
33. Jeff Moore	Oregon Department of Transportation
34. William Freeman	Oregon Department of Transportation
35. Kendra Smith	Bonneville Environmental Foundation
36. Mary Anne Nash	Oregon Farm Bureau
37. Bret Galloway	Willamette Partnerships
38. Alex Hutton Tine	Recology
39. Scott Fogarty	Friends of Trees
Online Attendee Names:	
40. Kathryn Van Natta	
41. Neil Mullane	Citizen
42. Andrew Hawley	Northwest Environmental Defense

	Center
43. Avis Newel	DEQ staff
44. Brian Wegner	
45. Chris Storey	
46. Claire Schary	EPA Region 10
47. Dennis Baker	City of Medford
48. Karen Hughes	
49. Katie Bohren	
50. Kristin Larson	
51. Lauren Hughes	
52. Marrisa Houlberg	
53. Nathan Hardebeck	
54. Rebecca McCoun	
55. Sharon Olson	

Policy Forum #2, Jan. 29, 2015, DEQ headquarters, Portland:

The goal of the second policy forum, as stated on its agenda, was to: “review the draft water quality trading rules and discuss baseline, in-depth.” At that policy forum DEQ reviewed the input received on the internal management directive and gave an overview of the draft rules. The afternoon focused on discussing the concept of baseline and its treatment in the draft rules, IMD and other trading mechanisms.

At this policy forum DEQ asked participants to submit any feedback on the rules to DEQ subsequent to the meeting. Participants remarked that the meeting venue at DEQ headquarters was not conducive to good discussion.

In Person Attendee Names:	Affiliation:
1. Krista Reininga	Brown & Caldwell
2. Dale Feik	Citizen
3. David Light	The Water Report
4. Katie Bohren	Biohabitats
5. Kathryn Van Natta	NWPPA
6. Kendra Smith	BES
7. Maryanne Nash	OFB
8. Jerome Ross	OCA
9. Bret Callaway	Willamette Partnership
10. Jerry Linder	CWS
11. Judith Callen	ODA
12. Mike Freese	AOI
13. Karen Burgess	EPA
14. Forrest English	Rogue Riverkeeper
15. Claire Schary	EPA
16. Alex Hutton-Tine	Recology
17. Carrie Sanneman	Willamette Partnership
18. Karin Power	Freshwater Trust

19. Chris Thomas	Freshwater Trust
20. Bob Baumgartner	CWS
21. Tara Davis	Calapoia Watershed Council
22. Kyle Abraham	ODF
23. Mark Yeager	City of Albany
24. Rick Glick	Davis Wright Tremaine
25. Bruce Roll	CWS
26. Scott Fogarty	Friends of Trees
27. Stephanie Eisner	City of Salem
28. Matt Stouder	MWMCC/City of Springfield
29. Raj Kapur	CWS
30. Alice Browley-Chesworth	Portland BES
31. Ken Williamson	CWS
32. Ranei Nomura	DEQ
Online Attendee Names:	
33. Chris Storey	DEQ
34. Chris Stine	DEQ staff
35. Danette Faucera	
36. Elaine Payne	
37. Josh Newman	
38. Lauren Hughes	
39. Melanie Bocianowski	
40. Michael Martinez	
41. Neil Mullane	
42. Stewart Rounds	
43. Tom Mendes	
44. Tim Wigington	
45. Tom Anderson	
(23 unidentified online attendees)	

Policy Forum #3 March 5, 2015, Willow Lake Wastewater Treatment Plant, Salem-Keizer:

DEQ held the meeting at a new site outside the Portland metro area, hoping it would be conducive to better discussion and might attract interested parties from different parts of the state.

The goal of the third policy forum was to: “reach a common understanding of DEQ’s regulatory process related to trading, to clear up confusion about how trading is implemented, to discuss participant comments on the draft rules and to discuss the subject of trading ratios.” This policy forum included an “early-bird primer” session on the fundamentals of DEQ’s TMDL and permitting processes. During the policy forum DEQ led discussion of the draft rules and asked participants to discuss and explain their comments on the rules. There was a session focusing on the topic of baseline and a presentation on “Trading Ratios: Overview of Approaches Taken by States” by Bobby Cochran, executive director of the Willamette Partnership. Small group breakout discussion sessions on specific issues related to ratios followed.

In Person Attendee Names:	Affiliation:
1. Krista Reininga	Brown & Caldwell

2. Dale Feik	Citizen
3. Stephanie Eisner	City of Salem
4. Maryanne Nash	Oregon Farm Bureau
5. Kendra Smith	BES
6. Jerry Linder	CWS
7. Judith Callen	ODA
8. Amanda Keller	Clackamas County
9. Karen Burgess	EPA
10. Todd Miller	City of Springfield
11. Claire Schary	EPA
12. Rebecca McCann	North Santiam WSC
13. Carrie Sanneman	Willamette Partnership
14. Karin Power	Freshwater Trust
15. Bobby Cochran	Willamette Partnership
16. Bob Baumgartner	CWS
17. Sarah Dyrda	Calapooia, Santiam WSCs
18. Mark Yeager	City of Albany
19. Josh Newman	City of Springfield
20. Cheryl Hummon	ODA
21. Janet Gillaspie	ACWA
22. Joe Furia	The Freshwater Trust
23. Karin Power	The Freshwater Trust
24. Raj Kapur	CWS
25. Alice Browley-Chesworth	Portland BES
26. Ken Williamson	CWS
27. Ranei Nomura	DEQ
Online Attendee Names:	
28. Bob Legge	
29. Elaine Payne	
30. Jane Hickman	DEQ
31. Melanie Bocianowski	
32. Sonja Biorn-Hansen	DEQ
33. Tom Mendes	
(7 unidentified online attendees)	

Policy Forum #3.5, April 9, 2015, DEQ headquarters, Portland:

The fourth policy forum was a “mini” session, held for a half day. All other policy forums were all-day meetings. The goal of this mini session was to discuss issues related to water quality trading credits and credit accounting as well as DEQ’s proposed approach to credits. The Willamette Partnership’s executive director presented on “Credits: Are credits there when they are needed? How do we know that credits are real?” and DEQ staff presented DEQ’s revised rule language relating to credits. There were small break out groups that discussed issues related to credits.

In Person Attendee Names:	Affiliation:
1. Tara Davis	Calapooia Watershed Council
2. Dale Feik	Citizen
3. Stephanie Eisner	City of Salem
4. Neil Mullane	Citizen
5. Kendra Smith	BEF
6. Jerry Linder	CWS
7. Judith Callen	ODA
8. Jane Hickman	DEQ
9. Ryan Michie	DEQ
10. Marty Jacobson	EPA
11. Claire Schary	EPA
12. Rebecca McCann	North Santiam WSC
13. Carrie Sanneman	Willamette Partnership
14. Karin Power	Freshwater Trust
15. Bobby Cochran	Willamette Partnership
16. Bob Baumgartner	CWS
17. Chris Thomas	The Freshwater Trust
18. Tim Wigington	The Freshwater Trust
19. Josh Newman	MWMC/City of Springfield
20. Cheryl Hummon	ODA
21. Janet Gillespie	ACWA
22. Joe Furia	The Freshwater Trust
23. Raj Kapur	CWS
24. Alice Browley-Chesworth	Portland BES
25. Ken Williamson	CWS
26. Ranei Nomura	DEQ
Online Attendee Names:	
27. Forrest English	Rogue Riverkeeper
28. Daniel Timmons	
29. Tom Mendes	
30. Todd Miller	
31. Krista Reininga	
(5 unidentified online attendees)	

Policy Forum #4, May 14, 2015, Springfield Justice Center, Springfield:

The fifth policy forum (fourth all-day meeting) was at the Springfield Justice Center in Springfield, Oregon. The goals of this forum were to “review DEQ’s draft proposed water quality trading rules and discuss the state of Oregon’s revised approach to baseline.” The baseline discussion began with a presentation by Oregon Department of Agriculture on their nascent efforts to develop streamside vegetation guidelines. Next, DEQ discussed treatment of baseline in the draft water quality trading rules. Small group break-out discussion sessions were planned but forum participants preferred instead to continue discussion among the group as a whole. In the afternoon DEQ presented a “walk through” of the rest of the rules. After the forum concluded, participants attended a “field trip” to a riparian shade project hosted by the City of Springfield and the Freshwater Trust.

In Person Attendee Names:	Affiliation:
1. Sarah Dyrdaahl	South Santiam Watershed Council
2. Kendra Smith	BEF
3. Heath Curtiss	OFIC
4. Stephanie Eisner	City of Salem
5. Neil Mullane	citizen
6. Karin Power	The Freshwater Trust
7. MaryAnne Nash	Oregon Farm Bureau
8. Judith Callens	ODA
9. Jane Hickman	DEQ
10. Ryan Michie	DEQ
11. Joseph Furia	The Freshwater Trust
12. Cheryl Hummon	ODA
13. Todd Miller	City of Springfield
14. Tim Wigington	The Freshwater Trust
15. Carrie Sanneman	Willamette Partnership
16. Loren Leighton	IP/NWPPA
17. Janet Gillaspie	ACWA
18. Bob Baumgartner	CWS
19. Tom Mendes	City of Eugene
20. Ken Williamson	CWS
21. Ranei Nomura	DEQ
22. Alice Brawley-Chesworth	Portland
23. Mark Yeager	Online – City of Albany
Online Attendee Names:	
24. Claire Schary	USEPA Region 10
25. Jenny Wu	USEPA Region 10
26. Mark Yeager	City of Albany
27. Allison Hensey	Oregon Environmental Council
28. Amanda Keller	
28. Jerome Rosa	
30. Melanie Bocianowski	
31. Raj Kapur	CWS
(14 unidentified attendees)	

Policy Forum #5, July 14, 2015, DEQ laboratory, Hillsboro:

This last policy forum focused on revisions to the existing water quality trading Internal Management Directive. The first part of the meeting included a presentation by DEQ of its IMD revisions and a case study of a hypothetical trade. DEQ also presented revised rules and the fiscal impact statement developed for the rulemaking for participant feedback and discussion. Forum participants provided comments about the fiscal impact statement as well as comments on how best to design and strengthen Oregon's water pollutant trading program.

In Person Attendee Names:	Affiliation:
1. Raj Kapur	Clean Water Services
2. Kendra Smith	Bonneville Environmental Foundation
3. Melanie Bocianowski	SLR
4. Jerry Linder	Clean Water Services
5. Mark Yeager	City of Albany
6. Sheila Sahu	Geosyntec Consultants
7. Jennifer Byrne	EPA
8. Claire Schary	EPA
9. Tim Wigington	The Freshwater Trust
10. David Primozich	The Freshwater Trust
11. Janet Gillaspie	ACWA
12. Carrie Sanneman	Willamette Partnerships
13. Todd Miller	Springfield MWMC
14. Neil Mullane	Willamette Partnership
15. Mary Anne Nash	Oregon Farm Bureau
16. Judith Callens	ODA
17. Thomas Benke	ECO LLC
18. Jane Hickman	DEQ
19. Evan Haas	DEQ
20. Ryan Michie	DEQ
21. Josh Newman	City of Springfield MWMC
22. Bob Baumgartner	Clean Water Services
23. Sonja Biorn-Hansen	DEQ
24. Gene Foster	DEQ
25. Andrew Bogle	The Freshwater Trust
26. Mia Pan	DEQ
27. Karin Power	The Freshwater Trust
28. Bryant Renaud	Governor's Office
29. Bruce Roll	Clean Water Services
30. Amanda Keller	Clackamas County
31. Steve Mrazik	DEQ
32. Karen Burgess	EPA - online

Meeting notifications

To notify people about the policy forum meetings and activities, DEQ:

- Sent a one-time notice on Sept. 23, 2014, to the following GovDelivery subscriber lists:
 - News Release
 - DEQ Public Notices
 - Rulemaking
 - Stormwater Permitting and Water quality Permits

The GovDelivery message informed subscribers that DEQ “will develop new rules and revise existing guidance to strengthen and clarify Oregon’s water quality trading program. DEQ will seek approval of the new rules from the Oregon Environmental Quality Commission at the December 2015 commission meeting.” The message told subscribers where to sign up for e-mail updates to stay informed of the efforts.

- On Oct. 31, 2014, sent a one-time notice to GovDelivery subscribers of the following subscriber lists:
 - Rulemaking
 - Stormwater
 - Water Quality Permits
 - Water Quality Standards

The notice invited stakeholders and interested members of the public to participate in the first three policy forums and directed interested persons to the water quality trading website, where they could sign up to receive e-mail updates on the policy forums via GovDelivery.

- Subsequently, sent notices about policy forum meetings and activities via GovDelivery bulletins to the Water Quality Trading Policy Forum subscribers list. After learning that not all subscribers were receiving the GovDelivery Notices to their inboxes, DEQ began a practice in early January of also sending e-mails duplicative of the GovDelivery Bulletins directly to the subscriber list via Outlook.
- Regularly updated its Water Quality Trading Policy Forum website with information including agenda and background materials for each policy forum posted in advance of the meetings. DEQ posted meeting summaries, participant lists and PowerPoint presentations made at the policy forums to the website within a week following each policy forum. To notify subscribers when each was made, DEQ sent a GovDelivery message to the Water Quality Trading Policy Forum subscriber list and an e-mail sent via Outlook to all GovDelivery subscribers to the Policy Forum subscriber list.
- Also added policy forum announcements to DEQ’s online calendar of public meetings at [DEQ Calendar](#).

EQC prior involvement

DEQ shared information about this rulemaking with the Oregon Environmental Quality Commission through an informational item in the [Director's Report](#) at the April 15, 2015, EQC meeting and presented an informational item at the Aug. 12, 2015, EQC meeting.

Public notice

DEQ provided notice of the Notice of Proposed Rulemaking with Hearing by:

- Filing with Secretary of State for publication in the Sept. 1, 2015 [Oregon Bulletin](#)
- Posting notice on the rulemaking web page: [WQ Trading Rulemaking](#)
- Emailing 28,129 interested parties on the Agency Rulemaking List through GovDelivery
- Issuing a press release
- Emailing the following key legislators required under [ORS 183.335](#):

- Chair Jessica Vega-Pederson, House Committee on Energy and Environment
- Chair Chris Edwards, Senate Committee on Environment and Natural Resources
- Emailing forum attendees and subscribers to the Policy Forum GovDelivery list
- Posting information about the rulemaking on Facebook and Twitter

Request for other options

During the public comment period, DEQ requested public comment on whether to consider other options for achieving the rules' substantive goals while reducing the rules' negative economic impact on business. This document includes a summary of comments and DEQ responses.

Public hearings and comment

DEQ held one public hearing. DEQ received one public comment during the hearing and 23 written comment submittals. The following is a summary of comments DEQ received during the public comment period with cross reference to the commenter number. DEQ's response follows the summary. Original comments are on file with DEQ.

Presiding Officers' Record

Public Hearing

Meeting location: DEQ headquarters, EQC-A, 10th Floor, 811 SW 6th Avenue, Portland

Meeting date and time: Monday Sept. 21, 2015, 6 p.m.

Presiding Officer: Evan Haas

The presiding officer convened the hearing and summarized procedures for the hearing including notification that DEQ was recording the hearing. The presiding officer asked people who wanted to present verbal comments to complete, sign and submit a registration form or, if attending via audio conference call to indicate their intent to present comments. The presiding officer advised all attending parties interested in receiving future information about the rulemaking to sign up for GovDelivery email notices.

As [Oregon Administrative Rule 137-001-0030](#) requires, the presiding officer summarized the content of the rulemaking notice given under [Oregon Revised Statute 183.335](#) and responded to any questions about the rulemaking.

Twenty people, including five DEQ staff, attended the public hearing. DEQ staff presented an overview of water quality trading and the rule development process and answered clarifying questions. One attendee presented oral comments. The hearing adjourned at 6:44 pm.

The one commenter who presented testimony at the hearing also submitted written comments during the comment period. This commenter is included in the commenter section of this staff report. DEQ added the oral comments presented at the hearing to the summary of comments and agency responses section of this staff report.

Close of public comment period

DEQ closed the public comment period at 4 p.m. on Friday, Sept. 25, 2015.

Summary of comments and DEQ responses

The public comments received by the close of the public comment period are listed below and have been organized into 68 categories with cross references to the commenter number. DEQ's response follows the summary. Original comments are on file with DEQ.

DEQ changed the proposed rules in response to comments described in the response sections below.

1. Comment

Prohibiting water quality trading for toxics pollutants (draft rule OAR 340-039-0015(2)(b)).

DEQ received five comments in this category from commenters #4, #13, #14, #16 and #18.

Commenter #16 supports the prohibition on trading for toxics.

Commenters #4, #13, and #18 commented that DEQ should delete the prohibition on toxics in favor of alternatives that would allow DEQ to approve trading for toxics under certain circumstances such as pilot programs or in the event EPA revises its water quality trading guidance to approve of trading for toxic pollutants.

Commenter #14 suggested that the draft rule at OAR 340-039-0015(2)(b) may prevent implementation of draft rule OAR 340-039-0017(1)(c) regarding permit variances and may conflict with implementation of OAR 340-041-0059 regarding pollution reduction plans.

Response

DEQ acknowledges that water quality trading for toxic pollutants has potential for environmental benefits, but at this time DEQ is not prepared to undertake this type of trading. U.S. EPA did not support trading of pollutants considered to be persistent bioaccumulative toxic pollutants (PBTs) in its final water quality trading policy statement of 2003. However, at the time EPA did indicate that it would consider revisions to its trading policy on PBTs based on findings of possible but unidentified pilot projects. To date EPA has not changed its position on trading for PBTs and at this stage in the development of Oregon's trading program, DEQ is focusing on trading for temperature and parameters identified in the EPA policy statement. Consequently DEQ's position is similar to EPA's policy prohibiting trading for toxics and the proposed rule language is unchanged (except as described below).

DEQ agrees with the comment made by commenter #14 regarding the potential conflict between the proposed prohibition on toxic pollutant trading and the authorization of the use of "pollutant offsets or trading" to meet underlying water quality standards in a pollutant reduction plan that is submitted as part of a request for an NPDES permit variance in OAR 340-041-0059(4)(e).

The kind of trading authorized by the draft rules in proposed division 039 functions differently from the kind of trading under a pollution reduction plan developed for a variance. Specifically, trading envisioned by division 039, in the context of an NPDES permit or a Section 401 water quality certification, would be part of a water quality-based effluent limitation or other condition designed to meet the requirements of an underlying water quality standard. Trading in the context of a “pollution reduction plan” required for a variance is different. In that context, trading could be a possible element of the plan that may be required of the source, but it would not be expected to result in achievement of the underlying standard. Rather it would be an additional element that may be required to justify a variance from the underlying standard.

To clarify that DEQ may approve a permit variance that includes trading for toxic pollutants described in OAR 340-041-0059(4)(e), DEQ has revised OAR 340-039-0015(2)(b) to include the italicized language “(b) Water quality trading for pollutants that are toxic and either persist in the environment or accumulate in the tissues of humans, fish, wildlife or plants is prohibited, *except if trading is an element of a pollution reduction plan in a variance that has been issued by DEQ or the EQC and approved by EPA pursuant to OAR 340-041-0059.*” The intent of the revision is to clarify that a proposed pollutant reduction plan that includes trading to meet a water quality standard for a parameter that is toxic and either persists in the environment or accumulated in the tissues of humans, fish, is allowed, but only in accordance with the rule regarding variances in OAR 340-041-0059.

2. Comment

Add “or” after the semicolon to draft rule OAR 340-039-0001(2)(e).

DEQ received four comments in this category from commenters #1, #4, #7 and #13.

Response

Since water quality trading may be approved if it promotes *one or more* policies of the EQC, DEQ amended the draft rule to include “or.”

3. Comment

Allowing the use of public conservation funds to generate water quality trading credits (draft rule OAR 340-039-0040(4)).

DEQ received 15 comments in this category from commenters #1, #2, #3, #4, #5, #6, #7, #10, #11, #13, #15, #16, #18, #20, #21, and #23.

Commenters #1, #3, #4, #11, #18, #16, and #23 all commented that the draft rule regarding public conservation funding should be removed or revised so as to allow for maximum flexibility of trading entities to partner with conservation organizations and co-mingle funds to produce the greatest possible environmental benefit. Commenters suggested that it was the province of the funding agencies - not DEQ - to establish guidelines for how funds may or may not be used and that DEQ should not take on that role. Commenters suggested that the draft rule would complicate trading in that it would require segregating and tracking various funding streams on

collaborative projects. Commenters also suggested that communities should be encouraged to build broad public and private support for watershed restoration and that provisions limiting the use of public conservation funds would discourage such collaboration.

Commenters #2, #5, #6, #10, #7, #13, #15, #20 and #21 commented in favor of some limitation on the use of public funds for credit generating projects. Commenters encouraged DEQ to draft a rule that is consistent with the 2008 “Oregon Interagency Recommendations” signed by other state and federal agencies available from: <http://www.fws.gov/oregonfwo/LandAndWater/Documents/PublicFunding-final.pdf>. Additionally, comments suggested that to allow the use of public conservation funding in credit-generating projects to meet water quality-based regulatory obligations such as NPDES permit limits or 401 water quality certification requirements would be inconsistent with the intent of the public funding programs, and inconsistent with TMDLs and nonpoint source implementation plans. Commenter #7 stated that allowing public conservation funds to meet regulatory compliance obligations sets a “dangerous precedent” and that public conservation funds should be allowed to meet baseline requirements.

Commenters #2, #3 and #7 suggested that “full disclosure” or transparent accounting is essential to demonstrate that actions supported by the use of public conservation funds produce additional benefits beyond those provided by credit-generating actions.

Commenters #3, #5, #18, #21 also commented that the principle of additionality is an important component to consider: that water quality benefits from trading should be “additional” to what would have occurred without the trade.

Commenters #6, #10, #13, and #21 suggested the following revision of OAR 340-039-0040(4): “Public conservation funds cannot be used to meet regulatory compliance obligations. Where multiple sources of funding are used in conjunction with credit-generating activities, it is the permittee’s responsibility to demonstrate compliance with this requirement.”

Commenters #1, #4 suggested that if the draft rule is kept, the word “sewer” be added to “utility sewer stormwater” in the definition of “public conservation funds” at OAR 340-039-0005(4).

Commenter #16 proposed changes to rule that allow permittees to combine their own funds with public conservation funds but only allow credits to be taken on a pro-rated basis.

Response	To ensure the credibility and long-term viability of the proposed water quality trading program, and to align with other state agency policies, public funds dedicated to voluntary conservation actions cannot be used to meet NPDES or 401 water quality certification regulatory compliance requirements for which
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trading is proposed to meet. In other words public conservation funds cannot be used to generate trading credits used to meet water quality based effluent limitations or 401 water quality certification conditions established to meet state water quality standards. Public conservation funds may be used to meet baseline requirements.

DEQ agrees with commenters who cite the importance of projects funded from multiple sources, as well as private and public collaboration, and commenters who suggested that where there are multiple sources of funding (which include public monies) it should be the permittee's or 401 water quality certification holder's responsibility to demonstrate compliance with the prohibition. DEQ does not want to limit collaborative trading projects or public-private partnerships that result in trading projects that have important water quality benefits. Therefore, DEQ has revised OAR 340-039-0040(4) to state that "[c]redits generated under an approved trading plan may not include water quality benefits obtained with public conservation funds. Where public sources of funding are used for credit-generating activities, it is the entity's responsibility to demonstrate compliance with this requirement in its annual report." DEQ did not use the commenters' exact wording requiring projects that have "multiple sources of funding" to demonstrate compliance through reporting because it would be overly broad and burdensome to require *all* projects with more than one source of funding - regardless of whether it was public or private - to have to make the demonstration of compliance with the rule.

DEQ has also revised the Annual Reporting requirements of OAR 340-039-0017(3) to include a requirement that entities submit a demonstration of compliance with the proposed rule -0040(4) regarding public conservation funds, if applicable. Transparent and proportional accounting which identifies and excludes a share of the eligible water quality benefits in proportion to the amount of public conservation funds used for the credit generating activities will be necessary to demonstrate compliance with the revised rule.

DEQ did not accept the language proposed by commenters #6, #10, #13, #21 that "public conservation funds cannot be used to meet regulatory compliance obligations" because it was overly broad; DEQ did not want to prohibit the use of public conservation funds for "regulatory compliance obligations" that are baseline requirements, or other regulatory requirements that may apply to other parts of an NPDES permit unrelated to the WQBEL for which trading is proposed. DEQ believes that its proposed language complies with the intent of the language proposed by these commenters but clarifies that baseline requirements are not subject to the prohibition.

DEQ's revisions strike the right balance between providing for flexible funding approaches to trading projects and ensuring that projects funded with public conservation funds will result in additional water quality benefits that would have otherwise not occurred and are not already required.

DEQ also revised the definition of public conservation funds at -0005(4) to include the word “sewer” per the comments received and added additional examples of “public conservation funds” to the definition to provide additional clarity to what types of funding are considered “public conservation funds.”

4. Comment

Baseline “backstop” rule provision

DEQ received eight comments in this category from commenters #1, #4, #6, #7, #10, #12, #13 #15, #16, and #18.

Commenters #1, #4, #6, #7, #10, #12, #13, #16, and #18 all commented that this provision should be removed from the draft rules. Commenters argued that it created uncertainty and confusion, that it was impractical and ambiguous, and increased the possibility that permits should be challenged. Commenters observed that if DEQ concludes that additional requirements are needed in a specific trade DEQ could simply include additional conditions in a permit.

Commenters #7 and #12 stated that including of the backstop provision implies existing requirements and regulations, TMDL and Water Quality Management Plans (WQMPs) are inadequate and trading is not the forum to address those inadequacies.

Commenter #12 stated that the backstop puts the trading program at odds with the SB1010 program applicable to agricultural lands. This commenter argued that the only applicable water quality baseline on agricultural lands are the site conditions that must be met under Oregon Department of Agriculture’s (ODA’s) area rules that implement SB1010 and allowing DEQ to set an independent baseline circumvents ODA’s role in regulating agricultural lands.

Commenter #15 supports the backstop provision asserting that it is “essential” that DEQ “retain the ability to make program modifications as needed to ensure TMDL progress towards meeting water quality standards or improved accuracy in credit calculations based on new monitoring or measurement information.”

Response

DEQ has deleted the “backstop” provision from draft rule OAR 340-039-0030 because, as many commenters observed, DEQ already has the authority to impose additional requirements in an NPDES permit or 401 water quality certification, and to make the modifications suggested by commenter #15 to “ensure TMDL progress towards meeting water quality standards or improved accuracy in credit calculations based on new monitoring or measurement information,” should it be necessary to do so.

5. Comment

No clear rule requirements regarding trading ratios; DEQ should establish ratios.

DEQ received five comments in this category from commenters #9, #13, #15, #16 and #18.

The comments stated that the proposed rules do not provide clear or enforceable requirements regarding what trade ratios would be acceptable or how those would be calculated, leaving that up to interpretation by the entity developing the trading plan. In addition, because the information sources a permittee should consider for ratios is not stated in the rule, ratios may be proposed by a permittee using their own judgment and not based on a more scientific analysis. Commenters stated that DEQ should establish the appropriate ratio and not shift the burden to the regulated entity to perform this task.

Commenter #15 and #16 stated that there is insufficient direction in the rules on which ratios are required to be included and how ratios are to be used to ensure compliance with water quality standards. The proposed rules recite the types of issues that *may* be addressed through trading ratios but do not *require* those issues to be addressed. And there is nothing in the rule that specifies what these ratios must be or the standards or goals that must be achieved through the use of ratios.

Commenter #13 stated that “retirement” should be deleted from the list of trading ratio variables.

Commenter #18 suggested the word “delay” be replaced with “time lag” because delay implies a schedule slip whereas “time lag” more accurately portrays that the benefit may take time to manifest. Commenter #18 also suggested changing the wording about using credit retirement to *ensure* a net reduction in water pollution to *promoting* a net reduction.

Response

DEQ declines to require the use of every type of ratio in every project or to place any more prescriptions in rule on what type of ratios must be used under what circumstances. It is not feasible to draft such rule language given the multitude of possible types of BMPs, types of trades, site specifics, and other unknown variables that affect the appropriateness of one type of ratio over another. Selection of the appropriate ratio(s) will be based upon the unique circumstances of each proposed trade and its elements, the particular trading area, the parameter to be traded, and Best Management Practices (BMPs) used to generate credits, among other considerations. The trade plan developer will be in the best position to identify unique characteristics of the proposed trade, to determine the risk and uncertainty associated with its proposal and to propose appropriate ratio or ratios. The developer must clearly document its proposed use of trade ratios and underlying assumptions in a trading plan submitted to DEQ for review and approval. DEQ staff will review the proposal, along with its underlying assumptions, as part of the trading plan approval process. DEQ may approve the proposed trading plan (and ratio) only based on information in the record and, in doing so, has not abrogated any duty to establish the ratio in the first instance. For many compliance approaches authorized under the CWA, it is incumbent upon the regulated entity to determine for itself the most appropriate means of achieving

compliance which it may then propose to DEQ for review and approval. Trading is no different in this regard.

DEQ expects that trade developers will draw information from TMDLs, trading frameworks, and individual trade protocols to identify trade ratios. TMDLs provide much of the analysis necessary to quantify pollutant attenuation and other factors that may be applied as ratios to adjust the number of credits generated by an individual trade project. DEQ anticipates in the future this ratio information as well as ratios that reflect local watershed restoration priorities or other TMDL implementation priorities will be included in trading frameworks developed by DEQ and issued as an agency order after public notice and comment. Individual trade protocols for specific pollutant parameters will be appended to the DEQ internal management directive for water quality trading and will be reviewed and approved by DEQ.

In response to the comments, DEQ has revised the proposed rule language to clarify that the underlying ratio components and assumptions must be documented in a trading plan submitted to DEQ for approval. Specifically, language was moved from the “Requirements for Trading Ratios” rule at -0043 and into the ratios subsection of “Requirements of a Water Quality Trading Plan” at -0025(5)(e) to clarify that “underlying assumptions of the ratio” must be included in the trading plan submitted to DEQ for review and approval and publicly noticed.

DEQ has revised OAR 340-039-0025(3) to clarify that “DEQ may amend the trading plan or require amendments to the trading plan”, which could include additional trade ratios or revisions to proposed ratios before approving a trading plan. The trading plan will be made available for public comment prior to DEQ final approval.

DEQ does not agree with commenter #13 that “retirement” should be deleted from the list of trading ratio variables. In some situations it will be appropriate that credits be retired in order to ensure a net reduction in water pollution.

DEQ agrees with the wording suggested by commenter #18 regarding “delay” and has revised the rule language to include “time lag”. DEQ does not agree with commenter #18’s suggestion about using the word “promote” instead of “ensure” and has not made that revision.

6. Comment

Trading baselines should be “revisited” over time to reflect changes in regulatory requirements.

DEQ received one comment in this category from commenter #16. The commenter stated that the rules should be clear that baseline requirements will be revisited in permit renewals to reflect changes in those requirements, and also to account for the fact that baseline requirements may result in the nonpoint source’s obligation to maintain the vegetation planted to generate credits.

Related to the above, this commenter also stated that the reference in proposed OAR 340-039-0030(1) to “pre-existing regulatory requirements” should clarify the effect of requirements enacted after the trading plan is approved. The commenter stated that the rule should specify that trades may be done only on the basis of the applicable baseline at the time the credits are being counted to reflect changes in baseline.

Response

DEQ agrees that baseline should be based on *current* regulations. Where those regulations change, the baseline should also change. Given the potential for passage of time between trading plan approval and trading project initiation, and the potential for the regulatory requirements that make up trading baseline to change or be revised over the course of a trade, DEQ has made the following revisions (shown here in *italics*) to baseline-related rule provisions to clarify that the regulations in place at the time of trading project *initiation* control: the references to “pre-existing legal requirements” in the definition of trading baseline at OAR 340-039-0005(6) and Requirements for Trading Baselines at OAR 340-039-0030(1) have been deleted; the definition of “trading baseline” has been revised to state that it includes requirements “*in place at the time of trading project initiation*” OAR 340-039-0005(6); and the “Requirements for Trading Baselines” at OAR 340-039-0030(1) has been revised to clarify that “[t]rading baseline must account for regulatory requirements applicable to the trading project *at the time of trading project initiation*.”

DEQ is also revising -0040(3) in response to comment to add “trading” before “baseline” to clarify that when referencing “baseline” DEQ means “trading baseline” as it is defined in -0005(6).

Under the proposed rules the proposed trading plan must identify the relevant regulatory requirements that constitute baseline. That is to say, the trading plan will identify regulations such as ODA area rules, Oregon Department of Forestry forest practices rules and local ordinances that will be later used to identify applicable location-specific regulations and to quantify trade project-specific baseline water quality benefits. Identifying the source of all applicable regulations at the time of trading plan proposal will help ensure that the most up-to-date versions of these regulations are applied at the time of individual project initiation. Trade credit users will document in their annual reports baseline conditions for each trading project initiated in the reporting period.

7. Comment

Enforceability of trading.

DEQ received three comments in this category from commenters #6, #7, #10, and #16.

Commenter #16 stated that it is not clear how trades will be enforceable under the draft rules and, along with commenters #6, #10, #7, commented that DEQ permit writers should include the enforceable components of a trade contained in the trading plan directly into the permit.

Commenter #16 suggested that the permittee be required to certify that it has purchased credits and specify how the credits relate to the permit limits for specific pollutants.

Response

Rather than require an entire trading plan be incorporated as an enforceable condition by reference, as was proposed in the publicly-noticed version of the rules, DEQ revised the proposed rule OAR 340-039-0025(1) in response to comments to state that “[t]he use of credits will be authorized after all elements of a DEQ-approved trading plan required by subsection (5) of this rule are incorporated as enforceable conditions” of an NPDES permit or 401 water quality certification. Any violation of a permit condition is a violation of ORS 468B.025(2) and any violation of a 401 water quality certification condition is a violation of a department order under ORS 468.140(1)(c). The revised proposed rule structure which requires required elements of approved trading plans to be incorporated into permits or 401 water quality certifications as “stand alone” enforceable conditions is a robust way to ensure the enforceability of water quality trading and its essential elements, while also providing trading entities the flexibility to adaptively manage the lesser components of their trading projects.

With regard to the comment that the draft rules should require the regulated entity to certify its purchase of credits and how it is related to its regulatory obligations, the revised rule now requires verification of trading plan performance in the annual report, “including the quantity of credits acquired from each trading project, and the total quantity of credits generated under the trading plan to date.” OAR 340-039-0017(3)(e). All reports or information submitted to DEQ must be signed or certified according to the mandatory Schedule F included in all NPDES permits. Falsification of a report, including any false statement, representation or certification in any record is a violation of ORS 468.953. For more discussion on annual reporting requirements see the response to comment #8, below.

Adaptive management remains a required element of a trading plan under the proposed rule at OAR 340-039-0025(6) but it was moved out of the required elements of a trading plan that will be incorporated as enforceable conditions - 0025(5) as the malleable nature of adaptive management would make for an awkward condition permit condition.

8. Comment

Annual reporting requirements & minimum monitoring.

DEQ received four comments in this category from commenters #6, #7, #10, #15, and #16. Commenters suggested that DEQ revise annual reporting requirements to better align with trading plan elements at OAR 340-039-0025(5), to include information specific to individual projects and to require baseline information specific to a project.

Commenters #6, #7, and #10 requested that the permittee should be required to describe how the trading plan was adaptively managed in its annual report.

Commenter #16 stated that the rule should include minimum monitoring and reporting requirements and not leave these decisions to the permittee and that minimums must be consistent with federal requirements.

Commenter #16 further commented that the rule requiring the permittee to propose methods and frequency of monitoring water quality benefits generated by a trading project “or surrogate measures” is unclear because there is no definition of “water quality benefits” or “surrogate measures.”

Response

Annual reporting requirements at OAR 340-039-0017(3) rule have been revised in response to comments to better align with the required trading plan elements of OAR 340-039-0025(5) and to clarify that the annual reporting requirement must include any adaptive management measures contemplated under the trading plan that were implemented, that the trading plan verification requirement included in the annual report must align with, and is the same as, the trading plan verification requirement in the trading plan, and to specify that site-specific information on each trading project implemented over the previous year must be included in the annual report. The rule was also revised to specify that baselines for trading projects must be reported, and that if public conservation funds are used, a demonstration of compliance with OAR 340-039-0040(4) is required.

DEQ has not proposed a revision to the rules requiring any minimum monitoring because there is no one-size-fits-all monitoring frequency that would make sense in all types of trades. Monitoring of water quality trading will be trading plan and parameter-specific and depend upon the kind of BMP implemented and the pollutant to be offset. DEQ has not proposed any minimum monitoring and reporting to meet federal minimum requirements because it is not necessary to restate federal requirements in rules.

In response to the comment by commenter #16 regarding monitoring of “water quality benefits” or “surrogate measures” DEQ has deleted reference to monitoring of “surrogate measures.” While there may be situations where monitoring of surrogate measures to evaluate BMP effectiveness would be appropriate, it is not necessary to state that in rule; it may be proposed in a trading plan and evaluated on a case-by-case basis. DEQ has not changed the reference to monitoring “water quality benefits” of a trading project or the definition of “water quality benefit” which was proposed at OAR 340-039-0005(12).

9. Comment

CWA Section 404 requirements are “baseline requirements.”

DEQ received one comment in this category from commenter #16. The commenter stated that for trades conducted as part of 401 water quality certifications of Section 404 permits issued by the Army Corps of Engineers, the requirements established by Section 404 should be included as baseline requirements.

Response	DEQ agrees with this comment and has revised the “Requirements for Trading Baseline” rule at OAR 340-039-0030(1)(i) to include “projects required under a permit or approval issued pursuant to Clean Water Act Section 404.”
10. Comment	<p>Trading plan referencing the trading framework.</p> <p>DEQ received one comment in this category from commenter #16. The commenter states that it is unclear why DEQ has frameworks included in its rule when proposed rule OAR 340-039-0025(3) allows that trading plans <i>may</i>, but are not required to, reference the trading framework.</p>
Response	DEQ agrees that the proposed draft rule language is unclear. The intent of the original language in proposed rule OAR 340-039-0025(3) (now numbered - 0025(4)) was to clarify that components of the framework may be incorporated into a trading plan by reference. In response to this comment, and to avoid confusion, the last sentence of that rule stating that “a trading plan may reference components in the trading framework” has been stricken. In some situations it may be easier for a trading plan to reference – rather than re-state trading framework components and this is not prohibited by the rules. It is not necessary that the rules expressly authorize this.
11. Comment	<p>Rules leave all trade planning up to the permittee.</p> <p>DEQ received four comments in this category from commenters #9, #15, #16, and #19. Commenters stated that the proposed rules leave all the trade planning up to the permittee. By allowing the regulated entity to propose a trading plan that, if approved, becomes an enforceable condition of the permit, DEQ is abdicating its obligation to regulate discharges.</p>
Response	DEQ retains its regulatory oversight through its review and approval of trading plans and its review of annual reports to ensure credits are generated as planned. In addition, all trading plans will go through a public comment period during which DEQ will evaluate and respond to public comments. DEQ has revised OAR 340-039-0025(3) to clarify that DEQ may make revisions, or require the permittee to make revisions, to the trading plan where it is necessary and appropriate. Furthermore, DEQ has revised OAR 340-039-0025(1) to state that “[t]he use of credits will be authorized after all elements of a DEQ-approved trading plan” are incorporated as enforceable conditions of an NPDES permit or 401 water quality certification. This will require that DEQ permit writers take the additional step of including the trading plan elements required in OAR 340-039-0025(5)(a)-(i) as stand-alone conditions of the regulatory instrument.
12. Comment	<p>The proposed rules are not clear that trading plans can be approved only as permit renewals and modifications.</p> <p>DEQ received one comment in this category from commenter #16.</p>

Response	DEQ has added a subsection at proposed rule OAR 340-039-0025(2) that for NPDES permittees, trading may be proposed as part of a permittee's application for permit renewal or modification.
13. Comment	<p>"Trading area" definition (proposed rule OAR 340-039-0005(5)).</p> <p>DEQ received one comment in this category from commenter #16. The commenter stated that the proposed rules should require the permittee to provide some justification as to the proposed trading area and that the trading area should encompass the location of the discharge to be offset and the downstream point of impact and the trading projects to be implemented. Additionally the commenter stated that trading areas should discuss why trading projects throughout a large area are related to offsetting the pollution discharged at the location where it is discharged and how offsets elsewhere are related to the designated uses impacted by the discharge.</p>
Response	DEQ has revised proposed OAR 340-039-0005(5) to state the trading area "must encompass the location of the discharge to be offset or its downstream point of impact, if applicable, and the trading project to be implemented." In addition, proposed OAR 340-039-0001(f) requires authorized trading plans to promote one or more EQC policies including "demonstrable benefits to water quality or designated uses the water quality standards are intended to protect," as previously suggested by the commenter. Lastly, the trading plan element regarding "trading area" at OAR 340-039-0025(5)(c) has been revised to include a description of "the relationship of the trading projects to beneficial uses in the trading area."
14. Comment	<p>Credit validation, tracking and reporting</p> <p>DEQ received three comments in this category from commenters #6, #7, #10, and #16. Commenter #16 stated that the rules should be more specific about the information required to establish how the credits are derived and verified. Specifically, the commenter stated that the rules should require the plan to describe the precise method by which the credit becomes "valid" or fully enforceable and the plan should explain how the permittee will record that legal event and make it available to the public.</p> <p>Commenters #6, #7, #10, and #16 commented that the trading plan should include tracking and reporting language and proposed language requiring the permittee to describe in its trading plan how credits will be issued and tracked so that the public can understand where they can get information on a permittee's credit balances and use.</p>
Response	The required trading plan elements are described in OAR 340-039-0025(5). The rule requires the trading plan include a description of how water quality benefits will be generated (i.e. types of BMPs), and a description of the credits needed to meet water quality-based requirements including quantity, timing and quantification methods. In addition, a required element of the trading plan is "trading plan performance verification." In response to comments DEQ

added language to this rule that trading plan performance verification include a description of how the regulated entity will verify and document that “credits are generated as planned.” In response to comments DEQ also added to the required trading plan elements a “tracking and reporting” provision that requires trading plans include “a description of how credit generation, acquisition and usage will be tracked and how this information will be made available to the public.” OAR 340-039-0025(5)(i).

All of these trading plan elements must be reported on in an annual report submitted to DEQ according to OAR 340-039-0017(3). DEQ has revised the annual reporting requirement to require that the regulated entity report on “the quantity of credits acquired from each trading project, and the total quantity of credits generated under the trading plan to date.” OAR 340-039-0017(3)(e). Details regarding trading plan implementation and credit generation will be communicated to DEQ through the annual report (which is in addition to other monitoring required by the permit or certification). In the event any report demonstrates non-compliance with permit or 401 water quality certification conditions, DEQ will follow up as appropriate.

15. Comment

Trading Plans: BMPs

DEQ received one comment in this category from commenter #16. The commenter stated that the required element of the trading plan in proposed OAR 340-039-0025(5)(d) should require a description of what benefits will be generated, not only how benefits will be generated.

Response

DEQ agrees and has revised this rule to require a description of the water quality benefits that will be generated in addition to the BMPs that will be used to generate the benefits.

16. Comment

DEQ must establish the water quality-based effluent limitation (WQBEL) and explain what portion, if any, of the restrictions in the effluent limit are available to be traded.

DEQ received one comment in this category from commenter #16. The comment stated that DEQ must establish the WQBEL and the trading plan must clearly establish whether excess heat discharged is or is not in compliance with the WQBEL. The plan should be required to lay out the pollutant loads and the proposed offsets, described as loads and as credits. The math must be clear.

Response

DEQ agrees that the “math must be clear.” It is common practice for DEQ to establish the WQBEL in NPDES permits; with trading DEQ is in no way abrogating this duty. Water quality trading is a potential compliance option among many available to permittees to meet water-quality based requirements of their permits and thus it is incumbent upon a permittee to propose to DEQ how it will meet its permit requirements. If trading is proposed as a compliance method, a required element of a trading plan is a description of the credits needed to meet a water-quality based requirement such as a WQBEL

including “the number of credits needed and any credit-generation milestones, including a schedule for credit generation.” OAR 340-039-0025(5)(f)(i). The credit-generation milestones are required to help inform interim steps in a compliance schedule, if one should be needed. DEQ will review and approve proposed trading plans and then use the information included in the approved plan to write the permit conditions, which would necessarily include a description of the pollutant loads to be met by the trading credits and the schedule by which those credits will be available. To add clarity, the provision at OAR 340-039-0025(5)(f) was revised slightly to clarify that the trading plan must include a “description of the credits needed *to meet water quality based requirements of the NPDES permit or 401 water quality certification.*”

17. Comment

Verification of BMPs and credits.

DEQ received one comment in this category from commenter #16. The commenter stated that in addition to requiring the permittee to verify that BMPs are conforming to applicable quality standards, the rules should require a permittee to verify that: (1) contracts were executed; (2) BMPs were installed; (3) BMPs were maintained; (4) BMPs performed as predicted; (5) pollution loads were reduced; and (6) credits were generated.

Response

DEQ has revised the annual reporting requirement at OAR 340-039-0017(3)(e) to specifically require “[v]erification of trading plan performance including the quantity of credits acquired from each trading project, and the total quantity of credits generated under the trading plan to date.” Additionally, the definition of “verification” at OAR 340-039-0005(11) has been expanded to include confirmation of “the quantity of credits generated by the trading project.”

18. Comment

The rules should include a requirement that a trade be consistent with an approved trading plan.

DEQ received one comment in this category from commenter #16.

Response

DEQ agrees with this comment and has added the commenter’s suggested language to clarify that “[individual] trading projects must be consistent with an approved trading plan” to proposed rule OAR 340-039-0025(3).

19. Comment

Allowing credits to “offset” more than one regulatory obligation (OAR 340-039-0040(2)).

DEQ received 4 comments in this category from commenter #16, #6, #10, #13, #15.

Commenter #6 and #10 stated that the language proposed in OAR 340-039-0040(2) that “ ‘credits may not be used to offset more than one regulatory obligation at any given time’ seemed to suggest that a permittee with both a temperature and a nutrient obligation cannot restore a wetland to manage both pollutants for credits – which doesn’t make sense.” This commenter stated that

“we do want to avoid different regulated entities using the same activity for different impacts.”

Commenter #16 also stated that this rule should not allow the use of one set of BMPs on a specific plot of land and then claim credits for it for multiple pollutants.

Commenter #16 stated that the term “offset” used in proposed rule OAR 340-039-0040(4) is an unclear term because it is not defined.

Response

DEQ agrees with commenter #6 and #10. Credits are unique to the approved water quality trade. DEQ has revised the rule to state more specifically that “[a] credit may not be used to meet a regulatory obligation by more than one entity at any given time.”

DEQ agrees with commenter #16 and has deleted the term “offset,” replacing it with “meets.”

DEQ disagrees with commenter #16 about allowing the use of one set of BMPs for multiple pollutants. DEQ agrees with commenters #6 and #10 that DEQ’s trading program should encourage solutions that deal with multiple impacts. Additionally, requiring separate BMPs for each pollutant would result in restrictions on trading not placed on other types of pollution control methods. ORS 468B.555(1) directs DEQ to develop a program in a manner that promotes economic efficiency; allowing an entity to implement BMPs that address multiple impacts furthers that objective.

Commenter #16 stated that DEQ should not allow a permittee to install BMPs and take credit for one pollutant during a five year period and then switch and claim credits for a new pollutant in the subsequent five years, because the BMPs would constitute baseline for the next permit. DEQ agrees that in the described situation it is possible the installed BMPs could become part of the baseline for the next permit.

20. Comment

Requirements for credits: verification as consistent with BMP quality standards (proposed OAR 340-039-0040(5)) & duration of credits.

DEQ received two comments in this category from commenters #15 and #16.

Commenter #15 stated that what BMP quality standards consist of and what the entity is charged with verifying, is not identified.

Commenter #16 stated that DEQ should not allow credits to be used as long as BMPs are maintained, without reference to the need to update the baseline analysis each time an NPDES permit is issued, pointing out that no pollution control solution investment lasts forever. The commenter further asserted that baseline and ratios must be evaluated anew at each permit issuance, since ratios may have been developed solely to address the timing of riparian

growth but not other issues such as the distance between trading projects and discharges, which may change the basis of the ratios over time.

Response

BMP quality standards are defined in proposed OAR 340-039-0005(2). Each credit-generating BMP must have quality standards. Some BMP quality standards already exist for BMPs that will be used to generate credits. Trade developers may propose existing BMP quality standards along with their proposed trading plans for DEQ approval. DEQ will review these proposals to ensure the BMPs and the accompanying quality standards are appropriate for the proposed trade and are well-supported, peer-reviewed and vetted by subject matter experts. BMPs and their quality standards that meet these criteria will be eligible and approvable for credit generation.

In the absence of already established BMP quality standards, DEQ may also develop or identify BMP quality standards for specific trade protocol expected to be used most often in Oregon. DEQ will consult with program and subject matter experts and outside stakeholders during this process to ensure BMPs and the accompanying quality standards adopted into protocol are well supported, peer-reviewed and vetted by experts.

The trading plan rule at OAR 340-039-0025(5) requires that a trade developer include in its trading plan a description of how the regulated entity will determine and document that project site BMPs are conforming to applicable quality standards. It will be incumbent upon the regulated entity to comply with all requirements of an approved plan because the regulatory obligation to meet its permit or 401 requirements remains with the regulated entity and are never transferable.

DEQ agrees that baselines and ratios and other elements of a trading plan will be reviewed and must be updated each time an NPDES permit is issued and to account for any changes in underlying regulatory requirements that make up the applicable baseline as has revised the applicable rules to account for that.

DEQ has revised OAR 340-039-0025(5)(f)(iii) to clarify that the duration of credits will be described and controlled by the approved trading plan; the trading plan must identify “the length of time credits are expected to be used.” DEQ does expect that the duration of some trade projects and the benefits they generate may span decades; others may be short-lived. The use of credits from these projects will be subject to requirements of current trading plans and permit requirements.

21. Comment

Requirements for Credits: allowing “pre-NPDES permit restoration to generate credits.”

DEQ received one comment in this category from commenter #16.

The commenter stated that this rule (OAR 340-039-0040(7) in the publicly noticed version) would “allow all pre-NPDES permit restoration to be used to offset discharged pollution” and allow greater levels of pollution by

essentially allowing point sources to take credit for nonpoint source BMPs rather than requiring both point sources and nonpoint sources to install BMPs.

Response DEQ disagrees with the commenter's conclusion about the effects of this rule. Only BMPs that have been verified as having been implemented consistent with current BMP quality standards will be eligible to generate credits. Consistency with BMP quality standards is a higher performance standard than most restoration projects meet. Furthermore, these BMPs must also be included as part of a trading plan that is reviewed and approved by DEQ and put out for notice and comment. DEQ made revisions to this rule (now numbered -0040(6)) to clarify the language.

22. Comment Requirements for Credits: proposed OAR 340-039-0040(3) includes only "water quality benefits" as resulting from trading projects with no reference to "pollutants," which is inconsistent with the rest of the rules.

DEQ received one comment in this category from commenter #16.

Response DEQ believes this concern is addressed by the definition of "water quality benefit" in proposed OAR 340-039-0005(12) which includes "net pollutant reduction." Note: the publicly noticed version of this rule included in the definition of water quality benefit "net pollution reduction." DEQ has revised the definition to change "pollution" to "pollutant" to be more consistent with commonly used Clean Water Act definitions and distinctions between the two terms.

23. Comment Adaptive Management.

DEQ received one comment in this category from commenter #16.

The commenter stated that the rule requiring adaptive management at OAR 340-039-0025(5) is inconsistent with the idea that failure to accomplish the tasks and the end results is an enforceable violation of permit terms. DEQ's proposal is not clear and more than likely not legal.

Response The purpose of requiring adaptive management in the trading plan is to encourage trade developers to plan for foreseeable circumstances (e.g. low survival rates, wildlife damage to a project, labor or supply shortages, trading project underperformance, etc.) that may adversely affect the implementation of their trading plans and include in their trading plan proposed adjustments that may be made to address these foreseeable changes in circumstances. By planning for this up-front, trade implementers have flexibility to adjust to foreseeable circumstances. By requiring that these adjustments be included in a trading plan that is publicly noticed and reviewed and approved by DEQ, the public and DEQ will be made aware of, and have the ability to review and approve or not approve, a limited range of adjustments that can be made to the projects without a permit modification.

DEQ revised OAR 340-039-0025 to take the adaptive management requirement out of the list of required elements in -0025(5) that must be incorporated as enforceable conditions of a permit or 401 water quality certification since including adaptive management alternatives as stand alone conditions in those instances would result in awkward and cumbersome permit requirements.

Allowing for adaptive management in the trading plan does not affect the requirement that an entity must secure and verify credits necessary to meet its water quality compliance obligations. Failure to generate credits as necessary to meet NPDES and 401 water quality certification requirements is a violation of state law; entities should adaptively manage their projects for foreseeable circumstances to avoid a result that violates permit and certification requirements. The proposed rules would require them to do so.

DEQ did *not* change the proposed rules in response to comments described in the response sections below.

24. Comment

Rules allow “double dipping” by polluters.

DEQ received one comment in this category from commenter #9.

Commenter #9 stated that the proposed rules allow “double dipping” by allowing polluters to claim credit for site conditions that landowners are prohibited from changing due to water quality considerations under existing laws.

Response

DEQ finds this comment confusing. To the extent we do understand its intent, we point to the proposed rule at OAR 340-039-0040(3) which states that “credits may be generated only from BMPs that result in water quality benefits *above* baseline requirements.” This rule read together with the definition of “trading baseline” at proposed rule OAR 340-039-0005(6) only allows trading credits to be generated *above* existing regulatory requirements.

25. Comment

Rules should require “additionality”

DEQ received one comment in this category from commenter #16.

This commenter suggested that the draft rules should require that trading result in additionality; that trading create water quality benefits that would not have otherwise occurred without trading.

Response

The draft rules require that credits may only be generated above baseline requirements. This requirement ensures that trading will result in benefits that are in “addition” to or above and beyond what is already required. DEQ expects many trading projects will generate benefits that are ancillary to the targeted offset (for instance, riparian restoration that establishes shade-generating trees to offset temperature discharges may also reduce nutrient and

sediment inputs to water, create fish and wildlife habitat and stabilize the riverbank). But these ancillary benefits or “ecological uplift” may not be used to comply with a water quality regulatory obligation such as a permit limit and are not, therefore, required by the trading rules.

DEQ expects that in most situations water quality trading will be driven by the need of regulated entities to meet stringent pollutant load reductions called for in a TMDL. Trading must be implemented to ensure that credit users fully offset their pollutant loads and that load reductions called for in an underlying TMDL are realized. This is achieved by requiring sources to meet their baseline requirements before credits can be generated, traded or used to comply with NPDES or 401 water quality certification requirements. While many trading projects will result in benefits to water quality that go above and beyond meeting the targeted discharge, the proposed trading rules do not require additional pollutant reductions beyond those necessary to meeting regulatory compliance obligations. Such additionality is not required of other compliance pathways.

Further, there are some instances, such as a point to point source or intra-plant trade, where there will likely be no “additionality” above and beyond the pollutant load reductions required of the two sources yet trading between the sources may provide a useful and more efficient and cost effective compliance tool.

26. Comment

Rules should prohibit trading for Total Suspended Solids (TSS).

DEQ received one comment in this category from commenter #16. This commenter argued that the trading rules should not allow trading of TSS because TSS can serve as carriers of toxic pollutants which readily cling to suspended particles.

Response

For most publicly owned wastewater treatment plants TSS are addressed through technology-based effluent limitations for which trading is not allowed under the draft rules OAR 340-039-0015(2)(c). In the event a TMDL for TSS is established, a permit may have a WQBEL for that parameter that is established more stringent than the technology-based requirement. Should this occur, DEQ would consider allowing a trade to meet the more stringent TMDL-based permit limitation. Therefore, DEQ will not propose prohibiting trading for TSS.

27. Comment

Rules focus on economic benefit to sources, not on ecological systems and improved water quality.

DEQ received four comments in this category from commenters #9, #16, #17 and #19. The commenters suggested that the rules focus primarily on economic benefit for polluters, not on benefit to ecological systems, improved water quality, compliance with water quality standards or the protection of beneficial uses. Water quality trading should not allow degradation of the State’s waters with a negative impact on beneficial uses. The improvement of

water quality, meeting water quality standards, and protecting beneficial uses are required to be the primary goals of any NPDES permit program under CWA.

Response

DEQ disagrees that the draft rules focus primarily on economic benefit for polluters and not on ecological and water quality benefits. However, DEQ does acknowledge that one of the benefits of trading is that it can, in some instances, provide a more cost effective and affordable compliance option than traditional “concrete and steel” treatment methods that require capital expenditures and are costly and resource-intensive to run and maintain.

The “purpose” of water quality trading as stated in draft rule OAR 340-039-0001(1) is to implement a trading program to allow regulated entities to meet federal CWA requirements through trading. The proposed rule also states that DEQ may only approve trading if it promotes one or more policies of the EQC which includes, among others: “achieving pollutant reductions and progress towards meeting water quality standards,” “offsets new or increased discharged resulting from growth,” “secures long-term improvements in water quality” or “results in demonstrable benefits to water quality or designated uses.” OAR 340-039-0001(2).

Among the stated objectives in the trading rules are that “water quality trading authorized under this rule *must*: (1) Be consistent with anti-degradation policies; (2) Not cause or contribute to an exceedance of water quality standards; ... (5) Be designed to result in a net reduction of pollutants from participating sources in the trading area ... 6) Be designed to assist the state in attaining or maintaining water quality standards ...; and (9) not create localized adverse impacts on water quality and existing and designated beneficial uses ” OAR 340-039-0003. It is mandatory that trading authorized under the proposed rules meet *all* the objectives of OAR 340-039-0003. Proposed trades that do not meet the objectives may not be approved by DEQ, according to the proposed rules.

Trading is a compliance option among several compliance options that may be available to regulated entities. It has the potential to yield water quality and environmental benefits beyond compliance with a parameter-specific water quality regulation – and to do so at a lower cost than traditional compliance options. However, neither of these are the overarching nor controlling purposes, policies or objectives of trading. Above all else, trading must result in an entity’s compliance with their CWA water quality-based requirements.

28. Comment

Incorporating TMDLs into permitting decisions

DEQ received three comments in this category from commenters #9, #16, and #19. Commenters said that the proposed rules do not clearly specify how TMDLs will be used and incorporated into permitting decisions to assess what baseline condition may be at potential trade sites, and what is available for trade, leaving that to be proposed by the polluter.

Response DEQ disagrees. In most situations TMDLs will play an important role in driving many elements of a proposed trade. But trading may also take place where there is no applicable TMDL. Where applicable, the proposed rules adequately incorporate the TMDLs into the planning and analysis process. For instance, one of the stated objectives of trading is that water quality trading *must* “be designed to assist in implementing TMDLs when applicable.” OAR 340-039-0003(6). DEQ may not approve a trade that does not meet all of the stated objectives in that rule.

The proposed rule “Requirements for Trading Baselines” OAR 340-039-0030(1) states that trading baseline “*must account*” for specific regulatory requirements applicable to a trading area and specifically includes at subsection (j) “[r]egulatory requirements a designated management agency establishes to comply with a DEQ-issued TMDL, [or] water quality management plan.” Water quality management plans issued as part of TMDL orders direct designated management agencies (DMAs) to develop implementation plans that are submitted to DEQ for approval. TMDL implementation plans may include mandatory rules, voluntary measures or a combination of implementation measures entities regulated by the DMAs (or the DMAs themselves) are required by law to meet. Trading baselines *must account for* these implementation plans and other requirements a DMA establishes to comply with TMDLs.

29. Comment Cross-Watershed trading

DEQ received one comment in this category from commenter #9. This commenter said the “proposed rules do not prohibit cross-watershed trading because the geographic scope of a trade is not limited to a single watershed by rule.”

Response This is an erroneous interpretation of the rules. The rules require that a trading plan include a proposed trading area. See OAR 340-039-0025(5)(c). The definition of a trading area is limited to a “watershed or other hydrological-connected geographic area” and does not include an area that is “cross-watershed.” OAR 340-039-0005(5).

30. Comment Allowing for trading of pollutants not listed in the draft rules on a “case by case” basis (proposed rule OAR 340-039-0015(2)(d)).

DEQ received three comments in this category from commenter #9, #16, and #19. The comments stated that the proposed rules allow for additional pollutants not explicitly outlined in the rules to be traded on a case-by-case basis. This leaves an open question of what pollutants are acceptable for trading, and hides the process for evaluating those pollutants from the public.

Response All trading will be reviewed on a case-by-case basis. This rule provision is intended to authorize trading of parameters not listed in OAR 340-039-0015(2)(a) and not prohibited in OAR 340-039-0015(2)(b). EPA states pollutants that cause water quality problems primarily as a result of

cumulative loadings relative to the contributions of any individual source are more suitable for trading than parameters that exert acute effects over a small area and in relatively low concentrations¹. DEQ is not precluding opportunities to trade parameters it has not yet contemplated. By including the provision DEQ is clarifying that it would analyze such proposals individually and separately as they are presented. Commenter #16 ignores the limitation on the “case-by-case” allowance; DEQ may authorize trading for other parameters on a case-by-case basis *provided it does not cause or contribute to exceedances of water quality standards.*” (Emphasis added). In addition, as with all proposed trades, “DEQ must provide an opportunity for public notice and comment on a trading plan before approving the trading plan.” OAR 340-039-0025(3). The process for evaluating those pollutants therefore would not be hidden.

31. Comment

Allowing credits to be generated before projects actually provide any benefits and without an explicit trade ratio.

DEQ received two comments in this category from commenters #9 and #22. Commenter #9 asserted that the proposed rules allow “credits to be generated by projects intended to provide benefits well before those projects are able to actually provide any such benefits and without making an explicit trade ratio imposition for this type of situation.” Commenter #22 stated that entities should not be able to get credits without sound evidence that trading is “eliminating pollution not just reducing it gradually.”

Response

The proposed rules require the use of one or more trading ratios and allow for the use of trading ratios to account for “time lag after BMP installation before a BMP produces full water quality benefit.” OAR 340-039-0043(2)(e). In a situation where there is a time lag after project implementation and before full benefits are realized, a water quality trade may be included in a permit’s compliance schedule with the required timelines and interim benchmarks. See OAR 340-039-0017(1)(b).

32. Comment

Limits on the duration of trades.

DEQ received one comment in this category from commenter #9. Commenter stated that the proposed rules fail to place limits on the duration of trades.

Response

It is true that the proposed rules do not place a limit on the duration of trades. In some instances the benefits of a BMP may endure. However the rules do place certain limitations and allow that credits may continue to be used for compliance “once implementation of BMPs has been verified as consistent with applicable BMP quality standards according to OAR 340-039-0025(5)(h)” OAR 340-039-0040(5).

33. Comment

Trades avoid public scrutiny.

¹ EPA Water Quality Trading Toolkit for Permit Writers 2009, p.11 EPA 833-R-07-004

DEQ received two comments in this category from commenter #9 and #19. Commenters stated the rules are structured to avoid public scrutiny of trades and that the proposed rules “fail to require that all elements of trades are fully described and subject to public comment during permit development.”

Response The comment is not based on an accurate reading of the proposed rules. DEQ agrees with the commenter that it is important that assumptions that go into a trade be transparent to the public and that the public be provided an opportunity to comment on an NPDES permit or 401 water quality certification and any proposed trading. The proposed rules require that all significant elements of a trade, including ratios, baselines, credit-generating activities and quantification methods be included in a trading plan. An entity may not engage in trading unless DEQ has reviewed and approved its plan and all required elements of the plan are incorporated as conditions of the regulatory instrument. OAR 340-039-0025(1). OAR 340-039-0025(3) also requires that there be an opportunity for public notice and comment on a proposed trading plan. This would happen along with public comment on the proposed NPDES permit or 401 water quality certification and the accompanying Evaluation & Findings Report or “fact sheet,” before DEQ approves the plan. After public notice and comment and DEQ approval of a trading plan, individual trading projects that are implemented pursuant to the trading plan must be consistent with the approved trading plan but are not required to be made available for public notice. Projects that are not implemented in accordance with the approved plan are not eligible for credit generation.

34. Comment Trading should be voluntary.

DEQ received one comment in this category from commenter #11. The commenter stated that the water quality trading program should be a “purely voluntary tool available to entities desiring to participate in a trading program; proposed rules should not create an expectation on [the] part of any governmental or non-governmental entity that water quality trading is necessary for renewal or issuance of NPDES discharge permits.”

Response The proposed rules create a program that is purely voluntary. Only entities interested in participation in trading will participate, and as a result, be subject to the proposed rules. There is no obligation for any permittees or any other entity to engage in water quality trading.

35. Comment Trading should not expand DEQ’s authority related to determining baseline.

DEQ received one comment in this category from commenter #11. Commenter stated that DEQ’s trading program should not be “in the role of judging whether another Oregon agency’s regulatory decisions are adequate to maintain designated uses and DEQ should not be able to expand their regulatory authority under these proposed rules.”

Response Trading credits may only be generated above baseline requirements. Only properties in compliance with applicable baseline regulatory requirements are eligible to participate in water quality trading. Determining compliance with existing baseline regulations is a necessary first step with any proposed trade. Therefore, trading plans must identify sources of regulation that may be used to determine baseline. This will likely include rules adopted by ODA, ODF and local agencies, including any requirements adopted to implement TMDLs. Rules promulgated by these agencies will be used to determine compliance with baseline regulatory requirements and quantify and document baseline conditions. Trade developers and DEQ will look to the applicable regulatory jurisdiction for any relevant information on compliance with baseline regulatory requirements in a trading area. DEQ would only specify conditions for eligibility of properties within the trading area to participate in trading if trading was proposed in the area and the other regulatory entity is not able to establish, identify or interpret its regulatory requirements at a property-specific level.

36. Comment DEQ's trading program should be simple.

DEQ received two comments in this category from commenter #4 and #11. Comments said that trading should be simple, easy to understand and to implement and use simple methods to measure compliance.

Response DEQ believes that the rules strike a balance between program accountability and transparency with flexibility desired by regulated participants. By requiring trading planning to happen "up front" and be documented in one document, a trading plan, that is submitted to DEQ for review then publicly noticed prior to approval the application requirements are streamlined and transparent. Additionally, the rules require annual reporting on trading plan implementation specific to each trading project and performance over the past year. These requirements are essential to ensure that trades are generating credits they are intended to generate and that this information is available for verification.

37. Comment Trading should not require prescriptive BMPs for agricultural lands engaged in trading.

DEQ received one comment in this category from commenter #12. The comment states that the use of prescriptive BMPs is inconsistent with SB 1010 which relies on a conditions-based program that dictates the condition the land is expected to achieve, and leaves it to the landowner to determine how to best achieve that outcome.

Response The proposed trading program does not require any BMPs or other actions for any lands including agricultural lands. The trading program is completely voluntary. For proposed trading projects, however, the program does require that credits be generated with BMPs that "must be quantifiable and have BMP quality standards." OAR 340-039-0015(4). Trading authorized under the rules must be "based on transparent and practical [BMP] quality standards so as to

ensure that water quality benefits and credits are generated as planned.” OAR 340-039-0003(7). The purpose of requiring the use of BMPs, and only BMPs with quality standards, is to ensure that credits generated are quantifiable, measurable and approvable for generating the type of benefits for which the credits are being offered. This will lend confidence that those BMPs are generating the intended water quality benefits and that the resulting credits are “real.” Requiring the use of BMPs with quality standards will also ensure consistency and facilitate project implementation and verification. Trading can occur on a wide variety of lands supporting many different types of uses, including uses that are not agricultural. By requiring the use of BMPs with Quality Standards as the credit-generating action, in lieu of a particular type of site condition, DEQ aims to set a standardized approach that can translate to a wide variety of lands supporting many land uses.

38. Comment

Clarify that “other applicable rules affecting nonpoint source requirements” in OAR 340-039-0030(1)(h) are not appropriate baseline requirements for agricultural lands.

DEQ received one comment in this category from commenter #12. The comment asked DEQ to clarify the rule to indicate that the only rules that apply to agricultural lands to establish baseline are the local area rules developed under SB 1010, and not “other applicable rules” such as local and county ordinances.

Response

DEQ does not agree that this clarification is warranted. Regardless of the land type or what, if any, operations occur on the land, regulatory requirements that have a relationship to water quality are relevant to the baseline determination. Local or county rules that implicate water quality could apply to agricultural lands for determining baseline.

39. Comment

Trade benefits should be in place upstream of the waste load for which the trade is made; Trading should not be allowed downstream of a discharge.

DEQ received two comments in this category from commenter #16, and #17.

Commenter #16 stated that trading should not be allowed downstream of a discharge, because this would allow the discharge to cause or contribute to the violations of water quality standards. If there is some rationale for allowing downstream trading, it must be required by these rules, articulated, and subject to public comment.

Response

Water quality trading areas will likely be determined by TMDLs established for each trade parameter. TMDLs target pollutant load reductions to comply with water quality standards at the point of maximum cumulative impact from human caused sources of pollution. Consequently, trades may occur downstream of a point source discharge when it results in the load reductions called for in a TMDL. If trading occurs outside the framework of a TMDL or similar water quality plan, DEQ will approve a trading area on a case-by-case

basis and consistent with all aspects of trading rules and water quality standards.

In addition, proposed OAR 340-039-0003(2) states that no trade authorized under the rules may “cause or contribute to an exceedance of water quality standards”, and DEQ is required by the proposed rules and the Clean Water Act to make that demonstration when authorizing trades. The supporting findings for those determinations will be in the permit fact sheet or 401 water quality certification Evaluation and Findings report, which are subject to public review and comment. It is not necessary to make the changes proposed by the commenter in this regard.

40. Comment

Trading and Mixing Zones

DEQ received two comments in this category from commenters #16 and #17. One commenter cited implementation of the temperature trade in the city of Medford and stated that the implementation of the trade results in a mixing zone that “is tantamount to a 60 mile mixing zone.” Another commenter said that where there are limits that are permitted through the creation of a mixing zone, trading may not be used to waive those restrictions.

Response

Point sources that use water quality trading to meet water quality-based effluent limitations must also comply with all other water quality regulations. Mixing zone rules (OAR 340-041-0053) and other regulations (see for example, OAR 340-041-0028(11) protection of cold water) are in place to ensure that point source discharges do not result in localized and adverse impacts to existing and designated uses such as recreation and aquatic life.

41. Comment

Compliance schedules.

DEQ received one comment in this category from commenter #16.

The comment suggested that the rule should establish when a compliance schedule is required and include in the rule all the requirements that apply to compliance schedules.

Response

Other state and federal rules establish conditions governing when a compliance schedule is allowed and the associated required findings and elements for compliance schedules. OAR 340-039-0017(1)(b) already states this requirement. DEQ declines to re-state requirements in this rule that are already stated elsewhere.

42. Comment

Annual Reports should be submitted electronically and information made available to the public.

DEQ received three comments in this category from commenters #6, #10, #7 and #16.

Response DEQ expects that many regulated entities will find electronic submittal most efficient and will choose to submit their annual reports electronically. There may be some types of reports or some entities for which electronic submittal is not available or difficult. Thus, DEQ declines to impose a submittal method in the rule. The rule does not require DEQ to post annual reports on its web site. However, DEQ's past practice and commitment is to post information regarding trading activities, such as trading plans and annual reports, to its website. And, like all public records, in the event a particular document submitted to DEQ is not available on its website, it would be available via a public records request.

43. Comment Trading Frameworks.

DEQ received one comment in this category from commenter #16.

Commenter #16 questioned DEQ's intent in introducing the concept of "frameworks" but then including language that frameworks are not required in order for DEQ to approve a water quality trading plan.

Response The framework concept is a desired future state. In the future DEQ intends to develop trading frameworks to facilitate trading and guide trading plans within a watershed. Once developed and established, trading activities must conform to the framework to ensure consistency in an area. However, trading frameworks do not currently exist. DEQ does not want to put all trading proposals and activities "on hold" until the time comes when trading frameworks are fully developed in watersheds throughout the state.

44. Comment Time lag in trading.

DEQ received one comment in this category from commenter #22.

The commenter stated that he was concerned about how much time it takes to get the benefit of trading from natural conditions.

Response Realization of the full water quality benefits generated by trading is dependent on the pollutant parameter traded and the BMPs and locations selected to generate trade credits. The restoration of riparian habitats can take years to produce the streamside vegetation, effective shade and thermal load reductions necessary to implement permit limits. DEQ believes that active streamside restoration with appropriate vegetation has the potential to provide water quality and beneficial use outcomes that are superior in many ways to those achieved through conventional treatment technologies. Because it does take several years to produce water quality benefits through restoration of riparian areas, in the past DEQ has required NPDES sources to offset twice the amount of their projected point source thermal load. This 2:1 offset ratio has been used to calculate the shade credits required to comply with permit limitations for thermal loads.

In addition, in the proposed water quality trading rule DEQ has created a process whereby point sources may proactively restore riparian areas for possible use in future trading plans. See OAR 340-039-0040(6). If pursued early, sources are more likely to have the trade credits necessary to demonstrate compliance with effluent limits at the time of permit issuance.

45. Comment Controlling temperature is an experiment.

DEQ received one comment in this category from commenter #22.

The commenter questioned the best methods of controlling temperature and stated that controlling temperature is an experiment.

Response DEQ uses modeling to assess the benefits of temperature trading projects and through this modeling DEQ is reasonably assured that trading projects deliver benefits necessary to meet regulatory compliance obligations (for more discussion on modeling see the responses to comments #64, 65, and 66). Trading plans and permits and 401 water quality certifications will include monitoring and reporting requirements that will document the results of implemented trading projects. For NPDES permittees the use of credits for compliance with permit limits will be documented in monthly discharge reports submitted to DEQ, per the normal NPDES requirements and annual reports on trading activities and credit generation are also required by the proposed rules. Progress on individual trading projects and any adaptive management measures undertaken to maintain project and credit quality will be reported annually to DEQ. According to OAR 340-039-0025(5)(j) trading plans must include descriptions of how credits are generated, acquired and used and how this information will be available to the public.

46. Comment Goal of CWA is to eliminate the discharge.

DEQ received one comment in this category from commenter #22.

Response DEQ agrees. Consistent with EPA guidance on the subject, DEQ views water quality trading as one of several compliance pathways available to permittees and other dischargers to meet NPDES and other CWA requirements.

47. Comment Water quality trading needs to reduce pollution over the long-run.

DEQ received one comment in this category from commenter #22.

Response Water quality trading is a compliance tool intended to help entities meet their pollutant reduction obligations under the CWA. Proposed rule OAR 340-039-0001(2)(e) states that DEQ may approve water quality trading if it promotes one or more of the stated policies of the EQC listed in that rule, including if trading “secures long-term improvements in water quality.”

48. Comment Trading project monitoring.

DEQ received one comment in this category from commenter #22. The commenter stated that planting trees and shrubs along river banks needs to be very carefully scientifically monitored to make sure that the trees and shrubs grow and cool the water sufficiently to meet the temperature standard for aquatic life.

Response Monitoring occurs at various scales in a trading project: BMP implementation monitoring will occur at each project site to ensure BMPs are performing as expected. Monitoring of water quality at a watershed or river basin scale is conducted by DEQ or other agencies and will be used to evaluate water quality status and trends within the area as well as overall program effectiveness.

49. Comment Allowing the mixing of pollutants.

DEQ received one comment in this category from commenter #22. The commenter urged DEQ not to allow the “mixing of pollutants” in trading.

Response To the extent DEQ understands this comment to be referring to allowing trading for more than one pollutant, the proposed rules require that trading plans must be developed and approved for each parameter before credits may be used for compliance purposes.

50. Comment Non-point source participation in trading.

DEQ received one comment in this category from commenter #22.

Response To the extent that DEQ understands this comment to ask DEQ to prohibit or discourage participation in water quality trading by nonpoint sources, DEQ responds that nonpoint sources are often a significant contributor of pollutant loads to waters of the state and thus have the potential to be important partners in water quality trading. Under the proposed rules nonpoint sources may voluntarily choose to engage in trading but are only eligible to participate in water quality trading when baseline requirements are met.

51. Comment Rule should ensure consistency with antidegradation policies.

DEQ received one comment in this category from commenter #16.

The commenter stated that the rules should include requirements to ensure consistency with antidegradation policies.

Response Oregon’s antidegradation rules have been approved by EPA as part of the water quality standards. In addition, proposed rule OAR 340-039-0003(1) states that water quality trading authorized under this rule must “[b]e consistent with antidegradation policies.” DEQ will conduct antidegradation evaluations as needed to ensure that permits authorizing trades comply with the antidegradation rules and policies, and the required findings will be made

on a permit-specific basis. Due to the site-specific nature of antidegradation reviews, it would not make sense to include specifics in the rule.

52. Comment

Baseline: TMDL wasteload allocation and load allocations should be included as baseline requirements.

DEQ received numerous comments in this category from commenter #16.

The commenter stated that the rules should include TMDL wasteload allocations and load allocations as baseline requirements in proposed OAR 340-039-0030 because WQBELs must be consistent with the assumptions in any EPA-approved TMDL.

Commenter #16 stated that the definition of trading baseline at proposed OAR 340-039-0005(6) and the rules at OAR 340-039-0030, which list the regulatory requirements that must be met as part of baseline before DEQ will approve a trade, should expressly include TMDLs.

Commenter #16 stated that trading plans should explain how the baseline from a TMDL allocation is derived.

Response

DEQ has not proposed to include TMDLs as a separate, standalone component of baseline requirements.

Use of a TMDL's numeric load allocations in lieu of the TMDL's non-point source implementation plans to develop the regulatory baseline for trading is not practicable for most of the existing TMDLs that have been issued by DEQ and approved by EPA. Typically, load allocations are gross pollutant or thermal loads assigned for an entire sector (e.g. forestry or agriculture) and they do not establish the BMPs or other control measures actually required to implement the TMDL. Rather, the BMPs or other control measures are developed later, and in an iterative fashion, by the designated management agencies for the nonpoint sources (e.g., Forest Practices Act rules, Agricultural Area Plans and Rules, voluntary conservation measures, local government ordinances, and memorandums of agreement with federal agencies). Consequently, only the TMDL implementation measures adopted pursuant to these implementation plans provide the means to translate the load allocations into baseline requirements. That is why the proposed rule OAR 340-039-0030(1) includes regulatory requirements established by designated management agencies to achieve their assigned load allocation and the water quality management plan issued by DEQ as part of the TMDL, and not the TMDL itself.

DEQ agrees with commenter #16 that trading plans should explain how baseline from a TMDL is derived. Proposed OAR 340-039-0025(5)(b) requires the trading plan to describe "any applicable regulatory requirements from OAR 340-039-0030(1) that apply within the trading area and that must be implemented to achieve baseline requirements." The trading plan will include an examination of the regulatory requirements that make up baseline

and how those requirements will apply to trading projects within the area. DEQ will review the information proposed in a trading plan and it will be put out for notice and comment before approval. At this review and approval stage DEQ can amend the trading plan or require amendments to the trading plan prior to approval. As trading projects are implemented under an approved trading plan the site-specific baselines and resulting credit calculations will be reported to DEQ in annual reports.

53. Comment

Trading practices and standards must be site-specific.

DEQ received one comment in this category from commenter #12.

Commenter #12 recommends modifying the definition of “BMPs” and “BMP Quality Standards” to clarify that the practices and standards will be site-specific, and will account for the specific waterbody, landscape and agricultural operations involved with the trade.

Response

A required element of a proposed trading plan is identifying the trading area, see OAR 340-039-0025(5)(c), as well as the regulatory requirements that comprise the trading baseline in the trading area. See OAR 340-039-0025(b). In addition to “BMP requirements”, the definition of “trading baseline” includes “site conditions” that must be met under existing legal requirements. OAR 340-039-0005(6). The rules do not limit the examination of a trading area’s baseline to only BMPs. Included in the analysis will be an examination of the existing site conditions as well.

DEQ did not revise the rule to add “site specific” to the definition of BMPs because while the decision about where to place a BMP is site-specific, BMPs themselves are not site-specific.

54. Comment

Individual trading projects should be publicly noticed.

DEQ received one comment in this category from commenter #16 stating that individual trading projects should be subject to public notice and comment.

Response

Trading projects consistent with the approved trading plan need not undergo separate public notice and comment. Requiring public notice and comment for implementation of each project would add unnecessary delay and process to trading. ORS 468B.555(3)(c) directs DEQ to minimize administrative requirements in order to encourage and facilitate pollutant trading. DEQ’s approach in this instance is a reasonable application of this requirement.

55. Comment

The proposed rule regarding required trading plan elements does not state how much information must be provided.

DEQ received one comment in this category from commenter #16. The commenter stated that proposed OAR 340-039-0025(4) (numbered -0025(5) in the revised rules) does not add much to the definition of a trading plan

provided earlier in the rule and does not explain how much information the permittee must provide to DEQ and the public.

Response The list of requirements for trading plans at OAR 340-039-0025(5)(a)-(i) is complete and adequate. DEQ has made a number of revisions to the rule in response to specific comments that further clarify the specific elements that must be addressed within the trading plan. It is not clear what the commenter would propose to be included with respect to how much information would be appropriate for each of the requirements. As with all regulatory decisions, DEQ must base its approval on substantial evidence. If a trading plan lacks sufficient information for approval, DEQ may amend the plan, require amendments to the plan or not approve the plan at all.

56. Comment BMPs addressing multiple parameters.

DEQ received one comment in this category from commenter #16.

The commenter stated that rules should state that a BMP implemented to address one parameter may not be used to address another parameter. Rule should describe “what can be used for parameters to be traded.”

Response The rules do not prohibit credits generated for more than one parameter by the same BMP by the same permittee; a trading project that addresses multiple impacts from one permittee would be an efficient use of resources and is not discouraged. DEQ does not see the benefit in allowing only one parameter to be offset by a BMP if in fact multiple types of benefits could accrue and therefore, did not revise the rule as suggested in the comment.

57. Comment Prohibit credits for existing vegetation.

DEQ received one comment in this category from commenter #16.

The commenter states that the rules should prohibit permittees from taking credit for any existing vegetation that is on a trading project site.

Response Credits for existing vegetation would not be allowed unless the project meets the requirements of proposed OAR 340-039-0040(6). This rule allows for generation of credits from BMPs installed prior to DEQ approval of a trading plan, but only if those BMPs are verified as having been implemented consistent with BMP quality standards identified in a subsequently approved plan and are functioning effectively. This provision will encourage early action on behalf of parties interested credit generation. Requiring only those BMPs implemented consistent with BMP quality standards to be eligible for credit generation will ensure the credits are verifiable and the BMPs were implemented with the intent to generate credits at a later date. In addition, the rules only allow credits to be generated from BMPs that result in water quality benefits *above* trading baseline requirements. OAR 340-039-0040(3).

58. Comment Require alternative BMPs, subject to public notice and comment.

DEQ received one comment in this category from commenter #16. The commenter stated that rules should require a permittee to set out the BMP alternatives that were evaluated and allow the basis for choosing a particular BMP to be subject to public comment.

Response Only BMPs that meet quality standards may be used to generate credits for pollutant trading. DEQ has the obligation to justify its approval of any proposed trading plans, including the BMP element, in the permit fact sheet, and all trading plans will be subject to public review and comment. DEQ does not think it would be efficient or useful to require the inclusion of alternative BMPs in trading plan proposals. With traditional compliance methods there is no corollary requirement that alternative treatment methods and the basis for each be subject to public comment. To require traders to propose alternatives would result in a cumbersome and inefficient review and approval process.

59. Comment

Baseline should be the most stringent applicable regulatory requirement.

Commenter #16 suggested that the rule should state the applicable baseline is whichever set of regulations results in the most stringent requirement and never less than the assumptions of a TMDL.

Response DEQ agrees. The “requirements for baseline” at OAR 340-039-0030(1) list the regulatory requirements that must be accounted for in determining a trading baseline. The requirements are not mutually exclusive; trading baseline must account for all of the requirements. As a result, making this revision is unnecessary. TMDLs in relation to baseline requirements are addressed in more depth in the response to comment 52.

60. Comment

Trading areas should not reference TMDL water quality management plans.

DEQ received one comment in this category from commenter #16.

The comment stated that rules should not require the trading area described in proposed OAR 340-039-0035(2) to be “consistent with any applicable TMDL water quality management plan” or any other management plan because the commenter’s view is that management plans have no regulatory import: “They are not related to water quality standards, they are not approved by EPA and therefore cannot be the basis for permitting.”

Response The portion of the TMDL, if any, that analyzes whether trading is an appropriate control mechanism is the WQMP. DEQ’s intent with OAR 340-039-0035(2) is to ensure that a trading area is consistent with the WQMP and any relevant analyses or conclusions contained within the WQMP, including specifying areas within the TMDL that are appropriate for trading. The trading area is a geographic designation and does not have regulatory import for trading purposes unless and until it is designated in an NPDES permit of 401 water quality certification condition.

61. Comment

Ratios should be addressed fully in rules; not IMD.

Commenters #15 and #16 state that ratios should be addressed fully in the rules, not just in the IMD, so the public will know how DEQ will use ratios to protect water quality and address the many levels of uncertainty and risk involved in relying on trades to meet water quality standards.

Response

Each water quality trade is unique. The ratios that are appropriate for each water quality trading plan will depend upon numerous factors including location of individual trading projects, characteristics of a trading area, BMPs implemented, the reserve capacity available, among many others. It is infeasible to prescribe in rule the innumerable scenarios and multitude of factors that must be considered in deciding which ratios are appropriate under which circumstances. See response to comment #5 for more discussion on ratios.

62. Comment

DEQ should take an incremental approach to new or revised permits that authorize trading.

DEQ received one comment in this category from commenter #16. The commenter stated that trading is still in the experimental stages, so “DEQ should take an incremental approach to rolling out new or revised NPDES permits that authorize trading” and limit trading to temperature.

Response

There have been three approved trades implemented in Oregon over the last decade. All three have been trades to address temperature requirements. All three are unique and represent the particular circumstances of the regulated entity and thus, each has been “rolled out” incrementally and after much deliberation and analysis. The intent of the rules is to establish trading as a potential compliance option available to regulated entities and establish consistent application, review and approval, and reporting requirements. We do not expect that all regulated entities will have the capacity, wherewithal or interest to choose trading as their compliance option. DEQ expects that trading will continue to happen incrementally, as it has to date.

While temperature trading is where DEQ has the most experience, across the country other types of trading are far more common and well-developed. DEQ declines to limit trading for only temperature as it has the potential to be a viable, sound, and effective compliance option for other types of pollutant parameters.

63. Comment

Trading between point sources.

DEQ received one comment in this category from commenter #16. The commenter stated that DEQ should prohibit trading between point sources, or at least provide the circumstances under which that would be allowed in the rules.

Response DEQ declines to expressly prohibit trading between point sources. In some situations trading between point sources could result in not only meeting their respective regulatory requirements, but also a significant cost savings and efficiency with no adverse impact to water quality. The “water quality trading objectives” in proposed rule OAR 340-039-0003 must apply to trading between point sources just as it does to all trading and provides appropriate sideboards and limitations to ensure that the trading meets state law and the policies of the EQC.

Public comments outside the scope of this rulemaking:

64. Comment Water Quality trading models.

DEQ received one comment in this category from commenter #12.

The commenter stated that the water quality models contain a number of assumptions which the Oregon Agricultural Organizations believe are incorrect due to the lack of data used to develop the models and a lack of ground-truthing of the models.

Response The use of water quality models is not an element addressed in the proposed rules. As a result, this comment is out of scope of the rulemaking.

DEQ does acknowledge that water quality models are frequently used within its water quality program and strives to use high quality information and analytical tools in its water quality programs. All models and data sets used to develop TMDLs and permits are subject to public review and comment. Many of the water quality models are peer-reviewed and local applications are developed in collaboration with experts at regional universities and agencies.

When developing Heat Source models for prediction of effective shade and solar radiation, the model must be parameterized with various data. The table below identifies the model inputs and the typical source of the data.

Model Input	Data Source
Stream position (latitude/longitude/aspect)	Stream position within the project site is digitized in a GIS from aerial photos and confirmed with site visits where GPS readings are taken. Stream aspect is determined from the digitized stream direction using an arctool called TTools.
Elevation	Elevation is determined from a digital elevation model.
Vegetation and Land cover (location/height/density)	Spatial datasets and plan view maps of the vegetation height and density for the project site are made in a GIS using aerial photos and from data collected in the field. Field crews collect vegetation data at every project site including identifying planting boundaries (using GPS) and vegetation type and extent. Crews also measure

	vegetation height and stem density as part of post project monitoring. If available, LiDAR is used to measure vegetation heights and verified with the field measured heights. Vegetation density values are derived from field measurements of cover and from other sites with similar vegetation.
Maximum Topographic Shade Angles	Maximum topographic angles are derived from a digital elevation model using an arctool called TTools.

See comment # 66 for a discussion about ground-truthing the model predictions.

65. Comment Models should be made available for public review.

DEQ received one comment in this category from commenter #12. The commenter stated that the models have not been made available for review by the Oregon Agricultural Organizations or others, and have not been vetted through any public process.

Response The use of water quality models is not an element addressed in the proposed rules. As a result, this comment is out of scope of the rulemaking.

DEQ does acknowledge that water quality models are frequently used within its water quality program. The models most often used or likely to be used for water quality trading in Oregon, Heat Source and the Nutrient Tracking Tool/APEX, are public domain models that are available for review and use.

Both models have received extensive peer review. Heat Source was originally developed at Oregon State University as a master's thesis where it was evaluated and approved by an academic committee. (Boyd 1998). Development of the model continued and in 1999 DEQ submitted the model equations and methodology for peer review (DEQ 1999) and again in 2004 to the Independent Multidisciplinary Science Team (IMST 2004) where the model was found to be scientifically sound. The heat source model and various aspects of the model methodology have also been used in numerous peer reviewed published studies including Bond et. al. 2015, Guzy et. al. 2015, Lawrence et al 2014, Smersrud et. al. 2014, Diabat et. al. 2013, Holzapfel et. al. 2013, Westhoff et. al. 2007, and Loheide and Gorelick 2006.

Interested parties may review the Heat Source model and model methodology here: <http://www.deq.state.or.us/wq/tmdls/tools.htm>.

The Nutrient Tracking Tool (NTT) is a simplified user interface for the APEX model. NTT was developed by the Texas Institute for Applied Environmental Research at Tarleton University and the USDA-NRCS. The NTT tool was described by Saleh et al (2011) and the model behind NTT, APEX, is well documented and has been used in many peer reviewed studies. You can review the model and current model methodology here: <http://apex.tamu.edu/documentation/>.

A list of peer reviewed APEX publications can be found here:
<http://apex.tamu.edu/publications/>

66. Comment

DEQ should ground-truth data to verify the models.

DEQ received one comment in this category from commenter #12.

The commenter stated that DEQ should collect and analyze data throughout the life of the trading program to ground-truth and verify the assumptions contained in the models.

Response

The use of water quality models is not an element addressed in the proposed rules. As a result, this comment is out of scope of the rulemaking.

DEQ does acknowledge that water quality models are frequently used within its water quality program and agrees with the commenter. It is standard practice nationally to determine trading credits, associated pollutant reductions, and water quality benefits from implementation of BMPs using models. DEQ requires project developers to collect field-based data over time to verify project status and the performance of the BMPs used to generate credits.

In addition, DEQ periodically reviews the literature on the efficacy and performance of different BMPs. DEQ uses this information to make decisions about trading ratios and other model assumptions.

Citations

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Westhoff , M.C., Savenije, H.H.G., Luxemburg W.M.J., Stelling, G.S., van de Giesen, N.C., Selker, J.S., Pfister, L., and Uhlenbrook, S. 2007. A distributed stream temperature model using high resolution temperature observations. *Hydrology and Earth Sciences*. 11(4): 1469–1480.

67. Comment

Disapproval of the “natural conditions criterion”

DEQ received one comment in this category from commenter #22. The commenter stated that with disapproval of the “natural conditions criterion” using trading to meet the temperature standard is suspect.

Response

This comment is out of scope with the rulemaking. Many other aspects of water quality standards for temperature remain in effect and trading may be used to meet regulatory obligations for parameters other than temperature.

68. Comment

Comments on IMD

DEQ received one comment in this category from commenter #16. The comment stated that DEQ should re-open the comment period on the draft IMD after the water quality trading rules are adopted so the public can ensure the IMD adequately explains how the rules as adopted will be implemented.

One example of the IMD not being comprehensive enough is its lack of specific directions on how to develop trading ratios.

Response

This comment is out of scope of the rulemaking but DEQ will take it into consideration as it revises its Internal Management Directive.

Commenters

Comments received by close of public comment period

Listed below are the 23 sets of comments submitted about the proposed rules by the deadline. Original comments are on file with DEQ.

- | | | |
|-----------|------------------|--|
| 1 | Commenter | Gregory Geist |
| | Affiliation | Water Environment Services, Clackamas County |
| 2 | Commenter | Danette Faucera |
| | Affiliation | Oregon Department of Fish and Wildlife |
| 3 | Commenter | Dan Moeller |
| | Affiliation | Metro Regional Government |
| 4 | Commenter | Janet Gillaspie |
| | Affiliation | Oregon Association of Clean Water Agencies |
| 5 | Commenter | Paul Henson |
| | Affiliation | US Fish and Wildlife Service |
| 6 | Commenter | Bobby Cochram |
| | Affiliation | Willamette Partnership |
| 7 | Commenter | Joseph A. Furia |
| | Affiliation | The Freshwater Trust |
| 8 | Commenter | Randy Knop |
| | Affiliation | Turcotte, Inc. |
| 9 | Commenter | Forest English |
| | Affiliation | Rogue River Keeper |
| | | Additional signatories to these comments were: Lauren Goldberg (Columbia Riverkeeper), Cameron La Follette (Oregon Coast Alliance), Glen Spain (Pacific Coast Federation of Fishermen's Associations & Institute for Fisheries Research), Brian Wegener (Tualatin Riverkeepers), Travis Williams (Willamette Riverkeeper), Joe Serres (Friends of Living Oregon Waters), F.S "Buck" Ryan (Snake River Waterkeeper), John DeVoe (WaterWatch of Oregon), Jared Margolis (Center for Biological Diversity), Rhett Lawrence (Oregon Chapter Sierra Club), Erika Stock (Native Fish Society), Josh Laughlin (Cascadia Wildlands), Veronica Warnock (Hells Canyon Preservation Council), Lesley Adams (Waterkeeper Alliance), and Konrad Fisher (Klamath Riverkeeper). |
| 10 | Commenter | Carrie Sanneman |
| | Affiliation | Willamette Partnership |

(These comments were identical to comments submitted by commenter #6)

- | | |
|---------------------|--|
| 11 Commenter | Kathryn VanNatta |
| Affiliation | Northwest Pulp & Paper Association |
| 12 Commenter | Mary Anne Nash, Tami Kerr, Jerome Rosa, Roger Beyer |
| Affiliation | Oregon Farm Bureau, Oregon Dairy Farmers Association, Oregon Cattlemen's Association, Oregon Seed Council |
| 13 Commenter | Robert P. Baumgartner |
| Affiliation | Clean Water Services |
| 14 Commenter | Neil Mullane |
| Affiliation | n/a |
| 15 Commenter | David Croxton |
| Affiliation | US Environmental Protection Agency, Region 10 |
| 16 Commenter | Nina Bell |
| Affiliation | Northwest Environmental Advocates and on behalf of Northwest Environmental Defense Center and Columbia River Keeper. |
| 17 Commenter | John MacDiarmid |
| Affiliation | n/a |
| 18 Commenter | Matt Stouder |
| Affiliation | Metropolitan Wastewater Management Commission |
| 19 Commenter | Harry L. Foster |
| Affiliation | n/a |
| 20 Commenter | Eric Metz |
| Affiliation | Oregon Department of State Lands |
| 21 Commenter | Catherine Macdonald |
| Affiliation | The Nature Conservancy |
| 22 Commenter | Dale Feik |
| Affiliation | n/a |
| 23 Commenter | Todd Reeve & Kendra Smith |
| Affiliation | Bonneville Environmental Foundation |

Notification

The proposed rules would become effective upon filing on approximately December 15, 2015. DEQ will notify affected parties by GovDelivery and by updating DEQ's water quality trading [website](#) with the adopted rules.

Once the rules are effective, DEQ will finalize revisions to the "Water Quality Trading in NPDES Permits Internal Management Directive." The appendices to the revised Internal Management Directive, containing parameter-specific protocols, will be updated and revised following finalization of the rules and IMD. As part of that process DEQ will convene a working group to adopt BMP quality standards that will be incorporated into the revised parameter-specific protocols.

Compliance and Enforcement

- Affected Parties – No changes in compliance and enforcement are anticipated.
- DEQ Staff – DEQ would continue to administer the program. No changes to compliance and enforcement implementation are anticipated.

Measuring, sampling, monitoring and reporting

- Affected Parties – No revisions would be required of approved trading plans until permit reissuance. All new and revised water quality trading plans would specify measuring, sampling, monitoring and reporting requirements as called for in rule and the NPDES permit or 401 water quality certification.
- DEQ Staff – No changes are anticipated in staff review of discharge monitoring reports and annual reports.

Systems

- Website - DEQ would post trading plans and annual reports to its water quality trading webpage. DEQ would update external websites with updated protocols and information to assist affected parties. This includes revisions to the internal management directive and specific trading protocol.
- Database – No changes would be required to DEQ databases.
- Invoicing – Invoicing activities would not be affected as a result of this rulemaking.

Training

- Affected Parties – DEQ outreach and technical assistance would not be affected. DEQ may convene subject matter experts to revise water quality trading best management practices and identify acceptable quality standards.
- DEQ Staff – Training would continue to be provided to program staff to ensure that the rules are properly implemented.

Requirement

Oregon law requires DEQ to review new rules within five years after EQC adopts them. The law also exempts some rules from review. DEQ determined whether the rules described in this report are subject to the five-year review based its analysis on the law in effect when EQC adopted these rules.

None of these proposed rules are exempt from the five-year review under ORS 183.405(4) and 183.405 (5) of the Administrative Procedures Act.

Five-year rule review required

No later than Dec.15, 2020, DEQ will review the newly adopted rules for which ORS 183.405(1) requires review to determine whether:

- The rule has had the intended effect
- The anticipated fiscal impact of the rule was underestimated or overestimated
- Subsequent changes in the law require that the rule be repealed or amended
- There is continued need for the rule.

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION 039

WATER QUALITY TRADING PROGRAM

340-039-0001

Purpose and Policy

(1) Purpose. This rule implements ORS 468B.555 to allow entities regulated under the Clean Water Act to meet pollution control requirements through water quality trading. This rule establishes the requirements for water quality trading in Oregon.

(2) Policy. The Oregon Department of Environmental Quality may approve water quality trading only if it promotes one or more of the following Environmental Quality Commission policies:

(a) Achieves pollutant reductions and progress towards meeting water quality standards;

(b) Reduces the cost of implementing Total Maximum Daily Loads (TMDLs);

(c) Establishes incentives for voluntary pollutant reductions from point and nonpoint sources within a watershed;

(d) Offsets new or increased discharges resulting from growth;

(e) Secures long-term improvement in water quality; or

(f) Results in demonstrable benefits to water quality or designated uses the water quality standards are intended to protect.

Stat. Auth.: ORS 468.020, 468B.020, 468B.030, 468B.035, 468B.555

Stats. Implemented: ORS 468B.555

340-039-0003

Water Quality Trading Objectives

Water quality trading authorized under this rule must:

(1) Be consistent with anti-degradation policies;

(2) Not cause or contribute to an exceedance of water quality standards;

(3) Be consistent with local, state, and federal water quality laws;

(4) Be designed to result in a net reduction of pollutants from participating sources in the trading area;

(5) Be designed to assist the state in attaining or maintaining water quality standards;

(6) Be designed to assist in implementing TMDLs when applicable;

(7) Be based on transparent and practical Best Management Practices (BMPs) quality standards to ensure that water quality benefits and credits are generated as planned; and

(8) Not create localized adverse impacts on water quality and existing and designated beneficial uses.

Stat. Auth.: ORS 468.020, 468B.020, 468B.030, 468B.035, 468B.555

Stats. Implemented: ORS 468B.555

340-039-0005

Definitions

(1) Best Management Practices (BMPs): In-water or land-based conservation, enhancement or restoration actions that will reduce pollutant loading or create other water quality benefits. BMPs include, but are not limited to, structural and nonstructural controls and practices and flow augmentation.

(2) BMP Quality Standards: Specifications for the design, implementation, maintenance and performance tracking of a particular BMP that ensure the estimated water quality benefits of a trading project are achieved, and that allow for verification that the BMP is performing as described in an approved trading plan.

(3) Credit: A measured or estimated unit of trade for a specific pollutant that represents the water quality benefit a water quality trading project generates at a location over a specified period of time, above baseline requirements and after applying trade ratios or any other adjustments.

(4) Public Conservation Funds: Public funds that are targeted to support voluntary natural resource protection or restoration. Examples of public conservation funds include United States Department of Agriculture (USDA) cost share programs, United States Environmental Protection Agency (EPA) section 319 grant funds, United States Fish and Wildlife Service Partners for Fish and Wildlife Program funds, State Wildlife Grants, and Oregon Watershed Enhancement Board restoration grants. Public funds that are not considered public conservation funds include: public loans intended to be used for water quality infrastructure projects, such as Clean Water State Revolving Funds, USDA Rural Development funds, and utility sewer storm water and surface water management fees.

(5) Trading Area: A watershed or other hydrologically-connected geographic area, as defined within a water quality management plan adopted for a TMDL, trading framework or trading plan. A trading area must encompass the location of the discharge to be offset, or its downstream point of impact, if applicable, and the trading project to be implemented.

(6) Trading Baseline: Pollutant load reductions, BMP requirements, or site conditions that must be met under regulatory requirements in place at the time of trading project initiation.

(7) Trading Framework: A description contained in a TMDL water quality management plan, or water pollution control plan adopted by rule or issued by order under ORS 468B.015 or 468B.110, that identifies trading elements applicable to one or more entities in a trading area.

(8) Trading Plan: A plan that describes the design, implementation, maintenance, monitoring, verification and reporting elements of a water quality trade.

(9) Trading Project: A site-specific implementation of a trading plan used to generate credits.

(10) Trading Ratio: A numeric value used to adjust the number of credits generated from a trading project, or to adjust the number of credits that a credit user needs to obtain.

(11) Verification: A process to confirm and document that a trading project is implemented and performing according to the approved trading plan and BMP quality standards, and to confirm the quantity of credits generated by the trading project.

(12) Water Quality Benefit: The quantifiable water quality improvement or net pollutant reduction that can be reasonably attributed to BMPs at a trading project site.

(13) Water Quality Trading or Trade: The use of water quality credits generated at one location in a trading area to comply with water quality-based requirements at another location within the trading area.

Stat. Auth.: ORS 468.020, 468B.020, 468B.030, 468B.035, 468B.555
Stats. Implemented: ORS 468B.555

340-039-0015

Eligibility

(1) An entity regulated by a National Pollutant Discharge Elimination System (NPDES) permit or a federal permit or license for which DEQ has issued a water quality certification pursuant to Clean Water Act section 401 and OAR chapter 340, division 048 (a “401 water quality certification”) is eligible to enter into a trade.

(2) Water quality parameters eligible for water quality trading:

(a) DEQ may authorize water quality trading for the following water quality parameters: temperature, ammonia, sediment, total suspended solids, and nutrients and other oxygen-demanding substances, including biochemical oxygen demand.

(b) Water quality trading for pollutants that are toxic and either persist in the environment or accumulate in the tissues of humans, fish, wildlife or plants is prohibited, except if trading is an element of a pollution reduction plan in a variance that has been issued by DEQ or the EQC and approved by EPA pursuant to OAR 340-041-0059.

(c) Water quality trading authorized under this division may not be used to meet technology-based effluent limitations.

(d) DEQ may authorize trading for other water quality parameters on a case-by-case basis provided it does not cause or contribute to an exceedance of a water quality standard.

(3) Water bodies where trading may occur:

(a) High quality waters. DEQ may authorize trading to maintain or improve water quality in water bodies that meet water quality standards, including but not limited to, trading projects designed to offset new or increased pollutant loads.

(b) Water quality limited waters. DEQ may authorize trading where it is consistent with the water quality management plan in a TMDL or other water pollution control plan adopted by rule or issued by order under ORS 468B.015 or 468B.110, or in water bodies:

(i) That are water quality limited but not subject to a TMDL; or

(ii) Where trading projects are designed to achieve progress towards meeting water quality standards before or while a TMDL is being developed.

(4) BMPs eligible for credit generation must be quantifiable and have BMP quality standards.

Stat. Auth.: ORS 468.020, 468B.020, 468B.030, 468B.035, 468B.555

Stats. Implemented: ORS 468B.555

340-039-0017

Regulatory Mechanisms for Water Quality Trading

(1) NPDES Permitting:

(a) Trading in Permits: DEQ may authorize water quality trading in an NPDES permit to meet water quality-based effluent requirements.

(b) Compliance Schedules. Water quality trading may be included in an NPDES permit compliance schedule only if the trade is consistent with the requirements of OAR 340-041-0061 and any applicable regulations of the EPA.

(c) Permit Variances. Water quality trading may be included as a component of the pollution reduction plan in a variance issued under OAR 340-041-0059.

(2) 401 Water Quality Certifications. DEQ may condition a 401 water quality certification based on water quality trading consistent with this division.

(3) Annual Reporting. The regulated entity must submit an annual report to DEQ that describes trading plan implementation and performance over the past year. The annual report must include information specific to each trading project implemented including:

a) The location of each trading project and BMPs implemented in the preceding year;

b) The trading project baseline;

c) The trading ratios used;

d) Trading project monitoring results;

e) Verification of trading plan performance including the quantity of credits acquired from each trading project, and the total quantity of credits generated under the trading plan to date;

f) A demonstration of compliance with OAR 340-039-0040(4), if applicable; and

g) Adaptive management measures implemented under the trading plan, if applicable.

Stat. Auth.: ORS 468.020, 468B.020, 468B.030, 468B.035, 468B.555

Stats. Implemented: ORS 468B.555

340-039-0020

Trading Frameworks

(1) DEQ may establish one or more trading frameworks in a TMDL water quality management plan or water pollution control plan adopted by rule or issued by order under ORS 468B.015 or ORS 468B.110. If established, a trading framework must specify pollutants that are eligible for trading, the trading area, any priority areas, as well as regulations and applicable TMDL allocations and implementation schedules that will be used to derive trading baseline.

(2) DEQ must provide an opportunity for public notice and comment before issuing a trading framework.

(3) A trading framework is not required in order for DEQ to approve a water quality trading plan.

Stat. Auth.: ORS 468.020, 468B.020, 468B.030, 468B.035, 468B.555
Stats. Implemented: ORS 468B.555

340-039-0025

Requirements of a Water Quality Trading Plan

(1) An eligible entity may not engage in water quality trading unless DEQ has reviewed and approved that entity's water quality trading plan. The use of credits will be authorized after all elements of a DEQ-approved trading plan required by subsection (5) of this rule are incorporated as enforceable conditions of an NPDES permit issued under OAR chapter 340 division 045 or a 401 water quality certification issued under OAR chapter 340 division 048.

(2) For NPDES permittees trading may be proposed as part of a permittee's application for permit renewal or modification.

(3) DEQ must provide an opportunity for public notice and comment on a trading plan before approving the trading plan. DEQ may amend the trading plan or require amendments to the trading plan prior to approval. Individual trading projects must be consistent with an approved trading plan. Individual trading projects do not require separate public notice and comment.

(4) A trading plan must be consistent with an applicable DEQ-issued trading framework if such a framework exists at the time DEQ approves the trading plan.

(5) A trading plan must include all of the following elements and a description of how the elements were derived or calculated:

(a) The parameter for which water quality trading is proposed;

(b) Trading baseline: A trading plan must identify any applicable regulatory requirements from OAR 340-039-0030(1) that apply within the trading area and that must be implemented to achieve baseline requirements;

(c) Trading area: A description of the trading area including identification of the location of the discharge to be offset, its downstream point of impact, if applicable, where trading projects are expected to be implemented, and the relationship of the trading projects to beneficial uses in the trading area;

(d) BMPs: A description of the water quality benefits that will be generated, the BMPs that will be used to generate water quality benefits, and applicable BMP quality standards;

(e) Trading ratios: A description of applicable trading ratios, the basis for each applicable trading ratio, including underlying assumptions for the ratio, and a statement indicating whether those ratios increase or decrease the size of a credit obligation or the number of credits generated from an individual trading project;

(f) Credits: A description of the credits needed to meet water quality-based requirements of an NPDES permit or 401 water quality certification, including:

(i) Quantity and timing: The number of credits needed and any credit generation milestones, including a schedule for credit generation;

(ii) Methods used: How credits will be quantified, including the assumptions and inputs used to derive the number of credits; and

(iii) Duration of credits: A description of the length of time credits are expected to be used.

(g) Monitoring. The trading plan must include a description of the following:

(i) Proposed methods and frequency of trading project BMP monitoring; and

(ii) Proposed methods and frequency of how water quality benefits generated by a trading project will be monitored;

(h) Trading Plan Performance Verification: A description of how the entity will verify and document for each trading project that BMPs are conforming to applicable quality standards and credits are generated as planned; and

(i) Tracking and Reporting: A description of how credit generation, acquisition and usage will be tracked and how this information will be made available to the public.

(6) Adaptive Management: Trading plans must include a description of how monitoring and other information may be used over time to adjust trading projects and under what circumstances;

(7) Trading Plan Revision: An approved trading plan must be revised during permit or 401 water quality certification renewal or if there is a change in circumstances that affects a trading plan element required by subsection (5) of this rule. Revised trading plans must be submitted to DEQ for review and approval and must be given an opportunity for public notice and comment. DEQ will reopen and modify the permit or 401 water quality certification for any revisions affecting an enforceable condition.

Stat. Auth.: ORS 468.020, 468B.020, 468B.030, 468B.035, 468B.555
Stats. Implemented: ORS 468B.555

340-039-0030

Requirements for Trading Baselines

(1) Trading baseline must account for the following regulatory requirements applicable to the trading project at the time of trading project initiation:

(a) NPDES permit requirements;

(b) Rules issued by Oregon Department of Agriculture for an agricultural water quality management area under OAR chapter 603 division 095;

(c) Rules issued by Oregon Board of Forestry under OAR chapter 629 divisions 610-680;

(d) Requirements of a federal land management plan, or an agreement between a federal agency and the state;

(e) Requirements established in a Clean Water Act Section 401 water quality certification;

(f) Local ordinances;

(g) Tribal laws, rules, or permits;

(h) Other applicable rules affecting nonpoint source requirements;

(i) Projects completed as part of compensatory mitigation, or projects required under a permit or approval issued pursuant to Clean Water Act section 404, or a supplemental environmental project used to settle a civil penalty imposed under OAR chapter 340 division 012 or the Clean Water Act; and

(j) Regulatory requirements a designated management agency establishes to comply with a DEQ-issued TMDL, water quality management plan or another water pollution control plan adopted by rule or issued by order under ORS 468B.015 or 468B.110.

(2) BMPs required to meet baseline requirements and BMPs used to generate additional water quality benefits and trade credits may be installed simultaneously.

Stat. Auth.: ORS 468.020, 468B.020, 468B.030, 468B.035, 468B.555

Stats. Implemented: ORS 468B.555

340-039-0035

Requirements for Trading Areas

(1) DEQ may establish trading areas in trading frameworks.

(2) All trading areas must be consistent with any applicable TMDL water quality management plan, independent state water quality management plans, or trading framework.

Stat. Auth.: ORS 468.020, 468B.020, 468B.030, 468B.035, 468B.555
Stats. Implemented: ORS 468B.555

340-039-0040

Requirements for Credits

(1) Credits used for compliance with NPDES permit and 401 water quality certification requirements must be generated within the trading area of an approved trading plan.

(2) A credit may not be used to meet a regulatory obligation by more than one entity at any given time.

(3) Credits may be generated only from BMPs that result in water quality benefits above trading baseline requirements.

(4) Credits generated under an approved trading plan may not include water quality benefits obtained with public conservation funds. Where public sources of funding are used for credit-generating activities, it is the entity's responsibility to demonstrate compliance with this requirement in its annual report.

(5) Credits may be used for compliance with NPDES permit requirements and 401 water quality certifications once implementation of BMPs has been verified as consistent with applicable BMP quality standards according to OAR 340-039-0025(5)(h).

(6) Credits may be generated from BMPs installed before DEQ approves a trading plan if BMPs are verified as having been implemented consistent with BMP quality standards identified in a subsequently approved trading plan and are functioning effectively.

Stat. Auth.: ORS 468.020, 468B.020, 468B.030, 468B.035, 468B.555
Stats. Implemented: ORS 468B.555

340-039-0043

Requirements for Trading Ratios

(1) Water quality trades must include one or more trading ratios that apply to credits. Ratio components and underlying assumptions must be clearly documented in the trading plan.

(2) Trading ratios may be used to account for variables associated with a trading project including the following:

(a) Attenuation of a water quality benefit between the location where credit-generating BMPs occur and the point of use;

(b) Pollutant equivalency;

(c) Uncertainty of BMP performance or water quality benefit measurement or estimate;

(d) Types of risk not associated with BMP performance;

(e) Time lag after BMP installation before a BMP produces full water quality benefit;

(f) Credit for trading projects located in priority areas; or

(g) Credit retirement to ensure a net reduction in water pollution.

Stat. Auth.: ORS 468.020, 468B.020, 468B.030, 468B.035, 468B.555

Stats. Implemented: ORS 468B.555