U.S. Department of Commerce
National Oceanic and Atmospheric Administration

U.S. Environmental Protection Agency

Mr. Greg Aldrich, Acting Administrator
Water Quality Division
Oregon Department of Environmental Quality
811 SW 6th Avenue
Portland, OR 97204-1390

DEC 21 2012

Dear Mr. Aldrich,

The Environmental Protection Agency and National Oceanic and Atmospheric Administration have enclosed our initial assessment of the Oregon Department of Environmental Quality's (ODEQ) "Implementation Ready Total Maximum Daily Load" (IR-TMDL) approach for the Mid-Coast Basin. The EPA and NOAA provide this initial assessment pursuant to the technical assistance authorities of the Coastal Zone Management Act, specifically, 16 U.S.C. § 1455b(d). Moreover, the EPA and NOAA provide this assessment consistent with paragraph 5 of a settlement agreement to resolve disputes in Northwest Environmental Advocates v. Locke, et al, Civil No. 09-0017-PK. Under the settlement agreement, the EPA and NOAA agreed to provide this written initial assessment, including evaluation of 1) whether implementation of the IR-TMDL approach to be applied in the Mid-Coast Basin, including safe-harbor best management practices (BMPs), is likely to result in actions that will achieve and maintain water quality standards (WQSs), and 2) whether the ODEQ's plan for developing and updating TMDLs for all sub-basins in the Coastal Nonpoint Program management area using the IR-TMDL approach could satisfy the outstanding condition on additional management measures for forestry in the State's Coastal Nonpoint Program identified in correspondence (dated May 12, 2010) from the EPA and NOAA to the ODEQ. The May 12, 2010, letter identified dates to serve as interim milestones.

The EPA and NOAA negotiated the settlement agreement based in part on the commitments that the ODEQ had made in its July 21, 2010, and July 26, 2010, letters responding to the EPA and NOAA's May 12, 2010, letter. In these letters, the ODEQ explained its continuing progress and deliberate intention to complete the Mid-Coast IR-TMDLs, which would include specific safe-harbor BMPs, by June 30, 2012. The ODEQ also stated its intention to meeting other interim milestones, including providing examples of the safe-harbor BMPs and additional detail on how the IR-TMDLs would address landslide prone areas and road management concerns. As you know, the ODEQ did not complete the Mid-Coast IR-TMDLs by June 30, 2012, and did not provide examples of safe-harbor BMPs or details about how the IR-TMDLs would address landslide prone areas or road management concerns. Instead, the ODEQ notified the EPA and NOAA that the Mid-Coast IR-TMDLs will not be completed until June 30, 2013, or later.

The EPA and NOAA recognize the complexities that Oregon faces in pursuing this new IR-TMDL approach and the extensive effort expended by the ODEQ's staff and management toward ensuring its success. For example, the ODEQ has held numerous stakeholder advisory and technical workgroup meetings and has analyzed and presented a significant amount of

information to support development of temperature, sediment, and bacteria IR-TMDLs for the Mid-Coast Basin. The EPA and NOAA agree that such meetings and analysis provide important groundwork for the development of BMPs to meet TMDL water quality targets and for completion of the Mid-Coast IR-TMDLs. As we have communicated, the EPA and NOAA have anticipated that such IR-TMDLs could satisfy the outstanding condition for additional management measures for forestry on Oregon's Coastal Nonpoint Program.

Without draft IR-TMDLs, examples of safe harbor BMPs, or further detail on how the IR-TMDLs would address landslide prone areas and road management concerns, the EPA and NOAA do not have the information to support a determination whether the IR-TMDL approach would: (1) enable Oregon to achieve and maintain applicable water quality standards, and (2) satisfy the additional management measures for forestry conditions in its Coastal Nonpoint Program. In order to evaluate whether Oregon has satisfied the condition for additional management measures for forestry, the EPA and NOAA request that the ODEQ accelerate its efforts to provide the following information as quickly as possible:

- Additional detail on how the ODEQ plans to determine the adequacy of the BMPs identified in the IR-TMDL process for meeting WQSs;
- Additional detail on the strategy the State plans to take to address landslide prone areas and forest roads;
- Examples of the safe-harbor BMPs Oregon would use to address:
    - protection of riparian areas, including for Type-N streams;
    - protection of landslide-prone areas; and
    - management/maintenance of forest roads; and
- Mid-Coast IR-TMDLs, including load allocations and surrogate targets.

In addition to the Mid-Coast IR-TMDLs, the Settlement Agreement also required the ODEQ to propose a schedule for developing other IR-TMDLs for all coastal subbasins in Oregon. The ODEQ developed a schedule to complete IR-TMDLs for coastal subbasins by June 2021. The EPA and NOAA conclude that this proposed schedule, received on July 14, 2011, provides a reasonable timeline for implementing the IR-TMDLs throughout the coastal nonpoint management area.

The enclosed assessment document provides additional information on what the EPA and NOAA regard as positive aspects of the possible IR-TMDL process, current shortcomings, and what Oregon could do to satisfy its remaining additional management measures for the forestry condition and achieve and maintain applicable WQSs. We have also included feedback on Oregon's approach for satisfying the other two conditions on its Coastal Nonpoint Program related to new development and onsite sewage disposal systems.

Under the settlement agreement, the EPA and NOAA agreed to announce in the Federal Register our intent to fully approve or disapprove Oregon's Coastal Nonpoint Program by November 15, 2013. As we have shared with Oregon in the past, the EPA and NOAA will need to receive the requested information by June 30, 2013, to provide sufficient time for the EPA and NOAA to evaluate how the State proposes to satisfy its Coastal Nonpoint Program conditions and prepare the documents needed to meet the November deadline. The EPA and NOAA staff remain available to assist the ODEQ staff in accelerating State action in advance of June 2013. With a

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timely State submission designed to resolve the outstanding conditions, the EPA and NOAA would be able to announce our intent to fully approve Oregon's program by November 15, 2013.

Working with Oregon to achieve full approval of its Coastal Nonpoint Program is a priority for both federal agencies. We will continue to work closely with the ODEQ to expeditiously move its IR-TMDL effort forward and to enable the State to meet the other remaining conditions on its Coastal Nonpoint Program.

Sincerely,

for

Margaret Davidson, Acting Director
Office of Ocean and Coastal Resource Management
National Oceanic and Atmospheric Administration

for

Daniel D. Opalski, Director
Office of Water and Watersheds
Environmental Protection Agency, Region 10

Enclosure

cc: Mr. Dick Pedersen, Director, ODEQ
Mr. Eugene Foster, Watershed Management Manager, ODEQ
Ms. Patty Snow, Coastal Management Program Manager, DLCD
Mr. Bill Blosser, Chair, OEQC
Ms. Nina Bell, Northwest Environmental Advocates

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Enclosure

The EPA and NOAA's Assessment of Oregon's Implementation-Ready TMDL Approach and the State's Progress in Addressing the Remaining Conditions on its Coastal Nonpoint Pollution Control Program

1) *Will the Implementation of the Implementation-Ready TMDLs, in the Mid-Coast Basin, Likely Result in Actions to Achieve and Maintain Water Quality Standards?*

The ODEQ is in the process of evaluating the safe-harbor Best Management Practices (BMPs) needed to achieve and maintain water quality standards (WQSs). Absent these BMPs and a completed Mid-Coast IR-TMDL document, the EPA and NOAA lack sufficient information to determine if the IR-TMDL approach is likely to result in actions that achieve and maintain WQSs. Based on the limited information and progress that Oregon has provided to date, we are concerned that the IR-TMDL approach might not enable the State to achieve and maintain water quality standards.

Although the ODEQ has fallen short of identifying specific BMPs and completing the Mid-Coast IR-TMDL document, the State has completed some necessary preliminary steps, such as establishing the geographic scope of the sediment IR-TMDL document and the numeric water quality targets for the TMDLs to address turbidity and biocriteria listings. To determine the scope of sediment problems in the Mid-Coast Basin, the ODEQ used PREDATOR and Stressor ID methodology to assess the biocriteria impairments caused by sediment. The ODEQ then determined percent fine sediment targets associated with the biological impairments to set numeric sediment water quality targets for biocriteria listings. The EPA and NOAA believe this methodology is credible and establishes an important link between aquatic life use and water quality. The ODEQ also has begun drafting approaches to addressing the impacts from roads.

The federal coastal zone statute, however, requires state agencies, like the ODEQ, to develop and submit enforceable policies to achieve the Coastal Zone Act Reauthorization Amendments (CZARA) nonpoint source goals. The ODEQ has not yet presented the EPA and NOAA with completed Mid-Coast IR-TMDLs, including examples of mandatory and enforceable BMPs, that, when implemented, would result in attainment of applicable WQSs. If the ODEQ chooses to allow the Designated Management Agencies (DMAs) to develop the BMPs, then the ODEQ needs to determine whether the BMPs submitted by the DMAs are adequate and, if not, the ODEQ would need to develop additional BMPs if DMA actions alone are not adequate to meet applicable WQSs. The process the ODEQ would use to make this assessment and potentially impose additional BMPs is not clear yet. In addition, it is not clear whether the ODEQ would incorporate the DMA-developed BMPs into the TMDL document. If the BMPs are not part of the TMDL document, then the TMDLs would be more representative of traditional TMDLs, rather than IR-TMDLs and likely would not enable Oregon to satisfy its Coastal Nonpoint Program condition absent any enforceable measure to ensure that the BMPs developed outside the TMDL process become enforceable.

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2) ***Will Oregon's Plan for Developing Implementation-Ready TMDLs throughout the Coastal Nonpoint Program Management Area Satisfy the Outstanding Condition on Additional Management Measures for Forestry for the State's Coastal Nonpoint Program?***

Based on what the ODEQ has presented to the EPA and NOAA to date, we do not believe the current IR-TMDL approach is likely to satisfy the outstanding condition requiring additional management measures for forestry for Oregon's Coastal Nonpoint Program. In the findings of the EPA and NOAA's 1997 conditional approval for Oregon's Coastal Nonpoint Program, we noted weaknesses in the State's ability to adequately address impacts from forest roads, as well as the State's ability to protect riparian and landslide prone areas, among other issues.

Although a conceptual forest road strategy that the ODEQ discussed with the EPA and NOAA has the potential to satisfy those conditions, the ODEQ has not, to date, provided a required road strategy with any measure of specificity. Key elements of a viable forest road strategy that could address outstanding concerns include, but would not be limited to:

- development of an inventory/assessment to identify where impacts from forest roads exist;
- development of a reasonable timeline for retiring or restoring forest roads that cause adverse water quality impacts;
- development of a requirement to track and report on progress to remediate identified forest road problems. Implementation principles for the tracking program could include addressing the worst road problems or highest risk categories of road problems earlier in the overall timeline as well as milestone-based targets to ensure steady progress on identified road work; and
- identification of effective BMPs for road siting, construction, operation, maintenance, abandoning, and closing to ensure road stability; drainage of road runoff back to the forest floor rather than directly to streams and other waterbodies; and adequate protection of both fish and nonfish bearing streams. This BMP identification and development effort could include establishing targets for the maximum percentage of a road network allowed to discharge directly to streams and other waterbodies, or other similar targets. This identification should include expectations for periodic monitoring or inspections: to track BMP implementation; to determine if targets are being met; to assess BMP effectiveness; and to determine whether there is any need to adjust BMPs in the future.

The EPA and NOAA are also concerned about Oregon's lack of progress identifying additional management measures for the protection of riparian and landslide prone areas. The Oregon Department of Forestry (ODF) is not considering requirements for the protection of riparian areas around nonfish bearing streams in its current riparian rulemaking effort. It is not clear whether ODF will have developed adequate requirements for the protection of riparian areas around small and medium fish bearing streams through the ODF rulemaking process by the time the EPA and NOAA have committed to make a final decision on the adequacy of Oregon's Coastal Nonpoint Program.

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In addition, the ODEQ has not developed additional management measures for small and medium fish bearing streams or nonfish bearing streams in the IR-TMDL effort. A significant body of science supports increases in the levels of protection afforded to riparian areas around small and medium streams in Oregon. Increased no-cut buffers, higher tree retention targets, minimum canopy retention targets, and/or higher basal area targets are currently required on private forest land for similar forest types in the two adjacent coastal states.

Many practices are available that, in combination, could help Oregon meet the additional management measures for forestry condition by protecting riparian areas, reducing sediment loads, and addressing large wood and stream temperature issues. Those practices include, but are not limited to: buffering key segments of nonfish bearing streams that affect downstream water quality above confluences of nonfish bearing streams and fish bearing streams; buffering hollows, inner gorges, headwalls, unstable landforms, and stream initiation points; and buffering special aquatic sites such as seeps, springs, wetlands, and beaver ponds. NOAA and the EPA recommend that Oregon consider riparian protection approaches similar to those that have addressed Coastal Nonpoint Program requirements in the neighboring coastal states.

Oregon has not yet provided sufficient information regarding additional management measures for landslide prone areas. ODF already requires management measures for protection of landslide prone areas that pose a risk to humans. A similar approach could be applied on high risk landslide prone areas to protect water quality and fisheries. Oregon could also consider adopting measures similar to the State of Washington's "Forests and Fish" rule provisions for protection of landslide prone areas.

A viable program for the protection of Oregon's landslide prone areas could include a process for identifying and designating high risk landslide prone areas. Factors such as slope and landform, sediment and wood delivery potential, and geologic factors should be used in the designation. Landscape scale mapping and analysis tools (e.g., LiDAR and DEMs) could help focus risk identification and designation efforts. An array of BMPs, including no harvest and thinning at various levels to maintain root strength and reduce precipitation impacts on soils, could be required in high risk areas based on factors such as delivery potential, the sensitivity of the aquatic resources, existing instream conditions, or other parameters. Oregon also may wish to consider an option to provide flexibility for forest land owners to rely on certified geologists or engineers to develop BMP options that provide equal or greater protection than the more broadly required measures. The program that Oregon develops to address landslide prone areas needs to address an adequate protection for both fish and nonfish bearing streams.

3) ***Feedback on the State's Progress in Meeting the New Development Condition on its Coastal Nonpoint Program***

To address its remaining condition for new development, the ODEQ has proposed to:

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- develop guidance, consistence with the new development 6217 (g) management measure, for TMDL Implementation Plan development for urban and rural residential areas within the Coastal Nonpoint Program management area boundary; and
- provide a strategy and schedule for completing and updating TMDL Implementation Plans to be consistent with that new guidance.

In its July 21, 2010 and July 26, 2010 letters to the EPA and NOAA, the ODEQ explained its continuing progress and deliberate intention to complete actions according to the interim milestone deadlines identified by the EPA and NOAA or as modified by the ODEQ. The deadlines identified by the EPA and NOAA include: a final draft of the guidance by December 31, 2010, releasing the final guidance by June 30, 2011, and beginning to hold workshops for DMAs by June/July 2011. However, the ODEQ has not met any of these commitments. As the EPA and NOAA notified the ODEQ in our July 23, 2012, comments, the draft *Guidance for TMDL Implementation Plan Development for Urban/Rural Residential Land Uses within the Coastal Nonpoint Management Area* (Implementation Guidance) that the ODEQ provided the EPA and NOAA to review on June 29, 2012, still needs significant work.

While the EPA and NOAA have been supportive of the potential for this Implementation Guidance approach to address the new development management measure requirements, we are very concerned that the deadlines have slipped significantly. In addition, based on our review of the July 2012 draft of the Implementation Guidance, it is still unclear whether the TMDL Implementation Plans developed under this Guidance would include practices consistent with the management measure for new development identified by the federal agencies under the Coastal Zone Act Reauthorization Amendments, as well as whether the ODEQ even has the authority to require implementation of the new development management measure, as needed (see comments the EPA and NOAA provided to the ODEQ by email on July 23, 2012). The Implementation Guidance for urban areas might not enable Oregon to satisfy the new development management measure condition.

As the ODEQ finalizes the Implementation Guidance, it should provide unambiguous instruction to the DMAs that practices consistent with the new development management measure need to be incorporated into their TMDL Implementation Plans (i.e., practices that will reduce post-development total suspended solid (TSS) loadings by 80% or reduce TSS loadings so that the average annual TSS loads are no greater than predevelopment loadings, and maintain post-development peak runoff rate and average volume to pre-development levels). The federal agencies will review the Implementation Guidance to ensure that it clearly indicates that the ODEQ can ensure implementation of the new development management measure, as needed.

Based on staff communications, the EPA and NOAA had understood that the Implementation Guidance would require Urban DMAs to include practices consistent with the new development measure within their TMDL Implementation Plans or, at a minimum, that the ODEQ would have the ability to require implementation of the recommended new development management measure. While states may rely on voluntary approaches, backed by enforceable authorities, to meet their Coastal Nonpoint Program requirements (see the EPA/NOAA 1998 *Final Administrative Changes Memo*), statements in Oregon's July 2012

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draft Implementation Guidance appear to contradict Oregon's September 23, 2005, legal opinion asserting that the ODEQ does have authority to require implementation of the 6217(g) measures as necessary to control nonpoint source pollution. We urge the ODEQ to resolve this apparent discrepancy.

The EPA and NOAA hope the ODEQ will expeditiously complete the *Guidance for TMDL Implementation Plan Development for Urban/Rural Residential Land Uses within the Coastal Nonpoint Management Area* and ensure that it clearly states that Urban DMAs need to include practices consistent with the new development measure and that the ODEQ has the ability to ensure, as needed, implementation of these practices. We strongly encourage the ODEQ to share a revised final draft of the guidance with the EPA and NOAA for review as soon as possible so we can confirm that these requirements are met or provide recommendations for how the draft can be improved further.

4) ***Feedback on the Oregon's Progress in Meeting the Onsite Sewage Disposal System (OSDS) Condition on its Coastal Nonpoint Program***

To address its remaining condition for OSDS, the ODEQ committed to develop rules to require point-of-sale inspections for systems within the Coastal Nonpoint Program management area. The EPA and NOAA applaud Oregon's progress on rule development and the fact that Oregon was on target for meeting benchmarks set out in its July 21, 2010, and July 26, 2010, letters. On September 27, 2012, the ODEQ proposed rules to require all OSDSs within the Coastal Nonpoint Program management area to be inspected by a professional engineer, registered environmental health specialist, wastewater specialist or certified inspector at the time of property transfer and that the results of the inspection would be reported to the ODEQ. The State has also provided a sample inspection form that provides a detailed examination of the system beyond a simple visual inspection. The proposed rules requiring point-of-sale inspections and reliance on qualified inspectors, combined with the State's detailed inspection form, should enable the State to satisfy the OSDS condition if adopted as proposed.

The EPA and NOAA are aware that the ODEQ has decided to delay presenting the proposed rules to the Oregon Environmental Quality Commission (EQC) for adoption until March 2013 to give the ODEQ more time to discuss the proposed rules with several State legislators. We recognize some additional time may be needed to address potential concerns. However, we strongly hope that the ODEQ will present the proposed rules to the EQC for adoption in March 2013. In addition, the EPA and NOAA expect the ODEQ to ensure that significant changes to the proposed rules do not occur such that the rules would no longer enable Oregon to satisfy the remaining OSDS condition. If not, the EPA and NOAA may not have everything they need by the end of June 2013 to fully approve Oregon's Coastal Nonpoint Program by November 15, 2013.

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