

Memo

To: MidCoast TMDLs local stakeholder advisory committee (LSAC)

From: DEQ Project Team

Date: October 27, 2014

Subject: MidCoast TMDLs – DEQ Status Report to LSAC

DEQ is providing this update on the status of the MidCoast TMDLs development to the local stakeholder advisory committee (LSAC) and members of the Sediment, Temperature and Bacteria Technical Working Group (TWGs). It is meant to report on progress and provide status information since the April 2014 meeting.

TMDLs development Schedule/Workplan: DEQ is periodically evaluating its TMDLs development Workplan and schedule, based on a combination of factors, including: the status of technical tasks, available resources, regulatory, legal and policy considerations, and the stakeholder involvement process. Our estimated schedules are shown below.

Freshwater Bacteria TMDLs: Based on current status and amount of work to be completed, we estimate that development of the freshwater Bacteria TMDLs (load duration curves, LDCs) will proceed according to the following schedule:

Estimated Schedule for LDC based freshwater TMDLs

Task	Target Completion Date
Receive LDC reviews from TWG members	Dec-2013
Review TWG comments on LDC and report back to TWG	Dec-2014
Load Allocations developed	Feb-2015
DMAs consult with ODEQ to develop implementation plans for load allocations	Jun-2015
DMA Implementation Plans submitted to ODEQ	Jul-2015
Develop Adaptive Resource Management plan	Nov-2015
Draft TMDL and WQMP ¹ completed	Dec-2015

Big Elk Creek Bacteria TMDL: Based on current status and amount of work to be completed, we estimate that development of the freshwater Bacteria TMDL for Big Elk Creek (using watershed model, WM) will proceed according to the following schedule:

Estimated Schedule for WM based freshwater TMDL for Big Elk Creek

Task	Target Completion Date
Distribute parameter estimation and model performance results to TWG members for review	Nov-2014
Receive parameter estimation and model performance results reviews from TWG members	Feb-2015
Model uncertainty analysis	Jun-2015
Distribute model uncertainty analysis results to TWG members for review	Jul-2015
Receive model uncertainty results reviews from TWG members	Oct-2015
Load Allocations developed	Nov-2014
DMAs consult with ODEQ to develop implementation plans for load	Jan-2016

¹ Water Quality Management Plan (see OAR 340-042-0030)



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allocations	
DMA Implementation Plans submitted to ODEQ	Mar-2016
Develop Adaptive Resource Management plan	Jul-2016
Draft TMDL and WQMP ² completed	Nov-2016

Beach bacteria TMDLs: Similarly, we estimate that development of the Beach (recreational water contact) TMDLs will proceed according to the following schedule:

Estimated Schedule for Beach (recreational water contact) TMDLs

Task	Target Completion Date
Complete form used to review beach information and input about sources	Jan-2015
Distribute form and related information to TWG for review	Feb-2015
Receive Beach reviews from TWG members	Apr-2015
Review TWG comments on Beaches and report back to TWG	Aug-2015
Load Allocations developed	Oct-2015
DMAs consult with ODEQ to develop implementation plans for load allocations	Mar-2016
DMA Implementation Plans submitted to ODEQ	Apr-2016
Develop Adaptive Resource Management plan	Sep-2016
Draft TMDL and WQMP completed	Oct-2016



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The estuarine waters (fecal coliform-shellfish growing waters) TMDLs will be developed following the Freshwater LDCs because of the connection between land surface run-off bacteria loads and estuarine conditions.

Sediment/Biocriteria/Turbidity TMDLs

Based on current status and amount of work to be completed, we estimate that development of the draft Sediment TMDLs will proceed according to the following schedule:

Estimated Schedule for Sediment/Biocriteria/Turbidity TMDLs

Task	Target Completion Date
DEQ & TWG work on source assessment analysis (<i>ongoing</i>)	Jan - July 2014
Source Assessment Complete	Dec-2014
TMDL Allocations developed	Dec-2014
DMAs consult with ODEQ to develop implementation plans to for allocations	Jan 2015 to June-2015
DMA Implementation Plans submitted to ODEQ	June-2015
Develop Adaptive Resource Management plan	Oct-2015
Draft TMDL and WQMP completed	Dec-2015

Adaptive Resource Management: We discussed the IR-TMDLs process with LSAC members at the April 16, 2014 meeting and identified key points where LSAC input will be sought. The majority of recent TWG discussion has been focused on technical approaches (i.e., biological criteria methods & results, sediment source assessment/analyses and bacteria source analyses). This input continues to play a crucial role in the development of the Mid-Coast TMDLs. Over the next three to six

² Water Quality Management Plan (see OAR 340-042-0030)

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months we anticipate that the majority of work will continue to be in the TWGs, and LSAC members are encouraged to attend those meetings.

We plan to schedule the next LSAC meeting when we are ready to gather input on significant next steps (e.g., discussions of draft load allocations and implementation strategies) or changes in the current approaches. In the meantime, we are open to LSAC members' feedback concerning whether there is sufficient communication on the status of the TMDLs work. DEQ would be responsive if LSAC members collectively ask for meeting(s) during this period.

Litigation update: There is no final resolution to temperature and TMDLs litigation at this time (see January 2014 LSAC update memo for links and information). For the CZARA litigation, EPA and NOAA posted the comments received on the agencies' draft decision to disapprove Oregon's Coastal Nonpoint Source Control Program at the following link: <http://coast.noaa.gov/czm/pollutioncontrol/oregondocket/public-comments/>

A number of LSAC member organizations and interested parties submitted comments to EPA and NOAA. We encourage LSAC members to review the comments, since they collectively contain substantial background information along with the opinions expressed by the commenters.

Temperature TMDLs technical work: DEQ postponed additional Heat Source modeling, including calibration, model scenarios of natural conditions and characterization of cold-water refugia, or potential management actions, until further resolution of two separate litigations concerning Oregon's temperature standards and TMDLs. We are examining technical approaches that can be applied within the framework of the current standards (i.e., following removal of the natural conditions criteria) and plan to report back to the LSAC and TWG when we have identified the available options.

Ongoing efforts include collaboration with the Oregon Dept of Agriculture (ODA) on riparian vegetation classification and characterization methods in the Strategic Implementation Areas under the Agricultural Water Quality Management program and involvement with the Oregon Dept of Forestry (ODF) on the review of the riparian rules under direction of the Board of Forestry.

Sediment/Biocriteria/Turbidity (Drinking water protection) technical work: The primary areas in which work is progressing include:

- **Biocriteria:** DEQ is conducting statistical analyses to evaluate strength of relationships among characteristics of impaired and non-impaired segments using the watershed characteristics developed with extensive TWG input. The overall approach includes applying a class of models referred to as Spatial Statistical Models of Stream Networks combined with regression-type models. This approach and the associated organization of data for conducting the analyses are being finalized will be described in detail at the October 28, 2014 Sediment TWG. We expect to provide preliminary results of the data organization at that meeting.
- The source analyses for the Siletz turbidity 303(d) listed segment is being evaluated using the same method that is being used for the biocriteria impairments and will be discussed at the next Sediment Technical Working Group meeting.



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- **TWG/LSAC input:** DEQ requested and received both formal (written) and less formal (email) comments in August and September 2013 from TWG/LSAC members on the Biocriteria methods and results that were distributed. Comments were also received on the methodology for the draft 2012 Integrated Report. DEQ considered all of the comments and is addressing them through the appropriate forums, including the TWG meetings, TMDLs documentation and response to comments on the 2012 Integrated Report. A response to comments is expected to be available for the October 28, 2014 Sediment TWG meeting.
- **Future biomonitoring:** DEQ is working with state agency partners and other stakeholders to identify resources to conduct biological monitoring at the appropriate spatial and temporal scales. We will include an update on these efforts in the aforementioned response to comments.
- **Source Assessment literature review:** The most current protocol and literature search rules were distributed to TWG members in January 2014. The primary task thus far has been to gather and organize the literature for the review. We expect that the evaluation will be conducted over the next 8 months and an update will be provided to the Sediment TWG on October 28, 2014.
- Updates and outputs will be posted at the Mid-Coast TMDLs project website at: <http://www.deq.state.or.us/wq/tmdls/midcoastLSAC.htm>

Bacteria TMDLs technical work: The bacteria TMDLs technical activities are focused on the following topical areas:

- **Calculations of Load Duration Curves (LDCs) for freshwater streams:** based on extensive input and assistance from Bacteria TWG members, DEQ developed automated methods to calculate the LDCs for more than 100 stations in the Mid-Coast basin. This automation allows for standardization of the methods, which ensures reproducibility and transparency for the TMDL development. Draft results packets for 18 watersheds were distributed to TWG members for review and comment and more are being prepared. DEQ received extensive comments from TWG members and is revising the LDC in response. We plan to report back to the TWG by December 2014. A notice will be sent soon.
- **Development of methods for the LDCs for the estuaries:** DEQ will use methods from LDC calculation for freshwater streams and rivers; an approach for development of the LDCs for the estuaries that accounts for the fluxes of fresh and saline water has been selected and major components of this approach will use the same methods from the LDC calculations for the freshwater streams and rivers. Once the LDCs are completed for the freshwater streams and rivers, DEQ staff will begin the tasks for calculating the LDCs for the estuaries and a projected schedule will be distributed.
- **Development of the Big Elk Creek watershed model:** DEQ is conducting parameter estimation using model performance measures and TWG is providing feedback to DEQ on the accuracy of source population and number estimates along with the quality of model performance. DEQ is also working with a consultant to extend the time-period of meteorological input data to include more recent bacteria sample data in the modeling effort.

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- **Development of methods for interpretation of load reductions for beaches:** DEQ is actively working with the TWG on reviewing data and characteristics of beaches with violations of the bacteria standards. TWG members are advising DEQ on the geographic & jurisdictional grouping of beach monitoring locations for analysis while considering implementation efficiencies as well as examining approaches to the source analyses.

New Tasks: DEQ is reviewing the available data for dissolved oxygen (DO) in the Basin. Dan Sobota accepted a technical analyst position and his initial focus is on reviewing available data primarily from mainstem projects conducted by DEQ for the purpose of examining 303(d) listed segments and collecting associated nutrient and temperature data. Most of those projects were conducted in 2008. We anticipate that the DO data evaluation will be completed in December 2014. Once the review is complete, we will provide that information to the LSAC for review and discussion of approaches. If the available information supports development of TMDLs in listed segments, we anticipate that the Temperature TWG would be the most appropriate forum for evaluation of the technical approach(es) and would ask the TWG to reconvene.

Because this is an important consideration in light of LSAC members' recommendations to address multiple impairments where possible, DEQ would bring this topic to the LSAC for discussion in advance of a final decision on approaches.

Thank you for your patience and continued involvement in this TMDLs process. Please contact us if you have questions or comments.



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