



MEMORANDUM

TO: Mid-Coast Basin TMDL Local Stakeholder Advisory Committee (LSAC) Members
FROM: Megan Kmon and Turner Odell, Oregon Consensus (OC), with DEQ Project Team
SUBJECT: Action Items from July 15 Meeting
DATE: August 17, 2015

This memo follows up on the 10th meeting of the Mid-Coast Basin Implementation Ready (IR) Total Maximum Daily Load (TMDL) LSAC, held at the Newport Recreation Center in Newport, Oregon, on July 15, 2015. The memo includes proposed future meeting dates, identified action items, meeting attendance, updates, and summaries of key topics discussed.

UPCOMING MEETINGS

Meeting	Date	Location
Sediment TWG 13	TBD; not likely before late October (pending progress on literature review) ¹	TBD
Newly formulated/coordinated Temperature & Dissolved Oxygen (DO) TWG meetings ²	November 19, 2015 (<i>tentative</i>)	TBD
Bacteria TWG 17	December 9, 2015	TBD
LSAC 11	First quarter 2016 (date will be identified in November)	TBD
Biomonitoring site visit for LSAC/TWG members	Scheduled for August 19, 2015; invitation and details distributed by David	Mapleton area

¹ DEQ feels that it is crucial to have completed the literature review in order to have substantial material for a Sediment TWG meeting. The very earliest the review will be complete is late October or early November – but it is also very possible that we will not be able to have a Sediment TWG meeting until early 2016.

² Although LSAC/TWG members and the project support team previously discussed creating a combined Temperature/Dissolved Oxygen TWG, the project team ultimately concluded that for clarity and efficiency, it was preferable to identify two separate TWGs. However, the project team recognizes there is likely to be substantial overlap between these two working groups and is committed to holding joint or closely coordinated meetings of these two groups as appropriate in order to ensure that participants are able to participate as efficiently as possible.

ACTION ITEMS

Action Item	Who	Date
1. <u>Action Items</u> <ul style="list-style-type: none"> • Prepare draft Action Items memo and distribute to LSAC members for review 	Megan and Turner (OC with DEQ)	Complete
2. <u>Documents to Website</u> <ul style="list-style-type: none"> • Post presentations and meeting documents to project website 	David (DEQ)	By August 5, 2015
3. <u>Monitoring</u> <ul style="list-style-type: none"> • Develop and distribute menu of options to Bacteria TWG and copy LSACmembers • Distribute a list of community-based organizations for potential collaboration 	David (DEQ) David (DEQ)	Mid-August Mid-August
4. <u>Temperature/DO TWG</u> <ul style="list-style-type: none"> • Email LSAC members for interest in inclusion in, or removal from, Temperature/DO TWG 	David (DEQ) and Turner (OC)	With Action Items
5. <u>Rosters</u> <ul style="list-style-type: none"> • Revise and place updated LSAC and TWG rosters on project website • Distribute to LSAC and TWG members 	David (DEQ) and Turner (OC) Turner (OC)	ASAP With Action Items

ATTENDANCEProject Team Members

Kevin Brannan (DEQ), David Waltz (DEQ), Peter Bryant (DEQ), Ryan Michie (DEQ), Dan Sobota (DEQ), Gene Foster (DEQ), Zach Loboy (DEQ), Alan Henning (EPA Region 10)

Facilitation

Turner Odell (OC), Megan Kmon (OC)

LSAC Members

Roy Kinion (Lincoln County), Kami Ellingson (USFS), Paul Engelmeyer (Native Fish Society), Jo Morgan (ODA), Stephen Hager (Siuslaw Watershed Council), Randy Hereford (Starker Forests), Jeff Light (Plum Creek), Wayne Hoffman (Mid-Coast Watershed Council), Richard Huff (Private Landowner), Heather Medina-Sauceda (NRCS), Charlie Plybon (Surfrider), Paul Robertson (Devils Lake WTD), Una Monaghan (Salmon-Drift Creek Watershed Council), Karl Schumacher (Georgia Pacific), Joe Steere (Private Landowner), Al Doelker (BLM), Stan van de Wetering (Confederated Tribes of the Siletz Indians), Liz Vollmer-Buhl (Siuslaw Watershed Council), Melissa Newman (Lincoln SWCD)

Other Attendees

Jim Welsh (*Oregon Cattlemen's Association*), Tyler Pederson (*Siuslaw Watershed Council*), Elizabeth Daniel (*Devils Lake WID*), Seth Barnes (*OFIC*), Gary Springer (*BOF*), Steve Wegner (*Salem BLM*), Joe Kreiter (*Hart Crowser*), Jennifer Bakke (*Hancock Forest Management*)

MEETING NOTES

Opening Remarks/Meeting Objectives

Turner Odell (*OC*) welcomed the group and provided a brief refresher on OC's role, including an explanation of OC, its mission, and its process. OC is currently funded by EPA through its contractor Tetra Tech to provide facilitation support to the Mid-Coast Basin's TMDLs development process. Turner is taking over responsibilities for Peter Harkema, though Peter may still be involved in the future. Jessie Conover is no longer with OC, as she has moved on to a new opportunity; Megan Kmon is now providing facilitation support. Turner reviewed objectives for the meeting, which were to provide updates on the TWGs, the technical approach for dissolved oxygen (DO), and an update on DEQ's review of the local organizations' monitoring programs.

Member Updates

- Melissa Newman of Lincoln SWCD is new to the group, replacing Josh Lambert.
- Alan Henning of the EPA gave an update on the CZARA process. As a brief background, EPA and NOAA were sued in 2008 because they had not issued a final decision on Oregon's Coastal Nonpoint Pollution Control Program. Per the settlement agreement, EPA and NOAA were supposed to make a final decision by January 2014 but subsequently disapproved Oregon's program due to four outstanding issues:
 - Protection of medium, small, and non-fish bearing streams
 - Protection for high-risk landslide areas
 - Adequacy of state rules to address private forest roads, and
 - The adequacy of stream buffers for the application of certain chemicals (pesticides)

Working groups (or other forums) have been formed to address each of these areas. The state is working to receive full approval in order to retain full funding under federal Clean Water Act §306 and §319.

- Jo Morgan of ODA mentioned two new web pages as well as an upcoming meeting that may be of interest to group members. The Oregon Watershed Enhancement Board (OWEB) has a new GIS Resource page (<http://www.oregon.gov/OWEB/Pages/GIS.aspx>) and ODA has a new Strategic Implementation Areas page (<http://www.oregon.gov/ODA/shared/Documents/Publications/NaturalResources/SIA2.pdf>). She also mentioned via email after the meeting that an evaluation of the Mid Coast Agricultural Water Quality Management Area Plan is underway. A Local Advisory Committee will meet on September 29 in Yachats for an evening meeting to provide recommendations on area plan implementation. The meeting will be open to the public. Anyone who would like to receive information about the meeting can email Jo at jmorgan@oda.state.or.us or call her at 503-986-4712.
- Per Wayne Hoffman's inquiry, Gene Foster and DEQ staff reported that DEQ has contacted permitted point sources about strategies to meet water quality standards during low flow discharges and that municipalities facing water shortages have been directed to contact the Water Resources Department. (Note: The Governor's office has convened a "Drought Council" with state agency representatives, and ODFW has been identified as the agency contact concerning fish and low flows).
<http://www.oregon.gov/gov/policy/Pages/Drought.aspx>

Summary Of Key Themes

Update on Bacteria TWG (Kevin Brannan, DEQ)

A statistical modeling approach using Load Duration Curves (LDCs) is being used to develop TMDLs for most of the freshwater listed segments in the Mid-Coast. LDC Reports for each watershed have been developed and

reviewed by the TWG members and are now being finalized. In addition, the TWG reviewed a work schedule developed by DEQ for developing TMDL documents and implementation plans based on the LDC work for watersheds within the Mid-Coast area. Kevin explained that DEQ will develop TMDLs for each watershed rather than one big document for the entire basin.

Bacteria TMDLs for Big Elk Creek and the Upper Yaquina River are being developed using a watershed modeling (mechanistic as opposed to statistical) approach. Kevin reviewed the status of the watershed models for Big Elk Creek and the Upper Yaquina. He reiterated the benefits of this type of model: it can help understand the system better; it is one approach to linking sources with effects; it can work in conjunction with direct monitoring; and it can help make better management decisions. The simulation period for the Big Elk Creek model was recently extended from 2010 to 2014 in order to include recent meteorological and bacteria data. The components of the model are currently under review by a third party contractor and should be completed by the end of this year.

The Big Elk Creek model is now being adapted and applied to the Upper Yaquina River watershed. DEQ's approach is to build on the work already done in Big Elk Creek and to work on different river segments in order to eventually develop an integrated model for the Yaquina River basin. The model will supplement LDCs and help support implementation with DMAs. Contractor work for the Yaquina River model began in June. Ultimately, the models help identify the sources of pollution, pollutant transport and fate, and relate changes in management practices to water quality responses.

Kevin also discussed preliminary results from a round of data collected from the TWG and volunteer participants on a variety of beaches to help identify bacteria sources. The data was collected between February and May of this year from 18 beaches (87 stations). He has been in the process of analyzing the data and putting it in a usable electronic format that interfaces with Google Earth. While the data still needs to be analyzed further and can be grouped differently, key sources identified include fresh water discharges to the beach, animals, debris and trash, odors, activities, and the number of people on "High Use Days." This data helps to make connections between pollutant sources and concentrations that are above the criteria so that strategies/measures can be developed to address the exceedances. Kevin will propose specific ideas and solicit responses/ideas from the TWG on how this data might be used. Kevin will also seek input on what publically available site might be used to house the data. Kevin proposed Oregon Health Authority (OHA) as a possible option; Charlie Plybon suggested that the Oregon Beach Monitoring Program (OBMP) might also be a good resource. (Note: The OBMP is comprised of DEQ, OHA and supported by EPA funding.)

Jeff Light (*Plum Creek*) asked if load allocations have been developed. David Waltz (*DEQ*) said that they have not yet been developed and that there is no single official document identifying the allocations. These are being developed in conjunction with the watershed LDC Reports, and DMAs will subsequently be identified. Kevin said that the development of TMDLs documents will follow.

Update on Sediment TWG (Peter Bryant, DEQ)

Peter presented an update on the source analysis model that DEQ developed in consultation with the TWG that evaluates linkages between watershed characteristics, potential sediment sources, and biological responses. The components that have been completed are location/scope, pollutant, target/loading capacity, and excess load. DEQ and the TWG are currently working on the source assessment/linkage analysis. The focus is on biological impairments where sediment is identified as the stressor. Additionally, macroinvertebrate sampling data that wasn't originally available when model was first built is being incorporated (107 additional stations and a total of 180 additional samples). A literature review to aid in the modeling process is also being conducted. It will be used in two steps of this process: the TMDL component, where model variables will be quantitatively or qualitatively linked to what is happening in the watershed in order to assign load allocations to sources, and the WQMP component to help translate model results to management strategies. A contractor funded through the EPA has been secured to help with the literature review.

Per Kami Ellingson's (USFS) question about ongoing data collection, David Waltz (DEQ) said that a statewide biomonitoring program just recently received funding again, so new collection will begin this summer at coastal zone reference sites. At Paul Engelmeyer's (Native Fish Society) request, David will strive to let LSAC members and other local groups know when data collection is happening in their area, but noted that it might be difficult to get this information in advance from field personnel during the busy field season. (NOTE: A site visit has been scheduled for 8/19/2015; see invitation for details)

In response to Joe Steere's (private landowner) question about the geographic extent of inclusion criteria for the literature review, DEQ responded that it will include Oregon, Washington, and British Columbia west of the crest of the Cascades; the Siskiyou Mountains and coastal ranges of northern California; northwest British Columbia; southeast Alaska. In response to Roy Kinion's (Lincoln County) question about the O/E score for Montgomery Creek, DEQ reported that the value in the table meets the 0.85 benchmark; however, there were two additional samples (at 0.57 and 0.72) that triggered the designation of Montgomery Creek as impaired.

Update on Temperature Technical Approach (Ryan Michie, DEQ)

Following a lawsuit challenging the natural conditions criterion contained in Oregon's water quality standard for temperature, EPA disapproved that part of the standard in 2013. Following that disapproval, the Mid-Coast TMDLs Temperature TWG ceased work and it has been two and a half years since the last meeting. When meetings stopped, DEQ and the TWG were working on the Heat Source models, site potential vegetation identification, RipStream modeling results, and evaluation of channel morphology and cold water refugia. A TWG meeting is tentatively scheduled for November of this year. DEQ concluded that certain work can continue, including work on cold water refugia and TMDLs for stream segments where the natural conditions would likely result in water temperatures at or below the biologically-based numerical standard. Liz Vollmer-Buhl (Siuslaw Watershed Council) asked whether there are any TMDLs that they can move forward on and Ryan indicated the Yachats River and potentially the North Fork of the Siletz River are candidates.

Overview of Dissolved Oxygen (DO) Technical Approach (Dan Sobota, DEQ)

Dan began with an overview of the TMDLs process and basic DO processes in aquatic systems, and then discussed existing DO TMDLs in Oregon and data review conducted for the Mid-Coast Basin specifically. There are a number of DO listings in Oregon and the Mid-Coast that need to be addressed. DO is a fundamental water quality parameter, closely linked with temperature. Dan provided a handout with a conceptual model of the physical and biological processes related to DO: air-water exchange, gross primary production (GPP), and ecosystem respiration (ER). He reviewed the four basic state numerical criteria for DO – of which spawning and cold water are the most relevant – and the two components of DO TMDL development – nonpoint source load allocations and point source wasteload allocations. DEQ proposes to use continuous DO data to model air-water exchange, GPP, and EP to determine which rivers are candidates for mechanistic modeling. Data from 11 of the 14 stations are possible candidates for mechanistic models. Dan proposed the Alsea and Yaquina as pilot basins based on the availability of data. He also suggested that DO technical work with stakeholders be combined with the work of the Temperature TWG.

Turner (OC) confirmed with DEQ and the group that there was indeed interest in addressing both Temperature and DO issues in a single TWG – specifically the previously formed Temperature TWG. He emphasized that the newly reformulated group should be fully reflective of both components, so members should let DEQ and Turner know if they want to be added or removed as appropriate.

As noted above at footnote 2 (above): *Although LSAC/TWG members and the project support team previously discussed creating a combined Temperature/Dissolved Oxygen TWG, the project team ultimately concluded that for clarity and efficiency, it was preferable to identify two separate TWGs. However, the project team recognizes there is likely to be substantial overlap between these two working groups and is committed to holding joint or closely coordinated meetings of these two groups as appropriate in order to ensure that participants are able to participate as efficiently as possible. The project team will follow up soon to confirm the rosters for these two coordinated TWGs.*

Update on Partner Monitoring Programs (David Waltz, DEQ)

David explained that OWEB (Regional Review Teams and Oregon Plan Monitoring Team) are becoming more rigorous in their evaluation of monitoring grants funding, and that community-based monitoring organizations should be aware of this for future grant proposals and be prepared to provide supporting information for their request. To help align with the increased specificity OWEB will be looking for, David presented a “menu of options” that monitoring groups might consider, using the past and current monitoring network in the Alsea subbasin as an example. He will send an email to the Bacteria TWG members with these options as a starting point for consideration in monitoring locations for filling gaps in knowledge for status/trends and TMDL implementation, as well as any collaborative opportunities with other local groups that he can identify. He mentioned that this is time critical because the next round of grant proposals are to due to OWEB on October 19, 2015.