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**Date:** September 29, 2009

**To:** Environmental Quality Commission

**From:** Dick Pedersen, Director

**Subject:** Agenda Item F, Informational and Discussion Item: Draft Willamette Basin Rivers and Streams Assessment Report  
October 22-23, 2009 EQC Meeting

**Why this is Important** DEQ works to restore, maintain and enhance the quality of Oregon's air, land and water. Part of this work is evaluating the current and historical conditions of Oregon's environment, and having high-quality scientific data to support policy decisions. The Willamette Basin Rivers and Streams Assessment is based on a long-term study of water quality conditions related to land use in the Willamette River Basin and illustrates a number of themes in water quality and ecological health.

**Background** For over ten years, DEQ, the Environmental Protection Agency, watershed councils, municipalities and university students have been collecting data on biological, chemical and habitat conditions in the Willamette River Basin. Much of this work was done under the Oregon Plan for Salmon and Watersheds. In 2008, the Oregon Watershed Enhancement Board provided funding for DEQ to summarize this information. The information was collected using similar protocols and compatible sampling designs, which allowed DEQ staff to combine the data sets into an integrated assessment of the conditions of rivers and streams in the Willamette Basin.

**Results** DEQ found that 80 percent of agricultural and urban lands, and 20 percent of forest lands, in the Willamette Basin had impaired conditions for aquatic insects, fish and amphibians. Warm water temperatures, inadequate streamside vegetation and excessive streambed sediment were the most extensive and severe stresses on the biological conditions. The water quality condition, as shown by the Oregon Water Quality Index, strongly related to the conditions of the biological communities. Poor water quality indicated struggling biological communities, and good water quality indicated thriving biological communities.

This draft report suggests that stronger actions to protect streamside vegetation would benefit biological conditions in the Willamette Basin.

**Key Issues** Laboratory managers would like this opportunity to engage the commission in a conversation to discuss:

- How this draft report and assessment links to other DEQ programs;
- Why this draft report does not look at trends in the Willamette Basin; and
- Why a statistically based and large-scale assessment like the Willamette Basin Streams and Rivers Assessment is of interest to DEQ.

**Questions for Discussion** Based on the conversation and discussion outlined above, staff at DEQ would like EQC's feedback and discussion on:

- Is this type of assessment part of DEQ's core water quality activities;
- What are the implications of this data in our work with other agencies;
- How should this information be used to achieve more effective water quality management programs and how do we do so while maintaining the scientific objectivity of the assessment reporting; and
- How we can combine the results of all our many and diverse assessment activities to better communicate with the public about the overall conditions of Oregon's waters.

**EQC Involvement** The commission will review the report, discuss the questions above and suggest feedback based on the report and presentation.

**Attachments** A. Draft Willamette Basin Streams and Rivers Assessment Report – file on CD

Approved:

Division: \_\_\_\_\_

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