



Oregon

Theodore R. Kulongoski, Governor

Oregon Watershed Enhancement Board

775 Summer St NE, Suite 360

Salem, OR 97301-1290

(503) 986-0178

FAX (503) 986-0199

www.oregon.gov/OWEB

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MEMORANDUM

TO: Oregon Watershed Enhancement Board

FROM: **Greg Sieglitz**, Monitoring and Reporting Program Manager
Kyle Abraham, Effectiveness Monitoring Coordinator

SUBJECT: **Agenda Item K: Effectiveness Monitoring Program Update
September 14-15, 2010 OWEB Board Meeting**

I. Introduction

This report provides an update on a three-way partnership developing between OWEB, the Natural Resources Conservation Service (NRCS) and the Oregon Department of Environmental Quality (DEQ) that is designed to conduct programmatic effectiveness evaluation in support of Goals 1 and 3 in the OWEB Strategic Plan. The report also includes a brief update on additional major components of the effectiveness monitoring program.

II. Effectiveness Monitoring Partnership

A. Background

In 2009, staff from the Oregon Office of the NRCS and OWEB began meeting to explore whether shared goals associated with the evaluation of the grant programs designed to improve water quality and watershed functions and process could be established. It was quickly determined that a number of commonalities existed between the two agencies related to grant funding opportunities and purposes, needs to conduct programmatic evaluations, and responsibilities to report to the public, grantors, and policy makers about accomplishments and challenges. Early in the discussion, the agencies determined that it was important to incorporate DEQ into the partnership to capture the Total Maximum Daily Load and Section 319 programs in our efforts. DEQ staff also provide significant modeling and evaluation capability along with data and water quality expertise. Staff from all three agencies have been meeting regularly to develop the program scope, objectives, methods, site selection, and reporting methods.

B. Project Development

To date, the partnership has developed the project to include the general goals of:

- Building an understanding of the extent of the investment in watershed improvement actions through the agencies' collective grant programs;
- Developing a better understanding of how local organizations are utilizing the agencies respective grant programs, in concert;



- Conducting an evaluation of the impacts of grant investments on water quality and watershed health;
- Producing a description of gaps in the treatment of priority limiting factors and watersheds; and
- Designing tools and methods of reporting accomplishments to the public.

Through the use of GIS analyses and data mining, the team developed a long list of sites that included watershed basins where: OWEB grants, the NRCS investments [Agriculture Water Enhancement Program (AWEP), Cooperative Conservation Partnership Initiative (CCPI) and Conservation Technical Assistance (CTA) projects], and DEQ funding through the 319 program and a Total Maximum Daily Load (TMDL) all occur.

After this initial analysis and further refinement of the site selection criteria, two watersheds emerged as “pilot watersheds” which will serve to develop the framework for this partnership evaluation. The plan includes extending this collaborative effort into new watersheds in the future. The Tillamook Bay and Upper Deschutes watersheds have been selected due in large part to the term and extent of past investment of grant program dollars, the magnitude of projects undertaken, the availability of current data sets and models for these watersheds, and the potential to detect trends of change. The Tillamook Bay evaluation is likely to focus mainly on reductions of in-stream bacteria, and the Upper Deschutes will focus on a combination of increasing streamflow and decreasing stream temperatures.

C. Next Steps and Preliminary Results

The partnership is in the final stages of developing a Memorandum of Understanding (Attachment A) which will establish the formal relationship between the parties, outline the project goals and timeline, and allow for data sharing between the project partners.

The early analyses have already proven significant with a demonstrable reduction in bacteria in the Wilson River since 2002 (Attachment B) and an increase in water quality conditions as demonstrated by macro-invertebrates populations in the Upper Deschutes basin.

The team will continue to work through the calendar year to building a more complete understanding of the significance of funding watershed restoration actions in the pilot basins and the respective impacts. Staff will also outline the future areas of interest around the state for future analysis and reporting. OWEB staff will provide project updates to the Board at future meetings.

III. Other Effectiveness Monitoring Initiatives

The Board’s Strategic Plan established some priorities that included actions associated with effectiveness monitoring. While a significant portion of the funding to launch these initiatives is being held in reserve in preparation for a potential budgetary shortfall during the final quarter of this biennium, staff continue to focus on time-sensitive priorities associated with gleaning and reporting data, information, and lessons learned from effectiveness monitoring. The following contains a very brief summary of those initiatives:

A. Coordination with the Network of Oregon Watershed Councils

Staff continue to work with the Network on capturing and developing a framework for restoration projects and programs with the goal of reporting near-term outcomes. Funding

has been secured from the Spirit Mountain Community Fund and information about accomplishments from watershed councils is rolling in through a recent survey.

B. Enhancement of the OWEB web sites to deliver outcomes-based information

Staff and contractors have drafted and launched several new web formats and tools including the Oregon Watershed Restoration Inventory mapping tool enhancements through OSU's Oregon Explorer program, the Fish Passage Map Tool with the University of Oregon's Infographics Lab, information pertaining to economic and job stimulus resulting from OWEB grants with the University of Oregon's Ecosystem Workforce Program, and At-A-Glance web pages featuring results of recent effectiveness monitoring studies.

C. Improvements to OWEB databases and other information management systems

Staff, temporary employees, and interns have made significant progress in improving the databases and data quality, Geographic Information Systems (GIS), and information infrastructure that OWEB manages.

D. Other ongoing programmatic and project type effectiveness monitoring that OWEB supports includes:

1. Livestock exclusion riparian work (fourth season of monitoring underway);
2. Small dam removal (third year of monitoring underway-recently including Gold Ray Dam on the Rogue River);
3. Irrigation efficiency improvements (four seasons of monitoring Malheur basin/three seasons Deschutes);
4. Intensively Monitored Watersheds (mid-way through third year of monitoring John Day); and
5. Wetland restoration (concluding the second year of monitoring).

IV. Recommendation

This is an informational item. No Board action is requested at this time.

Attachments

- A. Draft Memorandum of Agreement: OWEB, NRCS, DEQ
- B. EPA's Non Point Source Success Story-Wilson River