



Oregon

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May 14, 2009

MEMORANDUM

TO: Oregon Watershed Enhancement Board

FROM: Ken Bierly, Deputy Director

SUBJECT: **Agenda Item R: Willamette SIP Progress Report
June 2-3, 2009 OWEB Board Meeting**

I. Introduction

This report describes the challenge and the progress made in implementing a large river restoration initiative. The report is prepared to inform the Board on the status, approach and challenges involved in the Willamette Special Investment Partnership. No Board action is requested.

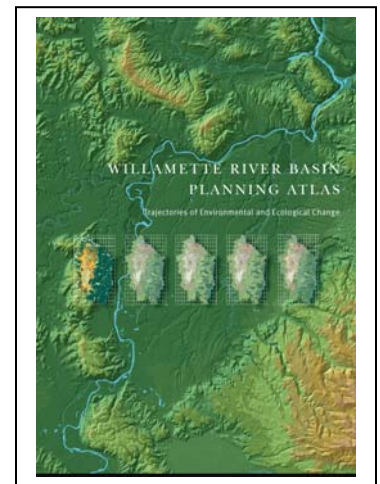
II. Background

In March of 2008, the Board approved the Willamette Special Investment Partnership (SIP). The Willamette SIP was seen as a significant opportunity to demonstrate the ability to address significant ecological outcomes with robust partnerships in an area of high visibility.

The partnership is unique in that it involves a private foundation funding partner, the Meyer Memorial Trust. The initiative was built on an extensive research program previously conducted by a consortium of Universities funded primarily by the Environmental Protection Agency (EPA). The Willamette River Basin Planning Atlas

(http://www.fsl.orst.edu/pnwerc/wrb/Atlas_web_compressed/PDFtoc.html)

provides an unprecedented context and guidance for the initiative. The Willamette SIP was organized around two ecological outcomes: 1) Reestablish channel complexity and length; and 2) Reconnect flood plains with adjacent active channels wherever feasible.



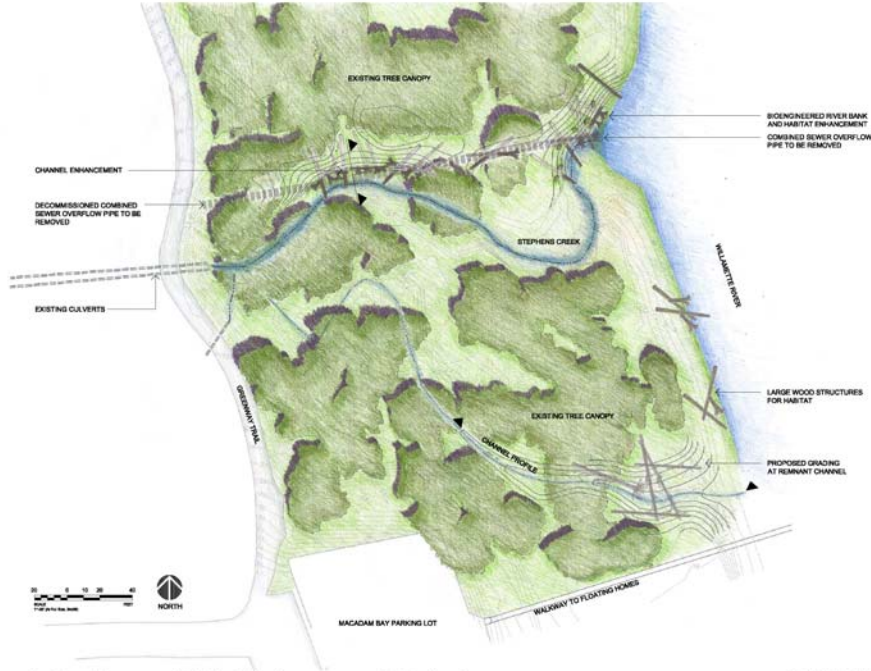
III. Willamette SIP Projects

To date, a total of six projects with a number of partners have been engaged in working with the Willamette SIP. OWEB funding has helped implement one project with the City of Portland and other partners. Two additional projects have been awarded funds and are in the process of being implemented, and three more are in the planning stages. Each project has a set of partners unique to that site and the River in the area of implementation. Several other projects are in development; we expect to receive applications related to these projects during the next 6-12 months.

A. Projects Funded and Implemented:

Stephens Creek Project: The Stephens Creek Project is in the City of Portland at the confluence of Stephens Creek and the Willamette River. The project eliminated a concrete barrier at the mouth of Stephens Creek in the Willamette floodplain and expanded the distributary of Stephens Creek where it meets the Willamette. The project was implemented by the City of Portland. The plan view (below) shows the treatment area at the mouth of Stephens Creek. Two sets of before and after photos show the changes from implementation.

Stephens Creek Restoration – City of Portland



Stephens Creek Confluence Habitat Enhancement Project



Mouth of the Creek **Before**



Mouth of the Creek **After**



Creek Channel

Before



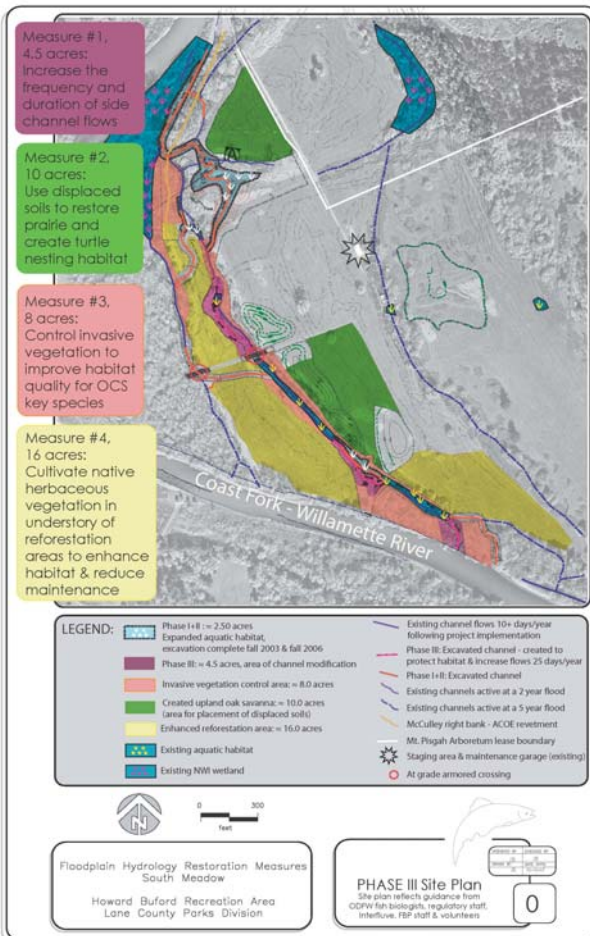
Creek Channel

After

Two additional projects are proposed for creek mouths in the City of Portland in coming years. While it is clear that there is limited opportunity to reconnect the floodplain or restore channel complexity, these projects are significant in the urban context in which they occur.

B. Projects Funded But Not Fully Implemented

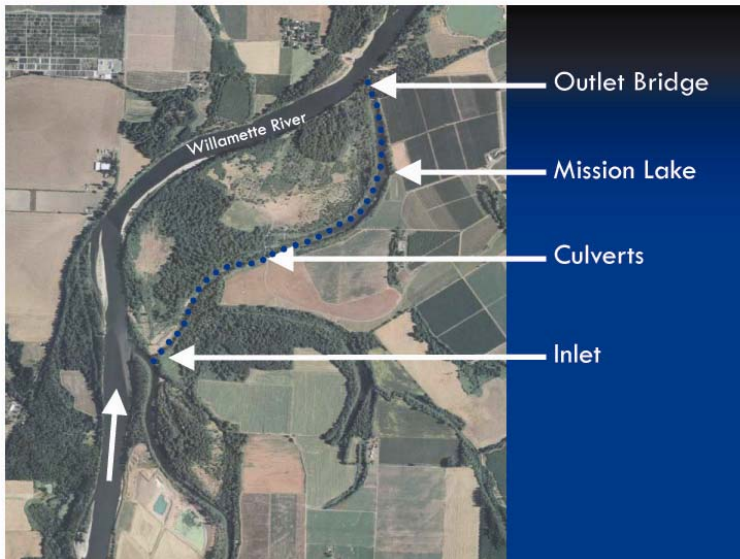
OWEB has funded two projects that have not been fully implemented. The projects have been designed and are proposed for implementation later this summer. The projects both address channel complexity in different areas of the Willamette.



South Meadows Floodplain Enhancement:

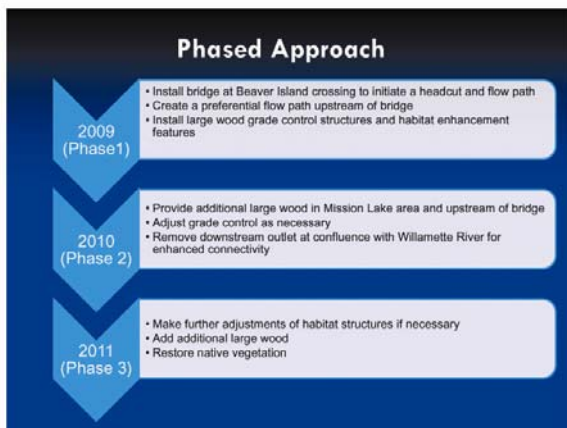
The Friends of Buford Park have been funded to reconnect a back channel to the Coast Fork of the Willamette River in the Springfield area. This project will be the subject of a field trip on June 3 following the Board meeting. The Meyer Memorial Trust (MMT) has funded the monitoring and outreach efforts associated with the project.

Willamette Mission State Park: The Willamette Riverkeeper and Oregon State Parks have been using the Willamette Mission State Park as a trial to use the Willamette SIP Technical Review Team as a guide for restoration planning. MMT has funded the project development and design for the Willamette Mission project. OWEB has funded the implementation anticipated to be started this summer. This is a new approach and appears to be working well for all involved. The project has matured from one involving significant earthwork to one eliminating human caused impediments and allowing the river to do much of the work. The primary purpose of the project will be to enhance flow through the back channel and through Mission Lake. The culverts on the crossing currently create an impediment to flow much of the year and have resulted in sediment deposition up gradient from the culverts. The project also includes removal of a plug placed at the inlet.



Mission Slough Project Elements

The phased approach will be implemented over three years but will help the team learn as implementation occurs.

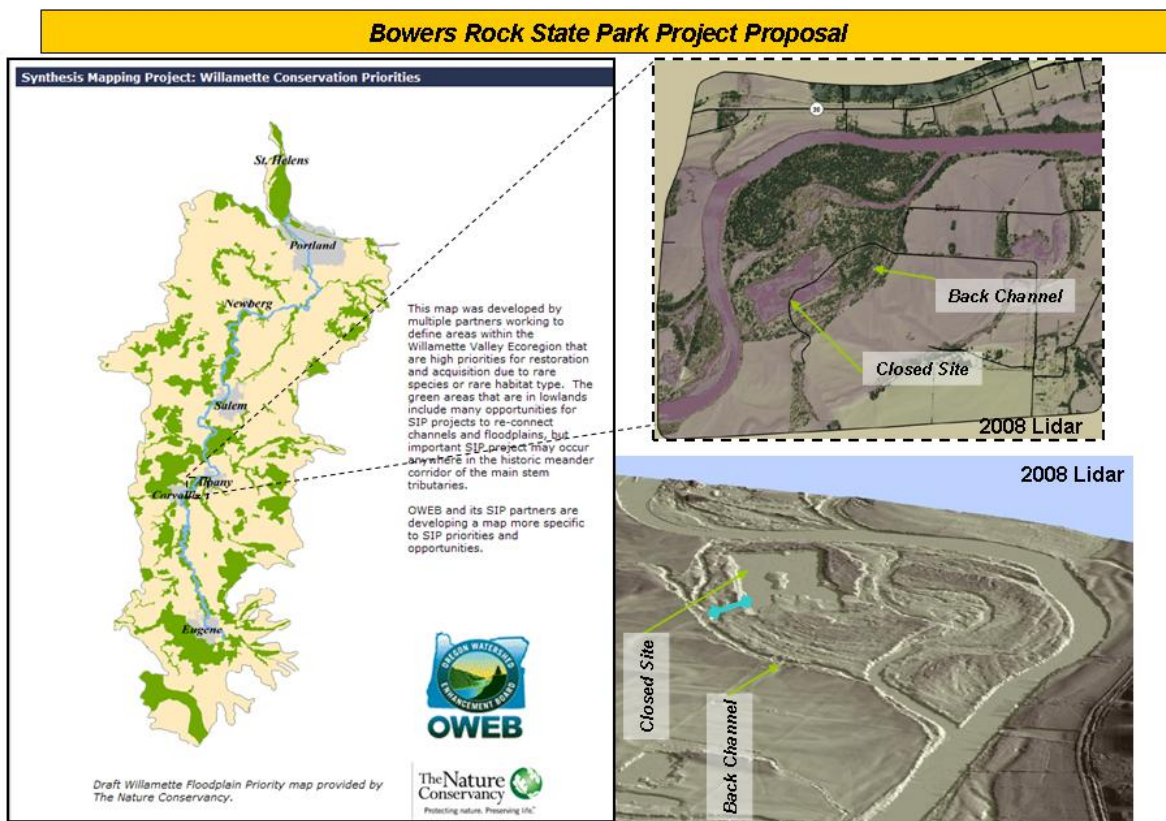


C. Projects in Development

There are four projects actively being developed for the Willamette SIP, two have been discussed with the Willamette SIP technical review team and two are being funded for development.

Bowers Rocks State Park: The reclamation of a gravel pit and restoration of hydrologic connectivity of the floodplain forest at Bowers Rocks is being evaluated by the Oregon Department of Geology and Mineral Industries (DOGMI) as a demonstration project for gravel pit reclamation and as a community asset by local community members. Project development was funded just recently by the Governor's Fund for the Environment. The evaluation of the opportunities will focus on gravel pit reconnection, back channel reconnection and elimination of peripheral berms around the gravel pit and alcove development. The involvement of the Calapooia Watershed Council, Willamette Riverkeeper, Oregon State Parks and DOGMI make this a project with great opportunity and numerous challenges.

Willamette Special Investment Partnership



OWEB and MMT are working with the Greenbelt Land Trust to develop and implement a restoration project on an adjacent parcel. The parcel is on private property being protected by a conservation easement from Bonneville Power Administration in cooperation with the Oregon Department of Fish and Wildlife.

Luckiamute Landing State Park: A partnership between the Luckiamute Watershed Council and Oregon State Parks Department has developed to evaluate the opportunities associated with restoration of floodplain forest and flood connections across the floodplain. MMT has funded project development and design by the Luckiamute Watershed Council. The recent LiDAR images (below) and discussion with the Willamette SIP review team suggest that this project will be less of a channel reconnection project than a project to enhance specific floodplain species (turtles, etc.) and habitats.



Land Surface Image

Cover Image

Tryon Creek Confluence: Similar to the Stephens Creek confluence project, the Bureau of Environmental Services is developing a project at the confluence of Tryon Creek and the Willamette River. While the project will not add significantly to channel complexity, it will address an ecologically important area within the urban area. Tryon Creek is one of the least developed watersheds in the Portland urban area. The confluence with the Willamette has been channelized and hardened in the past. This project will increase the access and use by juvenile salmonids.

Site Conditions Willamette River



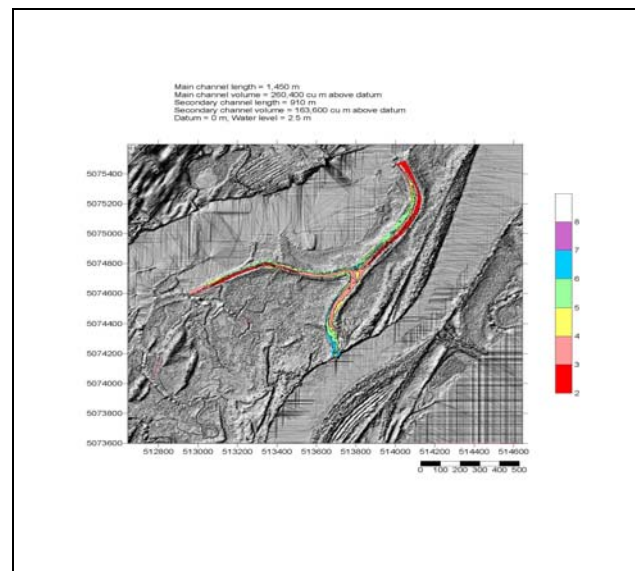
Low
Water



High
Water

Scappoose Bay Reconnection:

The Governor's Fund for the Environment funded the Scappoose Bay Watershed Council to develop a project that would connect the Multnomah Channel (Willamette River) to Scappoose Bay. The reconnection of this historic channel will allow juvenile salmon to evade high water in the winter. The LiDAR image shows a possible reconnection from the Multnomah Channel (Willamette River) to Scappoose Bay.



IV. A Developing Willamette SIP Approach

In the Willamette SIP team discussions throughout the valley, a significant number of potential actions have been identified. The challenge will be to link the potential actions to partners and interested landowners in creative ways. The approach when mapped looks like a “string of pearls” along the mainstem river. The Willamette SIP team has sponsored meetings in Eugene and Salem to inform local partners of the opportunities and concepts behind the initiative. Additional meetings will be held with partners further downstream as the spring progresses.

Opportunity maps have been developed to highlight the “string of pearls” and stimulate potential ownership of individual efforts that will lead to system change.

One product that has come from the reach meetings has been the development of Willamette SIP project criteria. The criteria were developed through interaction with the review team to help guide project development and design. The criteria attempt to capture the types of actions and outcomes desired from Willamette SIP projects.

V. Lessons Learned and Issues to Date

The Willamette SIP partners see tremendous momentum and pent up desire to move forward on Willamette restoration. The SIP has helped catalyze actions and thinking about the river and the adjacent lands. It is becoming a hope that the SIP, along with the Planning Atlas, may offer a new way to approach large scale river restoration. The clear articulation of expectations and desired outcomes helps to move the conversation in a productive direction.

An important lesson is that large river projects take time and deliberation. The MMT funding for project development has been critical to allow for considerations of alternatives and to engage project developers with the review team before a project is fully developed. That engagement has resulted in better approaches and more integrated approaches while it has taken more time.

The Willamette SIP team sees a significant opportunity to help implementation of the Biological Opinion on the Willamette system of dams. Close conversations about the actions of the Corps, critical funding by MMT, and full engagement by local partners and The Nature Conservancy will result in a number of project designs that can be implemented locally.

The evolving Willamette SIP project development process is working. Partnerships are developing around projects and coalescing around the idea of a more naturally functioning river. The integration of the technical team into project development has been a successful experiment.

The Willamette SIP partners are grappling with two significant issues: 1) an evaluation tool or approach to inform others on the value of the outcomes; and 2) the full realization that a very long-term view and commitment is necessary to make progress on a large system like the Willamette.

VI. Conclusions

Key project leads from OWEB and Meyer Memorial Trust will discuss these issues with the Board at the upcoming meeting.