

Willamette Special Investment Partnership Ecological Objectives and Projects
February 20, 2008

Ecological Objectives and Projects	Lead Partner(s)	Summary and Outcomes	Status and Timing	Other Participants	Notes
Objective: Channel and Flood Plain Restoration.	Various partners who are able to recruit willing land owners, design projects, assemble the many parts, partners, and dollars necessary, and (where appropriate) to manage the acquisition process and hold titles or easements in perpetuity.	Acquire, restore, and protect bottom land parcels suitable for OWEB's twin Willamette SIP objectives of re-establishing channel complexity and re-connecting channels and flood plains. The results of that will be improved habitat, improved water quality, and improved response to flood events.	There are many potential sites throughout the Basin. OWEB and partners have identified a number of target reaches, often based around tributary confluences, state-owned lands, ag lands that frequently flood, and inactive aggregate mining sites. Three candidate acquisition proposals are presently in consideration. A number of other projects are in the recruitment or development phase now and could start implementation in 2008. Greater specificity at this time would be counter-productive.	Many and various. Many confluence areas include public land parcels. Land trusts, watershed councils, Willamette Riverkeeper and other NGOs, and government agencies interested in water quality and in fish and wildlife habitat restoration and protection.	This is the over-arching concept that includes the public lands work listed below as separate project concepts.
	Restoration on DSL lands. (Projects would be undertaken by local partners.)	Re-establish silted-in channels and alcoves, reconnect oxbows and cut-off side channels, reconnect channels and flood plains where appropriate, restore native vegetation where appropriate.	In development, with implementation on a few sites possible starting in 2008. By statute, DSL owns the "beds and banks" of navigable Oregon waters, including many oxbow lakes and other former Willamette channels.	Local partners, NGOs.	Numerous potential project sites on state owned land offer the benefit of focusing available funding on restoration.
	Restoration on OPRD lands. (Projects would be undertaken by local partners.)	Re-establish silted-in channels and alcoves, reconnect oxbows and cut-off side channels, reconnect channels and flood plains where appropriate, restore native vegetation where appropriate.	In development, with implementation on a few sites possible starting in 2008. OPRD owns many bottom land parcels that include channel and flood plain features appropriate for SIP.	Local partners, NGOs.	Numerous potential project sites on state owned land offer the benefit of focusing available funding on restoration. Restoration could also enhance public access for passive recreation.
Objective: Effluent Cooling through floodplain interaction	Various waste water dischargers, primarily municipalities or waste water districts.	Re-establish silted-in channels and alcoves, reconnect oxbows and cut-off side channels, reconnect channels and flood plains where appropriate, restore native vegetation where appropriate.	In development. Generic technical work to model, site, and design such cooling projects is underway. Conversation has begun with certain dischargers; a few potential sites identified. Commitment to sites is possible this biennium, but construction is more likely starting in 2009 and beyond.	Association of Clean Water Agencies (ACWA), various cities and special districts. Land trusts, watershed councils.	OWEB's contribution would focus on restoration and protection relating to our two Willamette SIP objectives rather than the hyporheic cooling and would be above and beyond any actions required of the dischargers by regulatory permits.
Objective: Aggregate Site Reclamation to reconnect floodplain and complex channels.	Projects would be undertaken by local partners, including mine site owners.	Acquire and/or restore aggregate mine sites in the bottom land suitable for OWEB's Willamette SIP objectives. Create off-channel habitat, eliminate or reduce the risk of accidental and catastrophic re-capture by the River.	In development. Conversation begun with certain site owners and project implementers. A few potential sites identified. Commitment to sites is possible this biennium, but construction is more likely starting in 2009 and beyond.	Mine site owners, Oregon Dept. of Geology and Mineral Industries, Dept. of State Lands, Meyer Memorial Trust.	OWEB's contribution would focus on restoration and protection relating to our two Willamette SIP objectives and would be above and beyond any actions required of the mine owners by regulatory permits
Objective: Edge Habitat Restoration to reconnect floodplain habitats.	Various. Projects would be undertaken by local partners.	Create alcoves at outfalls, at piped confluences of small tributaries, and where riverside fill is no longer needed for built use. Reconnect with flood plains and side channels where feasible. Create off-stream loitering habitat and refugia along critical migratory reaches.	Many projects in the Portland-Metro area, with some ready to start implementation in 2008.	Public and private urban groups, including local governments, special districts, and watershed councils. Other funding sources interested in whole-basin restoration (e.g. Ecotrust).	"Roughening" the river side is a viable approach to restoring loitering habitat in heavily built-up and channelized areas, such as Portland Harbor and any reach flowing through an urbanized area. This is the overarching concept for several of the Portland and Metro projects in the packages listed below, and also is applicable to other urban areas in the basin. <u>Not</u> to be confused with rock barbs, j-hooks, and other flow re-direction techniques intended for bank stabilization.

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Project: Scappoose Bottom Restoration.	Scappoose Bay Watershed Council.	Restoration of wetlands and habitat, reconnection of channels and adjacent flood plains.	Area-wide action plan done. Much outreach to landowners and other partners. Some related projects started. Next projects will be ready within the year.	The Nature Conservancy, state and federal fish & wildlife agencies, City of Scappoose, LCREP, Ore. St. Parks, DSL.	This is a collection of projects addressing different site-specific objectives but all contributing to restoration of bottom land functions. Compliments work on Sauvie Island.
Project: Lower Portland Reach Package (Terminal 1 South, Centennial Mills, Swan Island Beach South, Balch Creek Confluence, Tanner Creek Confluence)	City of Portland.	Shallow water habitat, reshaping banks for flood plain reconnect, alcoves at Tanner and Balch Creek confluences, "roughening" the River's edge.	Initial design work done for most sites. Some projects could proceed this biennium.	Port of Portland, Metro, Portland Development Commission, private land owners, watershed councils.	These and other projects in the package listed below will be allocated SIP funds according to their ripeness in terms of design, match funding, land owner participation, and other factors.
Project: Upper Portland Reach Package (Oaks Bottom, Stephens Creek Confluence, Tryon Creek Confluence, Johnson Creek Confluence).	City of Portland.	Restore off-channel habitat, assure full hydrologic connection, replace invasives with natives, improve banks and riparian areas, reconnect flood plain.	Initial design work done for most sites -- detailed design work for some, which could proceed this biennium. Oaks Bottom project is large and might need to be done in several phases over several years.	Metro, Portland Development Commission, private land owners, watershed councils.	Along with adjacent Ross Island, Oaks Bottom constitutes the best and largest remaining undeveloped flood plain and side channel habitat in the central city. Refuge attracts many visitors.
Project: Columbia Slough.	City of Portland, Metro.	Restoration and protection of aquatic, riparian, and flood plain habitat and watershed functions. At confluence with Willamette: bank reshaping to create alcoves and to assure proper connection of Slough to the River at all flow levels.	Initial design work done for most sites. Some projects could proceed this biennium.	Columbia Slough Watershed Council, Metro, private land owners, Port of Portland.	The Slough, Smith and Bybee Lakes, and associated corridor are the principal natural area habitat in the north city.
Project: Johnson Creek Watershed.	Metro, City of Portland.	Reconnect flood plain, restore remnant alcoves and overflow channels, restore and protect habitat and connection corridors	Initial design work done for many sites. Some projects could proceed this biennium.	Johnson Creek WSC, Cities of Gresham and Milwaukie, ODFW, Counties of Clackamas and Multnomah.	Much of this work will be done well to the east of the Willamette main stem but will contribute to lower Willamette functions and values.
Project: Lower Willamette Greenway.	Metro, City of Portland.	Secure and restore critical native habitats and edge ecology at select locations from Lake Oswego downstream.	Parcels already acquired or identified for acquisition. Metro has acquisition funds. Site-specific details now being explored. Implementation likely in 2009-2010.	Local groups, private land owners, land trusts.	These parcels would offer opportunities for edge roughening in the lower river.
Project: Clackamas River Greenway.	Metro.	Protect and restore undeveloped flood plains, remnant side channels, gravel bars, and associated ecology and watershed functions.	Parcels already acquired or identified for acquisition. Metro has acquisition funds. Site-specific details now being explored. Implementation likely in 2009-2010.	Three Rivers Land Conservancy, Clackamas Co. Parks, North Clackamas Park Dist., Ore. St. Parks., PGE., Oregon City, Gladstone, watershed councils.	An example of the bottom land SIP objectives pursued on a major tributary to the Willamette.
Project: Tualatin River Greenway.	Metro.	Acquire, restore, and protect habitat, flood plain connections, and watershed functions along the lower reach of the Tualatin River.	Parcels already acquired or identified for acquisition. Metro has acquisition funds. Site-specific details now being explored. Implementation likely in 2009-2010.	Tualatin Riverkeeper, Three Rivers Conservancy, Clean Water Services, multiple local cities, state and federal fish and wildlife agencies, watershed councils..	An example of the bottom land SIP objectives pursued on a major tributary to the Willamette.
Project: Small Watershed Focus.	Meyer Memorial Trust. Local conservation partner	Contribute to restoration over a number of years in each of several selected small watersheds (e.g. 6 th field hydrologic units). The specific restoration objectives will be appropriate to each watershed.	This biennium, Meyer Memorial Trust will coordinate a process for identifying candidate small watersheds and will establish the program mechanism, which then may be contracted out to a suitable partner.	Forest Service Whole Watershed Program, Bonneville Environmental Foundation, watershed councils, land trusts, local governments and NGOs.	This effort will include projects that address the Willamette SIP objectives but also will address the larger matters of ecosystem restoration and protection and of refugia and connective corridors for species of concern. These other matters must be addressed in the Willamette in order for the SIP to have its full effect.