Endangered Species Act
Federal Columbia River Power System
2013 Annual Progress Report: Section 3

PROJECT TABLES FOR REASONABLE AND PRUDENT ALTERNATIVE (RPA) ACTION IMPLEMENTATION

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Attachment 1: Hatchery Safety Net & Conservation Programs and RME Projects Completed or in Progress in 2013

Attachment 1 - Table 1. BPA Project List

H-Section	BiOp Strategy	Action No.	Sub-Action No.	Project No.	Agency	Project Title	RPA Association Status	Project Information Internet Link
Hydro	Develop and Implement a Kelt Management Plan	33	All	2007-401-00	BPA	Kelt Reconditioning and Reproductive Success Evaluation Research	Continuing	http://www.cbfish.org/Project.mvc/Display/2007-401-00
Hatchery	Execute on Safety Net and Conservation Objectives	41	All	1997-038-00	BPA	Listed Stock Chinook Salmon Gamete Preservation	Continuing	http://www.cbfish.org/Project.mvc/Display/1997-038-00
Hatchery	Execute on Safety Net and Conservation Objectives	41	All	2007-402-00	BPA	Snake River Sockeye Captive Propagation	Continuing	http://www.cbfish.org/Project.mvc/Display/2007-402-00
Hatchery	Execute on Safety Net and Conservation Objectives	41	All	2007-403-00	BPA	Spring Chinook Captive Propagation-Idaho	Continuing	http://www.cbfish.org/Project.mvc/Display/2007-403-00
Hatchery	Execute on Safety Net and Conservation Objectives	41	All	2007-404-00	BPA	Spring Chinook Captive Propagation-Oregon	Continuing	http://www.cbfish.org/Project.mvc/Display/2007-404-00
Hatchery	Execute on Safety Net and Conservation Objectives	42	6	1988-053-01	BPA	Northeast Oregon Hatchery Master Plan	Continuing	http://www.cbfish.org/Project.mvc/Display/1988-053-01
Hatchery	Execute on Safety Net and Conservation Objectives	42	9	2008-710-00	BPA	Development of an Integrated strategy for Chum Salmon Restoration in the tributaries below Bonneville Dam	Continuing	http://www.cbfish.org/Project.mvc/Display/2008-710-00
Hatchery	Execute on Safety Net and Conservation Objectives	42	10	2008-710-00	BPA	Development of an Integrated strategy for Chum Salmon Restoration in the tributaries below Bonneville Dam	Continuing	http://www.cbfish.org/Project.mvc/Display/2008-710-00
Hatchery	Execute on Safety Net and Conservation Objectives	42	All	2003-023-00	BPA	Chief Joseph Hatchery Program	Continuing	http://www.cbfish.org/Project.mvc/Display/2003-023-00
Hatchery	Execute on Safety Net and Conservation Objectives	42	All	2007-212-00	BPA	Okanogan Basin Locally Adapted Steelhead Broodstock Step 1 and 2 (Casimer Bar)	Continuing	http://www.cbfish.org/Project.mvc/Display/2007-212-00
Hatchery	Execute on Safety Net and Conservation Objectives	42	All	2007-401-00	BPA	Kelt Reconditioning and Reproductive Success Evaluation Research	Continuing	http://www.cbfish.org/Project.mvc/Display/2007-401-00
Hatchery	Execute on Safety Net and Conservation Objectives	42	All	2007-402-00	BPA	Snake River Sockeye Captive Propagation	Continuing	http://www.cbfish.org/Project.mvc/Display/2007-402-00
Hatchery	Execute on Safety Net and Conservation Objectives	42	All	2008-458-00	BPA	Steelhead Kelt Reconditioning	Continuing	http://www.cbfish.org/Project.mvc/Display/2008-458-00
Predation	Implement Piscivorous Predation Control Measures	43	All	1990-077-00	BPA	Development of System-wide Predator Control	Continuing	http://www.cbfish.org/Project.mvc/Display/1990-077-00
Predation	Implement Piscivorous Predation Control Measures	44	All	2008-718-00	BPA	Non-Native Fish Hot Spots	Continuing	http://www.cbfish.org/Project.mvc/Display/2008-718-00
Predation	Implement Piscivorous Predation Control Measures	44	All	2008-719-00	BPA	Research Non-Indigenous Actions	Continuing	http://www.cbfish.org/Project.mvc/Display/2008-719-00
Predation	Implement Avian Predation Control Measures	45	All	1997-024-00	BPA	Avian Predation on Juvenile Salmon and steelhead	Continuing	http://www.cbfish.org/Project.mvc/Display/1997-024-00
Predation	Implement Avian Predation Control Measures	46	All	1997-024-00	BPA	Avian Predation on Juvenile Salmon and steelhead	Continuing	http://www.cbfish.org/Project.mvc/Display/1997-024-00
Predation	Implement Avian Predation Control Measures	47	All	1997-024-00	BPA	Avian Predation on Juvenile Salmon and steelhead	Continuing	http://www.cbfish.org/Project.mvc/Display/1997-024-00
Predation	Implement Marine Mammal Control Measures	49	All	2008-004-00	BPA	Sea Lion Non-Lethal Hazing	Continuing	http://www.cbfish.org/Project.mvc/Display/2008-004-00

Attachment 1 - Table 2. Reclamation Project List

H-Section	BiOp Strategy	Action No.	Sub- Action No.	Project No.	Agency	Project Title	RPA Association Status
Hatchery	Ensure Funded Hatchery Programs are not Impeding Recovery	40	4	N/A	Reclamation USFWS	Implementation of PASS Proposals for Addressing Steelhead Management Concerns at Winthrop National Fish Hatchery (via USFWS)	New
Predation	Implement Avian Predation Control Measures	47	All	1811	Reclamation Corps	Avian Predation Management at Potholes Reservoir (Implement Inland Avian Predation Management Plan, if appropriate)	Continuing

Attachment 2: Summary of 2013 Tributary Habitat Accomplishments by Population

Attachment 2 - Table 1. Summary of 2013 Tributary Habitat Accomplishments by Population

This table summarizes metrics at the population level for tributary habitat measures implemented with funding from BPA and/or with technical assistance from the Bureau of Reclamation (Reclamation) in 2013. BPA uses Pisces, a contract management system, to track and record planned and actual work accomplishments. Details for BPA projects can be found in Pisces via the links provided. Details of Reclamation projects are in Attachment 2, Table 2, accessible by the links provided. Further detail of work accomplished can be found in BPA's Report Center Habitat Metrics Report, available at http://www.efw.bpa.gov/IntegratedFWP/reportcenter.aspx.
NOTE: Projects and metrics may be reported twice in this attachment (once under each ESU/DPS) if they improve habitat for both Chinook salmon ESU and steelhead DPS.
Metric definitions: Metrics planned are from the 2014-2018 Implementation Plan. Metrics completed were reported from projects and standardized into categories and units as much as possible. Definitions and units are listed below.

Flow: Water protected by efficiency improvements and water purchase/lease projects, reported as either volume in acre-feet per year (af) or as river flow in cubic feet per second (cfs).

Entrainment: Number of screens addressed can include new screens installed, existing screens improved for compliance with criteria, or entrainment issues addressed by elimination/consolidation of diversions.

Passage: Number of barriers addressed by providing passage or removing the barrier, reported to include number of miles of access improved by addressing the barriers.

Complexity: Miles of Instream channel improved by adding habitat features via wood or boulder structures, or reconnecting existing habitat such as side channels.

WQ/Riparian: Projects undertaken to improve water quality by enhancing or protecting instream habitat or riparian function are reported in four different ways as described below.

Stream Miles Protected: Miles of stream habitat protected, typically by land purchases or conservation easements that improve land use practices such as excluding cattle from the stream.

Stream Miles Improved: Miles of stream habitat improved, typically by projects that enhance the function of the streambank such as planting native vegetation on the streambanks.

Riparian Acres Protected: Acres of riparian habitat protected by purchases or conservation easements that improve land use practices, allowing natural processes to reestablish riparian habitat.

Riparian Acres Improved: Acres of riparian habitat improved by projects to improve riparian habitat such as planting native vegetation or control of noxious weeds. Includes wetland acres.

» *These populations are not in the 2008 Biological Opinion for the FCRPS RPA Action 35 Table 5 and therefore expert panels have not been established to evaluate habitat conditions, limiting factors, actions and planned metrics.*

***** *These populations, also displayed in bold, are listed as "Priority Populations" in the 2008 Biological Opinion for the FCRPS RPA Action 35, Table 5.*

			Limiting Factors Identified	Metric Category	2013 - 2018 Planned Metrics	2013 Completed Metrics (Annual Report Requirement)	Projects Associated with 2013 Completed Metrics (See Attachment 2 Table 2 for USBR Projects)
Snake River Spring/Summer-run Chinook Salmon ESU	Dry Clearwater	Lapwai/Big Canyon	»Not listed in RPA Action 35 Table 5	**Entrainment:**			1999-017-00: Protect and Restore Lapwai Creek Watershed 2002-070-00: Lapwai Creek Anadromous Habitat
				Passage:		1 Barrier improved 5 mi.	
				Complexity:			
				WQ/Riparian:		0.4 Stream mile protected 20.41 Stream miles improved 2 Riparian acres protected 620.05 Riparian acres improved	
		Potlatch River	»Not listed in RPA Action 35 Table 5	**Passage:**			2002-061-00: Potlatch River Watershed Restoration 2008-604-00: Lower Clearwater and Potlatch Watersheds Habitat Improvements 2002-072-00: Red River Watershed Restoration
				Complexity:			
				WQ/Riparian:		6.8 Stream miles improved 102.5 Riparian acres improved	
		Upper South Fork Clearwater	»Not listed in RPA Action 35 Table 5	**Passage:**		7 Barriers improved 10.5 miles	
				Complexity:			
				WQ/Riparian:		13 Stream miles improved 16.4 Riparian acres improved	
	Grande Ronde/Imnaha	*** Catherine Creek**	9.2: Decreased Water Quantity	**Flow:**	Protect 3,230 AF, 3 cfs	457.4 af, 2.8 cfs protected	1984-025-00: Blue Mountain Fish Habitat Improvement 1992-026-01: Grand Ronde Model Watershed 2008-206-00: Instream Flow Restoration 1996-083-00: Grand Ronde Watershed Restoration USBR Project 4473
				Entrainment:	Address 1 screen		
			1.1 Anthropogenic Barriers	**Passage:**	Improve 14 barriers, 30.8 miles	3 Barriers improved 6.1 mi.	
			6.1: Bed and Channel Form, 6.2 Instream Structural Complexity	**Complexity:**	Improve 19.2 instream miles	0.34 Instream mile improved	
			4.1: Riparian Condition, 4.2: LWD Recruitment, 5.1: Side Channel and Wetland Conditions, 5.2: Floodplain Condition, 7.2: Increased Sediment Quantity, 8.1: Temperature, 8.2: Oxygen, 8.4: Turbidity	**WQ/Riparian:**	Protect 1 riparian mile Improve 1.5 riparian miles Improve 1,618 riparian acres	1.52 Stream miles protected 1.53 Stream miles improved 24.55 Riparian acres protected 50.9 Riparian acres improved	
		Big Sheep Creek	1.1: Anthropogenic Barriers	**Passage:**	Improve 4 barriers, 20.7 miles		-
		*** Grande Ronde River Upper Mainstem**	9.2: Decreased Water Quantity	**Flow:**	Protect 1,782 AF, 6.5 cfs	87.6 AF, 0.33 cfs protected	1992-026-01: Grand Ronde Model Watershed
			1.1: Anthropogenic Barriers	**Passage:**	Improve 3 barriers, 5 miles	2 Barriers improved 3 miles	
			6.1: Bed and Channel Form, 6.2 Instream Structural Complexity	**Complexity:**	Improve 43.8 instream miles	3.25 Instream miles improved	
			4.1: Riparian Condition 4.2: LWD Recruitment 7.2: Increased Sediment Quantity 8.1 Temperature	**WQ/Riparian:**	Improve 31 riparian miles Protect 24 riparian acres	1.14 Stream miles protected 22.85 Stream miles improved 1 Riparian acre protected 180.5 Riparian acres improved	
		Imnaha River Mainstem	1.1: Anthropogenic Barriers	**Passage:**	Improve 3 barriers, 16 miles		
				Complexity:			
				WQ/Riparian:			

			Limiting Factors Identified	Metric Category	2013 - 2018 Planned Metrics	2013 Completed Metrics (Annual Report Requirement)	Projects Associated with 2013 Completed Metrics (See Attachment 2 Table 2 for USBR Projects)
Snake River Spring/Summer-run Chinook Salmon ESU		Lostine River	9.1: Increased Water Quantity, 9.2: Decreased Water Quantity	**Flow:**	Protect 30 cfs	1188 AF, 15 cfs protected	1992-026-01: Grand Ronde Model Watershed 2002-013-01: Water Entity - Water Transaction Program
			1.1: Anthropogenic Barriers	**Passage:**	Improve 6 barriers, 41.3 miles	2 Barriers improved 12 mi.	
			6.1: Bed and Channel Form, 6.2 Instream Structural Complexity	**Complexity:**	Improve 1.6 instream miles	0.06 Instream mile improved	
			4.1: Riparian Condition 5.2: Floodplain Condition 7.2: Increased Sediment Quantity, 8.1: Temperature, 8.2: Oxygen	**WQ/Riparian:**	Protect 257 riparian acres	1.28 Stream miles protected 21 Riparian acres protected	
	Lower Snake	Asotin Creek	1.1: Anthropogenic Barriers	**Passage:**	Improve 1 barrier, 50 miles		1994-018-05 Asotin Creek Enhancement and Restoration
			6.1: Bed and Channel Form, 6.2: Instream Structural Complexity	**Complexity:**	Improve 5.2 instream miles	1 Instream mile improved	
				WQ/Riparian:		3.04 Stream miles protected 7 Stream miles improved 35 Riparian acres protected 30 Riparian acres improved	
		*** Tucannon River**	9.2: Decreased Water Quantity	**Flow:**	Protect 23.4 AF		1994-018-06: Tucannon Stream and Riparian Restoration 2008-202-00: Protect and Restore Tucannon Watershed
				Passage:		2 Barriers improved 1.8 miles	
			6.1: Bed and Channel Form, 6.2 Instream Structural Complexity	**Complexity:**	Improve 21.7 instream miles	1.6 Instream miles improved	
			4.1: Riparian Condition 5.2: Floodplain Condition 7.2: Increased Sediment Quantity 8.1: Temperature 8.4: Turbidity	**WQ/Riparian:**	Protect 1.3 riparian miles Imrove 3.9 riparian miles Improve 149.9 riparian acres	1.19 Stream miles protected 1.55 Stream miles improved 39.9 Riparian acres protected 30.3 Riparian acres improved	
	Lower Salmon River	Big Creek	1.1: Anthropogenic Barriers	**Passage:**	Improve 3 barriers, 8 miles		
			7.2: Increased Sediment Quantity 8.7: Toxic Contaminants	**WQ/Riparian:**	Improve 102.6 riparian acres		
		Chamberlain Creek	»Not listed in RPA Action 35 Table 5	**Passage:**		1 Barrier improved 2.5 miles	2002-072-00 Red River Watershed Restoration
		East Fork South Fork Salmon River	1.1: Anthropogenic Barriers	**Passage:**		2 Barriers improved 0.6 miles	2007-127-00: East Fork of South Fork Salmon River Passage Restoration
			7.2: Increased Sediment Quantity 8.1: Temperature	**WQ/Riparian:**		0.2 Stream mile protected 5 Stream miles improved	
			8.7: Toxic Contaminants			1 Riparian acre protected	
		Little Salmon River	»Not listed in RPA Action 35 Table 5	**Passage:**		1 Barrier improved 3 mi.	2007-064-00: Slate Creek Watershed Restoration
				WQ/Riparian:			
		Secesh River	1.1: Anthropogenic Barriers	**Passage:**	Improve 2 barriers, 1.9 miles		
			7.2: Increased Sediment Quantity	**WQ/Riparian:**			
		South Fork Salmon River	1.1: Anthropogenic Barriers	**Passage:**	Improve 5 barriers, 8.7 miles		
			7.2: Increased Sediment Quantity 8.1: Temperature, 8.7: Toxic Contaminants	**WQ/Riparian:**	Improve 2 riparian acres		

			Limiting Factors Identified	Metric Category	2013 - 2018 Planned Metrics	2013 Completed Metrics (Annual Report Requirement)	Projects Associated with 2013 Completed Metrics (See Attachment 2 Table 2 for USBR Projects)
Snake River Spring/Summer-run Chinook Salmon ESU	Upper Salmon River	East Fork Salmon River	9.2: Decreased a	**Flow:**	Protect 6 cfs		2007-268-00: Idaho Watershed Habitat Restoration-Custer District
			2.3: Mechanical Injury	**Entrainment:**	Address 7 screens		
			1.1: Anthropogenic Barriers	**Passage:**	Improve 5 barriers, 6.9 miles		
			6.1: Bed and Channel Form	**Complexity:**	Improve 0.1 instream mile		
				WQ/Riparian:		1.3 Stream miles protected 5 Riparian acres protected	
		Lemhi	9.2: Decreased Water Quantity	**Flow:**	Protect 36.8 cfs	3281.1 AF, 37.81 cfs protected	1994-015-00: Idaho Fish Screening Project
			2.3: Mechanical Injury	**Entrainment:**	Address 26 screens	5 Screens addressed	2008-608-00: Idaho MOA/Fish Accord Water Transactions
			1.1: Anthropogenic Barriers	**Passage:**	Improve 34 barriers, 61.3 miles	12 Barriers improved 25 mi.	2007-399-00: Upper Salmon Screen Tributary Passage
			6.1: Bed and Channel Form, 6.2: Instream Structural Complexity	**Complexity:**	Improve 11.7 instream miles	0.59 Instream mile improved	2008-608-00: Idaho MOA/Fish Accord Water Transactions
			4.1: Riparian Condition 5.2: Floodplain Condition 8.1: Temperature	**WQ/Riparian:**	Protect 11.5 riparian miles Improve 11.8 riparian miles Improve 15 riparian acres	0.92 Stream mile protected 0.86 Stream mile improved 3.55 Riparian acres protected 3.18 Riparian acres improved	2010-072-00: Lemhi River Restoration USBR Project 4553, 4554, 4555, 4556, and 4557
		Pashimeroi	9.2: Decreased Water Quantity	**Flow:**	Protect 14 cfs		2007-268-00: Idaho Watershed Habitat Restoration-Custer
			2.3: Mechanical Injury	**Entrainment:**	Address 5 screens	1 Screen addressed	2008-603-00: Pahsimeroi River Habitat
			1.1: Anthropogenic Barriers	**Passage:**	Improve 17 barriers, 73.4 miles	1 Barrier improved 1.2 mi.	
			6.1: Bed and Channel Form	**Complexity:**	Improve 17.8 instream miles		
			4.1: Riparian Condition 7.2: Increased Sediment Quantity	**WQ/Riparian:**	Improve 9 riparian miles		
		Panther Creek	»Not listed in RPA Action 35 Table 5	**WQ/Riparian:**		0.46 Stream mile protected 3.81 Riparian acres protected	2008-903-00: ESA Habitat Restoration
		Lower Mainstem Salmon River Below Redfish Lake	9.2: Decreased Water Quantity	**Flow:**	Protect 2.5 cfs	241.2 AF, 2 cfs protected	2002-013-01: Water Entity - Water Transaction Program
			2.3: Mechanical Injury	**Entrainment:**	Address 1 screen		2007-399-00: Upper Salmon Screen Tributary Passage
			1.1: Anthropogenic Barriers	**Passage:**	Improve 5 barriers, 18 miles	1 Barrier improved 1 mile	
				Complexity:			USBR Project 4470
		Upper Mainstem Salmon River above Redfish Lake	9.2: Decreased Water Quantity	**Flow:**	Protect 14 cfs	893 AF, 6 cfs protected	2008-903-00 ESA Habitat Restoration
				Entrainment:			2002-013-01 Water Entity - Water Transaction Program
			1.1: Anthropogenic Barriers	**Passage:**	Improve 5 barriers, 18.5 miles		
			4.1: Riparian Condition 7.2: Increased Sediment Quantity 8.1: Temperature	**WQ/Riparian:**	Improve 2 stream miles Improve 6.4 riparian acres	3.34 Stream miles protected 18.3 Riparian acres protected	
		Valley Creek	9.2: Decreased Water Quantity	**Flow:**	Protect 4 cfs		
			2.3: Mechanical Injury	**Entrainment:**	Address 10 screens		
		*** Yankee Fork**		**Passage:**		3 Barriers improved 1.19 miles	2002-059-00 Yankee Fork Salmon River Restoration
			6.1: Bed and Channel Form, 6.2: Instream Structural Complexity	**Complexity:**	Improve 6.1 instream miles	0.69 Instream mile improved	
			4.2: LWD Recruitment 5.2: Floodplain Condition 7.1: Decreased Sediment Quantity	**WQ/Riparian:**	 Improve 34 riparian acres	 0.34 Stream mile improved 12.25 Riparian acres improved	USBR Project 4508

			Limiting Factors Identified	Metric Category	2013 - 2018 Planned Metrics	2013 Completed Metrics (Annual Report Requirement)	Projects Associated with 2013 Completed Metrics (See Attachment 2 Table 2 for USBR Projects)
Upper Columbia River Spring-run Chinook Salmon ESU	Upper Salmon River	Lochsa River (Chinook)	»Not listed in RPA Action 35 Table 5	**Passage:**		1 Barrier improved 12.65 miles	2007-395-00 Protect and Restore Lochsa Watershed
				WQ/Riparian:		10.5 Riparian acres improved	
		Meadow Creek (Chinook)	»Not listed in RPA Action 35 Table 5	**Passage:**		1 Barrier improved 8.5 mi.	2007-092-00 Restore Selway River Watershed
		Lolo Creek (Chinook)	»Not listed in RPA Action 35 Table 5	**Passage:**		1 Barrier improved 15 miles	1996-077-02: Lolo Creek Watershed Restoration
				WQ/Riparian:		0.5 Stream mile improved 37 Riparian acres improved	
	Upper Columbia/East Slope Cascades	*** Entiat**		**Flow:**	Protect 6.5 cfs water	180 AF, 1 cfs protected	2002-013-01: Water Entity - Water Transaction Program 2010-001-00: Upper Columbia Programmatic Habitat
			2.3: Mechanical Injury	**Entrainment:**	Address 8 screens		
			1.1: Anthropogenic Barriers	**Passage:**	Improve 3 barrers, 3.5 miles	1 Barrier improved	
			6.1: Bed and Channel Form, 6.2: Instream Structural Complexity	**Complexity:**	Improve 6.2 instream miles	0.29 Instream mile improved	
			4.1: Riparian Condition 5.1: Side Channel and Wetland Conditions 5.2: Floodplain Condition 7.2: Increased Sediment Quantity	**WQ/Riparian:**	 Improve 2.65 stream miles Improve 123.8 riparian acres	0.84 Stream mile protected 1.37 Stream miles improved 5.6 Riparian acres improved	
		*** Methow**	9.1: Increased Water Quantity, 9.2: Decreased Water Quantity	**Flow:**	Protect 7,351 AF, 14 cfs	3,088 AF, 24 cfs protected	2002-013-01: Water Entity - Water Transaction Program 2009-003-00: Upper Columbia Habitat Restoration 2010-001-00: Upper Columbia Programmatic Habitat
			2.3: Mechanical Injury	**Entrainment:**	Address 7 screens	1 Screen addressed	
			1.1: Anthropogenic Barriers	**Passage:**	Improve 8 barriers, 42 miles	3 Barriers improved; 1.3 miles	
			6.1: Bed and Channel Form, 6.2: Instream Structural Complexity	**Complexity:**	Improve 23.2 instream miles	2.4 Instream miles improved	
			4.1: Riparian Condition 5.1: Side Channel and Wetland Conditions 5.2: Floodplain Condition 7.2: Increased Sediment Quantity 8.1: Temperature	**WQ/Riparian:**	 Improve 4.6 stream miles Protect 0.3 riparian acres Improve 322.1 riparian acres	1.23 Stream miles protected 1.61 Stream miles improved 44.7 Riparian acres protected 3.3 Riparian acres improved	USBR Project 4263, 4459, 4536, 4558
		*** Wenatchee**	9.2: Decreased Water Quantity	**Flow:**	Protect 15 cfs	7,943.5 AF, 38.8 cfs protected	2002-013-01: Water Entity- Water Transaction Program
			1.1: Anthropogenic Barriers	**Passage:**	Improve 6 barriers, 24.5 miles	4 Barriers improved 3.65 miles	2010-001-00: Upper Columbia Programmatic Habitat
			6.1: Bed and Channel Form, 6.2: Instream Structural Complexity	**Complexity:**	Improve 11.95 instream miles	0.1 Instream mile improved	USBR Project 4390, 4421, 4480, 4559, 4560
			4.1: Riparian Condition 5.1: Side Channel and Wetland Conditions, 5.2: Floodplain Condition	**WQ/Riparian:**	Improve 2 stream miles Improve 23.9 riparian acres	0.2 Stream mile improved 2.2 Riparian acres improved	
Middle Columbia River Steelhead DPS	Cascades Eastern Slope Tributaries	Deschutes River Eastside	9.2: Decreased Water Quantity	**Flow:**	Protect 144.6 AF, 0.6 cfs	1075.4 AF, 3.23 cfs protected	2002-019-00: Develop Riparian Buffer Systems in Lower Wasco County 1998-028-00: Trout Creek Watershed Restoration 2002-013-01: Water Entity - Water Transaction Program
				Entrainment:			
			1.1: Anthropogenic barriers	**Passage:**	Address 1 barrier	1 Barrier addressed	
			5.2: Floodplain condition, 6.1: Bed and Channel Form	**Complexity:**	Improve 3.7 instream miles	0.04 Instream mile improved	
			4.1: Riparian Condition	**WQ/Riparian:**	Protect 333 stream miles Improve 161.4 stream miles Protect 815 riparian acres Improve 1,027.3 riparian acres	0.54 Stream mile protected 43.55 Stream miles improved 22.7 Riparian acres protected 89.6 Riparian acres improved	

			Limiting Factors Identified	Metric Category	2013 - 2018 Planned Metrics	2013 Completed Metrics (Annual Report Requirement)	Projects Associated with 2013 Completed Metrics (See Attachment 2 Table 2 for USBR Projects)
Middle Columbia River Steelhead DPS	Cascades Eastern Slope Tributaries	Deschutes River Westside		**Complexity:**		0.1 Instream mile improved	2008-301-00: Habitat Restoration Planning/Design/Implementation Warm Springs Reservation
			4.1 Riparian Condition	**WQ/Riparian:**	Protect 3.5 stream miles Protect 70 riparian acres		
		Fifteenmile Creek (Winter Run)	9.2: Decreased Water Quantity	**Flow:**	Protect 407.6 AF, 4.1 cfs	737.3 AF, 3.23 cfs protected	2002-013-01: Water Entity - Water Transaction Program 2001-021-00: 15 Mile Creek Riparian Buffers
				Passage:		1 Barrier improved	
			4.1: Riparian Condition	**WQ/Riparian:**	Protect 3.5 stream miles Protect 70 riparian acres	23.5 Stream miles protected 237.3 Riparian acres protected	
		Klickitat River		**Passage:**			1997-056-00: Klickitat Watershed Enhancement
			5.2: Floodplain condition, 6.1: Bed and Channel Form	**Complexity:**	Improve 2.6 miles		
			4.1: Riparian Condition	**WQ/Riparian:**	Improve 7.4 stream miles Improve 99.3 riparian acres	4.21 Stream miles protected 72.3 Riparian acres improved	
		Rock Creek	4.1: Riparian Condition	**WQ/Riparian:**	Improve 3 stream miles Improve 12 riparian acres	3 Stream miles improved 8 Riparian acres improved	2007-156-00: Rock Creek Fish and Habitat Assessment
		Crooked River		**Flow:**		12,608 AF, 29.7 cfs protected	2007-397-00: John Day Watershed Restoration
				Entrainment:		1 Screen addressed	2002-013-01: Water Entity - Water Transaction Program
				Passage:		1 Barrier improved 5.3 miles	
	John Day River	John Day River Lower Mainstem Tributaries	9.2: Decreased Water Quantity	**Flow:**	Protect 0.5 AF, 0.5 cfs		1984-021-00: John Day Habitat Enhancement
			2.3: Mechanical injury	**Entrainment:**	Address 8 screens	7 Screens addressed	1998-022-00: Pine Creek Conservation Area
			1.1 Anthropogenic Barriers	**Passage:**	Improve 22 barriers, 114.5 miles	4 Barriers improved 14 mi.	
			5.2: Floodplain condition, 6.1: Bed and Channel Form	**Complexity:**	Improve 20.5 instream miles	2.5 Instream miles improved	
			4.1: Riparian Condition	**WQ/Riparian:**	Protect 189.2 stream miles	108.1 Stream miles protected	2002-019-00: Develop Riparian Buffer Systems in Lower Wasco County
			8.1: Temperature		Improve 161.4 stream miles	37.5 Stream miles improved	2002-034-00: Riparian Buffers in Wheeler County
					Protect 1379.3 riparian acres	1,912.7 Riparian acres protected	2007-397-00: John Day Passage, Flow and Habitat Enhancement
					Improve 78.9 riparian acres	40 Riparian acres improved	
		John Day River Upper Mainstem	9.2: Decreased Water Quantity	**Flow:**	Protect 953.8 AF, 7.88 cfs	187.2 AF, 1.6 cfs protected	1984-021-00: John Day Habitat Enhancement
			2.3: Mechanical injury	**Entrainment:**	Address 120 fish screens	12 Screens addressed	2001-041-01: Forrest Ranch Conservation Area
				Passage:		4 Barriers improved 18.2 miles	2007-397-00: John Day Passage, Flow and Habitat Enhancement
			5.2: Floodplain condition, 6.1: Bed and Channel Form	**Complexity:**	Improve 1.6 instream miles	0.31 Instream mile improved	1993-066-00: Oregon Fish Screens Project
			4.1 Riparian Condition	**WQ/Riparian:**	Protect 44.6 stream miles	12.14 Stream miles protected	
					Improve 6 stream miles	11 Stream miles improved	USBR Project 4408, 4413, 4429, 4433, 4475, and 4510
					Protect 4893.5 riparian acres	50 Riparian acres protected	
					Improve 125 riparian acres	154.4 Riparian acres improved	

			Limiting Factors Identified	Metric Category	2013 - 2018 Planned Metrics	2013 Completed Metrics (Annual Report Requirement)	Projects Associated with 2013 Completed Metrics (See Attachment 2 Table 2 for USBR Projects)
Middle Columbia River Steelhead DPS	John Day River	Middle Fork John Day River		**Flow:**			2000-015-00: Oxbow Conservation Area 2001-041-01: Forrest Ranch Conservation Area 2007-397-00: John Day Passage, Flow and Habitat Enhancement USBR Project 4411
				Entrainment:		1 Screen addressed	
				Passage:		1 Barrier improved 8.1 mi.	
			5.2: Floodplain condition, 6.1: Bed and Channel Form	**Complexity:**	Improve 1.9 instream miles	0.25 Instream mile improved	
			4.1: Riparian Condition	**WQ/Riparian:**	Protect 57.1 stream miles Improve 4.7 stream miles Protect 810 riparian acres Improve 127.2 riparian acres	5.4 Stream miles protected 25.2 Stream miles improved 193 Riparian acres protected 289.2 Riparian acres improved	
		North Fork John Day River	9.2: Decreased Water Quantity	**Flow:**			1984-021-00: John Day Habitat Enhancement 2000-031-00: Enhance Habitat in the North Fork John Day River
				Entrainment:		1 Screen addressed	
			1.1: Anthropogenic barriers	**Passage:**	Improve 2 barriers, 6 miles		
			5.2: Floodplain condition, 6.1: Bed and Channel Form	**Complexity:**	Improve 1.8 instream miles	2.35 Instream miles improved	
			4.1: Riparian Condition	**WQ/Riparian:**	Protect 100.5 stream miles Improve 22.8 stream miles Protect 659.7 riparian acres Improve 790 riparian acres	3.29 Stream miles protected 7.4 Stream miles improved 104.3 Riparian acres protected 374.35 Riparian acres improved	
		South Fork John Day River		**Entrainment:**		1 Screen addressed	1984-021-00: John Day Habitat Enhancement
				Passage:			
				Complexity:			
			4.1 Riparian Condition	**WQ/Riparian:**	Protect 3.8 stream miles Protect 55 riparian acres	5 Stream miles protected 85 Riparian acres protected	
	Umatilla and Walla Walla Rivers	Touchet River		**Flow:**		312.5 Af, 9.04 cfs protected	1996-046-01: Walla Walla River Basin Fish Habitat Enhancement 2000-026-00: Rainwater Wildlife Area Operations 2008-206-00: Instream Flow Restoration
			1.1: Anthropogenic barriers	**Passage:**	Improve 3 barriers, 34.5 miles	1 Barrrier improved 0.5 miles	
			5.2: Floodplain condition, 6.1: Bed and Channel Form	**Complexity:**	Improve 1.5 instream miles		
			4.1 Riparian Condition	**WQ/Riparian:**	Protect 9 stream miles Improve 27.2 stream miles Improve 352.4 riparian acres	3 Stream miles improved 60 Riparian acres protected	
		Umatilla River	9.2: Decreased Water Quantity	**Flow:**	Protect 326 AF, 6.2 cfs	1716.2 AF, 36 cfs protected	1987-100-01: Umatilla Anadromous Fish Habitat-Umatilla Tribe 2008-206-00: Instream Flow Restoration 1987-100-02: Umatilla Anadromous Fish Habitat-Oregon Department of Fish and Wildlife (ODFW)
			2.3: Mechanical injury	**Entrainment:**	Address 120 screens	4 Screens addressed	
			1.1: Anthropogenic barriers	**Passage:**	Improve 2 barriers, 7.5 miles	2 Barriers improved 20.5 mi.	
			5.2: Floodplain condition, 6.1: Bed and Channel Form	**Complexity:**	Improve 2.5 instream miles	2.54 Instream miles improved	
			4.1 Riparian Condition	**WQ/Riparian:**	Protect 76.64 stream miles Improve 51.9 stream miles Protect 442 riparian acres Improve 727.8 riparian acres	34.3 Stream miles improved 425 Riparian acres protected 455.8 Riparian acres improved	

			Limiting Factors Identified	Metric Category	2013 - 2018 Planned Metrics	2013 Completed Metrics (Annual Report Requirement)	Projects Associated with 2013 Completed Metrics (See Attachment 2 Table 2 for USBR Projects)
	Umatilla and Walla Walla Rivers	Walla Walla River	9.2: Decreased Water Quantity	**Flow:**	Protect 8,165.8 AF, 38.9 cfs	1,128 AF, 2.8 cfs protected	2007-396-00: Walla Walla Basinwide Tributary Passage and Flow 2008-206-00: Instream Flow Restoration 1996-046-01: Walla Walla River Basin Fish Habitat Enhancement
			2.3: Mechanical injury	**Entrainment:**	Address 120 screens	1 Screen addressed	
			1.1: Anthropogenic barriers	**Passage:**	Improve 1 barrier	5 Barriers improved 34 miles	
				Complexity:		1.5 Instream miles improved	
				WQ/Riparian:		4.7 Stream miles improved 48.4 Riparian acres improved	
		Willow Creek		**Entrainment:**			
	Yakima River Group	Naches River	9.2: Decreased Water Quantity	**Flow:**	Protect 757.8 AF, 11.3 cfs	1,555.8 AF, 7.92 cfs protected	2002-013-01: Water Entity - Water Transaction Progam 2007-398-00 Yakima Basinwide Tributary Passage and Flow
			2.3: Mechanical injury	**Entrainment:**	Address 1 screen	6 Screens addressed	
				Passage:		1 Barrier improved 0.5 miles	
			4.1 Riparian Condition	**WQ/Riparian:**	Protect 24.5 stream miles	1.1 Stream miles improved 62 Riparian acres improved	
		Satus Creek	4.1 Riparian Condition	**WQ/Riparian:**	Improve 808.5 riparian acres	20 Riparian acres improved	2002-014-00 Sunnyside Wildlife Mitigation
		Toppenish	9.2: Decreased Water Quantity	**Flow:**	Protect 5,820 AF, 307.9 cfs		1992-062-00: Lower Yakima Valley Riparian Wetlands Restoration 1996-035-01: Yakama Reservation Watershed Project
				Entrainment:		1 Screen addressed	
			1.1 Anthropogenic Barriers	**Passage:**	Improve 1 barrier, 0.2 miles		
			5.2: Floodplain condition, 6.1: Bed and Channel Form	**Complexity:**	Improve 0.1 instream miles		
			4.1 Riparian Condition	**WQ/Riparian:**	Protect 64.3 stream miles Improve 9 stream miles Protect 2,784.4 riparian acres Improve 423.3 riparian acres	9 Stream miles improved 29.75 Riparian acres improved	
		Yakima River Upper Mainstem	9.2: Decreased Water Quantity	**Flow:**	Protect 7,852.7 AF, 11.75 cfs	5,900 Af, 21.4 cfs protected	1988-120-25: Yakima River Management, Data and Habitat-Yakima/Klickitat Fisheries Project (YKFP) 2002-013-01: Water Entity - Water Transaction Program 2007-398-00: Yakima Basinwide Tributary Passage and Flow
			2.3: Mechanical injury	**Entrainment:**	Address 3 screens	2 Screens addressed	
			1.1 Anthropogenic Barriers	**Passage:**	Address 6 barriers		
				Complexity:		3 Instream miles improved	
			4.1 Riparian Condition	**WQ/Riparian:**	Protect 16 stream miles Improve 4 stream miles Improve 85 riparian acres	30 Stream miles protected 6.2 Stream miles improved 140 Riparian acres protected 65.8 Riparian acres improved	

			Limiting Factors Identified	Metric Category	2013 - 2018 Planned Metrics	2013 Completed Metrics (Annual Report Requirement)	Projects Associated with 2013 Completed Metrics (See Attachment 2 Table 2 for USBR Projects)
Snake River Steelhead DPS	Dry Clearwater	Clearwater River Lower Mainstem		**Entrainment:**			1999-017-00: Protect and Restore Lapwai Creek Watershed
			9.1: Increased Water Quantity, 9.2: Decreased Water Quantity	**Flow:**			
			1.1: Anthropogenic Barriers	**Passage:**	Improve 4 barriers, 71 miles	1 Barrier improved 5 miles	
			6.1: Bed and Channel Form, 6.2: Instream Structural Complexity	**Complexity**	Improve 8.61 instream miles		2002-061-00: Potlatch River Watershed Restoration
			4.1: Riparian Condition 7.2: Increased Sediment Quantity 8.1: Temperature 8.7: Toxic Contaminants	**WQ/Riparian:**	Protect 6.7 riparian miles Improve 36.8 riparian acres	0.4 Stream mile protected 27.2 Stream miles improved 2 Riparian acres protected 722.6 Riparian acres improved	2002-070-00: Lapwai Creek Anadromous Habitat Improvements
		*** Lochsa River**	1.1: Anthropogenic Barriers	**Passage:**	Improve 13 barriers, 56.5 miles	1 Barrier improved 12.7 miles	2007-395-00: Protect and Restore Lochsa Watershed
			6.2: Instream Structural Complexity	**Complexity:**	Improve 35 instream miles		
			4.1: Riparian Condition 4.2: LWD Recruitment 7.2: Increased Sediment Quantity 8.1: Temperature	**WQ/Riparian:**	Protect 75 stream miles Improve 1,549 riparian acres	 10.5 Riparian acres improved	
		*** Lolo Creek**	1.1: Anthropogenic Barriers, 1.2: Natural Barriers	**Passage:**	Improve 5 barriers, 27.4 miles	1 Barrier improved 15 miles	1996-077-02: Lolo Creek Watershed Restoration
			6.2: Instream Structural Complexity	**Complexity:**	Improve 0.4 instream mile		
			4.1: Riparian Condition 7.2: Increased Sediment Quantity 8.1: Temperature 8.2: Oxygen	**WQ/Riparian:**	Improve 1 stream mile Protect 16 stream miles Improve 10 riparian acres	0.5 Stream mile improved 37 Riparian acres improved	
		*** Selway River**	1.1: Anthropogenic Barriers	**Passage:**	Improve 3 barriers, 34.1 miles	1 Barrier improved 8.5 mi.	2007-092-00: Restore Selway River Watershed
			4.1: Riparian Condition 7.2: Increased Sediment Quantity 8.1: Temperature		Improve 1 stream mile		
		*** South Fork Clearwater River**	1.1: Anthropogenic Barriers	**Passage:**	Improve 23 barriers, 71.7 miles	7 Barriers improved 10.5 miles	2010-003-00: Lower South Fork Clearwater River Watershed Restoration
			6.2: Instream Structural Complexity	**Complexity:**	Improve 8.1 instream miles		2002-072-00: Red River Watershed Restoration
			4.1: Riparian Condition, 4.2: LWD Recruitment 5.1: Side Channel and Wetland Conditions, 5.2: Floodplain Condition 7.2: Increased Sediment Quantity 8.1: Temperature	**WQ/Riparian:**	Improve 15 stream miles Improve 314.5 riparian acres	13 Stream miles improved 16.4 Riparian acres improved	
Snake River Steelhead DPS	Grande Ronde River	Grande Ronde River Lower Mainstem Tributaries	9.1: Increased Water Quantity, 9.2: Decreased Water Quantity	**Flow:**			
			1.1: Anthropogenic Barriers	**Passage:**	Improve 1 barrier, 8 miles		
			6.2: Instream Structural Complexity	**Complexity:**			
			4.1: Riparian Condition 7.2: Increased Sediment Quantity 8.1: Temperature	**WQ/Riparian:**			

			Limiting Factors Identified	Metric Category	2013 - 2018 Planned Metrics	2013 Completed Metrics (Annual Report Requirement)	Projects Associated with 2013 Completed Metrics (See Attachment 2 Table 2 for USBR Projects)
Snake River Steelhead DPS	Grande Ronde River	Grande Ronde River Upper Mainstem	9.2: Decreased Water Quantity	**Flow:**	Protect 1,782 AF, 15.5 cfs	545 AF, 3.1 cfs protected	1992-026-01: Grande Ronde Model Watershed 2008-206-00: Instream Flow Restoration 1984-025-00: Blue Mountain Fish Habitat Improvement 1996-083-00: Grande Ronde Watershed Restoration USBR Project 4473
				Entrainment:	Address 2 barriers		
			1.1: Anthropogenic Barriers	**Passage:**	Improve 28 barriers, 75.6 miles	5 Barriers improved 9.1 miles	
			6.1: Bed and Channel Form, 6.2: Instream Structural Complexity	**Complexity:**	Improve 108.6 instream miles	14.18 Instream miles improved	
			4.1: Riparian Condition	**WQ/Riparian:**	Protect 15 riparian miles	2.66 Stream miles protected	
			4.2: LWD Recruitment		Improve 45.5 stream miles	29.8 Stream miles improved	
			5.1: Side Channel and Wetland Conditions		Protect 1,000 riparian acres	25.6 Riparian acres protected	
			5.2: Floodplain Condition		Improve 1,916.5 riparian acres	647.8 Riparian acres improved	
			7.2: Increased Sediment Quantity				
			8.1: Temperature, 8.2: Oxygen, 8.4: Turbidity				
		Joseph Creek	9.2: Decreased Water Quantity	**Flow:**	Protect 0.8 cfs		1996-080-00: Northeast Oregon Wildlife Project
			4.1: Riparian Condition	**WQ/Riparian:**	Improve 0.5 stream miles	2.3 Stream miles improved	
			5.2: Floodplain Condition			53.5 Riparian acres improved	
			7.2: Increased Sediment Quantity				
			8.1: Temperature, 8.2: Oxygen				
		Wallowa River	9.1: Increased Water Quantity, 9.2: Decreased Water Quantity	**Flow:**	Protect 30 cfs	1,188 AF, 15 cfs protected	1992-026-01: Grande Ronde Model Watershed 2002-013-01: Water Entity - Water Transaction Program
			1.1: Anthropogenic Barriers	**Passage:**	Improve 7 barriers, 54.3 miles	2 Barriers improved 12 miles	
			6.1: Bed and Channel Form, 6.2: Instream Structural Complexity	**Complexity:**	Improve 2 instream miles	0.06 Instream mile improved	
			4.1: Riparian Condition, 5.2: Floodplain Condition	**WQ/Riparian:**		1.28 Stream miles protected	
			7.2: Increased Sediment Quantity, 8.1: Temperature, 8.2: Oxygen		Protect 257 riparian acres	21 Riparian acres protected	
	Imnaha River	Imnaha River	9.1: Increased Water Quantity, 9.2: Decreased Water Quantity	**Flow:**	Protect 1.2 cfs		
			1.1: Anthropogenic Barriers	**Passage:**	Improve 9 barriers, 74 miles		
			4.1: Riparian Condition	**WQ/Riparian:**	Improve 2 stream miles		
			7.2: Increased Sediment Quantity, 8.1: Temperature, 8.2: Oxygen				
	Lower Snake	Asotin Creek	1.1: Anthropogenic Barriers	**Passage:**	Improve 1 barrier, 8 miles	1 Instream mile improved	1994-018-05: Asotin Creek Enhancement and Restoration 2002-050-00: Riparian Buffers on Couse and Tenmile Creeks in Asotin County
			6.1: Bed and Channel Form, 6.2: Instream Structural Complexity	**Complexity:**	Improve 6.5 instream miles	4.1 Stream miles protected	
			4.1: Riparian Condition	**WQ/Riparian:**	Improve 4 stream miles	8 Stream miles improved	
			5.2: Floodplain Condition			66 Riparian acres protected	
			7.2: Increased Sediment Quantity, 8.1: Temperature, 8.4: Turbidity			96.3 Riparian acres improved	
		Tucannon	9.2: Decreased Water Quantity	**Flow:**	Protect 23.4 AF		1994-018-06: Tucannon Stream and Riparian Restoration 2008-202-00: Protect and Restore Tucannon Watershed
			1.1: Anthropogenic Barriers	**Passage:**	Improve 1 barrier, 30 miles	2 Barriers improved 1.8 miles	
			6.1: Bed and Channel Form, 6.2: Instream Structural Complexity	**Complexity:**	Improve 26.4 instream miles	1.6 Instream miles improved	
			4.1: Riparian Condition	**WQ/Riparian:**	Protect 1.3 stream miles	1.19 Stream miles protected	
			5.2: Floodplain Condition		Improve 13.9 stream miles	1.55 Stream miles improved	
			7.2: Increased Sediment Quantity			39.9 Riparian acres protected	
			8.1: Temperature, 8.4: Turbidity		Improve 143 riparian acres	30.3 Riparian acres improved	

			Limiting Factors Identified	Metric Category	2013 - 2018 Planned Metrics	2013 Completed Metrics (Annual Report Requirement)	Projects Associated with 2013 Completed Metrics (See Attachment 2 Table 2 for USBR Projects)
Snake River Steelhead DPS	Salmon River	*** Lower Middle Fork Salmon River (Big, Camas, and Loon Creeks**	1.1: Anthropogenic Barriers	**Passage:**	Improve 3 barriers, 8 miles		
			7.2: Increased Sediment Quantity 8.7: Toxic Contaminants	**WQ/Riparian:**	Improve 102.6 riparian acres		
		East Fork Salmon River	9.2: Decreased Water Quantity	**Flow:**	Protect 15.5 cfs	241.2 AF, 2 cfs protected	2007-268-00: Idaho Watershed Habitat Restoration-Custer District 2002-013-01: Water Entity - Water Transaction Program
			2.3: Mechanical Injury	**Entrainment:**	Address 3 screens		
			1.1: Anthropogenic Barriers	**Passage:**	Improve 3 barriers, 7.9 miles		
				Complexity:			
				WQ/Riparian:		1.3 Stream miles protected 5 Riparian acres protected	
		Chamberlain Creek	»Not listed in RPA Action 35 Table 5	**Passage:**		1 Barrier improved 2.5 miles	2002-072-00: Red River Watershed Restoration
		Lemhi	9.2: Decreased Water Quantity	**Flow:**	Protect 36.8 cfs	3,281.1 AF, 37.8 cfs protected	1994-015-00: Idaho Fish Screening Project
			2.3: Mechanical Injury	**Entrainment:**	Address 35 screens	5 Screens addressed	2008-903-00: ESA Habitat Restoration
			1.1: Anthropogenic Barriers	**Passage:**	Improve 34 barriers, 63.2 miles	12 Barriers improved 25 mi.	2010-072-00: Lemhi River Restoration
			6.1: Bed and Channel Form, 6.2: Instream Structural Complexity	**Complexity:**	Improve 10.87 instream miles	0.59 Instream mile improved	2007-399-00: Upper Salmon Screen Tributary Passage
			4.1: Riparian Condition 5.2: Floodplain Condition 7.2: Increased Sediment Quantity 8.1: Temperature	**WQ/Riparian:**	Protect 11.5 stream miles Improve 10.75 stream miles Improve 5 riparian acres	0.92 Stream mile protected 0.86 Stream mile improved 3.55 Riparian acres protected 3.18 Riparian acres improved	2008-608-00: Idaho MOA/Fish Accord Water Transactions USBR Project 4553, 4554, 4555, 4556, and 4557
		Middle Fork Salmon River Upper Mainstem	»Not listed in RPA Action 35 Table 5	**Entrainment:**			
		Little Salmon and Rapid River	»Not listed in RPA Action 35 Table 5	**Passage:**		1 Barrier improved 3 mi.	2007-064-00: Slate Creek Watershed Restoration
				WQ/Riparian:			
		Pahsimeroi River	9.2: Decreased Water Quantity	**Flow:**	Protect 14 cfs		2007-399-00: Upper Salmon Screen Tributary Passage
			2.3: Mechanical Injury	**Entrainment:**	Address 5 screens	1 Screen addressed	
			1.1: Anthropogenic Barriers	**Passage:**	Improve 17 barriers, 72.4 miles	2 Barriers improved 2.2 miles	
			6.1: Bed and Channel Form	**Complexity:**	Improve 17.8 instream miles		USBR Project 4470
			4.1: Riparian Condition 7.1: Decreased Sediment Quantity, 7.2: Increased Sediment Quantity 8.1: Temperature		Protect 2 stream miles Improve 7 stream miles		
		Panther Creek	»Not listed in RPA Action 35 Table 5	**WQ/Riparian:**		0.46 Stream mile protected	2008-903-00: ESA Habitat Restoration

			Limiting Factors Identified	Metric Category	2013 - 2018 Planned Metrics	2013 Completed Metrics (Annual Report Requirement)	Projects Associated with 2013 Completed Metrics (See Attachment 2 Table 2 for USBR Projects)
Snake River Steelhead DPS	Salmon River	Upper Mainstem Salmon River	9.2: Decreased Water Quantity	**Flow:**	Protect 22 cfs	893 AF, 6 cfs protected	2007-268-00: Idaho Watershed Habitat 2002-013-01: Water Entity - Water Transaction Program 2007-399-00: Upper Salmon Screen Tributary Passage
			2.3: Mechanical Injury	**Entrainment:**			
			1.1: Anthropogenic Barriers	**Passage:**	Improve 6 barriers, 9.9 miles	3 Barriers improved 1.2 miles	
			6.1: Bed and Channel Form, 6.2: Instream Structural Complexity	**Complexity:**	Improve 7.92 instream miles	0.69 Instream mile improved	
			4.1: Riparian Condition, 4.2: LWD Recruitment 5.2: Floodplain Condition 7.1: Decreased Sediment Quantity, 7.2: Increased Sediment Quantity	**WQ/Riparian:**		3.34 Stream miles protected 0.34 Stream mile improved 18.3 Riparian acres protected	
			8.1: Temperature		Improve 20 riparian acres	12.25 Riparian acres improved	
		*** Secesh River**	1.1: Anthropogenic Barriers	**Passage:**	Improve 2 barriers, 1.9 miles		
			7.2: Increased Sediment Quantity	**WQ/Riparian:**			
		*** South Fork Salmon River**	1.1: Anthropogenic Barriers	**Passage:**	Improve 6 barriers, 12.2 miles	2 Barriers improved 0.6 miles	2007-127-00: East Fork of South Fork Salmon River Passage Restoration
			7.2: Increased Sediment Quantity 8.1: Temperature 8.7: Toxic Contaminants	**WQ/Riparian:**	Improve 2 riparian acres	0.2 Stream mile protected 5 Stream miles improved 1 Riparian acre protected	
Upper Columbia River Steelhead DPS	Upper Columbia/East Slope Cascades	*** Entiat**	9.1: Increased Water Quantity, 9.2: Decreased Water Quantity	**Flow:**			2010-001-00: Upper Columbia Programmatic Habitat
			2.3: Mechanical Injury	**Entrainment:**	Address 8 screens		
			1.1: Anthropogenic Barriers	**Passage:**	Improve 3 barriers, 3.5 miles	2 Barriers improved 0.6 miles	
			6.1: Bed and Channel Form, 6.2: Instream Structural Complexity	**Complexity:**	Improve 6.2 instream miles		
			4.1: Riparian Condition 5.1: Side Channel and Wetland Conditions 5.2: Floodplain Condition	**WQ/Riparian:**	 Improve 2.6 stream miles Improve 125.8 riparian acres	0.84 Stream mile protected 1.37 Stream miles improved 5.6 Riparian acres improved	
		*** Methow**	9.1: Increased Water Quantity, 9.2: Decreased Water Quantity	**Flow:**	Protect 7,351 AF, 14 cfs	3,088.8 AF, 24 cfs protected	2002-013-01: Water Entity - Water Transaction Program 2009-003-00: Upper Columbia Habitat Restoration USBR Project 4263, 4459, 4536, 4558
			2.3: Mechanical Injury	**Entrainment:**	Address 7 screens	1 Screen addressed	
			1.1: Anthropogenic Barriers	**Passage:**	Improve 8 barriers, 42 miles	3 Barriers improved; 1.3 miles	
			6.1: Bed and Channel Form, 6.2: Instream Structural Complexity	**Complexity:**	Improve 23.2 instream miles	2.41 Instream miles improved	
			4.1: Riparian Condition 5.1: Side Channel and Wetland Conditions 5.2: Floodplain Condition 7.2: Increased Sediment Quantity 8.1: Temperature	**WQ/Riparian:**	 Improve 4.6 stream miles Protect 0.3 riparian acre Improve 320.6 riparian acres	1.23 Stream miles protected 1.61 Stream miles improved 44.7 Riparian acres protected 3.3 Riparian acres improved	
		*** Okanogan**	9.2: Decreased Water Quantity	**Flow:**	Protect 4,630 AF, 7.5 cfs	1731.6 AF, 514.6 cfs protected	2007-224-00: Okanogan Subbasin Habitat Implementation Program 2008-104-00: Land & Water Acquisition
			2.3: Mechanical Injury	**Entrainment:**	Address 55 screens	20 Screens addressed	
			1.1: Anthropogenic Barriers	**Passage:**	Improve 3 barriers, 26.6 miles	1 Barrier improved	
			6.1: Bed and Channel Form, 6.2: Instream Structural Complexity	**Complexity:**	Improve 2.4 instream miles	0.29 Instream mile improved	
				WQ/Riparian:	 Improve 4.6 stream miles Improve.4 riparian acre	0.84 Stream mile protected 5 Stream miles improved 7.5 Riparian acres protected 67.3 Riparian acres improved	

			Limiting Factors Identified	Metric Category	2013 - 2018 Planned Metrics	2013 Completed Metrics (Annual Report Requirement)	Projects Associated with 2013 Completed Metrics (See Attachment 2 Table 2 for USBR Projects)
Upper Columbia River Steelhead DPS	Upper Columbia/East Slope Cascades	* Wenatchee	9.2: Decreased Water Quantity	**Flow:**	Protect 15 cfs	15,766.5 AF, 73.78 cfs protected	2010-001-00: Upper Columbia Programmatic Habitat 2009-003-00: Upper Columbia Habitat Restoration USBR Project 4390, 4421, 4480, 4559, and 4560
			1.1: Anthropogenic Barriers	**Passage:**	Improve 2 barriers, 26.5 miles	4 Barriers improved 3.65 miles	
			6.1: Bed and Channel Form, 6.2: Instream Structural Complexity	**Complexity:**	Improve 20.1 instream miles	0.1 Instream mile improved	
			4.1: Riparian Condition 5.1: Side Channel and Wetland Conditions, 5.2: Floodplain Condition 7.1: Decreased Sediment Quantity, 7.2: Increased Sediment Quantity 8.1: Temperature, 8.3: Gas Saturation, 8.5: pH	**WQ/Riparian:**	Improve 2 stream miles Improve 23.9 riparian acres	0.2 Stream mile improved 2.2 Riparian acres improved	
		Crab Creek	»Not listed in RPA Action 35 Table 5	**WQ/Riparian:**		116.9 Riparian acres improved	2006-003-00: Desert Wildlife Mitigation

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Attachment 2 – Table 2. Status of Tributary Habitat Actions Completed in 2013 with Reclamation Technical Assistance

Table 2 contains metric values for actions completed in 2013 with technical assistance provided by Reclamation. These actions complement BPA-funded projects (meaning both agencies participate in the same project).

Project ID with ** indicates USBR and partners OTHER THAN BPA.

The following descriptions apply. Streamflow: streamflow protected under State law. Stream length: stream length affected. Type (channel access): D, diversion; C, culvert. Extent of barrier: P, partial (upstream access seasonably inaccessible prior to action); F, full (absolutely no passage prior to action). Access: miles made accessible to next upstream full or partial barrier. Stream length affected (Miles): miles between action location and next diversion. Complexity Miles: length of instream habitat treated after action completed.

								STREAMFLOW		ACCESS			ENTRAINMENT		COMPLEXITY
Project ID	**Subbasin**	**Metric Type**	**Project Title**	**ESU/DPS**	**Major Sponsor / Partner**	**Lat Long**	**Construction Completion Date**	**Instream Volume (cfs)**	**Stream Length Miles**	**Type**	**Extent of Barrier**	**Access Miles**	**Screens Replaced**	**Stream Length Affected (Miles)**	**Complexity Miles/ Type**
4473	**Grande Ronde**	Channel Complexity	CC-44 Habitat Improvement Project Phase 1	Snake R Steelhead, and Sp/Su Chinook	BPA, Union SWCD, CTUIR, ODFW	45 10 30	10/31/2013								0.34 mile main channel
	Action Description	2013 action is a phase in a series of channel complexity and irrigation improvements and conservation easements on middle Catherine Creek through OWEB and BPA funding. This addressed 5 sites on 1.8 miles of stream with four separate landowners.				117 48 33									
4411	**John Day Middle Fork**	Channel Access	Austin Ranch Diversion	Middle Columbia River Steelhead	BPA, Grant SWCD, CTWSRO, USFS, OWEB	44 36 14	9/1/2013			D	F	15			
	Action Description	The Austin Ranch Diversion is about 17 miles north east of Prairie City, Oregon and diverts from the Middle Fork John Day. This high quality water is home to spawning and rearing steelhead and chinook. Action included replacing old partial fish barrier diversion with new fish passable structure.				118 28 50									
4429	**John Day Upper Main**	Streamflow and Entrainment and Channel Access	Chouinard Groundwater Conversion Project	Middle Columbia River Steelhead	BPA, Grant SWCD, CTWSRO	44 28 04	8/30/2013	1.6	3	D	P	1	1		
	Action Description	Action improved flow conditions in the upper John Day River by eliminating a stream irrigation diverion and converting to using a well. Water rights were obtained through an agreement with the Warms Springs Tribe and BPA and transfer surface water rights and leave instream. This permanently removed the push-up dam and converted the irrigation rights to instream rights held by the State of Oregon.				119 28 54									
4413	**John Day Upper Main**	Channel Access	Dad's Creek #1 Siphon	Middle Columbia River Steelhead	Grant SWCD, ODFW, OWEB, USFWS	44 27 22	8/13/2013			D	F	6.5			0.01 main channel

								STREAMFLOW		ACCESS			ENTRAINMENT		COMPLEXITY
Project ID	**Subbasin**	**Metric Type**	**Project Title**	**ESU/DPS**	**Major Sponsor / Partner**	**Lat Long**	**Construction Completion Date**	**Instream Volume (cfs)**	**Stream Length Miles**	**Type**	**Extent of Barrier**	**Access Miles**	**Screens Replaced**	**Stream Length Affected (Miles)**	**Complexity Miles/ Type**
	Action Description	This small tributary is known to have a remnant population of spawning and rearing steelhead. The action removed two barriers from an irrigation ditch intercept about a quarter mile from the confluence with the river. This allows for Dads Creek to flow unimpeeded to the river opening up 6.5 miles of access.				118 40 11									
4408	**John Day Upper Main**	Channel Access	Dovenberg Pump Station	Middle Columbia River Steelhead	Grant SWCD, CTWSRO, BPA, OWEB	44 26 15	8/15/2013			D	P	1			
	Action Description	This pump station on the Upper John Day River previously required a gravel pushup dam across the river to maintain proper water depth for the pump intake and fish screens function. This created a partial barrier depending on year to year timing and construction of the dam. The action installed a permanent rock weir providing full fish passage one mile upstream to the next irrigation diversion.				119 20 01									
4433	**John Day Upper Main**	Channel Access	Long Meadow Diversion	Middle Columbia River Steelhead	Grant SWCD, CTWSRO, BPA, OWEB	44 26 23	8/15/2013			D	P	2.5			
	Action Description	Action replaced the previous partial fish barrier push-up dam with an upgraded diversion structure provinding year-round fish passage and screening on the upper Jjohn Day River				118 48 28									
4475 **	**John Day Upper Main**	Channel Complexity	ODFW Phillip Schneider WA Habitat Improvement	Middle Columbia River Steelhead	Grant SWCD, ODFW, OWEB	44 27 23	8/15/2013								0.3 mile main channel
	Action Description	Action addesssed eroding banks and lack of instream fish habitat on the upper John Day River. This installed log structures and bank revetments increasing habitat complexity/cover, reducing erosion, and preventing channel avulsion.				119 26 32									
4510	**John Day Upper Main**	Channel Access	Stimac Pump Station Canyon Creek UMJD	Middle Columbia River Steelhead	Grant SWCD, CTWSRO, BPA	44 17 39	12/10/2013			D	P	0.5			
	Action Description	Action relocated an irrigation pump station on Canyon Creek, tributary to Upper John Day River. The previous structure required a pushup dam causing a partial fish barrier. Diversion was relocated to an adjacent site, eliminating the barrier.				118 57 16									
4459	**Methow**	Channel Complexity (main) and Channel Access and Channel Complexity (side)	M2 O'Banion Project Area	Upper Columbia Steelhead and Spring Chinook	BPA, MSRF, SRFB	48 25 44	10/23/2013			C	P	0.3			0.3 mile main and 0.5 mile side channel
	Action Description	The Middle Methow (M2) reach assessment is being used by the M2 Work Group to identify potential projects in the reach that will improve fish habitat. The O'Banion action added complexity/cover to the Methow and side channels and reconnected floodplain and alcove habitat.				120 08 40									

								STREAMFLOW		ACCESS			ENTRAINMENT		COMPLEXITY
Project ID	**Subbasin**	**Metric Type**	**Project Title**	**ESU/DPS**	**Major Sponsor / Partner**	**Lat Long**	**Construction Completion Date**	**Instream Volume (cfs)**	**Stream Length Miles**	**Type**	**Extent of Barrier**	**Access Miles**	**Screens Replaced**	**Stream Length Affected (Miles)**	**Complexity Miles/ Type**
4536	**Methow**	Channel Access and Channel Complexity	Right Elbow Reconnection	Upper Columbia Steelhead and Spring Chinook	BPA, MSRF, USFS	48 22 42	10/23/2013			D	P	0.3			0.3 mile side channel
	Action Description	Action addressed older levee which eliminated surface flow and fish access into a side channel on the Twisp River. This modified and improved a previous action breeching the levee allowing stream flow and fish to access important secondary channel habitat for rearing.				120 13 35									
4558 **	**Methow**	Streamflow	Twisp River Well Conversion Project	Upper Columbia Steelhead and Spring Chinook	NRCS, WA Depart Ecology, TU	48 22 42	11/1/2013	4.5	6.5						
	Action Description	Action eliminated a stream diversion in the Twisp River, improving habitat for ESA-listed fish by increasing instream flows and eliminating entrainment potential in the ditch. Completion of this action allows additional projects to move forward in a larger concept to improve habitat conditions in the lower river.				120 13 31									
4263	**Methow**	Entrainment and Channel Complexity and Channel Access	Upper Beaver Creek Side Channel Reconnection	Upper Columbia Steelhead and Spring Chinook	BPA, USFWS	48 20 22	11/25/2013			D	P	1	1		0.4 mile side channel
	Action Description	Action rehabilitaed 0.4 miles of tributary habitat by constructing stream channel from previously channelized conditions into original adjacent functioning floodplain/channel. This now provides improved habitat conditions and eliminates a partial barrier from an irrigation diversion and screens the ditch.				120 02 37									
4480	**Wenatchee**	Streamflow	Lower Wenatchee Instream Flow Enhancement Project (Pioneer Water Users Assoc)	Upper Columbia Steelhead and Spring Chinook	BPA, TU	47 29 21	10/23/2013	38.3	7	C					
	Action Description	Action was part of a larger diversion elimination by removing a dam on side channel of the river (partial barrier) and reduce water withdrawal. Original canal diverted over 30 cfs from the lower river. The system now pumps from wells installed at the confluence of the Wenatchee and Columbia Rivers and allowing the previously diverted water to remain instream.				120 25 12									
4560	**Wenatchee**	Channel Access	Lower Wenatchee Pioneer Dam Removal	Upper Columbia Steelhead and Spring Chinook	BPA, TU	47 29 37	8/26/2013			D	P	0.1			
	Action Description	This project removed the historic side-channel-spanning Pioneer Diversion Dam (fish passage is in place at Dryden Dam and Tumwater Dam farther upstream).				120 25 16									
4421	**Wenatchee**	Channel Access	Nason Creek Lower White Pine Reach Oxbow Reconnect	Upper Columbia Steelhead and Spring Chinook	BPA, Burlington-Northern RR, SRFB	47 46 6	10/22/2013			C	P	1.8			
	Action Description	The Project Sponsor explored several project concepts over a range of flows to reconnect channel segments cutoff by construction of the BNSF rail line within the Lower White Pine reach of Nason Creek. The preferred alternative consists of an upstream connection of the Upper Oxbow, a downstream connection of the Lower Oxbow, and a channel connecting the two.				120 48 27									

								STREAMFLOW		ACCESS			ENTRAINMENT		COMPLEXITY
Project ID	**Subbasin**	**Metric Type**	**Project Title**	**ESU/DPS**	**Major Sponsor / Partner**	**Lat Long**	**Construction Completion Date**	**Instream Volume (cfs)**	**Stream Length Miles**	**Type**	**Extent of Barrier**	**Access Miles**	**Screens Replaced**	**Stream Length Affected (Miles)**	**Complexity Miles/ Type**
4390 **	**Wenatchee**	Channel Access	Upper Chumstick Barriers	Upper Columbia Steelhead and Spring Chinook	USFWS, SRFB	47 41 43	10/31/2013			C	P	1.8			
	Action Description	This 2013 barrier removal is the last of the main actions as part of a larger tributary reconnection of Chumstick Creek.				120 38 17									
4559	**Wenatchee**	Channel Complexity	Wenatchee First Bend Project	Upper Columbia Steelhead and Spring Chinook	BPA, Yakama Nation	47 46 40	8/30/2013								0.13 mile main channel
	Action Description	Action increased Large woody material (LWM) habitat and LWM recruitment through installation of LWM structures and riparian planting.				120 49 44									
4555	**Lemhi**	Channel Access	Hawley Creek Culvert-to-Bridge Replacement Project (Private)	Snake R Steelhead, and Sp/Su Chinook	BPA, Lemhi SWCD	44 40 40	4/25/2013			C	F	4.7			
	Action Description	Replaced barrier culvert with bridge to improve fish passage and access to additional habitat in Hawley Creek, tributary to the Lemhi River as part of a larger reconnection concept.				113 17 13									
4553	**Lemhi**	Streamflow and Entrainment and Channel Access	Lemhi Bohannon Creek Diversion Consolidation-Flow Enhancement Project	Snake R Steelhead, and Sp/Su Chinook	BPA, IDFG, OSC	45 10 48	3/31/2013	3	0.5	C and D	F	2.3	1	2.3	
	Action Description	Improved fish passage and flow in an upper reach of Bohannon Creek, a tributary to the Lemhi River as part of a larger reconnection concept. This included consolidating three diversions into one, screening, reducing water withdrawal laeving an added 2 cfs or more instream, and improving access for an added 2.3 miles.				113 42 15									
4554	**Lemhi**	Channel Access	Lemhi Hawley Creek Culvert Replacement (BLM)	Snake R Steelhead, and Sp/Su Chinook	BPA, Lemhi SWCD	44 39 37	8/30/2013			C	P	0.13			
	Action Description	Replaced perched culvert with bridge to improve fish passage and access to additional habitat in Hawley Creek, tributary to the Lemhi River as part of a larger reconnection concept.				113 12 17									
4556 **	**Lemhi**	Channel Complexity	Lower Lemhi Project	Snake R Steelhead, and Sp/Su Chinook	Private landowner	45 04 53	10/31/2013								0.02 mile main channel
	Action Description	Project installed bioengineering techniques (i.e., engineered logjam, instream barb) to stabilize the eroding river bank, improve fish habitat, and protect private property on the lower Lemhi River.				113 42 57									
4557	**Lemhi**	Channel Complexity	Upper Lemhi River Side Channel Project	Snake R Steelhead, and Sp/Su Chinook	BPA, IDFG, OSC	44 47 36	10/31/2013								0.1 mile side channel
	Action Description	Action modified the Lemhi River channel previously impacted from a landslide to improve fish habitat by rehabilitating the disturbed channel, increasing instream complexity, substrate diversity and riparian vegetation.				113 33 25									
4470	**Salmon**	Channel Access	Iron Creek 7 Diversion Enhancement Project	Snake R Steelhead, and Sp/Su Chinook	BPA, IDFG	44 54 38	9/30/2013			D	P	4			

								STREAMFLOW		ACCESS			ENTRAINMENT		COMPLEXITY
Project ID	**Subbasin**	**Metric Type**	**Project Title**	**ESU/DPS**	**Major Sponsor / Partner**	**Lat Long**	**Construction Completion Date**	**Instream Volume (cfs)**	**Stream Length Miles**	**Type**	**Extent of Barrier**	**Access Miles**	**Screens Replaced**	**Stream Length Affected (Miles)**	**Complexity Miles/ Type**
	Action Description	Action reconstructed the Iron Creek 7 diversion site previously impassable to juvenile salmon and steelhead at most flows. The site now provides passage conditions allowing fish access to the upper reaches. This was the final part of a reconnection concept now installed.				114 02 04									
4508	**Salmon**	Channel Complexity and Channel Access	Yankee Fork Side Channel Development at Pond Series 2 (PS2)	Snake R Steelhead, and Sp/Su Chinook	BPA, TU, OSC, Shoshone-Bannock Tribes, USFS	44 20 20	9/30/2013			C	P	0.5			0.5 mile side channel
	Action Description	Action modified the limited existing secondary channel pond habitat to create improved conditions for rearing salmon/steelhead. This is part of a suite of actions in increase access to habitat, increase complexity and overall spawning/rearing conditions.				114 43 22									

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Attachment 3 – Table 1. 2013 Tributary Habitat Reports by the Bureau of Reclamation

Report Name	Internet address	Date
Reclamation's 2013 Annual Report of Tributary Habitat Projects Completed for the 2010 FCRPS Biological Opinion	http://www.usbr.gov/pn/fcrps/habitat/projects/annualreports/2013annrpt.pdf	Sep-14
Reclamation's 2012 Annual Report of Tributary Habitat Projects Completed for the 2010 FCRPS Biological Opinion	http://www.usbr.gov/pn/programs/fcrps/thp/other/2012annrept.pdf	May-13
Washington		
Entiat		
Gray Reach Assessment	http://www.usbr.gov/pn/fcrps/habitat/projects/uppercolumbia/reports/entiat/grayreach/assessment.pdf	May-13
Gray Reach Project Map Book	http://www.usbr.gov/pn/fcrps/habitat/projects/uppercolumbia/reports/entiat/grayreach/assessment.pdf	May-13
Stormy Reach Assessment Update	http://www.usbr.gov/pn/fcrps/habitat/projects/uppercolumbia/reports/entiat/stormyreach/stormyupdate.pdf	May-13
Stormy Reach Project Map Book	http://www.usbr.gov/pn/fcrps/habitat/projects/uppercolumbia/reports/entiat/stormyreach/stormymap.pdf	May-13
Oregon		
Grande Ronde River Basin		
Upper Grande Ronde Tributary Assessment	http://www.usbr.gov/pn/fcrps/habitat/projects/granderonde/reports/upgrta2014.pdf	Jan-14

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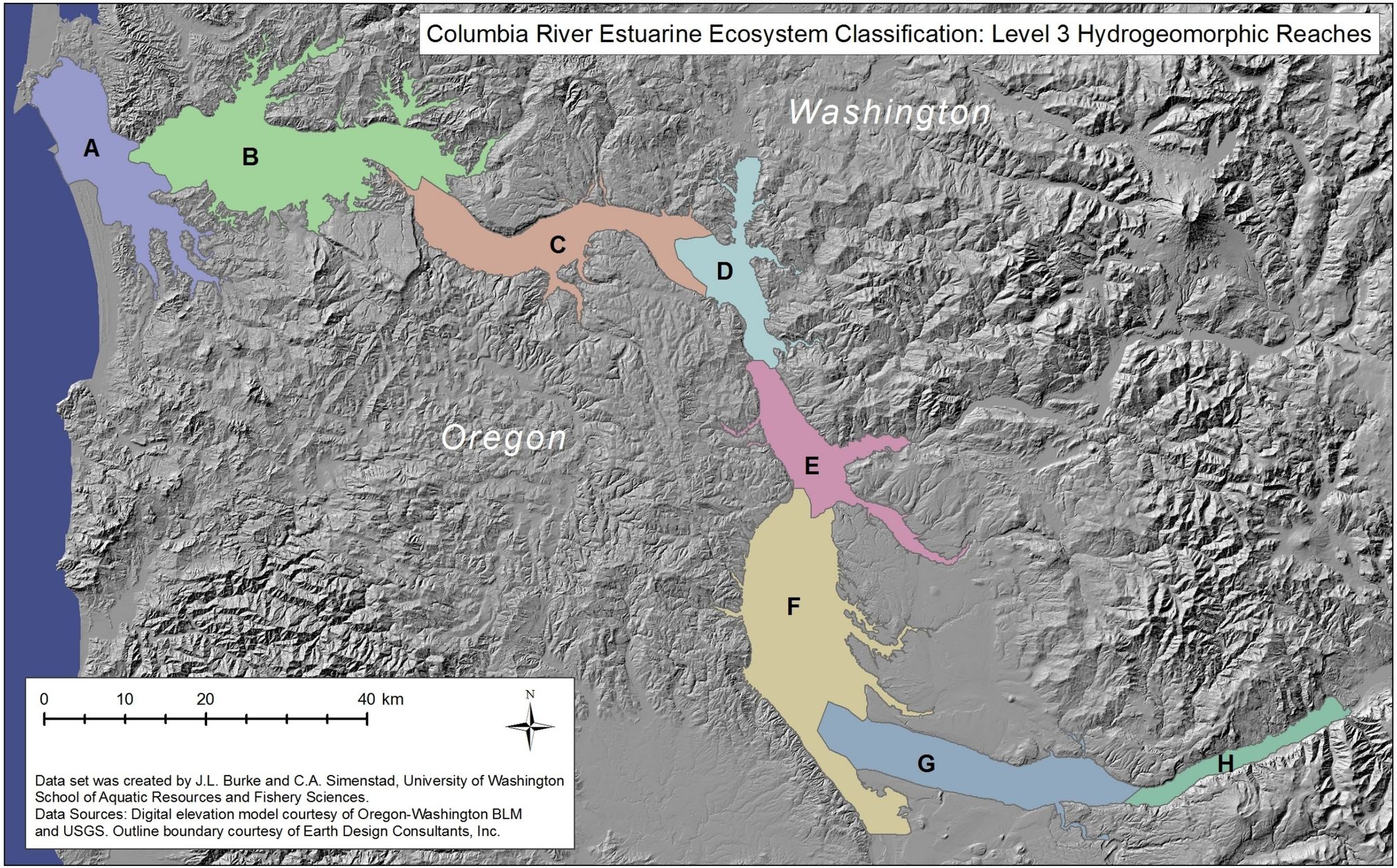
Attachment 4: Action Agency 2013 Estuary Habitat Projects



Attachment 4 – Table 1. Action Agency 2013 Estuary Habitat Projects

Location (Reach A–H)	Project Name	Project Number	Lead Agency / Sponsor	Estuary Module Action (Project Subactions Addressing Identified Limiting Factors)	Linear Miles of Riparian Stream / Channel Improved	Acres Restored	Ocean SBUs	Stream SBUs	[1]SBU Type	Status
Completed in 2013										
A	Chinook River Phase 1	2010-070-00	BPA / WDFW	CRE 9.3 Actively purchase off-channel habitats in urban and rural settings that (1) cannot be effectively protected through regulation, (2) are degraded but have good restoration potential, or (3) are highly degraded but could benefit from long-term restoration solutions		202	0.149	0.056	AA Final	Completed in 2013
A	Wallooskee-Youngs Phase 1	2012-015-00	BPA / Cowlitz Tribe	CRE 9.3 Actively purchase off-channel habitats in urban and rural settings that (1) cannot be effectively protected through regulation, (2) are degraded but have good restoration potential, or (3) are highly degraded but could benefit from long-term restoration solutions		163.4	0.113	0.042	AA Final	Completed in 2013
B	Skamokawa Creek – Dead Slough	2003-011-00	BPA / Estuary Partnership	CRE 1.4 Restore and maintain ecological benefits in riparian areas; this includes managing vegetation on dikes and levees to enhance ecological function and adding shoreline/instream complexity for juvenile salmonid refugia	4		0.077	0.052	ERTG Final	Completed in 2013
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality		31.9				
				CRE 10.3 Upgrade tide gates where (1) no other options exist, (2) upgraded structures can provide appropriate access for juveniles, and (3) ecosystem function would be improved over current conditions		8.6				
				CRE 15.3 Implement projects to address infestations on public and private lands		30				
B	Grays River Confluence – Phase 1	2010-073-00	BPA / Columbia Land Trust	CRE 9.3 Actively purchase off-channel habitats in urban and rural settings that (1) cannot be effectively protected through regulation, (2) are degraded but have good restoration potential, or (3) are highly degraded but could benefit from long-term restoration solutions		123	0.103	0.039	AA Final	Completed in 2013
B	Grays Bay Kandoll Farm – Phase 2	2010-073-00	BPA / Columbia Land Trust	CRE 1.4 Restore and maintain ecological benefits in riparian areas; this includes managing vegetation on dikes and levees to enhance ecological function and adding shoreline/instream complexity for juvenile salmonid refugia	6.2		1.247	0.423	ERTG Final	Completed in 2013
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality		8.6				
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels		163				
				CRE 15.3 Implement projects to address infestations on public and private lands		84				
B	Gnat Creek – Phase 2	2010-004-00	BPA / CREST	CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels		67.8	0.432	0.133	ERTG Final	Completed in 2013
C	Dibblee Point	2010-004-00	BPA / CREST	CRE 1.4 Restore and maintain ecological benefits in riparian areas; this includes managing vegetation on dikes and levees to enhance ecological function and adding shoreline/instream complexity for juvenile salmonid refugia	0.4		0.021	0.010	ERTG Final	Completed in 2013
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality		1.1				
				CRE 10.2 Remove tide gates to improve the hydrology between wetlands and the channel and to provide juveniles with physical access to off-channel habitat; use a habitat connectivity index to prioritize projects		12.1				
				CRE 15.3 Implement projects to address infestations on public and private lands		2.1				

[1] **Preliminary SBU Score**: The AA's used the Expert Regional Technical Group's (ERTG) scoring criteria, scoring spreadsheet, and the SBU calculator to provide preliminary SBU scores of project concepts. The concepts consisted of a project goal map showing the 2-year flood inundation and all CRE restoration activities. .

BA Final SBU Score: Final scores that were included in the Biological Assessment were scores completed prior to the formation of the ERTG and were scored by the BPA contractor that developed the original SBU scoring mechanism. All BA final SBU scores were incorporated by NOAA as part of the Biological Opinion (BiOp).

ERTG Preliminary SBU Scores: If a project includes a type of restoration that has not been previously reviewed by the ERTG or if a project requires significant funding early in process the AAs ask the ERTG for a preliminary score. These scores are not considered final but rather provide the AA with some level of assurance that the project is still worth pursuing. Once the project gets far enough along in the design phase then the projects are taken to the ERTG for a final SBU score.

ERTG Final SBU Scores: Most if not all projects have either an AA or ERTG preliminary score to insure that the project meets selection criteria (see Preliminary SBU scores above). Once a project reaches approximately 60% design, an ERTG template is completed and then sent to the ERTG for their review. In almost all cases the ERTG is then taken on a site visit to better evaluate the potential of each project. After The ERTG scoring is documented by the ERTG facilitator and then an ERTG Project SBU Report is developed. All scores are considered final unless the project constructed deviates in any significant way from the project presented to the ERTG. To date no project has been constructed in a manner deemed different enough to require re-scoring.

AA Final Scores: AA final scores are only used to calculate the benefit of passive restoration associated with land acquisitions. The AAs use a similar approach to the ERTG, incorporating CRE subaction information from the Estuary Module of the Lower Columbia River Recovery Plan. The AAs provide scores for certainty of success, habitat capacity and quality, and access using the same criteria as the ERTG.

Location (Reach A–H)	Project Name	Project Number	Lead Agency/ Sponsor	Estuary Module Action (Project Subactions Addressing Identified Limiting Factors)	Linear Miles of Riparian Stream/ Channel Improved	Acres Restored	Ocean SBUs	Stream SBUs	[1]SBU Type	Status
C	Kerry Island – Phase 1	2010-073-00	BPA / Columbia Land Trust	CRE 9.3 Actively purchase off-channel habitats in urban and rural settings that (1) cannot be effectively protected through regulation, (2) are degraded but have good restoration potential, or (3) are highly degraded but could benefit from long-term restoration solutions		110	0.077	0.029	AA Final	Completed in 2013
C	LA (Louisiana) Swamp	2003-011-00	BPA / Estuary Partnership	CRE 1.4 Restore and maintain ecological benefits in riparian areas; this includes managing vegetation on dikes and levees to enhance ecological function and adding shoreline/instream complexity for juvenile salmonid refugia	0.7		0.143	0.047	ERTG Final	Completed in 2013
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality		1.88				
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels		31.7				
				CRE 15.3 Implement projects to address infestations on public and private lands		31.7				
F	Honeyman Creek	2003-011-00	BPA / Estuary Partnership	CRE 10.2 Remove tide gates to improve the hydrology between wetlands and the channel and to provide juveniles with physical access to off-channel habitat; use a habitat connectivity index to prioritize projects		58	0.103	0.041	ERTG Final	Completed in 2013
F	Sauvie Island, North Unit (Ruby Lake) – Phase 1	2010-004-00	BPA / CREST	CRE 1.4 Restore and maintain ecological benefits in riparian areas; this includes managing vegetation on dikes and levees to enhance ecological function and adding shoreline/instream complexity for juvenile salmonid refugia	0.5		0.924	0.287	ERTG Final	Completed in 2013
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality		0.6				
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels		122.8				
				CRE 15.3 Implement projects to address infestations on public and private lands		16.4				
G	Sandy River Dam Removal	N/A	Corps / Forest Service	CRE 1.4 Restore and maintain ecological benefits in riparian areas; this includes managing vegetation on dikes and levees to enhance ecological function and adding shoreline/instream complexity for juvenile salmonid refugia	1		0.440	0.158	ERTG Final	Completed in 2013
				CRE 6.2 Identify and implement dredged material beneficial use demonstration projects, including the notching and scrape-down of previously disposed materials and placement of new materials for habitat enhancement and/or creation		0.69				
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality		5.8				
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels		50.7				
				CRE 15.3 Implement projects to address infestations on public and private lands		1				
H	Horsetail Creek	2003-011-00	BPA / Estuary Partnership	CRE 1.4 Restore and maintain ecological benefits in riparian areas; this includes managing vegetation on dikes and levees to enhance ecological function and adding shoreline/instream complexity for juvenile salmonid refugia	1.3		0.062	0.034	ERTG Final	Completed in 2013
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality		12				
				CRE 10.3 Upgrade tide gates where (1) no other options exist, (2) upgraded structures can provide appropriate access for juveniles, and (3) ecosystem function would be improved over current conditions		96				
				CRE 15.3 Implement projects to address infestations on public and private lands		30				
				Total completed 2013	**14.1**	**1466.87**	**3.89**	**1.35**		

Location (Reach A–H)	Project Name	Project Number	Lead Agency / Sponsor	Estuary Module Action (Project Subactions Addressing Identified Limiting Factors)	Linear Miles of Riparian Stream / Channel Improved	Acres Restored	Ocean SBUs	Stream SBUs	[1]SBU Type	Status
Projects initiated by 2013, completion anticipated in 2014 & beyond (metrics are included within Estuary Module Action)										
A	Sharnelle Fee	2010-004-00	BPA / CREST	CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (50 Acres)			0.25	0.1	BA Final	Final design initiated in 2013; anticipate restoration completion in 2014
A	Skipanon Slough, 8th St. Dam	2010-004-00	BPA / CREST	CRE 10.2 Remove tide gates to improve the hydrology between wetlands and the channel and to provide juveniles with physical access to off-channel habitat; use a habitat connectivity index to prioritize projects (299.3 Acres)			0.908	0.363	ERTG Final	Final design initiated in 2013; anticipate restoration completion in 2015
A	Wallacut River – Phase 2	2010-073-00 2003-011-00	BPA / Columbia Land Trust	CRE 1.4 Restore and maintain ecological benefits in riparian areas; this includes managing vegetation on dikes and levees to enhance ecological function and adding shoreline/instream complexity for juvenile salmonid refugia (3.4 miles)			0.285	0.098	ERTG Final	Acquisition complete in 2012, final design initiated in 2013; anticipate restoration completion in 2015
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (3 Acres)						
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (45.6 Acres)						
				CRE 15.3 Implement projects to address infestations on public and private lands (80 Acres)						
A	Chinook River	2010-070-00	BPA / WDFW	CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (41 Acres)			0.694	0.358	ERTG Final	Acquisition complete in 2013, final design initiated in 2013; anticipate restoration completion in 2014
				CRE 10.3 Upgrade tide gates where (1) no other options exist, (2) upgraded structures can provide appropriate access for juveniles, and (3) ecosystem function would be improved over current conditions (310 Acres)						
				CRE 15.3 Implement projects to address infestations on public and private lands (3 Acres)						
A	Youngs Bay/River Tidal Floodplain Reconnection	2012-015-00	BPA / COE / Cowlitz Tribe	CRE 1.4 Restore and maintain ecological benefits in riparian areas; this includes managing vegetation on dikes and levees to enhance ecological function and adding shoreline/instream complexity for juvenile salmonid refugia (0.5 Miles)			3.323	1.219	ERTG Preliminary	Feasibility initiated in 2013; anticipate restoration completion in 2016+
				CRE 9.3 Actively purchase off-channel habitats in urban and rural settings that (1) cannot be effectively protected through regulation, (2) are degraded but have good restoration potential, or (3) are highly degraded but could benefit from long-term restoration solutions (251 Acres)						
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (67 Acres)						
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (375 Acres)						
				CRE 15.3 Implement projects to address infestations on public and private lands (66 Acres)						
A	Trestle Bay Jetty Breach	N/A	Corps / CREST	CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (628 Acres)			0.995	0.306	ERTG Final	Design initiated in 2013; anticipate restoration completion in 2015
A	Wallooskee-Young's Bay Confluence	2012-015-00	BPA / Cowlitz Tribe	CRE 1.4 Restore and maintain ecological benefits in riparian areas; this includes managing vegetation on dikes and levees to enhance ecological function and adding shoreline/instream complexity for juvenile salmonid refugia (0.75 Miles)			2.132	0.764	ERTG Final	Acquisition complete in 2013, final design initiated in 2013; anticipate restoration completion in 2015
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (23.45 Acres)						
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (168.61 Acres)						
				CRE 15.3 Implement projects to address infestations on public and private lands (193.11 Acres)						

Location (Reach A–H)	Project Name	Project Number	Lead Agency / Sponsor	Estuary Module Action (Project Subactions Addressing Identified Limiting Factors)	Linear Miles of Riparian Stream / Channel Improved	Acres Restored	Ocean SBUs	Stream SBUs	[1]SBU Type	Status
B	Brix Bay Deep River Confluence – Phase 2 & 3	2010-073-00	BPA / Columbia Land Trust	CRE 9.3 Actively purchase off-channel habitats in urban and rural settings that (1) cannot be effectively protected through regulation, (2) are degraded but have good restoration potential, or (3) are highly degraded but could benefit from long-term restoration solutions (5 properties: #1 (55 acres) purchased in 2012; #2-#5 (72 acres) anticipated in 2014+)			0.893	0.386	Preliminary	Acquisition #1 complete in 2012; #2 complete in 2014; continue to negotiate parcels #3-#5; anticipate restoration completion in 2017
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (12 Acres)						
				CRE 10.2 Remove tide gates to improve the hydrology between wetlands and the channel and to provide juveniles with physical access to off-channel habitat; use a habitat connectivity index to prioritize projects (159 Acres)						
B	Karlson Island	2010-004-00	BPA / CREST	CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (313.5 Acres)			0.511	0.157	ERTG Final	Final design initiated in 2013; anticipate restoration completion in 2014
				CRE 15.3 Implement projects to address infestations on public and private lands (6 Acres)						
B	Elochoman Slough – Phase 3	2010-073-00 2010-070-00	BPA / WDFW / Columbia Land Trust	CRE 1.4 Restore and maintain ecological benefits in riparian areas; this includes managing vegetation on dikes and levees to enhance ecological function and adding shoreline/instream complexity for juvenile salmonid refugia (0.9 miles)			0.705	0.302	ERTG Final	Completed acquisition #1 in 2009 and acquisition #2 in 2012, final design initiated in 2013; anticipate restoration completion in 2015 & 2016
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (12.6 Acres)						
				CRE 10.2 Remove tide gates to improve the hydrology between wetlands and the channel and to provide juveniles with physical access to off-channel habitat; use a habitat connectivity index to prioritize projects (255.4 Acres)						
				CRE 15.3 Implement projects to address infestations on public and private lands (296.5 Acres)						
B	Julia Butler Hansen NWR – Steamboat Slough	n/a	COE / USFWS	CRE 1.4 Restore and maintain ecological benefits in riparian areas; this includes managing vegetation on dikes and levees to enhance ecological function and adding shoreline/instream complexity for juvenile salmonid refugia (1.6 miles)			0.384	0.135	ERTG Final	Restoration initiated in 2013; anticipate restoration completion in 2014
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (7.7 Acres)						
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (67.6 Acres)						
				CRE 15.3 Implement projects to address infestations on public and private lands (67.6 Acres)						
B	Svensen Island, Cathlamet Bay	2010-073-00	BPA / COE / Columbia Land Trust	CRE 9.3 Actively purchase off-channel habitats in urban and rural settings that (1) cannot be effectively protected through regulation, (2) are degraded but have good restoration potential, or (3) are highly degraded but could benefit from long-term restoration solutions (306 Acres)			2.855	1.009	ERTG Preliminary	Engage in acquisition negotiations; anticipate restoration completion in 2018
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (62.7 Acres)						
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (275.7 Acres)						
B	Grays River Confluence	2010-073-00	BPA / Columbia Land Trust	CRE 9.3 Actively purchase off-channel habitats in urban and rural settings that (1) cannot be effectively protected through regulation, (2) are degraded but have good restoration potential, or (3) are highly degraded but could benefit from long-term restoration solutions (7 properties: #1 (123 acres) purchased in 2013; #2-#7 (255 acres) anticipated in 2014+)			3.646	1.208	Preliminary	Acquisition #1 complete in 2013, continue to negotiate parcels #2-#7; anticipate restoration completion in 2017
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (16 Acres)						
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (282 Acres)						

Location (Reach A–H)	Project Name	Project Number	Lead Agency/ Sponsor	Estuary Module Action (Project Subactions Addressing Identified Limiting Factors)	Linear Miles of Riparian Stream/ Channel Improved	Acres Restored	Ocean SBUs	Stream SBUs	[1]SBU Type	Status
C	Kerry Island	2010-073-00	BPA / Columbia Land Trust	CRE 1.4 Restore and maintain ecological benefits in riparian areas; this includes managing vegetation on dikes and levees to enhance ecological function and adding shoreline/instream complexity for juvenile salmonid refugia (2 miles)			1.109	0.375	ERTG Final	Acquisition complete in 2013; anticipate restoration completion in 2016
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (5.6 Acres)						
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (95.5 Acres)						
				CRE 15.3 Implement projects to address infestations on public and private lands (110 Acres)						
C	Clatskanie River/Beaver Slough Confluence	2003-011-00 2010-073-00	BPA / Estuary Partnership / Columbia Land Trust	CRE 1.4 Restore and maintain ecological benefits in riparian areas; this includes managing vegetation on dikes and levees to enhance ecological function and adding shoreline/instream complexity for juvenile salmonid refugia (2.5 miles)			0.995	0.343	ERTG Preliminary	Engage in acquisition negotiations; anticipate restoration completion in 2018
				CRE 9.3 Actively purchase off-channel habitats in urban and rural settings that (1) cannot be effectively protected through regulation, (2) are degraded but have good restoration potential, or (3) are highly degraded but could benefit from long-term restoration solutions (4 properties 294 Acres)						
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (21.6 Acres)						
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (293.2 Acres)						
				CRE 15.3 Implement projects to address infestations on public and private lands (293.2 Acres)						
C	Batwater Station	2003-011-00	BPA / Estuary Partnership	CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (1.6 Acres)			0.076	0.025	Preliminary	Initiated design in 2013; anticipate restoration completion in 2015
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (23 Acres)						
C	Erickson Dike Slough	2010-004-00	BPA / CREST	CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (1 Mile)			0.673	0.21	Preliminary	Design initiated in 2013; anticipate restoration completion in 2016
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (74 Acres)						
E	Columbia Stock Ranch – Phase 2	2010-073-00	BPA / COE / Columbia Land Trust	CRE 1.4 Restore and maintain ecological benefits in riparian areas; this includes managing vegetation on dikes and levees to enhance ecological function and adding shoreline/instream complexity for juvenile salmonid refugia (7 Miles)			4.441	1.432	ERTG Preliminary	Acquisition completed in 2012, anticipate restoration completion in 2017
				CRE 6.2 Identify and implement dredged material beneficial use demonstration projects, including the notching and scrape-down of previously disposed materials and placement of new materials for habitat enhancement and/or creation (16 Acres)						
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (3 Acres)						
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (360 Acres)						
				CRE 10.2 Remove tide gates to improve the hydrology between wetlands and the channel and to provide juveniles with physical access to off-channel habitat; use a habitat connectivity index to prioritize projects (9 Acres)						
				CRE 15.3 Implement projects to address infestations on public and private lands (746 Acres)						
E	Large Dike Breach-Reach E	n/a	BPA	CRE 1.4 Restore and maintain ecological benefits in riparian areas; this includes managing vegetation on dikes and levees to enhance ecological function and adding shoreline/instream complexity for juvenile salmonid refugia (38 miles)			31.0	11.08	ERTG Preliminary	Feasibility continued in 2013
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (272.8 Acres)						

Location (Reach A–H)	Project Name	Project Number	Lead Agency / Sponsor	Estuary Module Action (Project Subactions Addressing Identified Limiting Factors)	Linear Miles of Riparian Stream / Channel Improved	Acres Restored	Ocean SBUs	Stream SBUs	[1]SBU Type	Status
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (2063 Acres)						
E	LaCenter Wetlands, Lewis River East Fork	2003-011-00	BPA / Estuary Partnership	CRE 1.4 Restore and maintain ecological benefits in riparian areas; this includes managing vegetation on dikes and levees to enhance ecological function and adding shoreline/instream complexity for juvenile salmonid refugia (1.6 Miles)			1.49	0.468	ERTG Final	Initiated feasibility in 2013; anticipate restoration completion in 2015
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (6.5 Acres)						
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (453 Acres)						
				CRE 15.3 Implement projects to address infestations on public and private lands (14 Acres)						
E	Lewis River, Willamette Meridian (formally called Mud Lake)	2012-015-00	BPA / Cowlitz Tribe	CRE 1.4 Restore and maintain ecological benefits in riparian areas; this includes managing vegetation on dikes and levees to enhance ecological function and adding shoreline/instream complexity for juvenile salmonid refugia (19.2 Miles)			0.195	0.145	ERTG Preliminary	Initiated feasibility in 2013; anticipate restoration completion in 2016
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (17.6 Acres)						
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (105.1 Acres)						
				CRE 15.3 Implement projects to address infestations on public and private lands (320 Acres)						
F	Shillapoo Wildlife Area	2010-070-00	Corps / BPA / WDFW	CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (10)			3.617	1.125	ERTG Preliminary	Feasibility initiated in 2012; anticipate restoration completion 2014+
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (1429)						
F	Dairy Creek – Sturgeon Lake	N/A	Corps / West Multnomah Soil & Water Conservation District	CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (7.7 Acres)			0.337	0.139	ERTG Final	Feasibility initiated in 2013; anticipate restoration completion 2017
				CRE 10.2 Remove tide gates to improve the hydrology between wetlands and the channel and to provide juveniles with physical access to off-channel habitat; use a habitat connectivity index to prioritize projects (4100 Acres)						
F	Sauvie Island, North Unit Phase 2	2010-004-00	BPA / CREST	CRE 1.4 Restore and maintain ecological benefits in riparian areas; this includes managing vegetation on dikes and levees to enhance ecological function and adding shoreline/instream complexity for juvenile salmonid refugia (1.7 Miles)			1.062	0.338	ERTG Final	Design initiated in 2013; anticipate restoration completion in 2014
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (3.3 Acres)						
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (137.9 Acres)						
				CRE 15.3 Implement projects to address infestations on public and private lands (20.1 Acres)						
F	Sauvie Island, North Unit Phase 3	2010-004-00	BPA / CREST	CRE 1.4 Restore and maintain ecological benefits in riparian areas; this includes managing vegetation on dikes and levees to enhance ecological function and adding shoreline/instream complexity for juvenile salmonid refugia (0.7 Miles)			0.262	0.089	Preliminary	Design initiated in 2013; anticipate restoration completion in 2015
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (2.4 Acres)						
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (31.6 Acres)						
				CRE 15.3 Implement projects to address infestations on public and private lands (1.4 Acres)						
F	Buckmire Slough	2010-070-00 2010-004-00	BPA / WDFW / CREST	CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (100 Acres)			3.299	1.208	ERTG Preliminary	Feasibility initiated in 2013; anticipate restoration

Location (Reach A–H)	Project Name	Project Number	Lead Agency / Sponsor	Estuary Module Action (Project Subactions Addressing Identified Limiting Factors)	Linear Miles of Riparian Stream / Channel Improved	Acres Restored	Ocean SBUs	Stream SBUs	[1]SBU Type	Status
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (456.1 Acres)						completion in 2015 & 2018
F	Duck Lake	2003-011-00	BPA / Estuary Partnership	CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (1 Acre)			0.153	0.049	Preliminary	Feasibility initiated in 2013; anticipate restoration completion in 2016
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (35 Acres)						
G	Steigerwald NWR	TBD	BPA / COE	CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (84 Acres)			4.31	1.579	ERTG Preliminary	Feasibility continued in 2013; anticipate restoration completion 2018
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (510 Acres)						
				CRE 15.3 Implement projects to address infestations on public and private lands (1060 Acres)						
G	Thousand Acres, Sandy River Delta	2003-011-00	BPA / Estuary Partnership	CRE 1.4 Restore and maintain ecological benefits in riparian areas; this includes managing vegetation on dikes and levees to enhance ecological function and adding shoreline/instream complexity for juvenile salmonid refugia (3.9 Miles)			0.137	0.053	ERTG Final	Final design completed in 2013, anticipate restoration completion in 2014
				CRE 9.4 restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality (3.5 Acres)						
				CRE 10.1 Breach or lower the elevation of dikes and levees; create and/or restore tidal marshes, shallow-water habitats, and tide channels (28 Acres)						
				CRE 15.3 Implement projects to address infestations on public and private lands (75 Acres)						
Projects No Longer Pursued										
B	Miller Sands	N/A	COE / Oregon Division of State Lands	No metrics to report						Project is not cost effective to implement
B	Wallace Island Complex (not proper)	N/A	COE	No metrics to report						Project is not cost effective to implement
B	Julia Butler Hansen NWR-Tenasilahe Island (TK Slough) Restoration - Option A/B	N/A	COE	No metrics to report						Project is not cost effective to implement
B	Mary's Creek	N/A	BPA / CREST	No metrics to report						Project is not cost effective to implement
F	Ridgefield NWR: Ridgeport Dairy Unit-Post Office Lake	N/A	Corps / USFWS	No metrics to report						Project is not cost effective to implement
F	Ridgefield NWR – Ridgeport Dairy Campbell Lake & Slough	N/A	Corps / USFWS	No metrics to report						Project is not cost effective to implement
F	Oaks Bottom Section 536	n/a	Corps / City of Portland	No metrics to report						Project is not cost effective to implement