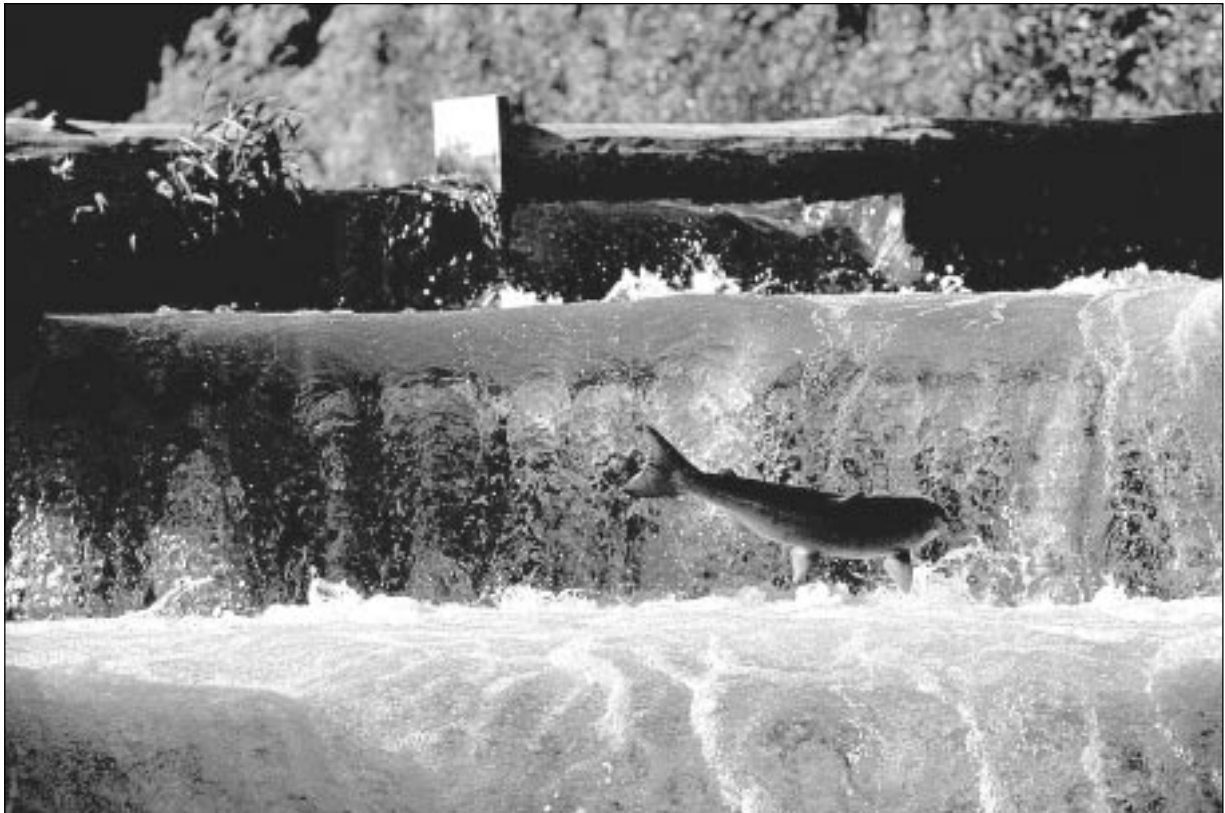


Endangered Species Act 2002 Implementation Plan for the Federal Columbia River Power System



Appendix



US Army Corps
of Engineers
North Pacific Division



November 2001

Appendix

Guide to Tables

Table 1: List of Hydrosystem Projects

Table 2: List of Water Quality Actions to Avoid Jeopardy

Table 3: List of Habitat Projects

Table 4: List of Hatchery Projects

Table 5: List of Harvest Projects

Table 6: List of Resident Fish Projects

Table 7: List of RM&E Projects

Guide to Tables

The tables of Projects display activities that will be implemented in FY02 for each H, Resident Fish, and for RM&E. RM&E projects that apply basinwide or that span Hs are generally shown in the RM&E table, whereas those that are more specific are assigned to the appropriate H or Resident Fish category. For example, a study of marine mammal predation in the tailrace of Bonneville Dam is listed in Table 1 as a hydrosystem project. Some on-site projects that apply substantially to both anadromous species and to resident species (e.g., the Water Management Plans) are listed under both Hydro and Resident Fish.

Projects are organized within each table according to Strategy and Substrategy, with a cross-reference to the Biological Opinions (i.e., RPA Action Num). Some projects apply to multiple substrategies and therefore are listed more than once. Project ID Numbers from the Unified Plan database provide a unique identifier for each project, although some projects have not yet been assigned a number ("pending" or "unassigned"). Lead Agency shows the Action Agency, primarily responsible, although many of the projects will be implemented cooperatively. Tribal, agency, university, and private subcontractors that are helping to implement many of the projects are not shown in the tables.

Work Expectations are the tangible and intangible products and progress that are expected of each project by the end of FY02. These are the benchmarks against which success will be measured in the FY02 Progress Report. An expectation of "n/a" means that the project will not be active in FY02, perhaps because of schedule changes that are described as Variances in the narrative of this Plan.

Table 1: List of Hydrosystem Projects

Strategy	Substrategy	Project Title	RPA Action Num	Project ID Number	Lead Agency	02 Work Expectation	FY02 Work?
Configuration	Adult Passage	Adult PIT Tag Monitoring @ Bonneville, etc.	50	1676	COE	Complete Bonneville implementation	Yes
Configuration	Adult Passage	Adult PIT Tag Monitoring- Snake River Projects	90	1686	COE	Complete Design for installation at Ice Harbor	Yes
Configuration	Adult Passage	Bonneville 2 Fish Units Intake Debris (adult passage improvement)	6, 146	1627	COE	Initiate construction	Yes
Configuration	Adult Passage	Bonneville 2nd Powerhouse Adult Fishway Water Supply	120,127	1668	COE	Initiate, complete construction	Yes
Configuration	Adult Passage	Bonneville Adult Fallback	60, 113	1667	COE	Complete alternatives study continue monitoring	Yes
Configuration	Adult Passage	Feasibility of Removal of Ghost Fishing Nets	107	1771	BPA	Locate and remove any ghost nets. Possible estimate of loss.	Yes
Configuration	Adult Passage	Ice Harbor Adult Fishway Auxiliary Water Supply	129	1675	COE	Purchase new pumps. Upgrade S Shore Elec.	Yes
Configuration	Adult Passage	John Day - Monitoring facility/ adult holding eval	?	1803	COE	No Work in 02	Yes
Configuration	Adult Passage	John Day Ladder Temperature Project	114	1671	COE	Complete analysis, determine future direction	No
Configuration	Adult Passage	John Day North Shore - Adult Fishway Water Supply	128	1669	COE	Complete review, initiate design report	Yes
Configuration	Adult Passage	John Day Salmonid Holding and Jumping Project	110,116	1670	COE	Complete design report	Yes
Configuration	Adult Passage	Little Goose Adult Fishway Auxiliary Water Supply	129	1674	COE	Complete Hydraulic Modeling	Yes
Configuration	Adult Passage	Lower Granite - Adult PIT detectors (new)	109	1806	COE	No work in 02	No
Configuration	Adult Passage	Lower Granite Adult Fishway Auxiliary Water Supply	129	1672	COE	Award Construction Contract	Yes
Configuration	Adult Passage	Lower Monumental Adult Fishway Auxiliary Water	129	1673	COE	Complete Technical Report	Yes
Configuration	Adult Passage	McNary Adult PIT Tag Program	50, 107	1677	COE	Complete Construction and Installation of PIT tag facility	Yes
Configuration	Adult Passage	McNary/Ice Harbor Collection Channel Adult Fallback Project	112	1666	COE	Collect Additional Data. Define Problem?	Yes
Configuration	Adult Passage	The Dalles Adult Entrance Channel Dewatering Mod	123,	1665	COE	Initiate construction	Yes
Configuration	Adult Passage	The Dalles North Shore Auxiliary Water Supply	129	1919	COE	Initiate study	Yes
Configuration	Adult Passage	The Dalles Sluice Outfall & Auxiliary Water Supply	122,70	1664	COE	Resolve outfall location, compl. design report	Yes
Configuration	Juvenile Passage	Avian Predation Study	101	1828	COE	Continue studies	Yes

Table 1: List of Hydrosystem Measures

Strategy	Substrategy	Project Title	RPA Action Num	Project ID Number	Lead Agency	02 Work Expectation	FY02 Work?
Configuration	Juvenile Passage	Bonneville 1st Powerhouse FGE Improvements	97,62,63	1634	COE	Determine whether further prototype tests required	Yes
Configuration	Juvenile Passage	Bonneville 1st Powerhouse JBS Improvements	97	1630	COE	Complete Plans and Specifications	Yes
Configuration	Juvenile Passage	Bonneville 1st Powerhouse Surface Bypass	97,61,86,	1633	COE	Complete B1 configuration decision report	Yes
Configuration	Juvenile Passage	Bonneville 2nd Powerhouse FGE Improvements	67	1635	COE	Evaluate Prototype Installation	Yes
Configuration	Juvenile Passage	Bonneville 2nd Powerhouse Gatewell Debris Removal	6, 146	1631	COE	No Work in 02	Yes
Configuration	Juvenile Passage	Bonneville 2nd Powerhouse JBS Improvements	65	1629	COE	Follow on Construction, as needed	Yes
Configuration	Juvenile Passage	Bonneville 2nd Powerhouse Surface Bypass	84,86,66	1632	COE	Award Construction Contract	Yes
Configuration	Juvenile Passage	Bonneville Flat Plate	87	1637	COE	Technology Development	Yes
Configuration	Juvenile Passage	Bonneville Juvenile Fish Bypass Studies	82,83	1636	COE	Continue spill efficiency/survival studies	Yes
Configuration	Juvenile Passage	Dalles Project Survival Study	69	1658	COE	Continue research	Yes
Configuration	Juvenile Passage	Ice Harbor Spillway Survival Study	82,83	1656	COE	Continuing Research	Yes
Configuration	Juvenile Passage	John Day - Relocation evaluation (Ringold)	?	1798	COE	Continue releases and monitoring	Yes
Configuration	Juvenile Passage	John Day Extended Length Screens	98,73,146	1662	COE	Re-test gatewell mortality issues	Yes
Configuration	Juvenile Passage	John Day Surface Bypass/Removable Spillway Weir	140,86,134,35,98,72,138	1701	COE	Defer prototype, initiate egress studies	No
Configuration	Juvenile Passage	Little Goose Extended Submerged Bar Screens	96,94	1640	COE	Complete Installation of Improvements	Yes
Configuration	Juvenile Passage	Little Goose Pit-Tag System Modification	53,94,87	1652	COE	Complete Construction	Yes
Configuration	Juvenile Passage	Little Goose Trash Boom	79,	1655	COE	Monitor predator use of new boom	Yes
Configuration	Juvenile Passage	Lower Granite Extended Submerged Bar Screens	94,97	1641	COE	Complete Installation of Improvements	Yes
Configuration	Juvenile Passage	Lower Granite Juvenile Bypass System	81	1650	COE	No Work in 02	No
Configuration	Juvenile Passage	Lower Granite Surface Bypass and Collection	80,86,138,85,99	1639	COE	Biological/Hydrological Test of RSW in Spring	Yes
Configuration	Juvenile Passage	Lower Monumental - Stilling basin repair	6, 144	1799	COE	Complete filling of eroded areas.	Yes
Configuration	Juvenile Passage	Lower Monumental Extended Submerged Bar Screens	94,78,99,	1642	COE	Initiate Analysis ESBS vs RSW	Yes
Configuration	Juvenile Passage	Lower Monumental Juvenile Bypass System Outfall	76	1651	COE	Complete Modeling	Yes
Configuration	Juvenile Passage	Lower Snake Feasibility Study	147	1872	COE	Complete FEIS	Yes

Table 1: List of Hydrosystem Measures

Strategy	Substrategy	Project Title	RPA Action Num	Project ID Number	Lead Agency	02 Work Expectation	FY02 Work?
Configuration	Juvenile Passage	Lower Snake River Juvenile Bypass System	53,94,	1644	COE	Initiate Engineering Evaluation of all JBS's	Yes
Configuration	Juvenile Passage	McNary - Juvenile facility improvements	74	1801	COE	Complete installation and test of 36-inch PIT-tag detector & replace release pipes.	Yes
Configuration	Juvenile Passage	McNary Cylindrical Dewatering Prototype Evaluation	94,74,146,	1653	COE	2nd year of debris & biological testing	Yes
Configuration	Juvenile Passage	McNary Extended Submerged Bar Screens	96,74,	1643	COE	Construct Spare ESBS/ final improvements	Yes
Configuration	Juvenile Passage	McNary Juvenile Fish Facility Debris	74,	1654	COE	Finalize Wes Modeling/Define Solutions	Yes
Configuration	Juvenile Passage	McNary Outfall Evaluation	74	1663	COE	Initiate investigation/Modeling	Yes
Configuration	Juvenile Passage	McNary Spillway Survival Study	82,83	1657	COE	Initiate first year of multi year research	Yes
Configuration	Juvenile Passage	The Dalles Sluice Outfall & Auxiliary Water Supply	122,70	1664	COE	Resolve outfall location, compl. design report	Yes
Configuration	Juvenile Passage	The Dalles Surface Bypass Studies	69,86	1628	COE	2002 Field Test	Yes
Configuration	Project RM&E	Adult Fish Transition Pool Evaluations	116	1682	COE	Continue Raised Weir Evaluations	Yes
Configuration	Project RM&E	Adult Lamprey Passage	119	1683	COE	Continue prototype tests	Yes
Configuration	Project RM&E	Adult Temperature Evaluation	116,34,114,115	1681	COE	Continue research	Yes
Configuration	Project RM&E	Adult Upstream Migration Studies	60, 107, 111, 113, 115, 116, 117, 118, 119	1678	COE	Continue passsge studies	Yes
Configuration	Project RM&E	Fish Ladder Temperature Evaluation	114	1680	COE	Collect data. Prepare White Paper	Yes
Configuration	Project RM&E	Investigate Adult Headburn	108	1685	COE	Initiate study	Yes
Configuration	Project RM&E	Juvenile Salmon Transportation Evaluations	185,191,195,46,45,181,182,52,49,47	1793			Yes
Configuration	Project RM&E	Marine Mammal Predation @Bonneville Tailrace	106	1684	COE	Initiate study	Yes
Configuration	Project RM&E	Separator Evaluation	95,81,53	1646	COE	Plans and Specs to Remove Prototype Structure	Yes
Configuration	Project RM&E	Turbine Design at The Dalles and Ice Harbor Dams	92	1712	COE		No
Configuration	Water Quality	Bonneville Gas Fast Track	134	1698	COE	Complete construction	Yes
Configuration	Water Quality	John Day Gas Fast Track	136	1714	COE	No Work in 02	No
Configuration	Water Quality	John Day Spill/Survival Studies	82,83,71	1700	COE	Continue evaluations	Yes
Configuration	Water Quality	Little Goose Gas Fast Track Deflectors	134,135,	1660	COE	Complete P&S	Yes
Configuration	Water Quality	Lower Granite Gas Fast Track	134	1871	COE	Initiate near field testing	Yes
Configuration	Water Quality	Lower Monumental Gas Fast Track Deflectors	135,134,76	1659	COE	Const End Bay deflectors/Complete model	Yes

Table 1: List of Hydrosystem Measures

Strategy	Substrategy	Project Title	RPA Action Num	Project ID Number	Lead Agency	02 Work Expectation	FY02 Work?
Configuration	Water Quality	McNary - Temperature Control	142	1800	COE	Initiate CFD Model Development	Yes
Configuration	Water Quality	McNary Gas Fast Track Deflectors	135,134,	1661	COE	Complete Construction of end bay deflectors. Complete Phase II P&S.	Yes
Configuration	Water Quality	Modify Water Supply to Dworshak NFH	33	1704	COE	Install new Boiler System/Initiate System 1 Mods	Yes
Configuration	Water Quality	O&M - Chief Joseph Dam	136	1887	COE	Spillway Modification	No
Configuration	Water Quality	Surface Bypass RSW at Lower Monumental Dam	77	1711	COE	No Work in 02	No
Configuration	Water Quality	Surface Bypass RSW at McNary Dam	75	1710	COE	No Work in 02	No
Configuration	Water Quality	The Dalles Gas Fast Track	134	1699	COE	Continue evaluations	No
Configuration	Water Quality	Water Quality Plan, 1-Year	5, 132	1696	COE/USBR/BPA	Included in 2002 Annual IP	Yes
O&M	Transmission Support	Columbia Falls Transmission Reinforcement	56	1781	BPA	Completed in 2002	Yes
O&M	Transmission Support	New Generation Caused Transmission Reinforcement	57	1791	BPA	Report on Generation Additions Issued	Yes
O&M	Transmission Support	Schultz-Hanford Transmission Line	55	1782	BPA	NEPA Record of Decision Completed	Yes
O&M	Transmission Support	West of Hatwai Transmission Reinforcement	56	1784	BPA	Draft EIS in 2002	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	General O&M - Walla Walla District (McNary, Ice Harbor, Lower Monumental, Little Goose, and Lower Granite Dams)	117	1849	COE	Rehab Adult Fish Counting Stations	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	General O&M - Walla Walla District (McNary, Ice Harbor, Lower Monumental, Little Goose, and Lower Granite Dams)	125	1849	COE	Auxiliary Water Supply Sensor System and Grating Attachment	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	General O&M - Walla Walla District (McNary, Ice Harbor, Lower Monumental, Little Goose, and Lower Granite Dams)	6, 121	1849	COE	Fish Facility Spare Parts	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	General O&M - Walla Walla District (McNary, Ice Harbor, Lower Monumental, Little Goose, and Lower Granite Dams)	6, 144	1849	COE	Real-Time Turbine and Spillway Data	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	General O&M - Walla Walla District (McNary, Ice Harbor, Lower Monumental, Little Goose, and Lower Granite Dams)	6, 144	1849	COE	Miscellaneous Fish Facility Modifications	No

Table 1: List of Hydrosystem Measures

Strategy	Substrategy	Project Title	RPA Action Num	Project ID Number	Lead Agency	02 Work Expectation	FY02 Work?
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	General O&M - Walla Walla District (McNary, Ice Harbor, Lower Monumental, Little Goose, and Lower Granite Dams)	6, 145	1849	COE	Develop Preventative Maintenance Program	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	General O&M - Walla Walla District (McNary, Ice Harbor, Lower Monumental, Little Goose, and Lower Granite Dams)	6, 146	1849	COE	Remove Obstructions From Turbine Environment	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - Dworshak	6, 144	1860	COE	Modify Hatchery Water Supply System	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - Ice Harbor	6, 144	1861	COE	Replace Adult Fishway Entrances and Hoists	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - Ice Harbor	6, 144	1861	COE	Rehab South Shore Fish Pumps	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - Ice Harbor	6, 144	1861	COE	Rehab Diffuser Valves and Operators	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - Ice Harbor	6, 144	1861	COE	Rehab Adult Powerhouse Collection Channel Mud Valves	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - Ice Harbor	6, 144	1861	COE	Replace Adult Fishway Control System	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - John Day Dam	6, 145	1862	COE	Rebuild Powerhouse Auxiliary Water Pumps	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - Little Goose	6, 144	1864	COE	Rehab Adult Fishway Entrances and Hoists	No

Table 1: List of Hydrosystem Measures

Strategy	Substrategy	Project Title	RPA Action Num	Project ID Number	Lead Agency	02 Work Expectation	FY02 Work?
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - Little Goose	6, 144	1864	COE	Rehab Adult Fish Pumps	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - Lower Granite	6, 144	1866	COE	Enlarge Adult Fishway Diffuser Chambers	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - Lower Granite	6, 144	1866	COE	Replace the two 200-Series Fish Barges	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - Lower Granite	6, 144	1866	COE	Additional Barge Moorage	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - Lower Granite	6, 144	1866	COE	Rehab Adult Fishway Entrances and Hoists	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - Lower Granite	6, 144	1866	COE	Rehab Adult Fish Pumps	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - Lower Granite	6, 144	1866	COE	Automate Fish Pump Bulkheads	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - Lower Monumental	6, 144	1867	COE	Juvenile Transportation Facility Valve Access Platforms	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - Lower Monumental	6, 144	1867	COE	Rehab Adult Fish Pumps	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - Lower Monumental	6, 144	1867	COE	Rehab Adult Fishway Entrances and Hoists	No

Table 1: List of Hydrosystem Measures

Strategy	Substrategy	Project Title	RPA Action Num	Project ID Number	Lead Agency	02 Work Expectation	FY02 Work?
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - Lower Monumental	6, 144	1867	COE	Replace Adult Fishway Control System	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - McNary	125	1868	COE	Rehab South Shore Rotovalves	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - McNary	125	1868	COE	Repair South Shore Diffuser Valves	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - McNary	6, 144	1868	COE	Rehab Fish Ladder Tilting Weirs	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - McNary	6, 144	1868	COE	Rehab South Shore Fish Pumps	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - McNary	6, 144	1868	COE	Rehab Adult Fishway Entrances	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - The Dalles Dam	6, 145	1869	COE	Rehab North Shore Fish Ladder	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Large Cap O&M - The Dalles Dam	6, 146	1869	COE	Replace North Shore Trash Rake	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Non-Routine O&M - Portland District	91	1884	COE	Remove Obstructions From Turbine Environment	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Non-Routine O&M - Portland District	117	1884	COE	Rehab Adult Fish Counting Stations	Yes

Table 1: List of Hydrosystem Measures

Strategy	Substrategy	Project Title	RPA Action Num	Project ID Number	Lead Agency	02 Work Expectation	FY02 Work?
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Non-Routine O&M - Portland District	120	1884	COE	Upgrade HELCRABS Model	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Non-Routine O&M - Portland District	125	1884	COE	Auxiliary Water Supply Sensor System and Grating Attachment	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Non-Routine O&M - Portland District	191	1884	COE	Implement New Fish Counting Actions	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Non-Routine O&M - Portland District	6, 121	1884	COE	Fish Facility Spare Parts	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Non-Routine O&M - Portland District	6, 144	1884	COE	Real-Time Turbine and Spillway Data	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	Non-Routine O&M - Portland District	6, 145	1884	COE	Develop Preventative Maintenance Program	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Ice Harbor	120	1861	COE	Adult Fishway Hydraulic Evaluation	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Ice Harbor	145	1861	COE	Purchase STS Mesh and Chain Parts	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Bonneville Dam	50	1886	COE	Maintain Adult PIT Tag System	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Bonneville Dam	101	1886	COE	Remove Netframes from both Powerhouse Tailraces	No

Table 1: List of Hydrosystem Measures

Strategy	Substrategy	Project Title	RPA Action Num	Project ID Number	Lead Agency	02 Work Expectation	FY02 Work?
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Bonneville Dam	126	1886	COE	Repair Bradford Island/Cascades Island Ladder Systems	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Bonneville Dam	126	1886	COE	Raise Diffuser Grating B1	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Bonneville Dam	191	1886	COE	Additional Fish Counting	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Bonneville Dam	6, 144	1886	COE	Maintain Submersible Traveling Screens	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Bonneville Dam	6, 144	1886	COE	Annual Fishway Overhaul	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Bonneville Dam	6, 144	1886	COE	O&M of the Smolt Monitoring Facilities	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Bonneville Dam	6, 144	1886	COE	Purchase Spare Roller Chain	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Bonneville Dam	6, 144	1886	COE	Maintain STS/VBS Inspection System	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Bonneville Dam	6, 145	1886	COE	Repair North Shore Monolith	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Bonneville Dam	6, 145	1886	COE	Replace Fishway Gates in B1	Yes

Table 1: List of Hydrosystem Measures

Strategy	Substrategy	Project Title	RPA Action Num	Project ID Number	Lead Agency	02 Work Expectation	FY02 Work?
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Bonneville Dam	6, 145	1886	COE	Refurbish STS's	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Bonneville Dam	6, 145	1886	COE	Pierce/Ives Island Chum Habitat	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Bonneville Dam	6, 145	1886	COE	Bull Trout Monitoring	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Bonneville, The Dalles, and John Day Dams	6, 145	1886	COE	NEPA for Avian Control	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Chief Joseph Dam		1887	COE	ESA Consultation	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Chief Joseph Dam	8.1.b	1887	COE	Upper Columbia VARQ EIS	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Chief Joseph Dam	198	1887	COE	Develop Data Management System	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Chief Joseph Dam	10.2	1887	COE	Implementation Plan	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Chief Joseph Dam	10.5	1887	COE	Water Management Coordination	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Dworshak	11.A.3.2.a	1860	COE	AFEP (Bull Trout Study)	

Table 1: List of Hydrosystem Measures

Strategy	Substrategy	Project Title	RPA Action Num	Project ID Number	Lead Agency	02 Work Expectation	FY02 Work?
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Ice Harbor	117	1888	COE	Replace North Shore Fish Counting Station Ventilation System	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Ice Harbor	125	1888	COE	Replace South Shore Diffuser Gratings	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - John Day Dam	50	1889	COE	Maintenance of Adult PIT tag system	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - John Day Dam	6, 144	1889	COE	Repair Fish Viewing Roof	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - John Day Dam	6, 144	1889	COE	O&M of the Smolt Monitoring Facilities	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - John Day Dam	6, 144	1889	COE	Maintenance of Juvenile Bypass System	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - John Day Dam	169	1889	COE	HGMP Development	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - John Day Dam	172	1889	COE	Implement HGMP Reforms	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - John Day Dam	10.A.2.1	1889	COE	Bull Trout Monitoring	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - John Day Dam	182	1889	COE	Study Reproduction Success of Hatchery Versus Wild Fish	No

Table 1: List of Hydrosystem Measures

Strategy	Substrategy	Project Title	RPA Action Num	Project ID Number	Lead Agency	02 Work Expectation	FY02 Work?
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - John Day Dam	184	1889	COE	Determine If Hatchery Reforms Reduce Extinction Risks	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Little Goose	6, 144	1891	COE	ESBS Overhaul	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Little Goose	6, 144	1891	COE	Repainting Juvenile Primary Dewatering Structure	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Little Goose	6, 144	1891	COE	Headgate Cylinders Quick Connects	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Little Goose	109	1891	COE	AFEP (Steelhead Kelt Study)	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Little Goose	11.A.3.1.d	1891	COE	AFEP (Bull Trout Study)	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Little Goose	11.A.3.1.c	1891	COE	Additional Fish Counting (Bull Trout)	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Little Goose	120	1891	COE	Adult Fishway Hydraulic Evaluation	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Lower Granite	6, 144	1892	COE	ESBS Overhaul	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Lower Granite	6, 144	1892	COE	Repair Fish Barge Push Knees	No

Table 1: List of Hydrosystem Measures

Strategy	Substrategy	Project Title	RPA Action Num	Project ID Number	Lead Agency	02 Work Expectation	FY02 Work?
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Lower Granite	6, 144	1892	COE	Headgate Cylinders Quick Connects	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Lower Granite	6, 144	1892	COE	Juvenile Fish Facility Bank Repair	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Lower Granite	109	1892	COE	AFEP (Steelhead Kelt Study)	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Lower Granite	120	1892	COE	Adult Fishway Hydraulic Evaluation	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Lower Granite	40, 44, 145	1892	COE	Spare Parts for Fish Barges	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Lower Monumental	6, 144	1893	COE	Rehab South Shore AWS Regulating Gate	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Lower Monumental	6, 144	1893	COE	Headgate Cylinders Quick Connects	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Lower Monumental	6, 144	1893	COE	Fish Ladder Handrail Systems	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Lower Monumental	11.A.3.1.d	1893	COE	AFEP (Bull Trout Study)	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Lower Monumental	11.A.3.1.c	1893	COE	Additional Fish Counting (Bull Trout)	Yes

Table 1: List of Hydrosystem Measures

Strategy	Substrategy	Project Title	RPA Action Num	Project ID Number	Lead Agency	02 Work Expectation	FY02 Work?
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - Lower Monumental	120	1893	COE	Adult Fishway Hydraulic Evaluation	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - McNary	125	1894	COE	Replace Fish Ladder Tilting Weir Controls	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - McNary	6, 144	1894	COE	Spare Fish Pump Winding	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - McNary	6, 144	1894	COE	Repair Diffuser Gratings	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - McNary	6, 144	1894	COE	Inspect South Shore Diffuser Valves	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - McNary	6, 144	1894	COE	Replace VBS Mesh	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - McNary	6, 144	1894	COE	ESBS Overhaul	No
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - McNary	45	1894	COE	AFEP (Transport Study)	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - McNary	103	1894	COE	AFEP (Pelican Study)	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - McNary	11.A.2.1.d	1894	COE	AFEP (Bull Trout Study)	Yes

Table 1: List of Hydrosystem Measures

Strategy	Substrategy	Project Title	RPA Action Num	Project ID Number	Lead Agency	02 Work Expectation	FY02 Work?
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - The Dalles Dam	125	1895	COE	Replace North Shore Diffuser Gratings	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - The Dalles Dam	6, 145	1895	COE	Replace North and South Entrance Gates	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - The Dalles Dam	6, 145	1895	COE	Replace Weir Guides N1&N2, S1 & S2	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - The Dalles Dam	10.A.2.1	1895	COE	Bull Trout Monitoring	Yes
Operate and Maintain Fish Passage Facilities	Nonroutine O&M Fishery Items	O&M - The Dalles Dam	145	1895	COE	Concrete Bulkheads	Yes
Operate and Maintain Fish Passage Facilities	Non-Routine O&M Fishery Items	General O&M - Seattle District	22	1850	COE	VarQ EIS and Associated Studies	Yes
Operate and Maintain Fish Passage Facilities	Non-Routine O&M Fishery Items	O&M - Libby Dam	6, 144	needed	COE	Establish a Buffer Zone at Murray Springs Fish Hatchery	No
Operate and Maintain Fish Passage Facilities	Operation of FCRPS to enhance fish survival	Fish Passage Plan (FPP)	6, 144	1687	COE	Fish Passage Plan Issued	Yes
Operate and Maintain Fish Passage Facilities	Operation of FCRPS to enhance fish survival	General O&M - Portland District (Bonneville, The Dalles, and John Day Dams)	40,191	1848	COE	Fish Counting and Hauling	Yes
Operate and Maintain Fish Passage Facilities	Operation of FCRPS to enhance fish survival	General O&M - Portland District (Bonneville, The Dalles, and John Day Dams) (Bonneville, The Dalles, and John Day Dams)	6, 144	1848	COE	Operate Fish Passage Facilities	Yes

Table 1: List of Hydrosystem Measures

Strategy	Substrategy	Project Title	RPA Action Num	Project ID Number	Lead Agency	02 Work Expectation	FY02 Work?
Operate and Maintain Fish Passage Facilities	Operation of FCRPS to enhance fish survival	General O&M - Walla Walla District (McNary, Ice Harbor, Lower Monumental, Little Goose, and Lower Granite Dams)	40,191	1849	COE	Juvenile Fish Transportation Program	Yes
Operate and Maintain Fish Passage Facilities	Operation of FCRPS to enhance fish survival	General O&M - Walla Walla District (McNary, Ice Harbor, Lower Monumental, Little Goose, and Lower Granite Dams)	6, 144	1849	COE	Operate Fish Passage Facilities	Yes
Operate and Maintain Fish Passage Facilities	Operation of FCRPS to enhance fish survival	General O&M - Walla Walla District (McNary, Ice Harbor, Lower Monumental, Little Goose, and Lower Granite Dams)	6, 146	1849	COE	Debris Control	Yes
Operate and Maintain Fish Passage Facilities	Operation of FCRPS to enhance fish survival	One & Five-Year O & M Plan & Budget	6	1688	COE	O&M Plans Issued	Yes
Operate and Maintain Fish Passage Facilities	Operations RM&E	General O&M - Portland District (Bonneville, The Dalles, and John Day Dams)	93,114	1848	COE	Anadramous Fish Evaluation Program	Yes
Operate and Maintain Fish Passage Facilities	Operations RM&E	General O&M - Walla Walla District (McNary, Ice Harbor, Lower Monumental, Little Goose, and Lower Granite Dams)	93,114	1849	COE	Anadramous Fish Evaluation Program	Yes
Operate and Maintain Fish Passage Facilities	Operations RM&E	Kelt Studies	109	1679	COE	Initiate studies	Yes
Operate and Maintain Fish Passage Facilities	Routine O&M Fishery Items	General O&M - Portland District (Bonneville, The Dalles, and John Day Dams)	6, 144	1848	COE	Maintain Fish Passage Facilities	Yes
Operate and Maintain Fish Passage Facilities	Routine O&M Fishery Items	General O&M - Portland District (Bonneville, The Dalles, and John Day Dams)	6, 144	1848	COE	ESA Coordination	Yes
Operate and Maintain Fish Passage Facilities	Routine O&M Fishery Items	General O&M - Walla Walla District (McNary, Ice Harbor, Lower Monumental, Little Goose, and Lower Granite Dams)	6, 144	1849	COE	Maintenance of Fish Passage Facilities	Yes

Table 1: List of Hydrosystem Measures

Strategy	Substrategy	Project Title	RPA Action Num	Project ID Number	Lead Agency	02 Work Expectation	FY02 Work?
Operate and Maintain Fish Passage Facilities	Routine O&M Fishery Items	General O&M Seattle District - Albeni Falls Dam	6, 144	1916	COE	Endangered Species Act Coordination	Yes
Operate and Maintain Fish Passage Facilities	Routine O&M Fishery Items	General O&M Seattle District - Albeni Falls Dam	8.1.b	1916	COE	Upper Columbia VARQ EIS	Yes
Operate and Maintain Fish Passage Facilities	Routine O&M Fishery Items	General O&M Seattle District - Albeni Falls Dam	10.A.1.4; 11.A.1.4.a	1916	COE	Lake Elevation Study	Yes
Operate and Maintain Fish Passage Facilities	Routine O&M Fishery Items	General O&M Seattle District - Albeni Falls Dam	11.A.1.4.d	1916	COE	Kokanee Coordination Meeting	Yes
Operate and Maintain Fish Passage Facilities	Routine O&M Fishery Items	General O&M Seattle District - Albeni Falls Dam	11.4	1916	COE	Implement Bull Trout Passage	No
Resident Fish	Bull Trout Operations	COE to Investigate TDG Abatement at Dworshak Dam	139	1716	COE	Initiate Hydrologic and Field Analysis	Yes
Resident Fish	Bull Trout Operations	COE to Investigate TDG Abatement at Libby Dam	137	1715	COE		No
RM&E	Critical Uncertainties	Delayed Mortality of Juveniles	47,185,186,189	1638	COE	Continue Research	Yes
RM&E	Critical Uncertainties	Estuary studies - Initiate evaluations in 2002	105	1805	COE	Continue evaluations	Yes
RM&E	Critical Uncertainties	Evaluation of Transportation Strategies	52, 47, 49, 186, 189	1648	COE	No Work in 02	No
RM&E	Critical Uncertainties	Juvenile Salmon Temperature Studies	1421431051996, 144	1647	COE	Initiate research studies	Yes
RM&E	Critical Uncertainties	Multiple Bypass Accumulative Impacts	46,187,189	1645	COE	Evaluate 2001 Passage Survival	Yes
RM&E	Critical Uncertainties	System - Estuary PIT recovery /Transp/In-river	104	1804	COE/BPA	Continue evaluations	Yes
RM&E	Critical Uncertainties	Turbine Passage Survival Program	93,89,90,111,59,91, 64,88	1649	COE	Biological Test at McNary	Yes
RM&E	Effectiveness	Predation Studies	#####	1713	COE/BPA		Yes
RM&E	Track Status	System /Less intrusive PIT tag monitoring (McNary)	87	1802	COE	See McNary Juv. Fac. Improvements	Yes

Table 1: List of Hydrosystem Measures

Strategy	Substrategy	Project Title	RPA Action Num	Project ID Number	Lead Agency	02 Work Expectation	FY02 Work?
Water Management	Flow Management	Accommodate Chum Spawning Below Bonneville Dam	15	1824	COE/BPA/USBR	Chum Flows Below Bonneville Dam were provided	Yes
Water Management	Flow Management	Accommodate Chum Spawning Below Bonneville Dam	16	1824	COE/BPA/USBR	Chum Flows Below Bonneville Dam were coordinated at TMT	Yes
Water Management	Flow Management	Acquire Water for instream use from USBR's Upper Snake River basin projects and Hells Canyon Complex	32	1825	USBR	Water for instream use from USBR's Upper Snake River basin projects and Hells Canyon Complex was acquired	Yes
Water Management	Flow Management	Draft Dworshak to cool summer water temperatures at the Lower Granite forebay.	19	1844	COE/BPA	Release were made from Dworshak to attempt to maintain water temperatures at the Lower Granite forebay at or below 68 o F.	Yes
Water Management	Flow Management	Manage Dworshak to Assure Refill	19	1874	COE	Dworshak refilled to full by 6/30	Yes
Water Management	Flow Management	Manage Dworshak to Assure Refill	19	1874	COE	Dworshak outflow limited to minimum flow after summer operations	Yes
Water Management	Flow Management	Manage Grand Coulee to Assure Refill	19	1876	USBR	Grand Coulee refilled to full by 7/4	Yes
Water Management	Flow Management	Manage Hungry Horse Assure Refill	19	1877	USBR	Hungry Horse refilled to full by 6/30	Yes
Water Management	Flow Management	Manage Libby to Assure Refill	19	1878	COE	Libby refilled to full by 6/30	Yes
Water Management	Flow Management	Provide Bull Trout Flows from Hungry Horse	19	needed	COE/USBR	The minimum outflow for Hungry Horse from was provided from April – August	Yes
Water Management	Flow Management	Provide recommended spring flows at Lower Granite	14	1900	COE/BPA/USBR	The spring flow objective at Lower Granite was achieved	Yes
Water Management	Flow Management	Provide recommended spring flows at McNary	14	1901	COE/BPA/USBR	The spring flow objective at McNary was achieved	Yes
Water Management	Flow Management	Provide recommended spring flows at Priest Rapids	14	1902	COE/BPA/USBR	The spring flow objective at Priest Rapids was achieved	Yes
Water Management	Flow Management	Provide recommended summer flows at Lower Granite	14	1903	COE/BPA/USBR	The summer flow objective at Lower Granite was achieved	Yes
Water Management	Flow Management	Provide recommended summer flows at McNary	14	1904	COE/BPA/USBR	The summer flow objective at McNary was achieved	Yes
Water Management	Juvenile fish transport	All juvenile fish collected were transported	40	1826	COE	All juvenile fish collected were transported	Yes
Water Management	Juvenile fish transport	Bypass Juvenile Spring Migrants collected at McNary Dam (pending results of McNary Transport Evaluation)	41	1836	COE	Juvenile spring migrants collected at McNary Dam were bypassed	Yes

Table 1: List of Hydrosystem Measures

Strategy	Substrategy	Project Title	RPA Action Num	Project ID Number	Lead Agency	02 Work Expectation	FY02 Work?
Water Management	Juvenile fish transport	Provide Spring spill as specified for McNary	41	1906	COE/BPA	Spring spill occurred at McNary as specified	Yes
Water Management	Other Actions	Banks Lake Drawdown Study	31	1694	USBR	Scoping Complete/Draft EIS Issued	Yes
Water Management	Other Actions	Coordinate Water Management Decisions with TMT	3	1840	COE/BPA/USBR	TMT Coordination has occurred	Yes
Water Management	Other Actions	Develop TDG Model	133	needed	COE	Update TDG production relationships	Yes
Water Management	Other Actions	Develop TDG Model	133	same	COE	Update the SYSTDG users manual and documentation	Yes
Water Management	Other Actions	Develop TDG Model	133	same	COE	Technical review of the model	Yes
Water Management	Other Actions	Develop TDG Model	133	same	COE	Statistical summary of historic gas data	Yes
Water Management	Other Actions	Evaluate Flood Control Operations to Reduce River Ecosystem Effects	35	1846	COE	Flood Control Study proceeding	Yes
Water Management	Other Actions	Implement VARQ at Hungry Horse	22	1852	USBR	EA for VARQ at Hungry Horse prepared, EIS in progress	Yes
Water Management	Other Actions	Implement VARQ at Libby	19	1853	COE/USBR/BPA	Libby VARQ study proceeding	Yes
Water Management	Other Actions	Install Screens at Burbank #2 and #3 Pump Plants	38	1708	USBR	Screen pumps for 2002 Irrigation Season	Yes
Water Management	Other Actions	Investigate drafting Dworshak to 1500' Elevation	34	1855	COE	Dworshak draft to 1500 study proceeding	Yes
Water Management	Other Actions	Investigate Unauthorized Use of USBR Water	29	1858	USBR	Unauthorized use of water is being investigated at USBR projects	Yes
Water Management	Other Actions	Listed Fish in Columbia Basin Project Wasteways	37	1707	USBR	Final report in 2002.	Yes
Water Management	Other Actions	Monitor TDG Effects	131	needed	COE	Monitor and Report TDG in FCRPS system	Yes
Water Management	Other Actions	Pursue Water conservation at USBR Projects	28	1910	USBR	Water conservation improvements made at USBR projects	Yes
Water Management	Other Actions	Request Shaping and Release of water behind Treaty Storage Projects	26	1912	COE/BPA	Shaping and release of water behind Canadian Treaty storage projects has been requested of BC Hydro	Yes
Water Management	Other Actions	Request/Negotiate 1 MAF of Treaty storage with BC Hydro	24	1913	COE/BPA	1 MAF of Treaty storage has been requested and negotiated with BC Hydro	Yes

Table 1: List of Hydrosystem Measures

Strategy	Substrategy	Project Title	RPA Action Num	Project ID Number	Lead Agency	02 Work Expectation	FY02 Work?
Water Management	Other Actions	Request/Negotiate non-Treaty storage with BC Hydro	25	1914	COE/BPA	The use of non-Treaty storage has been requested and negotiated with BC Hydro	Yes
Water Management	Other Actions	Return Flow Quality From Columbia Basin Project	39	1709	USBR	Water Quality Monitoring Plan in Place, Monitoring Commences	Yes
Water Management	Other Actions	Review of TDG Monitoring Stations	132	needed	COE	Issue Representativeness Report	Yes
Water Management	Other Actions	Review of TDG Monitoring Stations	132	same	COE	No Funding for FY 02	No
Water Management	Other Actions	Review of TDG Monitoring Stations	132	same	COE	Evaluate identified problem stations	No
Water Management	Other Actions	Revise Storage Diagrams for Libby	36	1915	COE	Revised Storage Diagram at Libby implemented	Yes
Water Management	Other Actions	USBR to Consult with NMFS Before Making Uncontracted Water/Storage Space Agreements	27	1829	USBR	Before entering into a agreement to commit uncontracted water/storage space USBR consulted with NMFS	No
Water Management	Other Actions	USBR to Consult with NMFS on Chief Joseph Project	30	1830	USBR	Chief Joseph [irrigation] Project ESA consultation is complete	No
Water Management	Other Actions	USBR to Consult with NMFS on Deschutes, Crooked River, Arnold Project	30	1831	USBR	Deschutes, Crooked River, Arnold Project ESA consultation is in progress	Yes
Water Management	Other Actions	USBR to Consult with NMFS on Okanogan Project	30	1832	USBR	Okanagon Project ESA consultation and feasibility study is in progress	Yes
Water Management	Other Actions	USBR to Consult with NMFS on Tualatin Project	30	1833	USBR	Tualatin Project ESA consultation is in progress	Yes
Water Management	Other Actions	USBR to Consult with NMFS on Umatilla Project	30	1834	USBR	Umatilla Project ESA consultation is in progress	Yes
Water Management	Other Actions	USBR to Consult with NMFS on Yakima Project	30	1835	USBR	Yakima Project ESA consultation is in progress	Yes
Water Management	Other Actions	Varq Flood Control Operation	22	1695	COE/USBR/BPA	EIS Scoping / Technical Studies	Yes
Water Management	Other Actions	Water Acquisition From Reclamation's Upper Snake R	32	1693	USBR	Consultations and SRBA settlement discussions in progress	Yes
Water Management	Other Actions	Water Management Plan (1 & 5-Year Plans)	3	1689	COE/USBR/BPA	Water Mangement Plan(s) Issued	Yes
Water Management	Reservoir Operations	Canadian Non-Treaty Storage	25	1797	BPA/COE	2002 Non-Treaty Storage Agreement Completed	Yes

Table 1: List of Hydrosystem Measures

Strategy	Substrategy	Project Title	RPA Action Num	Project ID Number	Lead Agency	02 Work Expectation	FY02 Work?
Water Management	Reservoir Operations	Continue Winter Egg-Fry Survival Study on Lake Pend Oreille	19	1839	COE	In the fall/winter 2002 Albeni Falls has been maintained at elevation 2,055 feet	Yes
Water Management	Reservoir Operations	Feasibility Analysis of Flood Operations for Salmon	35	1705	COE	No Work in 02	Yes
Water Management	Reservoir Operations	Implement VarQ at Hungry Horse	19	1827	USBR	Hungry Horse is using VARQ	Yes
Water Management	Reservoir Operations	John Day Minimum Pool Operation	20	1859	COE	John Day Pool operated at minimum irrigation pool dates specified	Yes
Water Management	Reservoir Operations	Lower Snake Reservoirs to Enhance Fish Passage	20	1873	COE	Lower Snake projects operated at MOP during fish season	Yes
Water Management	Reservoir Operations	Manage FCRPS Storage Projects	14	1875	COE/USBR	FCRPS projects are within 0.5 foot of the flood control rule April 10 and have refilled by June 30	Yes
Water Management	Reservoir Operations	Manage FCRPS Storage Projects	18	1875	COE/USBR	FCRPS projects are within 0.5 foot of the flood control rule April 10 and have refilled by June 30	Yes
Water Management	Reservoir Operations	Negotiate Canadian Storage Agreement	24	1796	BPA/COE	Additional Storage Requested/Negotiated for 2002	Yes
Water Management	Reservoir Operations	Operate Banks Lake to reduce August pumping from Grand Coulee	23	1896	USBR	Banks Lake was operated 5 feet from full during August	Yes
Water Management	Reservoir Operations	Operate Turbine units at 1% efficiency range during fish passage	58	1897	COE/BPA	Turbine units were operated at 1% efficiency range during time specified	Yes
Water Management	Reservoir Operations	Shift Flood Control to Maximize Snake River Water Storage	21	1917	COE/USBR	Shifting flood control requirements from Brownlee and Dworshak to Grand Coulee have been considered	Yes
Water Management	Spill Operations	Do not spill at Lower Snake projects if flow is below 85 Kcfs	40	1842	COE	No spill occurred at Lower Snake projects if flow was below 85 Kcfs	Yes
Water Management	Spill Operations	Provide Spring Spill as recommended by NMFS	54	1905	COE/BPA	Spring spill for juvenile fish passage was provided as specified	Yes
Water Management	Spill Operations	Provide Summer spill as recommended by NMFS	42	1907	COE/BPA	Summer spill for juvenile fish passage was provided as specified	Yes

Table 2: List of Water Quality Actions to Avoid Jeopardy

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation	FY02 Work?
Configuration	Water Quality	33	1704	Modify Water Supply to Dworshak NFH	COE	Install new Boiler System/Initiate System 1 Mods	Yes
Configuration	Water Quality	134	1698	Bonneville Gas Fast Track	COE	Complete construction	Yes
Configuration	Water Quality	136	1714	John Day Gas Fast Track	COE	No Work in 02	No
Configuration	Water Quality	142	1800	McNary - Temperature Control	COE	Initiate CFD Model Development	Yes
Configuration	Water Quality	134, 135	1660	Little Goose Gas Fast Track Deflectors	COE	Complete Plans and Specifications	Yes
Configuration	Water Quality	135, 134	1661	McNary Gas Fast Track Deflectors	COE	Complete Construction of end bay deflectors. Complete Phase II Plans and Specifications	Yes
Configuration	Water Quality	135, 134, 76	1659	Lower Monumental Gas Fast Track Deflectors	COE	Construct End Bay Deflectors/Complete Model	Yes
Configuration	Water Quality	5, 132	1696	Water Quality Plan, 1-Year	COE/USBR/BPA	Included in 2002 Annual IP	Yes
Configuration	Water Quality	82, 83, 71	1700	John Day Spill/Survival Studies	COE	Continue evaluations	Yes
Configuration	Project RM&E	114	1680	Fish Ladder Temperature Evaluation	COE	Collect data. Prepare White Paper	Yes
Configuration	Project RM&E	116, 34, 114, 115	1681	Adult Temperature Evaluation	COE	Continue research	Yes
Operate and Maintain Fish Passage Facilities to Enhance Fish Survival	Operation of FCRPS to enhance fish survival	6, 131, 132, 133, 144	1687	Fish Passage Plan (FPP)	COE	Fish Passage Plan Issued	Yes
Configuration	Water Quality	136	1887	O&M - Chief Joseph Dam	COE	Spillway Modification	No
RM&E	Critical Uncertainties	141, 142, 143, 105, 199, 6, 144	1647	Juvenile Salmon Temperature Studies	COE	Initiate research studies	Yes
Water Management	Flow Management	19	1844	Draft Dworshak to cool summer water temperatures at the Lower Granite forebay.	COE/BPA	Release were made from Dworshak to attempt to maintain water temperatures at the Lower Granite forebay at or below 68 o F.	Yes
Water Management	Other actions	34	1855	Investigate drafting Dworshak to 1500' Elevation	COE	Dworshak draft to 1500 study proceeding	Yes
Water Management	Other Actions	37	1707	Listed Fish in Columbia Basin Project Wasteways	USBR	Water Quality Monitoring Plan in Place, Monitoring Commences	Yes
Water Management	Other Actions	39	1709	Return Flow Quality From Columbia Basin Project	USBR	Investigation complete. Final report in 2002.	Yes

Table 2: List of Water Quality Actions to Avoid Jeopardy

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation	FY02 Work?
Water Management	Other Actions	131	needed	Monitor TDG Effects	COE/USBR	Monitor and Report TDG in FCRPS system	Yes
Water Management	Other Actions	132	needed	Review of TDG Monitoring Stations	COE	Issue Representativeness Report	Yes
Water Management	Other Actions	132	same	Review of TDG Monitoring Stations	COE	No Funding for FY 02	No
Water Management	Other Actions	132	same	Review of TDG Monitoring Stations	COE	Evaluate identified problem stations	Yes
Water Management	Other Actions	133	needed	Develop TDG Model	COE	Update TDG production relationships	Yes
Water Management	Other Actions	133	needed	Develop TDG Model	COE	Update the SYSTDG users manual and documentation	Yes
Water Management	Other Actions	133	needed	Develop TDG Model	COE	Technical review of the model	Yes
Water Management	Other Actions	133	needed	Develop TDG Model	COE	Statistical summary of historic gas data	Yes
Resident Fish	Bull Trout Operations	139	1716	COE to Investigate TDG Abatement at Dworshak Dam	COE	Initiate Hydrologic and Field Analysis	Yes
Operate and Maintain Fish Passage Facilities to Enhance Fish Survival	Operations RM&E	FWS7.A.1	1885	O&M - Albeni Falls Dam	COE	Spill Test - TDG Report	No
Water Management	Reservoir Operations	FWS8.3.h	260	Monitor Water Temperature in Lake Kooconusa during May and June	COE/BPA	Monitoring will be conducted in 2002	Yes
Water Management	Other actions	FWS8.2.a.1, 137	241	Test Libby Spillway for TDG in 2002, Evaluate gas throughout the Kootenai River	COE	Conduct Spill test in 2002	Yes
Resident Fish	Bull Trout Use	FWS10.A.3(1)	1794	Bull Trout use of Lower Snake River Reservoirs	COE	Evaluate Temp & Gas Effects	Yes
Operate and Maintain Fish Passage Facilities	Operations RM&E	FWS8.2.a.5	needed	O&M - Libby Dam	COE	Gas Abatement Feasibility Study	Yes

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Improve Mainstem Habitat	Mainstem Aquatic Habitat	155	1458	Salmon Spawning Below Lower Columbia Dams-ODFW	BPA	Study of chinook and chum spawning below Bonneville
Improve Mainstem Habitat	Mainstem Aquatic Habitat	163		Fund a study of the feasibility, biological benefits and ecological risks of habitat modification to improve spawning conditions for chum and chinook salmon in the Ives Island area	BPA	
Improve Mainstem Habitat	Mainstem Aquatic Habitat	157	1458	Salmon Spawning Below Lower Columbia Dams-ODFW	BPA	Study of chinook and chum spawning below Bonneville
Improve Mainstem Habitat	Mainstem Aquatic Habitat	157	1554	Eval Factors Limiting Col R Chum Salmon Population	BPA	Factors limiting chum salmon in Hamilton & Hardy Creeks
Improve Mainstem Habitat	Mainstem Aquatic Habitat	157	1554	Eval Factors Limiting Col R Chum Salmon Population	BPA	Hamilton & Hardy Creeks enhanced for chum salmon
Improve Mainstem Habitat	Mainstem Aquatic Habitat	157	1554	Eval Factors Limiting Col R Chum Salmon Population	BPA	Relationship between ainstem Columbia River and tributary chum salmon populations
Improve Mainstem Habitat	Mainstem Aquatic Habitat	157	1764	Reintro of Columbia R Chum Salmon in Duncan Creek	BPA	Enhanced chum spawning area
Improve Mainstem Habitat	Mainstem Aquatic Habitat	157	1764	Reintro of Columbia R Chum Salmon in Duncan Creek	BPA	M & E of spawning area
Improve Mainstem Habitat	Mainstem Riparian Conditions	155	1458	Salmon Spawning Below Lower Columbia Dams-ODFW	BPA	Study of chinook and chum spawning below Bonneville
Improve Mainstem Habitat	Mainstem Riparian Conditions	157	1458	Salmon Spawning Below Lower Columbia Dams-ODFW	BPA	Study of chinook and chum spawning below Bonneville
Improve Mainstem Habitat	Mainstem Riparian Conditions	157	1554	Eval Factors Limiting Col R Chum Salmon Population	BPA	Hamilton & Hardy Creeks enhanced for chum salmon
Improve Mainstem Habitat	Mainstem Riparian Conditions	157	1554	Eval Factors Limiting Col R Chum Salmon Population	BPA	Relationship between ainstem Columbia River and tributary chum salmon populations
Improve Mainstem Habitat	Mainstem Riparian Conditions	157	1554	Eval Factors Limiting Col R Chum Salmon Population	BPA	Factors limiting chum salmon in Hamilton & Hardy Creeks
Improve Mainstem Habitat	Mainstem Riparian Conditions	157	1764	Reintro of Columbia R Chum Salmon in Duncan Creek	BPA	Enhanced chum spawning area
Improve Mainstem Habitat	Mainstem Riparian Conditions	157	1764	Reintro of Columbia R Chum Salmon in Duncan Creek	BPA	M & E of spawning area
Improve Mainstem Habitat	Planning and Assessment	155	1458	Salmon Spawning Below Lower Columbia Dams-ODFW	BPA	Study of chinook and chum spawning below Bonneville
Improve Mainstem Habitat	Planning and Assessment	157	1458	Salmon Spawning Below Lower Columbia Dams-ODFW	BPA	Study of chinook and chum spawning below Bonneville
Improve Mainstem Habitat	Planning and Assessment	157	1554	Eval Factors Limiting Col R Chum Salmon Population	BPA	Factors limiting chum salmon in Hamilton & Hardy Creeks
Improve Mainstem Habitat	Planning and Assessment	157	1554	Eval Factors Limiting Col R Chum Salmon Population	BPA	Hamilton & Hardy Creeks enhanced for chum salmon
Improve Mainstem Habitat	Planning and Assessment	157	1554	Eval Factors Limiting Col R Chum Salmon Population	BPA	Relationship between ainstem Columbia River and tributary chum salmon populations
Improve Mainstem Habitat	Planning and Assessment	157	1764	Reintro of Columbia R Chum Salmon in Duncan Creek	BPA	Enhanced chum spawning area

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Improve Mainstem Habitat	Planning and Assessment	157	1764	Reintro of Columbia R Chum Salmon in Duncan Creek	BPA	M & E of spawning area
Improve Mainstem Habitat	Subbasin planning and assessment	149	<i>unassigned</i>	Pasco, WA, Section 1135	COE	Complete study, begin construction
Improve Mainstem Habitat	Subbasin planning and assessment	154	<i>unassigned</i>	Pasco, WA, Section 1135	COE	Complete study, begin construction
Protect & Enhance Estuary Habitat	Estuary Water Quality	160	<i>unassigned</i>	Brownsmead, Clatsop County OR, Section 1135	COE	Begin construction.
Protect & Enhance Estuary Habitat	Estuary Watershed Health	158	<i>unassigned</i>	Research: Salmonid survival research using acoustic tags	COE	Second year research complete
Protect & Enhance Estuary Habitat	Estuary Watershed Health	158	<i>unassigned</i>	Research: Estuarine Habitat and Juvenile Salmon Research	COE	Second year research complete
Protect & Enhance Estuary Habitat	Estuary Watershed Health	158	<i>unassigned</i>	Research: Evaluation of relationship of time of ocean entry, physical, and biological characteristics of the estuary and plume environment and adult return rates.	COE	Release tagged fish in Spring '02
Protect & Enhance Estuary Habitat	Estuary Watershed Health	159	<i>unassigned</i>	General Investigation: Columbia River mile 0 to 145	COE	Complete reconnaissance phase; begin feasibility phase.
Protect & Enhance Estuary Habitat	Estuary Watershed Health	160	<i>unassigned</i>	General Investigation: Columbia River mile 0 to 145	COE	Complete reconnaissance phase; begin feasibility phase.
Protect & Enhance Estuary Habitat	Estuary Watershed Health	160	<i>unassigned</i>	SW Washington Streams	COE	Reconnaissance study
Protect & Enhance Estuary Habitat	Estuary Watershed Health	160	<i>unassigned</i>	Skipanon River, Warrenton OR Section 206	COE	Begin construction
Protect & Enhance Estuary Habitat	Estuary Watershed Health	160	<i>unassigned</i>	Brownsmead, Clatsop County OR, Section 1135	COE	Begin construction.
Protect & Enhance Estuary Habitat	Estuary Watershed Health	161	<i>unassigned</i>	Research: Salmonid survival research using acoustic tags	COE	Second year research complete
Protect & Enhance Estuary Habitat	Estuary Watershed Health	161	<i>unassigned</i>	Research: Estuarine Habitat and Juvenile Salmon Research	COE	Second year research complete
Protect & Enhance Estuary Habitat	Estuary Watershed Health	161	<i>unassigned</i>	Research: Evaluation of relationship of time of ocean entry, physical, and biological characteristics of the estuary and plume environment and adult return rates.	COE	Release tagged fish in Spring '02
Protect & Enhance Estuary Habitat	Estuary Watershed Health	161	<i>unassigned</i>	Estuary research - acoustic tags, continental shelf (KinTama, David Welch).	BPA	Complete feasibility study
Protect & Enhance Estuary Habitat	Estuary Watershed Health	161	<i>unassigned</i>	Estuary research - tracking fish up the continental shelf	BPA	Second year research complete
Protect & Enhance Estuary Habitat	Tributary Water Quality		<i>unassigned</i>	Columbia River Estuary Demonstration Projects	COE	Identify projects for 02; begin study/construction
Protect & Enhance Estuary Habitat	Tributary Watershed Health		<i>unassigned</i>	Columbia River Estuary Demonstration Projects	COE	Identify projects for 02; begin study/construction
Protect & Enhance Tributary Habitat	Tributary Passage	149	<i>unassigned</i>	Lemhi Subbasin High Priority Subbasin Enhancement	USBR	Provide technical assistance for projects identified in 01; continue programmatic NEPA and hydrologic studies; identify new projects; coordinate with local groups.

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tribuary Passage	149	<i>unassigned</i>	Methow Subbasin High Priority Subbasin Enhancement	USBR	Provide technical assistance for projects identified in 01; continue programmatic NEPA and hydrologic studies; identify new projects; coordinate with local groups.
Protect & Enhance Tributary Habitat	Tribuary Passage	149	<i>unassigned</i>	Upper John Day High Priority Subbasin Enhancement	USBR	Provide technical assistance for projects identified in 01; continue programmatic NEPA and hydrologic studies; identify new projects; coordinate with local groups.
Protect & Enhance Tributary Habitat	Tribuary Passage	149	<i>unassigned</i>	Middle Fork John Day High Priority Subbasin Enhancement	USBR	Provide technical assistance for projects identified in 01; continue programmatic NEPA and hydrologic studies; identify new projects; coordinate with local groups.
Protect & Enhance Tributary Habitat	Tribuary Passage	149	<i>unassigned</i>	McKenzie High Priority Subbasin Enhancement	USBR	Initiate workload evaluation effort, programmatic NEPA. Identify projects for early implementation or FY03. Establish liaison offices.
Protect & Enhance Tributary Habitat	Tribuary Passage	149	<i>unassigned</i>	Upper Salmon High Priority Subbasin Enhancement	USBR	Initiate workload evaluation effort, programmatic NEPA. Identify projects for early implementation or FY03. Establish liaison offices.
Protect & Enhance Tributary Habitat	Tribuary Passage	149	<i>unassigned</i>	Wenatchee High Priority Subbasin Enhancement	USBR	Initiate workload evaluation effort, programmatic NEPA. Identify projects for early implementation or FY03. Establish liaison offices.
Protect & Enhance Tributary Habitat	Tribuary Passage	149	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian fencing on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tribuary Passage	149	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian planting on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tribuary Passage	149	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Instream work on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tribuary Passage	149	286	Umatilla Habitat Improvement / CTUIR	BPA	Anadromous habitat enhancement for Meacham Cr
Protect & Enhance Tributary Habitat	Tribuary Passage	149	709	Model Watershed Studies - Lemhi River Basin	BPA	Watershed restoration in Lemhi River Basin, Pahsimeroi River basin and East Fork Salmon River basin
Protect & Enhance Tributary Habitat	Tribuary Passage	149	850	Upper Salmon River Anadromous Fish Passage	BPA	Habitat enhancement and passage restoration through fishways, diversion headgates, improved water distribution, and acquired instream flow
Protect & Enhance Tributary Habitat	Tribuary Passage	149	850	Upper Salmon River Anadromous Fish Passage	BPA	Diversion headgates, improved water distribution, and acquired instream flow
Protect & Enhance Tributary Habitat	Tribuary Passage	149	850	Upper Salmon River Anadromous Fish Passage	BPA	Fishways
Protect & Enhance Tributary Habitat	Tribuary Passage	149	852	Oregon Fish Screens Project	BPA	DeNiel fish passage structures in Trout Cr

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tribuary Passage	149	852	Oregon Fish Screens Project	BPA	La Grande fish screen shop
Protect & Enhance Tributary Habitat	Tribuary Passage	149	852	Oregon Fish Screens Project	BPA	Fabricate & install fish screens in John Day, Umatilla, & Walla Walla Basins
Protect & Enhance Tributary Habitat	Tribuary Passage	149	852	Oregon Fish Screens Project	BPA	John Day fish screen shop
Protect & Enhance Tributary Habitat	Tribuary Passage	149	886	Idaho Fish Screening Improvement	BPA	Consolidate and screen diversions
Protect & Enhance Tributary Habitat	Tribuary Passage	149	888	Idaho Model Watershed Habitat Projects	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	149	888	Idaho Model Watershed Habitat Projects	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tribuary Passage	149	888	Idaho Model Watershed Habitat Projects	BPA	Resource Management System plans
Protect & Enhance Tributary Habitat	Tribuary Passage	149	888	Idaho Model Watershed Habitat Projects	BPA	Controlling livestock grazing
Protect & Enhance Tributary Habitat	Tribuary Passage	149	888	Idaho Model Watershed Habitat Projects	BPA	Instream structures
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1095	Juvenile & Adult Passage- Walla Walla Basin	BPA	Screen/trap facilities
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1101	Walla Walla Basin Anadromous Fish Passage	BPA	Adult passage at irrigation diversion dams
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1141	Methow River Valley Irrigation District - YN	BPA	Pressurized irrigation system
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1141	Methow River Valley Irrigation District - YN	BPA	Increased instream flow
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Pushup dams replaced
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Monitoring of results
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Pumping stations established
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1402	Irrigation & Riparian Improvements - John Day R	BPA	Alternative irrigation sources / techniques
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1402	Irrigation & Riparian Improvements - John Day R	BPA	Push-up dams eliminated
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1402	Irrigation & Riparian Improvements - John Day R	BPA	Permanent intake structures
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1408	Assess Salmonid Habitat Walla Walla Watershed - WA	BPA	Assesment of conditions and populations
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1478	Restore Salmon River - Challis Area	BPA	Restored fish habitat
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1497	Salmon Creek Instream Flow & Habitat Survey	BPA	Hydrologic model for the drainage
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1497	Salmon Creek Instream Flow & Habitat Survey	BPA	Fishery and water resources documented
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1575	Walla Walla River Fish Passage Operations	BPA	Effectively utilizing trtransport equipment

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1575	Walla Walla River Fish Passage Operations	BPA	Trapping facilities
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1575	Walla Walla River Fish Passage Operations	BPA	Passage facilities
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1734	Fifteen Mile Subbasin Water Right Acquisition	BPA	Acquired water rights
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1735	Salmon and Steelhead Exertion Study	BPA	Location of difficult fish passage sites
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1749	Gourley Creek Dam Fish Ladder	BPA	Eliminated fish passage barrier
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1750	Protect ESA Fish With Screens in Walla Walla Basin	BPA	Fish screens for 197 Walla Walla Basin irrigation diversions.
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1753	Farmers Irr Dist Mainstem Hood River Fish Screen	BPA	New horizontal fixed plate screen
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1762	Reconnect Little Morgan Creek to Pahsimeroi River	BPA	14.3 miles of historical anadromous habitat restored
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1762	Reconnect Little Morgan Creek to Pahsimeroi River	BPA	Little Morgan Creek reconnected with Pahsimeroi River
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1763	Restoration of Anadromous Fish Access to Hawley Cr	BPA	Hawley Creek reconnected to the Lemhi River
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1763	Restoration of Anadromous Fish Access to Hawley Cr	BPA	Improve irrigation methods
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1763	Restoration of Anadromous Fish Access to Hawley Cr	BPA	Restored riparian habitat
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1763	Restoration of Anadromous Fish Access to Hawley Cr	BPA	Reduced water temperatures
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1765	Supplemental Flows in Buck Hollow	BPA	Supplemented stream flow (1-1.5 cfs)
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1765	Supplemental Flows in Buck Hollow	BPA	headwater irrigation well
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1768	Trout Creek Streamflow Enhancement	BPA	Fish passage barriers removed
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1768	Trout Creek Streamflow Enhancement	BPA	Safer culverts
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1770	Badger Creek Culvert Replacement	BPA	Box culvert eliminating fish passage barrier
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1774	Touchet River Stream Flow Enhancement	BPA	Increased stream flows
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1774	Touchet River Stream Flow Enhancement	BPA	Acquired water rights
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1775	Lostine River Streamflow Enhancement	BPA	Acquired water rights
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1775	Lostine River Streamflow Enhancement	BPA	Increased stream flows
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1776	Methow River Basin Screening	BPA	new fish screens constructed
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1776	Methow River Basin Screening	BPA	Fish screen facilities upgrades

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1777	Simcoe Creek Streamflow Enhancement	BPA	Canal screens
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1777	Simcoe Creek Streamflow Enhancement	BPA	Ladders at two diversion dams
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1777	Simcoe Creek Streamflow Enhancement	BPA	Off site water facilities
Protect & Enhance Tributary Habitat	Tribuary Passage	149	1778	Hancock Springs Passage & Habitat Restoration	BPA	Access to spring fed channel
Protect & Enhance Tributary Habitat	Tribuary Passage	150	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian planting on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tribuary Passage	150	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian fencing on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tribuary Passage	150	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Instream work on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tribuary Passage	150	137	Joseph Creek & Grande Ronde River Habitat Work	BPA	Riparian fencing on Joseph Creek drainage and upper Grande Ronde R.
Protect & Enhance Tributary Habitat	Tribuary Passage	150	137	Joseph Creek & Grande Ronde River Habitat Work	BPA	Instream work on Joseph Creek drainage and upper Grande Ronde R.
Protect & Enhance Tributary Habitat	Tribuary Passage	150	286	Umatilla Habitat Improvement / CTUIR	BPA	Anadromous habitat enhancement for Meacham Cr
Protect & Enhance Tributary Habitat	Tribuary Passage	150	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Riparian fencing E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tribuary Passage	150	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Instream structures: E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tribuary Passage	150	752	Lower Yakima Valley Riparian/Wetlands - Phase I	BPA	Protecting and enhancing riparian and wetland habitat in the Yakama Reservation.
Protect & Enhance Tributary Habitat	Tribuary Passage	150	825	Fifteenmile Creek Habitat Improvement	BPA	Bank stabilization work in the Fifteenmile Creek Basin
Protect & Enhance Tributary Habitat	Tribuary Passage	150	825	Fifteenmile Creek Habitat Improvement	BPA	Riparian fencing in the Fifteenmile Creek Basin
Protect & Enhance Tributary Habitat	Tribuary Passage	150	888	Idaho Model Watershed Habitat Projects	BPA	Instream structures
Protect & Enhance Tributary Habitat	Tribuary Passage	150	888	Idaho Model Watershed Habitat Projects	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	150	888	Idaho Model Watershed Habitat Projects	BPA	Controlling livestock grazing
Protect & Enhance Tributary Habitat	Tribuary Passage	150	888	Idaho Model Watershed Habitat Projects	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tribuary Passage	150	888	Idaho Model Watershed Habitat Projects	BPA	Resource Management System plans
Protect & Enhance Tributary Habitat	Tribuary Passage	150	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon riparian planting
Protect & Enhance Tributary Habitat	Tribuary Passage	150	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon pool development

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tribuary Passage	150	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon stream bank stabilization
Protect & Enhance Tributary Habitat	Tribuary Passage	150	899	Pataha Creek Stream & Cropland Restoration	BPA	Reduced sediment delivery
Protect & Enhance Tributary Habitat	Tribuary Passage	150	899	Pataha Creek Stream & Cropland Restoration	BPA	Off site watering.
Protect & Enhance Tributary Habitat	Tribuary Passage	150	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	150	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian vegetation management
Protect & Enhance Tributary Habitat	Tribuary Passage	150	929	Trout Creek Operation & Maintenance	BPA	O & M of habitat improvements
Protect & Enhance Tributary Habitat	Tribuary Passage	150	929	Trout Creek Operation & Maintenance	BPA	M & E of habitat improvements / smolt production
Protect & Enhance Tributary Habitat	Tribuary Passage	150	937	Salmon River Habitat Enhancement and O&M	BPA	O & M of habitat improvements
Protect & Enhance Tributary Habitat	Tribuary Passage	150	937	Salmon River Habitat Enhancement and O&M	BPA	M & E of habitat improvements
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1034	Squaw Creek Watershed Wildlife Project	BPA	Purchased land
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1034	Squaw Creek Watershed Wildlife Project	BPA	Implemented management plan
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1089	Upper Salmon River Diversion Consolidation Program	BPA	Consolidate diversions and screen
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1141	Methow River Valley Irrigation District - YN	BPA	Pressurized irrigation system
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1141	Methow River Valley Irrigation District - YN	BPA	Increased instream flow
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1143	Yakima Watershed Restoration - Satus Creek - YIN	BPA	Improved fish habitat
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Noxious weed control
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Stabilized banks
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1205	Nez Perce NE Oregon Wildlife Project: Helm Tract	BPA	Helm Tract additions
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1208	Grande Ronde Watershed Restoration - CTUIR	BPA	Enhanced water quality
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1208	Grande Ronde Watershed Restoration - CTUIR	BPA	Enhanced water quantity
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1208	Grande Ronde Watershed Restoration - CTUIR	BPA	Enhanced riparian habitat
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1208	Grande Ronde Watershed Restoration - CTUIR	BPA	Enhanced instream habitat
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1263	Wallowa County/Nez Perce Salmon Habitat Recovery	BPA	Monitoring of the Salmon Habitat Recovery Plan

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1263	Wallowa County/Nez Perce Salmon Habitat Recovery	BPA	Implementation of the Salmon Habitat Recovery Plan
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1358	Cottonwood Creek Riparian Enhancement/Wallowa	BPA	Eroded road restored
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1358	Cottonwood Creek Riparian Enhancement/Wallowa	BPA	Cut banks armored
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1358	Cottonwood Creek Riparian Enhancement/Wallowa	BPA	Bridges repaired
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1358	Cottonwood Creek Riparian Enhancement/Wallowa	BPA	Road removed from riparian zone where possible
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1361	Water Quality Monitoring for Grande Ronde Basin	BPA	Reports of conditions and trends
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1361	Water Quality Monitoring for Grande Ronde Basin	BPA	Expanded monitoring program
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1361	Water Quality Monitoring for Grande Ronde Basin	BPA	Coordinated monitoring
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1409	Hood River Fish Habitat	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1409	Hood River Fish Habitat	BPA	Alternative irrigation water source developed
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1409	Hood River Fish Habitat	BPA	Problems resolved at diversions
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1409	Hood River Fish Habitat	BPA	Rip rap stream banks
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1411	Acquisition of Pine Creek Ranch	BPA	Pine Creek Ranch
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1442	Mcintyre Road Relocation - Union County	BPA	Obliterated road
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1442	Mcintyre Road Relocation - Union County	BPA	Reconstructed county road
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1444	Grouse Creek Culvert Replacement	BPA	Grouse Creek multi-plate arch culvert
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1444	Grouse Creek Culvert Replacement	BPA	Road raised and alignment improved
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1465	Bakeoven Riparian Assessment	BPA	Fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1465	Bakeoven Riparian Assessment	BPA	Watershed monitoring plan
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1465	Bakeoven Riparian Assessment	BPA	Off-site water developments
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1465	Bakeoven Riparian Assessment	BPA	Assessment of Bakeoven watershed conditions
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1465	Bakeoven Riparian Assessment	BPA	Revegetation
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1465	Bakeoven Riparian Assessment	BPA	Watershed restoration plan
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1503	Union County Technical Engineering Assistance	BPA	Technical support

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1504	Wallowa County Technical Engineering Assistance	BPA	Water Temperature Software Project
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1505	Water Temp Manipulation & Data Sharing Software	BPA	Public domain software program for water temperature data collection and analysis
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1521	Grande Ronde - Union SWCD Chan, Rd & Passage Rest	BPA	Phillips Creek bridge,
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1521	Grande Ronde - Union SWCD Chan, Rd & Passage Rest	BPA	Mill Creek / Caldwell diversion dam passage improvement
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1521	Grande Ronde - Union SWCD Chan, Rd & Passage Rest	BPA	Grande Ronde bank work
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1521	Grande Ronde - Union SWCD Chan, Rd & Passage Rest	BPA	Smutz Draw road relocation
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1522	Grande Ronde - Union SWCD Riparian, Upland Rest	BPA	Ladd Creek riparian fence
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1522	Grande Ronde - Union SWCD Riparian, Upland Rest	BPA	Soil aerator
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1522	Grande Ronde - Union SWCD Riparian, Upland Rest	BPA	Cattle watering troughs
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1524	Alpine Meadows - Trout Creek Restoration	BPA	Eroding Trout Creek channel stabilized
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1530	Wallowa County Gauging Stations	BPA	Maintain seven stream gages
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1531	Hagedorn Road Relocation/Stream Restoration	BPA	Old Hagedorn Road obliterated
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1531	Hagedorn Road Relocation/Stream Restoration	BPA	Hagedorn Road relocated
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1533	Grande Ronde Basin Tech Engineering Assistance	BPA	Technical support
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1537	Wallowa County Direct Seeding	BPA	No-till agriculture demonstration
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1538	Crow Cr Star Thistle Containment & Riparian Enhanc	BPA	Noxious weed control
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1538	Crow Cr Star Thistle Containment & Riparian Enhanc	BPA	Spalding catchfly protected
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1557	Acquire Oxbow Ranch Middle Fork John Day River	BPA	Oxbow Ranch
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1562	WLMitigation Sites Oregon, Wenaha WMA Additions	BPA	Enhanced Wenaha WMA
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1562	WLMitigation Sites Oregon, Wenaha WMA Additions	BPA	Land acquisition or easement
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1563	WL Mitigation Sites Oregon, Ladd Marsh Additions	BPA	Enhanced additions to Ladd Marsh WMA
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1563	WL Mitigation Sites Oregon, Ladd Marsh Additions	BPA	Ladd Marsh WMA additions
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Enhanced properties

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Monitored projects
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1607	Conservation Reserve Enhancement Program Incentive	BPA	Riparian protective strips along streams
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1609	Mccoey Cr Alta Cunha Ranches Instream Restoration	BPA	Large woody debris in stream
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1609	Mccoey Cr Alta Cunha Ranches Instream Restoration	BPA	McCoy Creek pasture fences
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1609	Mccoey Cr Alta Cunha Ranches Instream Restoration	BPA	Obliterated 3000 feet of abandoned railroad grade
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1609	Mccoey Cr Alta Cunha Ranches Instream Restoration	BPA	Replanted riparian zone
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1609	Mccoey Cr Alta Cunha Ranches Instream Restoration	BPA	Pasture rest
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1623	Asotin Watershed Grazing Biological Plan	BPA	Weed control
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1624	Rainwater Wildlife O & M	BPA	M & E for Rainwater Wildlife Area
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1731	Fifteen Mile Creek Riparian Fencing/Stream Survey	BPA	Physical evaluation of streams
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1731	Fifteen Mile Creek Riparian Fencing/Stream Survey	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1746	Protect Bear Valley Wild Salmon Spawning Habitat	BPA	Closed Grazing allotment
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1748	Arrowleaf/Methow River Conservation	BPA	Arrowleaf property
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1751	Wagner Ranch Acquisition	BPA	Wagner Ranch
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1752	Forrest Ranch Acquisition	BPA	Forrest Ranch
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1754	Acquire 27,000 Camp Creek Ranch at Zumwalt Prairie	BPA	27,000 acres of Zumwalt Prairie
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1755	Conservation Easement, Baker Ranch, Salmon River	BPA	Protected riparian areas
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1755	Conservation Easement, Baker Ranch, Salmon River	BPA	Restored stream banks
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1755	Conservation Easement, Baker Ranch, Salmon River	BPA	70 cfs remaining in stream thru closure of 7 diversions
Protect & Enhance Tributary Habitat	Tribuary Passage	150	1755	Conservation Easement, Baker Ranch, Salmon River	BPA	Conservation easement
Protect & Enhance Tributary Habitat	Tribuary Passage	151	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian fencing on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tribuary Passage	151	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian planting on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tribuary Passage	151	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Instream work on Middle Fk and mainstem John Day River tributaries.

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tribuary Passage	151	286	Umatilla Habitat Improvement / CTUIR	BPA	Anadromous habitat enhancement for Meacham Cr
Protect & Enhance Tributary Habitat	Tribuary Passage	151	1141	Methow River Valley Irrigation District - YN	BPA	Pressurized irrigation system
Protect & Enhance Tributary Habitat	Tribuary Passage	151	1141	Methow River Valley Irrigation District - YN	BPA	Increased instream flow
Protect & Enhance Tributary Habitat	Tribuary Passage	151	1467	15 Mile Creek Water Right Acquisition	BPA	Increase stream flow
Protect & Enhance Tributary Habitat	Tribuary Passage	151	1467	15 Mile Creek Water Right Acquisition	BPA	Acquired water rights
Protect & Enhance Tributary Habitat	Tribuary Passage	151	1725	Echo Meadow Winter Artificial Recharge	BPA	Linkages between winter artificial recharge of groundwater to the return flows
Protect & Enhance Tributary Habitat	Tribuary Passage	152	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Instream structures: E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tribuary Passage	152	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Riparian fencing E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tribuary Passage	152	707	Grande Ronde Model Watershed Development	BPA	Habitat restoration in the Grande Ronde basin
Protect & Enhance Tributary Habitat	Tribuary Passage	152	709	Model Watershed Studies - Lemhi River Basin	BPA	Watershed restoration in Lemhi River Basin, Pahsimeroi River basin and East Fork Salmon River basin
Protect & Enhance Tributary Habitat	Tribuary Passage	152	819	Red River Restoration (Little Ponderosa Ranch)	BPA	Bank stabilization in lower Red River Meadow.
Protect & Enhance Tributary Habitat	Tribuary Passage	152	819	Red River Restoration (Little Ponderosa Ranch)	BPA	Riparian cover and temperature control in lower Red River Meadow.
Protect & Enhance Tributary Habitat	Tribuary Passage	152	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon riparian planting
Protect & Enhance Tributary Habitat	Tribuary Passage	152	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon stream bank stabilization
Protect & Enhance Tributary Habitat	Tribuary Passage	152	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon pool development
Protect & Enhance Tributary Habitat	Tribuary Passage	152	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	152	899	Pataha Creek Stream & Cropland Restoration	BPA	Reduced sediment delivery
Protect & Enhance Tributary Habitat	Tribuary Passage	152	899	Pataha Creek Stream & Cropland Restoration	BPA	Off site watering.
Protect & Enhance Tributary Habitat	Tribuary Passage	152	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian vegetation management
Protect & Enhance Tributary Habitat	Tribuary Passage	152	926	Wallowa Basin Project Planning	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tribuary Passage	152	929	Trout Creek Operation & Maintenance	BPA	M & E of habitat improvements / smolt production
Protect & Enhance Tributary Habitat	Tribuary Passage	152	929	Trout Creek Operation & Maintenance	BPA	O & M of habitat improvements

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1034	Squaw Creek Watershed Wildlife Project	BPA	Purchased land
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1034	Squaw Creek Watershed Wildlife Project	BPA	Implemented management plan
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1089	Upper Salmon River Diversion Consolidation Program	BPA	Consolidate diversions and screen
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1143	Yakima Watershed Restoration - Satus Creek - YIN	BPA	Improved fish habitat
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Stabilized banks
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Noxious weed control
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1170	Clear Cr & NF John Day Dredge-Tailings Restoration	BPA	Redistributed dredge tailings
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1170	Clear Cr & NF John Day Dredge-Tailings Restoration	BPA	Improved stream channel
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Pumping stations established
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Monitoring of results
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Pushup dams replaced
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1402	Irrigation & Riparian Improvements - John Day R	BPA	Permanent intake structures
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1402	Irrigation & Riparian Improvements - John Day R	BPA	Push-up dams eliminated
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1402	Irrigation & Riparian Improvements - John Day R	BPA	Alternative irrigation sources / techniques
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1419	Implement Trout Creek Watershed Enhancement	BPA	Infiltration galleries
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1419	Implement Trout Creek Watershed Enhancement	BPA	Implemented restoration plan
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1419	Implement Trout Creek Watershed Enhancement	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Reestablished passage into tributary habitats
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Purchased property / easements
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1465	Bakeoven Riparian Assessment	BPA	Fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1465	Bakeoven Riparian Assessment	BPA	Revegetation
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1465	Bakeoven Riparian Assessment	BPA	Assessment of Bakeoven watershed conditions

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1465	Bakeoven Riparian Assessment	BPA	Watershed monitoring plan
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1465	Bakeoven Riparian Assessment	BPA	Watershed restoration plan
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1465	Bakeoven Riparian Assessment	BPA	Off-site water developments
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1469	Pine Hollow Watershed Enhancement	BPA	Replanted riparian areas.
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1469	Pine Hollow Watershed Enhancement	BPA	Master plan
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1469	Pine Hollow Watershed Enhancement	BPA	Springs developed
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1469	Pine Hollow Watershed Enhancement	BPA	Critical areas reseeded
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1469	Pine Hollow Watershed Enhancement	BPA	Cross fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1472	Ahtanum Creek Watershed Assessment	BPA	Assessed salmonid populated
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1472	Ahtanum Creek Watershed Assessment	BPA	Irrigated lands & water delivery systems mapped
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1472	Ahtanum Creek Watershed Assessment	BPA	Assessed stream habitat conditions
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1472	Ahtanum Creek Watershed Assessment	BPA	Water discharge & temperature monitored
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Sediment control basins
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Modified agricultural techniques
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Vegetation management
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Improved steelhead spawning & rearing habitat
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Coordination of funding and effort
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Improved agricultural /range land useage
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1481	Pataha Watershed Project Planning & Implementation	BPA	Pataha Creek Model Watershed Plan
Protect & Enhance Tributary Habitat	Tribuary Passage	152	1481	Pataha Watershed Project Planning & Implementation	BPA	Water quality monitored
Protect & Enhance Tributary Habitat	Tribuary Passage	153	137	Joseph Creek & Grande Ronde River Habitat Work	BPA	Instream work on Joseph Creek drainage and upper Grande Ronde R.
Protect & Enhance Tributary Habitat	Tribuary Passage	153	137	Joseph Creek & Grande Ronde River Habitat Work	BPA	Riparian fencing on Joseph Creek drainage and upper Grande Ronde R.
Protect & Enhance Tributary Habitat	Tribuary Passage	153	707	Grande Ronde Model Watershed Development	BPA	Habitat restoration in the Grande Ronde basin

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tribuary Passage	153	888	Idaho Model Watershed Habitat Projects	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	153	888	Idaho Model Watershed Habitat Projects	BPA	Controlling livestock grazing
Protect & Enhance Tributary Habitat	Tribuary Passage	153	888	Idaho Model Watershed Habitat Projects	BPA	Resource Management System plans
Protect & Enhance Tributary Habitat	Tribuary Passage	153	888	Idaho Model Watershed Habitat Projects	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tribuary Passage	153	888	Idaho Model Watershed Habitat Projects	BPA	Instream structures
Protect & Enhance Tributary Habitat	Tribuary Passage	153	926	Wallowa Basin Project Planning	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tribuary Passage	153	1548	Training Support to Nrcs/Wildland Hydrology	BPA	Fluvial geomorphology short course attendees
Protect & Enhance Tributary Habitat	Tribuary Passage	153	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Enhanced properties
Protect & Enhance Tributary Habitat	Tribuary Passage	153	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tribuary Passage	153	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Monitored projects
Protect & Enhance Tributary Habitat	Tribuary Passage	153	1607	Conservation Reserve Enhancement Program Incentive	BPA	Riparian protective strips along streams
Protect & Enhance Tributary Habitat	Tribuary Passage	153	1732	Fifteen Mile Creek Riparian Buffers	BPA	Riparian buffer
Protect & Enhance Tributary Habitat	Tribuary Passage	154	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Instream structures: E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tribuary Passage	154	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Riparian fencing E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tribuary Passage	154	710	Life Studies of Spring Chinook -Grande Ronde River	BPA	Study report on the abundance, migration patterns, survival, and habitat use of spring chinook salmon juveniles in the Grande Ronde River basin.
Protect & Enhance Tributary Habitat	Tribuary Passage	154	819	Red River Restoration (Little Ponderosa Ranch)	BPA	Riparian cover and temperature control in lower Red River Meadow.
Protect & Enhance Tributary Habitat	Tribuary Passage	154	819	Red River Restoration (Little Ponderosa Ranch)	BPA	Bank stabilization in lower Red River Meadow.
Protect & Enhance Tributary Habitat	Tribuary Passage	154	888	Idaho Model Watershed Habitat Projects	BPA	Instream structures
Protect & Enhance Tributary Habitat	Tribuary Passage	154	888	Idaho Model Watershed Habitat Projects	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tribuary Passage	154	888	Idaho Model Watershed Habitat Projects	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	154	888	Idaho Model Watershed Habitat Projects	BPA	Resource Management System plans
Protect & Enhance Tributary Habitat	Tribuary Passage	154	888	Idaho Model Watershed Habitat Projects	BPA	Controlling livestock grazing

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tribuary Passage	154	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon stream bank stabilization
Protect & Enhance Tributary Habitat	Tribuary Passage	154	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon riparian planting
Protect & Enhance Tributary Habitat	Tribuary Passage	154	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon pool development
Protect & Enhance Tributary Habitat	Tribuary Passage	154	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian vegetation management
Protect & Enhance Tributary Habitat	Tribuary Passage	154	899	Pataha Creek Stream & Cropland Restoration	BPA	Off site watering.
Protect & Enhance Tributary Habitat	Tribuary Passage	154	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	154	899	Pataha Creek Stream & Cropland Restoration	BPA	Reduced sediment delivery
Protect & Enhance Tributary Habitat	Tribuary Passage	154	929	Trout Creek Operation & Maintenance	BPA	M & E of habitat improvements / smolt production
Protect & Enhance Tributary Habitat	Tribuary Passage	154	929	Trout Creek Operation & Maintenance	BPA	O & M of habitat improvements
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1034	Squaw Creek Watershed Wildlife Project	BPA	Purchased land
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1034	Squaw Creek Watershed Wildlife Project	BPA	Implemented management plan
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1089	Upper Salmon River Diversion Consolidation Program	BPA	Consolidate diversions and screen
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1143	Yakima Watershed Restoration - Satus Creek - YIN	BPA	Improved fish habitat
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Noxious weed control
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Stabilized banks
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1170	Clear Cr & NF John Day Dredge-Tailings Restoration	BPA	Improved stream channel
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1170	Clear Cr & NF John Day Dredge-Tailings Restoration	BPA	Redistributed dredge tailings
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1198	Protect and Restore Lolo Creek Watershed	BPA	Cattle excluded from critical riparian areas
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1198	Protect and Restore Lolo Creek Watershed	BPA	Stablized landslide sites
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1198	Protect and Restore Lolo Creek Watershed	BPA	Obliterated roads
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1199	Protect & Restore Squaw & Papoose Cr Watersheds	BPA	Sediment traps
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1199	Protect & Restore Squaw & Papoose Cr Watersheds	BPA	Obliterated or restored roads
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1201	Restore Mccommas Meadows - NPT	BPA	Riparian planting

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1201	Restore McCommas Meadows - NPT	BPA	Enhanced channel morphology
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1201	Restore McCommas Meadows - NPT	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1212	Clearwater Focus Watershed - State of Idaho	BPA	Coordination of watershed efforts
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1293	Yakima River Side Channels	BPA	Access re-established to off-channel rearing habitats
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1293	Yakima River Side Channels	BPA	Reconnected floodplains
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1295	Toppenish/Simcoe Instream Flow Restoration	BPA	Restored instream flows
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1295	Toppenish/Simcoe Instream Flow Restoration	BPA	Evaluation of the anadromous population and habitat
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1317	Restoration of Watershed, Clearwater Basin	BPA	Installed instream structures
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1317	Restoration of Watershed, Clearwater Basin	BPA	Obliterate unnecessary roads
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1408	Assess Salmonid Habitat Walla Walla Watershed - WA	BPA	Assesment of conditions and populations
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1419	Implement Trout Creek Watershed Enhancement	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1419	Implement Trout Creek Watershed Enhancement	BPA	Infiltration galleries
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1419	Implement Trout Creek Watershed Enhancement	BPA	Implemented restoration plan
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1422	Implement Wy-Kan-ush-mi Wa-Kish-wit Watershed Plan	BPA	Watershed plans
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1424	Upper Toppenish Creek Watershed Restoration	BPA	Implemented restoration plans
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1424	Upper Toppenish Creek Watershed Restoration	BPA	Analysis of upper Toppenish Creek Watershed
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Reestablished passage into tributary habitats
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Purchased property / easements
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1465	Bakeoven Riparian Assessment	BPA	Revegetation
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1465	Bakeoven Riparian Assessment	BPA	Fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1465	Bakeoven Riparian Assessment	BPA	Watershed monitoring plan
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1465	Bakeoven Riparian Assessment	BPA	Off-site water developments
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1465	Bakeoven Riparian Assessment	BPA	Assessment of Bakeoven watershed conditions

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1465	Bakeoven Riparian Assessment	BPA	Watershed restoration plan
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1469	Pine Hollow Watershed Enhancement	BPA	Cross fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1469	Pine Hollow Watershed Enhancement	BPA	Critical areas reseeded
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1469	Pine Hollow Watershed Enhancement	BPA	Springs developed
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1469	Pine Hollow Watershed Enhancement	BPA	Master plan
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1469	Pine Hollow Watershed Enhancement	BPA	Replanted riparian areas.
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1472	Ahtanum Creek Watershed Assessment	BPA	Irrigated lands & water delivery systems mapped
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1472	Ahtanum Creek Watershed Assessment	BPA	Water discharge & temperature monitored
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1472	Ahtanum Creek Watershed Assessment	BPA	Assessed stream habitat conditions
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1472	Ahtanum Creek Watershed Assessment	BPA	Assessed salmonid populated
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Fencing
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Vegetation management
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Sediment control basins
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Modified agricultural techniques
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Coordination of funding and effort
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Improved agricultural /range land useage
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Improved steelhead spawning & rearing habitat
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1475	Protecting & Restoring Big Canyon Creek Watershed	BPA	Assessed watershed conditions
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1475	Protecting & Restoring Big Canyon Creek Watershed	BPA	Watershed plans
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1476	Rehabilitate Lapwai Creek	BPA	Lapwai Watershed Plan
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1478	Restore Salmon River - Challis Area	BPA	Restored fish habitat
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1481	Pataha Watershed Project Planning & Implementation	BPA	Pataha Creek Model Watershed Plan
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1481	Pataha Watershed Project Planning & Implementation	BPA	Water quality monitored
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1553	Rock Creek Watershed Assessment & Restoration	BPA	Rock Creek watershed study

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Monitored projects
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Enhanced properties
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1576	Protect N Lochsa Face Analysis Area Watershed	BPA	Sediment input alleviated
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1576	Protect N Lochsa Face Analysis Area Watershed	BPA	Obliterated road
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1576	Protect N Lochsa Face Analysis Area Watershed	BPA	M & E program
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1577	Rehabilitate Newsome Creek - S Fork Clearwater R	BPA	List of additional roads for obliteration
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1577	Rehabilitate Newsome Creek - S Fork Clearwater R	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1577	Rehabilitate Newsome Creek - S Fork Clearwater R	BPA	Plan for restoration of dredged areas
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1577	Rehabilitate Newsome Creek - S Fork Clearwater R	BPA	Obliterate 10 miles of road
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1578	Protect and Restore Mill Creek Watershed	BPA	MOA with the Nez Perce NF
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1578	Protect and Restore Mill Creek Watershed	BPA	Enhanced riparian areas
Protect & Enhance Tributary Habitat	Tribuary Passage	154	1736	Salmonid Production in Restored Rattlesnake Creek	BPA	Evaluation of habitat and population conditions
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian fencing on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian planting on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Instream work on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	286	Umatilla Habitat Improvement / CTUIR	BPA	Anadromous habitat enhancement for Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	709	Model Watershed Studies - Lemhi River Basin	BPA	Watershed restoration in Lemhi River Basin, Pahsimeroi River basin and East Fork Salmon River basin
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	850	Upper Salmon River Anadromous Fish Passage	BPA	Fishways
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	850	Upper Salmon River Anadromous Fish Passage	BPA	Habitat enhancement and passage restoration through fishways, diversion headgates, improved water distribution, and acquired instream flow
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	850	Upper Salmon River Anadromous Fish Passage	BPA	Diversion headgates, improved water distribution, and acquired instream flow
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	852	Oregon Fish Screens Project	BPA	La Grande fish screen shop

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	852	Oregon Fish Screens Project	BPA	Fabricate & install fish screens in John Day, Umatilla, & Walla Walla Basins
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	852	Oregon Fish Screens Project	BPA	DeNiel fish passage structures in Trout Cr
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	852	Oregon Fish Screens Project	BPA	John Day fish screen shop
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	886	Idaho Fish Screening Improvement	BPA	Consolidate and screen diversions
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	888	Idaho Model Watershed Habitat Projects	BPA	Controlling livestock grazing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	888	Idaho Model Watershed Habitat Projects	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	888	Idaho Model Watershed Habitat Projects	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	888	Idaho Model Watershed Habitat Projects	BPA	Resource Management System plans
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	888	Idaho Model Watershed Habitat Projects	BPA	Instream structures
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1095	Juvenile & Adult Passage- Walla Walla Basin	BPA	Screen/trap facilities
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1101	Walla Walla Basin Anadromous Fish Passage	BPA	Adult passage at irrigation diversion dams
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1141	Methow River Valley Irrigation District - YN	BPA	Pressurized irrigation system
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1141	Methow River Valley Irrigation District - YN	BPA	Increased instream flow
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Pushup dams replaced
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Monitoring of results
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Pumping stations established
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1402	Irrigation & Riparian Improvements - John Day R	BPA	Permanent intake structures
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1402	Irrigation & Riparian Improvements - John Day R	BPA	Push-up dams eliminated
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1402	Irrigation & Riparian Improvements - John Day R	BPA	Alternative irrigation sources / techniques
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1408	Assess Salmonid Habitat Walla Walla Watershed - WA	BPA	Assesment of conditions and populations
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1478	Restore Salmon River - Challis Area	BPA	Restored fish habitat
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1497	Salmon Creek Instream Flow & Habitat Survey	BPA	Fishery and water resources documented
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1497	Salmon Creek Instream Flow & Habitat Survey	BPA	Hydrologic model for the drainage
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1575	Walla Walla River Fish Passage Operations	BPA	Passage facilities

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1575	Walla Walla River Fish Passage Operations	BPA	Trapping facilities
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1575	Walla Walla River Fish Passage Operations	BPA	Effectively utilizing transport equipment
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1734	Fifteen Mile Subbasin Water Right Acquisition	BPA	Acquired water rights
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1735	Salmon and Steelhead Exertion Study	BPA	Location of difficult fish passage sites
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1749	Gourley Creek Dam Fish Ladder	BPA	Eliminated fish passage barrier
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1750	Protect ESA Fish With Screens in Walla Walla Basin	BPA	Fish screens for 197 Walla Walla Basin irrigation diversions.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1753	Farmers Irr Dist Mainstem Hood River Fish Screen	BPA	New horizontal fixed plate screen
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1762	Reconnect Little Morgan Creek to Pahsimeroi River	BPA	14.3 miles of historical anadromous habitat restored
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1762	Reconnect Little Morgan Creek to Pahsimeroi River	BPA	Little Morgan Creek reconnected with Pahsimeroi River
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1763	Restoration of Anadromous Fish Access to Hawley Cr	BPA	Reduced water temperatures
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1763	Restoration of Anadromous Fish Access to Hawley Cr	BPA	Hawley Creek reconnected to the Lemhi River
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1763	Restoration of Anadromous Fish Access to Hawley Cr	BPA	Restored riparian habitat
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1763	Restoration of Anadromous Fish Access to Hawley Cr	BPA	Improve irrigation methods
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1765	Supplemental Flows in Buck Hollow	BPA	Supplemented stream flow (1-1.5 cfs)
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1765	Supplemental Flows in Buck Hollow	BPA	headwater irrigation well
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1768	Trout Creek Streamflow Enhancement	BPA	Safer culverts
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1768	Trout Creek Streamflow Enhancement	BPA	Fish passage barriers removed
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1770	Badger Creek Culvert Replacement	BPA	Box culvert eliminating fish passage barrier
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1774	Touchet River Stream Flow Enhancement	BPA	Increased stream flows
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1774	Touchet River Stream Flow Enhancement	BPA	Acquired water rights
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1775	Lostine River Streamflow Enhancement	BPA	Acquired water rights
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1775	Lostine River Streamflow Enhancement	BPA	Increased stream flows
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1776	Methow River Basin Screening	BPA	new fish screens constructed
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1776	Methow River Basin Screening	BPA	Fish screen facilities upgrades

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1777	Simcoe Creek Streamflow Enhancement	BPA	Ladders at two diversion dams
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1777	Simcoe Creek Streamflow Enhancement	BPA	Off site water facilities
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1777	Simcoe Creek Streamflow Enhancement	BPA	Canal screens
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	149	1778	Hancock Springs Passage & Habitat Restoration	BPA	Access to spring fed channel
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Instream work on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian fencing on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian planting on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	137	Joseph Creek & Grande Ronde River Habitat Work	BPA	Instream work on Joseph Creek drainage and upper Grande Ronde R.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	137	Joseph Creek & Grande Ronde River Habitat Work	BPA	Riparian fencing on Joseph Creek drainage and upper Grande Ronde R.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	286	Umatilla Habitat Improvement / CTUIR	BPA	Anadromous habitat enhancement for Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Instream structures: E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Riparian fencing E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	752	Lower Yakima Valley Riparian/Wetlands - Phase I	BPA	Protecting and enhancing riparian and wetland habitat in the Yakama Reservation.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	825	Fifteenmile Creek Habitat Improvement	BPA	Riparian fencing in the Fifteenmile Creek Basin
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	825	Fifteenmile Creek Habitat Improvement	BPA	Bank stabilization work in the Fifteenmile Creek Basin
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	888	Idaho Model Watershed Habitat Projects	BPA	Resource Management System plans
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	888	Idaho Model Watershed Habitat Projects	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	888	Idaho Model Watershed Habitat Projects	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	888	Idaho Model Watershed Habitat Projects	BPA	Instream structures
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	888	Idaho Model Watershed Habitat Projects	BPA	Controlling livestock grazing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon stream bank stabilization
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon pool development

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon riparian planting
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	899	Pataha Creek Stream & Cropland Restoration	BPA	Off site watering.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	899	Pataha Creek Stream & Cropland Restoration	BPA	Reduced sediment delivery
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian vegetation management
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	929	Trout Creek Operation & Maintenance	BPA	M & E of habitat improvements / smolt production
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	929	Trout Creek Operation & Maintenance	BPA	O & M of habitat improvements
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	937	Salmon River Habitat Enhancement and O&M	BPA	M & E of habitat improvements
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	937	Salmon River Habitat Enhancement and O&M	BPA	O & M of habitat improvements
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1034	Squaw Creek Watershed Wildlife Project	BPA	Purchased land
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1034	Squaw Creek Watershed Wildlife Project	BPA	Implemented management plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1089	Upper Salmon River Diversion Consolidation Program	BPA	Consolidate diversions and screen
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1141	Methow River Valley Irrigation District - YN	BPA	Increased instream flow
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1141	Methow River Valley Irrigation District - YN	BPA	Pressurized irrigation system
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1143	Yakima Watershed Restoration - Satus Creek - YIN	BPA	Improved fish habitat
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Stabilized banks
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Noxious weed control
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1205	Nez Perce NE Oregon Wildlife Project: Helm Tract	BPA	Helm Tract additions
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1208	Grande Ronde Watershed Restoration - CTUIR	BPA	Enhanced riparian habitat
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1208	Grande Ronde Watershed Restoration - CTUIR	BPA	Enhanced instream habitat
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1208	Grande Ronde Watershed Restoration - CTUIR	BPA	Enhanced water quality
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1208	Grande Ronde Watershed Restoration - CTUIR	BPA	Enhanced water quantity
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1263	Wallowa County/Nez Perce Salmon Habitat Recovery	BPA	Implementation of the Salmon Habitat Recovery Plan

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1263	Wallowa County/Nez Perce Salmon Habitat Recovery	BPA	Monitoring of the Salmon Habitat Recovery Plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1358	Cottonwood Creek Riparian Enhancement/Wallowa	BPA	Cut banks armored
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1358	Cottonwood Creek Riparian Enhancement/Wallowa	BPA	Eroded road restored
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1358	Cottonwood Creek Riparian Enhancement/Wallowa	BPA	Bridges repaired
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1358	Cottonwood Creek Riparian Enhancement/Wallowa	BPA	Road removed from riparian zone where possible
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1361	Water Quality Monitoring for Grande Ronde Basin	BPA	Coordinated monitoring
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1361	Water Quality Monitoring for Grande Ronde Basin	BPA	Reports of conditions and trends
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1361	Water Quality Monitoring for Grande Ronde Basin	BPA	Expanded monitoring program
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1409	Hood River Fish Habitat	BPA	Alternative irrigation water source developed
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1409	Hood River Fish Habitat	BPA	Problems resolved at diversions
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1409	Hood River Fish Habitat	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1409	Hood River Fish Habitat	BPA	Rip rap stream banks
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1411	Acquisition of Pine Creek Ranch	BPA	Pine Creek Ranch
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1442	Mcintyre Road Relocation - Union County	BPA	Obliterated road
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1442	Mcintyre Road Relocation - Union County	BPA	Reconstructed county road
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1444	Grouse Creek Culvert Replacement	BPA	Road raised and alignment improved
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1444	Grouse Creek Culvert Replacement	BPA	Grouse Creek multi-plate arch culvert
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1465	Bakeoven Riparian Assessment	BPA	Assessment of Bakeoven watershed conditions
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1465	Bakeoven Riparian Assessment	BPA	Revegetation
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1465	Bakeoven Riparian Assessment	BPA	Watershed restoration plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1465	Bakeoven Riparian Assessment	BPA	Watershed monitoring plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1465	Bakeoven Riparian Assessment	BPA	Fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1465	Bakeoven Riparian Assessment	BPA	Off-site water developments
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1503	Union County Technical Engineering Assistance	BPA	Technical support

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1504	Wallowa County Technical Engineering Assistance	BPA	Water Temperature Software Project
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1505	Water Temp Manipulation & Data Sharing Software	BPA	Public domain software program for water temperature data collection and analysis
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1521	Grande Ronde - Union SWCD Chan, Rd & Passage Rest	BPA	Smutz Draw road relocation
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1521	Grande Ronde - Union SWCD Chan, Rd & Passage Rest	BPA	Mill Creek / Caldwell diversion dam passage improvement
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1521	Grande Ronde - Union SWCD Chan, Rd & Passage Rest	BPA	Phillips Creek bridge,
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1521	Grande Ronde - Union SWCD Chan, Rd & Passage Rest	BPA	Grande Ronde bank work
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1522	Grande Ronde - Union SWCD Riparian, Upland Rest	BPA	Ladd Creek riparian fence
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1522	Grande Ronde - Union SWCD Riparian, Upland Rest	BPA	Cattle watering troughs
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1522	Grande Ronde - Union SWCD Riparian, Upland Rest	BPA	Soil aerator
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1524	Alpine Meadows - Trout Creek Restoration	BPA	Eroding Trout Creek channel stabilized
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1530	Wallowa County Gauging Stations	BPA	Maintain seven stream gages
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1531	Hagedorn Road Relocation/Stream Restoration	BPA	Old Hagedorn Road obliterated
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1531	Hagedorn Road Relocation/Stream Restoration	BPA	Hagedorn Road relocated
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1533	Grande Ronde Basin Tech Engineering Assistance	BPA	Technical support
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1537	Wallowa County Direct Seeding	BPA	No-till agriculture demonstration
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1538	Crow Cr Star Thistle Containment & Riparian Enhanc	BPA	Spalding catchfly protected
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1538	Crow Cr Star Thistle Containment & Riparian Enhanc	BPA	Noxious weed control
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1557	Acquire Oxbow Ranch Middle Fork John Day River	BPA	Oxbow Ranch
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1562	WLMitigation Sites Oregon, Wenaha WMA Additions	BPA	Land acquisition or easement
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1562	WLMitigation Sites Oregon, Wenaha WMA Additions	BPA	Enhanced Wenaha WMA
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1563	WL Mitigation Sites Oregon, Ladd Marsh Additions	BPA	Enhanced additions to Ladd Marsh WMA
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1563	WL Mitigation Sites Oregon, Ladd Marsh Additions	BPA	Ladd Marsh WMA additions
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Enhanced properties

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Monitored projects
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1607	Conservation Reserve Enhancement Program Incentive	BPA	Riparian protective strips along streams
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1609	Mccoey Cr Alta Cunha Ranches Instream Restoration	BPA	Pasture rest
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1609	Mccoey Cr Alta Cunha Ranches Instream Restoration	BPA	Large woody debris in stream
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1609	Mccoey Cr Alta Cunha Ranches Instream Restoration	BPA	McCoy Creek pasture fences
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1609	Mccoey Cr Alta Cunha Ranches Instream Restoration	BPA	Obliterated 3000 feet of abandoned railroad grade
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1609	Mccoey Cr Alta Cunha Ranches Instream Restoration	BPA	Replanted riparian zone
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1623	Asotin Watershed Grazing Biological Plan	BPA	Weed control
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1624	Rainwater Wildlife O & M	BPA	M & E for Rainwater Wildlife Area
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1731	Fifteen Mile Creek Riparian Fencing/Stream Survey	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1731	Fifteen Mile Creek Riparian Fencing/Stream Survey	BPA	Physical evaluation of streams
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1746	Protect Bear Valley Wild Salmon Spawning Habitat	BPA	Closed Grazing allotment
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1748	Arrowleaf/Methow River Conservation	BPA	Arrowleaf property
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1751	Wagner Ranch Acquisition	BPA	Wagner Ranch
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1752	Forrest Ranch Acquisition	BPA	Forrest Ranch
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1754	Acquire 27,000 Camp Creek Ranch at Zumwalt Prairie	BPA	27,000 acres of Zumwalt Prairie
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1755	Conservation Easement, Baker Ranch, Salmon River	BPA	Restored stream banks
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1755	Conservation Easement, Baker Ranch, Salmon River	BPA	70 cfs remaining in stream thru closure of 7 diversions
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1755	Conservation Easement, Baker Ranch, Salmon River	BPA	Protected riparian areas
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	150	1755	Conservation Easement, Baker Ranch, Salmon River	BPA	Conservation easement
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	151	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Instream work on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	151	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian fencing on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	151	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian planting on Middle Fk and mainstem John Day River tributaries.

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	151	286	Umatilla Habitat Improvement / CTUIR	BPA	Anadromous habitat enhancement for Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	151	1141	Methow River Valley Irrigation District - YN	BPA	Increased instream flow
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	151	1141	Methow River Valley Irrigation District - YN	BPA	Pressurized irrigation system
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	151	1467	15 Mile Creek Water Right Acquisition	BPA	Increase stream flow
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	151	1467	15 Mile Creek Water Right Acquisition	BPA	Acquired water rights
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	151	1725	Echo Meadow Winter Artificial Recharge	BPA	Linkages between winter artificial recharge of groundwater to the return flows
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Riparian fencing E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Instream structures: E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	707	Grande Ronde Model Watershed Development	BPA	Habitat restoration in the Grande Ronde basin
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	709	Model Watershed Studies - Lemhi River Basin	BPA	Watershed restoration in Lemhi River Basin, Pahsimeroi River basin and East Fork Salmon River basin
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	819	Red River Restoration (Little Ponderosa Ranch)	BPA	Riparian cover and temperature control in lower Red River Meadow.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	819	Red River Restoration (Little Ponderosa Ranch)	BPA	Bank stabilization in lower Red River Meadow.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon stream bank stabilization
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon pool development
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon riparian planting
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian vegetation management
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	899	Pataha Creek Stream & Cropland Restoration	BPA	Off site watering.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	899	Pataha Creek Stream & Cropland Restoration	BPA	Reduced sediment delivery
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	926	Wallowa Basin Project Planning	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	929	Trout Creek Operation & Maintenance	BPA	M & E of habitat improvements / smolt production
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	929	Trout Creek Operation & Maintenance	BPA	O & M of habitat improvements

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1034	Squaw Creek Watershed Wildlife Project	BPA	Purchased land
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1034	Squaw Creek Watershed Wildlife Project	BPA	Implemented management plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1089	Upper Salmon River Diversion Consolidation Program	BPA	Consolidate diversions and screen
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1143	Yakima Watershed Restoration - Satus Creek - YIN	BPA	Improved fish habitat
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Stabilized banks
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Noxious weed control
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1170	Clear Cr & NF John Day Dredge-Tailings Restoration	BPA	Improved stream channel
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1170	Clear Cr & NF John Day Dredge-Tailings Restoration	BPA	Redistributed dredge tailings
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Pushup dams replaced
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Monitoring of results
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Pumping stations established
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1402	Irrigation & Riparian Improvements - John Day R	BPA	Permanent intake structures
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1402	Irrigation & Riparian Improvements - John Day R	BPA	Alternative irrigation sources / techniques
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1402	Irrigation & Riparian Improvements - John Day R	BPA	Push-up dams eliminated
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1419	Implement Trout Creek Watershed Enhancement	BPA	Implemented restoration plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1419	Implement Trout Creek Watershed Enhancement	BPA	Infiltration galleries
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1419	Implement Trout Creek Watershed Enhancement	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Purchased property / easements
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Reestablished passage into tributary habitats
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1465	Bakeoven Riparian Assessment	BPA	Revegetation
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1465	Bakeoven Riparian Assessment	BPA	Off-site water developments
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1465	Bakeoven Riparian Assessment	BPA	Watershed restoration plan

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1465	Bakeoven Riparian Assessment	BPA	Assessment of Bakeoven watershed conditions
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1465	Bakeoven Riparian Assessment	BPA	Fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1465	Bakeoven Riparian Assessment	BPA	Watershed monitoring plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1469	Pine Hollow Watershed Enhancement	BPA	Replanted riparian areas.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1469	Pine Hollow Watershed Enhancement	BPA	Critical areas reseeded
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1469	Pine Hollow Watershed Enhancement	BPA	Cross fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1469	Pine Hollow Watershed Enhancement	BPA	Springs developed
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1469	Pine Hollow Watershed Enhancement	BPA	Master plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1472	Ahtanum Creek Watershed Assessment	BPA	Assessed stream habitat conditions
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1472	Ahtanum Creek Watershed Assessment	BPA	Assessed salmonid populated
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1472	Ahtanum Creek Watershed Assessment	BPA	Water discharge & temperature monitored
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1472	Ahtanum Creek Watershed Assessment	BPA	Irrigated lands & water delivery systems mapped
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Sediment control basins
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Modified agricultural techniques
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Vegetation management
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Improved steelhead spawning & rearing habitat
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Improved agricultural /range land useage
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Coordination of funding and effort
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1481	Pataha Watershed Project Planning & Implementation	BPA	Pataha Creek Model Watershed Plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	152	1481	Pataha Watershed Project Planning & Implementation	BPA	Water quality monitored
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	153	137	Joseph Creek & Grande Ronde River Habitat Work	BPA	Instream work on Joseph Creek drainage and upper Grande Ronde R.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	153	137	Joseph Creek & Grande Ronde River Habitat Work	BPA	Riparian fencing on Joseph Creek drainage and upper Grande Ronde R.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	153	707	Grande Ronde Model Watershed Development	BPA	Habitat restoration in the Grande Ronde basin

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	153	888	Idaho Model Watershed Habitat Projects	BPA	Controlling livestock grazing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	153	888	Idaho Model Watershed Habitat Projects	BPA	Resource Management System plans
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	153	888	Idaho Model Watershed Habitat Projects	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	153	888	Idaho Model Watershed Habitat Projects	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	153	888	Idaho Model Watershed Habitat Projects	BPA	Instream structures
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	153	926	Wallowa Basin Project Planning	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	153	1548	Training Support to Nrcs/Wildland Hydrology	BPA	Fluvial geomorphology short course attendees
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	153	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	153	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Monitored projects
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	153	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Enhanced properties
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	153	1607	Conservation Reserve Enhancement Program Incentive	BPA	Riparian protective strips along streams
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	153	1732	Fifteen Mile Creek Riparian Buffers	BPA	Riparian buffer
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Riparian fencing E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Instream structures: E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	710	Life Studies of Spring Chinook -Grande Ronde River	BPA	Study report on the abundance, migration patterns, survival, and habitat use of spring chinook salmon juveniles in the Grande Ronde River basin.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	819	Red River Restoration (Little Ponderosa Ranch)	BPA	Riparian cover and temperature control in lower Red River Meadow.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	819	Red River Restoration (Little Ponderosa Ranch)	BPA	Bank stabilization in lower Red River Meadow.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	888	Idaho Model Watershed Habitat Projects	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	888	Idaho Model Watershed Habitat Projects	BPA	Controlling livestock grazing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	888	Idaho Model Watershed Habitat Projects	BPA	Resource Management System plans
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	888	Idaho Model Watershed Habitat Projects	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	888	Idaho Model Watershed Habitat Projects	BPA	Instream structures

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon pool development
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon riparian planting
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon stream bank stabilization
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	899	Pataha Creek Stream & Cropland Restoration	BPA	Reduced sediment delivery
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	899	Pataha Creek Stream & Cropland Restoration	BPA	Off site watering.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian vegetation management
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	929	Trout Creek Operation & Maintenance	BPA	O & M of habitat improvements
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	929	Trout Creek Operation & Maintenance	BPA	M & E of habitat improvements / smolt production
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1034	Squaw Creek Watershed Wildlife Project	BPA	Purchased land
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1034	Squaw Creek Watershed Wildlife Project	BPA	Implemented management plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1089	Upper Salmon River Diversion Consolidation Program	BPA	Consolidate diversions and screen
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1143	Yakima Watershed Restoration - Satus Creek - YIN	BPA	Improved fish habitat
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Noxious weed control
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Stabilized banks
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1170	Clear Cr & NF John Day Dredge-Tailings Restoration	BPA	Redistributed dredge tailings
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1170	Clear Cr & NF John Day Dredge-Tailings Restoration	BPA	Improved stream channel
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1198	Protect and Restore Lolo Creek Watershed	BPA	Obliterated roads
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1198	Protect and Restore Lolo Creek Watershed	BPA	Stablized landslide sites
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1198	Protect and Restore Lolo Creek Watershed	BPA	Cattle excluded from critical riparian areas
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1199	Protect & Restore Squaw & Papoose Cr Watersheds	BPA	Obliterated or restored roads
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1199	Protect & Restore Squaw & Papoose Cr Watersheds	BPA	Sediment traps
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1201	Restore Mccommas Meadows - NPT	BPA	Enhanced channel morphology

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1201	Restore McCommas Meadows - NPT	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1201	Restore McCommas Meadows - NPT	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1212	Clearwater Focus Watershed - State of Idaho	BPA	Coordination of watershed efforts
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1293	Yakima River Side Channels	BPA	Access re-established to off-channel rearing habitats
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1293	Yakima River Side Channels	BPA	Reconnected floodplains
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1295	Toppenish/Simcoe Instream Flow Restoration	BPA	Restored instream flows
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1295	Toppenish/Simcoe Instream Flow Restoration	BPA	Evaluation of the anadromous population and habitat
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1317	Restoration of Watershed, Clearwater Basin	BPA	Installed instream structures
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1317	Restoration of Watershed, Clearwater Basin	BPA	Obliterate unnecessary roads
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1408	Assess Salmonid Habitat Walla Walla Watershed - WA	BPA	Assesment of conditions and populations
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1419	Implement Trout Creek Watershed Enhancement	BPA	Implemented restoration plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1419	Implement Trout Creek Watershed Enhancement	BPA	Infiltration galleries
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1419	Implement Trout Creek Watershed Enhancement	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1422	Implement Wy-Kan-ush-mi Wa-Kish-wit Watershed Plan	BPA	Watershed plans
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1424	Upper Toppenish Creek Watershed Restoration	BPA	Implemented restoration plans
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1424	Upper Toppenish Creek Watershed Restoration	BPA	Analysis of upper Toppenish Creek Watershed
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Purchased property / easements
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Reestablished passage into tributary habitats
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1465	Bakeoven Riparian Assessment	BPA	Fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1465	Bakeoven Riparian Assessment	BPA	Watershed restoration plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1465	Bakeoven Riparian Assessment	BPA	Revegetation
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1465	Bakeoven Riparian Assessment	BPA	Assessment of Bakeoven watershed conditions
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1465	Bakeoven Riparian Assessment	BPA	Watershed monitoring plan

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1465	Bakeoven Riparian Assessment	BPA	Off-site water developments
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1469	Pine Hollow Watershed Enhancement	BPA	Cross fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1469	Pine Hollow Watershed Enhancement	BPA	Springs developed
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1469	Pine Hollow Watershed Enhancement	BPA	Critical areas reseeded
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1469	Pine Hollow Watershed Enhancement	BPA	Replanted riparian areas.
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1469	Pine Hollow Watershed Enhancement	BPA	Master plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1472	Ahtanum Creek Watershed Assessment	BPA	Water discharge & temperature monitored
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1472	Ahtanum Creek Watershed Assessment	BPA	Assessed stream habitat conditions
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1472	Ahtanum Creek Watershed Assessment	BPA	Assessed salmonid populated
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1472	Ahtanum Creek Watershed Assessment	BPA	Irrigated lands & water delivery systems mapped
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Modified agricultural techniques
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Vegetation management
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Fencing
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Sediment control basins
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Improved steelhead spawning & rearing habitat
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Coordination of funding and effort
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Improved agricultural /range land useage
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1475	Protecting & Restoring Big Canyon Creek Watershed	BPA	Assessed watershed conditions
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1475	Protecting & Restoring Big Canyon Creek Watershed	BPA	Watershed plans
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1476	Rehabilitate Lapwai Creek	BPA	Lapwai Watershed Plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1478	Restore Salmon River - Challis Area	BPA	Restored fish habitat
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1481	Pataha Watershed Project Planning & Implementation	BPA	Water quality monitored
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1481	Pataha Watershed Project Planning & Implementation	BPA	Pataha Creek Model Watershed Plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1553	Rock Creek Watershed Assessment & Restoration	BPA	Rock Creek watershed study

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Enhanced properties
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Monitored projects
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1576	Protect N Lochsa Face Analysis Area Watershed	BPA	M & E program
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1576	Protect N Lochsa Face Analysis Area Watershed	BPA	Obliterated road
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1576	Protect N Lochsa Face Analysis Area Watershed	BPA	Sediment input alleviated
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1577	Rehabilitate Newsome Creek - S Fork Clearwater R	BPA	Plan for restoration of dredged areas
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1577	Rehabilitate Newsome Creek - S Fork Clearwater R	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1577	Rehabilitate Newsome Creek - S Fork Clearwater R	BPA	Obliterate 10 miles of road
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1577	Rehabilitate Newsome Creek - S Fork Clearwater R	BPA	List of additional roads for obliteration
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1578	Protect and Restore Mill Creek Watershed	BPA	MOA with the Nez Perce NF
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1578	Protect and Restore Mill Creek Watershed	BPA	Enhanced riparian areas
Protect & Enhance Tributary Habitat	Tributary Subbasin Planning	154	1736	Salmonid Production in Restored Rattlesnake Creek	BPA	Evaluation of habitat and population conditions
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	<i>unassigned</i>	Milton-Freewater Walla Walla River, OR, Section 1135	COE	Up to 25 hectares of floodplain restored.
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	<i>unassigned</i>	Grande Ronde, LaGrande OR, Section 1135	COE	Improve 2 ½ river miles of habitat
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	<i>unassigned</i>	Ladd Marsh Grande Ronde Ladd Creek, Section 206	COE	Restore natural function in up to one mile of creek.
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	<i>unassigned</i>	East Birch Creek Umatilla County OR, Section 206	COE	Complete '02. Salmonid spawning and rearing habitat improved. 1.2 miles of natural channel restoration
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	<i>unassigned</i>	Salmon River, Challis, Idaho, Section 206	COE	Begin construction FY02. Restore natural channel and geomorphic function up to 12 river miles.
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	<i>unassigned</i>	Salmon River, Challis, Idaho, Section 206	COE	Begin construction FY02. Restore natural channel and geomorphic function up to 12 river miles.
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	<i>unassigned</i>	Trout Creek, Section 206	COE	Begin construction. Restore natural channel and geomorphic function up to 3 river miles.
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	<i>unassigned</i>	Salmon Creek, Vancouver, WA Section 206	COE	Begin construction
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	<i>unassigned</i>	Fox Creek, Rainier, Oregon Section 1135	COE	Restore approximately 500' riparian habitat

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	<i>unassigned</i>	Steigerwald Lake, Camas, Washougal, WA	COE	Reconnaissance study
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	<i>unassigned</i>	Milton-Freewater Walla Walla River, OR, Section 1135	COE	Up to 25 hectares of floodplain restored.
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	<i>unassigned</i>	Grande Ronde, LaGrande OR, Section 1135	COE	Improve 2 ½ river miles of habitat
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	<i>unassigned</i>	Ladd Marsh Grande Ronde Ladd Creek, Section 206	COE	Restore natural function in up to one mile of creek.
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	<i>unassigned</i>	East Birch Creek Umatilla County OR, Section 206	COE	Complete '02. Salmonid spawning and rearing habitat improved. 1.2 miles of natural channel restoration
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	<i>unassigned</i>	Salmon River, Challis, Idaho, Section 206	COE	Begin construction FY02. Restore natural channel and geomorphic function up to 12 river miles.
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	<i>unassigned</i>	Salmon River, Challis, Idaho, Section 206	COE	Begin construction FY02. Restore natural channel and geomorphic function up to 12 river miles.
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	<i>unassigned</i>	Trout Creek, Section 206	COE	Begin construction. Restore natural channel and geomorphic function up to 3 river miles.
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	<i>unassigned</i>	Salmon Creek, Vancouver, WA Section 206	COE	Begin construction
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	<i>unassigned</i>	Fox Creek, Rainier, Oregon Section 1135	COE	Restore approximately 500' riparian habitat
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	<i>unassigned</i>	Steigerwald Lake, Camas, Washougal, WA	COE	Reconnaissance study
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian fencing on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian planting on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Instream work on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	286	Umatilla Habitat Improvement / CTUIR	BPA	Anadromous habitat enhancement for Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	709	Model Watershed Studies - Lemhi River Basin	BPA	Watershed restoration in Lemhi River Basin, Pahsimeroi River basin and East Fork Salmon River basin
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	850	Upper Salmon River Anadromous Fish Passage	BPA	Fishways
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	850	Upper Salmon River Anadromous Fish Passage	BPA	Habitat enhancement and passage restoration through fishways, diversion headgates, improved water distribution, and acquired instream flow
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	850	Upper Salmon River Anadromous Fish Passage	BPA	Diversion headgates, improved water distribution, and acquired instream flow
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	852	Oregon Fish Screens Project	BPA	Fabricate & install fish screens in John Day, Umatilla, & Walla Walla Basins

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	852	Oregon Fish Screens Project	BPA	La Grande fish screen shop
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	852	Oregon Fish Screens Project	BPA	DeNiel fish passage structures in Trout Cr
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	852	Oregon Fish Screens Project	BPA	John Day fish screen shop
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	886	Idaho Fish Screening Improvement	BPA	Consolidate and screen diversions
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	888	Idaho Model Watershed Habitat Projects	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	888	Idaho Model Watershed Habitat Projects	BPA	Resource Management System plans
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	888	Idaho Model Watershed Habitat Projects	BPA	Controlling livestock grazing
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	888	Idaho Model Watershed Habitat Projects	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	888	Idaho Model Watershed Habitat Projects	BPA	Instream structures
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1095	Juvenile & Adult Passage- Walla Walla Basin	BPA	Screen/trap facilities
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1101	Walla Walla Basin Anadromous Fish Passage	BPA	Adult passage at irrigation diversion dams
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1141	Methow River Valley Irrigation District - YN	BPA	Pressurized irrigation system
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1141	Methow River Valley Irrigation District - YN	BPA	Increased instream flow
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Pumping stations established
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Monitoring of results
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Pushup dams replaced
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1402	Irrigation & Riparian Improvements - John Day R	BPA	Push-up dams eliminated
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1402	Irrigation & Riparian Improvements - John Day R	BPA	Permanent intake structures
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1402	Irrigation & Riparian Improvements - John Day R	BPA	Alternative irrigation sources / techniques
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1408	Assess Salmonid Habitat Walla Walla Watershed - WA	BPA	Assesment of conditions and populations
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1478	Restore Salmon River - Challis Area	BPA	Restored fish habitat
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1497	Salmon Creek Instream Flow & Habitat Survey	BPA	Hydrologic model for the drainage
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1497	Salmon Creek Instream Flow & Habitat Survey	BPA	Fishery and water resources documented
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1575	Walla Walla River Fish Passage Operations	BPA	Passage facilities

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1575	Walla Walla River Fish Passage Operations	BPA	Trapping facilities
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1575	Walla Walla River Fish Passage Operations	BPA	Effectively utilizing transport equipment
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1734	Fifteen Mile Subbasin Water Right Acquisition	BPA	Acquired water rights
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1735	Salmon and Steelhead Exertion Study	BPA	Location of difficult fish passage sites
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1749	Gourley Creek Dam Fish Ladder	BPA	Eliminated fish passage barrier
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1750	Protect ESA Fish With Screens in Walla Walla Basin	BPA	Fish screens for 197 Walla Walla Basin irrigation diversions.
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1753	Farmers Irr Dist Mainstem Hood River Fish Screen	BPA	New horizontal fixed plate screen
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1762	Reconnect Little Morgan Creek to Pahsimeroi River	BPA	14.3 miles of historical anadromous habitat restored
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1762	Reconnect Little Morgan Creek to Pahsimeroi River	BPA	Little Morgan Creek reconnected with Pahsimeroi River
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1763	Restoration of Anadromous Fish Access to Hawley Cr	BPA	Reduced water temperatures
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1763	Restoration of Anadromous Fish Access to Hawley Cr	BPA	Restored riparian habitat
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1763	Restoration of Anadromous Fish Access to Hawley Cr	BPA	Improve irrigation methods
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1763	Restoration of Anadromous Fish Access to Hawley Cr	BPA	Hawley Creek reconnected to the Lemhi River
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1765	Supplemental Flows in Buck Hollow	BPA	Supplemented stream flow (1-1.5 cfs)
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1765	Supplemental Flows in Buck Hollow	BPA	headwater irrigation well
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1768	Trout Creek Streamflow Enhancement	BPA	Fish passage barriers removed
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1768	Trout Creek Streamflow Enhancement	BPA	Safer culverts
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1770	Badger Creek Culvert Replacement	BPA	Box culvert eliminating fish passage barrier
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1774	Touchet River Stream Flow Enhancement	BPA	Increased stream flows
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1774	Touchet River Stream Flow Enhancement	BPA	Acquired water rights
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1775	Lostine River Streamflow Enhancement	BPA	Increased stream flows
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1775	Lostine River Streamflow Enhancement	BPA	Acquired water rights
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1776	Methow River Basin Screening	BPA	new fish screens constructed
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1776	Methow River Basin Screening	BPA	Fish screen facilities upgrades

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1777	Simcoe Creek Streamflow Enhancement	BPA	Canal screens
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1777	Simcoe Creek Streamflow Enhancement	BPA	Ladders at two diversion dams
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1777	Simcoe Creek Streamflow Enhancement	BPA	Off site water facilities
Protect & Enhance Tributary Habitat	Tributary Water Quality	149	1778	Hancock Springs Passage & Habitat Restoration	BPA	Access to spring fed channel
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Instream work on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian planting on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian fencing on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	137	Joseph Creek & Grande Ronde River Habitat Work	BPA	Riparian fencing on Joseph Creek drainage and upper Grande Ronde R.
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	137	Joseph Creek & Grande Ronde River Habitat Work	BPA	Instream work on Joseph Creek drainage and upper Grande Ronde R.
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	286	Umatilla Habitat Improvement / CTUIR	BPA	Anadromous habitat enhancement for Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Riparian fencing E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Instream structures: E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	752	Lower Yakima Valley Riparian/Wetlands - Phase I	BPA	Protecting and enhancing riparian and wetland habitat in the Yakama Reservation.
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	825	Fifteenmile Creek Habitat Improvement	BPA	Bank stabilization work in the Fifteenmile Creek Basin
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	825	Fifteenmile Creek Habitat Improvement	BPA	Riparian fencing in the Fifteenmile Creek Basin
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	888	Idaho Model Watershed Habitat Projects	BPA	Instream structures
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	888	Idaho Model Watershed Habitat Projects	BPA	Controlling livestock grazing
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	888	Idaho Model Watershed Habitat Projects	BPA	Resource Management System plans
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	888	Idaho Model Watershed Habitat Projects	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	888	Idaho Model Watershed Habitat Projects	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon pool development
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon riparian planting

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon stream bank stabilization
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	899	Pataha Creek Stream & Cropland Restoration	BPA	Reduced sediment delivery
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	899	Pataha Creek Stream & Cropland Restoration	BPA	Off site watering.
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian vegetation management
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	929	Trout Creek Operation & Maintenance	BPA	O & M of habitat improvements
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	929	Trout Creek Operation & Maintenance	BPA	M & E of habitat improvements / smolt production
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	937	Salmon River Habitat Enhancement and O&M	BPA	M & E of habitat improvements
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	937	Salmon River Habitat Enhancement and O&M	BPA	O & M of habitat improvements
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1034	Squaw Creek Watershed Wildlife Project	BPA	Implemented management plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1034	Squaw Creek Watershed Wildlife Project	BPA	Purchased land
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1089	Upper Salmon River Diversion Consolidation Program	BPA	Consolidate diversions and screen
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1141	Methow River Valley Irrigation District - YN	BPA	Increased instream flow
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1141	Methow River Valley Irrigation District - YN	BPA	Pressurized irrigation system
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1143	Yakima Watershed Restoration - Satus Creek - YIN	BPA	Improved fish habitat
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Stabilized banks
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Noxious weed control
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1205	Nez Perce NE Oregon Wildlife Project: Helm Tract	BPA	Helm Tract additions
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1208	Grande Ronde Watershed Restoration - CTUIR	BPA	Enhanced riparian habitat
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1208	Grande Ronde Watershed Restoration - CTUIR	BPA	Enhanced instream habitat
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1208	Grande Ronde Watershed Restoration - CTUIR	BPA	Enhanced water quality
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1208	Grande Ronde Watershed Restoration - CTUIR	BPA	Enhanced water quantity
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1263	Wallowa County/Nez Perce Salmon Habitat Recovery	BPA	Monitoring of the Salmon Habitat Recovery Plan

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1263	Wallowa County/Nez Perce Salmon Habitat Recovery	BPA	Implementation of the Salmon Habitat Recovery Plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1358	Cottonwood Creek Riparian Enhancement/Wallowa	BPA	Road removed from riparian zone where possible
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1358	Cottonwood Creek Riparian Enhancement/Wallowa	BPA	Eroded road restored
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1358	Cottonwood Creek Riparian Enhancement/Wallowa	BPA	Cut banks armored
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1358	Cottonwood Creek Riparian Enhancement/Wallowa	BPA	Bridges repaired
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1361	Water Quality Monitoring for Grande Ronde Basin	BPA	Coordinated monitoring
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1361	Water Quality Monitoring for Grande Ronde Basin	BPA	Reports of conditions and trends
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1361	Water Quality Monitoring for Grande Ronde Basin	BPA	Expanded monitoring program
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1409	Hood River Fish Habitat	BPA	Alternative irrigation water source developed
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1409	Hood River Fish Habitat	BPA	Rip rap stream banks
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1409	Hood River Fish Habitat	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1409	Hood River Fish Habitat	BPA	Problems resolved at diversions
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1411	Acquisition of Pine Creek Ranch	BPA	Pine Creek Ranch
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1442	Mcintyre Road Relocation - Union County	BPA	Reconstructed county road
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1442	Mcintyre Road Relocation - Union County	BPA	Obliterated road
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1444	Grouse Creek Culvert Replacement	BPA	Grouse Creek multi-plate arch culvert
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1444	Grouse Creek Culvert Replacement	BPA	Road raised and alignment improved
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1465	Bakeoven Riparian Assessment	BPA	Watershed restoration plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1465	Bakeoven Riparian Assessment	BPA	Fencing
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1465	Bakeoven Riparian Assessment	BPA	Watershed monitoring plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1465	Bakeoven Riparian Assessment	BPA	Off-site water developments
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1465	Bakeoven Riparian Assessment	BPA	Assessment of Bakeoven watershed conditions
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1465	Bakeoven Riparian Assessment	BPA	Revegetation
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1503	Union County Technical Engineering Assistance	BPA	Technical support

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1504	Wallowa County Technical Engineering Assistance	BPA	Water Temperature Software Project
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1505	Water Temp Manipulation & Data Sharing Software	BPA	Public domain software program for water temperature data collection and analysis
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1521	Grande Ronde - Union SWCD Chan, Rd & Passage Rest	BPA	Phillips Creek bridge,
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1521	Grande Ronde - Union SWCD Chan, Rd & Passage Rest	BPA	Grande Ronde bank work
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1521	Grande Ronde - Union SWCD Chan, Rd & Passage Rest	BPA	Mill Creek / Caldwell diversion dam passage improvement
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1521	Grande Ronde - Union SWCD Chan, Rd & Passage Rest	BPA	Smutz Draw road relocation
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1522	Grande Ronde - Union SWCD Riparian, Upland Rest	BPA	Ladd Creek riparian fence
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1522	Grande Ronde - Union SWCD Riparian, Upland Rest	BPA	Cattle watering troughs
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1522	Grande Ronde - Union SWCD Riparian, Upland Rest	BPA	Soil aerator
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1524	Alpine Meadows - Trout Creek Restoration	BPA	Eroding Trout Creek channel stabilized
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1530	Wallowa County Gauging Stations	BPA	Maintain seven stream gages
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1531	Hagedorn Road Relocation/Stream Restoration	BPA	Hagedorn Road relocated
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1531	Hagedorn Road Relocation/Stream Restoration	BPA	Old Hagedorn Road obliterated
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1533	Grande Ronde Basin Tech Engineering Assistance	BPA	Technical support
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1537	Wallowa County Direct Seeding	BPA	No-till agriculture demonstration
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1538	Crow Cr Star Thistle Containment & Riparian Enhanc	BPA	Noxious weed control
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1538	Crow Cr Star Thistle Containment & Riparian Enhanc	BPA	Spalding catchfly protected
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1557	Acquire Oxbow Ranch Middle Fork John Day River	BPA	Oxbow Ranch
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1562	WLMitigation Sites Oregon, Wenaha WMA Additions	BPA	Enhanced Wenaha WMA
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1562	WLMitigation Sites Oregon, Wenaha WMA Additions	BPA	Land acquisition or easement
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1563	WL Mitigation Sites Oregon, Ladd Marsh Additions	BPA	Enhanced additions to Ladd Marsh WMA
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1563	WL Mitigation Sites Oregon, Ladd Marsh Additions	BPA	Ladd Marsh WMA additions
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Enhanced properties

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Monitored projects
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1607	Conservation Reserve Enhancement Program Incentive	BPA	Riparian protective strips along streams
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1609	Mccoey Cr Alta Cunha Ranches Instream Restoration	BPA	Replanted riparian zone
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1609	Mccoey Cr Alta Cunha Ranches Instream Restoration	BPA	Pasture rest
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1609	Mccoey Cr Alta Cunha Ranches Instream Restoration	BPA	Large woody debris in stream
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1609	Mccoey Cr Alta Cunha Ranches Instream Restoration	BPA	McCoy Creek pasture fences
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1609	Mccoey Cr Alta Cunha Ranches Instream Restoration	BPA	Obliterated 3000 feet of abandoned railroad grade
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1623	Asotin Watershed Grazing Biological Plan	BPA	Weed control
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1624	Rainwater Wildlife O & M	BPA	M & E for Rainwater Wildlife Area
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1731	Fifteen Mile Creek Riparian Fencing/Stream Survey	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1731	Fifteen Mile Creek Riparian Fencing/Stream Survey	BPA	Physical evaluation of streams
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1746	Protect Bear Valley Wild Salmon Spawning Habitat	BPA	Closed Grazing allotment
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1748	Arrowleaf/Methow River Conservation	BPA	Arrowleaf property
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1751	Wagner Ranch Acquisition	BPA	Wagner Ranch
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1752	Forrest Ranch Acquisition	BPA	Forrest Ranch
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1754	Acquire 27,000 Camp Creek Ranch at Zumwalt Prairie	BPA	27,000 acres of Zumwalt Prairie
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1755	Conservation Easement, Baker Ranch, Salmon River	BPA	70 cfs remaining in stream thru closure of 7 diversions
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1755	Conservation Easement, Baker Ranch, Salmon River	BPA	Protected riparian areas
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1755	Conservation Easement, Baker Ranch, Salmon River	BPA	Conservation easement
Protect & Enhance Tributary Habitat	Tributary Water Quality	150	1755	Conservation Easement, Baker Ranch, Salmon River	BPA	Restored stream banks
Protect & Enhance Tributary Habitat	Tributary Water Quality	151	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Instream work on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Water Quality	151	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian fencing on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Water Quality	151	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian planting on Middle Fk and mainstem John Day River tributaries.

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quality	151	286	Umatilla Habitat Improvement / CTUIR	BPA	Anadromous habitat enhancement for Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Water Quality	151	1141	Methow River Valley Irrigation District - YN	BPA	Increased instream flow
Protect & Enhance Tributary Habitat	Tributary Water Quality	151	1141	Methow River Valley Irrigation District - YN	BPA	Pressurized irrigation system
Protect & Enhance Tributary Habitat	Tributary Water Quality	151	1467	15 Mile Creek Water Right Acquisition	BPA	Increase stream flow
Protect & Enhance Tributary Habitat	Tributary Water Quality	151	1467	15 Mile Creek Water Right Acquisition	BPA	Acquired water rights
Protect & Enhance Tributary Habitat	Tributary Water Quality	151	1725	Echo Meadow Winter Artificial Recharge	BPA	Linkages between winter artificial recharge of groundwater to the return flows
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Riparian fencing E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Instream structures: E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	707	Grande Ronde Model Watershed Development	BPA	Habitat restoration in the Grande Ronde basin
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	709	Model Watershed Studies - Lemhi River Basin	BPA	Watershed restoration in Lemhi River Basin, Pahsimeroi River basin and East Fork Salmon River basin
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	819	Red River Restoration (Little Ponderosa Ranch)	BPA	Bank stabilization in lower Red River Meadow.
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	819	Red River Restoration (Little Ponderosa Ranch)	BPA	Riparian cover and temperature control in lower Red River Meadow.
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon riparian planting
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon stream bank stabilization
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon pool development
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	899	Pataha Creek Stream & Cropland Restoration	BPA	Reduced sediment delivery
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	899	Pataha Creek Stream & Cropland Restoration	BPA	Off site watering.
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian vegetation management
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	926	Wallowa Basin Project Planning	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	929	Trout Creek Operation & Maintenance	BPA	M & E of habitat improvements / smolt production
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	929	Trout Creek Operation & Maintenance	BPA	O & M of habitat improvements

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1034	Squaw Creek Watershed Wildlife Project	BPA	Implemented management plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1034	Squaw Creek Watershed Wildlife Project	BPA	Purchased land
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1089	Upper Salmon River Diversion Consolidation Program	BPA	Consolidate diversions and screen
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1143	Yakima Watershed Restoration - Satus Creek - YIN	BPA	Improved fish habitat
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Noxious weed control
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Stabilized banks
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1170	Clear Cr & NF John Day Dredge-Tailings Restoration	BPA	Improved stream channel
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1170	Clear Cr & NF John Day Dredge-Tailings Restoration	BPA	Redistributed dredge tailings
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Monitoring of results
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Pumping stations established
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Pushup dams replaced
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1402	Irrigation & Riparian Improvements - John Day R	BPA	Push-up dams eliminated
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1402	Irrigation & Riparian Improvements - John Day R	BPA	Permanent intake structures
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1402	Irrigation & Riparian Improvements - John Day R	BPA	Alternative irrigation sources / techniques
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1419	Implement Trout Creek Watershed Enhancement	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1419	Implement Trout Creek Watershed Enhancement	BPA	Implemented restoration plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1419	Implement Trout Creek Watershed Enhancement	BPA	Infiltration galleries
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Purchased property / easements
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Reestablished passage into tributary habitats
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1465	Bakeoven Riparian Assessment	BPA	Watershed monitoring plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1465	Bakeoven Riparian Assessment	BPA	Fencing
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1465	Bakeoven Riparian Assessment	BPA	Off-site water developments

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1465	Bakeoven Riparian Assessment	BPA	Assessment of Bakeoven watershed conditions
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1465	Bakeoven Riparian Assessment	BPA	Revegetation
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1465	Bakeoven Riparian Assessment	BPA	Watershed restoration plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1469	Pine Hollow Watershed Enhancement	BPA	Master plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1469	Pine Hollow Watershed Enhancement	BPA	Springs developed
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1469	Pine Hollow Watershed Enhancement	BPA	Cross fencing
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1469	Pine Hollow Watershed Enhancement	BPA	Critical areas reseeded
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1469	Pine Hollow Watershed Enhancement	BPA	Replanted riparian areas.
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1472	Ahtanum Creek Watershed Assessment	BPA	Water discharge & temperature monitored
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1472	Ahtanum Creek Watershed Assessment	BPA	Assessed stream habitat conditions
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1472	Ahtanum Creek Watershed Assessment	BPA	Assessed salmonid populated
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1472	Ahtanum Creek Watershed Assessment	BPA	Irrigated lands & water delivery systems mapped
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Vegetation management
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Fencing
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Sediment control basins
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Modified agricultural techniques
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Improved steelhead spawning & rearing habitat
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Coordination of funding and effort
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Improved agricultural /range land useage
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1481	Pataha Watershed Project Planning & Implementation	BPA	Pataha Creek Model Watershed Plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	152	1481	Pataha Watershed Project Planning & Implementation	BPA	Water quality monitored
Protect & Enhance Tributary Habitat	Tributary Water Quality	153	137	Joseph Creek & Grande Ronde River Habitat Work	BPA	Instream work on Joseph Creek drainage and upper Grande Ronde R.
Protect & Enhance Tributary Habitat	Tributary Water Quality	153	137	Joseph Creek & Grande Ronde River Habitat Work	BPA	Riparian fencing on Joseph Creek drainage and upper Grande Ronde R.
Protect & Enhance Tributary Habitat	Tributary Water Quality	153	707	Grande Ronde Model Watershed Development	BPA	Habitat restoration in the Grande Ronde basin

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quality	153	888	Idaho Model Watershed Habitat Projects	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quality	153	888	Idaho Model Watershed Habitat Projects	BPA	Resource Management System plans
Protect & Enhance Tributary Habitat	Tributary Water Quality	153	888	Idaho Model Watershed Habitat Projects	BPA	Controlling livestock grazing
Protect & Enhance Tributary Habitat	Tributary Water Quality	153	888	Idaho Model Watershed Habitat Projects	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tributary Water Quality	153	888	Idaho Model Watershed Habitat Projects	BPA	Instream structures
Protect & Enhance Tributary Habitat	Tributary Water Quality	153	926	Wallowa Basin Project Planning	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	153	1548	Training Support to Nrcs/Wildland Hydrology	BPA	Fluvial geomorphology short course attendees
Protect & Enhance Tributary Habitat	Tributary Water Quality	153	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Enhanced properties
Protect & Enhance Tributary Habitat	Tributary Water Quality	153	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Monitored projects
Protect & Enhance Tributary Habitat	Tributary Water Quality	153	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	153	1607	Conservation Reserve Enhancement Program Incentive	BPA	Riparian protective strips along streams
Protect & Enhance Tributary Habitat	Tributary Water Quality	153	1732	Fifteen Mile Creek Riparian Buffers	BPA	Riparian buffer
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Riparian fencing E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Instream structures: E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	710	Life Studies of Spring Chinook -Grande Ronde River	BPA	Study report on the abundance, migration patterns, survival, and habitat use of spring chinook salmon juveniles in the Grande Ronde River basin.
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	819	Red River Restoration (Little Ponderosa Ranch)	BPA	Bank stabilization in lower Red River Meadow.
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	819	Red River Restoration (Little Ponderosa Ranch)	BPA	Riparian cover and temperature control in lower Red River Meadow.
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	888	Idaho Model Watershed Habitat Projects	BPA	Instream structures
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	888	Idaho Model Watershed Habitat Projects	BPA	Controlling livestock grazing
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	888	Idaho Model Watershed Habitat Projects	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	888	Idaho Model Watershed Habitat Projects	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	888	Idaho Model Watershed Habitat Projects	BPA	Resource Management System plans

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon stream bank stabilization
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon riparian planting
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon pool development
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	899	Pataha Creek Stream & Cropland Restoration	BPA	Reduced sediment delivery
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	899	Pataha Creek Stream & Cropland Restoration	BPA	Off site watering.
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian vegetation management
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	929	Trout Creek Operation & Maintenance	BPA	O & M of habitat improvements
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	929	Trout Creek Operation & Maintenance	BPA	M & E of habitat improvements / smolt production
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1034	Squaw Creek Watershed Wildlife Project	BPA	Implemented management plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1034	Squaw Creek Watershed Wildlife Project	BPA	Purchased land
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1089	Upper Salmon River Diversion Consolidation Program	BPA	Consolidate diversions and screen
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1143	Yakima Watershed Restoration - Satus Creek - YIN	BPA	Improved fish habitat
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Noxious weed control
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Stabilized banks
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1170	Clear Cr & NF John Day Dredge-Tailings Restoration	BPA	Redistributed dredge tailings
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1170	Clear Cr & NF John Day Dredge-Tailings Restoration	BPA	Improved stream channel
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1198	Protect and Restore Lolo Creek Watershed	BPA	Cattle excluded from critical riparian areas
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1198	Protect and Restore Lolo Creek Watershed	BPA	Obliterated roads
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1198	Protect and Restore Lolo Creek Watershed	BPA	Stablized landslide sites
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1199	Protect & Restore Squaw & Papoose Cr Watersheds	BPA	Sediment traps
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1199	Protect & Restore Squaw & Papoose Cr Watersheds	BPA	Obliterated or restored roads
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1201	Restore Mccommas Meadows - NPT	BPA	Riparian fencing

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1201	Restore McCommas Meadows - NPT	BPA	Enhanced channel morphology
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1201	Restore McCommas Meadows - NPT	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1212	Clearwater Focus Watershed - State of Idaho	BPA	Coordination of watershed efforts
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1293	Yakima River Side Channels	BPA	Reconnected floodplains
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1293	Yakima River Side Channels	BPA	Access re-established to off-channel rearing habitats
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1295	Toppenish/Simcoe Instream Flow Restoration	BPA	Evaluation of the anadromous population and habitat
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1295	Toppenish/Simcoe Instream Flow Restoration	BPA	Restored instream flows
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1317	Restoration of Watershed, Clearwater Basin	BPA	Obliterate unnecessary roads
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1317	Restoration of Watershed, Clearwater Basin	BPA	Installed instream structures
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1408	Assess Salmonid Habitat Walla Walla Watershed - WA	BPA	Assesment of conditions and populations
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1419	Implement Trout Creek Watershed Enhancement	BPA	Implemented restoration plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1419	Implement Trout Creek Watershed Enhancement	BPA	Infiltration galleries
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1419	Implement Trout Creek Watershed Enhancement	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1422	Implement Wy-Kan-ush-mi Wa-Kish-wit Watershed Plan	BPA	Watershed plans
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1424	Upper Toppenish Creek Watershed Restoration	BPA	Analysis of upper Toppenish Creek Watershed
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1424	Upper Toppenish Creek Watershed Restoration	BPA	Implemented restoration plans
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Reestablished passage into tributary habitats
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Purchased property / easements
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1465	Bakeoven Riparian Assessment	BPA	Fencing
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1465	Bakeoven Riparian Assessment	BPA	Watershed monitoring plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1465	Bakeoven Riparian Assessment	BPA	Off-site water developments
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1465	Bakeoven Riparian Assessment	BPA	Assessment of Bakeoven watershed conditions
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1465	Bakeoven Riparian Assessment	BPA	Revegetation

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1465	Bakeoven Riparian Assessment	BPA	Watershed restoration plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1469	Pine Hollow Watershed Enhancement	BPA	Springs developed
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1469	Pine Hollow Watershed Enhancement	BPA	Replanted riparian areas.
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1469	Pine Hollow Watershed Enhancement	BPA	Cross fencing
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1469	Pine Hollow Watershed Enhancement	BPA	Master plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1469	Pine Hollow Watershed Enhancement	BPA	Critical areas reseeded
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1472	Ahtanum Creek Watershed Assessment	BPA	Water discharge & temperature monitored
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1472	Ahtanum Creek Watershed Assessment	BPA	Assessed stream habitat conditions
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1472	Ahtanum Creek Watershed Assessment	BPA	Assessed salmonid populated
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1472	Ahtanum Creek Watershed Assessment	BPA	Irrigated lands & water delivery systems mapped
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Sediment control basins
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Modified agricultural techniques
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Vegetation management
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Fencing
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Improved agricultural /range land useage
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Coordination of funding and effort
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Improved steelhead spawning & rearing habitat
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1475	Protecting & Restoring Big Canyon Creek Watershed	BPA	Watershed plans
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1475	Protecting & Restoring Big Canyon Creek Watershed	BPA	Assessed watershed conditions
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1476	Rehabilitate Lapwai Creek	BPA	Lapwai Watershed Plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1478	Restore Salmon River - Challis Area	BPA	Restored fish habitat
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1481	Pataha Watershed Project Planning & Implementation	BPA	Pataha Creek Model Watershed Plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1481	Pataha Watershed Project Planning & Implementation	BPA	Water quality monitored
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1553	Rock Creek Watershed Assessment & Restoration	BPA	Rock Creek watershed study

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Enhanced properties
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Monitored projects
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1576	Protect N Lochsa Face Analysis Area Watershed	BPA	M & E program
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1576	Protect N Lochsa Face Analysis Area Watershed	BPA	Obliterated road
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1576	Protect N Lochsa Face Analysis Area Watershed	BPA	Sediment input alleviated
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1577	Rehabilitate Newsome Creek - S Fork Clearwater R	BPA	Plan for restoration of dredged areas
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1577	Rehabilitate Newsome Creek - S Fork Clearwater R	BPA	List of additional roads for obliteration
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1577	Rehabilitate Newsome Creek - S Fork Clearwater R	BPA	Obliterate 10 miles of road
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1577	Rehabilitate Newsome Creek - S Fork Clearwater R	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1578	Protect and Restore Mill Creek Watershed	BPA	MOA with the Nez Perce NF
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1578	Protect and Restore Mill Creek Watershed	BPA	Enhanced riparian areas
Protect & Enhance Tributary Habitat	Tributary Water Quality	154	1736	Salmonid Production in Restored Rattlesnake Creek	BPA	Evaluation of habitat and population conditions
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	<i>unassigned</i>	Lemhi Subbasin High Priority Subbasin Enhancement	USBR	Provide technical assistance for projects identified in 01; continue programmatic NEPA and hydrologic studies; identify new projects; coordinate with local groups.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	<i>unassigned</i>	Methow Subbasin High Priority Subbasin Enhancement	USBR	Provide technical assistance for projects identified in 01; continue programmatic NEPA and hydrologic studies; identify new projects; coordinate with local groups.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	<i>unassigned</i>	Upper John Day High Priority Subbasin Enhancement	USBR	Provide technical assistance for projects identified in 01; continue programmatic NEPA and hydrologic studies; identify new projects; coordinate with local groups.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	<i>unassigned</i>	Middle Fork John Day High Priority Subbasin Enhancement	USBR	Provide technical assistance for projects identified in 01; continue programmatic NEPA and hydrologic studies; identify new projects; coordinate with local groups.

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	<i>unassigned</i>	McKenzie High Priority Subbasin Enhancement	USBR	Initiate workload evaluation effort, programmatic NEPA. Identify projects for early implementation or FY03. Establish liaison offices.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	<i>unassigned</i>	Upper Salmon High Priority Subbasin Enhancement	USBR	Initiate workload evaluation effort, programmatic NEPA. Identify projects for early implementation or FY03. Establish liaison offices.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	<i>unassigned</i>	Wenatchee High Priority Subbasin Enhancement	USBR	Initiate workload evaluation effort, programmatic NEPA. Identify projects for early implementation or FY03. Establish liaison offices.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian fencing on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian planting on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Instream work on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	286	Umatilla Habitat Improvement / CTUIR	BPA	Anadromous habitat enhancement for Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	709	Model Watershed Studies - Lemhi River Basin	BPA	Watershed restoration in Lemhi River Basin, Pahsimeroi River basin and East Fork Salmon River basin
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	850	Upper Salmon River Anadromous Fish Passage	BPA	Diversion headgates, improved water distribution, and acquired instream flow
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	850	Upper Salmon River Anadromous Fish Passage	BPA	Habitat enhancement and passage restoration through fishways, diversion headgates, improved water distribution, and acquired instream flow
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	850	Upper Salmon River Anadromous Fish Passage	BPA	Fishways
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	852	Oregon Fish Screens Project	BPA	La Grande fish screen shop
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	852	Oregon Fish Screens Project	BPA	John Day fish screen shop
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	852	Oregon Fish Screens Project	BPA	DeNiel fish passage structures in Trout Cr
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	852	Oregon Fish Screens Project	BPA	Fabricate & install fish screens in John Day, Umatilla, & Walla Walla Basins
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	886	Idaho Fish Screening Improvement	BPA	Consolidate and screen diversions
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	888	Idaho Model Watershed Habitat Projects	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	888	Idaho Model Watershed Habitat Projects	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	888	Idaho Model Watershed Habitat Projects	BPA	Instream structures

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	888	Idaho Model Watershed Habitat Projects	BPA	Resource Management System plans
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	888	Idaho Model Watershed Habitat Projects	BPA	Controlling livestock grazing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1095	Juvenile & Adult Passage- Walla Walla Basin	BPA	Screen/trap facilities
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1101	Walla Walla Basin Anadromous Fish Passage	BPA	Adult passage at irrigation diversion dams
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1141	Methow River Valley Irrigation District - YN	BPA	Pressurized irrigation system
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1141	Methow River Valley Irrigation District - YN	BPA	Increased instream flow
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Pumping stations established
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Monitoring of results
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Pushup dams replaced
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1402	Irrigation & Riparian Improvements - John Day R	BPA	Permanent intake structures
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1402	Irrigation & Riparian Improvements - John Day R	BPA	Push-up dams eliminated
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1402	Irrigation & Riparian Improvements - John Day R	BPA	Alternative irrigation sources / techniques
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1408	Assess Salmonid Habitat Walla Walla Watershed - WA	BPA	Assesment of conditions and populations
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1478	Restore Salmon River - Challis Area	BPA	Restored fish habitat
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1497	Salmon Creek Instream Flow & Habitat Survey	BPA	Fishery and water resources documented
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1497	Salmon Creek Instream Flow & Habitat Survey	BPA	Hydrologic model for the drainage
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1575	Walla Walla River Fish Passage Operations	BPA	Effectively utilizing transport equipment
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1575	Walla Walla River Fish Passage Operations	BPA	Trapping facilities
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1575	Walla Walla River Fish Passage Operations	BPA	Passage facilities
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1734	Fifteen Mile Subbasin Water Right Acquisition	BPA	Acquired water rights
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1735	Salmon and Steelhead Exertion Study	BPA	Location of difficult fish passage sites
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1749	Gourley Creek Dam Fish Ladder	BPA	Eliminated fish passage barrier
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1750	Protect ESA Fish With Screens in Walla Walla Basin	BPA	Fish screens for 197 Walla Walla Basin irrigation diversions.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1753	Farmers Irr Dist Mainstem Hood River Fish Screen	BPA	New horizontal fixed plate screen

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1762	Reconnect Little Morgan Creek to Pahsimeroi River	BPA	14.3 miles of historical anadromous habitat restored
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1762	Reconnect Little Morgan Creek to Pahsimeroi River	BPA	Little Morgan Creek reconnected with Pahsimeroi River
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1763	Restoration of Anadromous Fish Access to Hawley Cr	BPA	Reduced water temperatures
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1763	Restoration of Anadromous Fish Access to Hawley Cr	BPA	Restored riparian habitat
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1763	Restoration of Anadromous Fish Access to Hawley Cr	BPA	Improve irrigation methods
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1763	Restoration of Anadromous Fish Access to Hawley Cr	BPA	Hawley Creek reconnected to the Lemhi River
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1765	Supplemental Flows in Buck Hollow	BPA	headwater irrigation well
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1765	Supplemental Flows in Buck Hollow	BPA	Supplemented stream flow (1-1.5 cfs)
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1768	Trout Creek Streamflow Enhancement	BPA	Safer culverts
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1768	Trout Creek Streamflow Enhancement	BPA	Fish passage barriers removed
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1770	Badger Creek Culvert Replacement	BPA	Box culvert eliminating fish passage barrier
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1774	Touchet River Stream Flow Enhancement	BPA	Increased stream flows
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1774	Touchet River Stream Flow Enhancement	BPA	Acquired water rights
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1775	Lostine River Streamflow Enhancement	BPA	Increased stream flows
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1775	Lostine River Streamflow Enhancement	BPA	Acquired water rights
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1776	Methow River Basin Screening	BPA	new fish screens constructed
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1776	Methow River Basin Screening	BPA	Fish screen facilities upgrades
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1777	Simcoe Creek Streamflow Enhancement	BPA	Off site water facilities
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1777	Simcoe Creek Streamflow Enhancement	BPA	Ladders at two diversion dams
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1777	Simcoe Creek Streamflow Enhancement	BPA	Canal screens
Protect & Enhance Tributary Habitat	Tributary Water Quantity	149	1778	Hancock Springs Passage & Habitat Restoration	BPA	Access to spring fed channel
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian planting on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Instream work on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian fencing on Middle Fk and mainstem John Day River tributaries.

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	137	Joseph Creek & Grande Ronde River Habitat Work	BPA	Riparian fencing on Joseph Creek drainage and upper Grande Ronde R.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	137	Joseph Creek & Grande Ronde River Habitat Work	BPA	Instream work on Joseph Creek drainage and upper Grande Ronde R.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	286	Umatilla Habitat Improvement / CTUIR	BPA	Anadromous habitat enhancement for Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Riparian fencing E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Instream structures: E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	752	Lower Yakima Valley Riparian/Wetlands - Phase I	BPA	Protecting and enhancing riparian and wetland habitat in the Yakama Reservation.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	825	Fifteenmile Creek Habitat Improvement	BPA	Riparian fencing in the Fifteenmile Creek Basin
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	825	Fifteenmile Creek Habitat Improvement	BPA	Bank stabilization work in the Fifteenmile Creek Basin
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	888	Idaho Model Watershed Habitat Projects	BPA	Resource Management System plans
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	888	Idaho Model Watershed Habitat Projects	BPA	Controlling livestock grazing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	888	Idaho Model Watershed Habitat Projects	BPA	Instream structures
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	888	Idaho Model Watershed Habitat Projects	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	888	Idaho Model Watershed Habitat Projects	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon pool development
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon riparian planting
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon stream bank stabilization
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	899	Pataha Creek Stream & Cropland Restoration	BPA	Off site watering.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	899	Pataha Creek Stream & Cropland Restoration	BPA	Reduced sediment delivery
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian vegetation management
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	929	Trout Creek Operation & Maintenance	BPA	M & E of habitat improvements / smolt production
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	929	Trout Creek Operation & Maintenance	BPA	O & M of habitat improvements

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	937	Salmon River Habitat Enhancement and O&M	BPA	M & E of habitat improvements
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	937	Salmon River Habitat Enhancement and O&M	BPA	O & M of habitat improvements
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1034	Squaw Creek Watershed Wildlife Project	BPA	Implemented management plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1034	Squaw Creek Watershed Wildlife Project	BPA	Purchased land
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1089	Upper Salmon River Diversion Consolidation Program	BPA	Consolidate diversions and screen
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1141	Methow River Valley Irrigation District - YN	BPA	Pressurized irrigation system
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1141	Methow River Valley Irrigation District - YN	BPA	Increased instream flow
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1143	Yakima Watershed Restoration - Satus Creek - YIN	BPA	Improved fish habitat
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Stabilized banks
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Noxious weed control
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1205	Nez Perce NE Oregon Wildlife Project: Helm Tract	BPA	Helm Tract additions
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1208	Grande Ronde Watershed Restoration - CTUIR	BPA	Enhanced riparian habitat
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1208	Grande Ronde Watershed Restoration - CTUIR	BPA	Enhanced instream habitat
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1208	Grande Ronde Watershed Restoration - CTUIR	BPA	Enhanced water quality
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1208	Grande Ronde Watershed Restoration - CTUIR	BPA	Enhanced water quantity
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1263	Wallowa County/Nez Perce Salmon Habitat Recovery	BPA	Implementation of the Salmon Habitat Recovery Plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1263	Wallowa County/Nez Perce Salmon Habitat Recovery	BPA	Monitoring of the Salmon Habitat Recovery Plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1358	Cottonwood Creek Riparian Enhancement/Wallowa	BPA	Road removed from riparian zone where possible
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1358	Cottonwood Creek Riparian Enhancement/Wallowa	BPA	Eroded road restored
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1358	Cottonwood Creek Riparian Enhancement/Wallowa	BPA	Bridges repaired
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1358	Cottonwood Creek Riparian Enhancement/Wallowa	BPA	Cut banks armored
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1361	Water Quality Monitoring for Grande Ronde Basin	BPA	Coordinated monitoring
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1361	Water Quality Monitoring for Grande Ronde Basin	BPA	Reports of conditions and trends

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1361	Water Quality Monitoring for Grande Ronde Basin	BPA	Expanded monitoring program
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1409	Hood River Fish Habitat	BPA	Problems resolved at diversions
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1409	Hood River Fish Habitat	BPA	Rip rap stream banks
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1409	Hood River Fish Habitat	BPA	Alternative irrigation water source developed
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1409	Hood River Fish Habitat	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1411	Acquisition of Pine Creek Ranch	BPA	Pine Creek Ranch
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1442	Mcintyre Road Relocation - Union County	BPA	Reconstructed county road
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1442	Mcintyre Road Relocation - Union County	BPA	Obliterated road
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1444	Grouse Creek Culvert Replacement	BPA	Grouse Creek multi-plate arch culvert
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1444	Grouse Creek Culvert Replacement	BPA	Road raised and alignment improved
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1465	Bakeoven Riparian Assessment	BPA	Revegetation
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1465	Bakeoven Riparian Assessment	BPA	Assessment of Bakeoven watershed conditions
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1465	Bakeoven Riparian Assessment	BPA	Off-site water developments
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1465	Bakeoven Riparian Assessment	BPA	Watershed monitoring plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1465	Bakeoven Riparian Assessment	BPA	Fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1465	Bakeoven Riparian Assessment	BPA	Watershed restoration plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1503	Union County Technical Engineering Assistance	BPA	Technical support
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1504	Wallowa County Technical Engineering Assistance	BPA	Water Temperature Software Project
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1505	Water Temp Manipulation & Data Sharing Software	BPA	Public domain software program for water temperature data collection and analysis
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1521	Grande Ronde - Union SWCD Chan, Rd & Passage Rest	BPA	Phillips Creek bridge,
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1521	Grande Ronde - Union SWCD Chan, Rd & Passage Rest	BPA	Grande Ronde bank work
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1521	Grande Ronde - Union SWCD Chan, Rd & Passage Rest	BPA	Mill Creek / Caldwell diversion dam passage improvement
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1521	Grande Ronde - Union SWCD Chan, Rd & Passage Rest	BPA	Smutz Draw road relocation

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1522	Grande Ronde - Union SWCD Riparian, Upland Rest	BPA	Cattle watering troughs
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1522	Grande Ronde - Union SWCD Riparian, Upland Rest	BPA	Soil aerator
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1522	Grande Ronde - Union SWCD Riparian, Upland Rest	BPA	Ladd Creek riparian fence
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1524	Alpine Meadows - Trout Creek Restoration	BPA	Eroding Trout Creek channel stabilized
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1530	Wallowa County Gauging Stations	BPA	Maintain seven stream gages
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1531	Hagedorn Road Relocation/Stream Restoration	BPA	Hagedorn Road relocated
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1531	Hagedorn Road Relocation/Stream Restoration	BPA	Old Hagedorn Road obliterated
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1533	Grande Ronde Basin Tech Engineering Assistance	BPA	Technical support
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1537	Wallowa County Direct Seeding	BPA	No-till agriculture demonstration
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1538	Crow Cr Star Thistle Containment & Riparian Enhanc	BPA	Spalding catchfly protected
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1538	Crow Cr Star Thistle Containment & Riparian Enhanc	BPA	Noxious weed control
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1557	Acquire Oxbow Ranch Middle Fork John Day River	BPA	Oxbow Ranch
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1562	WLMitigation Sites Oregon, Wenaha WMA Additions	BPA	Land acquisition or easement
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1562	WLMitigation Sites Oregon, Wenaha WMA Additions	BPA	Enhanced Wenaha WMA
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1563	WL Mitigation Sites Oregon, Ladd Marsh Additions	BPA	Enhanced additions to Ladd Marsh WMA
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1563	WL Mitigation Sites Oregon, Ladd Marsh Additions	BPA	Ladd Marsh WMA additions
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Enhanced properties
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Monitored projects
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1607	Conservation Reserve Enhancement Program Incentive	BPA	Riparian protective strips along streams
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1609	Mccooy Cr Alta Cunha Ranches Instream Restoration	BPA	Pasture rest
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1609	Mccooy Cr Alta Cunha Ranches Instream Restoration	BPA	Replanted riparian zone
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1609	Mccooy Cr Alta Cunha Ranches Instream Restoration	BPA	Obliterated 3000 feet of abandoned railroad grade
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1609	Mccooy Cr Alta Cunha Ranches Instream Restoration	BPA	Large woody debris in stream

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1609	Mccooy Cr Alta Cunha Ranches Instream Restoration	BPA	McCoy Creek pasture fences
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1623	Asotin Watershed Grazing Biological Plan	BPA	Weed control
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1624	Rainwater Wildlife O & M	BPA	M & E for Rainwater Wildlife Area
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1731	Fifteen Mile Creek Riparian Fencing/Stream Survey	BPA	Physical evaluation of streams
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1731	Fifteen Mile Creek Riparian Fencing/Stream Survey	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1746	Protect Bear Valley Wild Salmon Spawning Habitat	BPA	Closed Grazing allotment
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1748	Arrowleaf/Methow River Conservation	BPA	Arrowleaf property
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1751	Wagner Ranch Acquisition	BPA	Wagner Ranch
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1752	Forrest Ranch Acquisition	BPA	Forrest Ranch
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1754	Acquire 27,000 Camp Creek Ranch at Zumwalt Prairie	BPA	27,000 acres of Zumwalt Prairie
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1755	Conservation Easement, Baker Ranch, Salmon River	BPA	Conservation easement
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1755	Conservation Easement, Baker Ranch, Salmon River	BPA	Protected riparian areas
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1755	Conservation Easement, Baker Ranch, Salmon River	BPA	70 cfs remaining in stream thru closure of 7 diversions
Protect & Enhance Tributary Habitat	Tributary Water Quantity	150	1755	Conservation Easement, Baker Ranch, Salmon River	BPA	Restored stream banks
Protect & Enhance Tributary Habitat	Tributary Water Quantity	151	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Instream work on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	151	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian planting on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	151	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian fencing on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	151	286	Umatilla Habitat Improvement / CTUIR	BPA	Anadromous habitat enhancement for Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Water Quantity	151	1141	Methow River Valley Irrigation District - YN	BPA	Increased instream flow
Protect & Enhance Tributary Habitat	Tributary Water Quantity	151	1141	Methow River Valley Irrigation District - YN	BPA	Pressurized irrigation system
Protect & Enhance Tributary Habitat	Tributary Water Quantity	151	1467	15 Mile Creek Water Right Acquisition	BPA	Acquired water rights
Protect & Enhance Tributary Habitat	Tributary Water Quantity	151	1467	15 Mile Creek Water Right Acquisition	BPA	Increase stream flow
Protect & Enhance Tributary Habitat	Tributary Water Quantity	151	1725	Echo Meadow Winter Artificial Recharge	BPA	Linkages between winter artificial recharge of groundwater to the return flows

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Instream structures: E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Riparian fencing E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	707	Grande Ronde Model Watershed Development	BPA	Habitat restoration in the Grande Ronde basin
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	709	Model Watershed Studies - Lemhi River Basin	BPA	Watershed restoration in Lemhi River Basin, Pahsimeroi River basin and East Fork Salmon River basin
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	819	Red River Restoration (Little Ponderosa Ranch)	BPA	Bank stabilization in lower Red River Meadow.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	819	Red River Restoration (Little Ponderosa Ranch)	BPA	Riparian cover and temperature control in lower Red River Meadow.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon stream bank stabilization
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon riparian planting
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon pool development
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	899	Pataha Creek Stream & Cropland Restoration	BPA	Off site watering.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian vegetation management
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	899	Pataha Creek Stream & Cropland Restoration	BPA	Reduced sediment delivery
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	926	Wallowa Basin Project Planning	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	929	Trout Creek Operation & Maintenance	BPA	O & M of habitat improvements
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	929	Trout Creek Operation & Maintenance	BPA	M & E of habitat improvements / smolt production
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1034	Squaw Creek Watershed Wildlife Project	BPA	Implemented management plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1034	Squaw Creek Watershed Wildlife Project	BPA	Purchased land
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1089	Upper Salmon River Diversion Consolidation Program	BPA	Consolidate diversions and screen
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1143	Yakima Watershed Restoration - Satus Creek - YIN	BPA	Improved fish habitat
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Stabilized banks
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Noxious weed control

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1170	Clear Cr & NF John Day Dredge-Tailings Restoration	BPA	Redistributed dredge tailings
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1170	Clear Cr & NF John Day Dredge-Tailings Restoration	BPA	Improved stream channel
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Monitoring of results
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Pumping stations established
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Pushup dams replaced
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1402	Irrigation & Riparian Improvements - John Day R	BPA	Push-up dams eliminated
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1402	Irrigation & Riparian Improvements - John Day R	BPA	Alternative irrigation sources / techniques
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1402	Irrigation & Riparian Improvements - John Day R	BPA	Permanent intake structures
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1419	Implement Trout Creek Watershed Enhancement	BPA	Implemented restoration plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1419	Implement Trout Creek Watershed Enhancement	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1419	Implement Trout Creek Watershed Enhancement	BPA	Infiltration galleries
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Purchased property / easements
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Reestablished passage into tributary habitats
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1465	Bakeoven Riparian Assessment	BPA	Off-site water developments
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1465	Bakeoven Riparian Assessment	BPA	Watershed monitoring plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1465	Bakeoven Riparian Assessment	BPA	Assessment of Bakeoven watershed conditions
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1465	Bakeoven Riparian Assessment	BPA	Revegetation
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1465	Bakeoven Riparian Assessment	BPA	Watershed restoration plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1465	Bakeoven Riparian Assessment	BPA	Fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1469	Pine Hollow Watershed Enhancement	BPA	Replanted riparian areas.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1469	Pine Hollow Watershed Enhancement	BPA	Master plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1469	Pine Hollow Watershed Enhancement	BPA	Springs developed

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1469	Pine Hollow Watershed Enhancement	BPA	Cross fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1469	Pine Hollow Watershed Enhancement	BPA	Critical areas reseeded
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1472	Ahtanum Creek Watershed Assessment	BPA	Assessed stream habitat conditions
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1472	Ahtanum Creek Watershed Assessment	BPA	Assessed salmonid populated
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1472	Ahtanum Creek Watershed Assessment	BPA	Irrigated lands & water delivery systems mapped
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1472	Ahtanum Creek Watershed Assessment	BPA	Water discharge & temperature monitored
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Sediment control basins
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Vegetation management
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Modified agricultural techniques
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Coordination of funding and effort
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Improved agricultural /range land useage
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Improved steelhead spawning & rearing habitat
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1481	Pataha Watershed Project Planning & Implementation	BPA	Water quality monitored
Protect & Enhance Tributary Habitat	Tributary Water Quantity	152	1481	Pataha Watershed Project Planning & Implementation	BPA	Pataha Creek Model Watershed Plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	153	137	Joseph Creek & Grande Ronde River Habitat Work	BPA	Riparian fencing on Joseph Creek drainage and upper Grande Ronde R.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	153	137	Joseph Creek & Grande Ronde River Habitat Work	BPA	Instream work on Joseph Creek drainage and upper Grande Ronde R.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	153	707	Grande Ronde Model Watershed Development	BPA	Habitat restoration in the Grande Ronde basin
Protect & Enhance Tributary Habitat	Tributary Water Quantity	153	888	Idaho Model Watershed Habitat Projects	BPA	Instream structures
Protect & Enhance Tributary Habitat	Tributary Water Quantity	153	888	Idaho Model Watershed Habitat Projects	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tributary Water Quantity	153	888	Idaho Model Watershed Habitat Projects	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	153	888	Idaho Model Watershed Habitat Projects	BPA	Controlling livestock grazing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	153	888	Idaho Model Watershed Habitat Projects	BPA	Resource Management System plans
Protect & Enhance Tributary Habitat	Tributary Water Quantity	153	926	Wallowa Basin Project Planning	BPA	Watershed plan

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quantity	153	1548	Training Support to Nrcs/Wildland Hydrology	BPA	Fluvial geomorphology short course attendees
Protect & Enhance Tributary Habitat	Tributary Water Quantity	153	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Enhanced properties
Protect & Enhance Tributary Habitat	Tributary Water Quantity	153	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Monitored projects
Protect & Enhance Tributary Habitat	Tributary Water Quantity	153	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	153	1607	Conservation Reserve Enhancement Program Incentive	BPA	Riparian protective strips along streams
Protect & Enhance Tributary Habitat	Tributary Water Quantity	153	1732	Fifteen Mile Creek Riparian Buffers	BPA	Riparian buffer
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Riparian fencing E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Instream structures: E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	710	Life Studies of Spring Chinook -Grande Ronde River	BPA	Study report on the abundance, migration patterns, survival, and habitat use of spring chinook salmon juveniles in the Grande Ronde River basin.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	819	Red River Restoration (Little Ponderosa Ranch)	BPA	Riparian cover and temperature control in lower Red River Meadow.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	819	Red River Restoration (Little Ponderosa Ranch)	BPA	Bank stabilization in lower Red River Meadow.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	888	Idaho Model Watershed Habitat Projects	BPA	Controlling livestock grazing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	888	Idaho Model Watershed Habitat Projects	BPA	Instream structures
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	888	Idaho Model Watershed Habitat Projects	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	888	Idaho Model Watershed Habitat Projects	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	888	Idaho Model Watershed Habitat Projects	BPA	Resource Management System plans
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon stream bank stabilization
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon riparian planting
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon pool development
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian vegetation management
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	899	Pataha Creek Stream & Cropland Restoration	BPA	Off site watering.
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	899	Pataha Creek Stream & Cropland Restoration	BPA	Reduced sediment delivery

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	929	Trout Creek Operation & Maintenance	BPA	M & E of habitat improvements / smolt production
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	929	Trout Creek Operation & Maintenance	BPA	O & M of habitat improvements
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1034	Squaw Creek Watershed Wildlife Project	BPA	Implemented management plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1034	Squaw Creek Watershed Wildlife Project	BPA	Purchased land
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1089	Upper Salmon River Diversion Consolidation Program	BPA	Consolidate diversions and screen
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1143	Yakima Watershed Restoration - Satus Creek - YIN	BPA	Improved fish habitat
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Noxious weed control
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Stabilized banks
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1170	Clear Cr & NF John Day Dredge-Tailings Restoration	BPA	Redistributed dredge tailings
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1170	Clear Cr & NF John Day Dredge-Tailings Restoration	BPA	Improved stream channel
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1198	Protect and Restore Lolo Creek Watershed	BPA	Cattle excluded from critical riparian areas
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1198	Protect and Restore Lolo Creek Watershed	BPA	Obliterated roads
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1198	Protect and Restore Lolo Creek Watershed	BPA	Stablized landslide sites
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1199	Protect & Restore Squaw & Papoose Cr Watersheds	BPA	Sediment traps
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1199	Protect & Restore Squaw & Papoose Cr Watersheds	BPA	Obliterated or restored roads
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1201	Restore Mccommas Meadows - NPT	BPA	Enhanced channel morphology
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1201	Restore Mccommas Meadows - NPT	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1201	Restore Mccommas Meadows - NPT	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1212	Clearwater Focus Watershed - State of Idaho	BPA	Coordination of watershed efforts
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1293	Yakima River Side Channels	BPA	Access re-established to off-channel rearing habitats
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1293	Yakima River Side Channels	BPA	Reconnected floodplains
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1295	Toppenish/Simcoe Instream Flow Restoration	BPA	Restored instream flows

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1295	Toppenish/Simcoe Instream Flow Restoration	BPA	Evaluation of the anadromous population and habitat
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1317	Restoration of Watershed, Clearwater Basin	BPA	Installed instream structures
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1317	Restoration of Watershed, Clearwater Basin	BPA	Obliterate unnecessary roads
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1408	Assess Salmonid Habitat Walla Walla Watershed - WA	BPA	Assesment of conditions and populations
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1419	Implement Trout Creek Watershed Enhancement	BPA	Implemented restoration plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1419	Implement Trout Creek Watershed Enhancement	BPA	Infiltration galleries
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1419	Implement Trout Creek Watershed Enhancement	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1422	Implement Wy-Kan-ush-mi Wa-Kish-wit Watershed Plan	BPA	Watershed plans
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1424	Upper Toppenish Creek Watershed Restoration	BPA	Implemented restoration plans
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1424	Upper Toppenish Creek Watershed Restoration	BPA	Analysis of upper Toppenish Creek Watershed
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Reestablished passage into tributary habitats
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Purchased property / easements
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1465	Bakeoven Riparian Assessment	BPA	Fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1465	Bakeoven Riparian Assessment	BPA	Watershed monitoring plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1465	Bakeoven Riparian Assessment	BPA	Off-site water developments
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1465	Bakeoven Riparian Assessment	BPA	Assessment of Bakeoven watershed conditions
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1465	Bakeoven Riparian Assessment	BPA	Revegetation
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1465	Bakeoven Riparian Assessment	BPA	Watershed restoration plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1469	Pine Hollow Watershed Enhancement	BPA	Master plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1469	Pine Hollow Watershed Enhancement	BPA	Springs developed
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1469	Pine Hollow Watershed Enhancement	BPA	Cross fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1469	Pine Hollow Watershed Enhancement	BPA	Critical areas reseeded
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1469	Pine Hollow Watershed Enhancement	BPA	Replanted riparian areas.

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1472	Ahtanum Creek Watershed Assessment	BPA	Assessed stream habitat conditions
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1472	Ahtanum Creek Watershed Assessment	BPA	Assessed salmonid populated
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1472	Ahtanum Creek Watershed Assessment	BPA	Water discharge & temperature monitored
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1472	Ahtanum Creek Watershed Assessment	BPA	Irrigated lands & water delivery systems mapped
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Fencing
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Sediment control basins
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Modified agricultural techniques
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Vegetation management
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Improved steelhead spawning & rearing habitat
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Improved agricultural /range land useage
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Coordination of funding and effort
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1475	Protecting & Restoring Big Canyon Creek Watershed	BPA	Watershed plans
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1475	Protecting & Restoring Big Canyon Creek Watershed	BPA	Assessed watershed conditions
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1476	Rehabilitate Lapwai Creek	BPA	Lapwai Watershed Plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1478	Restore Salmon River - Challis Area	BPA	Restored fish habitat
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1481	Pataha Watershed Project Planning & Implementation	BPA	Water quality monitored
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1481	Pataha Watershed Project Planning & Implementation	BPA	Pataha Creek Model Watershed Plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1553	Rock Creek Watershed Assessment & Restoration	BPA	Rock Creek watershed study
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Monitored projects
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Enhanced properties
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1576	Protect N Lochsa Face Analysis Area Watershed	BPA	Obliterated road
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1576	Protect N Lochsa Face Analysis Area Watershed	BPA	M & E program
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1576	Protect N Lochsa Face Analysis Area Watershed	BPA	Sediment input alleviated

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1577	Rehabilitate Newsome Creek - S Fork Clearwater R	BPA	Obliterate 10 miles of road
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1577	Rehabilitate Newsome Creek - S Fork Clearwater R	BPA	Plan for restoration of dredged areas
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1577	Rehabilitate Newsome Creek - S Fork Clearwater R	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1577	Rehabilitate Newsome Creek - S Fork Clearwater R	BPA	List of additional roads for obliteration
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1578	Protect and Restore Mill Creek Watershed	BPA	Enhanced riparian areas
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1578	Protect and Restore Mill Creek Watershed	BPA	MOA with the Nez Perce NF
Protect & Enhance Tributary Habitat	Tributary Water Quantity	154	1736	Salmonid Production in Restored Rattlesnake Creek	BPA	Evaluation of habitat and population conditions
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	<i>unassigned</i>	Milton-Freewater Walla Walla River, OR, Section 1135	COE	Up to 25 hectares of floodplain restored.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	<i>unassigned</i>	Grande Ronde, LaGrande OR, Section 1135	COE	Improve 2 ½ river miles of habitat
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	<i>unassigned</i>	Ladd Marsh Grande Ronde Ladd Creek, Section 206	COE	Restore natural function in up to one mile of creek.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	<i>unassigned</i>	East Birch Creek Umatilla County OR, Section 206	COE	Complete '02. Salmonid spawning and rearing habitat improved. 1.2 miles of natural channel restoration
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	<i>unassigned</i>	Walla Walla General Investigation	COE	Feasibility study, gather baseline info, develop alternatives
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	<i>unassigned</i>	Trout Creek, Section 206	COE	Begin construction. Restore natural channel and geomorphic function up to 3 river miles.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	<i>unassigned</i>	Salmon Creek, Vancouver, WA Section 206	COE	Begin construction
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	<i>unassigned</i>	Fox Creek, Rainier, Oregon Section 1135	COE	Restore approximately 500' riparian habitat
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	<i>unassigned</i>	Reevaluate Lower Snake Compensation Plan	COE	Complete analysis and recommendations
Protect & Enhance Tributary Habitat	Tributary Watershed Health	151	<i>unassigned</i>	Reevaluate Lower Snake Compensation Plan	COE	Complete analysis and recommendations
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	<i>unassigned</i>	Milton-Freewater Walla Walla River, OR, Section 1135	COE	Up to 25 hectares of floodplain restored.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	<i>unassigned</i>	Grande Ronde, LaGrande OR, Section 1135	COE	Improve 2 ½ river miles of habitat
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	<i>unassigned</i>	Ladd Marsh Grande Ronde Ladd Creek, Section 206	COE	Restore natural function in up to one mile of creek.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	<i>unassigned</i>	East Birch Creek Umatilla County OR, Section 206	COE	Complete '02. Salmonid spawning and rearing habitat improved. 1.2 miles of natural channel restoration
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	<i>unassigned</i>	Walla Walla General Investigation	COE	Feasibility study, gather baseline info, develop alternatives

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	<i>unassigned</i>	Trout Creek, Section 206	COE	Begin construction. Restore natural channel and geomorphic function up to 3 river miles.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	<i>unassigned</i>	Salmon Creek, Vancouver, WA Section 206	COE	Begin construction
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	<i>unassigned</i>	Fox Creek, Rainier, Oregon Section 1135	COE	Restore approximately 500' riparian habitat
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian fencing on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Instream work on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian planting on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	286	Umatilla Habitat Improvement / CTUIR	BPA	Anadromous habitat enhancement for Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	709	Model Watershed Studies - Lemhi River Basin	BPA	Watershed restoration in Lemhi River Basin, Pahsimeroi River basin and East Fork Salmon River basin
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	850	Upper Salmon River Anadromous Fish Passage	BPA	Diversion headgates, improved water distribution, and acquired instream flow
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	850	Upper Salmon River Anadromous Fish Passage	BPA	Habitat enhancement and passage restoration through fishways, diversion headgates, improved water distribution, and acquired instream flow
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	850	Upper Salmon River Anadromous Fish Passage	BPA	Fishways
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	852	Oregon Fish Screens Project	BPA	DeNiel fish passage structures in Trout Cr
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	852	Oregon Fish Screens Project	BPA	La Grande fish screen shop
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	852	Oregon Fish Screens Project	BPA	John Day fish screen shop
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	852	Oregon Fish Screens Project	BPA	Fabricate & install fish screens in John Day, Umatilla, & Walla Walla Basins
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	886	Idaho Fish Screening Improvement	BPA	Consolidate and screen diversions
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	888	Idaho Model Watershed Habitat Projects	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	888	Idaho Model Watershed Habitat Projects	BPA	Controlling livestock grazing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	888	Idaho Model Watershed Habitat Projects	BPA	Resource Management System plans
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	888	Idaho Model Watershed Habitat Projects	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	888	Idaho Model Watershed Habitat Projects	BPA	Instream structures
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1095	Juvenile & Adult Passage- Walla Walla Basin	BPA	Screen/trap facilities

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1101	Walla Walla Basin Anadromous Fish Passage	BPA	Adult passage at irrigation diversion dams
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1141	Methow River Valley Irrigation District - YN	BPA	Increased instream flow
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1141	Methow River Valley Irrigation District - YN	BPA	Pressurized irrigation system
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Pushup dams replaced
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Monitoring of results
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Pumping stations established
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1402	Irrigation & Riparian Improvements - John Day R	BPA	Alternative irrigation sources / techniques
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1402	Irrigation & Riparian Improvements - John Day R	BPA	Push-up dams eliminated
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1402	Irrigation & Riparian Improvements - John Day R	BPA	Permanent intake structures
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1408	Assess Salmonid Habitat Walla Walla Watershed - WA	BPA	Assesment of conditions and populations
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1478	Restore Salmon River - Challis Area	BPA	Restored fish habitat
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1497	Salmon Creek Instream Flow & Habitat Survey	BPA	Fishery and water resources documented
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1497	Salmon Creek Instream Flow & Habitat Survey	BPA	Hydrologic model for the drainage
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1575	Walla Walla River Fish Passage Operations	BPA	Passage facilities
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1575	Walla Walla River Fish Passage Operations	BPA	Trapping facilities
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1575	Walla Walla River Fish Passage Operations	BPA	Effectively utilizing transport equipment
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1734	Fifteen Mile Subbasin Water Right Acquisition	BPA	Acquired water rights
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1735	Salmon and Steelhead Exertion Study	BPA	Location of difficult fish passage sites
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1749	Gourley Creek Dam Fish Ladder	BPA	Eliminated fish passage barrier
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1750	Protect ESA Fish With Screens in Walla Walla Basin	BPA	Fish screens for 197 Walla Walla Basin irrigation diversions.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1753	Farmers Irr Dist Mainstem Hood River Fish Screen	BPA	New horizontal fixed plate screen
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1762	Reconnect Little Morgan Creek to Pahsimeroi River	BPA	Little Morgan Creek reconnected with Pahsimeroi River
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1762	Reconnect Little Morgan Creek to Pahsimeroi River	BPA	14.3 miles of historical anadromous habitat restored
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1763	Restoration of Anadromous Fish Access to Hawley Cr	BPA	Improve irrigation methods

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1763	Restoration of Anadromous Fish Access to Hawley Cr	BPA	Reduced water temperatures
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1763	Restoration of Anadromous Fish Access to Hawley Cr	BPA	Restored riparian habitat
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1763	Restoration of Anadromous Fish Access to Hawley Cr	BPA	Hawley Creek reconnected to the Lemhi River
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1765	Supplemental Flows in Buck Hollow	BPA	headwater irrigation well
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1765	Supplemental Flows in Buck Hollow	BPA	Supplemented stream flow (1-1.5 cfs)
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1768	Trout Creek Streamflow Enhancement	BPA	Safer culverts
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1768	Trout Creek Streamflow Enhancement	BPA	Fish passage barriers removed
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1770	Badger Creek Culvert Replacement	BPA	Box culvert eliminating fish passage barrier
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1774	Touchet River Stream Flow Enhancement	BPA	Acquired water rights
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1774	Touchet River Stream Flow Enhancement	BPA	Increased stream flows
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1775	Lostine River Streamflow Enhancement	BPA	Acquired water rights
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1775	Lostine River Streamflow Enhancement	BPA	Increased stream flows
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1776	Methow River Basin Screening	BPA	new fish screens constructed
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1776	Methow River Basin Screening	BPA	Fish screen facilities upgrades
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1777	Simcoe Creek Streamflow Enhancement	BPA	Canal screens
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1777	Simcoe Creek Streamflow Enhancement	BPA	Ladders at two diversion dams
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1777	Simcoe Creek Streamflow Enhancement	BPA	Off site water facilities
Protect & Enhance Tributary Habitat	Tributary Watershed Health	149	1778	Hancock Springs Passage & Habitat Restoration	BPA	Access to spring fed channel
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian planting on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Instream work on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian fencing on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	137	Joseph Creek & Grande Ronde River Habitat Work	BPA	Instream work on Joseph Creek drainage and upper Grande Ronde R.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	137	Joseph Creek & Grande Ronde River Habitat Work	BPA	Riparian fencing on Joseph Creek drainage and upper Grande Ronde R.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	286	Umatilla Habitat Improvement / CTUIR	BPA	Anadromous habitat enhancement for Meacham Cr

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Riparian fencing E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Instream structures: E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	752	Lower Yakima Valley Riparian/Wetlands - Phase I	BPA	Protecting and enhancing riparian and wetland habitat in the Yakama Reservation.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	825	Fifteenmile Creek Habitat Improvement	BPA	Riparian fencing in the Fifteenmile Creek Basin
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	825	Fifteenmile Creek Habitat Improvement	BPA	Bank stabilization work in the Fifteenmile Creek Basin
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	888	Idaho Model Watershed Habitat Projects	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	888	Idaho Model Watershed Habitat Projects	BPA	Instream structures
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	888	Idaho Model Watershed Habitat Projects	BPA	Resource Management System plans
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	888	Idaho Model Watershed Habitat Projects	BPA	Controlling livestock grazing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	888	Idaho Model Watershed Habitat Projects	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon pool development
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon stream bank stabilization
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon riparian planting
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	899	Pataha Creek Stream & Cropland Restoration	BPA	Reduced sediment delivery
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	899	Pataha Creek Stream & Cropland Restoration	BPA	Off site watering.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian vegetation management
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	929	Trout Creek Operation & Maintenance	BPA	O & M of habitat improvements
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	929	Trout Creek Operation & Maintenance	BPA	M & E of habitat improvements / smolt production
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	937	Salmon River Habitat Enhancement and O&M	BPA	M & E of habitat improvements
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	937	Salmon River Habitat Enhancement and O&M	BPA	O & M of habitat improvements
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1034	Squaw Creek Watershed Wildlife Project	BPA	Implemented management plan

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1034	Squaw Creek Watershed Wildlife Project	BPA	Purchased land
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1089	Upper Salmon River Diversion Consolidation Program	BPA	Consolidate diversions and screen
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1141	Methow River Valley Irrigation District - YN	BPA	Pressurized irrigation system
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1141	Methow River Valley Irrigation District - YN	BPA	Increased instream flow
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1143	Yakima Watershed Restoration - Satus Creek - YIN	BPA	Improved fish habitat
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Stabilized banks
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Noxious weed control
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1205	Nez Perce NE Oregon Wildlife Project: Helm Tract	BPA	Helm Tract additions
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1208	Grande Ronde Watershed Restoration - CTUIR	BPA	Enhanced water quality
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1208	Grande Ronde Watershed Restoration - CTUIR	BPA	Enhanced water quantity
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1208	Grande Ronde Watershed Restoration - CTUIR	BPA	Enhanced instream habitat
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1208	Grande Ronde Watershed Restoration - CTUIR	BPA	Enhanced riparian habitat
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1263	Wallowa County/Nez Perce Salmon Habitat Recovery	BPA	Implementation of the Salmon Habitat Recovery Plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1263	Wallowa County/Nez Perce Salmon Habitat Recovery	BPA	Monitoring of the Salmon Habitat Recovery Plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1358	Cottonwood Creek Riparian Enhancement/Wallowa	BPA	Road removed from riparian zone where possible
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1358	Cottonwood Creek Riparian Enhancement/Wallowa	BPA	Bridges repaired
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1358	Cottonwood Creek Riparian Enhancement/Wallowa	BPA	Eroded road restored
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1358	Cottonwood Creek Riparian Enhancement/Wallowa	BPA	Cut banks armored
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1361	Water Quality Monitoring for Grande Ronde Basin	BPA	Coordinated monitoring
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1361	Water Quality Monitoring for Grande Ronde Basin	BPA	Expanded monitoring program
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1361	Water Quality Monitoring for Grande Ronde Basin	BPA	Reports of conditions and trends
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1409	Hood River Fish Habitat	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1409	Hood River Fish Habitat	BPA	Alternative irrigation water source developed

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1409	Hood River Fish Habitat	BPA	Problems resolved at diversions
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1409	Hood River Fish Habitat	BPA	Rip rap stream banks
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1411	Acquisition of Pine Creek Ranch	BPA	Pine Creek Ranch
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1442	Mcintyre Road Relocation - Union County	BPA	Obliterated road
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1442	Mcintyre Road Relocation - Union County	BPA	Reconstructed county road
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1444	Grouse Creek Culvert Replacement	BPA	Grouse Creek multi-plate arch culvert
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1444	Grouse Creek Culvert Replacement	BPA	Road raised and alignment improved
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1465	Bakeoven Riparian Assessment	BPA	Fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1465	Bakeoven Riparian Assessment	BPA	Off-site water developments
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1465	Bakeoven Riparian Assessment	BPA	Assessment of Bakeoven watershed conditions
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1465	Bakeoven Riparian Assessment	BPA	Revegetation
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1465	Bakeoven Riparian Assessment	BPA	Watershed restoration plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1465	Bakeoven Riparian Assessment	BPA	Watershed monitoring plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1503	Union County Technical Engineering Assistance	BPA	Technical support
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1504	Wallowa County Technical Engineering Assistance	BPA	Water Temperature Software Project
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1505	Water Temp Manipulation & Data Sharing Software	BPA	Public domain software program for water temperature data collection and analysis
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1521	Grande Ronde - Union SWCD Chan, Rd & Passage Rest	BPA	Grande Ronde bank work
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1521	Grande Ronde - Union SWCD Chan, Rd & Passage Rest	BPA	Mill Creek / Caldwell diversion dam passage improvement
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1521	Grande Ronde - Union SWCD Chan, Rd & Passage Rest	BPA	Smutz Draw road relocation
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1521	Grande Ronde - Union SWCD Chan, Rd & Passage Rest	BPA	Phillips Creek bridge,
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1522	Grande Ronde - Union SWCD Riparian, Upland Rest	BPA	Soil aerator
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1522	Grande Ronde - Union SWCD Riparian, Upland Rest	BPA	Ladd Creek riparian fence
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1522	Grande Ronde - Union SWCD Riparian, Upland Rest	BPA	Cattle watering troughs

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1524	Alpine Meadows - Trout Creek Restoration	BPA	Eroding Trout Creek channel stabilized
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1530	Wallowa County Gauging Stations	BPA	Maintain seven stream gages
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1531	Hagedorn Road Relocation/Stream Restoration	BPA	Old Hagedorn Road obliterated
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1531	Hagedorn Road Relocation/Stream Restoration	BPA	Hagedorn Road relocated
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1533	Grande Ronde Basin Tech Engineering Assistance	BPA	Technical support
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1537	Wallowa County Direct Seeding	BPA	No-till agriculture demonstration
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1538	Crow Cr Star Thistle Containment & Riparian Enhanc	BPA	Spalding catchfly protected
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1538	Crow Cr Star Thistle Containment & Riparian Enhanc	BPA	Noxious weed control
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1557	Acquire Oxbow Ranch Middle Fork John Day River	BPA	Oxbow Ranch
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1562	WLMitigation Sites Oregon, Wenaha WMA Additions	BPA	Enhanced Wenaha WMA
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1562	WLMitigation Sites Oregon, Wenaha WMA Additions	BPA	Land acquisition or easement
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1563	WL Mitigation Sites Oregon, Ladd Marsh Additions	BPA	Ladd Marsh WMA additions
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1563	WL Mitigation Sites Oregon, Ladd Marsh Additions	BPA	Enhanced additions to Ladd Marsh WMA
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Enhanced properties
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Monitored projects
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1607	Conservation Reserve Enhancement Program Incentive	BPA	Riparian protective strips along streams
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1609	Mccoys Cr Alta Cunha Ranches Instream Restoration	BPA	Pasture rest
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1609	Mccoys Cr Alta Cunha Ranches Instream Restoration	BPA	Replanted riparian zone
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1609	Mccoys Cr Alta Cunha Ranches Instream Restoration	BPA	Obliterated 3000 feet of abandoned railroad grade
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1609	Mccoys Cr Alta Cunha Ranches Instream Restoration	BPA	Large woody debris in stream
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1609	Mccoys Cr Alta Cunha Ranches Instream Restoration	BPA	McCoy Creek pasture fences
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1623	Asotin Watershed Grazing Biological Plan	BPA	Weed control
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1624	Rainwater Wildlife O & M	BPA	M & E for Rainwater Wildlife Area

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1731	Fifteen Mile Creek Riparian Fencing/Stream Survey	BPA	Physical evaluation of streams
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1731	Fifteen Mile Creek Riparian Fencing/Stream Survey	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1746	Protect Bear Valley Wild Salmon Spawning Habitat	BPA	Closed Grazing allotment
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1748	Arrowleaf/Methow River Conservation	BPA	Arrowleaf property
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1751	Wagner Ranch Acquisition	BPA	Wagner Ranch
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1752	Forrest Ranch Acquisition	BPA	Forrest Ranch
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1754	Acquire 27,000 Camp Creek Ranch at Zumwalt Prairie	BPA	27,000 acres of Zumwalt Prairie
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1755	Conservation Easement, Baker Ranch, Salmon River	BPA	Restored stream banks
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1755	Conservation Easement, Baker Ranch, Salmon River	BPA	70 cfs remaining in stream thru closure of 7 diversions
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1755	Conservation Easement, Baker Ranch, Salmon River	BPA	Protected riparian areas
Protect & Enhance Tributary Habitat	Tributary Watershed Health	150	1755	Conservation Easement, Baker Ranch, Salmon River	BPA	Conservation easement
Protect & Enhance Tributary Habitat	Tributary Watershed Health	151	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Instream work on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	151	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian fencing on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	151	133	Mainstem & Middle Fork John Day Habitat Work	BPA	Riparian planting on Middle Fk and mainstem John Day River tributaries.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	151	286	Umatilla Habitat Improvement / CTUIR	BPA	Anadromous habitat enhancement for Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Watershed Health	151	1141	Methow River Valley Irrigation District - YN	BPA	Pressurized irrigation system
Protect & Enhance Tributary Habitat	Tributary Watershed Health	151	1141	Methow River Valley Irrigation District - YN	BPA	Increased instream flow
Protect & Enhance Tributary Habitat	Tributary Watershed Health	151	1467	15 Mile Creek Water Right Acquisition	BPA	Increase stream flow
Protect & Enhance Tributary Habitat	Tributary Watershed Health	151	1467	15 Mile Creek Water Right Acquisition	BPA	Acquired water rights
Protect & Enhance Tributary Habitat	Tributary Watershed Health	151	1725	Echo Meadow Winter Artificial Recharge	BPA	Linkages between winter artificial recharge of groundwater to the return flows
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Instream structures: E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Riparian fencing E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	707	Grande Ronde Model Watershed Development	BPA	Habitat restoration in the Grande Ronde basin
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	709	Model Watershed Studies - Lemhi River Basin	BPA	Watershed restoration in Lemhi River Basin, Pahsimeroi River basin and East Fork Salmon River basin
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	819	Red River Restoration (Little Ponderosa Ranch)	BPA	Riparian cover and temperature control in lower Red River Meadow.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	819	Red River Restoration (Little Ponderosa Ranch)	BPA	Bank stabilization in lower Red River Meadow.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon riparian planting
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon pool development
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon stream bank stabilization
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	899	Pataha Creek Stream & Cropland Restoration	BPA	Reduced sediment delivery
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	899	Pataha Creek Stream & Cropland Restoration	BPA	Off site watering.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian vegetation management
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	926	Wallowa Basin Project Planning	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	929	Trout Creek Operation & Maintenance	BPA	M & E of habitat improvements / smolt production
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	929	Trout Creek Operation & Maintenance	BPA	O & M of habitat improvements
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1034	Squaw Creek Watershed Wildlife Project	BPA	Implemented management plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1034	Squaw Creek Watershed Wildlife Project	BPA	Purchased land
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1089	Upper Salmon River Diversion Consolidation Program	BPA	Consolidate diversions and screen
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1143	Yakima Watershed Restoration - Satus Creek - YIN	BPA	Improved fish habitat
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Noxious weed control
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Stabilized banks
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1170	Clear Cr & NF John Day Dredge-Tailings Restoration	BPA	Redistributed dredge tailings
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1170	Clear Cr & NF John Day Dredge-Tailings Restoration	BPA	Improved stream channel

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Pumping stations established
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Monitoring of results
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1401	Gravel Push-Up Dam Removal Lower N FK John Day R	BPA	Pushup dams replaced
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1402	Irrigation & Riparian Improvements - John Day R	BPA	Permanent intake structures
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1402	Irrigation & Riparian Improvements - John Day R	BPA	Push-up dams eliminated
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1402	Irrigation & Riparian Improvements - John Day R	BPA	Alternative irrigation sources / techniques
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1419	Implement Trout Creek Watershed Enhancement	BPA	Implemented restoration plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1419	Implement Trout Creek Watershed Enhancement	BPA	Infiltration galleries
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1419	Implement Trout Creek Watershed Enhancement	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Reestablished passage into tributary habitats
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Purchased property / easements
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1465	Bakeoven Riparian Assessment	BPA	Assessment of Bakeoven watershed conditions
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1465	Bakeoven Riparian Assessment	BPA	Watershed monitoring plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1465	Bakeoven Riparian Assessment	BPA	Watershed restoration plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1465	Bakeoven Riparian Assessment	BPA	Fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1465	Bakeoven Riparian Assessment	BPA	Off-site water developments
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1465	Bakeoven Riparian Assessment	BPA	Revegetation
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1469	Pine Hollow Watershed Enhancement	BPA	Replanted riparian areas.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1469	Pine Hollow Watershed Enhancement	BPA	Master plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1469	Pine Hollow Watershed Enhancement	BPA	Critical areas reseeded
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1469	Pine Hollow Watershed Enhancement	BPA	Cross fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1469	Pine Hollow Watershed Enhancement	BPA	Springs developed
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1472	Ahtanum Creek Watershed Assessment	BPA	Assessed stream habitat conditions

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1472	Ahtanum Creek Watershed Assessment	BPA	Irrigated lands & water delivery systems mapped
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1472	Ahtanum Creek Watershed Assessment	BPA	Water discharge & temperature monitored
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1472	Ahtanum Creek Watershed Assessment	BPA	Assessed salmonid populated
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Sediment control basins
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Modified agricultural techniques
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Vegetation management
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Improved agricultural /range land useage
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Improved steelhead spawning & rearing habitat
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Coordination of funding and effort
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1481	Pataha Watershed Project Planning & Implementation	BPA	Water quality monitored
Protect & Enhance Tributary Habitat	Tributary Watershed Health	152	1481	Pataha Watershed Project Planning & Implementation	BPA	Pataha Creek Model Watershed Plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	153	137	Joseph Creek & Grande Ronde River Habitat Work	BPA	Instream work on Joseph Creek drainage and upper Grande Ronde R.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	153	137	Joseph Creek & Grande Ronde River Habitat Work	BPA	Riparian fencing on Joseph Creek drainage and upper Grande Ronde R.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	153	707	Grande Ronde Model Watershed Development	BPA	Habitat restoration in the Grande Ronde basin
Protect & Enhance Tributary Habitat	Tributary Watershed Health	153	888	Idaho Model Watershed Habitat Projects	BPA	Controlling livestock grazing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	153	888	Idaho Model Watershed Habitat Projects	BPA	Resource Management System plans
Protect & Enhance Tributary Habitat	Tributary Watershed Health	153	888	Idaho Model Watershed Habitat Projects	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tributary Watershed Health	153	888	Idaho Model Watershed Habitat Projects	BPA	Instream structures
Protect & Enhance Tributary Habitat	Tributary Watershed Health	153	888	Idaho Model Watershed Habitat Projects	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	153	926	Wallowa Basin Project Planning	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	153	1548	Training Support to Nracs/Wildland Hydrology	BPA	Fluvial geomorphology short course attendees
Protect & Enhance Tributary Habitat	Tributary Watershed Health	153	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Monitored projects
Protect & Enhance Tributary Habitat	Tributary Watershed Health	153	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Watershed plan

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Watershed Health	153	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Enhanced properties
Protect & Enhance Tributary Habitat	Tributary Watershed Health	153	1607	Conservation Reserve Enhancement Program Incentive	BPA	Riparian protective strips along streams
Protect & Enhance Tributary Habitat	Tributary Watershed Health	153	1732	Fifteen Mile Creek Riparian Buffers	BPA	Riparian buffer
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Instream structures: E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	287	Umatilla Fish Habitat Improvement / ODFW	BPA	Riparian fencing E & W Birch Creeks, Meacham Cr & North Fk of Meacham Cr
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	710	Life Studies of Spring Chinook -Grande Ronde River	BPA	Study report on the abundance, migration patterns, survival, and habitat use of spring chinook salmon juveniles in the Grande Ronde River basin.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	819	Red River Restoration (Little Ponderosa Ranch)	BPA	Bank stabilization in lower Red River Meadow.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	819	Red River Restoration (Little Ponderosa Ranch)	BPA	Riparian cover and temperature control in lower Red River Meadow.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	888	Idaho Model Watershed Habitat Projects	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	888	Idaho Model Watershed Habitat Projects	BPA	Controlling livestock grazing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	888	Idaho Model Watershed Habitat Projects	BPA	Resource Management System plans
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	888	Idaho Model Watershed Habitat Projects	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	888	Idaho Model Watershed Habitat Projects	BPA	Instream structures
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon stream bank stabilization
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon riparian planting
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	898	Tucannon Stream & Riparian Restoration	BPA	Tucannon pool development
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian vegetation management
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	899	Pataha Creek Stream & Cropland Restoration	BPA	Off site watering.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	899	Pataha Creek Stream & Cropland Restoration	BPA	Reduced sediment delivery
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	899	Pataha Creek Stream & Cropland Restoration	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	929	Trout Creek Operation & Maintenance	BPA	O & M of habitat improvements
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	929	Trout Creek Operation & Maintenance	BPA	M & E of habitat improvements / smolt production

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1034	Squaw Creek Watershed Wildlife Project	BPA	Implemented management plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1034	Squaw Creek Watershed Wildlife Project	BPA	Purchased land
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1089	Upper Salmon River Diversion Consolidation Program	BPA	Consolidate diversions and screen
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1143	Yakima Watershed Restoration - Satus Creek - YIN	BPA	Improved fish habitat
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Noxious weed control
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1163	Walla Walla River Basin Fish Habitat Enhancement	BPA	Stabilized banks
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1170	Clear Cr & NF John Day Dredge-Tailings Restoration	BPA	Improved stream channel
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1170	Clear Cr & NF John Day Dredge-Tailings Restoration	BPA	Redistributed dredge tailings
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1198	Protect and Restore Lolo Creek Watershed	BPA	Cattle excluded from critical riparian areas
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1198	Protect and Restore Lolo Creek Watershed	BPA	Stablized landslide sites
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1198	Protect and Restore Lolo Creek Watershed	BPA	Obliterated roads
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1199	Protect & Restore Squaw & Papoose Cr Watersheds	BPA	Obliterated or restored roads
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1199	Protect & Restore Squaw & Papoose Cr Watersheds	BPA	Sediment traps
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1201	Restore Mccommas Meadows - NPT	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1201	Restore Mccommas Meadows - NPT	BPA	Enhanced channel morphology
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1201	Restore Mccommas Meadows - NPT	BPA	Riparian planting
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1212	Clearwater Focus Watershed - State of Idaho	BPA	Coordination of watershed efforts
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1293	Yakima River Side Channels	BPA	Reconnected floodplains
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1293	Yakima River Side Channels	BPA	Access re-established to off-channel rearing habitats
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1295	Toppenish/Simcoe Instream Flow Restoration	BPA	Restored instream flows
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1295	Toppenish/Simcoe Instream Flow Restoration	BPA	Evaluation of the anadromous population and habitat
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1317	Restoration of Watershed, Clearwater Basin	BPA	Installed instream structures
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1317	Restoration of Watershed, Clearwater Basin	BPA	Obliterate unnecessary roads

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1408	Assess Salmonid Habitat Walla Walla Watershed - WA	BPA	Assesment of conditions and populations
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1419	Implement Trout Creek Watershed Enhancement	BPA	Implemented restoration plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1419	Implement Trout Creek Watershed Enhancement	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1419	Implement Trout Creek Watershed Enhancement	BPA	Infiltration galleries
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1422	Implement Wy-Kan-ush-mi Wa-Kish-wit Watershed Plan	BPA	Watershed plans
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1424	Upper Toppenish Creek Watershed Restoration	BPA	Implemented restoration plans
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1424	Upper Toppenish Creek Watershed Restoration	BPA	Analysis of upper Toppenish Creek Watershed
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Reestablished passage into tributary habitats
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Purchased property / easements
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1425	Establish Safe Access Tributaries -Yakima Subbasin	BPA	Riparian fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1465	Bakeoven Riparian Assessment	BPA	Fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1465	Bakeoven Riparian Assessment	BPA	Watershed monitoring plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1465	Bakeoven Riparian Assessment	BPA	Off-site water developments
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1465	Bakeoven Riparian Assessment	BPA	Assessment of Bakeoven watershed conditions
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1465	Bakeoven Riparian Assessment	BPA	Revegetation
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1465	Bakeoven Riparian Assessment	BPA	Watershed restoration plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1469	Pine Hollow Watershed Enhancement	BPA	Critical areas reseeded
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1469	Pine Hollow Watershed Enhancement	BPA	Master plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1469	Pine Hollow Watershed Enhancement	BPA	Springs developed
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1469	Pine Hollow Watershed Enhancement	BPA	Cross fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1469	Pine Hollow Watershed Enhancement	BPA	Replanted riparian areas.
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1472	Ahtanum Creek Watershed Assessment	BPA	Water discharge & temperature monitored
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1472	Ahtanum Creek Watershed Assessment	BPA	Irrigated lands & water delivery systems mapped
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1472	Ahtanum Creek Watershed Assessment	BPA	Assessed salmonid populated

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1472	Ahtanum Creek Watershed Assessment	BPA	Assessed stream habitat conditions
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Sediment control basins
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Modified agricultural techniques
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Vegetation management
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1473	Restore Anadromous Fish Habitat - Little Canyon Cr	BPA	Fencing
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Improved steelhead spawning & rearing habitat
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Improved agricultural /range land useage
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1474	Restore Anadromous Fish Habitat - Nichols Canyon	BPA	Coordination of funding and effort
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1475	Protecting & Restoring Big Canyon Creek Watershed	BPA	Assessed watershed conditions
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1475	Protecting & Restoring Big Canyon Creek Watershed	BPA	Watershed plans
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1476	Rehabilitate Lapwai Creek	BPA	Lapwai Watershed Plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1478	Restore Salmon River - Challis Area	BPA	Restored fish habitat
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1481	Pataha Watershed Project Planning & Implementation	BPA	Pataha Creek Model Watershed Plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1481	Pataha Watershed Project Planning & Implementation	BPA	Water quality monitored
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1553	Rock Creek Watershed Assessment & Restoration	BPA	Rock Creek watershed study
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Enhanced properties
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1573	Enhance North Fork John Day River Subbasin - CTUIR	BPA	Monitored projects
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1576	Protect N Lochsa Face Analysis Area Watershed	BPA	Obliterated road
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1576	Protect N Lochsa Face Analysis Area Watershed	BPA	Sediment input alleviated
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1576	Protect N Lochsa Face Analysis Area Watershed	BPA	M & E program
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1577	Rehabilitate Newsome Creek - S Fork Clearwater R	BPA	List of additional roads for obliteration
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1577	Rehabilitate Newsome Creek - S Fork Clearwater R	BPA	Plan for restoration of dredged areas
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1577	Rehabilitate Newsome Creek - S Fork Clearwater R	BPA	Obliterate 10 miles of road

Table 3: List of Habitat Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1577	Rehabilitate Newsome Creek - S Fork Clearwater R	BPA	Watershed plan
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1578	Protect and Restore Mill Creek Watershed	BPA	MOA with the Nez Perce NF
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1578	Protect and Restore Mill Creek Watershed	BPA	Enhanced riparian areas
Protect & Enhance Tributary Habitat	Tributary Watershed Health	154	1736	Salmonid Production in Restored Rattlesnake Creek	BPA	Evaluation of habitat and population conditions

Table 4: List of Hatchery Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Hatchery Reform	Develop HGMPs	169		HGMPs for LSRCP hatcheries (Mountain Snake & Blue Mountain Provinces)	BPA	Develop HGMPs
Hatchery Reform	Develop HGMPs	169		HGMPs for USBR hatcheries (Columbia Cascade Province)	USBR	Develop HGMPs
Comprehensive Marking Plan		174		Marking Strategy Oversight Group	BPA	Completion of marking strategy
Use a Safety Net Program		175	1277	Listed Stock Chinook Salmon Gamete Preservation	BPA	Progress of this project will be reported in FY 2002 annual report, which will be available on the BPA Fish & Wildlife web site.
Use a Safety Net Program		175	1549	Infrastructure for FDA Registration of Erythromycin	BPA	Provide support for the infrastructure of registration effort of erythromycin by the FDA
Use a Safety Net Program		175	1760	Safety Net Coordinator	BPA	Safety net coordinator will facilitate meetings to insure the completion of HGMPs.
Use a Safety Net Program		175	359	NE Oregon Hatchery Master Plan - Nez Perce	BPA	Final designs, estimates and schedules
Use a Safety Net Program		175	363	NE Oregon Outplanting Facilities Plan - ODFW	BPA	Review, input on designs, NEPA, etc.
Use a Safety Net Program		175	609	Genetic Analyses of Columbia & Snake Sockeye	BPA	DNA analyses and other genetic information/assistance needed by the Snake River sockeye and chinook salmon captive broodstock (safety-net) programs
Use a Safety Net Program		175	669	Redfish Lake Sockeye Rearing and Trapping	BPA	Protective rearing of captive broodstocks of Snake River sockeye salmon and production of juveniles and adults for release in Redfish Lake, ID, and other Stanley Basin lakes

Table 4: List of Hatchery Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Use a Safety Net Program		175	723	Redfish Lake Sockeye Broodstock Rearing/Research	BPA	Protective rearing of captive broodstocks of Snake River sockeye salmon and production of juveniles and adults for release in Redfish Lake, ID, and other Stanley Basin lakes
Use a Safety Net Program		175	1155	Johnson Creek Artificial Propagation Enhancement	BPA	It is anticipated that construction will occur in FY 2002; maintain ESA-listed by utilizing supplementation to prevent extirpation of the Johnson Creek summer chinook salmon population and to maintain genetic diversity (O&M). M&E: to assess effectiveness of program.
Use a Safety Net Program		175	1186	Manchester Spring Chinook Captive Brood	BPA	Maintain ESA-Listed stocks of Snake river Spring/summer Chinook Salmon while habitat improvements are under way and provide for a geographically separate captive brood population to insure against a catastrophic loss should that occur at one site.
Use a Safety Net Program		175	1231	Idaho Chinook Salmon Captive Rearing	BPA	Maintain ESA-Listed stocks of Snake river Spring/summer Chinook Salmon while habitat improvements are under way and provide for a geographically separate captive brood population to insure against a catastrophic loss should that occur at one site. Annual M&E Report.

Table 4: List of Hatchery Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Use a Safety Net Program		175	1379	Grande Ronde Supplementation Facilities- O&M - NPT	BPA	Hatchery master plan
Use a Safety Net Program		175	1380	Grande Ronde Supplementation - O&M -CTUIR	BPA	Hatchery master plan
Use a Safety Net Program		175	1386	Grande Ronde Captive Brood O&M / M&E	BPA	Maintain ESA-Listed stocks of Snake river Spring/summer Chinook Salmon while habitat improvements are under way and provide for a geographically separate captive brood population to insure against a catastrophic loss should that occur at one site. Annual Monitoring and Evaluation Report
Use a Safety Net Program		175	1390	Pittsburg Landing Acclimation Facility - Snake River	BPA	Progress of this project will be reported in FY 2002 annual report, which will be available on the BPA Fish & Wildlife web site.
Use a Safety Net Program		175	1391	Captive Broodstock Artificial Propagation	BPA	Progress of this project will be reported in FY 2002 annual report, which will be available on the BPA Fish & Wildlife web site.
Use a Safety Net Program		175	1561	Tucannon River Spring Chinook Captive Broodstock	BPA	Raise and spawn captive brood adult spring chinook salmon. Raise, mark and release juveniles. Monitor genetics of hatchery adults and progeny. Cooperate in information exchange with other captive salmon programs in the Columbia/Snake River basin.

**Table 5: List of Harvest
Projects**

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Develop Fishing Techniques	Gear Efficacy	164	1717	Evaluate Live Capture Selective Harvest	BPA	Comprehensive assessment of the full impact of selective fisheries (gear and methods) on the spawning success of ESA listed stocks
Develop Fishing Techniques	Gear Efficacy	164	1717	Evaluate Live Capture Selective Harvest	BPA	Feasibility and effectiveness of tooth-tangle net gear at reducing take of ESA salmonids, including logistics for transfer of technology
Develop Fishing Techniques	Incidental Mortality	167	1450	NMFS Net Exchange Program	BPA	increase in stock survival through the migration corridor.
Develop Fishing Techniques	Incidental Mortality	167	1450	NMFS Net Exchange Program	BPA	Determine effectiveness of alternate gillnet mesh size at reducing take of ESA steelhead while maintaining viable tribal fisheries
Develop Fishing Techniques	Incidental Mortality	167	1813	Scope of Research on Gear Impacts to Salmonids	BPA	Prioritized list of gear types and associated mortality studies to be evaluated
Harvest Management Decisions	Improve escapement assessments	166	1815	Scope of effort to improve catch sampling programs	BPA	Prioritized list of harvest management information needs
Harvest Management Decisions	Selective Fisheries	165	1814	Scope of future RME & harvest management decisions	BPA	Prioritized list of critical uncertainties and information needs
Harvest Management Decisions	Unaccounted Harvest Mortality	167	1771	Feasibility of Removal of Ghost Fishing Nets	BPA	Locate and remove any ghost nets. Possible estimate of loss.
Sustainable Fisheries	Value Added Projects	C/R 11.13	1816	Identify fishery economic development strategies	BPA	Economic development strategies

**Table 5: List of Harvest
Projects**

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Sustainable Fisheries	Terminal Fishing Locations	C/R 11.12	846	Columbia River Terminal Fisheries Research - ODFW	BPA	Provide additional hatchery production and terminal fishing opportunities in the Lower Columbia Estuary.
Sustainable Fisheries	Terminal Fishing Locations	C/R 11.12	1818	Inventory of potential terminal fishing locations	BPA	Prioritized list of sites for further development
Fishery Effort Reduction	N/A	C/R 11.13			BPA	Decrease in harvest related mortality and resultant increase in life-stage survival
Crediting Harvest Reforms	N/A	168			BPA	Accounting approach to be used when harvest projects are implemented

Table 6: List of Resident Fish Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.2.a.9 8.3.d 8.4.a 8.4.b	377	Kootenai R. sturgeon studies, conserv'n aquaculture	BPA	>Collect and spawn wild KWS, rear and release up to 12,000 juv. >Construct 2nd KWS hatchery facility. >Begin process to establish experimental KWS population outside of current range. >Begin studies to identify factors limiting KWS recruitment.
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.1.f 8.4.b	936	Improving the Kootenai R. ecosystem	BPA	>Large-scale nutrient enhancement of Kootenay Lake. > Initiate NEPA for mainstem nutrient enhancement. >M&E results of mesocosm study.
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.1.a 8.1.c 8.1.d 8.1.e 8.1.g 8.2.a.1 8.2.a.2 8.2.a.3 8.2.a.4 8.2.a.7 8.2.c 8.3.a 8.3.c 8.3.f 8.3.g 8.3.h 10.4 10.5 10.A.1.1 10.A.1.2 11.A.1.1.a 11.A.1.1.b 11.A.1.1.c 11.A.1.2.a 11.A.1.3.c 11.A.1.4.d	1689	Annual Water Management Plan (1-WMP)	Corps	

Table 6: List of Resident Fish Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.1.b 8.1.d	1690	Five-Year Water Management Plan (5-WMP)	Corps	
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.1.b 8.1.d	1695	Varq Flood Control Operation	Corps	n/a
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.2.a.1	1837	Conduct Libby Spill Test	Corps	> Libby spill test is scheduled.
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.2.c	1838	Conduct KWS operation as defined by USFWS	Corps	> Libby outflow will follow guidelines provided by the Service prior to and during the KWS operation.
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.1.g 8.2.c 11.A.1.1.b 11.A.1.1.c	1840	Coordinate Water Management Decisions with TMT	Corps	> Relevant water management decisions will be coordinated.
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.1.g	1841	Coordinate Water Management Decisions with USFWS	Corps	> Coordination with USFWS will occur.
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.3.b	1843	Don't exceed Bonners Ferry levee elevations during sturgeon flows	Corps	> KWS spawning flows will not exceed a levee elevation of 1,764 feet at Bonners Ferry.

Table 6: List of Resident Fish Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.3.g	1845	During KWS recruitment use local inflows to supplement Libby Dam releases	Corps	> During KWS recruitment flow periods, local inflow will be allowed to supplement Libby Dam releases
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.3.a	1847	Evaluation of flood levels etc., along the banks of the Kootenai River below Libby Dam is proceeding.	Corps	> Flood evaluation, including assessment of public safety, is completed. > Channel capacity study scheduled
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.2.a.5	1851	If Libby can not spill 5 Kcfs, begin planning for additional unit or spill deflectors	Corps	> Corps will begin initial assessment of feasibility of additional turbine in FY02.
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.1.b 8.1.d	1853	Implement VARQ at Libby	Corps	> Libby VarQ EIS proceeding.
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.2.a.2	1856	Investigate Kootenai River Channel Capacity	Corps	> Kootenai River channel capacity investigation is proceeding.
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.3.c	1857	Investigate Kootenai Valley Groundwater Seepage	Corps	> Kootenai Valley groundwater seepage study was completed in FY01; a report will be provided in December, 2001.
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.1.h	1870	Libby variable Dec. 31 flood control elevation study proceeding	Corps	n/a

Table 6: List of Resident Fish Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.3.h	1882	Monitor Water Temperature in Lake Koocanusa during May and June	Corps	> Water temperature profiles in Lake Koocanusa during May and June will be monitored .
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.1.e	1883	Negotiate Libby/Arrow Storage Swap	BPA	> A Libby/Arrow swap will be negotiated if needed.
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.2.a.2	1890	O&M - Libby Dam	Corps	> Spillway condition evaluation > NEPA evaluation for spill test > Spill test > Recommendations from spill test
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.2.a.3	1890	O&M - Libby Dam	Corps	> Gas abatement feasibility study
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.2.a.5	1890	O&M - Libby Dam	Corps	> Levee restoration
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.3.b	1890	O&M - Libby Dam	Corps	> Kootenai Valley crop study
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.3.c	1890	O&M - Libby Dam	Corps	> Load following evaluation

Table 6: List of Resident Fish Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.3.e	1890	O&M - Libby Dam	Corps	> Levee erosion outreach
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.3.f	1890	O&M - Libby Dam	Corps	> Kootenai River water level monitoring
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.3.g	1890	O&M - Libby Dam	Corps	> Spillway repair
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.2.a.6	1898	Plan for additional 5 Kcfs (10 total) outflow capability at Libby	Corps	n/a
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.2.a.7	1911	Reinitiate consultation with USFWS if additional flow is not achieved	Corps	n/a
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.1.c	1918	Store water at Libby for KWS Augmentation	Corps	> Appropriate water is stored at Libby for sturgeon augmentation if not using VarQ.
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.2.a.3	1920	Use Libby Spillway for KWS flow augmentation	Corps	n/a

Table 6: List of Resident Fish Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.2.a.4	1921	Use Libby spillway for KWS flow augmentation if Libby elevation above spillbay elevation	Corps	n/a
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.1.i	1922	Volume forecast study for Libby and Kootenai River proceeding	Corps	> Volume forecast study for Libby and Kootenai River proceeding
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.3.i 8.3.j	pending	Assess feasibility of enhancing KWS spawning substrate	BPA	> Animation of sediment transport and bedform movement in KWS spawning habitat. > Description/identification of the availability, movement, and distribution of fluvial sediment within KWS spawning areas.
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.2.a.1 8.2.a.8 8.2.a.9 8.3.d 8.4.b	pending	Kootenai R. Fisheries Recovery Investigations	BPA	> Model of the effects of Kootenay Lake elevation on KWS spawning location. > 1st year results of methods to sample larval KWS.
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Conditions below Libby Dam that facilitate KWS natural reproduction and juvenile survival	8.2.a.8 10.A.1.1 8.3.d	pending	Mitigation for Libby Dam	BPA	> Determine best flows for KWS spawning and rearing. > Juvenile KWS habitat requirements incorporated in IFIM model. > Identify downstream effects of Libby Dam ramping .
Promote the Reproduction and Recruitment of Kootenai River White Sturgeon (KWS).	Kootenai River white sturgeon conservation hatchery program	8.2.a.9 8.3.d 8.4.a 8.4.b	377	Kootenai R. sturgeon studies, conserv'n aquaculture	BPA	> Collect and spawn wild KWS, rear and release up to 12,000 juv. > Construct 2nd KWS hatchery facility. > Begin process to establish experimental KWS population outside of current range. > Begin studies to identify factors limiting KWS recruitment.

Table 6: List of Resident Fish Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Determine the extent to which bull trout use and are affected by FCRPS dams and reservoirs	11.A.1.4.a 11.A.1.4.b 11.A.1.4.d	934	Lake Pend Oreille kokanee mitigation research	BPA	> Estimates of kokanee population size, spawning distribution, effects of lake level on recruitment. > Data, recommendations from shoreline spawning gravel.
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Determine the extent to which bull trout use and are affected by FCRPS dams and reservoirs	8.1.a 8.1.c 8.1.d 8.1.e 8.1.g 8.2.a.1 8.2.a.2 8.2.a.3 8.2.a.4 8.2.a.7 8.2.c 8.3.a 8.3.c 8.3.f 8.3.g 8.3.h 10.4 10.5 10.A.1.1 10.A.1.2 11.A.1.1.a 11.A.1.1.b 11.A.1.1.c 11.A.1.2.a 11.A.1.3.c 11.A.1.4.d	1689	Annual Water Management Plan (1-WMP)	Corps	
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Determine the extent to which bull trout use and are affected by FCRPS dams and reservoirs	11.A.2.1.a 11.A.3.1.b 11.A.3.1.c	1780	Adult fish counting at Corps dams	Corps	> Daily report to Walla Walla District when a bull trout is observed in fishway counting station. >Annual reports of bull trout passage at Corps mainstem dams.
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Determine the extent to which bull trout use and are affected by FCRPS dams and reservoirs	11.2 11.5	1783	Prioritize FCRPS dams for bull trout research	Corps	n/a

Table 6: List of Resident Fish Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Determine the extent to which bull trout use and are affected by FCRPS dams and reservoirs	10.8 11.A.3.1.d 11.A.3.1.f	1794	Evaluate BT movements: Tucannon & Lower Snake	BPA	> 20-40 bull trout captured @ the Tucannon Hatchery trap, then radio-tagged and tracked. (results in 2003 and 2004)
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Determine the extent to which bull trout use and are affected by FCRPS dams and reservoirs	10.8 10.A.3.2 11.6 11.A.3.2.a	1795	Effects of Dworshak Withdrawal on BT Distribution	Corps	> Continue radiotelemetry work (wording from Hydro list)
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Determine the extent to which bull trout use and are affected by FCRPS dams and reservoirs	11.A.1.4.b	pending	Lake Pend Oreille predation research	BPA	> Methods to differentiate predator species from habitat use and echosounder data. > Estimates of predator population sizes. > A method or rationale for managing predators based on production/abundance of kokanee prey.
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Determine the extent to which bull trout use and are affected by FCRPS dams and reservoirs	11.A.2.1.b 11.A.3.1.a	pending	Non-federal smolt monitoring	BPA	>Data on incidence of bull trout movement through juvenile fish passage facilities.
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Determine the extent to which bull trout use and are affected by FCRPS dams and reservoirs	11.A.2.1.d 11.A.2.1.e	pending	Hood R. production program - ODFW M&E	BPA	> 1-24 bull trout radiotagged at Powerdale Dam and tracked through the remainder of the FY.
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Determine the extent to which bull trout use and are affected by FCRPS dams and reservoirs	8.2.a.1 8.2.a.8 8.2.a.9 8.3.d 8.4.b	pending	Kootenai R. Fisheries Recovery Investigations	BPA	> Model of the effects of Kootenay Lake elevation on KWS spawning location. > 1st year results of methods to sample larval KWS.
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Determine the extent to which bull trout use and are affected by FCRPS dams and reservoirs	10.A.1.2	pending	Hungry Horse Mitigation	BPA	> IFIM habitat suitability curves for bull trout in Flathead R. > Effects of HH selective withdrawal on downstream temp. and macrozoobenthos. > Effects of HH ramp rates on bull trout distribution and macrozoobenthos abundance and diversity.
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Determine the extent to which bull trout use and are affected by FCRPS dams and reservoirs	11.A.2.1.b 11.A.3.1.a	pending	Fish Passage Center	BPA	>Design & oversight of the SMP.

Table 6: List of Resident Fish Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Determine the extent to which bull trout use and are affected by FCRPS dams and reservoirs	11.A.2.1.d 11.A.2.1.e	pending	Bull trout assessment in the Columbia R. gorge, WA	BPA	> Developed and initiated plan to capture and radiotag potentially adfluvial bull trout in Washington tribs of Bonneville Pool.
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Determine the extent to which bull trout use and are affected by FCRPS dams and reservoirs	11.A.2.1.f 11.A.2.1.g	pending	Offer to assist in bull trout studies	BPA	> Letters sent and follow-up phone calls made to USFWS, ODFW, WDFW, and USFS to identify BPA contact person(s) and offer to assist.
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Determine the extent to which bull trout use and are affected by FCRPS dams and reservoirs	10.6 11.1	pending	Help develop, implement actions and PS for BT, KWS	BPA	> Letters sent and follow-up phone calls and e-mails made to USFWS to identify BPA contact person(s) and to offer assistance as requested. > Appropriate AA staff participated in completing work products with USFWS.
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Operate and modify FCRPS dams to protect, provide, and reconnect bull trout habitats	11.A.1.4.a 11.A.1.4.b 11.A.1.4.d	934	Lake Pend Oreille kokanee mitigation research	BPA	> Estimates of kokanee population size, spawning distribution, effects of lake level on recruitment. > Data, recommendations from shoreline spawning gravel.
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Operate and modify FCRPS dams to protect, provide, and reconnect bull trout habitats	8.1.f 8.4.b	936	Improving the Kootenai R. ecosystem	BPA	>Large-scale nutrient enhancement of Kootenay Lake. > Initiate NEPA for mainstem nutrient enhancement. >M&E results of mesocosm study.

Table 6: List of Resident Fish Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Operate and modify FCRPS dams to protect, provide, and reconnect bull trout habitats	8.1.a 8.1.c 8.1.d 8.1.e 8.1.g 8.2.a.1 8.2.a.2 8.2.a.3 8.2.a.4 8.2.a.7 8.2.c 8.3.a 8.3.c 8.3.f 8.3.g 8.3.h 10.4 10.5 10.A.1.1 10.A.1.2 11.A.1.1.a 11.A.1.1.b 11.A.1.1.c 11.A.1.2.a 11.A.1.3.c 11.A.1.4.d	1689	Annual Water Management Plan (1-WMP)	Corps	
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Operate and modify FCRPS dams to protect, provide, and reconnect bull trout habitats	11.A.1.4.a	1839	Continue Winter Egg-Fry Survival Study on Lake Pend Oreille	Corps	> Lake elevation to be regulated at 2051' during winter.
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Operate and modify FCRPS dams to protect, provide, and reconnect bull trout habitats	8.1.g 8.2.c 11.A.1.1.b 11.A.1.1.c	1840	Coordinate Water Management Decisions with TMT	Corps	> Relevant water management decisions will be coordinated.
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Operate and modify FCRPS dams to protect, provide, and reconnect bull trout habitats	8.1.g	1841	Coordinate Water Management Decisions with USFWS	Corps	> Coordination with USFWS will occur.

Table 6: List of Resident Fish Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Operate and modify FCRPS dams to protect, provide, and reconnect bull trout habitats	8.1.h	1870	Libby variable Dec. 31 flood control elevation study proceeding	Corps	n/a
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Operate and modify FCRPS dams to protect, provide, and reconnect bull trout habitats	11.A.1.4.b	1879	Meet annually to evaluate Lake Pend Oreille kokanee monitoring results	BPA	> Corps and BPA representatives will meet with staff from fisheries agencies in FY02 to evaluate results of Lake Pend Oreille kokanee monitoring.
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Operate and modify FCRPS dams to protect, provide, and reconnect bull trout habitats	10.A.1.2	1880	Minimize Hungry Horse Flow Fluctuations	BOR	> Ramp rates at Hungry Horse will be followed.
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Operate and modify FCRPS dams to protect, provide, and reconnect bull trout habitats	10.A.1.1	1881	Minimize Libby Flow Fluctuations	Corps	> Ramp rates at Libby will be followed.
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Operate and modify FCRPS dams to protect, provide, and reconnect bull trout habitats	10.A.1.2	1899	Provide Bull Trout Flows and Assure Hungry Horse Refill	BOR	> The minimum flow for Hungry Horse will be provided from April - August. > The minimum flow for Columbia Falls will be provided from April - August.
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Operate and modify FCRPS dams to protect, provide, and reconnect bull trout habitats	11.A.1.2.a	1908	Provide USFWS an annual operational schedule for Hungry Horse	BOR	> An annual operational schedule for Hungry Horse will be provided.
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Operate and modify FCRPS dams to protect, provide, and reconnect bull trout habitats	11.A.1.1.b 11.A.1.1.c	1909	Provide USFWS an annual operational schedule for Libby	Corps	> An annual operational schedule for Libby will be provided .
Determine the Impacts of the FCRPS on Bull Trout and Mitigate for Those Impacts.	Operate and modify FCRPS dams to protect, provide, and reconnect bull trout habitats	8.2.a.8 10.A.1.1 8.3.d	pending	Mitigation for Libby Dam	BPA	> Determine best flows for KWS spawning and rearing. > Juvenile KWS habitat requirements incorporated in IFIM model. > Identify downstream effects of Libby Dam ramping .

Table 6: List of Resident Fish Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Determine the Impacts of the FCRRS on Bull Trout and Mitigate for Those Impacts.	Performance standards for bull trout	10.6 11.1	pending	Help develop, implement actions and PS for BT, KWS	BPA	> Letters sent and follow-up phone calls and e-mails made to USFWS to identify BPA contact person(s) and to offer assistance as requested. > Appropriate AA staff participated in completing work products with USFWS.

Table 7: List of Research, Monitoring, and Evaluation Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Status - Track the status of fish populations and their environment relative to required performance standards	System Level	163		Develop a project implementation and compliance monitoring program	BPA	Database system for tracking implementation of projects and a plan for development of a compliance monitoring program
Status - Track the status of fish populations and their environment relative to required performance standards	System Level	179		Assistance to TRTs through AA staff and technical support contracts	BPA	Products from the participation in TRT working groups as requested by NMFS and technical reviews of TRT work products having significant relationship to assessments and prioritization of IP actions
Status - Track the status of fish populations and their environment relative to required performance standards	System Level	179		TRT Support - Identification of individual population structures for Interior Basin ESUs.	BPA	Progress report - TRT/NMFS
Status - Track the status of fish populations and their environment relative to required performance standards	System Level	179		TRT Support - Develop Viable Salmonid Population (VSP) criteria for each of the populations	BPA	Updated VSP NMFS methodology report, and an Interior Basin VSP report - TRT

Table 7: List of Research, Monitoring, and Evaluation Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Status - Track the status of fish populations and their environment relative to required performance standards	System Level	179		TRT Support - Develop Interim Monitoring/Evaluation recommendations	BPA	A report on interim RM&E recommendations - TRT/NMFS
Status - Track the status of fish populations and their environment relative to required performance standards	System Level	179		TRT Support - Alternative Delisting Scenarios Report for Interior Basin ESUs	BPA	ESU Delisting Scenarios progress report -TRT/NMFS
Status - Track the status of fish populations and their environment relative to required performance standards	System Level	179		TRT Support - Habitat Characteristics Assessment Report	BPA	Summary of Interior Basin Reports: 1. Historical Perspectives on Tributary Anadromous Fish Habitat. 2. Estuarine Anadromous Fish Habitat Characteristics. 3. Fish Habitat Characteristics and Location Report. - TRT/NMFS
Status - Track the status of fish populations and their environment relative to required performance standards	System Level	193		New Monitoring and Marking Techniques (BPA Project No 198331900); Evaluate Small Stream PIT Detection (BPA Project 200101200)	BPA	Continued development of detectors for small streams; continued development of flat plate technology

Table 7: List of Research, Monitoring, and Evaluation Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Status - Track the status of fish populations and their environment relative to required performance standards	System Level	180		Development of a regionally coordinated RME Program that includes status monitoring	BPA	Status monitoring plans and data collection protocols for each ESU population and each major environmental performance measure with regional coordination and cost sharing
Status - Track the status of fish populations and their environment relative to required performance standards	System Level	181		Development of a regionally coordinated plan for obtaining aerial and satellite imagery data	BPA	Plan for obtaining co-purchased aerial and satellite imagery data
Effectiveness - Identify the physical and biological responses to management actions	System Level	184	921	Assess Chinook Restoration (Snake River Basin)	BPA	Report to BPA the life history and survival information on naturally produced fall chinook
Status - Track the status of fish populations and their environment relative to required performance standards	System Level	198		Development of a regionally coordinated plan for a data management system	BPA	Regionally coordinated plan for the development and implementation of a data management system, including data tracking categories, protocols, and proposed software and hardware platforms.

Table 7: List of Research, Monitoring, and Evaluation Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Status - Track the status of fish populations and their environment relative to required performance standards	Tributary Habitat	180		John Day RM&E Pilot Project -Tier2 EMAP sampling	BPA	EMAP sampling design; Database of environmental sampling data.
Status - Track the status of fish populations and their environment relative to required performance standards	Tributary Habitat	190		Post-Release survival of Fall Chinook in the Snake River (BPA project 199102900)	BPA	Projections of fall chinook emergence, growth, migration timing, and survival.
Status - Track the status of fish populations and their environment relative to required performance standards	Hydro Corridor	191		Adult fish counting program (Corps)	BPA	Hourly adult fish counts and improved reporting at dams
Status - Track the status of fish populations and their environment relative to required performance standards	Hydro Corridor	192		Installation of Adult PIT Detectors (BPA project 198331900)	BPA	Operational adult PIT detectors at Bonneville and McNary dams

Table 7: List of Research, Monitoring, and Evaluation Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Status - Track the status of fish populations and their environment relative to required performance standards	Estuary and Ocean	196		Evaluate relationships between estuary, plume and near-shore ocean conditions and juvenile salmon growth and survival.	BPA	Progress report on utilization, growth and survival of salmon in the estuary, plume and near shore ocean. Final report for sonic tag project.
Status - Track the status of fish populations and their environment relative to required performance standards	Estuary and Ocean	197		Evaluate relationships between estuary, plume and near-shore ocean conditions and juvenile salmon growth and survival.	BPA	Progress report on utilization, growth and survival of salmon in the estuary, plume and near shore ocean. Final report for sonic tag project.
Effectiveness - Identify the physical and biological responses to management actions	System Level	184	64	Nez Perce Tribal Hatchery Monitoring & Evaluation	BPA	Progress of this research project will be reported in FY 2002 annual report which will be available on the BPA Fish & Wildlife website.
Effectiveness - Identify the physical and biological responses to management actions	System Level	184	530	Genetic M&E Program for Salmon & Steelhead	BPA	Progress of this research project will be reported in FY 2002 annual report which will be available on the BPA Fish & Wildlife website.
Effectiveness - Identify the physical and biological responses to management actions	System Level	184	532	Evaluate Supplementing The Salmon and Clearwater	BPA	Progress of this research project will be reported in FY 2002 annual report which will be available on the BPA Fish & Wildlife website.
Effectiveness - Identify the physical and biological responses to management actions	System Level	184	533	Salmon Supplementation Studies in Idaho - USFWS	BPA	Progress of this research project will be reported in FY 2002 annual report, which will be available on the BPA Fish & Wildlife web site.

Table 7: List of Research, Monitoring, and Evaluation Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Effectiveness - Identify the physical and biological responses to management actions	System Level	184	534	Salmon Supplementation Studies in Idaho- Nez Perce	BPA	Progress of this research project will be reported in FY 2002 annual report, which will be available on the BPA Fish & Wildlife web site.
Effectiveness - Identify the physical and biological responses to management actions	System Level	184	535	Salmon Supplementation in Idaho- Shoshone-Bannock	BPA	Progress of this research project will be reported in FY 2002 annual report, which will be available on the BPA Fish & Wildlife web site.
Effectiveness - Identify the physical and biological responses to management actions	System Level	184	569	Production Impacts of Various Hatchery Stocks	BPA	Progress of this research project will be reported in FY 2002 annual report which will be available on the BPA Fish & Wildlife website.
Effectiveness - Identify the physical and biological responses to management actions	System Level	184	650	The Natures (Natural Rearing Enhancement Systems)	BPA	Periodic technical reports on research findings and technology transfer to increase the post release survival of hatchery produced fish.
Effectiveness - Identify the physical and biological responses to management actions	System Level	184	921	Assess Chinook Restoration (Snake River Basin)	BPA	Report to BPA the evaluation of supplementation strategies favorable for recovery and restoration of summer and fall chinook in major tributaries to Snake River
Effectiveness - Identify the physical and biological responses to management actions	System Level	184	1042	YKFP - Yakima / Klickitat Fisheries M & E	BPA	Annual results on supplementation research will be reported in FY 2002 annual report which will be available on the BPA Fish & Wildlife website.
Effectiveness - Identify the physical and biological responses to management actions	System Level	184	1559	Recondition Wild Steelhead Kelts	BPA	Progress of this research project will be reported in FY 2002 annual report, which will be available on the BPA Fish & Wildlife web site.

Table 7: List of Research, Monitoring, and Evaluation Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Effectiveness - Identify the physical and biological responses to management actions	System Level	184	1614	Analyze Behavioral Change During Salmonid Domestication	BPA	Progress of this research project will be reported in FY 2002 annual report, which will be available on the BPA Fish & Wildlife web site.
Effectiveness - Identify the physical and biological responses to management actions	System Level	184	1772	M&E of Chinook & Steelhead Outplanting	BPA	Completed report is due in FY 2002 and will be available on the BPA Fish & Wildlife web site.
Effectiveness - Identify the physical and biological responses to management actions	System Level	184	1773	Adult Spring/Summer Chinook Outplanting	BPA	Completed report is due in FY 2002 and will be available on the BPA Fish & Wildlife web site.
Effectiveness - Identify the physical and biological responses to management actions	System Level	184	1728	Reintroduction Success of Steelhead from Captive Propagation and Release Strategies	BPA	Progress of this research project will be reported in 2002 annual report, which will be available on the BPA Fish & Wildlife web site
Effectiveness - Identify the physical and biological responses to management actions	System Level	184	532	Idaho Supplementation Studies	BPA	Progress of this research project will be reported in 2002 annual report, which will be available on the BPA Fish & Wildlife web site
Effectiveness - Identify the physical and biological responses to management actions	System Level	184	842	Captive Salmonid Broodstock Technology Demo	BPA	Progress of this research project will be reported in FY 2002 annual report, which will be available on the BPA Fish & Wildlife web site.

Table 7: List of Research, Monitoring, and Evaluation Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Effectiveness - Identify the physical and biological responses to management actions	System Level	183		AA staff and contractor support to work with NMFS and TRTs for identification and development of effectiveness studies for each major action category	BPA	Report that identifies: 1) key action categories and performance measures, 2) a review of baseline data across ESUs and recommendations of opportunities for statistically robust studies, 3) guidance for statistical design of studies, and 4) short-term measures for action responses.
Effectiveness - Identify the physical and biological responses to management actions	Tributary	183		Develop and initiate an Oxbow property study of flood irrigation effects on instream water quantity/quality (part of BPA proposal 25069)	BPA	Design project, develop water monitoring network, and initiate data collection. Issue progress report.
Effectiveness - Identify the physical and biological responses to management actions	Tributary	183		Forrest property diversion dam removal and passage study.	BPA	Design project, install monitoring equipment to study adult and juvenile fish movement, and initiate data collection. Issue progress report.
Effectiveness - Identify the physical and biological responses to management actions	Tributary	183		Lower S. Fork John Day flow effectiveness study of diversion dam removal, water augmentation, and diversion screens.	BPA	Design project, collect baseline environmental data. Issue progress report.
Effectiveness - Identify the physical and biological responses to management actions	Hydro Corridor	100		Biological evaluation of Northern Pikeminnow Management Program (BPA project 9007700)	BPA	Evaluation of the Northern Pikeminnow Management Program for 2002 and cumulative results to-date: annual and multi-year exploitation rate, estimated salmonids "saved." Preliminary estimates of over-wintering mortality of northern pikeminnow.

Table 7: List of Research, Monitoring, and Evaluation Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Effectiveness - Identify the physical and biological responses to management actions	Hydro Corridor	107		Evaluation of adult salmon and steelhead migration past dams, through reservoirs, and into tributaries (Corps prject ADS-00-xx)	BPA	Adult salmon passage rates, conversion rates, losses,
Effectiveness - Identify the physical and biological responses to management actions	Hydro Corridor	82, 83		Estimate juvenile fish survival through powerhouses and spillways (multiple; project titles vary)	BPA	Total project and route specific survival through Bonneville, The Dalles, John Day, and Ice Harbor dams
Effectiveness - Identify the physical and biological responses to management actions	Hydro Corridor			Reach Survival Studies (BPA project 199302900; 199602000)	BPA	PIT-tag based estimates of in-river survival through select projects and river reaches for sp/su chinook and steelhead
Effectiveness - Identify the physical and biological responses to management actions	Hydro Corridor			Smolt Monitoring Program (BPA project 1987-12700; others)	BPA	Juvenile salmonid migration timing and passage indices at select mainstem dams
Effectiveness - Identify the physical and biological responses to management actions	Hydro Corridor	102		Biological evaluation of caspian tern predation on juvenile salmonids	BPA	Evaluation of the Caspian tern relocation project; abundance and distribution of terns and other avian predators, consumption rates on juvenile salmonids
Effectiveness - Identify the physical and biological responses to management actions	Estuary and Ocean	194		Develop conceptual model of relationship between estuarine conditions and salmon population structure and resilience.	BPA	Progress report on development of the model for: a) tidal, seasonal, and inter-annual variability of the circulation, hydraulic residence times, and physical properties below Bonneville Dam; b) extent and properties of plume, c) physical properties of the nearshore ocean environment north and south of the plume.

Table 7: List of Research, Monitoring, and Evaluation Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Resolve critical uncertainties in the methods and data required for the evaluation of future population performance and needed survival improvements	Hydro Corridor	185		Comparison of SAR's for in-river vs. transported juveniles (TPE-W-00-1)	BPA	Annual estimates of in-river survival and accrual of additional SAR's for transported and in-river migrants
Resolve critical uncertainties in the methods and data required for the evaluation of future population performance and needed survival improvements	Hydro Corridor	186		see RPA action 195, below	BPA	
Resolve critical uncertainties in the methods and data required for the evaluation of future population performance and needed survival improvements	Hydro Corridor	189		Long-term survival and disease susceptibility of yearling chinook salmon with different juvenile passage histories (BPS-00-9; BPA-00-10).	BPA	Comparison of general health and delayed mortality of juveniles with different passage histories; effect of bypass system passage on immune competency.
Resolve critical uncertainties in the methods and data required for the evaluation of future population performance and needed survival improvements	Estuary and Ocean	187		CoE AFEP proposal: Evaluation of the relationship among time of ocean entry, physical, and biological characteristics of the estuary and plume environment, and adult return rates (EST-P-02-03).	BPA	First year progress report
Resolve critical uncertainties in the methods and data required for the evaluation of future population performance and needed survival improvements	Estuary and Ocean	187		Innovative project: Feasibility study for Pacific Ocean Salmon Tracking.	BPA	Tracking system to identify individual fish in-river and north along the continental shelf to Alaska. Final report due February 2002

Table 7: List of Research, Monitoring, and Evaluation Projects

Strategy	Substrategy	RPA Action Num	Project ID Number	Project Title	Lead Agency	02 Work Expectation
Resolve critical uncertainties in the methods and data required for the evaluation of future population performance and needed survival improvements	System Level	182		Develop Request for Qualifications (RFQ) and Proposals (RFP) with NMFS for project(s) to research the reproductive success of hatchery spawners relative to wild spawners	BPA	RFQ, list of qualified research entities, and RFPs
Resolve critical uncertainties in the methods and data required for the evaluation of future population performance and needed survival improvements	System Level	195		Salmonid survival below Bonneville Dam, including potential mechanisms of delayed hydrosystem mortality (EST-P-01)	BPA	Feasibility of estimating survival below Bonneville Dam and through the estuary using acoustic tag.