8.0 PLAN IMPLEMENTATION

Implementation of the Snake River Salmon Recovery Plan involves addressing data gaps through research, monitoring, and evaluation; establishing schedules; identifying responsibilities; and securing funding that results in the placement of effective actions on the landscape.

This chapter identifies actions, monitoring and programs in the watersheds of the Snake River Region and does not include mainstem Snake River actions that are currently being implemented by state, federal and Tribal entities. This regional recovery plan includes, by reference, the hydropower system plans and associated programs and actions, monitoring and review.

Although there is considerable uncertainty surrounding the effectiveness of actions, enough is known about the types of actions that will reduce the many threats to salmon, to both select and implement projects in the first 18 months of the plan. Early implementation has been made possible by the fact that salmon recovery has been an on-going process in the region since the early 1990s. Therefore, a significant portion of the internal framework (policy, scientific, public support, and funding) needed to implement the SRSRP is either already in place, or can be established quickly once the plan is adopted.

The following section begins with a review of the actions that will be implemented over the next 18 months in the recovery region. The actions vary from those dealing with the elimination of imminent threats to the restoration of riparian areas. Next, a discussion of the policy, legislation and scientific "unknowns" that must be resolved to fully implement the plan is presented, with sections on the RM&E program, Education and Outreach, Schedule, Responsibilities, and Commitments, and the Lead Entity Strategy for Implementation of Habitat Protection and Restoration Action.

8.1 IMPLEMENTATION STRUCTURE, ROLES, FUNCTIONS AND RESPONSIBILITIES

8.1.1 Plan Implementation Overview

The SRSRB has developed a plan to recover salmonids that is scientifically sound and supported by the communities in the region. This section describes the administrative support needed to ensure that the plan is maintained. The SRSRB does not want this plan to be a static compilation of information that sits on a shelf. We have the responsibility to ensure that this plan is maintained as it is implemented, monitored and reported. Adaptive management must involve the local communities and natural resource technical agencies.

The administrative structure of the SRSRB during plan implementation will be similar to the structure used during development of the Plan. The SRSRB will rely on a director, an administrative assistant, an executive committee, a regional technical team (RTT) and on the Lead Entity program. From its inception in 2002, the SRSRB used contractors for development of plan sections and plan revisions. The Board also relied on a staff to direct contractors, oversee development of the Plan, communicate across all levels of government, coordinate and integrate planning strategies with recent planning efforts, and conduct public involvement. Looking to the future, the SRSRB envisions a shift from the use of contractor services (as in development of the plan) to the use of local resources as the plan is adaptively managed. Natural resource agencies, county planning departments, Tribes, conservation districts and the Regional Fisheries Groups will be called upon to assist with plan maintenance and updates. In addition to plan maintenance, the Board believes that continued coordination and communication is essential as we implement and adaptively manage the Plan. We will coordinate Plan implementation with subbasin plans, watershed plans, Lead Entity processes, habitat conservation plans, and myriad other related efforts at the local, state and federal level. The SRSRB will depend on a director and other planning organizations to

communicate, coordinate, and integrate processes and programs within the region. In the absence of such coordination and integration, the public and local government support for a regional organization may wane.

The SRSRB will rely heavily on the Lead Entity program for public outreach, project identification, and proposal development at the subbasin level. The SRSRB will turn to planning units for coordination and integration of land use updates and development of water-use strategies that meet the needs of our communities and salmon. The SRSRB will look for technical participation and support from state and tribal agencies.

The SRSRB is anxious to get on with its work of implementing the critical elements of the Plan, including the projects, programs, research, monitoring, coordination, adaptive management, and reporting.

8.1.2 Public Support Expectations

Public involvement is essential for successful plan implementation. It is vital that the public understand and support the priority areas and actions as well as the programs and potential policies necessary for salmon recovery. This involvement and support will vest the public in this process and allow them to take ownership. It is important that the public recognize the multiple planning efforts ongoing across the region and be assured that these efforts are coordinated and to the extent possible, consistent. For example, there is a Lead Entity program, watershed planning, habitat conservation planning, a regional fisheries enhancement group, Walla Walla watershed alliance, and dozens of state and federal programs like CREP, irrigation efficiencies, the water trust, etc. The public deserves coordination of these various programs and processes at a geographic scale that makes sense. The SRSRB is positioned to serve this coordination function, and to ensure a point of contact for the public.

In addition to programs aimed at habitat conditions in the watersheds, the region is also faced with programs aimed at hatcheries, harvest and hydropower system management and improvement. The SRSRB is in a good position to promote greater accountability and understanding of these federal and state initiatives, and to interface with the public on such matters. These steps will be taken during the implementation/adaptive management time frame, and it is critical that the Board play an active role in these management decisions.

Projects will be implemented by individual citizens, state agencies, tribal organizations, regional fisheries groups, planning units, conservation districts and other organizations. These entities will rely heavily on the priority areas and actions to guide their project locations and types. The SRSRB will maintain a list of projects completed, scheduled for completion, and those project on the to-do list. This habitat project list will be informative for the public, elected officials, and agencies to demonstrate that measures are being taken in a strategic manner to address the limiting habitat factors across the region.

The SRSRB will oversee plan revisions, implementation, reporting and accountability of recovery actions. Its duties will include advising local, state, and federal policy decisions and representing the larger community of the Snake River Salmon Recovery Region. The SRSRB will also serve as the Lead Entity for the Region, and will be responsible for submitting a single prioritized habitat protection and restoration list to the SRFB.

8.1.3 Technical Support Roles

The SRSRB acknowledges that the Plan is not a static document and that it will evolve through time as we move toward salmon recovery. Changes to the plan will require technical input and review. The

SRSRB will rely on the RTT, an Implementation Work Group (IWG), and the Lead Entity organization for technical support.

8.1.4 Regional Technical Team (RTT)

The RTT is a science group that will have the responsibilities of RME coordination and activities, adaptive management, and project review tasks as requested. This team will operate at the regional level. The RTT representative agencies will require financial resources for its tasks, and may require a part-time team leader.

In addition to local and state technical agencies and representatives, the RTT will also interface directly with the federal agencies. The RTT will identify issues and opportunities for enhancing the SRSRP and then elevate those issues and opportunities to the SRSRB for its consideration as the Plan is revised over time.

8.1.5 Implementation Work Group (IWG)

There is an emerging implementation work group that will be responsible for reviewing and rating habitat and assessment projects in the Walla Walla Basin for most funding sources dedicated to the Basin. This group may also rank habitat and assessment projects for funding sources at the regional level. The IWG is currently composed of technical and citizen representatives from the three counties that make up the Walla Walla Basin. The IWG may require a part-time team leader. A similar group may be identified for the Middle Snake Watershed Planning Unit area at a later date.

8.1.6 Lead Entity Program

The Lead Entity program will be responsible for notifying the public of the SRFB grant program and working with sponsors at the county-level to develop applications for SRFB funding. The County Conservation Districts in each of the five counties that make-up the Region are identified as the co-leads and are contracted by the SRSRB for county-specific tasks. In addition to the co-leads, the lead entity program relies on a citizen-technical committee to review and rate projects for SRFB funding. These projects are then presented to the SRSRB for its consideration and development of a final ranked list for the SRFB's consideration. The Lead Entity program operates at the local and regional scale and will continue to require financial resources from WDFW that will be used to manage the program and to provide capacity to county co-leads for working at the local level.

8.1.7 Representing the Region

The SRSRB developed a strong relationship with federal fisheries agencies as the recovery plan was developed. Maintaining this relationship at the local and regional levels is best accomplished by a regional salmon recovery board. The SRSRB will serve as southeast Washington's communication conduit to the federal agencies on existing, new, and developing policy and technical matters as they arise. This is a very important role for the SRSRB. Prior to the establishment of the SRSRB, neither the local communities nor the federal government had a mechanism or single point of contact for interacting on policy and technical matters. Furthermore, because the SRSRB's geographic area includes only those populations of mid-Columbia and Snake River listed stocks, the SRSRB expects to be an active participant when these populations are rolled up to a full ESU recovery plan.

8.2 RECOVERY ACTION IMPLEMENTATION

8.2.1 Recovery Action Accomplishments

Several recovery actions proposed in earlier versions of this Plan have already been conducted by various entities. Appendix K contains a list of those actions which have already been conducted and a summary the improvements that have been made throughout the recovery region. The Region is compiling project accomplishment information for each of the major population groupings to be added to future revisions of this Plan. This data will demonstrate that significant actions have been implemented by multiple organizations to address the primary limiting factors at the MPG scale. In the near future, the Region will further parse the data out specific to each of the MSAs to demonstrate and report actions occurring at the scale consistent with the limiting factors and actions within the priority areas.

8.2.2 18-Month Implementation

Multiple agencies and groups within the recovery region are actively developing salmon recovery actions for implementation in 2006 and 2007. These actions are located throughout the recovery area and will improve stream habitat and fish performance in almost all MSAs. The combined cost to implement these actions is approximately $29 million. Table 8-1 contains a list of the actions that are scheduled to be implemented in each county in 2006 and 2007 and identifies responsible agencies and funding information. Additional information on these actions can be found in Tables 8-2 and 8-3. It should be noted that SRSRP calls for an average annual spending of $6.9 million over 15 years to fully implement the actions identified to date. The data presented in Table 8-2 clearly show that the SRSRP is well on its way to achieving the action implementation objectives for 2006 and 2007.

Table 8-1. Project and Assessments Implemented or to be Implemented in 2006–2007 (18-month Implementation Plan)

Project Name	Lead	Contributors	Cost	Fund Source(s)
Walla Walla County				
Gose Street Barrier Removal	CTUIR	WWCD	$325,000	SRFB, BPA, NRCS
Hofer Dam/Barrier Removal	WWCD	CTUIR	$1,100,000	EFSEC, BPA, SRFB,
Coppei Conservation Easement	IEAC		$181,000	SRFB
Bolles Conservation Easement	IEAC		$234,000	SRFB
Fish Screens	WWCD			
Strohmaier Restoration & Conservation Project	RFEG	Land Trust	$467,000	
South Fork Coppie Easement	WWCD		$160,000	SRFB
Russel Creek Riparian Restoration	RFEG	Land Trust	$5,500	DOE
Walla Walla River Habitat Restoration	RFEG	WWCD	$75,000	WDFW, USFWS
Fish Screen Improvement	WWCD		$87,000	SRFB
Columbia County				
McKinley Instream Habitat Restoration	CCD		$68,000	SRFB
Laib Upland	CCD		$77,000	SRFB
East End Ditch Piping	CCD		$66,000	SRFB
Curl Lake Barrier Removal	WDFW		$100,000	SRFB
5-year CREP extensions	CCD		$190,000	BPA
10-year CREP extensions	CCD		$199,000	BPA
CREP contracts	CCD		$183,000	USDA
CREP contracts	CCD		$159,000	USDA
Livestock Water Quality	CCD		$19,000	Conservation Commission
Livestock Water Quality	CCD		$15,000	Conservation Commission
Irrigation Efficiencies	CCD			WCC
Turbidity Monitoring	CCD		$15,000	BPA, WCC
Turbidity Monitoring	CCD		$15,000	BPA, WCC
Vegetation Management	CCD		$25,000	BPA
Fish Screens	CCD		$10,000	SRFB
Flow Meter	CCD		$2,300	DOE
Flow Meter	CCD			DOE
Jim Creek Fish Barrier	RFEG	CCD	$50,000	Family Forest and Fish
North Fork Touchet LWD placement	WDFW	RFEG	$13,000	WDFW
Touchet River Diversions Consolidation	WDFW		$1,400,000	SRFB, BPA
Asotin County				
Heffelfinger Barrier Removal	ACCD		$34,000	SRFB

(continued)

Table 8-1. Project and Assessments Implemented or to be Implemented in 2006–2007 (18-month Implementation Plan) (Continued)

Project Name	Lead	Contributors	Cost	Fund Source(s)
Shumaker Barrier Removal	ACCD		$85,000	SRFB
Fish Screens	ACCD		$60,000	SRFB
George Creek Upland	ACCD		$240,000	SRFB
Studies and Assessments				
Mill Creek Passage	WDFW		$113,000	SRFB
Gardena Passage	GFID		$270,000	SRFB
Doan Creek Restoration	WWCD		$17,000	SRFB
Walla Walla Surface/Ground Water Study	WWBWC		$145,000	DOE
Total 2-Year Secured Implementation Budget:			$6,204,800	

8.2.3 Continuing Implementation

For WRIA 35 and WRIA 32, Tables 8-2 and 8-3 respectively contain proposed actions to be implemented over the next 5 years. These tables were compiled using the WRIA 35 and WRIA 32 Detailed Implementation Plans (DIPs). For more details on these actions and their implementation, refer to the appropriate DIP in Appendix L. These actions will be incorporated into implementation plans through the ongoing management of the recovery plan. It should be noted that most of the projects, especially those approved by the NPPC, were selected based on how well they were coordinated with subbasin plans. This has importance for the SRSRP in that this Plan was based heavily on the analysis and conclusions developed through subbasin planning for the Tucannon, Asotin, Walla Walla, and to a lesser extent the Grande Ronde Basins; therefore, the actions proposed in 2006 and 2007 are linked to the habitat problems identified in the SRSRP. For more detailed information on NPPC-approved projects, see the following web address: http://www.nwcouncil.org/fw/budget/2006/Default.asp.

As can be seen from the projects listed in Tables 8-2 and 8-3, salmon recovery activities will continue even as the major unknowns restricting the full implementation of the SRSRP are addressed over the next year. However, the level of effort being put forth by local, state, federal, tribal, and public groups to improve salmon habitat and survival shows how committed these groups are to salmon recovery. Based on this, it appears that the major uncertainty that could potentially restrict plan implementation is the lack of funding for action development and RM&E.

Table 8-2. Actions Proposed in the WRIA 35 Portion of the Recovery Region in 2006–2011 Expected to Improve Salmonid Abundance, Productivity, Diversity, Capacity, or Spatial Structure

WRIA 35 (Lower Snake Subbasins)								
No.	**Action Name**	**Description**	**Action Agency**	**Objective**	**Location (Subbasin (MSA/mSA)**	**Expected Source of funds**	**Schedule**	**Cost**
1	Asotin Enhancement Restoration	Coordinate, assess, protect, restore and monitor holistically-based fish habitat cost-share programs in Asotin Creek watershed. Continue "grass-root" public and agency cooperation and collaboration for identified priority projects benefiting ESA species	Asotin County Conservation District (NPPC 1994-018-05)	Reduce erosion and sediment load to streams through the implementation of direct seed projects and planting of 37 acres of CREP Continue riparian plantings and fencing projects to improve riparian conditions	Asotin	BPA/CREP	2006–Ongoing	$280,214
2	Protect & Restore Asotin Creek Watershed	Contribute to an on-going watershed restoration effort to address sedimentation into stream and tributaries from road-related sources on forested ground within the watershed	Nez Perce Tribe – Lapwaii (NPPC 2002-054-00) With USFS as a co-operator with road obliteration and contract administration.	Decommission a minimum of 10 miles of road in the South Fork Asotin Creek Improve fish passage conditions at 6 culverts	Asotin	BPA	2006–Ongoing	$128,400 $50,000 in Cost share matching by USFS
3	Asotin County Fish Screen Projects	Reduce sources of wild salmon mortality by installing fish screens	ACCD	Reduce salmon mortality caused by water withdrawal and diversions	Asotin MSA	SRFB	2006	$48,000
4	Riparian Buffer Couse/Tenmile	Implement BMPs to protect and enhance watersheds in Asotin County. Utilize cost-share from USDA, WCC and SRFB as match to BPA funds to implement riparian buffers under the CREP Program (RPA Actions 152 & 153)	Asotin County Conservation District (NPPC 2002-050-00)	Re-establish and protect riparian areas with fencing and alternative water developments to reduce impacts to the stream channel Reduce cropland erosion and sediment inputs to the stream through the use of CREP	Couse/Tenmile	BPA, CREP	2006–Ongoing	$241,000
5	George Creek Upland Sediment Reduction	Reduce sediment delivery to the stream from upland land uses	ACCD	Control sources and delivery of sedimentation and erosion	George Creek MSA	SRFB	2006–2011	$224,500

Table 8-2 Actions Proposed in the WRIA 35 Portion of the Recovery Region in 2006-2011 That Are Expected to Improve Salmonid Abundance, Productivity, Diversity, Capacity or Spatial Structure (continued)

WRIA 35 (Lower Snake Subbasins)								
6	South Fork Asotin Creek LWD Replenishment and Riparian Enhancement	Place LWD in South Fork Asotin Creek and plant native conifers and other large woody trees in the riparian to establish shade, sediment control and future wood recruitment	WDFW	Re-establish large woody debris in upper South Fork Asotin Creek, enhance riparian function, and establish a source of natural wood recruitment for the future	South Fork Asotin Creek	SRFB	2006–2008	$200,000
7	Assess Salmonids on Asotin Creek	Ongoing assessment of fish abundance and distribution	WDFW (NPPC) 2002-053-00	Enumerate adult and juvenile steelhead in the Asotin Creek watershed	Asotin Creek	BPA	2006–Ongoing	$260,000
8	Asotin Creek Wildlife O&M	Operation and Maintenance of Schlee Property in Upper Asotin Creek watershed	WDFW (NPPC) 2006-005-00		Asotin Creek	BPA	2006-Ongoing	$120,000
9	Curl Lake Intake Improvement	Make improvements to the intake to improve fish passage success	WDFW/USFWS	Increase fish passage success and survival	Tucannon	SRFB	2007	$108,000
10	Habitat For Fall Chinook, Steelhead (Garfield sediment reduction…)	Coordinate, implement, and monitor conservation practices for the reduction of sediment from the uplands of Garfield County and enhance habitat in the riparian zones of the streams to improve water quality for steelhead and Chinook salmon	Pomeroy Soil & Water (NPPC 1994-018-07)	Sediment reduction through the establishment of CREP (1,333 acres no-till seeding, 1,500 acres of direct seeding) Reduce sediment by developing 10 aces of terrace and sediment basins Fencing (0.63 miles) and off-site watering (2-sites) 10 acres of native tree and shrub planting	Tucannon	BPA	2006–Ongoing	$80,000
11	Larger Hatchery Smolt Size on the Tucannon		WDFW		Tucannon	BPA		unknown
12	Tucannon School and Pattit Sale area KV projects	Plant native grasses and shrubs components within timber sale boundaries and roads. Control noxious weeds.	USFS	Reduce erosion and increase stream shade within riparian habitats and reduce noxious weeds	Tucannon	USFS	2007–2011	$14,000
13	Tucannon River Storage Ponds	Construct water retention pond at Hartsock Creek	WDFW/CCD	Reduce peak stream flows	Tucannon	DOE	Start work by 2007	$250,000
14	Tucannon Road Cutslope Stabilization Project	Plant native grasses and shrubs along Road 47, 4712, 4713 and 4726	USFS	Reduce erosion from cutbanks and reduce the need for channel cleanout	Tucannon	USFS/Resource Advisory Committee (RAC)	2007–2011	$10,000

Table 8-2 Actions Proposed in the WRIA 35 Portion of the Recovery Region in 2006-2011 That Are Expected to Improve Salmonid Abundance, Productivity, Diversity, Capacity or Spatial Structure (continued)

WRIA 35 (Lower Snake Subbasins)								
15	Tucannon Stream and Riparian Restoration	Continue implementation of the Tucannon River Model Watershed Plan	Columbia Conservation District	Provide administrative activities to implement the plan, prioritize projects, establish strategies	Tucannon	BPA	2007–Ongoing	$75,000
16	Curl Lake Fish Barrier Removal	Connect isolated habitat to increase the range and distribution of salmon.	WDFW	Increase access to areas blocked by human-caused impediments.	Tucannon MSA	SRFB	2007	$108,000
17	School Fire Riparian Recovery	Restore riparian areas damaged during fire.	WDFW/USFS/PCD/ CCD	Restore fire damaged riparian and upland habitat damaged from School fire	Tucannon MSA	SRFB, USFS, WDFW WCC, BPA	2006–2011	$986,000
18	Touchet and Tucannon River Endemic Summer Steelhead Stock Program	Develop and test (see RME table) endemic hatchery program to potentially replace Lyons Ferry Hatchery Steelhead Stock in the Touchet and Tucannon Rivers	WDFW/USFWS	Tucannon R. goal is for supplementation of natural steelhead population and to achieve mitigation goals. Touchet R. goal is to minimize adverse effects of the mitigation program on native population while maintaining mitigation.	Tucannon R and Touchet River	BPA	Ongoing	$150,000
19	Tucannon Steelhead Captive Brood Program	Collect Native Brood for the hatchery to expand Tucannon River Endemic Steelhead Stock Program	WDFW	Increase supplementation of endemic Tucannon River Steelhead and increase genetic diversity within the hatchery brood stock. Minimize adverse impacts to native steelhead (prevent brood stock mining)	Tucannon River	BPA	2006–2008	~$20,000
20	Tucannon Spring Chinook Hatchery Supplementation Program	Enhance natural population using conventional hatchery program with endemic stock and captive brood supplement	WDFW/USFWS	Rebuild naturally reproducing Tucannon Spring Chinook and meet hatchery mitigation goals/harvest	Tucannon River/ Lower Snake River	BPA	Ongoing	~700,000
21	Wooten Wildlife Area and School Fire Riparian Recovery Project	Riparian Recovery and LWD replenishment project, 15 miles of CREP	WDFW/USFS/NRCS/ CCD	Restore riparian are damaged by the School Fire and restore 15 miles of riparian through CREP and modify campgrounds to reduce impacts to riparian function. Upland grass seeding to reduce sediment caused by the fire to the streams	Wooten Wildlife Area Tucannon River – Cummins Creek – Tumalum Creek- others.	USFS, CREP, Conservation Commission, CCD, PCD, SRFB	2006–2008	$1 million +

Table 8-3. Actions Proposed in the WRIA 32 Portion of the Recovery Region in 2006–2011 Expected to Improve Salmonid Abundance, Productivity, Diversity, Capacity, or Spatial Structure

WRIA 32 (Walla Walla Watershed)								
No.	**Action Name**	**Description**	**Action Agency**	**Objective**	**Location (Subbasin (MSA/mSA)**	**Expected Source of funds**	**Schedule**	**Cost**
1	Hughes Conservation Easement on S. Fork of Coppei Creek	Secure a permanent 44-acre conservation easement with riparian restoration	Inland Empire Action Coalition	Permanently protect riparian zone on 2 miles of S. Fork of Coppei Creek from grazing or development and allow to develop into mature, fully functional riparian forest buffer	Coppei Creek	SRFB	2006–2007	$140,000
2	Restoration of Doane Creek Spring Branch	Reestablish stream characteristics to Doane Creek by excavating a channel with natural alignment and geometry, revegetating riparian buffers and reintroducing flow	WWCCD/WDFW/RFEG	Make available 3 miles of perennial spring branch spawning and rearing habitat for ESA listed species.	Lower Mill Creek	SRFB	2005–2008	$100,000
3	Lyons Ferry Fall Chinook Stock Recovery Program	Provide endemic Snake River Fall Chinook hatchery production for release in the Snake River Basin by Nez Pierce Tribe (NPT), Idaho Power/ODFW/IDFG and WDFW.	WDFW/NPT/USFWS/ BPA/IPC/IDFG/ODFW	Rebuild Naturally Reproducing Snake River Fall Chinook and Tribal and mitigation goals, as well as harvest goals	Lower Snake River/Lower Grande Ronde/Middle Snake River	USFWS/USACE/BPA	Ongoing	~3 million +
4	Piping the east and west irrigation ditches in the Lower Touchet River	Convert canal systems to pipes	Walla Walla Conservation District	Improve water quality and quantity	Lower Touchet IT	BPA	2008–2009	$1 million +
5	Hofer Dam fish passage project	Reconstruct the irrigation diversion at Hofer Dam to improve fish passage and fish screening	WWCCD/WDFW/RFEG	Improve adult and juvenile passage and reduce juvenile irrigation entrainment mortality for ESA listed steelhead and bull trout and reintroduced Chinook	Lower Touchet R.	SRFB	Design in 2005 and construct in 2006	$900,000
6	Pipe Irrigation District No. 2 Canal	Replace earth-lined open ditches with closed-conduit gravity flow piping	WWCCD/Ditch Board	Improve adult and juvenile passage and rearing by reducing the quantity of irrigation water lost in conveyance	Lower Walla Walla River	SRFB	By 2010	unknown

Table 8-3. Actions Proposed in the WRIA 32 Portion of the Recovery Region in 2006–2011 Expected to Improve Salmonid Abundance, Productivity, Diversity, Capacity or Spatial Structure (continued)

WRIA 32 (Walla Walla Watershed)								
No.	**Action Name**	**Description**	**Action Agency**	**Objective**	**Location (Subbasin (MSA/mSA)**	**Expected Source of funds**	**Schedule**	**Cost**
7	Piping Garden City Ditch	Replace earth-lined open ditches with closed-conduit gravity flow piping.	WWCCD/Ditch Board	Improve adult and juvenile passage and rearing by reducing the quantity of irrigation water lost in conveyance	Lower Walla Walla River	Unknown	By 2009	$800,000
8	Piping Lowden 2 irrigation district	Pipe open ditch conveyance system of Lowden 2 irrigation district	WWCCD	Improve adult and juvenile passage and by reducing the quantity of irrigation water lost in conveyance	Lower Walla Walla River	Unknown	Design in 2005 and construct in 2006	$900,000
9	Restoration of Mud Creek	Reestablish natural stream and habitat characteristics to Mud Creek which is an altered tributary to the lower Walla Walla River.	WWCCD/WDFW/ Landowners	Make available 5 miles of perennial tributary spawning and rearing habitat for ESA listed steelhead trout	Lower Walla Walla River	SRFB	2005–2008	$200,000
10	McEvoy Creek Project	Restore the entire length of McEvoy Creek – 1.25 miles including spring/wetland headwaters to the confluence with the Walla Walla River.	WDFW, Landowners, RFEG, USFWS	Restore historic channel meander, create pool and riffles, add cobble and LWD, replace culverts, and plant riparian along the entire stream	McEvoy Creek/ Middle Walla Walla River	SRFB	2006–2008	$97,000
11	Barnes Canyon Road (S. Fork Coppei) Culvert Replacement	Replace small culvert on S. Fk. Coppei Road and install culverts on Barnes Canyon Road	Tri-State Steelheaders RFEG	Improve fish passage conditions and reduce sedimentation in South Fork Coppei Creek	Middle Touchet	SRFB	2006 or 2007	$30,000
12	Barnes Road (S. Fork Coppei) Culvert Replacement	Remove small culvert on Barnes Road	RFEG/Walla Walla County	Improve fish passage conditions	Middle Touchet	SRFB		$8,500
13	North Fork Coppei Creek Conservation Easement	Easement on 80 acres in North Fork Coppei drainage	Tri-State Steelheaders RFEG	Protect and restore spring-fed stream that provides flow to N. Fork Coppei	Middle Touchet	SRFB	2007	$76,000
14	South Fork Coppei Creek Stream Crossings	Two bridges and one culvert at fords to provide stream crossing	Tri-State Steelheaders RFEG	Protect fish, in-stream habitat, and water quality by keeping vehicles from driving through the creek	Middle Touchet	Unknown	2008	unknown
15	McKinley Instream Habitat Enhancement & Streambank Stabilization	Improve instream morphology	CCD	Increase instream cover, spawning and resting areas.	Middle Touchet MSA	SRFB	2007	$55,722.00

Table 8-3. Actions Proposed in the WRIA 32 Portion of the Recovery Region in 2006–2011 Expected to Improve Salmonid Abundance, Productivity, Diversity, Capacity or Spatial Structure (continued)

WRIA 32 (Walla Walla Watershed)								
No.	**Action Name**	**Description**	**Action Agency**	**Objective**	**Location (Subbasin (MSA/mSA)**	**Expected Source of funds**	**Schedule**	**Cost**
16	South Fork Coppei Conservation Easement	Conversation easement along Coppei Creek	Inland Empire Action Council	Restore and protect riparian areas along Coppei Creek	Middle Touchet MSA	SRFB	2007–2008	$162,472
17	Piping Gardena Farms irrigation district	Pipe open ditch conveyance system of Gardena Farms Irrigation District	WWCCD/GFID 13	Install 2 piping projects to save 2 cfs of flow. Improve adult and juvenile passage and by reducing the quantity of irrigation water lost in conveyance	Middle Walla Walla River	Unknown	Design in 2006 Construct 2007	$700,000 for projects in 2006-08
18	Design Gose Street grade control structure	Design Gose Street grade control structure to improve fish passage	WWCCD/CTUIR/ WDFW/RFEG/Walla Walla County	Improve adult and juvenile passage for ESA listed steelhead and bull trout and reintroduced Chinook	Mill Creek	SRFB	2006–2007	unknown
19	Improve Stiller Ditch Intake	Improve Stiller Ditch intake through completion of improvements suggested in 1999 Montgomery Watson study	WWCCD/WDFW/ WWCC/DOE/ Landowners	Replace a gravel push up dam with a lift pump system which incorporates a compliant fish screen. Improve adult and juvenile passage and reduce juvenile irrigation entrainment mortality	Mill Creek	Unknown	By 2008	unknown
20	Remove fish passage barrier at the Gose Street Bridge on Mill Creek	Install a fish passage facility at the Gose Street Bridge over Mill Creek	WWCCD/CTUIR/ WDFW/RFEG	Improve adult and juvenile passage for ESA listed steelhead and bull trout and reintroduced Chinook	Mill Creek	SRFB	2006	$150,000
21	Remove fish passage barrier at the Stiller Diversion on Mill Creek	Install a screened lift pump system at Stiller Irrigation Diversion	WWCCD/WDFW/ WWCC	Replace a gravel push up dam with a lift pump system which incorporates a compliant fish screen. Improve adult and juvenile passage and reduce juvenile irrigation entrainment mortality	Mill Creek	SRFB	Design 2005 Construct 2006	$40,000
22	Mill Creek Fish Passage Assessment	Increase/improve information to help select projects that have a high certainty and benefit.	WDFW	Fill data gaps regarding fish barriers.	Mill Creek MSA	SRFB	2007	$115,000

Table 8-3. Actions Proposed in the WRIA 32 Portion of the Recovery Region in 2006–2011 Expected to Improve Salmonid Abundance, Productivity, Diversity, Capacity or Spatial Structure (continued)

WRIA 32 (Walla Walla Watershed)								
No.	**Action Name**	**Description**	**Action Agency**	**Objective**	**Location (Subbasin (MSA/mSA)**	**Expected Source of funds**	**Schedule**	**Cost**
23	Touchet River LWD Sediment Reduction Project	Stream Bank Restoration using LWD and riparian revegetation.	WDFW/Landowners/ RFEG/USFWS	Use LWD to restructure eroding bank and provide fish habitat and plant riparian vegetation.	North Fork Touchet River	SRFB	2006–2008	$30,000
24	Expansion of Rearing Capacity at Lyons Ferry Hatchery	Increase capacity for Tucannon Endemic Captive Brood, other endemic steelhead, and Fall Chinook	WDFW/USFWS	Increase fish production for endemic stock supplementation and/or maintenance.	Snake River/ Tucannon River/Grande Ronde/ Touchet River	USFWS	2006–2008	~$350,000
25	Dayton Acclimation Pond Intake/trap /diversion Screens	Screen the intake at the Dayton Acclimation Ponds	LSRCP/WDFW	Screen intakes to reduce entrainment	Upper Touchet	SRFB/BPA	2007–2008	$500,000
26	Dayton Juvenile fishing pond dredging and outlet structure	Dredge pond to increase effluent water quality	Dayton Non-Profit Group	Improve water quality, reduce sediment	Upper Touchet	DOE	2006–2007	$35,000
27	East End Ditch (Columbia County) Irrigation Efficiency Piping Project.	Continue to replace earth-lined open ditches with closed-conduit gravity piping	CCD/Ditch Board/ WWWA	Improve water quantity, quality y, and improve irrigation efficiency	Upper Touchet	WWWA	2007	$191,000
28	Frame Culvert Replacement	Replaced four undersized culverts on Jim Creek	Dave Frame (landowner & sponsor)/Family Forest Fish Passage Program	Improve fish passage	Upper Touchet	RFEG	Completed July 2005	$114,125 (est.)
29	Hearn Ditch (Touchet mainstem)	Replace earth-lined open ditches with closed-conduit gravity flow piping.	Ditch Board/CCD	Increase water quantity; improve irrigation efficiency	Upper Touchet	WWWA	By 2008	$261,000
30	Hearn Ditch (Columbia County) Irrigation Efficiency Project	Implement actions to increase water efficiency of irrigation system	Ditch Board/CCD	Improve water quality and quantity	Upper Touchet	DOE	2007	$30,000 to complete
31	Jim Creek Culvert Replacement	Replace an undersized culvert on Jim Creek downstream of the Patrick and Frame projects	Tri-State Steelheaders RFEG	Improve fish passage	Upper Touchet	RFEG	2006 construction	$50,000
32	Juvenile Fishing Pond in Dayton (Touchet mainstem)	Convert fishing pond water source from gravity diversion to screened pump system or consider use of a shallow well.	CCD/City of Dayton/ WDFW/Walla Walla	Reduce fish entrainment, improve water quality	Upper Touchet	WWWA/SRFB	2007	$50,000

Table 8-3. Actions Proposed in the WRIA 32 Portion of the Recovery Region in 2006–2011 Expected to Improve Salmonid Abundance, Productivity, Diversity, Capacity or Spatial Structure (continued)

WRIA 32 (Walla Walla Watershed)								
No.	**Action Name**	**Description**	**Action Agency**	**Objective**	**Location (Subbasin (MSA/mSA)**	**Expected Source of funds**	**Schedule**	**Cost**
33	Patrick Culvert Replacement	Replaced undersized culvert on Jim Creek	Tri-State Steelheaders RFEG	Improve fish passage	Upper Touchet	RFEG	Completed July 2005	$21,849
34	Rainwater Wildlife Area Operations	Project designed to off-set habitat losses associated with hydro system	CTUIR (NPPC 2000-026-00)	Increase LWD by placing trees, reconstruction of approximately 3 miles of drawbottom road and planting 2,400 trees and shrubs in upland areas and riparian areas to reduce sediment input and stream temperature. Maintain 6 miles of existing fencing to protect riparian habitat.	Upper Touchet	BPA	2006–2007	$304,926
35	Steelhead Acclimation Pond Improvements	Project entails constructing a fish ladder, screens and consolidating diversions		Reduce entrainment and improve fish passage	Upper Touchet	SRFB	2007	~$150,000
36	Touchet River Consolidation and Fishway Project	Combine three irrigation diversions and utilize a formal intake dam to its full potential. Build a Pool and Chute fishway to provide fish passage for ESA salmonids and other native species in the Touchet R.	WDFW/USFWS/SRFB/ CCD/Local Irrigators	Eliminate stream habitat impacts associated with irrigation activities, provide fish passage, alleviate flooding issues, improve stream habitat and water quality.	Upper Touchet	SRFB	2007–2009	+1 million
37	Touchet River Hearn and West End ditch Consolidation	Combine water intakes to reduce entrainment	WDFW	Reduce entrainment	Upper Touchet	SRFB	2007–2009	~$500,000 to 1 million
38	Touchet Valley Golf Course Irrigation Efficiency Project	Implement actions to improve irrigation efficiency	Columbia County	Improve water quantity and quality	Upper Touchet	DOE	2007–2008	~$500,000 to 1 million
39	West End ditch (Columbia County) Irrigation Efficiency Project	Convert canal to piping system		Improve water quality and quantity	Upper Touchet	WWWA	2007	$25,000 plus
40	South Fork Touchet River Road	Increase or maintain adequate flows for wild salmon.	CTUIR	Reduce over appropriation of water in salmon bearing streams.	Upper Touchet MSA	SRFB	Summer 2006	$35,000

Table 8-3. Actions Proposed in the WRIA 32 Portion of the Recovery Region in 2006–2011 Expected to Improve Salmonid Abundance, Productivity, Diversity, Capacity or Spatial Structure (continued)

WRIA 32 (Walla Walla Watershed)								
No.	**Action Name**	**Description**	**Action Agency**	**Objective**	**Location (Subbasin (MSA/mSA)**	**Expected Source of funds**	**Schedule**	**Cost**
41	Touchet River Consolidation	Connect isolated habitat to increase the range and distribution of salmon	WDFW	Increase access to areas block by human-caused impediments.	Upper Touchet MSA	SRFB	Summer 2006	$1,185,000
42	Weed Control	Weed control in various areas of Columbia County	CC Weed Board	Reduce weed load.	Upper, Middle Touchet, Tucannon	BPA	2006–2007	$15,000
43	Burlingame Diversion Dam Modification and Fish Passage Improvement	Increase or maintain adequate flows for wild salmon.	Gardena Farms Irrigation District No. 13	Reduce over appropriation of water in salmon bearing streams.	Walla Walla	SRFB	Summer 2006	$26,500
44	City of Walla Walla Service Area Water Efficiency Improvement	Implement DOH-compliant water conservation program that includes: leak detection/pipe replacement (and other measures to get unaccounted for water at or below 10%); public education, technical assistance, flat or inclining rates structure, large-user audits, incentives to reduce water use, and other elements as defined in the city's water system plans.	City of Walla Walla	Improve water quality and quantity	Walla Walla	DOE	Ongoing	unknown
45	Doane Creek	Instream Habitat - restoration	WWCCD/WDFW	Restore creek to original channel and improve instream and riparian habitat	Walla Walla	SRFB	2007–2008	30,000
46	Dry Creek Stream Fords Assessment	Increase or maintain adequate flows for wild salmon.	Walla Walla County Watershed Planning	Project is to reduce over appropriation of water in salmon bearing streams.	Walla Walla	SRFB	2007–2008	$77,000
47	Gardena Farms Irrigation District #13 ditch piping	Replace irrigation canal with pipe system	DOE	Increase water quantity; improve irrigation efficiency	Walla Walla	DOE	2008–2010	$100,000
48	Garrison Creek Fish Screen	Screen off migratory fish access to Garrison Creek.	WWCCD	Reduce fish entrainment	Walla Walla	SRFB	By 2008	$250,000
49	Hofer Dam Fish Passage Project	Restore natural river function by removing dam structure.	WWCCD	Remove Dam	Walla Walla	SRFB, State, BPA	Summer 2006	$987,686

Table 8-3. Actions Proposed in the WRIA 32 Portion of the Recovery Region in 2006–2011 Expected to Improve Salmonid Abundance, Productivity, Diversity, Capacity or Spatial Structure (continued)

WRIA 32 (Walla Walla Watershed)								
No.	**Action Name**	**Description**	**Action Agency**	**Objective**	**Location (Subbasin (MSA/mSA)**	**Expected Source of funds**	**Schedule**	**Cost**
50	Johnson Walla Walla River Riparian Restoration & Conservation Easement	Install LWD for in-stream habitat and stream bank stabilization, plant riparian buffer, protect 5 acres in conservation easement	Tri-State Steelheaders RFEG	Provide in-stream habitat, protect eroding stream bank, restore riparian buffer, protect streamside acreage	Walla Walla	RFEG	2006	$50,000
51	Juvenile Screens and Traps- Walla Walla River	Provide safe fish passage for migrating juvenile and adult salmonids in the Walla Walla River by constructing and maintaining passage facilities at irrigation diversion canals and dams	CTUIR (NPPC 1996-011-00)	Improve fish passage facilities at Hofer dam and design of screens at Old Lawden and Bergervin-Williams ditches. Improve fish passage success at Gose Street in Lower Mill Creek.	Walla Walla	BPA	2006–2007	$1.91 million + $300,000 cost share.
52	Kooskooskie Dam Removal	Remove dam on upper Mill Creek	Tri-State Steelheaders RFEG	Improve fish passage by removing passage barrier	Walla Walla	SRFB	2006	$200,000
53	Rec. Fields (Schulke) Ditch Fish Screens	Install fish screen on Rec. Fields Ditch. Evaluate opportunities to modify diversion to improve fish passage.	WWCCD	Reduce entrainment	Walla Walla	SRFB	2007	unknown
54	Remnant Dike Removal	Remove a small dike on the lower Walla Walla River	DOE	Restore floodplain connectivity	Walla Walla	SRFB	2007	$15,000
55	Re-route Yellowhawk Creek Stormwater Runoff	Re-route Yellowhawk stormwater runoff to SAR site and provide treatment and indirect discharge and replant native vegetation along riparian corridor	DOE	Improve water quality; reduce sediment and stream temperature	Walla Walla	DOE	2008–2011	$125,000
56	Shallow Aquifer Recharge	Continue implementation of shallow aquifer recharge project	DOE/Walla Walla County/Walla Walla Basin Watershed Council/USACE/CTUIR/ WWWA/Native Creek Society	Improve water quantity and quality conditions in Lower Walla Walla River	Walla Walla	WWWA, DOE	Ongoing	$80,000 +
57	Urban CREP and Riparian Restoration Pilot	Improve riparian conditions throughout urban area		Reduce sediment, decrease stream temperature	Walla Walla	BPA	2007	$150,000

Table 8-3. Actions Proposed in the WRIA 32 Portion of the Recovery Region in 2006–2011 Expected to Improve Salmonid Abundance, Productivity, Diversity, Capacity or Spatial Structure (continued)

WRIA 32 (Walla Walla Watershed)								
No.	**Action Name**	**Description**	**Action Agency**	**Objective**	**Location (Subbasin (MSA/mSA)**	**Expected Source of funds**	**Schedule**	**Cost**
58	Urban Landscape Pilot Demonstration Project	Develop urban landscape pilot xeriscape planting project to conserve water along sidewalk planting strips		Improve water quality and quantity	Walla Walla	WWWA	2007	$25,000
59	Walla Walla River Basin Habitat and passage improvements	Manage and implement fish habitat and passage improvements in the Walla Walla River	CTUIR (NPPC 1996-046-01)	Enhance floodplain function by removing 1,360 feet of gravel dike Maintenance of existing long term conservation easements Develop future restoration plan for high priority reaches as defined by the subbasin plan	Walla Walla	BPA	2006–Ongoing	$305,378
60	Walla Walla River Fish Passage	Increase survival of migrating juvenile and adult salmonids in the Walla Walla Basin by operating passage facilities, flow enhancement measures, trapping facilities, and transport equipment to provide adequate passage conditions	Confederated Tribes of the Umatilla Indian Reservation (NPPC 2000-033-00)	Improve fish passage and survival conditions	Walla Walla	BPA	2006-Ongoing	$117,127
61	Nollette Russell Creek Restoration	Riparian buffer, streambank stabilization, wetland enhancement	Tri-State Steelheaders RFEG	Enhance riparian buffer, stabilize streambank, enhance spring fed wetland (possible ASR)	Walla Walla	SRFB	2007 or 2008	unknown
62	Soden Russell Creek Restoration	Riparian buffer and upland restoration	Tri-State Steelheaders RFEG	Plant and enhance riparian buffer on 500 feet of Russell Creek and plant adjacent acreage in native upland vegetation	Walla Walla	SRFB	2007 or 2008	unknown
82	Fish Screens in the Walla Walla and Tucannon Basin.	Install fish screens through the Cooperative Compliance Program.	WWCCD/WW Community College/ WDOE/WDFW/CCCD	Provide technical assistance and cost share for ESA Compliant Fish Screens throughout the basin	Walla Walla Basin	SRFB	2006–2008	$150,000

Table 8-3. Actions Proposed in the WRIA 32 Portion of the Recovery Region in 2006–2011 Expected to Improve Salmonid Abundance, Productivity, Diversity, Capacity or Spatial Structure (continued)

WRIA 32 (Walla Walla Watershed)								
No.	**Action Name**	**Description**	**Action Agency**	**Objective**	**Location (Subbasin (MSA/mSA)**	**Expected Source of funds**	**Schedule**	**Cost**
63	Walla Walla Wetland Reserve Assessment	Identify projects for the WRP Program	WDFW/NRCS	Identify projects to reestablish wetlands in the Walla Walla Basin to promote enhanced water quality, diverse habitat, and natural aquifer recharge.	Walla Walla Basin	WDFW	2006–2008	5,000
64	McDonald Road Dike Removal and Riparian revegetation	Remove Dike on WDFW Property along the Walla Walla to promote floodplain continuity.	CTUIR/WDFW/USACE/ Walla Walla County	Remove dike along the Walla Walla River around McDonald Road to establish floodplain connectivity and replant.	Walla Walla River	SRFB	2006–2008	$12,000
65	Revegetation of Riparian Forest Buffers in Walla Walla Watershed	Installation of native vegetation along fish bearing streams in Walla Walla County	WWCCD/NRCS/FSA/ Landowners	Install 120 acres of trees. Use the CREP program to install riparian buffers	Walla Walla Watershed	CREP	Ongoing since 2000 2006–2008	$325,000
66	Screening of Irrigation Diversions in Walla Walla Watershed	Complete final phase of Cooperative Compliance Fish Screen Program in Walla Walla County	WDFW/ WWCCD/ WWCC	Install 90 screens. Reduce entrainment mortality of juvenile salmonids	Walla Walla Watershed	SRFB	2006–2007 Ongoing – complete in 2007	$400,000
67	Walla Walla On-Farm Irrigation Efficiency	Improve efficiency of irrigation application (e.g., convert from flood to sprinkler) on individual farms	WWCCD	Install 8 projects that save 10 cfs of flow. Improve adult and juvenile passage and by reducing the quantity of irrigation water applied but not utilized by crop	Walla Walla Watershed	DOE	2006–2008	$3,800,000
68	Wolf Fork Fish Habitat Enhancement	Fish Habitat Enhancement, LWD	WDFW/Landowners/ RFEG/USFWS	Construct instream fish habitat with large woody structures and boulders.	Wolf Fork Touchet	SRFB	2006–2008	$30,000
69	Dos Rios Project	Riparian restoration on Yellowhawk Creek and Cottonwood Creek.	WDFW/Landowners/ RFEG/USFWS	Restore and increase riparian area along Yellowhawk Creek and Cottonwood Creek on private property.	Yellowhawk Creek	SRFB	2006–2008	$26,000
70	Arroyos Escondidos	Riparian restoration on Yellowhawk Creek and Caldwell Creek	WDFW/Landowners/ RFEG/NRCS	Restore riparian area along Yellowhawk Creek and Caldwell Creek on private property.	Yellowhawk Creek/ Caldwell Creek	SRFB	2006–2008	$36,000

8.2.4 Land Use Planning

The local governments (cities, towns, counties) in the Snake River Salmon Recovery Region have a significant role in the development, adoption, implementation, and enforcement of land-use regulations that address existing and future threats to listed species. In Washington State, land-use planning and a wide array of environmental protection programs are mandated at the state level, but developed, adopted, and implemented at the local level (e.g., counties, cities, and towns). This means that threats to recovery of listed species from future development, land uses, and land and facilities management activities must be addressed by local governments, including criteria regarding development, adoption, implementation, monitoring, and enforcement of land use and environmental protection regulations that affect the habitat of listed species.

During August 2005, most of the jurisdictions in the region were contacted about any projects or programs being developed over the next 18 months that may benefit salmon recovery. While specific details were not available for most jurisdictions, nearly all are involved in Watershed Planning (RCW 90.82) and have transportation projects that may indirectly improve conditions. Some projects of note, very recent past and future, are listed below.

- Walla Walla City and County are developing new roads standards for the urban growth area.
- The City of Pomeroy has recently updated its sewer treatment facilities.
- The City of Waitsburg is planning on updating their water utility plan, and noted that WSDOT is improving a stream crossing with a bridge within the city limits.
- Columbia County has a bridge currently under construction that has an additional screening project associated with it.

The local comprehensive plans and regulations may be amended annually, and also have a 7-year review cycle. The State has established a 2007 deadline for all local governments to review and revise their comprehensive plans and critical areas regulations to ensure that the best available science is used to establish the goals, policies, and regulations for the protection of critical areas. Since this legislation is relatively recent, it unlikely that any of the local governments in the Region has a shoreline master program that complies with new state Shoreline Management Act (SMA) requirements. However, adoption of the new Shoreline Master Programs at the local level is not required until 2014.

8.2.4.1 Future Review

Local government programs and regulations that potentially affect listed species can be divided into the following categories:

- Comprehensive Plans (land use, water, wastewater, stormwater, solid waste, etc.)
- Implementing Regulations (zoning, critical areas, shorelines, development standards, subdivisions, etc.)
- Permitting Processes (conditional use, substantial development, building, variance, exemptions, etc.)
- Code Enforcement/Compliance
- Environmental Review (SEPA)

The local governments in the Region have numerous policies, regulations, and programs designed to avoid or minimize impacts to the environment from activities associated with human land use and management activities. The decline in salmon and trout habitat has resulted from numerous diverse human activities and natural processes over a biologically short period of time. Many of the activities contributing to the decline in salmon habitat conditions occurred before current policies, regulations, and programs were enacted. Therefore, the existence of degraded habitat does not necessarily mean that local government policies, regulations, and programs are inadequate as most were non-existent during the period of decline. However, as part of the recovery planning process, a review of programs now in place can be undertaken to determine if either compliance or implementation can be improved to aid in recovery. Additionally, as local governments update their policies and regulations, including critical area protections, this plan will be part of the "best available science" that must be considered.

In addition to GMA and SMA plans, programs, and regulations, local governments also operate utilities (water, sewer and stormwater) and transportation and recreation systems (roads, parks, trails) that may affect listed species. For example, management of transportation systems is another area where local governments are just beginning to develop and adopt best management practices and road abandonment plans. Also, while most jurisdictions have adopted the International Building Code, it is unknown if any have adopted the appendices related to clearing and grading.

The review process should include a list of specific plans, programs, and activities under the purview of local governments. For each plan, program, and activity, a description and relationship to the recovery of listed species, VSP parameters, and ESA threat criteria can be evaluated. Analyzing the direct and indirect impacts to listed species to establish the relationship is relatively straightforward and is primarily based on whether the plan or program entails a physical action. However, a determination of the adequacy of existing regulations may require more analysis.

Next, an evaluation regarding the adequacy of existing regulatory programs should be done to determine: 1) whether any mechanism exists, 2) whether a mechanism exists but needs improvements, and 3) whether the existing mechanism is adequate.

An important assumption in this evaluation process is that local compliance with state growth management planning (specifically critical areas) and shoreline master programming mandates is the benchmark for the measurement of adequacy. This assumption is based on the fact that both the Growth Management Act and Shoreline Management Act have been revised in recent years as part of the State's efforts to recover listed species. Both Acts require local governments to plan and implement programs aimed at protection, restoration, and enhancement of fish and wildlife habitat and related environmental attributes.

Under the Clean Water Act regulations, local governments and those subject to the federal National Pollutant Discharge Elimination System (NPDES) Storm Water Program are required to have stormwater management programs. New NPDES rules (Phase II) extended coverage to operators of regulated small municipal separate storm sewer systems (MS4s) serving less than 100,000, and required these facilities to apply for a stormwater permit by March 2003. The state also issued its final revisions to the Surface Water Quality Standards on June 25, 2003 (Chapter 173-201A WAC). The listing of salmon under the Environmental Species Act (ESA) requires that streams and wetlands be protected. All local governments with salmon habitats are encouraged to develop storm water management plans. Those seeking 4(d) rule exemptions will be required to meet National Marine Fisheries Service (NMFS) stormwater requirements (excerpt from MRSC http://www.mrsc.org/subjects/environment/water/SW-main.aspx?r=1).

It is clear from that local governments have an important role to play in the recovery of listed species. The wide range of mandated planning and regulatory programs provide a solid foundation for local governments to implement and enforce actions needed to recover listed species.

8.3 IMPLEMENTATION UNKNOWNS

There are currently a number of major "unknowns" regarding implementation of the recovery plan including policy, legislation, funding and science. This section describes information and data gaps and discusses ways to address them.

8.3.1 Policy and Legislative Uncertainties

8.3.1.1 Funding

The Snake River Salmon Recovery Board is continuing to design a process to determine how actions will be prioritized for funding and implementation. Section 8.5 and Appendix F describe the process to date. Under the Salmon Recovery Act, the Lead Entities for the Washington Snake River watersheds have exclusive authority to recommend actions to the Snake River Salmon Recovery Board, but it is unclear how the SRSRB and the statewide Salmon Recovery Board will authorize and fund the actions submitted for implementation. Uncertainties remain regarding authority and responsibility for actions at different geographic scales and in different watersheds. Actions proposed to meet instream flow goals are an example of this problem. Instream flows and the actions to achieve them are set by watershed planning units. The official adoption of such actions, however, is taken by the regional and statewide Salmon Recovery Boards. These entities may have priorities that conflict with local priorities and it is possible that local priorities may not be preserved.

Funding recovery actions is also problematic. Direct SRFB funding is clearly insufficient for the large-scale actions included in the recovery plan. In addition, two major funding sources (BPA's Fish and Wildlife Program and the SRFB) address identical kinds of recovery actions, but have not standardized and coordinated their application procedures (see below). Funding for RM&E actions is also problematic. For instance, RM&E is ineligible for funding by the SRFB, and RM&E funding from the BPA is limited to 25 percent of a subbasin's total funding allocation. While the participants in the development of this recovery plan emphasize the need for RM&E, current policy and program limitations significantly limit the Region's ability to effectively carry out the RM&E needed to evaluate project effectiveness.

A wide variety of funding sources will be required if the complete Snake River Recovery Plan is to be implemented. The Fish and Wildlife Program and the SRFB alone are insufficient resources. With this in mind, the authors of the Walla Walla Watershed Plan listed a number of potential funding sources to supplement the Fish and Wildlife Program and the SRFB. The potential funding sources include:

- Appropriations from the Washington State Legislature for state agency budgets (Department of Ecology, Department of Health, Department of Natural Resources, Department of Fish and Wildlife, Conservation Districts): provides funding and/or staffing that could be utilized under existing state programs to implement elements of the Plan.
- Direct appropriation from the Washington State Legislature for specific projects, based on requests to be prepared as the Plan is implemented.
- Appropriations from the U.S. Congress for federal agency funds (USACE, USFWS, NRCS, USGS, USFS) under existing programs.

- Grants or low interest loans from existing funding programs, such as the Public Works Trust Fund, the State Revolving Fund, and other sources.[29]
- Rates and hookup charges collected from customers by public water systems such as cities which operate a water system, public water utilities, etc.
- County permitting fees or general fund revenues.
- Assessments on property through local improvement districts for projects that benefit those properties, subject to local approval.
- Private industry funds for voluntary projects at selected industrial facilities, supplemented by public funds where possible.
- Voluntary projects at selected sites by private, supplemented by public funds where possible.
- Public Utility Districts and Conservation Districts have the authority to levy property taxes subject to a vote of the affected public. This funding source might be an option for activities that cross local jurisdictional boundaries.
- Many agencies and jurisdictions are currently funding programs that match aspects of the recovery plan. Coordination of such programs could aid the recovery plan with minimal additional cost.

The Walla Walla Watershed Plan makes several concluding remarks on the subject of funding. First, it notes that Public Utility Districts and Conservation Districts have the authority to levy property taxes subject to a vote of the affected public. This funding source might be an option for activities that cross local jurisdictional boundaries. Second, the watershed plan notes that many agencies and jurisdictions are currently funding programs that match aspects of the recovery plan (and the draft watershed plan). Coordination of such programs could aid the recovery plan with minimal additional cost.

Finally, the watershed plan notes that certain projects should be funded primarily by regional, state, or federal sources. These types of projects would be implemented by one community, but would serve the interests of the region, the State of Washington, or the nation as a whole. As an example of such a project, the watershed plan cites a local community that decides, for the good of a listed fish population, to switch its water source from surface water to an alternative such as a well. It would not be equitable for the considerable costs of such a program to be borne exclusively by the local community. While some cost burden may be appropriate at the local level, the majority of funding for such a project should come from regional, state, and federal sources.

8.3.1.2 BPA/SRF Board Standardization

The application procedures for funding under BPA's Fish and Wildlife Program or the SRFB are complex and lengthy processes. The procedures are completely different and there is no reciprocity between the processes. It is recommended that BPA and the Governor's SRFB standardize their application processes so that funding of recovery actions for salmon and steelhead can be streamlined to the extent possible.

[29] The Phase 4 Committee Report to the Legislature includes an appendix listing several dozen grant and loan programs that may be suitable for funding the recovery plan.

8.3.1.3 Exculpation

In order to raise public interest in supporting salmonid recovery plans, assurances are needed that good faith recovery efforts based on best available science will absolve the public of culpability in regard to adverse impacts on listed stocks. In other words, if a public entity has corrected problems which have been identified as detrimental to salmonids, there must be a point at which they are no longer responsible for salmonid population problems. A legally binding definition of discharge of responsibility for impacts to salmon and steelhead populations would increase voluntary participation in recovery planning considerably.

8.3.1.4 Longevity and Funding of Snake River Salmon Recovery Board

The Snake River Salmon Recovery Board is currently not funded for the duration of the recovery planning period (15 years). Specifically, existing Phase 4 grants established by the Washington State Legislature in their amendments to the Watershed Planning program cover only the first 5 years of implementation at a rate of $100,000 for the first 3 years, and $50,000 for the last 2 years. Funding at this level is inadequate and too short-lived to accomplish the goals of the SRSRB under the recovery plan. Legislative action is needed to preserve the coordination and oversight functions of the SRSRB. Needed funding could come from the state operating budget or a SRFB directive.

The Snake River Salmon Recovery Board must remain active throughout plan implementation to provide coordination and oversight. Some functions which the SRSRB must fulfill include:

- Tracking Plan actions implemented by various organizations to ensure that projects are completed in a timely fashion and that the highest priority concerns are being addressed.
- Coordinating efforts to secure funding for Plan actions to avoid duplication of effort.
- Providing information to the public on Plan implementation and improvement in watershed conditions and the performance of listed stocks.
- Functioning as an "early warning system" and response coordinator in the event of changing conditions (altered physical status of the watershed, unforeseen impacts of recovery actions, new regulatory developments, new project proposals, etc.)
- Monitoring across jurisdictional boundaries and agencies, data standardization and data management through an umbrella group such as a Watershed Monitoring Council sponsored by the SRSRB.
- Act as the responsible party for recovery planning and implementation under ESA requirements.
- Reporting of progress.

8.4 EDUCATION AND OUTREACH

As implementation of the recovery plan progresses, continued stakeholder and public interactions such as those that occurred during Plan development will be necessary to provide final shaping, maintain support, and ensure effective execution of recommended management strategies and actions. The Snake River Salmon Recovery Board established a public involvement program during plan development to increase public participation in the planning process and encourage support for various management strategies. It is recommended that the public involvement program be continued into Plan implementation. The purposes of the program would include:

- Coordination and facilitation of public meetings to collect SEPA scoping documents and public input on planning objectives.

- Distribution of newsletters to relay updated planning efforts, advertise participation opportunities, and highlight successful projects.
- Maintain comprehensive recovery planning websites for the entire Snake River Salmon Recovery Region and its constituent subbasins.
- Schedule and facilitate public conferences in each subbasin and for each WRIA in the recovery region.
- Support and inform local fish, habitat, and watershed restoration groups, such as the Walla Walla Backyard Stream Team, the Walla Walla Watershed Alliance, the Kooskooskie Commons, the Native Creek Society, the Mill Creek Passage Work Group, the Tri-State Steelheaders and other hunting, fishing, and outdoor recreation groups about the progress of the recovery plan.
- Make recovery plan presentations in other planning venues, such as planning units, regional fisheries enhancement groups, and civic groups.
- Issue press releases, participate in radio interviews, and publish articles describing recovery planning and restoration projects.
- Regularly update the bi-state coordinating committee in the Walla Walla watershed regarding subbasin-wide coordination of recovery efforts.
- Regularly update the Conservation Districts of Recovery Plan developments (notices in monthly newsletter).
- Regularly update the Asotin Conservation District of recovery plan developments to allow them to incorporate recovery information into their own public outreach program.

Examples of useful outreach tools and activities that might be considered in the future include:

- Facilitation of an e-mail information distribution list to communicate periodic status reports and to notify the public of forums dealing with specific issues.
- Organization and hosting of public conferences targeting technical and non-technical audiences to increase understanding of recovery issues and successes.
- Production of television and radio Public Service Announcements.

8.5 SCHEDULE, RESPONSIBILITIES, AND COMMITMENTS

8.5.1 Schedule and Milestones

The Snake River Salmon Recovery Plan assumes a 15-year planning period; however, many details of the schedule remain undefined due to a lack of information. Information is lacking on such aspects of the plan as identification of specific actions to upgrade individual habitat factors, identification of response triggers, frequency and location of monitoring activities, identification of milestones, and designation of management responses to triggering events. Nonetheless, broad features of the implementation schedule can be described including the approach to the prioritization of actions and designation of milestones.

Within each subbasin, actions will be implemented in order of their importance. Actions, as described in Chapter 7.0, will be prioritized in the following manner from most important (and urgent) to less important.

- Actions targeting imminent threats such as unscreened or impassible diversion dams, dewatered stream sections, sources of toxic effluents, etc.

- Actions in Priority Restoration Areas identified by EDT analysis and modified in subbasin plans.
- Actions addressing specific environmental attributes most responsible for limiting current production of listed species within Priority Restoration Areas.
- Actions targeting key environmental attributes in order of likely effectiveness and feasibility (in terms of both cost effectiveness and technological practicability) in Priority Restoration Areas.

A preliminary scheme has been proposed to determine precedence for implementing recovery actions within Priority Restoration Areas. This scheme entails sorting limiting environmental attributes into three categories corresponding to their impact on current production: High, Medium, and Low. Candidate actions would also be sorted into three categories based on combined effectiveness and feasibility. Within this scheme, the High-Attribute, High-effectiveness/feasibility actions would be implemented first, followed by High – Medium, Medium - High, Medium – Medium, High – Low, Medium – Low and, lastly, by all actions targeting environmental attributes with low impacts on current production.

Establishment of milestones is an important aspect of implementation. At this point, no specific milestones have been identified, although it is agreed that a mid-cycle progress evaluation is imperative. The approach to identification of milestones will be based on progress toward attaining habitat objectives. In addition, it is recognized that milestones are essential to guaranteeing timely management responses to changes in conditions.

8.5.2 Responsibilities and Commitments

It is premature to talk about a "level of commitment" by any provisional Lead Agency to any specific recovery action until the recovery plan has been approved by the SRSRB and affected counties and provisional Lead Agencies have given their consent. However, it is clear that the community support will be high for actions that improve fish habitat while maintaining the local culture and economy. It is also clear that actions that come at the expense of the local culture and economy will be strongly opposed.

Identification of the "Responsible Agency" or "Lead Agency" for actions proposed under the recovery plan is somewhat problematic. For example, actions that do not involve a federal agency are voluntary until approved by the SRSRB and the Commissioners of the affected counties. Even so, there are obvious affinities and associations between various agencies and organizations and actions that affect specific environmental attributes. Conservation easements, for instance, are typically arranged through the efforts of Conservation Districts, and impacts to habitat diversity associated with urban development should be the concern of a particular municipality.

8.6 LEAD ENTITY STRATEGY FOR IMPLEMENTATION OF HABITAT PROTECTION AND RESTORATION

The Lead Entity process is one of the programs that will be used to identify and solicit habitat protection and restoration projects. As the Lead Entity, the SRSRB will be responsible for reviewing and ranking projects. The SRSRB will use this ranking for submitting funding requests to the SRFB. The current Lead Entity approach to implementation is discussed in this section; more detailed information is found in Appendix F. It is likely that the approach will continue to evolve as the planning process progresses and more information becomes available.

The Lead Entity committee reviews, scores, and ranks proposed projects before sending them to the SRSRB for its review and concurrence. The scoring criteria were developed by the Lead Entity and have been in use since 1999. The recovery plan analyses provide the technical foundation for priority protection and restoration areas and actions. Stream reaches are rated for preservation based on current

habitat conditions. Reaches rated for restoration are based on comparisons between current and historic habitat conditions. MSAs and mSAs were overlaid on the priority restoration and protection reaches to illustrate that actions in these areas will contribute to augmented spatial structure for salmonids within the recovery region.

Prioritized projects are organized into "tiers." Tier 1 comprises imminent threats and Tier 2 includes projects to restore habitat functions currently impacting survival within priority reaches of MSAs. Projects designed to protect priority areas within mSAs are included in Tier 3. Tier 4 comprises projects in areas supporting salmon outside of identified MSAs and mSAs.

Points will be awarded to projects based on the area in which they will occur and on proposed actions. Evaluators will rate each project according to its benefits to salmonids and their habitats. Benefits may be **High, Medium,** or **Low** based on the project's proximity to priority areas, fish health and population status, fish productivity, life stage, number of fish species, habitat conditions, watershed-forming processes, and cost effectiveness.

Evaluators will also assess the certainty that a proposed project will accomplish its stated benefits for fish. This determination is based on the project location, current habitat conditions, habitat-forming processes, the degree to which historical functions will be protected or restored, the success of similar projects, the likelihood that benefits will be achieved, the appropriateness of the proposed methodology, and the potential for continued habitat degradation if the project does not take place.

Projects are awarded points for certainty, longevity, and size. Projects that have a high degree of certainty, will last in perpetuity, and affect the largest amount of habitat will receive the highest number of points. Those whose certainty is highly speculative, whose benefits will persist for less than 10 years, and that affect a relatively small area of habitat will receive the lowest number of points.

Agencies, citizens, tribal representatives, and conservation districts identify potential projects. Project sponsors apply to the Conservation District (Co-Lead Entity) in the county in which the project would be located. The Co-Lead Entity reviews the project and determines community support and technical applicability. The Lead Entity then reviews proposed projects forwarded from the co-lead entities. Any technical and/or social concerns are being addressed at this point before the rigorous assessment of benefit and certainty occurs.

8.7 ECONOMIC, SOCIAL, AND CULTURAL RESULTS

As discussed in Chapter 2.0, salmon, steelhead, and bull trout are important to the people of the recovery region as well as the Pacific Northwest as a whole. Recovery of listed populations is expected to have positive effects that would extend through the social and economic fabric of the region. Recovery actions proposed by this plan should benefit salmon without negatively affecting the culture or economic base. Abundant populations of salmon and steelhead would attract sport fishers and visitors to the region to spend money in local businesses. More salmon would also benefit treaty tribes and out-of-region commercial fisheries. In addition, implementation of the recovery actions would bring funds and employment to the region.

The recovery of listed populations is expected to have positive effects on society and the culture of the region. Many of these benefits are intangible and cannot be quantified, but it is expected that the citizens of the region would take pride in augmentation of a resource important to their identity as residents of the Pacific Northwest. The importance of salmon to the treaty tribes cannot be overstated; this plan is aimed at restoring salmon to levels that sustain tribal ceremonial and subsistence harvest as well as non-tribal

harvest to other communities. It is important to fulfill obligations to the tribes to provide fish for these needs.

Finally, the recovery plan is structured so that it will not result in detrimental effects to the region. On the contrary, doing nothing to aid the recovery of salmon, steelhead, and bull trout would be more detrimental to the region's economy, society, and culture.