

Three-Year Implementation Plan Narrative for
Lake Washington/Cedar/ Sammamish Watershed (WRIA 8)
April 2010

Introduction

This document provides a brief narrative to accompany the 2010 3-Year Work Plan update for the Lake Washington/Cedar/Sammamish Watershed (WRIA 8). Both the capital and non-capital actions listed in the 3-Year Plan reflect the most important known priorities for Chinook conservation and recovery in the watershed, and are based upon analyses and hypotheses described in detail in the *Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Chinook Salmon Conservation Plan* (2005).

Estimated costs for each action in the 3-Year Work Plan are based on the 10-Year Start List cost estimates from the WRIA 8 Plan or other recent updates. This 3-Year Work Plan update was developed in consultation with the WRIA 8 Salmon Recovery Council and Technical Committee.

The conservation and practical rationale for the 3-Year Work Plan remains unchanged from the 2009 narrative. Refer to that narrative if more detailed information is needed (<http://www.govlink.org/watersheds/8/reports/default.aspx>).

Consistency

1. What are the actions and/or suites of actions needed for the next three years to implement your salmon recovery chapter as part of the regional recovery effort?

The accompanying spreadsheet lists the actions needed to implement the WRIA 8 work plan in the next three years. Specific additions or deletions for 2010 are outlined below:

Additions for 2009

(Cedar River Population)

- In Reach 3, explore redevelopment options including purchasing easements, removing bank hardening, and restoring riparian buffer (C206)¹

(Sammamish River Population)

- Little Bear Creek fish passage and riparian restoration (N401, N402, N403)
- Kelsey Creek fish passage and channel restoration (N473)
- North Creek riparian restoration and stream enhancements (N379, N384)
- Bear Creek Reach 9 acquisition (N239)
- Swamp Creek Regional Park wetland and stream restoration (N335)
- Sammamish River Reach 2 wetland restoration (N337, N338)

¹ The project code (C206, N401, etc) is the nomenclature used in the WRIA 8 Chinook Conservation Plan to identify projects. Refer to Volume 2 of the Conservation Plan if more information about a particular project is required.

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Programmatic actions needed for the next three years include all those on the WRIA 8 10-Year Start List of Actions (Volume 1, Chapter 9), with some examples provided in the 3-Year Work Plan description column, and the key ones highlighted below:

- Complete the H-Integration process and work with co-managers to implement priority recommendations
- Continue work with co-sponsors on overcoming barriers to more salmon-friendly lake shorelines
- Continue to support efforts to encourage Low-Impact Development
- Build on successful 'Lakeside Living' workshops and Green Shorelines Guidebook outreach efforts and potentially extend this outreach model to streamside property owners

Research, monitoring and evaluation actions needed include:

- Continue habitat status and trends monitoring for the Cedar River and for wadeable streams. WRIA 8 recently received a grant from the EPA to continue survey work through 2013.
- Complete an overall WRIA 8 Monitoring and Adaptive Management Framework – this framework will leverage effectiveness and implementation monitoring efforts already taking place and help strategically direct future effectiveness monitoring to focus on projects with greatest uncertainty, as well as incorporate H-Integration efforts. The WRIA 8 Technical Committee is working with PSP and the RITT to develop this framework in the context of overall Puget Sound adaptive management.
- Work with RITT and Puget Sound Partnership to devise methods for programmatic effectiveness monitoring

Removals (project completions)

(Cedar River Population)

- Cedar River Rainbow Bend Acquisition (C236A)
- Jones Reach Protection (C228a, Seattle Public Utilities target parcels)

(Sammamish River Population)

- Cottage Lake Creek Forest Cover Protection (N277)

In addition, the following projects on the WRIA 8 10-year list (but not on the 3-Year Work Plan) were completed in 2009:

(Cedar River Population)

- Alaska/Adam Street (C281)

(Migratory Area)

- Salmon Bay Natural Area (M247)

(Sammamish Population)

- Expand Twin Creeks Project (N377)
- Sammamish River Reach 3 Restoration (N343)

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- Anderson Property Acquisition (I215/I285)
- Squak Valley Park Acquisition and Restoration (I226A)

Pace/Status

2. What is the status of actions underway per your recovery plan chapter? Is this on pace with the goals of your recovery plan?

Jurisdictions are advancing the WRIA 8 Conservation Plan with the funding available to implement the Plan. Programmatic and capital actions are in progress, as detailed in previous narratives and in the 2006-2007 WRIA 8 Implementation Progress Report (http://www.govlink.org/watersheds/8/planning/progress_report.aspx). WRIA 8 is planning an implementation status 5-year summit for the late-fall of 2010; at that time more detailed information regarding implementation status and pace will be available.

3. What is the general status of implementation towards your habitat restoration, habitat protection, harvest management, and hatchery management goals?

More integration of harvest and hatchery management with habitat management goals would be beneficial. Some progress has been made in H-integration. Further progress awaits development of an adaptive management framework (in progress).

Sequence/Timing

4. What are the top implementation priorities in your recovery plan in terms of specific actions or theme/suites of actions? How are these top priorities being sequenced in the next three years? What do you need to be successful in implementing these priorities?

Capital projects during the next three years of implementation continue to attempt to increase fry colonization and juvenile rearing success by protecting and restoring areas of floodplain connectivity in and around areas that have high Chinook spawning concentrations.

Within Lake Washington, restoration actions are focused on the southern end of the lake to benefit the fry-migrant life stage that rears in the lake, as well as migrating smolts. We hypothesize that restoration of shallow sandy habitat with overhanging vegetation will reduce predator efficiency, and increase juvenile survival.

The naturally spawning Sammamish River population has low abundance and low productivity, and actions are necessary in the near-term to secure this population from any increase in extinction risk. Actions are also necessary to ensure that the habitat potential exists to support recovery in the future as population productivity increases and the distribution expands into the Tier 2 North Lake Washington tributaries (e.g. Little Bear and North Creeks). This requires programmatic actions to maintain and restore landscape level processes at risk from development as well as capital projects to acquire functioning habitat

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or restore degraded habitats. These acquisitions include headwater areas in Upper Bear Creek, Cottage/Cold Creek, Little Bear Creek, and North Creek to maintain forest cover, water quality, and hydrologic processes.

The nearshore component of the WRIA 8 plan includes significant uncertainties. Actions are focused on identifying specific locations where feeder bluff connections to the nearshore environment can be restored, and restoring pocket estuaries where possible. The railroad severely constrains restoration opportunities in WRIA 8, making a feasibility study essential for WRIA 8 to implement feeder bluff projects throughout the 10-year plan horizon.

In order to be successful the WRIA requires stable, predictable state and federal funding support, as well as continued state leadership on conservation messages at the regional level (e.g., STORM).

Next Big Challenge

5. Do these top priorities reflect a change in any way from the previous three-year work program? Have there been any significant changes in the strategy or approach for salmon recovery in your watershed? If so, how & why?
No change in priorities from the previous three year work program.
6. What is the status or trends of habitat and salmon populations in your watershed?
 - a. Habitat status and trends monitoring (wadeable streams) began in July 2009, and is currently funded through 2013. Data are being loaded into the Washington Department of Ecology Status and Trends database and will be analyzed in future months. An overall habitat status and trends framework, including wadeable streams and rivers, land cover, water quality, and hydrologic trends, is in preparation. Initial results will be presented at the WRIA 8 Summit in December 2010.
 - b. WRIA 8 has been collecting salmon population status and trend data for more than 10 years. The figures and tables at the end of this document summarize Chinook adult and juvenile trends for WRIA 8.
7. Are there new challenges associated with implementing salmon recovery actions that need additional support? If so, what are they?
 - a. The H-Integration process has not resulted in consensus on the role of the hatchery-origin spawners on the Sammamish spawning grounds. Adaptive management actions or actions to test alternate hypotheses, if any, will require co-manager approval and likely require input from the RITT and PSP.

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- b. Detailed analyses of programmatic effectiveness are likely beyond the capacity of the WRIA to implement and would benefit from initiatives managed by an outside agency or university.
- c. The stability of local funding for WRIA 8 team and local staff coordination and local implementation of salmon recovery actions has become a concern due to shrinking local government budgets. Stable, predictable state and federal funding helps to keep local governments at the table; messages and support for the importance of keeping the local effort going would be appreciated.

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Figures and Tables

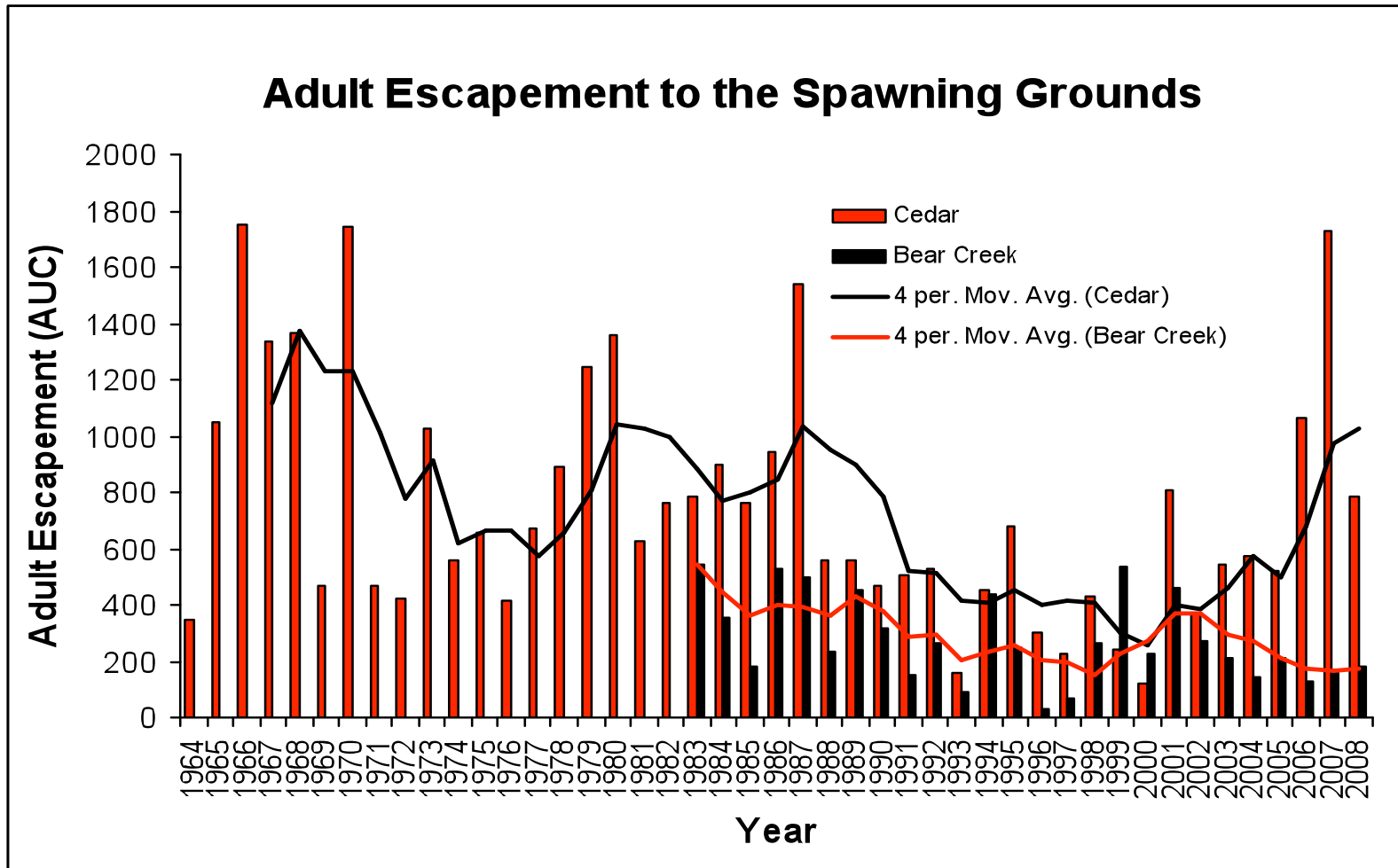


Figure 1. WRIA 8 Adult Escapement (Area Under the Curve estimation method). Data for 2009 are not yet available from co-managers.

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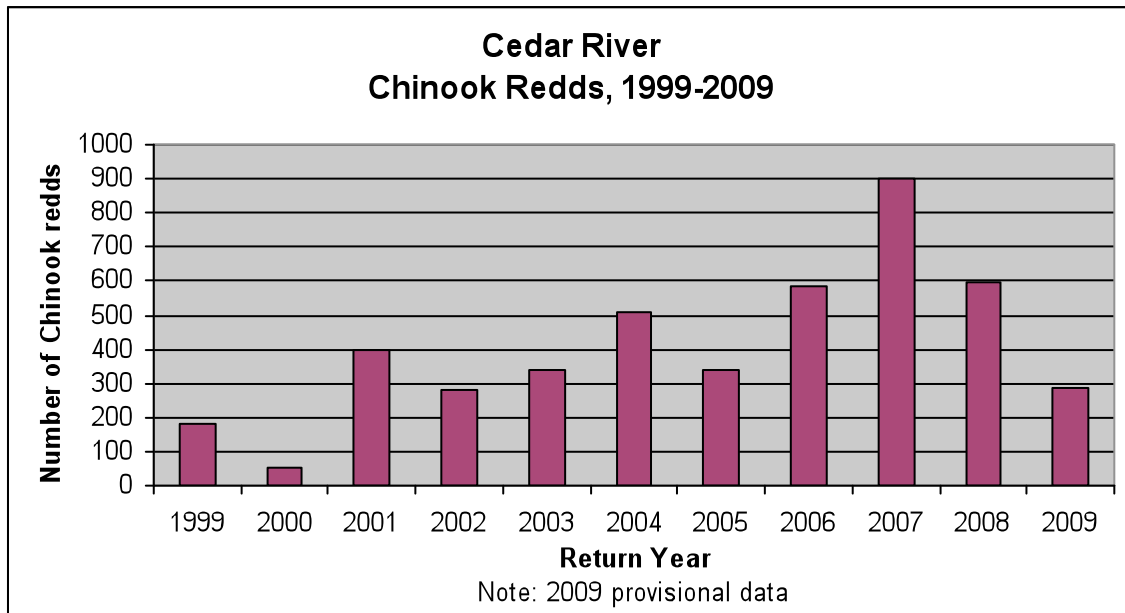


Figure 2. Cedar River Chinook Redds, 1999-2009.

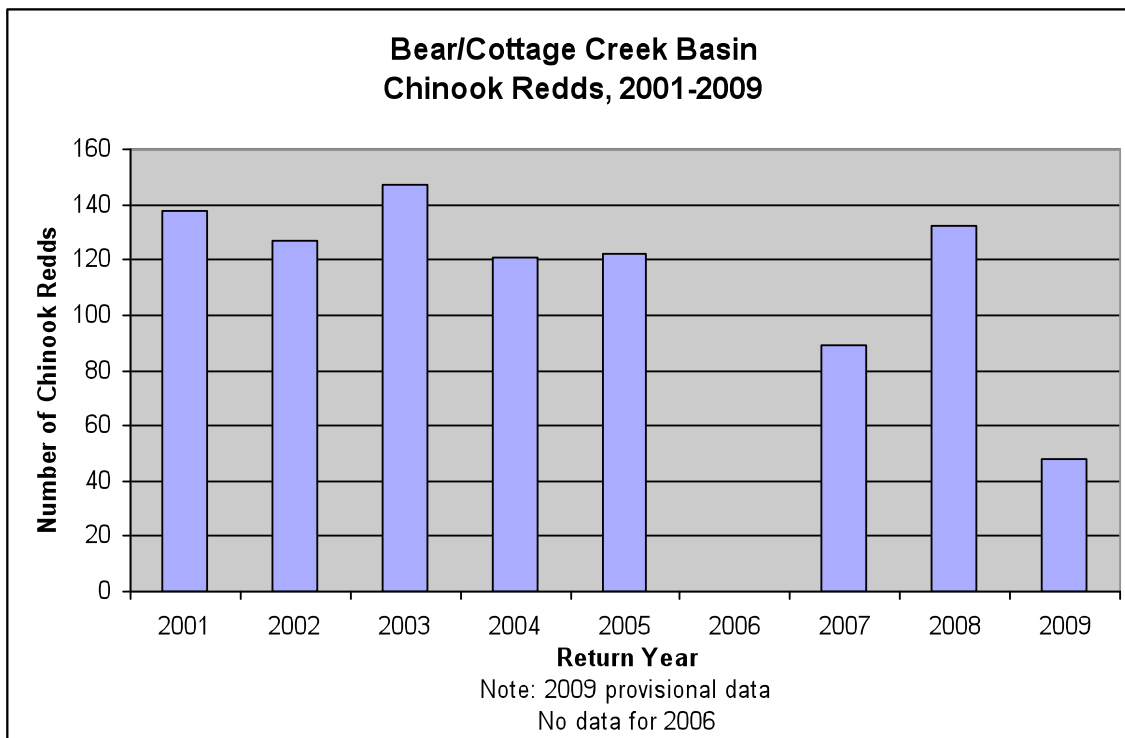


Figure 3. Bear/Cottage Creek Basin Chinook Redds, 2001-2009.

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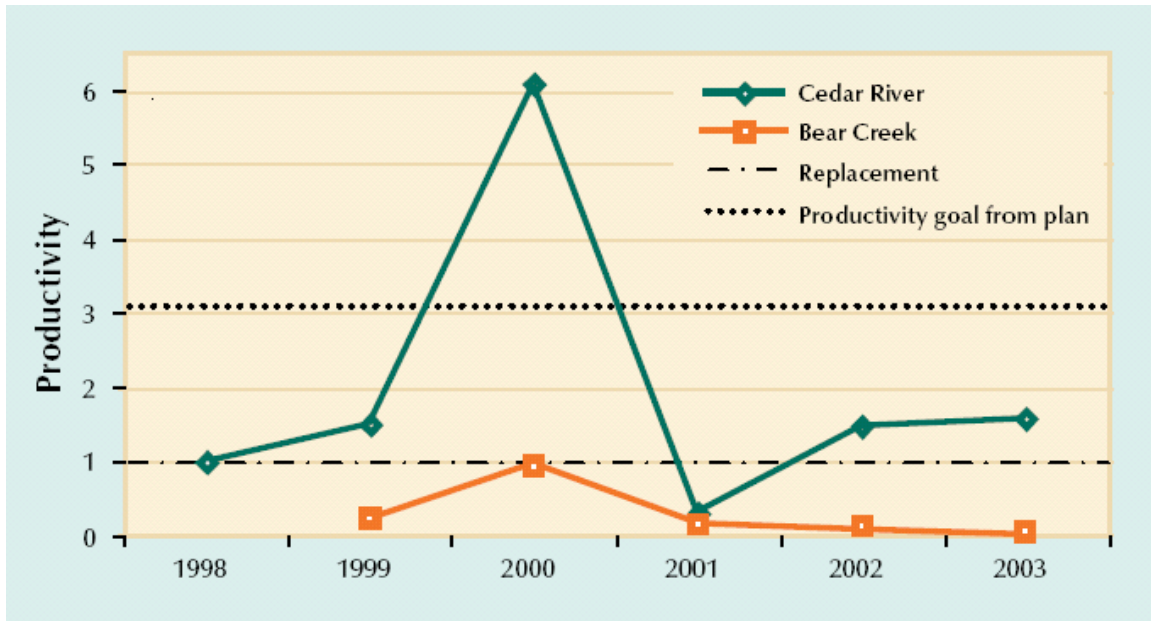


Figure 4. Cedar River and Bear/Cottage Creek Redd:Redd Productivity. The majority of Chinook in the Cedar River return after 3 to 4 years, though the proportion varies each year. The WRIA 8 Plan has a productivity goal of 3.1 for the Cedar River population and 3.0 for the Sammamish population. (Figure from the 2006-2007 WRIA 8 Implementation Progress Report.). Note that this productivity estimate incorporates all mortality during the life cycle, including ocean harvest, which is estimated at approximately 40% of the total run.

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Brood Year	Estimated Migration			% Migration		Est. Females	PED	Production/Female			Survival Rates		
	Fry	Parr	Total	Fry	Parr			Fry	Parr	Total	Fry	Parr	Total
1998	67,293	12,811	80,104	84.0%	16.0%	173	778,500	389	74	463	8.6%	1.6%	10.3%
1999	45,906	18,817	64,723	70.9%	29.1%	180	810,000	255	105	360	5.7%	2.3%	8.0%
2000	10,994	21,157	32,151	34.2%	65.8%	53	238,500	207	399	607	4.6%	8.9%	13.5%
2001	79,813	39,326	119,139	67.0%	33.0%	398	1,791,000	201	99	299	4.5%	2.2%	6.7%
2002	194,135	41,262	235,397	82.5%	17.5%	281	1,264,500	691	147	838	15.4%	3.3%	18.6%
2003	65,875	54,929	120,804	54.5%	45.5%	337	1,516,500	195	163	358	4.3%	3.6%	8.0%
2004	74,292	60,006	134,298	55.3%	44.7%	511	2,299,500	145	117	263	3.2%	2.6%	5.8%
2005	98,085	19,474	117,559	83.4%	16.6%	339	1,525,500	289	57	347	6.4%	1.3%	7.7%
2006	107,796	14,613	122,409	88.1%	11.9%	587	2,641,500	184	25	209	4.1%	0.6%	4.7%
2007	694,264	78,915	773,179	89.8%	10.2%	899	4,045,500	772	88	860	17.2%	2.0%	19.1%
2008	121,584	17,868	139,452	87%	13%	599	2,695,500	203	30	233	4.5%	0.7%	5.2%

Table 1. Production, productivity (production per female), and survival of Chinook fry and parr among brood years. Fry migration was assumed to be January 1 to April 15. Parr migration was assumed to be April 16 through July 13. Productivity was calculated from potential egg deposition (PED) for returning spawners. Data are Cedar River broods 1998 to 2008. (Table from Kiyohara and Zimmerman, 2009 and unpublished data; 2008 data are provisional.)

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Brood Year	Estimated Migration			% Migration		Est. Females	PED	Production/Female			Survival Rates		
	Fry	Parr	Total	Fry	Parr			Fry	Parr	Total	Fry	Parr	Total
2000	419	10,087	10,506	4.0%	96.0%	133	598,500	3	76	79	0.1%	1.7%	1.8%
2001	5,427	15,891	21,318	25.5%	74.5%	138	621,000	39	115	154	0.9%	2.6%	3.4%
2002	645	16,636	17,281	3.7%	96.3%	127	571,500	5	131	136	0.1%	2.9%	3.0%
2003	2,089	21,558	23,647	8.8%	91.2%	147	661,500	14	147	161	0.3%	3.3%	3.6%
2004	1,178	8,092	9,270	12.7%	87.3%	121	544,500	10	67	77	0.2%	1.5%	1.7%
2005	5,764	16,598	22,362	25.8%	74.2%	122	549,000	47	136	183	1.0%	3.0%	4.1%
2006	3,452	13,077	16,529	20.9%	79.1%	131	589,500	26	100	126	0.6%	2.2%	2.8%
2007	1,163	11,543	12,706	9.2%	90.8%	276	1,242,000	4	46	50	0.1%	0.9%	1.0%
2008	14,243	50,959	65,202	21.8%	78.2%	132	594,000	108	386	494	2.4%	8.6%	11.0%

Table 2. Production, productivity (production per female), and survival of natural-origin Chinook in Bear Creek. Fry are assumed to have migrated between February 1 and April 8. Parr are assumed to have migrated between April 9 and June 30. Data are 2000 to 2008 brood years. (Table from Kiyohara and Zimmerman, 2009 and unpublished data; 2008 data are provisional.)

2010 Three-Year Work Plan - WRIA 8 Watershed Implementation Priorities
New Projects Highlighted in Yellow

Project Type	Plan Category	Project Name	Project Description	Priority Tier	Primary Limiting Factors Addressed	Reference Document for limiting factor	Habitat Type	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting	Current Project Status	Year 1 Activity to be funded	Year 1 Estimated Budget	Year 2 Activity to be funded	Year 2 Estimated Budget	Year 3 Activity to be funded	Year 3 Estimated Budget	Likely end date	Likely sponsor	Total Cost of Project	Local share or other funding	Source of funds (PSAR, SRFB, other)	Project ID
Cedar																							
Capital Projects																							
Cedar River - Restore Floodplain Connectivity to Increase In-Stream Juvenile Rearing Productivity																							
Capital	Acquisition and Restoration	Cedar Reach 3	Protect and improve riparian habitat in future redevelopment	Tier 1	Floodplain Connectivity & Function	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian, Instream	Activity Type - Land Protected, Acquired, or Leased: Streambank or Riparian Protected (19 acres, 4500 linear feet)	Chinook	Coho, Sockeye, Steelhead	Feasibility Pending	Acquisition	\$ -	restoration		\$ -	2014	SPU, CLC, Renton			SRFB/ PSAR	C206	
Capital	Acquisition	Acquisition and Habitat Protection Upstream of Ron Regis park: Reach 4	Protect Habitat in Reach 4: Protect existing riparian habitat, instream habitat conditions and extensive LWD in reach. Most of reach already in public ownership or protected by regulations (e.g. steep slopes). Targeted parcel is adjacent to landslide reach immediately upstream of Ron Regis park. (C213)	Tier 1	Channel Structure and Complexity, Riparian Areas & LWD Recruitment	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian, Instream	Activity Type - Land Protected, Acquired, or Leased: Streambank or Riparian Protected (0.10 Miles)	Chinook	Coho, Sockeye, Steelhead	Feasibility Pending	NA	\$ -	acquisition	\$ 200,000	NA	\$ -	2013	King County	\$ 200,000	\$ 50,000	KCD , King County SWM	C213
Capital	Restoration	Study Options to Protect Habitat in Reach 4 and Reduce Flooding and Erosion in Ron Regis park	Study Options to Protect Habitat in Reach 4 and Reduce Flooding and Erosion in Ron Regis Park: It is unclear how much further river is going to erode bank and migrate into Ron Regis park in landslide area. Eventually there will be a conflict with park uses. Explore using LWD and levee setback to prevent excessive erosion and flood damage to public lands associated with Ron Regis Park while protecting natural habitat forming processes in reach. Study should include lower Madsen Creek. (C214)	Tier 1	Floodplain Connectivity & Function	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian, Instream	Activity Type - Instream: Large Woody Debris (0 Feet)	Chinook	Coho, Sockeye, Steelhead	Feasibility Pending	NA	\$ -	Feasibility	\$ 40,000	NA	\$ -	2013	Renton / King County	\$ 40,000	\$ -		C214
Capital	Acquisition	Jones Reach Acquisition and Habitat Protection - C228b	Jones Reach: 20.8 acres, 13 parcels (of total 29 acres, 16 parcels) targeted for protection. Left bank of river already protected. Acquiring parcels on right bank of the river would allow both banks of the river to be protected. (C228)	Tier 1	Channel Structure and Complexity, Riparian Areas & LWD Recruitment	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian	Activity Type - Land Protected, Acquired, or Leased: Upland Protected (20.8 Acres)	Chinook	Coho, Sockeye, Steelhead	Feasibility Pending	Acquisition	\$ 1,000,000	acquisition	\$ 1,400,000	acquisition	\$ 1,400,000	2013	King County (City of Seattle partnership)	\$ 3,800,000	\$ 1,000,000	KCD , King County SWM	C228B
Capital	Acquisition	Bucks Curve Buyout	Bucks Curve Buyout: Continue buying out structures to build on previous restoration efforts in vicinity of RM 6.2 to RM 6.4. Once sufficient land acquired, remove or setback existing levee, and revegetate floodplain. In best alternative, a portion of SE Jones Road could be relocated northward. (C215A)	Tier 1	Floodplain Connectivity & Function	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian, Instream	Activity Type - Land Protected, Acquired, or Leased: Upland Protected (37 Acres)	Chinook	Coho, Sockeye, Steelhead	Feasibility Pending	Acquisition	\$ 800,000	acquisition	\$ 800,000	acquisition	\$ 800,000	2013	King County / City of Seattle	\$ 2,250,000	\$ 750,000	KCD , King County SWM	C215A
Capital	Restoration	Bucks Curve Levee Setback/Removal	Bucks Curve Levee Setback / Removal: Once sufficient land acquired, remove or setback existing levee, and revegetate floodplain. In best alternative, a portion of SE Jones Road could be relocated northward. (C215B)	Tier 1	Floodplain Connectivity & Function	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian, Instream	Channel Reconfiguration (Includes Channel Roughening), Activity Type - Instream: Large Woody Debris, Activity Type - Riparian: Revegetation Planting	Chinook	Coho, Sockeye, Steelhead	Feasibility Pending	NA	\$ -	NA	\$ -	NA	\$ -	2013	King County / Corps of Engineers	\$ 40,000	\$ 40,000	KC Surface Water Mgmt CIP	C215B
Capital	Restoration	Cedar River Rainbow Bend Restoration (C236-B)	(Name change from Cedar Grove Road - Rainbow Bend Levee Removal). Conduct further levee modification work to maximize channel-floodplain interactions. (C235)	Tier 1	Floodplain Connectivity & Function	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian, Instream	Channel Reconfiguration (Includes Channel Roughening), Activity Type - Instream: Large Woody Debris, Activity Type - Riparian: Revegetation Planting	Chinook	Coho, Sockeye, Steelhead	Design	NA	\$ -	NA	\$ -	Design	\$ 50,000	2010	King County / Seattle Public Utilities	\$ 50,000	\$ 50,000	King County SWM, Corps	C235B
Capital	Acquisition	Lower Lions Stream Reach Acquisition	30 acres (12 parcels) includes a large area of riparian forested floodplain between the Cedar River and SE 188th Street. Enhances side channel that was constructed in the area, allows expansion, and completion of side channel. (C239)	Tier 1	Floodplain Connectivity & Function	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Instream, Riparian	Activity Type - Land Protected, Acquired, or Leased: Upland Protected (39 Acres)	Chinook	Coho, Sockeye, Steelhead	underway	Acquisition	\$ 540,000	Acquisition	\$ 540,000	Acquisition	\$ 540,000	2010	King County	\$ 1,620,000		Conservation Futures, King County SWM	C239
Capital	Acquisition	218th Place Side Channel Protection and Enhancement	218th Place Side Channel: Protect 5 acres, 1 parcel, rural residential, riverfront. Once acquired there are opportunities for habitat enhancement in floodplain and off-channel areas. (Related to C242 to enhance 218th side channel once protected. C242 is not on start list.) (C244)	Tier 1	Floodplain Connectivity & Function	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Instream, Riparian	Activity Type - Land Protected, Acquired, or Leased: Upland Protected (5 Acres)	Chinook	Coho, Sockeye, Steelhead		NA	\$ -	NA	\$ -	acquisition	\$ 500,000	2012	King County	\$ 500,000	\$ -		C244
Capital	Acquisition	Mouth of Taylor Creek Reach Acquisition	Mouth of Taylor Creek Reach: Acquire approximately 40 acres of forested riparian floodplain associated with both the Cedar mainstem and the lower reach of Taylor Creek. The target parcels include approximately 1,000 feet of mainstem channel, nearly 1,300 feet of the lowermost reach and mouth of Taylor Creek, and one of the largest remaining floodplain wetlands adjacent to the mainstem. Some of the acquisitions will facilitate future levee removal and/or modification projects (Getchman and Rhode Levees). Completes acquisition by 2009, with restoration by 2012. (C245)	Tier 1	Floodplain Connectivity & Function	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian, Wetland	Activity Type - Land Protected, Acquired, or Leased: Upland Protected (40 Acres)	Chinook	Coho, Sockeye, Steelhead	underway	Acquisition	\$ 1,000,000	acquisition	\$ 1,250,000	acquisition	\$ 1,250,000	2010	King County	\$ 3,500,000	\$ 1,350,000	FEMA, Open Space Bond, King County SWM, Conservation Futures	C245

Project Type	Plan Category	Project Name	Project Description	Priority Tier	Primary Limiting Factors Addressed	Reference Document for limiting factor	Habitat Type	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting	Current Project Status	Year 1 Activity to be funded	Year 1 Estimated Budget	Year 2 Activity to be funded	Year 2 Estimated Budget	Year 3 Activity to be funded	Year 3 Estimated Budget	Likely end date	Likely sponsor	Total Cost of Project	Local share or other funding	Source of funds (PSAR, SRFB, other)	Project ID
Capital	Acquisition	Belmondo Reach Acquisition	Belmondo Reach: 71 acres, 10 parcels, rural residential, riverfront. No levees in reach, numerous side channels, braided reach. Located between WPA and Cummings levees. Reach includes Trib 0316 confluence area. Area is just downstream of Cedar Grove Road / Rainbow Bend acquisition and meander bend restoration. (C232)	Tier 1	Floodplain Connectivity & Function	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian	Activity Type - Land Protected, Acquired, or Leased: Upland Protected (71 Acres)	Chinook	Coho, Sockeye, Steelhead	underway	Acquisition	\$ 500,000	Acquisition	\$ 800,000	Acquisition	\$ 1,800,000	2010	King County	\$ 3,100,000	\$ 1,100,000	Seattle HCP, Conservation Futures, King County SWM	C232
Capital	Acquisition	Elliot Bridge Habitat Acquisitions	Acquisition of high habitat value properties (7 parcels, 6.7 acres) in the Elliot Bridge reach. These acquisitions will supplement flood buy-outs in the reach and will facilitate early removal and setback of the levee. (C216-B)	Tier 1	Floodplain Connectivity & Function	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian	Activity Type - Land Protected, Acquired, or Leased: Upland Protected (6.7 Acres)	Chinook	Coho, Sockeye, Steelhead	underway	Acquisition	\$500,000	Acquisition	\$500,000			2010	King County	\$1,676,000	\$676,000	KCD, King County SWM	C216 B
Capital	Acquisition	Royal Arch Reach Acquisitions	Acquisition of parcels in the Royal Arch Reach (RM 13.19 to 14.19) of the Cedar River mainstem. Potential habitat restoration opportunities include restoration of a historic side channel for high flow refuge for juveniles, and spawning and rearing habitat.	Tier 1	Floodplain Connectivity & Function	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian	Activity Type - Land Protected, Acquired, or Leased: Upland Protected (24.76 Acres)	Chinook	Coho, Sockeye, Steelhead	underway	Acquisition	\$500,000	Acquisition	\$500,000	Acquisition		2011		\$2,000,000	\$1,000,000	SPU HCP	C247
Capital	Acquisition	Dorre Don Meanders Reach Acquisition	Dorre Don Meanders Reach: Protect 71 acres, 14 parcels, rural residential, riverfront with flooding issues. Includes an extensive floodplain riparian forest, numerous valley floor spring-fed features including side channel, stream, and oxbow habitats. (C253)	Tier 1	Floodplain Connectivity & Function	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian	Activity Type - Land Protected, Acquired, or Leased: Upland Protected (71 Acres)	Chinook	Coho, Sockeye, Steelhead	underway	Acquisition	\$ 1,000,000	Acquisition	\$ 1,500,000	Acquisition	\$ 1,500,000	2011	King County / City of Seattle	\$ 4,000,000	\$ 1,000,000	Conservation Futures, King County SWM	C253
Cedar River - Protect and Restore Hydrologic Processes to Support Egg Incubation and Pre-Spawning Migrant Life Stages																							
Capital	Restoration	Enhance Flows at Lower Rock Creek	Spawning Migrants: Work with the City of Kent in establishing instream flows that are protective of Chinook through their HCP process. (C351)	Tier 2	Stream flow, Water quality	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Instream	Instream flow: water flow returned to stream	Chinook		feasibility pending	\$ -	\$ -	\$ -					Kent	\$ -	\$ -		C351
Cedar River - Restore LWD to Increase In-Stream Juvenile Rearing Productivity																							
Capital	Restoration	LWD over Landsburg Dam	Explore feasibility of passing large woody debris over Landsburg Dam. (C260)	Tier 1	Channel structure and complexity	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Instream	Instream: large woody debris	Chinook		feasibility pending	0 \$ -	Feasibility Study	\$ 25,000	NA	\$ -	ongoing	City of Seattle	\$ -	\$ -		0	C260
Cedar River - Restore Riparian Function to Increase In-Stream Juvenile Rearing Productivity																							
Capital	Restoration	City of Renton Riparian Restoration	Riparian restoration in City of Renton-owned parkland upstream of I-405 bridge on left bank. Define area and then restore (C209/C210)	Tier 1	Riparian areas and LWD recruitment, Floodplain connectivity	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian	Riparian	Chinook		feasibility pending	NA	\$ -	riparian restoration	\$ 81,000	NA	\$ -	2010	Renton	\$ 81,000	\$ 21,000	Local Governments	C209 / C210
Subtotal - Capital - Cedar												\$ 5,840,000	\$ 7,636,000	\$ 7,840,000	\$ 22,857,000	\$ 7,037,000							
Migratory																							
Capital projects																							
Lakes - Restore Shoreline Complexity to Increase Juvenile Rearing and Migratory Survival																							
Capital	Restoration	Small Creek Mouth and Shoreline Restoration	Opportunities to restore small creek mouths or restore shorelines (remove bulkheads, reduce armoring, reduce number of docks, or restore vegetation). Work with private landowners (including homeowner demonstration project) or on public lands throughout section 1 and 2. (C267, C269 - South Lake Washington Habitat Design and Restoration, C270, and C271 - Mapes Creek daylighting demonstration site).	Tier 1	Shoreline complexity	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Instream, Lakeshore	Instream: channel reconfiguration, Riparian: planting, Lakeshore: armor modification/ removal, modify/ remove overwater structure	Chinook		feasibility pending	Design/ Construction	\$ 1,500,000	Design/ Construction	\$ 1,000,000	Design/ Construction	\$ 1,000,000	2015	Seattle	\$ 3,500,000	\$ 2,500,000	Renton, or Seattle and Corps	C267, C269 - C271
Capital	Restoration	South Lake Washington DNR Shoreline Restoration	Natural Resources property. Remove am portion of flume (along lakeside), create shallow water habitat, protect existing cove, and plant overhanging riparian vegetation.	Tier 1	Reduced habitat complexity; Shoreline complexity	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian	Activity Type - Estuarine & Nearshore: Restore elevation (1 Each), Activity Type - Riparian Habitat: Planting (8 Acres)	Chinook		feasibility pending	Design		Construction				2015	Dept. of Natural Resources			SRFB/PSAR	C266
Ship Canal Lake Union Locks - Improve Survival of Migrating Adults and Juveniles																							
Capital	Restoration	Operational Improvements to Locks	Operational Improvements to Improve Juvenile and Adult Chinook Survival (eg Add/Replace strobe lights to locks to deter smolts and prevent entrainment.) (M204)	Tier 1	Fish Passage	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Estuary	Fish passage	Chinook		Operational Improvements	\$ 150,000	0 \$ -	\$ -	\$ -	Ongoing	Corps	\$ 150,000	\$ 150,000	Corps		M204	
Estuary and Nearshore - Improve Juvenile Rearing Habitat																							
Capital	Restoration	Feeder Bluff Restoration Feasibility Study and pilot restoration projects	Nearshore feasibility assessment to develop multiple beach nourishment designs for restoration (M2 & M3)	Tier 1	Sediment supply	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Nearshore	Beach nourishment	Chinook		Feasibility assessment	\$100,000						2010	King County	\$300,000	\$150,000	WDFW; SRFB/PSAR, KCD; ESRP	M2/M3
Capital	Restoration	Big Gulch Pocket Estuary Restoration	Big Gulch Pocket Estuary: Design and restoration of pocket estuary and culvert improvements to restore system connectivity and improve sediment transport into the nearshore. (M222)	Tier 1	Passage; Reduced Habitat Capacity	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Estuary River Delta	Nearshore: Culvert Replacement - Estuary/Nearshore (1 Each), Activity Type - Land Protected, Acquired, or Leased: Upland Protected (1.10 Acres)	Chinook	Coho, Steelhead	Feasibility and Design	\$ 100,000	Restoration	\$ 1,900,000	\$ -	\$ -	2012	Mukilteo	\$ 20,000,000	\$ 1,900,000	Local Governments / Grants/ Mitigation	M222	
Subtotal - Capital - Migratory												\$ 1,850,000	\$ 2,900,000	\$ 1,000,000	\$ 23,950,000	\$ 4,700,000							
Sammamish - North Lake Washington Tributaries																							
Capital Projects																							
NLW Tribs - Channel Complexity and Large Woody Debris to support juvenile rearing and fry colonization life stages																							
Capital	Restoration	Lower Bear Creek Restoration	Lower Bear Creek Restoration: Provide an enhanced channel alternative to the ditched and leveed lower 3,000 feet of Bear Creek, including a new refuge confluence with the Sammamish River. Add LWD, restore riparian conditions. (N201)	Tier 1	Channel Structure and Complexity, Riparian Areas & LWD Recruitment	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian, Instream	Activity type - Instream: Channel Reconfiguration (Includes Channel Roughening) (0.50 Miles), Activity Type - Instream: Large Woody Debris (3000 Feet)	Chinook	Coho, Sockeye	Feasibility Completed	Construction	\$ 1,000,000	Construction	\$ 9,000,000	Monitoring	\$ 25,000	2010	Redmond	\$ 10,000,000	\$ 850,000	design and permitting 2006-2010, construction 2011	N201

Project Type	Plan Category	Project Name	Project Description	Priority Tier	Primary Limiting Factors Addressed	Reference Document for limiting factor	Habitat Type	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting	Current Project Status	Year 1 Activity to be funded	Year 1 Estimated Budget	Year 2 Activity to be funded	Year 2 Estimated Budget	Year 3 Activity to be funded	Year 3 Estimated Budget	Likely end date	Likely sponsor	Total Cost of Project	Local share or other funding	Source of funds (PSAR, SRFB, other)	Project ID
Capital	Restoration	Evaluate Locations for LWD Additions	Evaluate locations for LWD addition. Focus on Reach 6, which has the highest restoration potential but does not presently include any projects. (N242)	Tier 1	Channel Structure and Complexity, Riparian Areas & LWD Recruitment	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Instream	Activity Type - Instream Habitat: Channel structure - Large woody debris (1750 Feet)	Chinook	Coho, Sockeye	Feasibility Pending	Feasibility Study	\$ 50,000	Construction	\$ 150,000	Construction	\$ 150,000	2013	King County	\$ 350,000	\$ 100,000	Local governments	N242
Capital	Restoration	Evans/Bear Creek Restoration	Evans/Bear Creek Restoration: In-channel restoration is needed in Bear Creek and Evans Creek through the former dairy farm at the confluence; RM 1.25 to RM 2.5 on Bear Creek and RM 1.2 to RM 4.6 on Evans Creek (Same as Keller Farm). Reconfigure channel where it has been widened due to past farm practices, enhance riparian area, add LWD, replant. (N208/N211)	Tier 1	Channel Structure and Complexity	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian, Instream	Activity Type - Instream: Channel Reconfiguration (Includes Channel Roughening) (4.65 Miles), Activity Type - Instream: Large Woody Debris (4500 Feet), Activity Type - Riparian: Revegetation Planting (5 Acres)	Chinook	Coho, Sockeye	Feasibility Pending	Acquisition	\$ 2,000,000		\$ -	Restoration	\$ 1,000,000	2010	Redmond / WSDOT	\$ 3,000,000	\$ 3,000,000	Private / WSDOT	N208 / N211
Capital	Restoration	Cottage Creek Restoration	Cottage Creek: Explore opportunities to improve floodplain connection in reach by removing riprap or artificial constrictions. (N282)	Tier 1	Channel Structure and Complexity	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Instream	Activity Type WRIA 8: Armor modification/removal (2750 Linear Feet)	Chinook	Coho, Sockeye	Feasibility Pending	Restoration	\$ -		\$ -	Restoration	\$ 180,000	2010	King County	\$ 90,000	\$ 90,000	Local governments	N282
Capital	Restoration	North Creek School (now called Clearwater School) Restoration	Continue North Creek School Project: Work with school to do additional riparian restoration, large woody debris addition and side channel enhancements on their property. This project has been one of Snohomish county's top priorities in recent years. (N378)	Tier 2	Channel Structure and Complexity, Riparian Areas & LWD Recruitment	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian, Instream	Channel Reconfiguration (Includes Channel Roughening), Activity Type - Instream: Large Woody Debris, Activity Type - Riparian: Revegetation Planting	Chinook	Coho, Sockeye, Steelhead	Feasibility Pending, Feasibility Completed	Restoration	\$240,360	Restoration	\$134,350			2010	Snohomish County	\$ 374,710	\$134,350	Local government; NFW	N378
NLW Tribes - Hydrologic processes to support egg incubation, juvenile rearing, and adult migration																							
Capital	Acquisition	Bear Creek Forest Cover Protection	Bear Creek Forest Cover Protection: Acquire forest property, development rights/conservation easements, and provide enhanced incentives to retain and plant forest area environments. Particularly forested area south of Puget Power Trail and at corner of 116th and Avondale Road. (N216)	Tier 1	Riparian Areas & LWD Recruitment, Water Quality	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Upland, Riparian	Activity Types - Acquisition/Easements/Leases : Upland protected (24 Acres)	Chinook	Coho (Secondary Species), Sockeye (Secondary Species)		Acquisition	\$ 800,000	\$ -	\$ -	\$ -	\$ -	2010	King County	\$ 800,000	\$ 200,000	Local governments	N216
Capital	Acquisition	Little Bear and Great Dane Creeks Forested Wetland Protection	Forest Cover, Wetland Protection: Protect large, undeveloped forested wetland on both Little Bear and Great Dane Creeks. Approximately 100 acres including 10 parcels. Also listed under Great Dane Creek Reach 1. (N422)	Tier 2	Water Quality, Reduced Habitat Capacity	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Wetland	Activity Type - Land Protected, Acquired, or Leased: Upland Protected (100 Acres)	Chinook			Acquisition	\$ -	Acquisition	\$ 500,000	Acquisition	\$ 500,000	2009	Snohomish County	\$ 1,000,000	\$ 500,000	Local governments	N422
Capital	Acquisition	Little Bear Reach Riparian Wetland Protection	Protect Riparian Wetland in Little Bear Reach 10: Protect undeveloped, forested wetlands (second growth forest) in reach covering approximately 55 acres and 12 parcels owned by two landowners. Enhance with large woody debris. (N424)	Tier 2	Riparian Areas & LWD Recruitment, Water Quality, Reduced Habitat Capacity	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Wetland	Activity Type - Land Protected, Acquired, or Leased: Upland Protected (110 Acres)	Chinook		Feasibility Pending	Acquisition	\$ 500,000	Acquisition	\$ 750,000	Acquisition	\$ 750,000	2010	Snohomish County	\$ 1,000,000	\$ 250,000		N424
Capital	Acquisition	Little Bear Creek Forested Headwater Wetlands Protection	Little Bear Forest Cover Protection: Protect forested, headwater wetlands from corner of 51st and 180th upstream approximately 2 miles along Little Bear Creek through conservation easements and acquisition. Includes three wetland complexes totaling over 200 acres: 4 parcels along 180th St. on mainstem; ~7 parcels along Trout Stream from 180th to Interurban Blvd.; and 5 parcels north of 164th Street to 156th Street. (N429)	Tier 2	Riparian Areas & LWD Recruitment, Water Quality	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Wetland	Activity Type - Land Protected, Acquired, or Leased: Upland Protected (200 Acres)	Chinook			Acquisition	\$ -	Acquisition	\$ 500,000	Acquisition	\$ 1,000,000	2011	Snohomish County	\$ 1,500,000	\$ 500,000	Local Governments	N429
Capital	Restoration Projects	Little Bear Creek Reach 2- Fish Passage 132 Ave NE (N401) and Fish passage 134th Ave NE (N402) with riparian restoration (N403)	Fish Passage Benefiting Chinook: 132nd Avenue NE (a low flow blockage), RM 0.45, and 134th Ave NE (3 cement pipes, broken), RM 0.5, City of Woodinville; Restore Riparian Vegetation up to H 522 and add large wood.	Tier 2	Degraded Habitat- Fish Passage; Riparian Areas & LWD Recruitment	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Instream	Activity Type - Fish Passage: Fish passage blockages removed or altered (4); Riparian Habitat - plantings of native vegetation; Large Wood - placement	Chinook		Feasibility Pending							12/31/2055	Woodinville City of	300000			N401, N402, N403
Capital	Restoration	Kelsey Creek Fish Passage and Channel Restoration - Reach 3 (N473)	N473 Fish Passage: Reduce jump height at concrete weirs using artificial riffle or other "safer" engineering. With N454/N458 - Installation of LWD, design and install LWD to provide hydraulic refuge areas during peak flows in stream segments 76-03 through 76-08 of Kelsey Creek. With N457/N459 - Restoration of Riparian Areas: Identify and implement opportunities to plant native coniferous trees in the riparian zones throughout the subarea. First priority should be the mainstem of Kelsey Creek.	Tier 2	Fish Passage, Riparian Areas & LWD Recruitment	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Instream, Riparian	Activity Type - Fish Passage: Fish passage blockages removed or altered (9 Each)	Chinook	Coho, Sockeye	Design & permits	Design						2014				Bellevue, KCD	N473
Capital	Restoration	North Creek Reach 5- Riparian Restoration and Stream Enhancements	Riparian restoration and Stream enhancements: Work with Landowners in Reach 5 to restore riparian vegetation and to do stream enhancements. Adopt-a-Stream Project in Snohomish County portion of North Creek. Project overlaps with Snohomish County North Creek Drainage Needs Report Project proposal.	Tier 2	Degraded Habitat- Channel Structure and Complexity, Degraded Habitat- Riparian Areas and LWD Recruitment	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian, Instream	Activity Type - Riparian Habitat: Planting	Chinook	Cutthroat (Secondary Species), Coho (Secondary Species), Sockeye (Secondary Species)	Feasibility Pending							12/31/2015	Snohomish County of				N379, N384

Project Type	Plan Category	Project Name	Project Description	Priority Tier	Primary Limiting Factors Addressed	Reference Document for limiting factor	Habitat Type	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting	Current Project Status	Year 1 Activity to be funded	Year 1 Estimated Budget	Year 2 Activity to be funded	Year 2 Estimated Budget	Year 3 Activity to be funded	Year 3 Estimated Budget	Likely end date	Likely sponsor	Total Cost of Project	Local share or other funding	Source of funds (PSAR, SRFB, other)	Project ID
Capital	Acquisition	Reach 6 Protection through Acquisition	North Creek- Protect remaining forest cover and wetlands through CAOs, regulations, BMPs, and incentives and acquisition where regulations and incentives are not sufficient. There are undeveloped forested areas and wetlands in the following reaches: Lower North reaches 4,3,2 and upper North reaches 10,9,8,7 (listed in EDT priority). (N385)	Tier 2	Riparian Areas & LWD Recruitment, Stream Flow, Water Quality	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Upland, Riparian	Activity Type - Riparian Habitat: Planting	Chinook			Acquisition								\$ 2,000,000			N385
NLW Tribs River - Restore Riparian Function to Support Juvenile Rearing and Fry Colonization																							
Capital	Restoration	NLW Tribs Riparian Restoration	Riparian restoration in reach. Most of the reach is publicly owned, but need to remove invasive plants and replant with native vegetation. (N206)	Tier 1	Riparian Areas & LWD Recruitment	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian	Activity Type - Riparian Habitat: Planting (12 Acres)	Chinook	Coho, Sockeye	Design Completed		\$ -	\$ -	Restoration		\$ 25,000	2010	Redmond	\$ 25,000	\$ 12,500		N206
Capital	Acquisition	Reach 9- Bear Creek Waterways Program (N239)	Continue Bear Creek Waterways program to protect best remaining habitat. This reach includes Reach D. Change in feasibility with a willing seller of a large parcel.	Tier 1	Riparian Areas & LWD Recruitment	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Upland, Riparian	Activity Type - Land Protected, Acquired, or Leased: Streambank or Riparian Protected (62 acres)	Chinook	Coho, Sockeye	negotiations underway	Acquisition		Acquisition	\$ 1,350,000			2012	King County	\$ 1,350,000	\$ 900,000	KCD, CFT, SRFB/ PSAR	N239
Capital	Acquisition	Bear Creek Waterways Program	Continue Bear Creek Waterways program to protect best remaining habitat. Includes "Reach D" and Reach E. In particular, forested riparian parcels contiguous to already protected properties. Also protect undeveloped properties that can be restored. (N232, N303, N293, N286)	Tier 1	Riparian Areas & LWD Recruitment	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Upland, Riparian, Wetland	Activity Types - Acquisition/Easements/Leases : Upland protected (84 Acres)	Chinook	Coho, Sockeye		Acquisition	\$ -	Acquisition	\$ 500,000		\$ -	0	King County	\$ 500,000	\$ 100,000		N232, N303, N293, N286
Capital	Restoration	Horse Farm Restoration (Bear Creek)	Restoration needed on Horse Farm property on NE 140th St. Reduce fine sediments, restore riparian areas. Pursue farm plan to address impacts to Bear Creek. (N228)	Tier 1	Riparian Areas & LWD Recruitment, Excessive Sediment	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Upland, Riparian	Activity Types- Agriculture BMP, Erosion control structures, riparian planting	Chinook	Coho, Sockeye	Feasibility Pending		\$ -	Restoration	\$ 25,000		\$ -	0	King County	\$ 25,000	\$ 12,500		N228
Capital	Restoration	Paradise Valley Conservation Area Restoration (Bear Creek)	Remove invasive plants and plant riparian buffer along Bear Creek through out Paradise Valley Conservation Area. (N276)	Tier 1	Riparian Areas & LWD Recruitment	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian	Activity Type- Riparian Habitat: plant removal/control and riparian planting	Chinook	Coho, Sockeye	Feasibility Pending		\$ 50,000		\$ -		\$ -	0	Snohomish	\$ 50,000	\$ 25,000		N276
Subtotal - Capital - NLW Tribs.												\$ 5,640,360	\$ 12,559,350	\$ 4,630,000		\$ 23,714,710	\$ 6,774,350						
Sammamish River - Protect and Restore Floodplain Connectivity to Support Juvenile Rearing and Adult Migration																							
Capital	Restoration	Swamp Creek Regional Park Wetland and Stream Restoration (N335)	Swamp Creek Regional Park Wetland and Stream Restoration: As identified in the Sammamish River Corridor Action Plan, restore large, publicly owned wetland complex at the confluence of Swamp Creek and the Sammamish River, creating a diversity of wetland elevations and habitats in the floodplain.	Tier 1	Channel Structure and Complexity, Riparian Areas & LWD Recruitment, High Water Temperatures	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Instream, Riparian (1 acre), Wetland (28 acres)	Instream, Riparian, Wetland	Chinook	Coho, Sockeye, Steelhead	Design underway	permits		Construction								Kenmore, SRFB/PSAR KCD	N335
Capital	Restoration	Sammamish River Reach 2- Wetland Restoration on Right Bank in Bothell and Riparian Wetlands adjacent to 102nd Avenue bridge (N337/N338)	Wetland Restoration on Right Bank in Bothell: Restore historic wetlands on right bank downstream of 102nd Avenue bridge to be seasonally inundated wetlands with small channels connecting them to the river.(N337). Enhance and reconnect riparian wetlands and remnant side channels adjacent to 102nd Avenue bridge on left bank (N338)		Degraded Habitat- Floodplain Connectivity and Function		Riparian, Wetlands		Chinook		Feasibility Pending							12/31/2015	Bothell City of			N337 N338	
Capital	Restoration	Transition Zone Restoration	Restore Transition Zone: Restoration of the left meander (Marymoor meander) below the weir as either the main channel or a seasonal channel with wetlands is recommended. Reroute tributary 0141 into wetland. Enhance or create pools at small tributary outlets, at meander bends downstream of the transition zone, and just downstream of the weir. Restoration elements could include excavation of new channel, creation of pools, and an overflow bench with wetland vegetation; removal of non-native vegetation; placement of gravel substrate in new channel; connection to capture hyporeic flows; and revegetation of riparian and wetland areas with native plants. (N358)	Tier 1	Channel Structure and Complexity, Riparian Areas & LWD Recruitment, High Water Temperatures, Reduced Access to Spawning Habitat - Fish Passage/Anthropogenic/Natural Barriers	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian, Instream	Activity Type - Riparian Habitat: Planting (1 Acres), Activity Type - Wetlands: Upland wetland - wetland restoration (28 Acres)	Chinook	Coho, Sockeye, Steelhead	Feasibility Pending	Design	\$ 270,000	Construction	\$ 1,800,000		\$ -	2011	King County	\$ 2,070,000	\$ 1,270,000	King County Surface Water Mgmt and River Improvement Fund, Army Corps	N358
Capital	Restoration	Sammamish River Tributary Mouth Restoration Feasibility and Restoration	Sammamish River Tributary Mouth Restoration Feasibility and design study for each of the tributary mouths in the Sammamish River. Implement restoration projects. Includes Bear, Little Bear, North, and Swamp Creeks, as well as Willows (trib 0102), Peters (trib 0104), and tribs 0057A, 0068, 0069, 0095, 0095A, and 0095B. (N201, N339, N346, N357)	Tier 1	Floodplain connectivity and function	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Instream, Riparian, Wetland	Activity Type - Instream Habitat: Channel reconfiguration and connectivity (0.50 Miles), Activity Type - Instream Habitat: Channel structure - Large woody debris (3000 Feet)	Chinook	Coho, Sockeye, Steelhead	Feasibility Pending		\$ -	Feasibility and Design	\$ 150,000		\$ -	2015	King County	\$ 150,000	\$ 50,000	Local Government	N201, N339, N346, N357
Subtotal - Capital												\$ 270,000	\$ 1,950,000	\$ -		\$ 2,220,000	\$ 1,320,000						
Sammamish - Issaquah																							
Issaquah Tribs - Protect and Restore Channel Complexity to Support Juvenile Rearing and Pre-Spawning Migrants																							

Project Type	Plan Category	Project Name	Project Description	Priority Tier	Primary Limiting Factors Addressed	Reference Document for limiting factor	Habitat Type	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting	Current Project Status	Year 1 Activity to be funded	Year 1 Estimated Budget	Year 2 Activity to be funded	Year 2 Estimated Budget	Year 3 Activity to be funded	Year 3 Estimated Budget	Likely end date	Likely sponsor	Total Cost of Project	Local share or other funding	Source of funds (PSAR, SRFB, other)	Project ID
Capital	Restoration	Sammamish State Park Restoration	Sammamish State Park Restoration: Revisions of the State's Plan for the park emphasis restoration of the wetlands, streams and lakeshore areas. EDT modeling results suggest park restoration in Reach 1 has highest restoration potential to affect VSP attributes, but based on an aggressive approach. Opportunity to work with State and consultants on restoration actions. (I204)	Tier 1	Regulatory Mechanisms	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian	Activity Type - Riparian Habitat: Planting and native plant establishment	Chinook		Feasibility Completed	Restoration	\$ 50,000	Restoration	\$ 50,000	Restoration	\$ 50,000	2010	Washington State Parks	\$ 150,000	\$ 150,000	Washington State Parks / Local Govts	I204
Capital	Restoration	Pickering Place Channel and Riparian Restoration	Pickering Place Channel and Riparian Restoration, Stream restoration along 1,800 feet of west bank Issaquah Creek. Restoration could include removal of hardened banks and floodplain, side channel, and riparian enhancements. (I207)	Tier 1	Floodplain Connectivity & Function, Channel Structure and Complexity	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian, Instream	Restoration: Channel Connectivity/Rehabilitation/Creation - Floodplain Restoration (1800 Linear Feet), Activity Type - Riparian: Revegetation Planting (8.20 Acres)	Chinook		Feasibility Pending	Restoration		Restoration		Restoration		2010	Issaquah	\$500,000		Local Governments	I207
Capital	Acquisition and Restoration	Bush Lane Acquisition and Restoration	Bush Lane Acquisition and restoration. When combined with Pickering Place could create a large protected/restored section of Issaquah Creek on both banks and some of lower NF Issaquah. Stream, riparian, and floodplain restoration on 1,200 feet of Issaquah Creek east bank. Stream/buffer enhancements can be combined with other public use of upland area of site, such as active recreation. (I206 & I208)	Tier 1	Floodplain Connectivity & Function, Channel Structure and Complexity	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian, Instream, Wetland	Activity Type - Floodplain Restoration: Channel Connectivity/Rehabilitation/Creation - Floodplain Restoration (1200 Linear Feet), Activity Type - Land Protected, Acquired, or Leased: Upland Protected (12.50 Acres), Activity Type - Riparian: Revegetation Planting (12.50 Acres)	Chinook		Feasibility Pending							2010	Issaquah			Local Governments	I206, I208, I274, I270
Capital	Restoration	Juniper Acres Restoration	Juniper Acres Restoration. A small 2-acre parcel recently acquired. When combined with Issaquah Park and other City owned parcels, represents good restoration potential in urban reaches. (I212)	Tier 1	Floodplain Connectivity & Function	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian, Instream, Wetland	Activity Type - Floodplain Restoration: Channel Connectivity/Rehabilitation/Creation - Floodplain Restoration (550 Linear Feet)	Chinook		Feasibility Completed	Restoration						2010	Issaquah	\$150,000		Local Governments	I212
Capital	Protection	Additional South Issaquah Creek Greenway Acquisitions	Additional South Issaquah Creek Greenway Acquisitions. Large parcels adjacent to the South Issaquah Creek Greenway offer additional potential for open space preservation, riparian and wetland enhancements, instream restoration, and side channels. Includes Mohl Property, located immediately downstream of Sycamore	Tier 1	Channel Structure and Complexity, Riparian Areas & LWD Recruitment	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Upland, Riparian, Instream, Wetland	Activity Type - Land Protected, Acquired, or Leased: Upland Protected (19 Acres)	Chinook			Acquisition	\$ -		\$ -	Acquisition	\$ 750,000	2010	Issaquah	\$ 750,000	\$ 375,000	Local Governments/KCD	I225
Capital	Restoration	Squak Valley Park Restoration	Squak Valley Park Restoration. Improve habitat complexity and riparian forest, create off-channel areas connected to the stream, large woody debris placement. Levee removal (all or parts - unknown). Right bank Issaquah - 8. (I226)	Tier 1	Floodplain Connectivity & Function, Channel Structure and Complexity, Riparian Areas & LWD Recruitment	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian, Instream, Wetland	Activity Type - Estuarine & Nearshore: Channel modification / creation (1250 Yards), Activity Type - Instream Habitat: Channel structure - Large woody debris (1250 Feet), Activity Types - Acquisition/Easements/Leases:	Chinook		Feasibility Completed	Restoration						2010	Issaquah	\$700,000		Local governments	I226 B
Capital	Acquisition	Issaquah Waterways Acquisition and Restoration and Carey/Holder/Issaquah Creek Confluence	Issaquah Waterways Acquisition and Restoration (I249) and Carey/Holder/Issaquah Creek Confluence (I248, I250, I252): Middle Issaquah Reach 12 acquisition and restoration and the confluence of Issaquah, Carey and Holder Creeks. Acquisition in fee or conservation easement to restore or expand riparian buffers. Removal of invasives. Plan includes increased fenced buffers (100 ft for named tributaries and 50 ft. for unnamed tributaries), and restricted access to the riparian corridors. (I248, I249, I250, I252)	Tier 1	Riparian Areas & LWD Recruitment	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Riparian	Activity Type - Riparian: Revegetation Planting (120 Acres)	Chinook		Feasibility Pending	Acquisition	\$ -	Acquire conservation easement	\$ 350,000	Acquire Conservation Easement	\$ 350,000	2009	King County	\$ 700,000	\$ 350,000	Local Governments/KCD/Conservation Futures	I250
Issaquah - Protect and Restore Riparian Function to Support Juvenile Rearing and Spawning Migrants																							
Capital	Acquisition	Wildwood Acquisition	Wildwood Acquisition: Acquisition of the left bank property opposite recent acquisition of one of the few remaining large undeveloped parcels (8 acres - Johnson property) on lower Issaquah Creek. (I222)	Tier 1	Riparian Areas & LWD Recruitment	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Upland, Riparian	Activity Type - Land Protected, Acquired, or Leased: Upland Protected (0.30 Acres)	Chinook			\$ -		\$ -	Acquisition	\$ 300,000	2009	Issaquah	\$ 300,000	\$ 150,000	Local Governments	I222	
Issaquah - Protect and Restore Water Quality to Support Egg Incubation, Juvenile Rearing, and Pre-Spawning Migrants																							
no projects																							
Issaquah - Hatchery Capital Projects																							
Capital	Hatchery	Issaquah Integrated Fish Passage	Issaquah Integrated Fish Passage. Allow unhindered adult passage of Chinook and coho. Open up 10 miles of habitat. (was "Issaquah Hatchery Dam Passage") (I221)	Tier 1	Spawning Habitat - Fish Passage/Anthropogenic/Natural	Chapter 4 (Volume I) WRIA 8 Chinook Salmon Conservation Plan	Instream	Activity Type - Fish Passage: Fishways (Ladders, Chutes or Pools) - Fish Passage (1 Each)	Chinook	Coho	Feasibility Completed		\$ 400					2010	Issaquah, Corps of Engineers, and WDFW	\$800,000	\$2,400,000	Local Governments, Army Corps of Engineers, WDFW	
Subtotal - Capital - Issaquah												\$ 50,400	\$ 400,000	\$ 1,450,000	\$ 4,050,000	\$ 3,425,000							
TOTAL - Capital Projects												\$ 13,650,760	\$ 25,445,350	\$ 14,920,000	\$ 76,791,710	\$ 23,256,350							
Non-Capital																							
Non-capital needs for Adaptive Management and Coordination																							
Non-Capital	Future Habitat Development	5-6% Capacity Funds	Assistance to site-specific projects or addressing barriers to implementation of projects or programs. Identifying priorities for programmatic actions.	All					Chinook			Staffing, facilitation, project or	\$53,885	Staffing, facilitation, project or	\$53,885	Staffing, facilitation, project or	\$53,885	Ongoing	Multiple stakeholders	\$161,655	\$0	PSAR Capacity Funds	

Project Type	Plan Category	Project Name	Project Description	Priority Tier	Primary Limiting Factors Addressed	Reference Document for limiting factor	Habitat Type	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting	Current Project Status	Year 1 Activity to be funded	Year 1 Estimated Budget	Year 2 Activity to be funded	Year 2 Estimated Budget	Year 3 Activity to be funded	Year 3 Estimated Budget	Likely end date	Likely sponsor	Total Cost of Project	Local share or other funding	Source of funds (PSAR, SRFB, other)	Project ID	
Non-Capital	Watershed Plan Implementation & Coordination	Salmon Recovery Coordination	Salmon Recovery Coordination/ Adaptive Management Framework and Plan Implementation tracking	All					Chinook			Staffing, facilitation, databases	\$100,000	Staffing, facilitation, databases	\$100,000	Staffing, facilitation, databases	\$100,000	Ongoing	Multiple stakeholders	\$300,000	\$50,000	Local govts		
Non-Capital	Watershed Plan Implementation & Coordination	Habitat, Hatchery, and Harvest Integration	Enhanced Integration of Habitat, Hatchery, and Harvest Management Actions	All					Chinook			Management recommendations from regional	\$50,000	Management recommendations from regional	\$50,000	Management recommendations from regional	\$50,000	Ongoing	Co-Managers and Multiple Stakeholders	\$150,000	\$0			
Non-Capital	Watershed Plan Implementation & Coordination	Lead Entity Coordination & Administrative Support of Watershed Committees	Lead entity coordination* & Administrative Support and coordination of the watershed committees / Completion and periodic revisions to the watershed salmon plan	All					Chinook			Staffing (3.5 FTE)	\$561,000	Staffing (3.5 FTE)	\$561,000	Staffing (3.5 FTE)	\$561,000	Ongoing	Local gov't. & Lead entity	\$1,683,000	\$1,683,000	ILA Local govts & LE grant		
Sub-total - Non-capital needs for Adaptive Management and Coordination												\$764,885	\$764,885	\$764,885							\$2,294,655	\$1,733,000		
Non-capital needs for WRIA 8 Plan Programmatic Recommendations (For a more detailed list of the programmatic recommendations, associated limiting factor, and cost estimates, see Attachment B: WRIA 8 Programmatic Actions List)																								
			(No examples proposed)									Staffing, materials, and mix of other resources	\$56,000	Staffing, materials, and mix of other resources	\$56,000	Staffing, materials, and mix of other resources	\$56,000	Ongoing	Multiple stakeholders and WRIA 8	\$175,000	\$130,500	Local govts and other sources		
Non-Capital	Habitat Protection	Integration of regulatory flexibility to benefit salmon		Tier 1	Hydrology, Water and Sediment Quality, Floodplain Connectivity, Riparian Vegetation, Sediment Processes, Shoreline Complexity, Passage				Chinook			Staffing, materials, and mix of other resources	\$56,000	Staffing, materials, and mix of other resources	\$56,000	Staffing, materials, and mix of other resources	\$56,000	Ongoing	Multiple stakeholders and WRIA 8	\$175,000	\$130,500	Local govts and other sources		
Non-Capital	Habitat Protection	Incentive programs	Examples of Programs: Incentives to restore ecosystem function (C007) Riparian – Negotiate for enhancement of riparian buffers (C006)	Tier 1	"				Chinook			Staffing, materials, and mix of other resources	\$266,000	Staffing, materials, and mix of other resources	\$266,000	Staffing, materials, and mix of other resources	\$266,000	Ongoing	Multiple stakeholders and WRIA 8	\$798,000	\$396,000	Local govts and other sources		
Non-Capital	Habitat Protection	Innovative approaches to stormwater and shoreline management	Examples of programs: Green Shorelines C729/C730, I730, C030/C033, I056/N051/N057: Outreach to encourage lakeshore restoration. Activities could include workshops, media campaign, permitting or financial incentives, technical assistance, lakeshore design criteria, or demonstration projects. Technical assistance for stormwater pollution abatement	Tier 1	"				Chinook			Staffing, materials, and mix of other resources	\$268,000	Staffing, materials, and mix of other resources	\$268,000	Staffing, materials, and mix of other resources	\$268,000	Ongoing	Multiple stakeholders and WRIA 8	\$804,000	\$402,000	Local govts and other sources		
Non-Capital	Habitat Protection	Increase Best Management Practices (BMPs)	Examples of Programs: Septic tank maintenance. Encourage commercial car wash and alternatives for charity car washes, and car maintenance.	Tier 1	"				Chinook			Staffing, materials, and mix of other resources	\$181,000	Staffing, materials, and mix of other resources	\$181,000	Staffing, materials, and mix of other resources	\$181,000	Ongoing	Multiple stakeholders and WRIA 8	\$543,000	\$363,000	Local govts and other sources		
Non-Capital	Habitat Protection	Support existing regulations that benefit salmon	No examples proposed	Tier 1	"				Chinook			Staffing, materials, and mix of other resources	\$453,000	Staffing, materials, and mix of other resources	\$453,000	Staffing, materials, and mix of other resources	\$453,000	Ongoing	Multiple stakeholders and WRIA 8	\$1,359,000	\$903,750	Local govts and other sources		
Non-Capital	Outreach and education	Outreach and education	Examples of Programs: Stewardship – Encourage community stewardship (e.g. C721 with C719/C731 but basinwide) Streamside Landowner Education workshops for education, stewardship and BMP implementation Promote tree cover value (C720/N719/N735/I715) Stormwater actions - basinwide Natural Yard Care – basinwide Protection of nearshore	Tier 1	"				Chinook			Staffing, materials, and mix of other resources	\$1,905,000	Staffing, materials, and mix of other resources	\$1,905,000	Staffing, materials, and mix of other resources	\$1,905,000	Ongoing	Multiple stakeholders and WRIA 8	\$5,715,000	\$476,250	Local govts and other sources		
Sub-total - Non-capital needs for Programmatic Recommendations												\$3,129,000	\$3,129,000	\$3,129,000							\$9,394,000	\$2,671,500		
Monitoring																								
Non-Capital	Monitoring	Evaluating Cumulative Effectiveness	Evaluating Cumulative Effectiveness of Actions (Habitat)	All		Chapter 6 Volume I WRIA 8 Plan			Chinook			Staffing, site selection/reconn	\$200,000	Staffing, data acquisition and	\$150,000	Staffing, data acquisition and	\$150,000	Ongoing	Multiple stakeholders	\$500,000	\$300,000	Local govts		
Non-Capital	Monitoring	Stock Monitoring Support	Stock monitoring support (Fish In/Out)	All		Chapter 6 Volume I WRIA 8 Plan			Chinook			Staffing, surveys, smolt trapping	\$461,034	Staffing, surveys, smolt trapping	\$461,034	Staffing, surveys, smolt trapping	\$461,034	Ongoing	Multiple stakeholders	\$1,383,102	\$1,081,305	Local govts, WDFW		
Non-Capital	Monitoring	Project Effectiveness	Evaluate projects to determine the benefit to Chinook of specific features of restoration projects	All		Chapter 6 Volume I WRIA 8 Plan			Chinook			Staffing, site selection/reconn	\$600,000	Staffing, site selection/reconn	\$600,000	Staffing, site selection/reconn	\$600,000	Ongoing	Multiple stakeholders	\$1,800,000	\$600,000	Local govts, WDFW		
Sub-total - Non-capital needs for Monitoring												\$1,261,034	\$1,211,034	\$1,211,034							\$3,683,102	\$1,981,305		

Project Type	Plan Category	Project Name	Project Description	Priority Tier	Primary Limiting Factors Addressed	Reference Document for limiting factor	Habitat Type	Activity Type and Project Performance	Primary Species Benefiting	Secondary Species Benefiting	Current Project Status	Year 1 Activity to be funded	Year 1 Estimated Budget	Year 2 Activity to be funded	Year 2 Estimated Budget	Year 3 Activity to be funded	Year 3 Estimated Budget	Likely end date	Likely sponsor	Total Cost of Project	Local share or other funding	Source of funds (PSAR, SRFB, other)	Project ID										
Total Non-Capital Need												<i>Total year 1 need</i>	\$4,390,034	<i>Total year 2 need</i>	\$4,340,034	<i>Total year 3 need</i>	\$4,340,034		<i>Total Programmatic non-capital need</i>	\$13,077,102	\$4,652,805												
* In the recent past, WRIA 8 received \$60,000/year for lead entity coordination. The \$75,000 figure is an estimate received from Evergreen Funding.																																	
Priority projects and programs benefitting non-listed species																																	
Capital	Acquisition/ Restoration	Ebright Creek Enhancement and Acquisition	Ebright Creek: Enhance mouth and protect lower reaches of Ebright Creek on East shore of Lake Sammamish. If property on lower reaches of creek is acquired there could be educational outreach opportunities on the site. (I-310)	Tier 1	Loss of Habitat, Reduced Habitat Capacity	Chapter 9 Volume 1 WRIA 8 Plan	Riparian, Instream	Activity Type WRIA 8: Restore Creek Mouths/Pocket Estuaries (1)	Chinook		Feasibility Pending			Acquisition	\$ 300,000			2010	City of Sammamish	\$ 300,000	\$ 150,000	Local Governments	1-310										