

## 2008 Narrative to South Puget Sound 3-Year Project List

For the purposes of recovery and sustainability planning, “South Sound” is defined as that area of Puget Sound south of the Tacoma Narrows that includes the marine, near-shore, estuaries, and freshwater environments.

A locally collaborative South Sound Core Group has been assembled to provide policy level direction and oversight. The stated purpose of this group is to: 1. help steer the development of the action agenda as it pertains to South Sound in the near-term; 2. enhance regional collaboration for management of the South Puget Sound ecosystem for the longer term. The group consists of members from:

- Puget Sound Partnership Ecosystem Coordination Board
  - ❖ Dan D. Wrye, Convener, South Puget Sound Action Area Representative
  - ❖ Teri King, Hood Canal Action Area Representative
  - ❖ Bill Dewey, Business Representative
  - ❖ David Troutt, Tribal Representative
- Pierce County
- Thurston County
- Mason County
- Kitsap County
- City of Olympia
- Port of Shelton
- Port of Olympia
- City of Shelton
- City of University Place
- City of Tacoma
- City of Lacey
- Key Peninsula/Gig Harbor/Islands Watershed Council
- Squaxin Island Indian Tribe
- Nisqually Indian Tribe
- Puyallup Indian Tribe
- Citizens for a Healthy Bay
- Coalition for Clean Water
- Tacoma/Pierce County Health Department
- Nisqually River Council
- South Puget Sound Salmon Enhancement Group
- Chambers-Clover Watershed Council
- MetroParks Tacoma
- Fort Lewis, McChord Military Bases
- Cascade Land Conservancy
- Town of Steilacoom
- People for Puget Sound
- Puget Sound Partnership
- Department of Ecology
- Department of Fish and Wildlife
- Mason Conservation District
- Thurston Conservation District

- Pierce Conservation District
- WSU Extension

In addition, a South Sound Salmon Technical Team has been convened that consists of representatives from Pierce and Thurston Counties, the Nisqually and Squaxin Indian tribes, the Washington Department of Fish and Wildlife, and the South Sound Salmon Enhancement Group.

Specific accomplishments of the larger group over the last year include:

- Hosting a South Sound Ecological Symposium
- Convening a South Sound Science Symposium
- Producing a South Sound Sustainability Outreach report
- Producing a South Sound Action Agenda report
- Producing a paper that investigated the effects of upland impervious surface on marine water quality in South Sound.

The information provided by these assessments and reports will be used to craft a collaborative framework to address regional problems and issues. One of the goals of the Core Group is to convene a South Puget Sound Congress by early next year to formalize a collaborative process.

### Salmon Recovery

The goal of the South Puget Sound Salmon Recovery Group is to use an ecosystem-based, multi-species approach to restore Chinook, coho and other species in the South Sound to a sustainable, harvestable level by ensuring that there are properly functioning near-shore and freshwater habitats that serve their spawning, rearing, refuge, feeding, physiological transition, and migratory needs.

As a first product the South Sound Salmon Technical team produced the Chinook and Bull Trout Recovery plan. This work, subsequently adopted by NOAA Fisheries, addressed near-shore habitat south of the Tacoma Narrows. The South Sound Recovery Plan identified and addressed the following human- induced stressors that are contributing to the status of the salmon in the nearshore and the hypothesized effect on the Viable Salmonid Population:

- Shoreline Armoring
- Overwater Structures and Ramps
- Stormwater and wastewater
- Riparian Loss
- Wetland and Estuarine Modification
- Boat Traffic
- Invasive Species
- Shellfish Aquaculture

Since submission of the recovery plan, the technical group has continued its efforts to understand how ecosystem stressors affect salmon populations and to identify specific recovery actions by incorporating near-shore assessment information into a South Sound Access database and by conducting a mapping exercise. This effort is expected to be completed by summer of 2008. The group has also obtained a grant to create a landscape

based near-shore ecosystem prioritization model that is anticipated to be complete in the fall of 2008.

The South Sound Technical Group, in conjunction with the lead entities technical and citizens committees, have devised and adopted a process for prioritizing projects in South Sound that are deemed to be of regional significance at a South Sound wide scale regardless of WRIA boundaries. This is envisioned to be an interim method of dealing with South Sound wide projects. The group has also conducted an exercise that links upland impervious surface with marine water quality. This information will be used to formulate a prioritized action plan.

The technical group is continuing to expand their analysis beyond the submitted recovery chapter to include understanding of how habitat alterations have affected the Viable Salmonid Population parameters for multiple species, hypothesized use of the near-shore by salmonids, and interactions between hatchery and naturally produced fish. They have included as a programmatic action ongoing facilitation of the technical committee, further development of the stressor models to be more explicit about effects on VSP parameters, and additional GIS data development. A future outcome of the technical committee will be the development of an adaptive management plan.

The submitted 3-year project list includes actions that address the nearshore stressors. We hypothesize that these projects will benefit multiple species, including Chinook, bull trout, coho, chum, pink, steelhead, other salmonids, and forage fish.

In addition to the nearshore actions, we include freshwater actions that address habitat concerns identified in limiting factors reports and lead entity strategies. Again, we believe these projects will benefit multiple species. A hypothesized list of the species benefited is included on the list for each freshwater project.

### **Puget Sound Technical Review**

The intent of the 3-year list is to provide a strategic short term frame work that is based upon the long term goals contained in the South Puget Sound Chinook Recovery Plan and the various lead entity strategies. It must be noted that the list is designed to be a clearing house of projects for all cooperating South Sound entities to access and is designed for multiple funding sources. To be placed on the list a project must, in general, meet minimum criteria including: have a sponsor willing to do the work in the next three years, have some form of landowner willingness, be part of a strategy or plan that has ranked the project as “tier 1”, “high priority” or other form of high ranking. In 2008, projects ranked in the second tier or priority has been included at the request of the Puget Sound Partnership. It is likely that there are few second priority projects included because little effort is spend on developing them. Funding constraints and species targeted are not considered for inclusion on the list.

The 2008 version is an update of the three year list submitted to Shared Strategy in 2007 that underwent NOAA Technical Recover Team (TRT) review. Because this is an update,

the South Puget Sound Technical Team (SPSTT) utilized the TRT comments from the 2007 review as a guide in formulating this list. For clarity and continuity included below are comments from the 2007 TRT review and an updated (2008) response from the SPSTT.

## **I. Puget Sound Technical Recovery Team Review Comments**

### Consistency with the hypotheses and strategy in the May 2005 plan

*Comment-* little information is provided to determine why specific projects were chosen in freshwater and nearshore parts of South Sound

*Response-* SPSTT has acknowledged this as a weakness in the submitted plan. The group has been working on an update to the chapter that is intended to fill this gap. In the interim the South Puget Sound Salmon Enhancement Group has made available a simplified project model that uses information in the recovery chapter, hypothesized fish use, project type, project location, cost, expected benefit and land owner willingness

The SPSTT has obtained a grant to produce a marine near-shore model that will provide a basis for prioritization along marine shorelines. It is anticipated that this product will become available by fall 2008. After this is complete the next step planned is to create a methodology to prioritize among freshwater basins and sub-basins and then among freshwater and marine projects.

*Comment-* Why are there so many projects in deeper South Sound rather than in the northern parts of South Sound, where there are likely to be more benefits to Nisqually and White River fish?

*Response-* Since 2007 the groups making up the collaborative group have placed a greater emphasis on identifying projects in the WRIA 15 portion of South Sound. Draft products generated by the Nisqually to Point Defiance Near-shore Assessment conducted by the South Puget Sound Salmon Enhancement Group have been used to identify potential projects. The South Puget Sound Salmon Enhancement Group has also obtained a SRFB grant to directly target land owners in the area in question. Several projects that were identified in this process are in negotiation with landowners. As this is still relatively early in the process landowner willingness is still an issue that is being addressed by outreach

*Comment-* Projects that improve habitat structure within streams are important, but higher benefits for Chinook would be realized were protection of nearshore and freshwater quantity and quality improvements to receive higher priority ranking.

*Response-* The South Sound chapter and list is an all species freshwater and marine recovery and sustainability plan. To help clarify project benefits for review and selection a line has been added to the list with the hypothesized species being benefited. This list is used with numerous funding opportunities by the many groups working in South Sound

and is designed to be inclusive. This is necessary because each of the many groups funding projects has its own selection and review process.

*Comment-* There are more studies/assessments and restoration projects listed than protection/acquisition projects for both nearshore and freshwater areas.

*Response-* The South Sound chapter and list is intended to be inclusive of restoration and protection projects that generally have some form of land owner willingness and are at the least somewhat likely to be ready in the next three years. However, all assessments that have been identified as a need to fill a data gap, not just those that could happen in the next three years, are listed to provide a framework for applying to the multiple funding sources. Protection and acquisition in high priority areas is an integral part of the chapter but we are constrained by land owner willingness and a lack of funds to cultivate willing land owners.

*Comment-* Not enough information is provided to enable reviewers to understand how prioritization of projects within and among sub-basins, freshwater vs. nearshore, would proceed if the full funding is not attained for the projects on their list.

*Response-* SPSTT has acknowledged this as a weakness in the submitted plan. The group has been working on an update to the chapter that is intended to fill this data gap. The South Sound Group has obtained a grant to produce a marine near-shore model that will provide a basis for prioritization along marine shorelines. It is anticipated that this product will become available by fall 2008. The next logical step planned is to create a methodology to prioritize among freshwater basins and sub-basins and then among freshwater and marine projects.

In the interim, several strategies have been put into place to address this issue. The majority of freshwater streams have had modeling, such as EDT, performed or they are included in a lead entity recovery strategy. This provides a basis for prioritizing within freshwater systems. Shoreline prioritization is accomplished using the criteria found in the South Sound Recovery Plan. An additional process involving multi-lead entity has been created to deal with projects that are proposed as having “regional significance” where a project is proposed, sent to the South Sound technical group for review, and then passed to the lead entity technical and public groups.

The majority of funding passes through the lead entities (WRIA's) to project sponsors. The lead entities that make up South Sound must have proposed projects reviewed and ranked by their own technical committees and then ranked and approved by citizens committees. This process provides several layers of ranking for proposed projects.

### Sequence and timing

*Comment-* Justification for some of the high priority projects is not clear. For example, why is a LWD project in the Deschutes (hatchery fish benefit) a high priority?

*Response-* The South Sound work includes all species in freshwater and marine. A species benefited line has been added to the list to help clarify which species are being targeted. In the case of the Deschutes River LWD, hatchery origin and natural spawning Chinook, among other species, would benefit from the project.

*Comment-* Higher benefits to Chinook would be realized were projects that protect the nearshore and freshwater quantity and quality improvements ranked more highly than those that improve habitat structure within streams.

*Response-* The South Sound chapter and list is an all species freshwater and marine recovery and sustainability plan. To help clarify project benefits for review and selection a line has been added to the list with the hypothesized species being benefited.

### Significant components missing

*Comment-* The hypothesized interaction between hatchery and wild fish in the South Sound region is not spelled out. As habitat recovery and hatchery improvement actions are put in place, what is the expected effect on hatchery and wild fish interactions? Where are hatchery origin and wild fish likely to co-occur, in what numbers, and for how long? What will be the likely outcomes of those interactions? How will they monitor these and make needed adjustments in hatchery or habitat strategies over time?

*Response-* The technical team has also identified this as a shortcoming of the South Sound planning process and is currently working on an update to address these comments. A draft capacity model for South Sound has been produced by the South Sound Technical Group. Several studies by the State and tribes, including beach seining and acoustic tracking, have been initiated to look specifically at this issue.. Information from these projects are being currently being integrated into the chapter update.

*Comment-* The work program would be strengthened by addressing how harvest strategies interact with hatchery and habitat strategies and how they may be adjusted over time as needed, e.g. fishing rates on hatchery stocks and their effects on wild fish recovery. Another question to be addressed is how harvest rate targets affect release numbers for hatchery fish, and how those rates affect the anticipated benefits of habitat projects.

*Response-* The technical team has acknowledged the statement put forth by the TRT. As of this time the co-managers have stated dealing with harvest issues will be their responsibility.

## **II. Policy Review Comments**

*Comment-* There is a continuing need to identify which geographic areas within South Sound should be targeted for priority protection and restoration actions.

*Response-* The SPSTT has also identified this as a data gap and is currently updating the recovery chapter to address this need.

*Comment-* Water quality remains a significant concern. The extent to which water quantity and water quality issues are being addressed is not evident in the work program project list and narrative.

*Response-* The SPSTT shares these same concerns. In an effort to address this, the South Sound group successfully applied for a grant that allowed the use of GIS to conduct a study that linked upland impervious surfaces with marine water quality in South Sound. This is a first effort to more closely tie in water quality concerns with habitat based projects.

*Comment-* Plan refinement and implementation will benefit from addressing the need to develop an organizational structure and capacity for technical-policy discussions and deliberations.

*Response-* The SPSTT agree with the above comment and has obtained a grant that will help further the creation of a South Sound structure.



2009 - 2011 Three-Year Watershed Implementation Priorities for WRIA's 13 and 14,

														2009		2010		2011			
Project Name	WRIA	Priority tier of project	Project Description	Status	Likely Sponsor	Total Cost of first three years	Local share or other funding	Proposed SRFB (or grant) share	Source of funds	Limiting Factors	Habitat Type	Activity Type	Primary Species Benefiting	Secondary Species Benefiting	Year 1 Scope	Year 1 Cost	Year 2 Scope	Year 2 Cost	Year 3 Scope	Year 3 Cost	Likely End Date
<b>Capital Projects</b>																					
<b>Habitat Restoration</b>																					
#		1	LWD placement on the Deschutes - Stewart property LWD projects, 93rd and Deschutes River Rd.	Landowner willing, funding needed	SPSSEG, WFC	\$350,000	\$52,500	\$297,500	unknown	1,3,4,5,6	mainstem	1 mile of stream treated	steelhead / coho	chinook	Scoping		Designs			Funding / permitting	
#		1	Spurgeon creek riparian planting and fencing - Spurgeon creek - Lattins property.	County culvert first, implement following	WFC, SPSSEG, PFPS, TCD	\$60,000	\$30,000	\$30,000	unknown	3,4,5	tributaries	1500 lineal feet, 50 ft wide corridor	steelhead / coho	chinook	Replacement of Thurston County culvert		Landowner negotiations			implementation	
#		1	Culvert at Bentley property on Spurgeon creek	Landowner willing, riparian project underway	WFC	\$93,500	\$14,025	\$79,475	SRFB project development grant	3,4,6,7	tributaries	culvert replacment	steelhead / coho		Full designs / permitting		Implementation			Monitoring	
#		1	Green Cove creek fish passage project - restore fish passage by removing the blocking culvert on Green Cove at Country Club rd.	Sequencing - Ellis first, then Green Cove (Thurston County)	SPSSEG, Thurston County, Stream Team, TCD, etc	\$1,700,000	\$400,000	\$1,300,000	Thurston County	3,4,6,7	mainstem	Remove total blocking culvert, opening up 2 miles of spawning and rearing habitat.	steelhead / coho	chum	Full designs / permitting		Implementation			Monitoring	
#		1	Deschutes River trib river mile 31-41 LWD		SPSSEG, others	\$400,000	\$60,000	\$340,000	SRFB, unknown	1,3,4,5,6	mainstem	LWD to state standards	steelhead / coho		(Deschutes Assessment)						
#		2	Phase II of Ellis creek fish passage: remove blocking culvert on Gull Harbor Rd	Landowner willing, need funding	Thurston County, WFC, SPSSEG, TCD, Stream Team	\$1,300,000	\$520,000	\$780,000	Thurston County	3,4,6,7	mainstem	LWD to state standards	steelhead / coho	chum	Full designs / permitting		Implementation			Monitoring	
#		1	Off-channel habitat creation - develop and implement off-channel habitat creation and re-establishment opportunities 0.25 acres total per year on Spurgeon creek and the Deschutes	Sites identified, funding needed	SIT, SPSSEG, TCD	\$100,000	\$15,000	\$85,000	unknown	1,3	tributaries	0.75 acres created	steelhead / coho	chum	landowner negotiations		Full Designs			implementation	
	13	1	WRIA 13 bulkhead removals - five sites. 1-Mud Bay bulkhead at Buzz's Bar 2-Squaw Pt.	Evergreen bulkhead undergoing feasibility and designs	SPSSEG, SIT, PSAT, PFPS	\$840,000	\$126,000	\$714,000	unknown		marine shorelines, 2 estuary	Restore 600 feet of shoreline	steelhead / coho	chum	landowner negotiations		Full Designs / permitting			implementation	
	13	1	Two estuary connectivity projects in WRIA 13 -1)Butler Cove 2) Mission	1- Butler - Landowner impediment working towards remediation 4-Little Fish Trap funded with SRFB	SPSSEG, SIT,PSAT, TC	\$250,000	37,500	\$212,500	unknown		2 Estuary	recreate ~150 acres of estuary	steelhead / coho	chum	Full designs / permitting		Implementation				
	13	1	3) Gull Harbor - dam site with trout pond	1- Butler - Landowner impediment working towards remediation 4-Little Fish Trap funded with SRFB	SPSSEG, SIT, PSAT, TC	\$125,000	\$18,750	\$106,250	unknown	3,4,6,7	Estuary	estuary re-connect	steelhead / coho	chum	landowner negotiations		landowner negotiations			Full Designs	
	13	1	Eastbay nearshore restoration - Phase 1 plant 2000' Phase 2 - restore shallow intertidal structure	Reveg begun with 275' along shoreline	People for Puget Sound, SPSSEG, Stream Team, City of Olympia, TCD	\$125,000	\$18,750	\$106,250	unknown		marine 2 shorelines	2000' linear feet planted and stored	chinook	all	30% designs / permits /installation						

13	1	West Bay Restoration restore shoreline at previous Reliable site inclusive of bulkhead removal in tandem with public access, reshape beach profile, acquisition at railroad site	Permits underway for removing RxR contaminated soils, create public access, resloping beach, reveg	City of Olympia	Under assessment				unknown	3,4,6,7	marine shorelines	shoreline rehabilitation	chinook	all	
13	1	Beachcrest - reconnect tidal influence to a pond and spring fed creek	Designs complete 100%, funding needed for implementation	SPSSEG	\$165,000	\$24,750	\$140,250	SRFB project development grant		3,4,6,7	estuary, marine shorelines	estuary re-connect	chinook	all	Permitting, project completion
13	1	Shoreline restoration at the mouth of Snyder Creek - remove the barrier to passage on TESC Evergreen beach property and remove existing bulkhead, Squaw Point ( <i>note bulkheads above</i> )	Construction this summer for passage barrier, 2008. Bulkhead feasibility currently.	WFC, SPSSEG, PFPS	\$258,000	\$38,700	\$219,300	NOAA, SRFB	2,3,4,6,7		marine shorelines	restore passage for spawning and rearing	chinook	all	permitting, complete
14	1	Youngs Cove - remove pond and derelict boat ramp (Gravelly Beach Loop)	Landowner negotiations -	SPSSEG, PFPS	\$100,000	\$15,000	\$85,000	SRFB	3,4,6,7		marine shorelines	restore 1500 sq ft of shoreline	chinook	all	Landowner negotiations
13-14	2	Alternate water sources for livestock-work with Mason and Thurston CD's to implement alternate water sources for livestock		TCD, MCD, SPSSEG, SIT, WDFW	\$150,000	\$75,000	\$75,000	unknown	2,3,5		estuary, marine shoreline, mainstem, tributaries	150 acres fenced and livestock exclusion culvert replacment	steelhead / coho	chum	
13	1	McLane Creek - East Fork, passage barrier		SPSSEG	\$130,000	\$30,000	\$100,000	unknown	3,4,6,7		tributaries		steelhead / coho	chum	
13	1	McLane creek LWD at three sites, 1- DNR nature trail		SPSSEG, PFPS, SIT, WFC	\$600,000	\$90,000	\$510,000	unknown	2,3,5		mainstem	LWD to state standards	steelhead / coho	chum	
13	2	Sediment control and road maintence at upper McLane on DNR property		SPSSEG, PFPS, SIT, WFC				unknown	3,4,5		mainstem	Road re-habilitation	steelhead / coho	chum	
13	1	CLT property - McLane Estuary, removing buildings, shoreline armoring, revegetation	Conservation easement complete, majority of bulkhead removed, ongoing revegetation, two buildings removed	CLT, PFPS	\$200,000	\$30,000	\$170,000	unknown			2 nearshore	shoreline rehabilitation	chinook	all	
13	2	Woodland creek - St. Martins property - remove debris from stream channel	Landowner willing and will pay some	SPSSEG	\$50,000	\$18,000, St. Martins	\$32,000	unknown	1,3,4,5		mainstem	remove blockage	steelhead / coho	chum	
13	2	Woodland creek - USFWS site at Community center - riparian planting and stream work		City of Lacey	\$100,000	\$15,000	\$85,000	unknown	3,4,5		mainstem	shoreline rehabilitation	steelhead / coho	chum	
13-14	1	Green Diamond moving logs rafts and pilings towards north end, off that piece of shoreline protecting Goldsborough fish		SIT				unknown			2 nearshore	remove toxic creosote	chinook	all	
13	1	Creosote removal - Budd Inlet, Woodard Bay, Port of Shelton and Green Diamond		GA				unknown			2 hore	estuary re-connect	chinook	all	
13	1	Capitol Lake estuary restoration Deschutes - LWD mainstem rm 10-17, tribs rm 2-41		SIT	\$1.3 million			unknown	1,3,4,5		mainstem	LWD to state standards	steelhead / coho	chum	



Acquisition for protection

#	#	#	#	1	Deschutes River / Capitol Lake Shoreline Conservation. Purchase and restore property Skookum (Skookum Valley) creek habitat acquisition - easement on McDonald property. 300 acres with restoration to follow. Skookum Inlet - purchase property and remove existing dikes on 100 acres of existing farmland to restore to estuary function		Capitol Land Trust and multiple local/state/NGO partners	\$400,000	200,000	200,000	unknown	1,3,4,5	marine shorelines	14 acre conservation	chinook	all	Landowner identification	Landowner negotiations, project development	400,000		
#	#	#	#	1	McDonald property. 300 acres with restoration to follow. Skookum Inlet - purchase property and remove existing dikes on 100 acres of existing farmland to restore to estuary function	Partial funding (WWRP)	CLT, SIT, SPSSEG, MCD	\$4,000,000	600,000	3,850,000	unknown	1,3,4,5	mainstem	300 acres restored and protected	steelhead / coho	chum	landowner negotiations	landowner negotiations	purchase	450,000	
14	1	1	1	1	function	Landowner negotiation	SPSSEG, SIT	\$3,000,000	\$450,000	\$2,550,000			Estuary, marine 2 shorelines	100 acre purchase and re-habilitation	chinook	all		landowner negotiations			
#	#	#	#	1	Deschutes River Headwaters habitat acquisition - acquire 6,000 acres of forest lands on the upper Deschutes		Capitol Land Trust, numerous	\$6,000,000	\$900,000	\$5,100,000	unknown	1,3,4,5,6	mainstem	6,000 acres protected in perpetuity	Steelhead / Coho	chum					
#	#	#	#	1	Green Cove Habitat Acquisition - 50 acres on Green Cove - Gull Harbor Acquisition, Phase III protect through easements 2 unprotected parcels (25 acres) within Gull Harbor	Currently 39 acquired in 2007-08 using LOTT and TC conservation futures, City of Olympia	Capitol Land Trust	\$500,000	\$300,000	\$200,000	unknown	1,3	mainstem	50 acres protected	Steelhead / Coho	chum	Parcel prioritization, landowner negotiations, purchase	Acquire \$250,000 parcels	\$250,000		
13	1	1	1	1	Harbor	Funded with SRFB, seeking additional \$\$\$	Capitol Land Trust	\$1,200,000	\$180,000	\$1,020,000	unknown		2 Estuary	25 acres protected	chinook	all	landowner negotiations	landowner negotiations	Purchase		
13	1	1	1	1	Budd Inlet / Henderson Inlet connectivity - habitat corridor that connects Henderson with Budd Inlets, salt and fresh water habitats	Landowner negotiations - Little Fish Trap to forested uplands above Gull Harbor Funding???	Capitol Land Trust and multiple local/state/NGO partners	\$5,000,000	\$4,000,000	\$1,000,000	unknown		Estuary, marine shorelines, mainstem, 2 tributaries	various depending on plan	Steelhead / Cc	chum	Project development, landowner negotiations Project development, parcel prioritization, landowner negotiations	Acquisitions, landowner negotiations	2,500,000 negotiations	Acquisitions, landowner negotiations	2,300,000
13	1	1	1	1	Lower Eld Inlet - McLane creek estuary acquisition - 35 acre parcel	Partial funding for 55 acres (\$400,000 current)	CLT, SIT, SPSSEG	\$900,000	400,000	500,000	unknown		2 Estuary	protect 35 acres of estuary	all		Project development, parcel prioritization, landowner negotiations	100,000 Acquisition	500,000		
13	1	1	1	1	Acquire 130 acres within Tumwater floodplain upstream Pioneer Park WSU property on Henderson Inlet, Shellfish Farm - protect 80 acres Tree farm shoreline property Henderson Inlet South of Harmony Farms - protect 60 acres creating corridor	Landowner negotiations, easement language complete	CLT	\$2,000,000	\$300,000	\$1,700,000		1,3	mainstem	protect 135 acres	Coho / Steelhead	chum					
13	1	1	1	1	protect 80 acres Tree farm shoreline property Henderson Inlet South of Harmony Farms - protect 60 acres creating corridor		CLT	\$2,000,000	\$300,000	\$1,700,000			Marine 2 Shorelines	protect 60 acres	chinook	all					
13	1	1	1	1	protect 60 acres creating corridor		CLT	\$1,000,000	\$150,000	\$850,000		1,3	Marine Shorelines	protect 80 acres	chinook	all					

14	1	Totten Inlet habitat acquisition - acquire 80 acres of intact habitat on Totten Inlet	Capitol Land Trust, SIT, SPSSEG, MCD	\$700,000	105,000	595,000	unknown	2	estuary	Protect 30 acres of estuary / tidelands	chinook	all				
14	1	East Hammersley Inlet, at the mouth, acquire / create conservation easement 30 acres - several different sites: 18 acres with restoration to follow; other properties are across the water. Conserve four of the remaining five large marine shoreline properties on Oakland Bay - see below - Oakland Bay habitat protection - two options being discussed: 1) Twin Rivers property - 133 acres	CLT	\$500,000	400,000	100,000	Landowner donation	2	nearshore/	Protect 80 acres of estuary / tidelands	chinook	all	18 acre site: easement complete Others continue negotiations	Purchase additional 200,000 parcels	200,000	Restoration 100,000
14	1	Malaney property 80+ acres acquired		\$5,000,000	750,000	4,250,000		2	nearshore	Protect 80 acres of estuary / tidelands	chinook	all				
14	1	Partial funding for Twin Rivers, 133 acres	CLT, SIT	\$1,500,000	700,000	800,000	unknown	2	estuary, marine shoreline	Protect either 132 or 36 acres of estuary / marine shorelines	chinook	all				
14	1	2) 36-acre shoreline property	Landowner neg	\$1,900,000	\$285,000	\$1,615,000		2		Protect 36 acres of estuary / marine shorelines	chinook	all				
14	1	Acquire 200 acres on Coffee creek	Landowner negotiations	\$150,000	\$22,500	\$127,500	1,3		Tributary	protection	Steelhead / Coho	chum				
14	1	Acquire 500 acres in Goldsborough Creek watershed	50 acres Partially funded, landowner negotiations	\$2,000,000	\$300,000	\$1,700,000	unknown	1, 3	Mainstem	protection	Steelhead / Coho	chum				
14	1	Protect Eagle Point on Oakland Bay	Current landowner negotiations ongoing, seeking funding for purchase	\$450,000	\$300,000	\$150,000	CLC, CW		Marine	2 shorelines protection	chinook	all	Landowner negot	\$450,000		

Hatchery

Other

**Total Capital Need**

**Non-Capital Programs**

Harvest Management Support

**Future Habitat Project Development**

13-14	1	WRIA 13 and 14 Watertyping Assessment - Target Puget Sound drainages facing development pressures, build off on-going projects. Local gov'ts acknowledge the need for data to help them protect critical areas	on-going, needs additional funding to complete	WFC, SPSSEG, Thurston County, SIT, TCD	\$350,000	\$52,500	\$297,500	1,2,3,4,5,6,7	riparian, nears numerous		all		Present current ir \$			
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	13-14	1	Develop nearshore projects specificity, shoreline outreach to landowners, designs, GIS layer	5% PSAR funding	SIT, SPSSEG, CLT, PFPS, TCD, MCD, WFC	\$100,000		\$100,000	PSAR funds		all	all	Begin work	\$45,000	conti, landown	\$55,000		
	13	1	Landowner outreach on McLane Creek, future project development		SPSSEG, WDFW, SIT, WFC, PFPS	\$40,000	\$4,500	\$35,500		riparian	all							
	13-14	1	Habitat modeling for South Sound - Employ modeling tools Ecopath and Ecosim for nearshore modeling		SIT, TC, MC, SPSSEG, USACOE	\$75,000	\$11,250	\$63,750	unknown	all	all	scoping	begin modeling			modeling		
	14	1	Habitat assessment on Campbell and Deer creeks		SPSSEG, MCD, SIT	\$100,000	\$15,000	\$85,000	unknown	riparian		steelhead / col	Assessment					
<b>Habitat Protection</b>																		
	13	1	Woodard Bay Ecosystem Assessment - feasibility to assess the effects of the log dump, inclusive of the seal pullout, bat habitat, etc. Chemical stressors, biological components, creosote pillings - pilot for application elsewhere to inform fixes at other sites,	Feasibility funded, revegetation begun	DNR	\$1,500,000	\$350,000	\$1,150,000	DNR, ESRP, ACOE	2,5	marine shoreline	all	Assessment	\$350,000	Feasibility stuc	\$100,000	Restoration	
	13	1	Weekly surveys during spawning of Ellis, Schneider, Green Cove and Indian / Moxlie creeks for: pre-spawn mortality, escapement and redd mapping. No WDFW monitoring of these streams currently		WFC	\$45,000	\$15,000	\$30,000	City of Olympia	\$5	riparian	steelhead / colchum	survey		survey		survey	
	13-14	1	Participate in SMP updates in cities and counties. Aid in the rewrite of the Public Benefit Rating System (PBRs)		TCD, MCD	\$15,000	\$2,250	\$12,750	unknown		all	all	work with commi	\$5,000	Continue work	\$8,000	Road show	\$2,000
<b>Watershed Plan Implementation &amp; Coordination</b>																		
	13	1	Deschutes River, Henderson, Totten, Eld nutrient reduction and TMDL implementation		TCD, DOH, TC, DOH	\$350,000	\$52,500	\$297,500	unknown		mainstem	steelhead / colchum						
<b>Outreach &amp; Education</b>																		
	14	1	Schumocher creek carcass augmentation - place carcasses to meet state guidelines		ASEG, SIT	\$38,000	5,700	32,300	unknown	3,5	riparian	nutrient enrichment	all	coordinate landowners and co-managers, outline scope		implement		continue

	14	1	Begin mass marking on Coho in Sherwood / Schumocher creeks Refine outreach / media strategy for targeted outreach. Brainstorm new name for LE's		ASEG, SIT	\$45,000	\$6,750	\$38,250	local volunteer time	1,2,3,4,5	riparian	research	coho	discussion with co-managers	discussion with co-managers - outline scope	purchase equipment, train volunteers, begin marking	
	13-14	1	for LE's	rename in 2008	MCD, TCD	\$17,500	2,625	\$14,875	Some from WDFW		all		all	Outline scope, contact NWIFC for guidance	Begin implementation	\$5,000 Continue	\$5,000

**Instream Flow Protection**

**Habitat Project Monitoring**

	13	1	Fish Passage project monitoring, post and pre-project continuation		WFC	\$30,000		\$30,000	unknown		riparian				\$10,000	\$10,000	\$10,000
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**Stock Monitoring Support**

	13-14	1	Nearshore project monitoring - monitoring partnership to monitor South Sound nearshore project sites for adaptive management and future project development. Possible publication or website for comparision		WFC, SPSSEG, SIT, PPS	\$75,000	11,250	63,750	unknown		nearshore						
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**Research Salmon Recovery coordination / implementation / Other**

	13-14	1	Salmonid species usage and distribution - expand current beach seining work to Totten and Eld Inlets Outmigrant study of Coho in Mill, Goldsborough and Sherwood creeks - acoustic tagging of Coho for tracking in the Sound		WDFW, SIT, Nisqually	\$37,000	5,550	\$31,450	unknown		nearshore	research		\$12,500	\$12,500	\$12,500	
	14	1	Receivers to be installed on the Narrows Bridge		SIT, Nisqually, WDFW	\$270,000	40,500	\$229,500	unknown		nearshore	research	coho	all	\$90,000	\$90,000	\$90,000
	13-14	1	Continued support of South Sound coordination of a sub-regional organization		WDFW, PSP	\$30,000	4,500	\$25,500	SIT to date		all						

**Total Non-Capital Need:**

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**Priority Projects and Programs Benefiting Non-Listed Species**

**Total Non-Listed Species Need:**

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2008 three-year Watershed Implementation Priorities Template

Project Description	Priority tier of project	Limiting Factors	Project Name	Likely Sponsor	Total Cost of first three years	Funding needed	Funding secured	Source of funds	2008	2009	2010	Year 3 Cost	Likely End Date	Habitat Type	Activity Type	Primary Species Benefiting	Secondary Species Benefiting		
									Year 1 Scope	Year 1 Cost	Year 2 Scope							Year 2 Cost	Year 3 Scope
<b>Capital Projects</b>																			
<b>Habitat Restoration</b>																			
Remove several miles of dikes to restore over 760 acres of intertidal and riverine wetlands as well as riparian revegetation at the mouth of the Nisqually River.	1	1, 2, 3, 7	Nisqually Refuge Estuary Restoration 760 acres	Ducks UNisqually Land Trustd / USFWS	\$12,000,000	\$5,000,000	\$7,000,000	Federal/Ducks Unlimited/SRF B/ESRP/PSAR	project construction	\$3,000,000	project construction	\$7,000,000	project completion	\$2,000,000	2010	Estuary river delta	wetland	chinook, chum, cutthroat, Bull Trout	steelhead, coho, pink
Revegetate surge plain forest and remove final remnant dikes and bridge pilings on east side of estuary	1	1,2,3,7	Red Salmon Slough Estuary Restoration Phase 3	Nisqually Tribe	\$505,000	\$145,000	\$360,000	WRP, NFWF, ESRP	revegetation, design	\$200,000	reveg, permitting, secure funding for construction	\$120,000	Revegetation, dike/bridge removal	\$185,000	2010	Estuary river delta	wetland	chinook, chum, cutthroat, Bull Trout	steelhead, coho, pink
Secure landowner willingness, design and construct next phase of restoration of Mashel in the Eatonville Reach from Smallwood Park to Little Mashel confluence. Add more log-jams and increase off-channel habitat.	1	1,3	Mashel Eatonville Reach in-stream Restoration Phase II	South Puget Sound Salmon Enhancement Group (SPSSEG)	\$950,000	\$859,888	\$90,112	SRFB	project design	\$100,000	design, permitting, securing construction funds	\$100,000	project construction, riparian reveg	\$750,000	2011	Instream, Riparian	In-stream Flow, Riparian	Coho, Chinook, Steelhead, Cutthroat	Pink
Restore first mile of Lower Ohop Creek on Nisqually Land Trust property adjacent to Hwy. 7. Including channel reconstruction and valley floor revegetation	1	1,3,4,5,6	Lower Ohop Valley restoration - Phase I	SPSSEG	\$2,700,000	\$400,000	\$2,300,000	SRFB, Pierce Conservation District Assessment, PSAR	project design, permitting, construction, revegetation	\$1,700,000	riparian/wetl and revegetation, channel monitoring and inspection	\$200,000	Revegetation/ adjacent wetland restoration, construction	\$800,000	2010	instream, riparian, upland, wetland	Instream wetland, riparian, Upland-Wetland, Water Quality Improvement, Upland-Agriculture	Coho, Steelhead, Cutthroat, Chinook	Pink
Restore 1.5 miles of Lower Ohop Creek below Hwy. 7. Including channel reconstruction and valley floor revegetation	1	1,3,4,5,6	Lower Ohop Valley restoration - Phase II	SPSSEG	\$2,700,000	\$2,700,000	\$0	Unknown	secure funds	\$0	secure funds	\$0	project construction (figure represents first year implementation estimate only)	\$2,700,000	2011	instream, riparian, upland, wetland	Instream wetland, riparian, Upland-Wetland, Water Quality Improvement, Upland-Agriculture	Coho, Steelhead, Cutthroat, Chinook	Pink
Restore over 2 miles of Lower Ohop Creek upstream of first two phases of project. Including channel reconstruction and valley floor revegetation	1	1,3,4,5,6	Lower Ohop Valley restoration - Phase III	SPSSEG	\$3,150,000	\$3,150,000	\$0	Unknown	secure funds	\$0	secure funds	\$0	project construction (figure represents first year implementation estimate only)	\$3,150,000	2011	instream, riparian, upland, wetland	Instream wetland, riparian, Upland-Wetland, Water Quality Improvement, Upland-Agriculture	Coho, Steelhead, Cutthroat, Chinook	Pink
Oversee all riparian restoration projects in the Nisqually watershed. Work with all interested organizations to restore a minimum of 15 acres of riparian and wetland buffers and maintain projects for 3 years. This includes all cost incl. staff and crew time, equipment and	1	1,3,4,5,6	Nisqually vegetation management	Nisqually Tribe	\$1,075,791	\$925,791	\$150,000	Nisqually Tribe	groundtruth, review assessment, prioritize mainstem reveg site, revegetate priority areas	\$341,250	continue to implement planting plans, maintain plantings	\$358,313	continue to implement planting plans, maintain plantings	\$376,228	on-going	Riparian	Riparian	Chum, Coho, Chinook, Steelhead, Pink, and Cutthroat	
channel migration zone restoration	1	1,3,5	Northern Powell Creek Restoration	Nisqually Land Trust (Nisqually Land Trust)	\$52,000	\$44,200	\$7,800	Nisqually Land Trust	permits, remove rip-rap, buildings, concrete and fences, prep site for planting	\$15,000	planting	\$37,000			2010	instream, riparian, upland	Instream, riparian, upland-vegetation	chinook,	all salmonids
Remove old bridge abutment, road culverts and decommission old Weyerhaeuser haul road to reconnect Powell Creek and open up Nisqually mainstem floodplain.	1	1,3,7	Powell Creek/Nisqually mainstem off-channel reconnection	Nisqually Land Trust/SPSSEG	\$212,000	\$20,000	\$192,000	SRFB, USFWS, PSC (Pacific Salmon Commission)	construction	\$192,000	revegetation, restoration maintenance	\$15,000	restoration maintenance	\$5,000	2010	Instream, Riparian, Upland, Wetland	Fish Passage, In-Stream Flow, In-Stream Wetland, Upland Wetland	Coho, Chinook, Steelhead, Cutthroat	Chum

Restoration of access to small pocket estuary in South Sound, just west of Nisqually Delta on Thurston County shoreline.	1	2,7	Beachcrest pocket estuary restoration	SPSSEG	\$208,500	\$170,000	\$38,500	SRFB	complete design	\$38,500	identify, secure construction funds, construct project	\$160,000	monitor and/or identify funding	\$10,000	2010	Nearshore Embayment	Fish Passage, Nearshore	Chinook	Coho, Steelhead, Bull Trout, Chum, Pink, Cutthroat Trout
Identify and develop restoration projects including: estuarine reconnection and enhancement, marine riparian planting, beach enhancement, removal of softening of shoreline armor.	1	2	Nisqually - Pt. Defiance nearshore restoration project	SPSSEG	\$1,675,000	\$1,500,000	\$175,000	SRFB, PSAR, USFWS, NFWF	assessment, feasibility, preliminary design	\$175,000	secure design funds, develop full design	\$500,000	secure construction funds	\$1,000,000	2010	Riparian, Nearshore Beaches, Nearshore Embayments	Fish Passage, Riparian, Nearshore	Chinook, Chum, Bull Trout	Coho, Steelhead, Pink, Cutthroat Trout, Sand Lance and Surf Smelt
Recreate historic connection between the Nisqually mainstem and Harts Lake Creek	2	1,3,7	Nisqually River Wilcox Reach Side-channel	SPSSEG/Tribe	\$275,000	\$275,000	\$0	SRFB, others	Feasibility study and design	\$50,000	permitting, securing construction funds	\$25,000	project construction	\$200,000	2011	instream	fish passage, instream-wetland	Chum, Coho, Chinook, Steelhead	Pink, Cutthroat
Restoration of the riparian buffer along a small strip of the Nisqually mainstem	2	3	Hahn Restoration	Nisqually Land Trust	\$15,000	\$12,750	\$2,250	Nisqually Land Trust	weed control	\$10,000	planting	\$5,000			2009	riparian, upland	riparian, upland-vegetation	chinook,	all salmonids
25 acre riparian restoration at a small pocket estuary	2	2,3	Hogum Bay Restoration	Nisqually Land Trust	\$30,000	\$25,000	\$5,000	EMT	nothing	\$0	cultural survey, inventory and management plan	\$7,000	weed control and planting	\$23,000	2012	nearshore embayment, riparian, upland	riparian	Chinook, Chum, Bull Trout, Cutthroat	Coho, Steelhead,
Farm planning and implementation focused on high priority salmon reaches	2	1,3,4,5,6,7	Nisqually Basin farm planning	Conservation Districts	\$680,000	\$680,000	\$0	unknown	landowner outreach, farm plan development	\$220,000	landowner outreach, farm plan development, plan implementation/cost share	\$226,600	landowner outreach, farm plan development, plan implementation/cost share	\$233,400	on-going	In-Stream, Riparian, wetland, upland	riparian, water quality improvement project, upland agriculture,	all salmonids	
155 acre mainstem, off channel and migration zone restoration	2	3,4,5,6	Wilcox Flats Nisqually River mainstem and off channel restoration	Nisqually Land Trust	\$100,000	\$85,000	\$15,000	Nisqually Land Trust	weed control and planting	\$35,000	debris removal, weed control and planting	\$35,000	weed control and planting	\$30,000	2012	riparian, upland	riparian, upland-vegetation	chinook,	all salmonids
110 acre restoration and public access project	2	1,3,5	Yelm Shoreline Land Trust restoration project	Nisqually Land Trust	\$200,000	\$170,000	\$30,000	Nisqually Land Trust	project design and permits	\$50,000	begin restoration and project implementation	\$25,000	restoration and project implementation	\$125,000	2012	instream, riparian, upland	fish passage, riparian	chinook,	all salmonids
Replace partial fish barrier at Horn Creek. A man-made waterfall at river mile 1.0 precludes most salmon from migration upstream	2	1,7	Horn Creek Fish Passage Project	Pierce Co.	\$132,000	\$132,000	\$0	Unknown	secure funds, start designs	\$15,000	obtain permits, complete final designs	\$25,000	construction and replanting of site	\$92,000	2010	instream	Fish passage	Coho, Steelhead, Chum	Cutthroat, Chinook, Pink
Replace partial fish barrier culvert on Brighton Creek under Harts Lake Loop Road with a fish-friendly culvert	2	1,7	Brighton Creek Culvert Replacement Project	Pierce Co.	\$820,000	\$820,000	\$0	Unknown	secure funds, start designs	\$15,000	obtain permits, complete final designs	\$25,000	construction and replanting of site	\$780,000	2010	instream	Fish passage	Coho, Steelhead,	Cutthroat
Identify and eradicate invasive knotweed in the Nisqually River watershed, with a focus in the riparian buffer and floodplain of salmon-bearing streams	2	3,4,5	Japanese Knotweed eradication	Pierce Co. Noxious Weed Board	\$75,000	\$50,000	\$25,000	Community Salmon Fund	identification and control	\$25,000	identification and control	\$25,000	identification and control	\$25,000	2010	riparian, upland, wetland	instream, wetland, upland	chinook, coho cutthroat, steelhead	pink, chum
Annually Replant 3 to 5 acres of reed canary grass wetlands of the lower Tanwax creek valley.	2	3,4,5,6	Tanwax Creek Riparian restoration	Multiple potential sponsors	\$96,000	\$96,000	\$0	unknown	revegetate stream channel and maintain	\$31,000	revegetate stream channel and maintain	\$32,000	revegetate stream channel and maintain	\$33,000	2018	riparian, wetland	riparian, wetland, water quality improvement	Coho	Cutthroat, Chinook, steelhead
Restore the riparian forests along the lower Red Salmon Creek and all its tributaries on the Nisqually Land Trust properties.	3	1,3,4,5,6	Red Salmon Creek/Wash Creek restoration phases IV and V	Nisqually Land Trust	\$50,000	\$0	\$50,000	USFWS, NFWF Community Salmon Fund, Lone Star mitigation funds	phase IV	\$10,000	finish phase IV, begin phase V	\$30,000	finish phase V	\$10,000	2011	Riparian	Riparian	Chum	Coho, Steelhead, Cutthroat
Enhance the salmon food source by distributing 30000 pounds of salmon carcasses annually into the most utilized and under-nourished salmon streams.	3	5	Salmon Carcass nutrient enhancement	Nisqually Tribe	\$77,273	\$57,273	\$20,000	Nisqually Tribe	store carcasses, organize volunteer salmon carcass distribution	\$25,000	store carcasses, organize volunteer salmon carcass distribution	\$25,750	store carcasses, organize volunteer salmon carcass distribution	\$26,523	on-going	In-Stream, Riparian	Nutrient Enrichment	Coho, Steelhead, Cutthroat, Chinook	Chum, Pink

Identify and eradicate invasive plant species on the Nisqually Wildlife Refuge	3	3,4,5	Invasive species management at NWR (obj. 1.4)	USFWS	\$222,000	\$222,000	\$0	Unknown	identification and control (1FTE plus operational costs)	\$72,000	identification and control (1FTE plus operational costs)	\$74,000	identification and control (1FTE plus operational costs)	\$76,000	on-going	Estuary river delta	wetland	chinook, chum, cutthroat, bull trout	pink, coho, steelhead,
Boundary protection and restoration	3	1,3,4,5	Nisqually Mainstem Land Trust Boundary protection and restoration	Nisqually Land Trust	\$45,000	\$38,000	\$7,000		surveys, trash removal and fencing	\$40,000	weed control and planting	\$5,000			2010	riparian	riparian, project maintenance	chinook,	all salmonids
Replace partial fish barrier at Horn Creek under Harts Lake Loop Road with a passable culvert	3	1,7	Harts Lake Loop Road Horn Creek culvert replacement project	Pierce Co.	\$294,000	\$294,000	\$0	Unknown	secure funds, start designs	\$15,000	obtain permits, complete final designs	\$25,000	construction and replanting of site	\$254,000	2010	instream	Fish passage	Coho, Steelhead, Chum	Cutthroat, Chinook, Pink
Replace concrete culvert under pedestrian trail with footbridge on small floodplain channel.	3	1,7	Nisqually Pines Culvert Replacement	SPSSEG	\$25,000	\$0	\$25,000	NFWF	construction	\$23,000	Re-planting	\$2,000			2009	In-Stream, Riparian	Fish Passage, Riparian	Coho	steelhead, chinook, cutthroat trout
Culvert replacement project near Piessner Road upstream of large floodplain wetland	3	7	Powell Creek Neighborhood Road Culvert Replacement	SPSSEG	\$100,000	\$100,000	\$0	FFFP	project design	\$10,000	Project Construction	\$90,000			2010	Instream	Fish Passage	Coho, Steelhead, Cutthroat	Chum and Chinook
Replace partial fish barrier at Lackamas Creek under a private road with a fish-friendly concrete box culvert	3	1,7	Lackamas Creek (Thurston Co.) Culvert Replacement	SPSSEG	\$176,000	\$176,000	\$0	Unknown	secure funds, start designs	\$20,000	obtain permits, complete final designs	\$30,000	construction and replanting of site	\$126,000	2010	instream	Fish passage	Coho, Steelhead,	Cutthroat, Chinook, Chum, Pink

**Acquisition for future restoration**

Acquire 1 mile Ohop creek, 100 acres	1	1,3,4,5,6	Lower Ohop Protection Project	Nisqually Land Trust/Pierce Co.	\$1,200,000	\$1,200,000	\$0	Unknown	acquire property	\$600,000	acquire rest of property	\$600,000			2010	Instream, Riparian, Upland, Wetland	Land Protection	Chinook, Steelhead, Coho	Cutthroat, Pink
Acquire 45 of riparian and floodplain acres near the mouth of the Little Mashel into the Mashel River	1	1,3,4,5,6	Little/Big Mashel Confluence Protection	Nisqually Land Trust/Pierce Co.	\$250,000	\$250,000	\$0	SRFB	acquire property	\$250,000					2009	Instream, Riparian, Upland	Land Protection	Chinook, Steelhead, Coho	Cutthroat, Pink
Acquire up to 200 acres of wetland and riparian forest in the McAllister valley and Lower Nisqually valley to be incorporated into the Nisqually	1	1, 3	Lower Nisqually mainstem, McAllister Creek acquisition	USFWS	\$1,500,000	\$1,500,000			negotiate with sellers, begin purchasing properties	\$500,000	purchase properties	\$750,000	purchase properties	\$250,000	2011	instream, riparian, wetland, estuary river delta	Land Protection	chinook, chum, cutthroat, coho, steelhead,	
Acquire 1 mile Mashel shoreline, 200-400 ft. buffer, 20 - 40 acres	1	1,3	Mashel Riparian Habitat Acquisition Project	Town of Eatonville/Pierce County	\$1,689,510	\$866,224	\$823,286	Washington Wildlife and Recreation Fund	acquire match	\$695,250	negotiate with sellers purchase properties	\$994,260			2009	Instream, Riparian, Upland	Land Protection	Chinook, Steelhead, Coho	Cutthroat, Pink

**Acquisition for protection**

Acquire 50 acres, 0.5 mile of Nisqually Mainstem per year	1	1,3,4,5,6	Mainstem Protection Project	Nisqually Land Trust/Pierce Co.	\$2,500,000	\$2,500,000	\$0	Unknown	acquire properties	\$833,334	acquire properties	\$833,333	acquire properties	\$833,333	on-going	Instream, Riparian, Upland	Land Protection	all salmon	
Acquire small parcels as available along Ohop Creek and Mashel River	1	1,3,4,5,6	Upper Watershed small properties protection	Nisqually Land Trust/Pierce Co.	\$470,000	\$470,000	\$0	Unknown	acquire property	\$170,000	acquire property	\$150,000	acquire property	\$150,000	on-going	Instream, Riparian, Upland	Land Protection	Chinook, Steelhead, Coho	Cutthroat, Pink
Acquire easement over 250 acres along Nisqually mainstem and Horn Creek	1	1,3,4,5,6	Wilcox Area Protection Project	Nisqually Land Trust/Pierce Co.	\$750,000	\$750,000	\$0	Unknown			acquire easement	\$750,000			2010	Instream, Riparian, Upland	Land Protection	all salmon	
Acquire over 180 acres of Ohop valley including large amounts of wetland and 1 mile of Ohop Creek	2	1,3,4,5,6	Upper Ohop valley protection	Nisqually Land Trust/Pierce Co.	\$800,000	\$800,000	\$0	Unknown			acquire property	\$800,000			2010	Instream, Riparian, Upland, Wetland	Land Protection	Coho, Steelhead	Chinook, Cutthroat
Acquire easement over 249 acres, 1.2 miles of Nisqually mainstem, off channel creek and large wetland	1	1,3,4,5,6	McKenna Area Protection Project	Nisqually Land Trust	\$750,000	\$750,000	\$0	Unknown			acquire easement	\$750,000			2010	Instream, Riparian, Upland, Wetland	Land Protection	all salmon	
Acquire intact South Puget Sound nearshore habitat as it becomes available.	1	2	South Sound Nearshore Protection Project	multiple sponsors	\$3,000,000	\$3,000,000			acquire properties	\$1,000,000	acquire properties	\$1,000,000	acquire properties	\$1,000,000	on-going	Riparian, Nearshore Beaches, Nearshore Embayments	Land Protection	Chinook, Chum, Bull and Cutthroat Trout	Coho, Steelhead, Pink, Sand Lance and Surf Smelt

**Hatchery**

Low Impact Seasonal Weir Final Design, Engineering, Construction Blueprints	1	allowing adaptation of naturally spawning fish	Seasonal Weir Final Design	Nisqually Indian Tribe	\$190,550	\$0	\$190,550	Hatchery Reform 2007	Begin process of final Design	\$90,000	Complete Final Design	\$100,550	NA					Chinook	
Acquire necessary permits and Fort Lewis Landowners agreement for low impact seasonal weir	1	allowing adaptation of naturally spawning fish	Seasonal Weir permitting and	Nisqually Indian Tribe	\$70,000	\$70,000	\$0	not identified yet	Begin process to obtain all required permits and agreements	\$40,000	complete process to obtain all required permits and agreements	\$30,000	NA					Chinook	
Construct a low impact seasonal weir to preclude hatchery chinook salmon from straying above Rivermile 11.5	1	allowing adaptation of naturally spawning fish	Seasonal Weir	Nisqually Indian Tribe	\$2,400,000	\$0	\$2,400,000	federal appropriation	NA	\$0	Begin Construction	\$1,000,000	Complete construction and install for operations	\$1,400,000				Chinook	

**Other**

<b>Total Capital Need</b>			<b>\$44,210,623</b>	<b>\$30,304,125</b>	<b>\$13,906,498</b>
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**Non-Capital Programs**

**Harvest Management Support**

Negotiate with co-managers and Canada to ensure total harvest rate on Chinook is consistent with recovery plan objectives.			Renegotiation of pre terminal harvest rates	Nisqually Tribe	\$1,013,040	\$333,361	\$679,679	BIA	3 FTE Harvest policy and technical staff	\$323,500	3 FTE Harvest policy and technical staff	\$339,675	3 FTE Harvest policy and technical staff	\$349,865	on-going	NA	NA	Chinook	
Determine landing and encounter rates for terminal recreational fishery	1		Chinook/Chum Creel Survey	Nisqually Tribe/ WA Dept of Fish and Wildlife	\$250,000	\$250,000	\$0		Chinook Survey of recreational survey	\$100,000	Chum Survey	\$100,000	Report	\$50,000	2010		research	Chinook, Chum	
Investigate selective fishing methods and opportunities for Tribal Net Fishery	1		Selective Fishery Investigation	Nisqually Tribe	\$300,000	\$300,000	\$0		Survey methods and design study	\$100,000	Implement study	\$100,000	Study Results	\$100,000	2010		research	Chinook, Chum, Steelhead	

**Future Habitat Project Development**

Complete the Lower Nisqually River Restoration assessment and identify at least one project to complete to full design	1	1,2,3,4,5,6	Lower Nisqually Restoration feasibility and design	Nisqually Tribe	\$344,000	\$330,000	\$14,000	BIA	complete feasibility analysis	\$14,000	secure design funds	\$20,000	complete design work	\$310,000	2010	instream, riparian, wetland	fish passage, instream wetland, riparian, sediment reduction,	Chinook, Steelhead, Coho, Chum, Pink, Cutthroat	
Utilize the 2003 Off-channel assessment to engage willing landowners for restoration projects on their properties and assess feasibility	1	1,3	Nisqually River mainstem off-channel restoration project development - feasibility	Nisqually Tribe/SPSSEG /Nisqually Land Trust	\$93,000	\$93,000	\$0	unknown	willing landowner outreach, feasibility design	\$30,000	willing landowner outreach, feasibility design	\$31,000	willing landowner outreach, feasibility design	\$32,000	2015	instream, riparian, wetland	fish passage, instream wetland, riparian, sediment reduction, nutrient	Coho, Steelhead, Cutthroat, Chinook	Chum, Pink
Utilize the 2008 Nearshore assessment to engage willing landowners for restoration projects on their properties, assess feasibility, and design 1st major project along Nearshore	1	2	Nisqually - Pt. Defiance nearshore restoration project	SPSSEG/Nisqually Tribe	\$120,000	\$120,000	\$0	unknown	assessment, feasibility, preliminary design	\$30,000	secure design funds, develop full design	\$60,000	secure construction funds	\$30,000	2090	nearshore beaches	Nearshore	Chinook, Chum, Bull Trout, Cutthroat	Coho, Steelhead,
Assess the feasibility of removing the Interstate 5 fill and returning the entire road way back on piers between the eastern valley side and the river bridge	1	1,2,3,6,7	I-5 fill removal feasibility analysis	Nisqually Tribe / DOT	\$400,000	\$400,000	\$0	DOT	hire consultants	\$5,000	start analysis	\$200,000	Complete anal	\$195,000	2010	instream, wetland, estuary river delta	fish passage, instream wetland	Chinook, Steelhead, Coho, Chum, Pink, Cutthroat	
Assess the condition and need of instream large woody debris in the Nisqually River mainstem, formulate restoration options	1	1,3,4,5,6	Mainstem Nisqually LWD assessment and restoration plan	Nisqually Tribe	\$135,000	\$135,000	\$0	unknown	Identify assessment protocol, contract consultants and engineers	\$20,000	Conduct assessment, identify projects	\$65,000	Publish results and engineering designs	\$50,000	2010	instream	instream	Chinook, Steelhead, Coho, Cutthroat	Chum, Pink

**Habitat Protection**

stewardship and monitoring	2	1,2,3,4,5,6	Nisqually Land Trust property stewardship/natural resource management	Nisqually Land Trust	\$187,500	\$159,375	\$28,125	unknown	monitor and restore Nisqually Land Trust properties habitat functions	\$62,500	monitor and restore Nisqually Land Trust properties habitat functions	\$62,500	monitor and restore Nisqually Land Trust properties habitat functions	\$62,500	ongoing	instream, riparian, upland, wetland estuary river delta, nearshore beaches, nearshore embayments	fish passage, instream wetland, riparian, sediment reduction, nutrient enrichment, project maintenance, upland	all salmonids	
protect properties from damaging trespass and dumping	3	1,3,4	Protection enforcement and monitoring on Nisqually Land Trust properties	Nisqually Land Trust	\$30,000	\$25,500	\$4,500	unknown	Monitor and enforce no trespassing and no dumping regulations	\$10,000	Monitor and enforce no trespassing and no dumping regulations	\$10,000	Monitor and enforce no trespassing and no dumping regulations	\$10,000	ongoing	instream, riparian, upland, wetland estuary river delta, nearshore beaches, nearshore embayments	fish passage, instream wetland, riparian, sediment reduction, nutrient enrichment, project maintenance, upland	all salmonids	
Provide fish and wildlife protection on Nisqually NWR and in Nisqually estuary			Protection enforcement on Nisqually Wildlife Refuge	USFWS	\$151,500	\$151,500	\$0	USFWS	.5 FTE Enforcement officer	\$48,500	.5 FTE Enforcement officer	\$50,500	.5 FTE Enforcement officer	\$52,500	on-going	Estuary river delta	Project maintenance	chinook, chum, cutthroat, Bull Trout	steelhead, coho, pink
Oversight of formulation of the terms and conditions of the WA DNR Habitat Conservation Plan for waterways of the state.		2	DNR Aquatic HCP planning	USFWS	\$220,675	\$220,675	\$0	unknown	staff time	\$71,043	staff time	\$73,529	staff time	\$76,103	2010	Instream, Nearshore	Instream, Nearshore	chinook, chum, cutthroat, Bull Trout	steelhead, coho, pink
Updating the Critical Areas Ordinance, one of Thurston Counties two main protective regulations.			Thurston County CAO revision	Thurston County	\$280,000	\$280,000		unknown	staff time	\$140,000	staff time	\$140,000			2009	NA	NA	all salmonids	
Updating the Shoreline Master Program, one of Thurston Counties two main protective regulations.			Thurston County Shoreline Master Program revision	Thurston County	\$444,000	\$444,000		unknown	staff time	\$130,000	staff time	\$157,000	staff time	\$157,000	2011	NA	NA	all salmonids	
Updating the Shoreline Master Program in Pierce County.			Pierce County Shoreline Master Program revision	Pierce County	\$0	\$0													
Oversee any forestry activity in the Nisqually Watershed for compliance under Forest and Fish rules		1,3,4,5,6,7	Forest and Fish/watershed analysis prescription implementation/technical assistance	Nisqually Tribe	\$298,354	\$0	\$298,354		Staffing (1 FTE)	\$95,275	Staffing (1 FTE)	\$100,039	Staffing (1 FTE)	\$103,040	on-going	Riparian, Upland Vegetation	Instream Flow, Riparian, Sediment Reduction, Water Quality Improvement, Upland Vegetation	all salmonids	

**Watershed Plan Implementation & Coordination**

		1,2,3,4,5,6,7	In-stream, off-channel, and estuary habitat project Restoration Biologist	Nisqually Tribe	\$328,300	\$238,300	\$90,000	numerous project funds	1 FTE (including 54% indirect)	\$105,000	1 FTE (including 54% indirect)	\$110,000	1 FTE (including 54% indirect)	\$113,300	on-going	NA	NA	all salmonids	
		1,2,3,4,5,6,7	Salmon Recovery Project Technician	Nisqually Tribe	\$126,591	\$86,166	\$40,425	Tribe	.5 FTE (including 54% indirect)	\$40,425	.5 FTE (including 54% indirect)	\$42,446	.5 FTE (including 54% indirect)	\$43,720	on-going	NA	NA	all salmonids	
		1,2,3,4,5,6,7	Lead entity coordination/Salmon Recovery Program Management	Nisqually Tribe	\$387,341	\$267,341	\$120,000	WDFW	Staffing (1 FTE + 54% indirect)	\$124,740	Staffing (1 FTE + 54% indirect)	\$129,360	Staffing (1 FTE + 54% indirect)	\$133,241	on-going	NA	NA	all salmonids	
		1,2,3,4,5,6,7	GIS support for plan development/implementation	Nisqually Tribe	\$387,341	\$287,341	\$100,000	Tribe	Staffing (1 FTE + 54% indirect)	\$124,740	Staffing (1 FTE + 54% indirect)	\$129,360	Staffing (1 FTE + 54% indirect)	\$133,241	on-going	NA	NA	all salmonids	

		1,2,3,4,5,6,7	Development and Coordination of Adaptive Management Program	Nisqually Tribe	\$368,676	\$368,676			Staffing (1 FTE + 54% indirect)	\$118,580	Staffing (1 FTE + 54% indirect)	\$123,200	Staffing (1 FTE + 54% indirect)	\$126,896	on-going	NA	NA	all salmonids	
		1,2,3,4,5,6,7	Identify and research key uncertainties to improve plan	Nisqually Tribe	\$368,676	\$368,676			Staffing (1 FTE + 54% indirect)	\$118,580	Staffing (1 FTE + 54% indirect)	\$123,200	Staffing (1 FTE + 54% indirect)	\$126,896	on-going	NA	NA	all salmonids	
use tools EDT, Managing for Success to complete structure and priorities for an Adaptive Management plan		1,2,3,4,5,6,7	complete Adaptive Management plan and database	Nisqually Tribe	\$100,000	\$100,000			complete structure, tracking database	\$75,000	update, adjust structure	\$25,000		\$0		NA	NA	all salmonids	
		1,2,3,4,5,6,7	Adaptive Management database	Nisqually Tribe	\$255,780	\$255,780					1 FTE data manager, database maintenance costs, maintenance, data input	\$126,000	1 FTE data manager, database maintenance costs, maintenance, data input	\$129,780	on-going	NA	NA	all salmonids	

**Outreach & Education**

Conduct environmental education program at Nisqually NWR to serve up to 15,000 students annually		1,2,3,4,5,6,7	Nisqually National Wildlife Refuge Education Program (obj. 3.1, Goal III)	USFWS	\$237,000	\$237,000	\$20,000	Friends of Nisqually NWR, USFWS	outreach and education	\$75,000	outreach and education	\$79,000		\$82,000	on-going				
outreach and education for K-12 students in the Nisqually watershed		1,2,3,4,5,6,7	Nisqually River Education Project	Nisqually River	\$270,000	\$130,000	\$140,000	City of Yelm, Dept. of Ecology, EPA, NFWF, Nisqually Indian Tribe, Pierce Co. Thurston Co.	1 FTE plus program costs	\$90,000	1 FTE plus program costs	\$90,000	1 FTE plus program costs	\$90,000	on-going				
outreach and education for all residents in the Nisqually watershed and surrounding areas		1,2,3,4,5,6,7	Nisqually Stream Stewards	Nisqually Tribe	\$375,000	\$275,000	\$100,000	Nisqually Tribe, WDFW,	1 FTE plus program costs	\$120,000	1 FTE plus program costs	\$125,000	1 FTE plus program costs	\$130,000	on-going				

**Instream Flow Protection**

**Habitat Project Monitoring**

physical and biological monitoring of the refuges estuary restoration projects		1, 2, 3, 7	Refuge Estuary Restoration Project Monitoring	USFWS	\$424,000	\$424,000	\$30,000	Tribe	pre project and post project monitoring	\$135,000	post project monitoring	\$141,000		\$148,000			Project Maintenance	chinook, chum, cutthroat, Bull Trout	steelhead, coho, pink
Monitoring of the physical and biological response to the 140 acres of tribal estuary restoration on the east side of the river		2,3,7	Monitoring of estuary restoration at Red Salmon Slough	Tribe	\$174,000	\$119,000	\$55,000	Tribe	project monitoring	\$55,000	project monitoring	\$58,000	project monitoring	\$61,000	2016	Estuary river delta	Project Maintenance	chinook, chum, cutthroat, Bull Trout	steelhead, coho, pink
Monitoring of the physical and biological response to the restoration of Ohop Creek.		1,3,4,5,6	Ohop monitoring plan	SPSSEG / Tribe	\$190,000	\$180,000	\$10,000	Tribe	Write monitoring plan /implement first year pre-project	\$80,000	Implement 2nd year pre-project /As-built	\$60,000	Implement 1st year post-project	\$50,000	2018	Instream, riparian, wetland	Project Maintenance	Coho, Steelhead, Cutthroat, Chinook	Pink
Monitoring of the physical and biological response to the restoration of Mashel River.		1,3,4,5,6	Mashel monitoring plan	SPSSEG / Tribe	\$190,000	\$150,000	\$40,000	BIA	Continue to monitor restoration and control reaches	\$80,000	Continue to monitor restoration and control reaches	\$60,000	Continue to monitor restoration and control reaches	\$50,000	2018	Instream, riparian, wetland	Project Maintenance	Coho, Steelhead, Cutthroat, Chinook	Pink
Creation and implementation of a watershed-wide habitat and restoration action monitoring plan to assess effect of recovery plan		1,3,4,5,6,7	Nisqually Chinook Recovery Habitat Monitoring	Tribe	468,240	413,240	55,000	BIA	Completion of monitoring plan / partial implementation	\$150,000	Implementati on of monitoring plan	\$156,000	Implementati on of monitoring plan	162,240	on-going	instream, riparian, wetland	Project Maintenance	Chinook, Coho, Steelhead	Pink, cutthroat

**Stock Monitoring Support**

Monitor the juvenile salmon usage of the Nisqually River Estuary and nearshore of the Nisqually Reach	1	1, 2, 3, 7	Estuary Fish Monitoring	Tribe/USFWS/SPSSEG	\$300,000	\$270,000	\$30,000	PCSRF	minimal estuary seining plus nearshore seining (for otoliths), need 1 FTE for 3 people during sampling period	\$100,000	minimal estuary seining plus fyke netting	\$100,000	minimal estuary seining plus fyke netting	\$100,000		Estuary river delta	NA	Chinook, Chum, Bull trout	Pink, Steelhead, Cutthroat
Life History assessment of the Chinook salmon of the Nisqually Basin, Estuary and Reach through Otolith analysis	1		Otolith study- Chinook life history analysis	Tribe/USGS/USFWS	\$271,000	\$211,000	\$60,000		collect otoliths, analysis of collected otoliths, microstructure and water chemistry	\$70,000	collect otoliths, analysis of collected otoliths, microstructure and water chemistry	\$106,000	collect otoliths, analysis of collected otoliths, microstructure and water chemistry	\$95,000	on-going (at least 2012)	Instream, Estuary River delta, Nearshore	NA	Chinook	

**Research**

Tag 50 steelhead smolts annually and track their early saltwater migration through Puget Sound and the strait of Juan De Fuca utilizing acoustic tags and set receivers	1	2	Steelhead smolt acoustic tag study	Tribe	\$177,000	\$147,000	\$30,000	Nisqually Tribe	tag 50 steelhead smolts	\$57,000	tag 50 steelhead smolts	\$59,000	tag 50 steelhead smolts	\$61,000	2010	estuary river delta, nearshore beaches, rocky coast, and embayments	Research	Steelhead	
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**Other**

Coordination of monitoring of overall recovery plan	1	1,3,4,5,6,7	Implementation/Effectiveness/Validation Monitoring	Tribe	\$143,263	\$143,263		Nisqually Tribe	Monitoring of projects / plan	\$46,350	Monitoring of projects / plan	\$47,741	Monitoring of projects / plan	\$49,173	on-going		Project Maintenance	all salmonids	
Nisqually Land Trust program support is critical for the continued operation of the land trust and the fulfillment of its mission. The Nisqually Land Trust is the major organization working on salmon habitat protection in the Nisqually basin.	1	NA	Nisqually Land Trust administrative/facilities support	Nisqually Land Trust	\$150,000	\$127,500	\$22,500			\$50,000		\$50,000		\$50,000	ongoing	instream, riparian, upland, wetland, estuary river delta, nearshore beaches, nearshore embayments	fish passage, instream flow, instream wetland, riparian, sediment reduction, nutrient enrichment, project maintenance	all salmonids	
Staffing of Nisqually River Council, Watershed Festival, newsletters, and subcommittees	1		Nisqually River Council Support	Nisqually River Foundation	\$300,000	\$0	\$300,000	WA Dept of Ecology		\$100,000		\$100,000		\$100,000					
Marketing of sustainable local businesses	1		Nisqually Sustainable Initiative	Nisqually River Foundation	\$1,100,000	\$217,000	\$883,000	EPA	Development	\$100,000	Implement	\$500,000	Implement	\$500,000					
Implementation of Low Impact Development projects in the Nisqually watershed	1		Nisqually Low Impact Development	Nisqually River Foundation	\$225,000	\$125,000	\$100,000	WA Dept of Ecology	FTE Implement	\$75,000	FTE Implement	\$75,000	FTE Implement	\$75,000					
Write conservation plans for Class A water purveyors in the Nisqually Watershed.	1		Nisqually Water Conservation	Nisqually River Foundation	\$150,000	\$0	\$150,000	WA Dept of Ecology	Staff write plans	\$100,000	Implement plans	\$50,000							
Utilize EDT and other models to publish a multi-species Nisqually salmon recovery plan that addresses all four 4 H's. This includes formulation of goals, objectives and an action plan to restore salmon runs to PFC.	1	NA	Multispecies Nisqually Salmon Plan	Tribe	\$150,000	\$150,000			coordinate plan development, work with contractor to model conditions, scenarios, develop options	\$75,000	coordinate plan development, work with contractor to model conditions, scenarios,	\$75,000			2009	NA	NA	steelhead, coho, chum, pink	

**Total Non-Capital Need:** \$11,884,277 \$8,533,694 \$3,400,583

*Priority Projects and Programs Benefiting Non-Listed Species*

Total Non-Listed  
Species Need:

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Pierce County Lead Entity (WRIA 10/12) 2008 three-year Watershed Implementation Priorities Template																			04/18/08
Puyallup/White River and Chambers/Clover Creek Watersheds																			
Project Name	Priority tier of project	Project Description	Likely Sponsor	Total Cost of first three years	Local share or other funding	Proposed SRFB (or grant) share	Source of funds	Limiting Factors	Habitat Type	Activity Type	Primary Species Benefiting	Secondary Species Benefiting	Year 1 Scope	Year 1 Cost	Year 2 Scope	Year 2 Cost	Year 3 Scope	Year 3 Cost	Likely End Date
<b>Capital Projects</b>																			
<b>Habitat Restoration</b>																			
<b>Titlow Beach Pocket Estuary Restoration</b>	2	Replace culvert/tidegate through BNSF railroad to improve connectivity and fish passage between Titlow lagoon and Puget Sound, beach cleanup/enhancement	SPSSEG, Metro Parks Tacoma	\$700,000	\$100,000	\$400,000	SPSSEG, Metro Parks Tacoma, BNSF	2, 7	Nearshore embayment	Nearshore restoration	Chinook	coho, pink	Conceptual design	\$50,000	Design, permitting	\$75,000	Construction	\$575,000	2010
<b>Sequalitchew Creek Diversion and Streamflow Restoration</b>	Unrated	Re-route the Fort Lewis water treatment diversion and refit flood control structures to return flows to Sequalitchew Creek	SPSSEG	\$400,000	\$200,000	\$200,000	Fort Lewis	1, 3, 5, 6	Instream, riparian	Instream flow			Lewis to design retrofits to water treatment system	\$50,000	Design and permit	\$50,000	Construct and Revegetation restored stream channel	\$300,000	2010
<b>Chambers Bay Estuarine and Riparian Enhancement</b>	New	Enhance estuarine habitat structure within Chambers Bay. Restore marine riparian corridor in and around Chambers Bay.	SPSSEG	\$360,000	\$25,000	\$306,000	SPSSEG	2	Nearshore embayment, Nearshore beaches	Nearshore Restoration	Chinook	coho, chum, pink and forage fish	Preliminary design	\$10,000	Permitting, Implementation/Construction	\$300,000	Implementation, monitoring and maintenance	\$50,000	2012
<b>Sequalitchew Creek Beach and Riparian Restoration</b>	New	Remove derelict creosote pilings and bulkhead structures, restore natural beach profile, remove invasive plants and restore native, marine riparian corridor	SPSSEG	\$350,000	\$20,000	\$297,500	SPSSEG	2	Nearshore Beaches	Nearshore Restoration	Chinook	coho, chum, pink and forage fish	Preliminary Design	\$20,000	Permitting, Implementation/Construction	\$200,000	Implementation, monitoring and maintenance	\$130,000	2012
<b>Pocket Beach Enhancement/Nourishment Pilot: Sequalitchew to Solo Point</b>	New	Target existing pocket beaches persisting waterward of the BNSF rail line between Sequalithew Creek and Solo Point for sediment enhancement and marine riparian planting pilot projects	SPSSEG	\$200,000	\$20,000	\$170,000	SPSSEG	2	Nearshore Beaches	Nearshore Restoration	Chinook	coho, chum, pink and forage fish	Preliminary Design	\$20,000	Permitting, Implementation/Construction	\$160,000	Implementation, monitoring and maintenance	\$20,000	2012
Acquisition for future																			
Acquisition for protection																			
<b>Hatchery</b>																			
<b>Chambers Creek Adult Trap and Juvenile Acclimation Facility Improvements</b>	Unrated	Rebuild ponds and intake, and install pollution abatement system (HSRG recommendations) to improve upstream passage for non-target wild stocks; improve acclimation for smolts and adult holding for returning chinook; establish pollution abatement system for effluent; and improve screen to minimize impacts on wild stocks.	WDFW - Legislature - CTED (bridge component)	\$3,200,000			CTED - \$176,000						Design, permitting, construction	\$1,600,000	Construction complete	\$1,600,000			2010
<b>Other</b>																			
<b>Total Capital Need</b>				\$5,210,000	\$365,000	\$1,373,500													
<b>Non-Capital Programs</b>																			
<b>Harvest Management Support</b>																			
<b>Future Habitat Project Development</b>																			
<b>Update regional Culvert Study</b>	Unrated	Re-evaluate the system to check on work done since the original study was completed - function of those removed and make sure there are not any new ones.	Pierce Conservation District	\$320,000	\$70,000	\$250,000	PCD	7					Review Existing Inventory; Staff up; Prioritize Reaches	\$110,000	Conduct inventory	\$110,000	Conduct Inventory; Prepare Final Report	\$100,000	2010
<b>Habitat Protection</b>																			
<b>Nearshore effectiveness monitoring</b>	Unrated	Develop and implement a nearshore effectiveness monitoring plan for future restoration projects	SPSSEG	\$300,000		\$300,000	ESRP, DOE, DNR, WDFW						Develop monitoring plan to assess nearshore processes and response to restoration. Collect baseline data.	\$150,000	Carry out monitoring and assessment actions.	\$50,000	Carry out monitoring and assessment actions.	\$50,000	Ongoing



2008 three-year Watershed Implementation Priorities Template: Addendum

Project Name	Human Health	Human Well-Being	Partnership Goals Species/Food Web	Habitat	Water Quality	Water Flow
<b>Capital Projects</b>						
Habitat						
Hatchery						
Other						
<b>Total Capital Need</b>						
<b>Non-Capital Programs</b>						
Harvest Management Support						
Future Habitat Project Development						
Habitat Protection						
Watershed Plan Implementation & Coordination						
Outreach & Education						
Instream Flow Protection						

Habitat Project  
Monitoring

Stock  
Monitoring

Research

Other

**Total Non-Capital  
Need:**

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*Priority Projects  
and Programs  
Benefiting Non-  
Listed Species*

**Total Non-Listed  
Species Need:**

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