Mid-Hood Canal Narrative for 2009 Three-Year Work Program

This narrative only covers the Mid-Hood Canal Chinook Salmon Chapter of the Salmon Recovery Plan, and not the Skokomish Chapter. This is due to the fact that the Skokomish Chapter is currently under review and is being significantly re-organized and structured to address comments from NOAA and the Puget Sound Partnership. NOAA RITT members and PSP staff are participating in that process.

Consistency Question

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?
    - Significant conservation work is ongoing in the Dosewallips and Duckabush, though given the relatively small number of parcels, small size of anadromous zones in private property, and public perception of government buy-outs in south Jefferson County, the pace is deliberately slow and community-oriented. Jefferson County is still working to complete the purchase of estuary parcels (see below) in Duckabush from the year before last, while the Jefferson Land Trust is moving forward with 2 new conservation proposals in the anadromous zone of that watershed, partnering with Wild Fish Conservancy (WFC) for channel restoration on one of them (see below). There are still a few small in-holdings in the "powerlines reach" (already mostly conserved from a previous effort) that need further pursuit in the next 3 years. Conservation along Lazy C to improve salmon habitat and minimize flood hazards is pending outcome of reach assessment (see below). Conservation work in the Hama Hama is not proposed as an immediate need in the Salmon Recovery Plan or 3YWP, given the stable ownership by one family dedicated to forestry.
    - Channel and floodplain restoration will be forwarded in the next 3 years by completing designs for at least 10 engineered log jams in both the Dosewallips and Duckabush Rivers and implementing those designs. Focal areas are Forest Service lands in the upper watersheds, public land along powerlines reach of the Dosewallips, and private lands in the middle reach of the Duckabush. Log jams and levee removal were completed last year in the estuary reach of the Dosewallips, while another levee removal will be conducted this year in 2009 just above the estuary reach. In addition, a geomorphic reach analysis is being conducted in the Dosewallips estuary reach on State Parks land by WFC to determine potential benefits from riprap and campground removal for 2010. Also, a reach analysis has begun in partnership with Jefferson County to improve habitat and mitigate flooding hazards at the Lazy C on the Dosewallips.
    - Estuary restoration is progressing with several smaller levee removals in the Dosewallips and Duckabush Rivers in the last few years. In the next 3 years we will seek to implement the recommendations from the geomporphic reach analysis described above for the Dosewallips. There are a few smaller projects in the Dosewallips estuary along blind tidal channels that we have not had success implementing due to landowner expectations. For the

Duckabush, we are working on conserving a few smaller parcels of threatened land in the estuary along Pierce Slough/Creek, which will be enhanced in the coming three years with culvert replacement and channel/floodplain work as this is an important off-channel rearing area for summer chum and chinook salmon. Of particular concern at this point is our inability to begin to address the impacts of the earthen-filled causeway under Highway 101 at the Duckabush River. In the Hama Hama estuary, the HCSEG is partnering with the landowner to install channel complexity, improve bank stability, and enhance access to a blind tidal channel system, and though permits are ready for 2009 construction, we are underfunded to complete the project. We are hopeful of continuing to work with the landowners after this estuary project is completed to address the feasibility of improving connectivity of the mainstem to the upper estuary above Highway 101. Finally, many other non-natal nearshore habitat conservation and restoration projects are being implemented outside of these 3 main estuaries that will benefit chinook salmon recovery.

- Other than the USFS Wateshed Analyses and EDT analysis, we have limited information on the magnitude of sedimentation in these systems, though both document increases over natural conditions and potential negative consequences for fish VSP. In addition, very little work has been done to quantify in-channel scour/deposition of bedload, though anecdotal evidence suggests this may be a relatively bigger problem in at least the 2 northern rivers. Actions outlined in the Salmon Recovery Plan call for decommissioning roads with high aquatic risk on US Forest Service lands. Very few roads exist in the upper Dosewallips, with the exception of the Rocky Brook drainage where the USFS continues to make slow but steady progress. A somewhat larger length of roads exists in the subwatersheds of the upper Duckabush River, with little progress made towards implementing goals. A significantly larger length of USFS and private logging roads exist in the watershed/subwatersheds of the Hama Hama River, also with very little progress made towards implementing goals. For context however, the USFS has been quite busy addressing this specific issue in the Skokomish River where the scale and impacts are hypothesized to be much more significant, re-directing most of their staff capacity and our shared funding for this issue. Minimizing chronic bed scour/deposition impacting efficacy of spawning and incubating salmon is a focus being addressed in the next 3 years and beyond by channel/floodplain/riparian restoration described above, mostly in the Dosewallips and Duckabush Rivers.
- Finally, riparian conservation/restoration is a fundamental building block documented by the Salmon Recovery Plan and supported by EDT. Several site specific projects have occurred, though several others are proposed in the 3YWP at a broader scale. We are currently implementing a Riparian Habitat Assessment and developing prescriptions for both public and private lands to move them to more functional, late successional stages, at a more comprehensive scale, with a proposal forwarded in 2009 for 2010 implementation.

Pace/Status Question

1. What is the status of actions underway per your recovery plan chapter? Is this on pace with the goals of your recovery plan?
   - See above. Generally, we are making slow but steady progress. Much of what was outlined in the high implementation category for our 10 year goals has either been achieved or is achievable if funding were increased, while some unforeseen progress has been made on the low implementation potential category. Given lower-than-hoped-for funding levels, landowner expectations, and capacity issues at many levels, it would be fair to say we are not quite meeting the pace outlined in the Salmon Recovery Plan.
2. *An excel document is attached which includes a spreadsheet called 'PSP Staff Work - Watershed Goals.' This spreadsheet will be filled out by PSP staff based on your watershed chapter plan to identify the 10-year recovery goals & objectives. PSP staff will send each watershed this information in preparation for the three-year work plan update process. This spreadsheet is to help track progress (and changes) toward recovery goals.* What is the general status of implementation towards your habitat restoration, habitat protection, harvest management, and hatchery management goals? Progress can be tracked in terms of 'not started, little progress, some progress, or complete' or in more detail if you choose.

Sequence/Timing

1. 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?
   - Speaking for habitat only, the EDT analysis suggested that all projects identified would basically need to be implemented to recover habitat enough to meet VSP goals, depending on intensity and efficacy of implementation. So our questions have been not which projects need to be done, but how to accomplish each project listed in the right sequence of highest benefit. In most cases, the only sequencing issue is property ownership/landowner willingness and whether or not conservation needs to be pursued before implementing an action. Exceptions exist however about logistical sequencing, such as the concern about re-establishing the northern estuarine distributary in the Duckabush without first having raised the causeway so we don't wash out Highway 101. Thus the short answer to this question is which of the identified projects are ready to implement next logistically, but based on the principle of not implementing a lower priority project (as identified by EDT) "in lieu of" a higher priority project with the funding available.

Next Big Challenge

1. 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
2. What is the status or trends of habitat and salmon populations in your watershed?
   - Status and trends of habitat is unknown, though the trend in the regulatory protections theme is towards an improving set of protections via SMP and CAO

regulation updates, and the trend in the voluntary habitat restoration/conservation theme is towards an improving set of conditions as well.

- Trends for chinook salmon in the Mid-Hood Canal population is level or declining, I believe, and dangerously low. However, that discussion is on-going!

3. Are there new challenges associated with implementing salmon recovery actions that need additional support? If so, what are they?
   - At this point, we don't know of new challenges other than climate change, only lack of movement on old challenges. If support could be leveraged, it would be to address the two largest issues remaining that were identified in the very beginning of this process, including constrictions caused by Highway 101 and understanding and addressing the impacts of public and private logging roads in the upper watersheds.

Three-Year Watershed Implementation Priorities for Hood Canal Coordinating Council

Costs are from Recovery Plan estimates and comparables methods

Yearly costs are preliminary estimates to be developed further with project sponsors

Prioritization to be determined by Lead Entity Committees, regional participants, and governments

Total Costs represent multiple years worth of projected costs

Annual costs represent money obtained and/or spent during calendar year

Projects retresent all 4 priority Domains to allow more comprehensive tracking of salmon recovery while supporting community values

Domain	Definition
1	Domain 1 represents natal freshwater and sub-estuarine habitats for 7 extant summer chum subpopulations, 2 extant chinook populations, and 1 extant bull trout subpopulation in the HCCC LE area.
2	Domain 2 represents natal freshwater and sub-estuarine habitats for 3 re-introduced extinct summer chum subpopulations and all significant nearshore habitats in the HCCC LE area.
3	Domain 3 represents natal freshwater and sub-estuarine habitats for all remaining extinct summer chum and chinook subpopulations in the HCCC LE area.
4	Domain 4 represents all other habitats including nearshore areas not labeled as significant

Domain Priority	Bio Rank / EDT	Primary Limiting Factors	Action name and description	Likely sponsor	Total cost	Unfunded Portion	Existing Funding	Source of other funds	2007 Scope	2007 Cost	2008 Scope	2008 Cost	2009 Scope	2009 Cost	2010 Scope	2010 Cost	2011 Scope	2011 Cost	2012 Scope	2012 Cost	Restor-ation Type	Location w/in watershed	Performance	Brief Description	Action #	Project Name
CAPITAL PROJECTS																										
Habitat Capital Projects																										
Mid-Hood Canal																										
1	1 of 17	1,3	USFS/Upper Dosewallips wood-riparian restoration phase 1	WFC, USFS, Tribes	$1,690,000	$1,250,860	$439,140	PSP, USFS, SRFB	Funding Strategy; Coordination		Feasibility/Design	Part of $439140	Feasibility/Design; Riparian Assess	Part of $439140	Permitting and Construction; More design phases; Riparian Planting	?	Permitting and Construction; More design phases; Riparian Planting	?	Permitting and Construction; More design phases; Riparian Planting	?	I,F,R	Mainstem	4 miles	Place log jams and increase wood loading by helicopter and/or conventional means in strategic locations, including 6 mile bridge, FS boundary, above Camp Acacia, Steelhead Campground, and below road washout	33,34,36, 37,38,40	USFS/Upper Dosewallips wood-riparian restoration phase 1
1	4,6,9,5 of 17	1,3,5	Powerlines, Lazy C, Southshore riparian-floodplain protection Lower Dosewallips	Jefferson Land Trust, State Parks, Jefferson County, CLC, HCCC	$2,000,000	$1,586,410	$413,590	PSP, IAC, Jefferson County, SRFB	Implement Exisitng SRFB Grant and Develop New, Coordinate with Citizen Outreach Program	$163,590	Community Outreach, Planning and Transactions	$250,000	Community Outreach, Planning and Transactions	?	Community Outreach, Planning and Transactions	?	Community Outreach, Planning and Transactions	?	Community Outreach, Planning and Transactions	?	L	Mainstem	300 acres	Protect high quality habitats and purchase impaired habitats for future restoration; includes planning effort	20,25,32	Powerlines, Lazy C, Southshore riparian-floodplain protection Lower Dosewallips
1	6 of 17	1,3	Powerlines Lower Dosewallips wood riparian restoration	WFC, USFS, Tribes, County	$735,000	$734,000	$1000+	PSP, USFWS	Conifer Plantings	$1,000	Feasibility/Design and Landowner Discussions, Sponsor Development	some work conducted as part of Upper Dose project	Feasibility/Design, Landowner Outreach, Riparian/Exotic Assess	some work conducted as part of Upper Dose project	Permitting and Construction; More design phases; Exotic Control and Planting	?	Permitting and Construction; More design phases; Riparian Planting	?	Permitting and Construction; More design phases; Riparian Planting	?	I,F,R	Mainstem		Improve instream wood loading rates and riparian conditions in the Powerlines Reach	21,23,24	Powerlines Lower Dosewallips wood-riparian restoration
1	7,5,9,5 of 17	1,2,3,5,7	Lower Dosewallips floodplain/estuary restoration	WFC, Tribes, State Parks	$2,000,000	$1,539,225	$460,775	PSP, State Parks, BIA, SRFB, ESRP	Landowner Outreach, plantings, design, and permitting	$360,775	Reach Assess, plantings, design, permitting and construction	$100,000	Deconstruct RB levee above SR101, Finish Assessment, Planting, Monitoring	$711,000	Construction, Planting, Monitoring	?	Monitoring	?	Monitoring	?	I,E,F,R	Estuary, Mainstem	40 acres	Improve riparian conditions, tidal inundation, and floodplain connection; feasibility study included	3,5,6,7,9,11,1 6	Lower Dosewallips floodplain/estuary restoration
1	16 of 17	2,7	Wolcott Slough Fishtrap Removal	HCSEG	$60,000	$10,000	$50,000	ESRP	Permitting, Construction	$50,000	Monitoring	$10,000									E	Estuary	15 acres	Remove USFWS fishtrap and regrade salt marsh and tidal channels	14	Wolcott Slough Fishtrap Removal
1	10 of 17	3,4,5	USFS road decommission Dosewallips	USFS, Tribes, HCSEG	$226,500	$226,500	$0	USFS, federal approp.							Design, Permitting	$40,000	Construction	$186,500	Construction	$186,500	U	Headwater	6.5 miles	Decommission high priority roads for aquatic risk	27,28,41	USFS road decommission Dosewallips
1	2,5,5 of 7	1,2,3,5	Lower and Middle Duckabush riparian-floodplain protection Phase 1	Jefferson County and Jefferson Land Trust	$2,000,000	$1,650,000	$350,000	PSP, IAC, Jefferson County, SRFB	Community Outreach		Community Outreach and Planning	?	Community Outreach, Planning and Transactions	$350,000	Community Outreach, Planning and Transactions	?	Community Outreach, Planning and Transactions	?	Community Outreach, Planning and Transactions	?	L	Mainstem	200 acres	Protect high quality habitats and purchase impaired habitats for future restoration; includes planning effort	11,14	Lower and Middle Duckabush riparian-floodplain protection Phase 1
1	2 of 7	1,3	Lower Duckabush riparian-floodplain restoration Phase 1	WFC, Jeff County, JLT	?	?	?	PSP, IAC, SRFB					Reach Assessment, Landowner Outreach	some work conducted as part of Upper Dose project	Feasibility/Design, Landowner Outreach; Permitting and Construction	?	Feasibility/Design, Landowner Outreach; Permitting and Construction	?	Continued Design, Permitting	?	I,E,F,R	Mainstem		Improve instream wood loading rates and riparian conditions in the Lower Duckabush after protection efforts have advanced	11	Lower Duckabush riparian-floodplain restoration Phase 1
1	3 of 7	3,4,5	USFS road decommission Duckabush	USFS, Tribes, HCSEG	$370,500	$370,500	$0	USFS, federal approp.							Design, Permitting	$40,000	construction	$330,500	construction	$330,500	U	Headwater	8.7 miles	Decommission high priority roads for aquatic risk	9,10	USFS road decommission Duckabush
1	1.5 of 7	1,3	Middle Duckabush wood-riparian restoration phase 1	WFC, USFS and Tribes	$3,175,000	$3,175,000	included in Dose USFS wood-riparian project	PSP, USFS			Feasibility/Design	included above	Landowner Outreach, Surveys/Feasibility/Desi gn; Riparian Assess	some work conducted as part of Upper Dose project	Feasibility/Design, Landowner Outreach; Permitting and Construction	?	Feasibility/Design, Landowner Outreach; Permitting and Construction	?	Continued Design, Permitting	?	I,F,R	Mainstem		Place log jams and increase wood loading by helicopter and conventional means in strategic locations	12,13	Middle Duckabush wood-riparian restoration phase 1
1	4.5 of 7	1,2,3,7	SR101 Causeway Replacement Duckabush	Army Corps, multiple?	$20,000,000	$20,000,000	$0	PSAWR, ESRP, FHA, WSDOT, SRFB					Feasibility	$200,000	Feasibility	$200,000	Design	$200,000	Design	$200,000	E	Estuary		Continue feasibility studies to address benefits for retrofit, alternatives, and costs along the Duckabush causeway	2,3,5,6,7	SR101 Causeway Replacement Duckabush
1	7 of 7	2,7	Robinson Road Levee Removal Duckabush	HCSEG	$300,000	$0	$300,000	ESRP, SRFB, PSP	Design and permitting	$20,000	Construction	$280,000	Monitoring	?							E	Estuary	3 acres	Obliterate levee on WDFW property, remove exotic invasive plant species	4	Robinson Road Levee Removal Duckabush
1	7 of 7	1,2,3,7	Pierce Creek culvert at Shorewood RD	Jefferson County and Jefferson Land Trust	$275,000	$275,000	$0	PSP, ESRP, SRFB					Design	$50,000	Permitting and Construction	$225,000	Monitoring	?	?	?	E,P	Estuary		Improve tidal inundation and fish passage under Shorewood Road	8	Pierce Creek culvert at Shorewood RD
1	4.5 of 6.5	1,2,7	Hama Hama Estuary Restoration	HCSEG	$500,000	$385,115	$114,485	SRFB, LIP, NFWF, ESRP, PSP	Landowner Discussion and Design	$20,000	Design and permitting	$30,000	Construction (funds needed) and more design	$165,000	Design, landowner outreach, Construction	$285,000	?	?	?	?	I,W,E,P	Estuary	50 acres	Restore connectivity to north distributary and estuary as feasible, including levee breach below 101 and North Fork reconnection above 101 where feasible	?	Hama Hama Estuary Restoration
1	4.5 of 6.5	1,3	Upper Hama Hama riparian restoration	USFS	$100,000	$100,000	$0	USFS, federal approp. , other							Inventory, Exotic Control and Planting	$30,000	design, planting, exotic and upland control	$35,000	planting, exotic and upland control	$35,000	R	Mainstem		Improve riparian conditions in non-anadromous reaches to address identified sediment and temperature inputs	12,13,14	Upper Hama Hama riparian restoration
1	6.5 of 6.5	3,4,5	USFS road decommission Hama Hama	USFS, Tribes, HCSEG	$1,048,500	$1,048,500	$0	USFS, federal approp.							Design, Permitting	$100,000	Permitting and Construction	$500,000	?	?	U	Headwater	27.1 miles	Decommission high priority roads for aquatic risk	7,8	USFS road decommission Hama Hama
1	NM	4,5	USFS Road Drainage and Stabilization	USFS	?	?	$0	USFS, federal approp	Permitting, Construction	?	Permitting, Construction	$100,000	Permitting, Construction	$100,000	Permitting, Construction	$100,000	Permitting, Construction	$100,000	?	?	U	Headwater	?	Stabilize high priority roads for aquatic risk; ongoing USFS maintenance		USFS Road Drainage and Stabilization
										$615,365		$770,000		$1,576,000		$1,020,000		$1,352,000		$752,000						

Projects represent all 4 priority Domains to allow more comprehensive tracking of salmon recovery while supporting community values.

Domain Priority	Bio Rank / EDT	Primary Limiting Factors	Action name and description	Likely sponsor	Total cost	Unfunded Portion	Existing Funding	Source of other funds	2007 Scope	2007 Cost	2008 Scope	2008 Cost	2009 Scope	2009 Cost	2010 Scope	2010 Cost	2011 Scope	2011 Cost	2012 Scope	2012 Cost	Restor-ation Type	Location w/in watershed	Performance	Brief Description	Action #	Project Name
Skokomish-Lilliwaup																										
1		1,3,4,5,6,7	Army Corps General Investigation for restoration feasibility	Skokomish Tribe and Mason County,USACE	$4,195,000	$2,395,000	$1,800,000	federal approp., Mason County, Skok Tribe	Cost share agreement, assessments	$605,000	Assessment	$590,000	Assessment	$1,000,000	Design and Documentation	$1,000,000	Documentation, Permitting, Funding Strategy	$1,000,000	Documentation, Permitting, Funding Strategy	$1,000,000				Complete general investigation as a mechanism for a consensus-based road map to improving floodplain and channel functions		Army Corps General Investigation for restoration feasibility
1		1,3,4,5	Vance Creek Restoration Feasibility	Skokomish Tribe	$130,000	$0	$130,000	SRFB, PSP, Skok Tribe			BOR selected, asses't designed, outreach	$30,000	Asses't and Design Completed	$100,000	Construction, More Design	?	Construction, More Design	?	Construction, More Design	?	F,I,L	Mainstem	1 mile of stream	Conduct landowner outreach, survey, and conceptual design for conservation and restoration actions in the summer chum and chinook reaches		Vance Creek Restoration Feasibility
1		2,7	Nalley Island Estuary Restoration	Skokomish Tribe	$4,648,776	$1,695,071	$2,953,705	PSP, TP,ESRP, SRFB, NOAA	Design	?	Design	?	Permitting, Construction, Monitoring	$4,548,776	monitoring	$100,000	monitoring	?			E	Estuary	400 acres, remove 10 miles levees, roads, ditches	Obliterate levees, borrow ditches, and tidegates on Nalley Island		Nalley Island Estuary Restoration
1		2,7	Eastshore 6 acre fill removal	Skokomish Tribe	$400,000	$400,000	$0	PSAWR, ESRP, PSP							property transactions	$200,000	design and permitting	$25,000	construction	$175,000	E, I,	Estuary	6 acres	Remove fill in the eastern cell of the lower Skokomish Estuary		Eastshore 6 acre fill removal
1		2,3	Potlach State Park Restoration	Skokomish Tribe and WA State Parks	Ask Tribe		Ask Tribe	BIA	design	?	design, permitting	?	construction	?							M	Marine		Reroute Potlach Creek; investigate fill removal in historic salt marsh; revegetate shoreline		Potlach State Park Restoration
1		?	Lake Cushman passage down/upstream	Tacoma Power	?			TP	passage agreement	$0	passage agreement	?	?	?							P	Mainstem		Create upstream and downstream passage past Cushman Project, or other alternative as driven by passage agreement		Lake Cushman passage down/upstream
1		1,3,4,5,6	North Fork Flow Restoration	Tacoma Power	$1,500,000	$0	$1,500,000	TP	Construction	$1,500,000	Implementation; Hydrological Assessment for next phase	?	Implementation	?							I	Mainstem		Add Cone Valve to Cushman Project to allow quantity and quality of outflow to improve North Fork and Skokomish Mainstem; continue discussions on re-establishing natural flow regime		North Fork Flow Restoration
1		1,3,5,6,7	Gibbons Creek Fish Passage with Bridge	TP, GD, USFS, MCD	$360,000	$0	$360,000	American Rivers, Joint Venture, GD			design, permitting	$50,000	construction	$310,000							P	Tributary		Fish passage and stream improvement to a significant amount of spawning and rearing area		Gibbons Creek Fish Passaee with Bridge
1		1,3,5,6,7	McTaggert Diversion Dam Removal	Tacoma Power	?	?	?	TP					design, permitting, construction	?	monitoring	?					P	Tributary		Fish passage and water quantity		McTaggert Diversion Dam Removal
1		1,3	Lower Skobob Creek Complexity	Skokomish Tribe	$100,000	$100,000	$0	BIA							design, permitting, construction	$100,000					I,W	Tributary	4000 feet	Place woody debris by helicopter to improve rearing habitat in tidal creek system		Lower Skobob Creek Complexity
1			ELJs in mainstem, SF, NF, Vance	Skok Tribe, multiple	?				coordinate with GI	$0	coordinate with GI	$0	design, permitting	?	construction, design, permitting	?								General category of restoration as a placeholder for results of General Investigation		ELJs in mainstem, SF, NF, Vance
1		1,3,5	Five Mile Creek Engineered Log Jams	MCD	$95,000	$0	$95,000	CSF, NRCS, WHIP					construct	$95,000							I,F	Mainstem	460 feet	Install 5 log jams approximately 1/2 mile upstream of old North Fork confluence		Five Mile Creek Engineered Log Jams
1		1,3	Upper South Fork, Holman Flats, and Tributary Floodplain-Channel-Riparian Restoration	Skokomish Tribe and USFS	$1,463,500	$752,000	$711,500	SRFB,PSP, USFWS,NFWF, USFS, TP			feasibility	$63,500	design, permitting	$100,000	final design, wood stockpiling, construction	$1,300,000	monitoring, begin new design	?	design and permitting	?	I,F	Mainstem	5 miles	Place woody debris jams by helicopter and conventional means in upper forks and tributary junctions; riparian plantings		Upper South Fork, Holman Flats, and Tributary Floodplain-Channel-Riparian Restoration
1		1,3,4,5,6,7	Car-body Levee Removal and Channel Complexity	Mason CD, NRCS, Skok Tribe, and/or landowner	$2,000,000	$1,554,874	$445,126	NRCS, TP, SRFB, PSP			Design within GI	$0	Design within GI	$0	Design within GI	$0	design and permitting	?	Construct	?	I,F,R	Mainstem	1.5 miles	Deconstruct levee system at historic confluence of North and South Forks, enhance resulting channels, replant vegetation		Car-body Levee Removal and Channel Complexity
1		1,3,4,5,6,7	Skokomish River and Bourgalt Road Partial Removals	Tribe	$90,000	$60,000	$30,000	USFWS, WSDOT			design	$0	design, permitting, construction	$90,000	monitoring						F,W	Mainstem	0.5 miles	Deconstruct abandoned road system to reconnect adjacent wetlands and floodplains to the lower Skokomish River		Skokomish River and Bourgalt Road Partial Removals
1		1,3,4,5,6,7	Dike Removal and/or setbacks-TBD by GI	multiple	?	?	?				Design within GI	$0	Design within GI	$0	Design within GI	$0	design and permitting	?	design and permitting and construction	?	I,W,R,F	Mainstem		General category of restoration as a placeholder for results of General Investigation		Dike Removal and/or setbacks-TBD by GI
1		1	SR101 and SR106 road prisms/bridees - TBD by GI	WSDOT, multiple	$10,704,510	+	$10,704,510	WSDOT, FHA	moving ahead with Purdy, wait to coord on others with GI	$0	construct Purdy	$5,210,390	construct, more design within GI	$5,494,120	Design within GI	$0	design and permitting	?	construct, more design	?	W,F	Mainstem		In addition to general category of restoration as a placeholder for results of General Investigation, also includes Purdy Creek 101 rebuild		SR101 and SR106 road prisms/bridees - TBD by GI
1		1,5,6	Silviculture Treatments for increased hydrologic maturity	USFS, HCSEG, GD	?			federal approp., PSP, other?			design, permitting	?	implementation, design, permitting	?	implementation, design, permitting	?	implementation, design, permitting	?			U	Headwaters		Increase hydrologic maturity within Skokomish basin		Silviculture Treatments for increased hydrologic maturity
1		1,3,4,5,6,7	Protect habitats through conservation tools	multiple	$7,000,000	$4,000,000	$3,000,000	SRFB, PSP, TP, Mason County, Tribe	strategy, landowner outreach, land transactions	$0	strategy, landowner outreach, land transactions	$4,000,000	strategy, landowner outreach, transactions	$1,000,000	strategy, landowner outreach, transactions	$1,000,000	strategy, landowner outreach, transactions	$1,000,000	strategy, landowner outreach, transactions	$1,000,000	I,	Mainstem	700 acres, 4 miles	Protect high quality habitats and purchase impaired habitats for future restoration		Protect habitats through conservation tools
1		1,3,4,5	Riparian plantings, Farm Plans, and BMPs	MCD, multiple	$600,000	$350,000	$250,000	NRCS, MCD, Landowner	landowner outreach, planting, exotic control, fencing, farm plans,	$100,000	landowner outreach, planting, exotic control, fencing, farm plans,	$100,000	landowner outreach, planting, exotic control, fencing, farm plans,	$100,000	landowner outreach, planting, exotic control, fencing, farm plans,	$100,000	landowner outreach, planting, exotic control, fencing, farm plans,	$100,000	landowner outreach, planting, exotic control, fencing, farm plans,	$100,000	R	Tributaries	2 miles	Work with Mason Conservation District and private landowners to improve stewardship through public incentive programs such as Farm Plans Cost Share, Environment Quality Improvement Program, Wildlife Habitat Improvement Program, and BMP construction		Riparian plantings, Farm Plans, and BMPs
1		4,5,6,7	USFS Road Decommission - North Fork 14km	USFS and SWAT	?								design, permitting	$30,000	construction	?					U	Headwaters		Decommission high priority roads for aquatic risk		USFS Road Decommission - North Fork 14km
1		4,5,6,7	USFS Road Decommission - South Fork 93km	USFS and SWAT	$10,033,400	$9,433,400	$600,000	federal approp., SRFB, PSP, EPA, USFS	construction, design, permitting	?	construction, design, permitting	$600,000	construction, design, permitting	$3,010,020	construction, design, permitting	$3,511,690	construction, design, permitting	$2,911,690	construction, design, permitting	?	U	Headwaters	70.5 miles	Decommission high priority roads for aquatic risk		USFS Road Decommission - South Fork 93km
1		4,5,6,7	USFS Road Decommission - Vance Creek 6km	USFS and SWAT	?								design, permitting	$30,000	construction	?					U	Headwaters		Decommission high priority roads for aquatic risk		USFS Road Decommission - Vance Creek 6km
1		4,5,6,7	Road Drainage and Stabilization - South Fork	USFS and SWAT	$2,128,400	?	?	federal approp., SRFB, PSP, EPA, USFS	planning, permitting, construction	?	planning, permitting, construction	$638,460	construction, BMPs	$744,970	construction, BMPs	$744,970	?	?	?	?	U	Headwaters	149 miles	Stabilize roads to reduce aquatic risk		Road Drainage and Stabilization - South Fork
1		4,5,6,7	Road Maintenance	USFS and SWAT	476,250	?	?	federal approp., SRFB, PSP, EPA, USFS	construction	?	construction	$142,875	construction	$166,688	construction	$166,687	construction	?	construction	?	U	Headwaters		Maintain roads to redue aquatic risk through annual maintenance program		Road Maintenance
1		1,2,3,7	Lilliwaup Instream Restoration Design	LLTK, HCSEG, WDFW, Skok Tribe	100,000	100,000	$0	SRFB, in-kind							assessment and design	$50,000	?	?	construction	?	I,E,R,F	Mainstem	4000 feet	Work with landowners to design restoration project to remove fill in lower floodplain, enhance woody debris, and replant riparian areas		Lilliwaup Instream Restoration Design
										$2,205,000		$11,425,225		$16,819,574		$8,273,347		$5,036,690		$2,275,000					
Eastern Straits																										
1		2,3,5,7	Snow/Salmon Estuary and Shoreline Restoration	NOSC, WDFW, DNR, JCD	$1,690,215	$0	$1,690,215	DNR, WDFW, NOAA,PSP, SRFB, Oil Spill	final design, permitting; derelict building removal	$100,000	construction, replanting	$1,590,215	monitoring, planning, plantine	$20,000	monitoring	?	monitoring	?	monitoring	?	E	Estuary	20 acres	Remove abandoned railroad grade and fill, naturalize adjacent shoreline, and remove derelict structures; expand existing project, relocate water line		Snow/Salmon Estuary and Shoreline Restoration
1		2,7	Snow/Salmon Estuary Railroad Grade Removal Feasibility and Design	NOSC, WDFW, JCD	$100,000	$0	$100,000	SRFB, PSP			scoping	$0	feasibility and design	$100,000							E	Estuary		Assess options for removing railroad causeway in lower estuary		Snow/Salmon Estuary Railroad Grade Removal Feasibility and Design
1		2,3,5,7	Snow/Salmon Railroad Grade Removal	NOSC, WDFW	$250,000	$250,000	$0	NOAA, PSP							permitting and construction	$250,000	monitoring	?	monitoring	?	E	Estuary	20 acres	Implement design study to remove abandoned railroad grade in southern estuary and enhance grade in northern estuary		Snow/Salmon Railroad Grade Removal
1		1,2,3,6	Snow/Salmon Reconnection Feasibility and Design	WDFW, NOSC, JCD	$10,000	$0	$10,000	private donation, ESRP, PSP	feasibility, planning	$10,000	Put on hold due to hydrology impacts on adjacent structures/bridee	$0									LW,R,F	Mainstem	1 mile	Assess benefits and feasiblity of reconnecting Snow and Salmon Creeks; design construction plans		Snow/Salmon Reconnection Feasibility and Design
1		3,5	Snow/Salmon Riparian Restoration	JCD, NOSC, WDFW, Nooksus Weed Board	$418,461	$200,000	$218,461	SRFB, CREP,PSP	planting, fencing, etc not included in cost		landowner contacts, planting	$218,461	maintenance, assessment, planting	$50,000	maintenance, assessment, plantine	$50,000	maintenance, assessment, planting	$50,000	maintenance, assessment, planting	$50,000	R	Mainstem	30 acres	Plant native vegetation and control exotic invasives; install livestock exclusion fencing, add BMPs, and alternative water systems		Snow/Salmon Riparian Restoration
1		1,3,4,5,6	Snow/Salmon Floodplain and Nearshore Protection	Jefferson Land Trust, NOSC, JCD, WDFW	$900,000	$600,000	$300,000	USFWS, IAC,PSP, SRFB	transactions not included in costs		transactions	$300,000	landowner outreach	$0	transactions	$300,000	transactions	$300,000	transactions	$300,000	L	Mainstem	200 acres	Protect high quality habitats and purchase impaired habitats for future restoration in floodplains and estuary; includes planning effort to work with willing landowners		Snow/Salmon Floodplain and Nearshore Protection
1		1,3,7	West Uncas Road Culvert Replacement Design	NOSC, Jefferson County	$50,000	$0	$50,000	NOAA, American Rivers, PSP					Design	$50,000	Construction	?					I,P,F	Mainstem		Assess design options and costs for replacing culvert with bridge to ease passage and restore habitat forming processes		West Uncas Road Culvert Replacement Design
1		1,3,4	Snow Creek Wood Enhancement Design	NOSC, JCD	$50,000	$50,000	$0	PSP, SRFB							landowner contacts, survey, design	$50,000	design, permitting, construction	?	construction	?	I	Mainstem	1 mile	Landowner outreach, feasibility, and design of project to improve channel complexity and instream functions through summer chum range		Snow Creek Wood Enhancement Design
1		4,5,6,7	Snow/Salmon Road Decommissioning and Stabilization	USFS, NOSC	$150,000	$150,000	$0	USFS, SRFB,PSP					Design	$30,000	Permitting and construction	$120,000					U	Headwaters	7 miles	Decommission highest priority roads for aquatic risk		Snow/Salmon Road Decommissioning and Stabilization
1		2,7	Fairmount Marsh Restoration	JCD, MRC, NOSC	$25,000	$0	$25,000	ESRP, PSP	design	$25,000	landowner discussions	$0	landowner discussions	$0	landowner discussions	$0	landowner discussions	$0	landowner discussions	$0	M	Marine	8 acres, 800 feet channel?	Remove abandoned causeway to restore pocket marsh habitat adjacent to Snow/Salmon watershed; replace bulkhead with softshore protection		Fairmount Marsh Restoration
2		1,3,5	Chimacum Creek Priority Lands Conservation	Jefferson Land Trust, NOSC, JCD	$1,500,000	$1,500,000	$0	IAC, Jeff Co Conservation Futures,PSP	transactions, landowner contacts (cost not included)		landowner contacts, transactions	$300,000	transactions	$300,000	transactions	$300,000	transactions	$300,000	transactions	$300,000	L	Mainstem	500 acres	Protect high quality habitats and habitats for restoration in summer chum range; maintain headwater working forests		Chimacum Creek Priority Lands Conservation
2		1,3,4,5,7	Chimacum Creek Restoration	JCD, NOSC	$500,000	$500,000	$0	SRFB, NRCS	construction (cost not included)		design, permitting, construction	$100,000	design, permitting, construction	$100,000	design	?	design, permitting, construction	?			I,W,R,F,P	Mainstem	2 miles	Improve stream and floodplain habitat conditions in Chimacum Watershed through channel improvements, wood addition, riparian plantings, fencing, and noxious weed control		Chimacum Creek Restoration
2		2,3	Chimacum Estuary Restoration Phase 2	NOSC, WDFW	$200,000	$200,000	$0	SRFB, ESRP, Ecology Oil Spill, PSP			design, permitting	$20,000	construction, monitoring	$180,000	monitoring						E	Estuary	15 acres	Restore estuarine and shoreline functions by removing non-native fill and replanting shoreline to the south of Chimacum estuary phase 1 site		Chimacum Estuary Restoration Phase 2
2		2,7	Scow Bay Culvert Replacement	NOSC, WSDOT, WDFW	$2,000,000	$2,000,000	$0	WSDOT, ESRP, USACE			discussion	$0	discussion	$0	feasiblity	$100,000	design and permitting	$100,000	construction	$1,800,000	M,F	Marine		Replace undersized culverts with bridge length on Marrowstone Island causeway to restore natural tidal inundation and access to and from Scow Bay for Puget Sound and Hood Canal salmon stocks		Scow Bay Culvert Replacement
4		2	Oak Bay Park Shoreline Restoration	JCD, Jefferson County, MRC	$250,000	$200,000	$50,000	ESRP, PSP, SRFB, NWSI			discussion	$0	feasibility and design	$25,000	design and permitting	$25,000	construction	$200,000	monitoring	?	M	Marine	1500 feet	Work with Jefferson County Parks and public to determine project design for marine shoreline restoration, including road abandonment, riprap removal, and replantings		Oak Bay Park Restoration
4		2	Old Fort Townsend State Park Shoreline Restoration	MRC, State Parks	$250,000	$250,000	$0	NWSI, State Parks			discussion	$0		$0	design and permitting	$50,000	construction	$200,000	monitoring	?	M	Marine	300 feet	State Parks would like to restore the marine shoreline by pulling back fill and riprap while preserving pedestrian access to the beach		Old Fort Townsend State Park Shoreline Restoration
										$135,000		$2,508,676		$665,000		$1,335,000		$1,270,000		$2,450,000					
Quilcene																										
2		2	Tarboo/Dabob Bay Protection	NWI, TNC, DNR, Tribes, Jefferson Land Trust	$29,000,000	$14,000,000	$15,000,000	USFWS, SRFB, ESRP, Trust Land Transfer			Transactions	$2,000,000	transactions	$5,000,000	Transactions	$10,000,000	Transactions	$10,000,000	transactions	$2,000,000	M,L	Marine	3,600 acres, 1 mile shoreline	Protection of state timber and private lands within the 3,600 acre Dabob Bay Natural Area to protect ecosystem functions and processes, and diverse habitats in one of the highest quality and largest saltmarsh estuaries remaining in the Hood Canal and Straits of Juan de Fuca region. The project includes acquisition of 1,400 acres of private lands from willing landowners and use of Trust Land Transfer funds for State lands.		Tarboo/Dabob Bay Protection
4		2,5	Tarboo/Dabob Bay Nearshore Restoration	NWI, TNC, DNR, Tribes, Jefferson Land Trust	$3,000,000	$3,000,000	$100,000	USFWS, NOAA, ESRP, SRFB			landowner outreach, early projects	$40,000	landowner outreach, design and permitting	$60,000	landowner outreach, construction, more design	$200,000	landowner outreach, construction, more design	$1,000,000	landowner outreach, construction, more design	$1,700,000	M	Marine	3000 feet	Remove rock and creosote bulkheads, shoreline fill, unstable shoreline roads, and plant and maintain shoreline riparian forests at priority restoration sites within Tarboo-Daboh Bay.		Daboh Bay Creosote Bulkhead Removal
1		1,3,5,6	Big and Little Quilcene Floodplain and Estuary Protection	Jefferson Land Trust, HCSEG, Tribes, Jefferson County	$1,350,000	$800,000	$550,000	IAC, Jeff Co Conservation Futures,PSP	Transactions in progress	$250,000	Landowner Contacts, appraisals, transactions	$350,000	transactions	$250,000	transactions	$250,000	transactions	$250,000	transactions	?	L	Mainstem	150 acres	Protect high quality habitats and purchase impaired habitats for future restoration; includes planning effort to work with willing landowners;		Big and Little Quilcene Floodplain and Estuary Protection
1		2,7	Quilcene Wetlands Restoration	HCSEG, NRCS, WDFW, USFWS	$800,000	$0	$800,000	SRFB,USFWS, Landowner, NRCS, Priv. Business,LIP	design, funding strategy, permitting	$100,000	construction	$700,000	monitoring	?	easement transaction	donated					E	Estuary	50 acres	Obliterate saltwater levees south of Big Quilcene River on willing landowner property to restore salt marsh habitat and tidal channels; include abandoned WDFW pond; donated easement. $25,000 is needed to fund landowner conservation transactions		Quilcene Wetlands Restoration

Projects represent all 4 priority Domains to allow more comprehensive tracking of salmon recovery while supporting community values.

Domain Priority	Bio Rank / EDT	Primary Limiting Factors	Action name and description	Likely sponsor	Total cost	Unfunded Portion	Existing Funding	Source of other funds	2007 Scope	2007 Cost	2008 Scope	2008 Cost	2009 Scope	2009 Cost	2010 Scope	2010 Cost	2011 Scope	2011 Cost	2012 Scope	2012 Cost	Restor-ation Type	Location w/in watershed	Performance	Brief Description	Action #	Project Name
1		2,7	WDFW Abandoned Wildlife Pond	HCSEG, WDFW	$300,000	$0	$300,000	SRFB, ESRP	design, permitting	$10,000	construction	$290,000	monitoring	?	monitoring	?	monitoring,	?			L	Estuary	4 acres	Remove failed levee system constructed as a wildlife pond by WDFW at the mouth of the Big Quilcene River		WDFW Abandoned Wildlife Pond
1		1,3	Big Quilcene Wood Enhancement	Skokomish Tribe, WDFW, HCSEG	$950,000	$220,000	$730,000	SRFB, Skokomish Tribe, PSP, LIP	design, permitting	$70,000	design, levee removal study (see below)	$60,000	construct phase 1, design phase 2	$320,000	construct phase 2	$500,000	monitoring, reach assessment, design	?	construct phase 3?	?	LF	Mainstem	4000 feet	Place woody debris and remove riprap at two sites (old Rose and PUD properties) to improve channel and floodplain complexity and instream functions through summer chum range		Big Quilcene Wood Enhancement
1		1,3	Big Quilcene Levee Removal Feasibility - Baclawski	Skok Tribe, HCSEG, JCCD	$64,000	$0	$64,000	SRFB, NFWF			Feasibility and Conceptual Design Study	$64,000	complete study, integrate into Phase 2 above								LR,F	Mainstem	0.25 miles	Model floodplain with new LiDAR data in 2 dimensional model; assess liabilities and options for removing or setting back small levee on Baclawski property; determine preferred alternative and conceptual design		Big Quilcene Levee Removal Feasibility - Baclawski
1		1,2,3,6,7	Linger Longer Reach Restoration	Jefferson County, WDFW, Tribes	$6,000,000	$6,000,000	$0	PSP, SRFB, ?	finish linger longer assessment	$60,000	Develop funding strategy; continue land transactions as appropriate	$300,000	more land transactions	$300,000	Design and permitting	$100,000	Construction	$5,300,000	monitoring	?	LW,E,L,R,F	Mainstem		Continue Linger Longer Reach Restoration with the end goal of restoring floodplain processes below Rogers Street. This project will include widening the floodplain, creating increased channel habitat, widening the existing bridge, and replanting.		Linger Longer Reach Restoration
1		1,3	Little Quilcene Floodplain Enhancement	HCSEG, NRCS, WDFW, Tribes, Noxious Weed Board	$450,000	$450,000	$0	HCSEG,PSP	land transaction (not included in cost)						exotic and habitat survey, design, construction, planting	$150,000	exotic control, plantings, construction	$150,000	exotic control, plantings, construction	$150,000	LF	Mainstem	2000 feet	Remove riprap, add wood, control exotic invasive species, and replant riparian habitats in lower river below Center Road; begin design of upstream projects		Little Quilcene Floodplain Enhancement
1		2	Little Quilcene Delta Cone Removal	HCSEG, WDFW	$930,000	$830,000	$100,000	SRFB, NRCS, PSP, NOAA			design	$100,000	permitting, construction	$800,000	monitoring	$10,000	monitoring	$10,000	monitoring	$10,000	E	Estuary	25 acres	Remove delta cones to restore linkage between tidal and freshwater hydraulic forces		Big and Little Quilcene Delta Cone Removals
1		2,7	Little Quilcene Estuary Restoration	HCSEG, NRCS, WDFW, Jefferson County, Tribes	$1,665,000	$0	$1,665,000	SRFB, NRCS, Jefferson County,PSP, ESRP	design, permitting		construction, land transaction (not included in cost)	$1,665,000	monitoring	?	monitoring	?	monitoring	?	monitoring	?	E	Estuary	20 acres	Provide additional funds to existing project to remove aggraded delta cone		Little Quilcene Estuary Restoration
1		2,3	Quilcene Bay/Donovan Creek Acquisition and Restoration	WDFW, TNC, JCCD, JLT, HCSEG	$1,040,084	$1,033,872	$6,212	USFWS, JLT, TNC					design, appraisals	$20,000	land transactions, restoration	$1,020,084	monitoring	?	monitoring	?	L,E,L,R	Estuary	93 acres, 3500 feet channel, 15 acres riprian, 120 pieces LWD	This project aims to protect and restore nearly 50 acres of tidal marsh, freshwater wetland and stream channel habitat along the lower reach of Donovan Creek as it enters the head of Quilcene Bay in Hood Canal, Washington.		Quilcene Bay/Donovan Creek Acquisition and Restoration
										$490,000		$5,569,000		$6,780,000		$12,730,084		$16,710,000		$3,860,000					
Union and Tahuya																										
1		1,2,3,7	Union River Salt Marsh Restoration	HCSEG, WDFW, PNWSC	$2,000,000	$1,980,000	$20,000	SRFB, IAC, WSDOT, Mason County,PSP	land transaction (not included in total cost)				design	$20,000	final design, permitting	$100,000	construction	$1,880,000	monitoring	?	E,R,L	Estuary	45 acres	Breach levees strategically and enhance tidal channels to restore tidal inundation to 40 acres of historic salt marsh; revegetate backshore; enhance adjacent channels		Union River Salt Marsh Restoration
1		1,2	Union and Tahuya River Floodplain Protection	HCSEG, CLC	$500,000	$500,000	$0	SRFB, Mason County, CLC,PSP					strategy, outreach, appraisals, transactions	$50,000	transactions	$300,000	transactions	$150,000	?	?	L	Mainstem	100 acres	Protect high quality habitats and purchase impaired habitats for future restoration		Union and Tahuya River Floodplain Protection
1		1,3,5	Union and Tahuya River Floodplain and Channel Enhancement	HCSEG, WDFW, Noxious Weed Board, Mason CD	$900,000	$700,000	$200,000	SRFB, NFWF, WDFW, USFWS,PSP	implement several smaller projects	?	survey and design 2 LIP projects	?	construct 2 LIP projects; reach assessment and design for LWD	$200,000	survey and control exotic species, replant; construct LWD	$400,000	design and construction	$300,000	monitoring	?	I, W, R, F	Mainstem	3000 feet	Remove riprap, add wood, control exotic invasive species, and replant riparian habitats in summer chum range		Union and Tahuya River Floodplain Enhancement
1		2,3,7	Klinget Estuary Restoration	GPC, WDFW, NRCS	$525,000	$0	$525,000	SRFB, NRCS,PSP	expand project	$20,000	design	100000	final design, permiting, construction	$380,000	monitoring	$25,000					E, R	Estuary	20 acres	Remove levees and tidegate to restore salt marsh and tidal channels		Klinget Estuary Restoration
1 or 2		1,3,4,5,6	Tahuya to Union Headwaters Conservation	WDFW, DNR, HCA, CLC	$6,650,000	$662,500	$5,987,500	Forest Legacy, IAC	Design and partner building; funding	?	Appraisal, Negotiations	?	Transactions	$6,650,000	transactions	?					L	Headwaters	10000 acres	Work with large forest landowners to purchase development rights and ensure in perpetuity working forests that form the headwaters of Tahuya and Union Rivers; Hood Canal Alliance		Tahuya to Union Headwaters Conservation
4		2	Twanoh Falls Community Club Estuary Restoration	HCSEG	$75,000	$50,000	$25,000	LIP, ESRP	Design, landowner outreach	$10,000	landowner discussions	$0	funding strategy, designs, permitting	$15,000	construction	$50,000					M	Marine	250 feet	Work with Twanoh Falls Community Club to enhance the Twanoh Falls Creek estuary, replace culvert with bridge, and restore marine vegetation in documented surf smelt spawning habitat on the south shore of Lower Hood Canal		Twanoh Falls Community Club Estuary Restoration
										$30,000		$100,000		$7,315,000		$875,000									
West Kitsap																										
2 or 3		1,3,4,5,6	Big Beef to Dewatto Priority Lands Conservation	GPC, WDFW, DNR, HC Alliance	$1,000,000	$1,000,000	$0	Unknown					Design and partner building; funding	?	Appraisal, Negotiations	?	Transactions	?			L	H	400 acres	Continue conservation efforts with the Hood Canal Alliance		Big Beef to Dewatto Priority Lands Conservation
2		1	IMW Big Beef Wetland and Channel Restoration	WDFW	$600,000	$600,000	$0	SRFB			Project Development		Preliminary Design	?	Final Design, permitting, construction	$300,000	construction	$300,000	monitoring	?	I	M	50 acres	WDFW, HCSEG led effort to restore instream wood structures and thus wetlands and side channel habitat in lower watershed on UW property; treatment associated with IMW program		IMW Big Beef Wetland and Channel Restoration
3		1,3	IMW Little Anderson Channel Restoration	HCSEG, HCCC	$350,000	$0	$350,000	LIP, Kitsap County	Design and construct Phase 1	150000	Reach Assessment	$30,000	Design and construct Phase 2	$170,000	Reach Assessment	?					I	Mainstem	8000 feet	HCSEG and HCCC led effort to restore instream woody debris and thus instream and floodplain habitat in middle and lower watershed; treatment associated with IMW program		
2		2,7	Dewatto Estuary	HCSEG	$400,000	$400,000	$0	PSP, SRFB, ESRP, coastal wetlands							design	$20,000	permitting, construction	$380,000			E	Estuary		Remove relict levees in sub-estuary and restore channel complexity; fill dredge hole; replant affected riparian areas		Dewatto Estuary
2		1,3	Big Beef Fee Acquisition	GPC	$407,731	$346,315	$61,416	GPC in-kind, donation					appraisal, transaction	$407,731							L	Mainstem	10 acres	Acquire 10 acre parcel with 330 feet of both sides of Big Beef Creek which supports a re-introduced run of summer chum salmon		Big Beef Fee Acquisition
4		1,2,3	Martha John Creek Estuary Conservaiton Plan	GPC, PG S'Klallam Tribe,	$47,500	$20,000	$27,500	NFWF					conservation plan development	$47,500							L, I, W, E, R	Mainstem	1 Mile	Engage key landowners in development of a conservation plan for Martha John Creek estuary and lower reach, resulting in a strategic conservation plan implemented by multiple organizations		Martha John Creek Estuary Conservaiton Plan
4		2,3,5	Kitsap Memorial Bulkhead Restoration	State Parks	$450,000	$0	$450,000	FEMA, State Parks, ESRP			design, discussions	?	permitting, construction	$450,000							M	Marine	1500 feet	Replace creosoted bulkhead with soft bank or no protection to improve drift cell functions and forage fish habitat		Kitsap Memorial Bulkhead Removal
										$150,000		$30,000		$1,075,231		$320,000		$680,000		$0					
Dungeness and Jimmycomelately (only summer chum stocks considered in HCCC process)																										
			See NOPLE 3 Year Work Program																							
										$0		$0		$0		$0		$0		$0					
Regional																										
2 or 3 or 4		2,3,5	Marine Riparian Initiative	HCCC, JLT, CLC, GPC, RFEGs, CDs, WSU, Noxious Weed Boards	$700,000	$600,000	$100,000	Landowners,PSP, CSF, LIP, ALEA	outreach/eduction, training, planting, monitoring	$40,000	outreach/eduction, training, planting, monitoring	$20,000	outreach/eduction, training, planting, monitoring	$40,000	outreach/eduction, training, planting, monitoring	$200,000	outreach/eduction, training, planting, monitoring	$200,000	outreach/eduction, training, planting, monitoring	$200,000	L, R, M	Marine	6 miles	Restore marine riparian corridors in the summer chum ESU. In addition to plants, technical assistance, and workforce on public and private lands, this project could provide matching funds to enable a process for landowners to donate conservation easements		Marine Riparian Initiative
2 or 3 or 4		2	Derelict Gear Removal	HCSEG	?	?	?	NOAA, private foundation, ESRP	Inventory	?	Remove and Inventory	?	Remove and Inventory	?	Remove and Inventory	?	Remove and Inventory	?	Remove and Inventory	?	E,M	Marine	?	Inventory marine subtidal areas of Hood Canal for derelict nets and pots and continue removal process		Derelict Gear Removal
1 or 2		1,3,5	Regional Riparian Successional Strategy	Multiple	300,000	300,000	$0	federal approp., Noxious weed boards, partner in kind			Survey and inventory noxious weeds	$75,000	Survey, inventory, remove noxious weeds; begin riparian assessment	$300,000	Survey, inventory, remove noxious weeds; implement riparian plantings	$300,000	Survey, inventory, remove noxious weeds; implement riparian plantings	$300,000	Survey, inventory, remove noxious weeds; implement riparian plantings	$300,000	R	All except marine	?	Survey, inventory, and control exotic, invasive vegetation species along high priority freshwater reaches; prepare sites, plant, and maintain sites following recommendations from riparian assessment		Riparian Enhancement and Noxious Weed Control
										$40,000		$95,000		$340,000		$500,000		$500,000		$500,000					
Hatchery Capital Projects																										
TOTAL CAPITAL NEED					$149,303,327	$92,584,142	$54,213,135			$3,665,365		$20,497,901		$34,520,805		$24,533,431		$25,548,690		$9,837,000					

Projects represent all 4 priority Domains to allow more comprehensive tracking of salmon recovery while supporting community values.

Domain Priority	Bio Rank / EDT	Primary Limiting Factors	Action name and description	Likely sponsor	Total cost	Unfunded Portion	Existing Funding	Source of other funds	2007 Scope	2007 Cost	2008 Scope	2008 Cost	2009 Scope	2009 Cost	2010 Scope	2010 Cost	2011 Scope	2011 Cost	2012 Scope	2012 Cost	Restor-ation Type	Location w/in watershed	Performance	Brief Description	Action #	Project Name
NON-CAPITAL PROGRAMS																										
Harvest Management support																										
			Population Analysis & Modeling	WDFW, Tribes	$129,250	$129,250	$0	?	planning	?	planning	?	Staffing (0.5 FTE)	$41,000	Staffing (0.5 FTE)	$43,050	Staffing (0.5FTE)	$45,200	Staffing (0.5FTE)	$45,200				This program would hire an analyst to address population analysis and modeling needs identified in the recovery plans to help fill gaps identified by the TRT and increase understanding and certainty in the management of salmon recovery.		Population Analysis & Modeling
Future Habitat Project Development																										
			Juvenile Salmonid Research Project	LE Group, co-managers	$858,500	$858,500	$5,000		planning	$5,000	planning, coordination	?	Staffing (1 FTE - Bio., 4FTEs - Tech.)	$320,800	Staffing (1 FTE - Bio., 4FTEs - Tech.)	$262,400	Staffing (1 FTE - Bio., 4FTEs - Tech.)	$270,300	Staffing (1 FTE - Bio., 4FTEs - Tech.)	$270,300				Conduct survey of juvenile salmonid distribution, behavior, habitat preferences, and life histories of summer chum and chinook salmon. This would be a collaborative effort to address the most important uncertainties outlined in recovery and implementation plans.		Juvenile Salmonid Research Project
			Nearshore Inventory, Assessment, and Coordination	HCCC, Kitsap, Mason, Jefferson	$300,000	$300,000	$0	HCCC and County In-kind	Jefferson County focus	?	Kitsap County focus to wrap current effort into Hood Canal	?	Kitsap data collection and analysis; Mason County scoping	$200,000	landowner outreach, final report, coord with SMPs and SRPs	$100,000							The goal of this project will be to incorporate existing databases and governmental nearshore assessments in all three counties to develop a prioritized set of voluntary habitat actions and to incorporate best available science into federal, state, and county regulatory programs.		Nearshore Inventory, Assessment, and Coordination
			Conservation Strategy Database	HCCC	TBD				Planning	?	project implementation and coordination	?	project implementation and coordination	?	project implementation and coordination	?									Conservation Strategy Database
Habitat protection -- monitoring of habitat quality																										
			Adaptive management and monitoring	Multiple stakeholders	$880,000	$750,000	$130,000	PSP, County and Tribe Partners	Planning	?	aquatic and riparian habitat status and trends	$130,000	aquatic and riparian habitat status and trends	$250,000	aquatic and riparian habitat status and trends	$250,000	aquatic and riparian habitat status and trends	$250,000	aquatic and riparian habitat status and trends	$250,000				Direct and cumulative effectiveness mon'g for projects and programs can be implemented concurrently through a rigorous watershed program that meets multiple objectives, including status and trends of habitats, effectiveness of activities, and watershed assessment for future project design. Our proposal is to work within Ecology framework to monitor conditions at WRIA and SRR scales, coordinating and supporting local interests, and communicating with regional roll-up efforts.		Adaptive management and monitoring
Habitat protection -- monitoring of regulatory programs																										
			Adaptive management and monitoring	Multiple stakeholders					See Above															See above		Adaptive management and monitoring
Habitat protection -- participation in policy or regulatory updates																										
			Landuse Permit Tracking	HCCC	TBD				Implementation, further dev't	?	Implementation, further dev't	?	Implementation, further dev't	?										Continue land use permit tracking database and analysis to assess hypotheses in the Summer Chum SRP regarding build-out, etc.		Landuse Permit Tracking
			Conservation Strategy Database	HCCC	TBD				Planning	?	project implementation and coordination	?	project implementation and coordination	?	project implementation and coordination	?								Overlay existing protected areas including voluntary and regulatory programs with high priority conservation areas to determine an integrated conservation strategy.		Conservation Strategy Database
Watershed Plan Implementation																										
			To Be Determined																							To Be Determined
Outreach & Education																										
			Multiple																							Multiple
Salmon Recovery coordination/implementation																										
			Co-manager General Management and Operations Support Program	Co-managers	$689,620	?	?	State and Tribal	on-going	?	2 FTE	$160,000	2 FTE	$168,000	2 FTE	$176,400	2 FTE	$185,220	2 FTE	$185,220				Thre is a need to provide oversight and ensure follow-up management and coordination of chinook recovery efforts. Multiple tasks can be implemented through increased capacity at WDFW and the Tribes.		Co-manager General Management and Operations Support Program
			Enforcement Needs Analysis	HCCC	TBD																			Work with local land use jurisdictions and state regulatory agencies to conduct an enforcement needs analysis.		Enforcement Needs Analysis
			Dosewallips/Duckabush Habitat Planning	Jefferson, HCCC, JLT	TBD																			Work with local community to develop broadly supported habitat recovery projects.		Dosewallips/Duckabush Habitat Planning
			Multiple other - See Summer Chum SRP	HCCC	TBD																					Multiple other - See Summer Chum SRP
Habitat Project Monitoring																										
			Nutrient Sequestering from Salmon Projects	HCCC, Ecology	$60,000	$50,000	$10,000	Ecology, partner in-kind	create monitoring plans for estuarine levee removals and LWD placements; implement	$10,000	refine monitoring plans for estuarine levee removals and LWD placements; implement	$20,000	unknown	?	unknown	?							This effort to monitor Skokomish and Klingel estuary restoration sites, and LWD placement sites in Little Anderson, Gamble, and Carpenter Creeks will establish the efficacy of 2 types of salmon restoration projects in nutrient sequestering, an important aspect of the Hood Canal low dissolved oxygen effort, and Puget Sound Partnership.		Nutrient Sequestering from Salmon Projects
		?	Anchor Exclusion Eelgrass Effectiveness Monitoring	MRC	$30,000	$20,000	$10,000	NWSC, ESRP, priv. donation	survey	?	survey and analysis	?	survey and analysis	?	survey and analysis	?							This project will monitor the effectiveness of a voluntary anchor exclusion zone offshore of Port Townsend.		Anchor Exclusion Eelgrass Effectiveness Monitoring
Stock Monitoring Support																										
			New Fishcounter at Salmon Creek	NOSC	$30,000	$30,000	$0																			New Fishcounter at Salmon Creek
TOTAL NON-CAPITAL NEED:					$2,977,370		$155,000																			
TOTAL CAPITAL & NON-CAPITAL NEED:					$152,280,697		$54,368,135																			