

I. Context

1. Provide a brief overview of the characteristics of your Chinook Salmon Recovery area.

Please refer to the checklists and other content developed for the 2012 Salmon Recovery Council conference:

http://www.mypugetsound.net/index.php?option=com_docman&task=cat_view&gid=584&Itemid=238

2. Describe the process for developing your 3YWP narrative and project/activity list. Who are the stakeholders involved and what are their roles? Are harvest and hatchery managers involved in your planning group or have they had an opportunity to comment or consult on your 3YWP?

Habitat components of the 3YWP project spreadsheet are reviewed and updated through the lead entity process and committees. For Mid Hood Canal (MHC) this year, HCCC staff facilitated two, broader lead entity meetings on the topic as well as a focused workshop at Lilliwaup on this topic. The narrative is typically written by HCCC staff to reflect these updates and then provided to lead entity committees for their information.

Hatchery and harvest managers are marginally involved, but not a major focus of the 3YWP. For the last two years we have updated the hatchery and harvest components of the 3YWP to reflect the planned actions necessary for this MHC Chinook population. As it is a complex topic, additional discussion and vetting with the major stakeholders will be necessary as we move forward with adaptive management planning.

II. Background/Planning/Logic of the Recovery Chapter

1. What are the recovery goals for your watershed for Chinook salmon? Include information on both population goals (VSP parameters) and habitat goals.

Population goals are found on page 17 of the MHC Chinook Salmon Recovery Plan, as expressed in abundance and productivity. Diversity and spatial recovery goals have not been developed. Habitat goals are expressed in terms of project lists (Table 5.1), and the improvement on watershed performance modeled by EDT (Table 5.2).

2. What is the current strategy to accomplish the recovery goals and what assumption(s) is this strategy based on?

The current strategy is to implement voluntary habitat recovery projects with funds provided by grants; implement habitat protections as outlined programmatically in the summer chum salmon recovery plan; implement harvest protections as outlined in the Puget Sound Chinook harvest management program; and to discuss status and next steps for hatchery supplementation and/or reintroduction programs during the upcoming adaptive management planning process.

3. What new knowledge or information has changed your strategy, assumptions or hypotheses since your recovery chapter was written?

None, which may be a problem. One important point is that the Skokomish Chinook Recovery Plan has recently been drafted and that has significant bearing on how to update the MHC Chinook plan.

4. How is the sequencing and timing of actions or projects done in such a way as to implement the strategy as effectively as possible?

Habitat restoration and protection is on-going which will provide opportunity for any adjustments that may be needed in hatchery and harvest management as we move forward with adaptive management.

III. Plan and Gaps

1. What are the obstacles or barriers for implementing monitoring and adaptive management? Where could you use support for development of your M&AM plans?

Desire to update the MHC Chinook Salmon Recovery Plan exists, but it is unclear how much capacity will exist in 2013-2015 for planning level efforts given funding changes. The core work group has been meeting and has a work plan that begins with Skokomish and plans to move on to MHC this summer.

2. Considering all actions affecting salmon recovery in the watershed, is the Chinook salmon resource likely to be closer to, or further from, the recovery goals ten years from now as it is today?

Habitat goals will have progressed if funding is stable and sufficient; however it is not knowable how the Chinook salmon resource will fare given their existing status and questions regarding stock appropriateness.

Three-Year Watershed Implementation Priorities for Hood Canal Coordinating Council																						
Costs are from Recovery Plan estimates and comparables methods and are for planning purposes only										Domain												
Prioritization to be determined by Lead Entity Committees, regional participants, and governments										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.												
Annual costs represent money obtained and/or spent during calendar year										2 Domain 2 represents natal freshwater and sub-estuarine habitats for 3 re-introduced extant summer chum subpopulations and all significant nearshore habitats in the HCCC LE area.												
Projects represent all 4 priority Domains to allow more comprehensive tracking of salmon recovery while supporting community values.										3 Domain 3 represents natal freshwater and sub-estuarine habitats for all remaining extant summer chum subpopulations in the HCCC LE area.												
										4 Domain 4 represents all other habitats including nearshore areas not labeled as significant.												
										2013		2014		2015								
Domain Priority	Bio Rank / EDT	Primary Limiting Factors	Action name	Likely sponsor	Total cost	Unfunded Portion	Existing Funding	Source of other funds	Scope	Cost	Scope	Cost	Scope	Cost	Restoration Type	Location w/in watershed	Performance	Brief Description	Action #	HWS link	HWS link Cont.	3 YWP Project Name
CAPITAL PROJECTS																						
Habitat Capital Projects																						
Mid-Hood Canal (Dosewallips, Duckabush, Hamma Hamma)																						
1	1 of 17	1,3	USFS/Upper Dosewallips wood-riparian restoration	WFC, USFS, Tribes	\$979,699	\$610,000	\$369,699	PSP, USFS, SRFB, PSC	finish permitting and construct 3 ELJs in FS Boundary (phase 1)	\$369,699	monitoring	\$10,000	Construct ELJs in phase 2	\$600,000	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, Case Creek, and road washout	33,34,36, 37,38,40	04-01-000	04-01-001, 04-01-003	USFS/Upper Dosewallips wood-riparian restoration
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, HCCC, TNC	\$2,141,225	\$1,400,000	\$741,225	Jefferson County, SRFB, PSAR, WWRP, Parks	Community Outreach, Planning and Transactions	\$741,225	Community Outreach, Planning and Transactions	\$1,200,000	Community Outreach, Planning and Transactions	\$200,000	AP, R	Mainstem	400 acres	Protect high quality habitats and purchase impaired habitats for future restoration; includes planning effort	20,25,32	04-02-001, 04-02-002, 04-02-003, 04-02-004		Powerlines, Lazy C, Dosewallips Floodplain Acquisition II
1	6 of 17	1,3	Powerlines Lower Dosewallips wood-riparian restoration	WFC, USFS, Tribes, County	\$152,000	\$151,000	\$1,000	PSP, USFWS	Riparian Planting and exotic control	\$1,000	Riparian Planting and exotic control	\$1,000	ELJ design begins; Riparian Planting and exotic control	\$150,000	I,F,R	Mainstem	0.5 miles	Improve instream wood loading rates and riparian conditions in the Powerlines Reach	21,23,24	04-01-004		Lower Dosewallips Powerline Reach LWD Design & Implementation
1	7,5,9,5 of 17	1,2,3,5,7	Lower Dosewallips floodplain/estuary restoration and Dosewallips Estuary Phase 4	WFC, Tribes, State Parks	\$630,000	\$30,000	\$600,000	PSP, State Parks, BIA, SRFB, ESRP	RB armor and fill removal below 101; 2000ft	\$600,000			Outyear planning for Brinnon levee and improve Sylopash Slough	\$30,000	I,E,F,R	Estuary, Mainstem	2000ft	Improve riparian conditions, tidal inundation, and floodplain connection; feasibility study included	3,5,6,7,9,11,16	04-03-004,04-03-007	04-03-007	Dosewallips Floodplain and Estuary Restoration 2011 Phase 4
1	10 of 17	3,4,5	USFS road decommission Dosewallips	USFS, Tribes, HCSEEG	\$226,500	\$226,500	\$0	USFS, federal approp.			Design, Permitting	\$40,000	Construction	\$186,500	U	Headwater	6.5 miles	Decommission high priority roads for aquatic risk or convert them to trails	27,28,41	04-06		USFS road decommission Dosewallips
1	13 of 17	1,2,3,7	Walker Cr. Barge Removal & Estuary Restoration, Shoreline Acquisitions	HCSEEG, Jeff Co	\$221,000	\$221,000	\$0	SRFB, PSAR, ILF?	Landowner Outreach, Acquisition	\$10,000	Design & Permitting & construct	\$211,000	monitoring	?	AR,E	Estuary West	1 acre	Remove barge from mouth of Walker Creek in Dosewallips estuary and restore tidal inundation and distributary	13	04-03-006		Walker Cr. Barge Removal & Estuary Restoration, Shoreline Acquisitions
1	1.5 of 7	1,3	Middle Duckabush wood-riparian restoration phase 1	WFC, USFS and Tribes	\$575,000	\$575,000	\$0	PSP, USFS			Final Design	\$75,000	Construction	\$500,000	I,F,R	Mainstem	0.5 miles	Place log jams and increase wood loading by helicopter and conventional means in strategic locations on Forest Service	12,13	05-01-000	05-01-001	Duckabush ELJ Design, Mid Duckabush ELJ Construction
1	2,5,5 of 7	1,2,3,5	Lower and Middle Duckabush riparian-floodplain protection	Jefferson County and Jefferson Land Trust	\$844,964	\$500,000	\$344,964	PSP, RCO, Jefferson County, SRFB	Community Outreach, Planning and Transactions	\$344,964	Community Outreach, Planning and Transactions	\$250,000	Community Outreach, Planning and Transactions	\$250,000	L	Mainstem	200 acres potential	Protect high quality habitats and purchase impaired habitats for future restoration; includes planning effort	11,14	04-02-006	05-02-000,05-02-001	Mid Hood Canal Dosewallips and Duckabush Acquisition 2007, Mid Hood Canal Dosewallips and Duckabush Acquisition 2009, Dosewallips and Duckabush Acquisitions 2012
1	2 of 7	1,3	Lower Duckabush riparian-floodplain restoration Phase 1	WFC, Jeff County, JLT	\$825,000	\$605,430	\$219,570	PSP, RCO, SRFB			Finish designs and \$ Strategy	\$75,000	Funding, permit and Construction	\$750,000	I,E,F,R	Mainstem	0.5 miles	Improve instream wood loading rates and riparian conditions in the Lower Duckabush after protection efforts have advanced	11	05-01-000		Lower Duckabush riparian-floodplain restoration Phase 1
1	3 of 7	3,4,5	USFS road decommission Duckabush	USFS, Tribes, HCSEEG	\$370,500	\$370,500	\$0	USFS, federal approp.			Design, Permitting	\$40,000	construction	\$330,500	U	Headwater	8.7 miles	Decommission high priority roads for aquatic risk or convert them to trails	9,10	05-06-001	05-06-000	USFS road decommission Duckabush
1	4.5 of 7	1,2,3,7	SR101 Causeway Replacement Duckabush	Army Corps, WDFW, USFWS, TNC	\$320,000	\$300,000	\$20,000	TNC, LNFF, ESRP, FHA, WSDOT, SRFB	Feasibility and Design; community outreach	\$20,000	More Design	\$100,000	Final Design	\$200,000	E	Estuary	?	Continue PSNERP feasibility studies to address benefits for retrofit, alternatives, and costs along the Duckabush causeway	2,3,5,6,7	PA 01-01-002	05-03-002	Duckabush SR101 Causeway Replacement and Estuary Restoration
1	7 of 7	1,2,3,7	Pierce Creek culvert at Shorewood RD	Jefferson County and Jefferson Land Trust	\$225,000	\$225,000	\$0	PSP, ESRP, SRFB	Feasibility and Design; community outreach	\$25,000	final design and permitting	\$25,000	construction	\$200,000	E,P	Estuary	2 culverts; 1000ft	Improve tidal inundation and fish passage under Shorewood Road, improve upstream habitat and reduce flooding	8	05-04-000		Pierce Creek culvert at Shorewood RD
1	--	2,5	Duckabush Fire Station Fill Removal	HCSEEG, Jeff Co	\$175,000	\$175,000	\$0	SRFB, PSAR	consider new approach to fire station		purchase, design, permit	75000	construction and planting	\$100,000	E,R	Estuary	2 acres	Remove landfill and replant streamside and upper estuary once property has been acquired		05-03-001		Duckabush Fire Station Pierce slough Fill Removal
1	4.5 of 6.5	1,3,4,5	Upper Hama Hama riparian restoration	USFS	\$70,000	\$70,000	\$0	USFS, federal approp., other	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	08-05-000	Map	Upper Hama Hama riparian restoration	
1	6.5 of 6.5	3,4,5	USFS road decommission Hamma Hamma	USFS, Tribes, HCSEEG	\$600,000	\$600,000	\$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 or convert to trails	7,8	08-06		USFS road decommission Hamma Hamma
1	Not modeled	4,5	USFS Road Drainage and Stabilization	USFS	\$300,000	\$300,000	\$0	USFS, federal approp.	Permitting, Construction	\$100,000	Permitting, Construction	\$100,000	Permitting, Construction	\$100,000	U	Headwater	?	Stabilize high priority roads for aquatic risk; ongoing USFS maintenance across mid-HC rivers and beyond		08-06		USFS Road Drainage and Stabilization
										\$2,221,888		\$2,337,000		\$4,097,000								
Skokomish-Lillwaup																						
1		2	Skokomish Estuary Restoration Phase 3- Skokomish Flats	MCD, Skokomish Tribe	\$3,100,000	\$1,500,000	\$1,600,000	ESRP, PSP, SRFB, NOAA	permitting and construction	\$1,600,000	construction and adaptive management	\$1,450,000	monitoring and adaptive management	\$50,000	E	Estuary	200+ acres, ~40 culverts	Lower berm in Phase 1 down further in limited area, remove bridge landing, topography modification, restore hydrology across Skok Flats RD and on TP access RD; 2014 to include barrier island access breaches etc		10-03-002		Skokomish Estuary Restoration Phase 3- Skokomish Flats
1		2,7	Skokomish Estuary Restoration Phase 4- Eastshore 6 acre fill removal	MCD, Skokomish Tribe	\$450,000	\$450,000	\$0	ESRP, PSP, SRFB, NOAA			property transactions	\$200,000	design, permitting, construction	\$250,000	E, L	Estuary	6 acres	Remove fill and old access road in the eastern cell of the lower Skokomish Estuary		10-03-003		Skokomish Estuary Restoration Phase 4- Eastshore 6 acre fill removal
1		1,2,3,4,5	Lower Skobob Creek Complexity	MCD, Skokomish Tribe	\$145,000	\$145,000	\$0	BIA, PSP			design, funding strategy	\$25,000	design, permitting, construction	\$120,000	E,I,W	Estuary	4000 feet	Place woody debris by helicopter to improve rearing habitat in tidal creek system		10-01-014		Lower Skobob Creek Complexity
1		1,3,4,5	Car Body Armor Removal	MCD, Skokomish Tribe	\$193,710	\$0	\$193,710	SRFB, PSP	design, permitting	\$50,000	construction and planting	\$143,710		I, F	Mainstem	1000 feet	Remove rock and/or car body riprap		10-01-019	Map	Car Body Armor Removal	
1		1,3,4,5,7	armor removal and off-channel reconnection projects TBD																			armor removal and off-channel reconnection projects TBD
1		1,3,4,5	Riparian plantings and noxious weed control	MCD, MNWCB, multiple	\$550,000	\$400,000	\$150,000	NRCS, USDA, SRFB, PSP	scoping, planting, inventory and control	\$150,000	scoping, planting, inventory and control	\$200,000	scoping, planting, inventory and control	\$200,000	R, W	Mainstem and Tributaries	4 miles	MCD and Mason County Noxious Weed Board to conduct outreach to private and public landowners to control knotweed and plant both agricultural openings and existing, alder-dominated riparian areas		10-05	18-02	Riparian plantings and noxious weed control
1		1,3,4,5	North and South Fork Confluence Floodplain Restoration	MCD, Skokomish Tribe, multiple	\$2,650,000	\$2,650,000	\$0	SRFB, PSP, Corps, Skokomish	landowner outreach and transactions	\$550,000	design	\$200,000	construction	\$1,900,000	I,F	Mainstem	150 acres	This project will restore over 150 acres of mainstem floodplain between the historic and present confluences of the North and South Fork Skokomish by removing at least 3500ft of river dike, placing ~50 engineered log jams, and replanting		10-01-015	10-01-020	North and South Fork Confluence Floodplain Restoration
1		1,3,4,5	Vance Creek LWD and Armor Removal	MCD, Skokomish Tribe	\$320,218	\$320,218	\$0		funding		design and construct	\$70,218	design and construct	\$250,000	I, F	Mainstem	2000ft	Implement designs developed with Bureau of Reclamation		10-01-018		Vance Creek LWD and Armor Removal
1		1,3,4,5	Farm Plans, and BMPs	MCD, multiple	\$300,000	\$200,000	\$100,000	NRCS, MCD, Landowner	landowner outreach, fencing, farm plans,	\$100,000	landowner outreach, fencing, farm plans,	\$100,000	landowner outreach, fencing, farm plans,	\$100,000	R, W	Mainstem and 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		Not in HWS		Farm Plans, and BMPs
1		1,3,4,5	ELJs in North Fork	Skokomish Tribe, Fish Committee	\$1,300,000	\$1,200,000	\$100,000	TP, Skokomish	Reach assessment and planning	\$100,000	Design and permitting	\$200,000	construction	\$1,000,000	I,F	Tributary	multiple miles	License agreement requires Fish and Habitat Committee develop Restoration plan after a couple of years of assessment		10-01-021		ELJs in North Fork
4		1,3,5,6,7	Frigid Creek Culvert Replacement	GD, USFS, MCD	\$227,236	\$227,236	\$0	GD, Joint Venture			design	\$27,236	construction	\$200,000	P	Tributary	remove 2 barriers	2 fish passage projects at upper extent of Frigid Creek for steelhead (?), coho (?) and cutthroat		10-04-001		Frigid Creek Culvert Replacement

Domain Priority	Bio Rank / EDT	Primary Limiting Factors	Action name	Likely sponsor	Total cost	Unfunded Portion	Existing Funding	Source of other funds	2013		2014		2015		Restoration Type	Location w/in watershed	Performance	Brief Description	Action #	HWS link	HWS link Cont.	3 YWP Project Name	
									Scope	Cost	Scope	Cost	Scope	Cost									
1		1,3,4,5	Holman Flats Floodplain Restoration Phase 2	Skokomish Tribe and USFS	\$932,252	\$932,252	\$0	SRFB,PSP, USEFS,NFWF, USFS, TP	funding strategy		design and planning	\$120,000	construction	\$812,252	I,F	Tributary	1 mile	Phase 2 in Tacoma Power section of Holman Flats; construct engineered log jams		10-01-007		Holman Flats Floodplain Restoration Phase 2	
1		1,3,4,5	Upper South Fork and Tributary Floodplain-Channel-Riparian Restoration Assessment and Design	Skokomish Tribe and USFS	\$300,000	\$300,000	\$0	SRFB, PSP, stewardship receipts			LWD assessment and conceptual	\$150,000	Design and permitting	\$150,000	I,F	Tributary	10 miles	Recovery plan diagnoses the upper South Fork watershed as producing sediments and channel instability beyond reference levels from both faulty roads/logging as well as instream channel incision/terrace erosion. This assessment would determine the extent of degradation and lay out a road map for restoration for coming years.		Not in HWS yet		Upper South Fork and Tributary Floodplain-Channel-Riparian Restoration Assessment and Design	
1		4,5,6,7	USFS Road Decommission - North Fork 14km	USFS and SWAT	\$330,000	\$330,000	\$0	federal approp., SRFB, PSP, EPA, USFS			design, permitting	\$30,000	construction	\$300,000	U	Headwaters	8.7 miles	Decommission high priority roads for aquatic risk		10-06-004		USFS Road Decommission - North Fork 14km	
1		4,5,6,7	USFS Road Decommission - South Fork 18.4 miles	USFS and SWAT	\$2,455,000	\$2,000,000	\$455,000	federal approp., SRFB, PSP, EPA, USFS	construction, design, permitting	\$1,455,000	construction	\$1,000,000		U	Headwaters	18.4 miles	Decommission last remaining priority roads on the Forest in this basin		10-06-003		USFS Road Decommission - South Fork 18.4 miles		
1		4,5,6,7	USFS Road Decommission - Vance Creek 6km	USFS and SWAT	\$230,000	\$230,000	\$0	federal approp., SRFB, PSP, EPA, USFS			design, permitting	\$30,000	construction	\$200,000	U	Headwaters	3.7 miles	Decommission high priority roads for aquatic risk		10-06-011		USFS Road Decommission - Vance Creek 6km	
1		1,5,6	Silviculture Treatments for increased hydrologic maturity	USFS, SWAT	?	?	?	timber sale	implementation for South Fork					U	Headwaters	800 acres	Increase hydrologic maturity within Skokomish basin		Not in HWS		Silviculture Treatments for increased hydrologic maturity		
1		4,5,6,7	Road Drainage and Stabilization - South Fork	USFS and SWAT	?	?	?	federal approp., SRFB, PSP, EPA, USFS	construction		construction		construction		U	Headwaters	149 miles	Stabilize roads to reduce aquatic risk		10-06-002		Road Drainage and Stabilization - South Fork	
1		4,5,6,7	Road Maintenance	USFS and SWAT	?	?	?	federal approp., SRFB, PSP, EPA, USFS	maintenance		maintenance		maintenance		U	Headwaters	?	Maintain roads to reduce aquatic risk through annual maintenance program		Not in HWS		Road Maintenance	
1		1,2,3,7	Lilliwaup Instream Restoration	LLTK	1,140,000	1,000,000	\$140,000	SRFB, in-kind	final design	\$140,000	construction and planting	\$1,000,000	monitoring		I,E,R,F	Mainstem	0.5miles	Work with landowners to implement restoration projects to remove fill and aggraded sediments in lower floodplain, enhance woody debris, and replant riparian areas		09-01-000		Lilliwaup Instream Restoration	
										\$4,145,000		\$4,946,164											
Eastern Straits																							
1		2,3,5,7	Discovery Bay (snow/salmon) Railroad Grade Removal	NOSC, WDFW, JCD	\$450,000	\$0	\$450,000	NOAA, PSP	final design and permitting	\$100,000	construction	\$350,000			E	Estuary	15 ac 3400' RR grade removal	Implement selected alternative to remove abandoned railroad grade in southern estuary between Snow and Salmon Creeks		01-03-006		Discovery Bay (snow/salmon) Railroad Grade Removal	
1		2,3,5	Snow Creek Delta Cone and Estuary Restoration	NOSC, WDFW, JCD	\$800,000	\$0	\$800,000	NOAA, PSP, NRCS	final design and permitting	\$100,000	construction	\$700,000			E	Estuary	12 acres	Implement selected alternative to restore floodplain and tidal prism below SR101, as scoped by the RR Grade Removal study and Delta Cone Removal and Estuary Design		01-03-009		Snow Creek Delta Cone and Estuary Restoration	
1		2,3,5	Maynard Nearshore Restoration	NOSC, WDFW, JCD, JMRC	\$568,932	\$0	\$568,932	JCMRC,SRFB	final design and permitting		construction	\$568,932			E	Estuary	10 acres	Implement selected alternative to enhance railroad grade in northwestern estuary, including riprap removal, cherry pond connection, contaminated sediments, forage fish, small stream culvert daylighting, and bridge removal		01-03-004		Maynard Nearshore Restoration	
1		1,2,3,6	Snow/Salmon Reconnection Feasibility and Design	WDFW, NOSC, JCD, TNC, PSNERP	\$20,000	\$0	\$20,000	PSNERP, LNFF	further scoping	\$10,000	further scoping	\$10,000			I,W,R,F	Mainstem	1 mile	Assess benefits and feasibility of reconnecting Snow and Salmon Creeks; design construction plans		01-01-001		Snow/Salmon Reconnection Feasibility and Design	
1		1,2,7	SR101 Bridge/Causeway Replacement Feasibility	PSNERP, DOT	\$20,000	\$0	\$20,000	PSNERP, LNFF	further scoping	\$10,000	further scoping	\$10,000			I,W,E,F	Estuary	1miles	Assess benefits and feasibility of widening the bridge and shortening causeway of State Route 101 crossing in Lower Discovery Bay to allow reconnection of Snow and Salmon and improve tidal hydrology		01-03-010		SR101 Bridge/Causeway Replacement Feasibility	
1		1,3,4,7	West Uncas Road Culvert Retrofit Design	NOSC, Jefferson County, WDFW	\$20,000	\$0	\$20,000	NOAA, American Rivers, PSP, JC	continue preliminary design	\$10,000	complete designs	\$10,000			I,P,F	Mainstem	0.25 miles	Assess design options and costs for replacing culvert with bridge to ease passage and restore habitat forming processes, including road vacation; temporarily provide for passage with sand bag weirs.		01-04-000		West Uncas Road Culvert Retrofit Design	
1		1,3,4,7	West Uncas Road Culvert Replacement	NOSC, JCD, WDFW, Jeff County	\$400,000	\$400,000	\$0	PSAR, Jefferson County			funding strategy		construction	\$400,000	I,P,F	Mainstem	1 mile	Implement selected alternative from above to address West Uncas RD culvert passage problem		01-04-001		West Uncas Road Culvert Replacement	
1		1,3,4,5	Mid-Salmon Creek Floodplain Restoration	JSKT, NOSC, Jeff County, JCD	\$675,000	\$675,000	\$0	PSAR, SRFB, NOAA, USFWS	continue scoping discussions and outreach		land transactions and preliminary design	\$500,000	final designs and funding strategy	\$175,000	AR, I, R, F	Mainstem	0.5 miles	Investigate feasibility of restoring the middle reach of salmon creek (adjacent to Unca's RD) back to original location, while improving fish passage barrier, instream and riparian conditions				Mid-Salmon Creek Floodplain Restoration	
1		1,3,4	Snow Creek LWD Restoration Design	NOSC, JCD	\$100,000	\$100,000	\$0	PSP, SRFB			landowner contacts and survey	\$50,000	preliminary design	\$50,000	I	Mainstem	1 mile	Landowner outreach, feasibility, and design of project to improve channel complexity and instream functions through summer chum range		01-01-002		Snow Creek LWD Restoration Design	
1		4,5,6	Snow/Salmon Creek Sediment Investigation	NOSC, JCD, USFS	\$100,000	\$100,000	\$0	PSP, SRFB			landowner contacts and survey	\$50,000	preliminary design	\$50,000	U	Headwaters	?	Limiting habitat factors assessments have identified sediment as a major factor for salmonid decline. This project would work with major headwater owners of public and private forestlands and road networks to ID most likely sources and address them				Snow/Salmon Creek Sediment Investigation	
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, convert to trail, or stabilize highest priority roads for aquatic risk		01-06-001; 01-06-002; 01-06-003; 01-06-004; 01-06-005		Snow/Salmon Road Decommissioning and Stabilization	
2		2,7	Kilist Harbor/Oak Bay Reconnection	JSKT, WSDOT, WDFW,NOSC	\$9,200,000	\$9,200,000	\$0	WSDOT, ESRP, USACE, PSAR	preliminary design	\$100,000	design	\$200,000	permitting and construction	\$8,900,000	M,P	Marine	100 acres	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		07-02-002	07-02-003	Kilist Harbor/Oak Bay Reconnection	
4		2	Fort Townsend State Park Shoreline Restoration	MRC, State Parks	\$250,000	\$250,000	\$0	NWSI, State Parks	funding strategy and design	\$25,000	final design	\$25,000	construction	\$200,000	M	Marine	300 feet, 1 acre	State Parks would like to restore the marine shoreline by pulling back fill and riprap while preserving pedestrian access to the beach		07-02-001		Fort Townsend State Park Shoreline Restoration	
										\$355,000		\$2,503,932											
Quilcene																							
2 or 4		2	Tarboo/Dabob Bay Protection	NWI, TNC, DNR, Tribes, Jefferson Land Trust	\$2,500,000	\$1,150,000	\$1,350,000	USFWS, SRFB, ESRP, Trust Land Transfer	transactions	\$1,500,000	transactions	\$500,000	transactions	\$500,000	M,I	Marine	118 acres	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.		06-02		Tarboo/Dabob Bay Protection	
2 or 4		2,5	Tarboo/Dabob Bay Nearshore Restoration	NWI, TNC, DNR, Tribes, Jefferson Land Trust	\$350,000	\$300,000	\$50,000	USFWS, NOAA, ESRP, SRFB, NFWF	design and funding; invasive control	\$60,000	construction; invasive control	\$140,000	invasive control	\$150,000	M	Marine	300ft; 3000acres	Remove rock and creosote bulkheads, plant, and control invasive species in shoreline riparian forests at priority restoration sites within Tarboo-Dabob Bay.		Not in HWS		Dabob Bay Creosote Bulkhead Removal	

Domain Priority	Bio Rank / EDT	Primary Limiting Factors	Action name	Likely sponsor	Total cost	Unfunded Portion	Existing Funding	Source of other funds	2013		2014		2015		Restoration Type	Location w/in watershed	Performance	Brief Description	Action #	HWS link	HWS link Cont.	3 YWP Project Name
									Scope	Cost	Scope	Cost	Scope	Cost								
4		7	Tarboo Fish Passage	NWI	\$155,000	\$155,000	\$0	NOAA, USFWS, NFWF	funding strategy		design and construction	\$155,000			P	Mainstem	?	Replace undersized culverts on East Fork Tarboo Creek and retrofit mainstem culverts funded in previous SRFB rounds to ensure function and fish passage.		06-04		Tarboo Fish Passage
1		1,2,3,6,7	Lower Biq Quilcene River & Estuary Master Plan	Jefferson County, TNC, HCSEG, WDFW	\$220,000	\$200,000	\$20,000	PSP, SRFB, NFWF	community outreach and conceptual design	\$20,000	preliminary and final designs	\$200,000		I,W,E,I,R,F	Mainstem and Estuary	4000ft; 250 acres	Continue Linger Longer Reach Restoration with the end goal of restoring floodplain processes below Rogers Street and reconnecting freshwater and tidal link. TNC to lead outreach and HCSEG to lead design; work with shellfish industry. This project will include widening the floodplain, creating increased channel habitat, widening the existing bridge, and removing last estuary dike on north bank and delta cone. PSNERP funded 10% design and Navy funded limited additional investigation.		03-01-001	03-03-009, 011, 013, 014	Lower Biq Quilcene River & Estuary Master Plan	
1		1,2,3,6,7	Big Quilcene Estuary South Bank Levee and Delta Cone Removal	HCSEG, TNC, WDFW	\$1,100,000	\$1,100,000	\$0	PSAR, SRFB, ESRP, NFWF			construction	\$1,100,000		E	Estuary	2000 feet, 50+acres	Implement Master Plan by removing south bank levee and delta cone upland materials, as designed and supported by community and shellfish industry		03-03-011	add delta cone link	Big Quilcene Estuary South Bank Levee and Delta Cone Removal	
1		1,2,3,6,7	Big Quilcene Linger Longer Reach Restoration	Jefferson County, TNC, HCSEG, WDFW	\$4,400,000	\$4,400,000	\$0	PSAR, SRFB, ESRP, NFWF		land transactions	construction	\$4,000,000	\$4,000,000	M, E	Mainstem	4000ft; 250 acres	Implement Master Plan by replacing Linger Longer road and bridge with new thoroughfare on elevated bridge. Reconstruct river channel as designed and supported by community and shellfish industry				Big Quilcene Linger Longer Reach Restoration	
1		1,3	Big Quilcene River Habitat Restoration Phase 3	Skokomish Tribe, HCSEG	\$400,000	\$400,000	\$0	SRFB, Skokomish Tribe, PSAR	monitor	\$0	design and permit and fund	\$50,000	construct phase 3, monitoring; further design?	I,F	Mainstem	4000 feet	Place woody debris to improve channel and floodplain complexity and instream functions through summer chum range		03-01-004 , 03-01-005 , 03-01-006 , 03-01-007 , 03-01-009 , 03-01-010	03-01-008	Big Quilcene River Habitat Restoration Phase 3	
1	add	1,3	Little Quilcene Mclanahan Reach Feasibility and Design	HCSEG	\$50,000	\$50,000	\$0	PSAR, SRFB, NFWF, USFWS		design and community outreach		\$50,000		I,F	Mainstem	2000 feet	Complete feasibility and design for instream and floodplain restoration in lower river below Center Road		03-01-015		Little Quilcene Mclanahan Reach Feasibility and Design	
1		1,3	Little Quilcene Mclanahan Reach Restoration	HCSEG	\$250,000	\$250,000	\$0	PSAR, SRFB, NFWF, USFWS			permitting and construction	\$250,000		I,F	Mainstem	2000 feet	Remove riprap and add wood to restore floodplain and channel habitats in lower river below Center Road		03-01-016		Little Quilcene Mclanahan Reach Restoration	
									\$1,580,000			\$1,495,000										
Union and Tahuya																						
1,4		1,2,3,7	Union Estuary Johnson Farm Restoration -Construction	HCSEG, WDFW, PNWSC	\$2,125,000	\$125,000	\$2,000,000	federal, SRFB, NRCS	construction	\$2,000,000	Lower Mendy Creek improvements	\$125,000		E,R,L	Estuary	41 acres	Construct - Breach levees strategically and enhance tidal channels and flats to restore tidal inundation to 40 acres of historic salt marsh, bridge breaches with boardwalks; revegetate backshore; enhance adjacent channels. Mid to upper Mendy Creek is Domain 4.		11-03-003		Union Estuary Johnson Farm Restoration - Construction	
1		2, 7	Beards Cove Union River Estuary	WDFW, GPC	\$547,500	\$450,000	\$97,500		Design & Permitting	\$97,500	Permitting and funding					19 acres	Design and restore the union river estuary on the 'Beards Cove' parcels		11-03-005		Beards Cove Union River Estuary	
1		1,3,4, 5	Lower Union River Assessment and Preliminary Design	HCSEG	\$120,000	\$120,000	\$0	SRFB, NFWF, WDFW, USFWS, PSP	funding strategy		preliminary design lower Union River	\$120,000		I, W, R, F	Mainstem	5000ft	Assess opportunities for improving instream and floodplain conditions		12-01-000	12-01-002 , 12-01-003	Lower Union River Assessment and Preliminary Design	
1		1,3,4, 5	Lower Union River Instream Enhancement	HCSEG	\$350,000	\$350,000	\$0	SRFB, NFWF, WDFW, USFWS, PSP			funding strategy		final design, permitting and construction of Phase 1	I, W, R, F	Mainstem	5000ft	Add wood in summer chum range to restore instream and floodplain conditions		12-01-000	12-01-002 , 12-01-003	Lower Union River Instream Enhancement	
2		1,3,4,5	Tahuya River LWD Placement, Phase 3	HCSEG	\$280,000	\$280,000	\$0	SRFB, PSAR, NFWF, USFWS			funding strategy and design	\$30,000	permitting and construction	I, W, R, F	Mainstem	5000ft	Add wood in summer chum range to restore instream and floodplain conditions		12-01-004		Tahuya River LWD Placement, Phase 3	
2		1,2,7	Tahuya River Northshore Road Bridge Replacement	Mason County	\$240,000	\$240,000	\$0	PSNERP	Feasibility and Design; community outreach	\$20,000	More Design	\$20,000	Final Design	E	Estuary	?	Continue PSNERP feasibility studies to address benefits for retrofit, alternatives, and costs along the Tahuya causeway				Tahuya River Northshore Road Bridge Replacement	
2		1,3,4,5,6	Tahuya Priority Lands Conservation	GPC, WDFW, DNR, HC Alliance	\$4,474,059	\$4,474,059	\$0	PSAR	funding strategy	0	Appraisal, Negotiations	70,000	Transactions	L	Headwaters	3500 acres	Continue conservation efforts with the Hood Canal Alliance		Not in HWS		Big Beef to Dewatto Priority Lands Conservation	
									\$2,117,500			\$365,000										
West Kitsap																						
2		1,3,4,5,6,7	IMW Lower Big Beef Final Design	HCSEG	\$70,061	\$0	\$70,061	SRFB, PSAR	Final Design	\$70,061				I	Mainstem	50 acres; 1 mile	WDFW, HCSEG, UW effort to design well road removal, instream wood structures, wetlands and side channel habitat in lower watershed on UW property; treatment associated with IMW program		15-01-000	15-01-005	IMW Lower Big Beef Final Design	
2		1,3,4,5,6,7	IMW Lower Big Beef Restoration	HCSEG	\$1,000,000	\$1,000,000	\$0	SRFB, PSAR, USFWS, NOAA	funding strategy and final design		construction	\$1,000,000		I	Mainstem	50 acres; 1 mile	WDFW, HCSEG, UW effort to restore well road removal, instream wood structures, wetlands and side channel habitat in lower watershed on UW property; treatment associated with IMW program		15-01-000	15-01-005	IMW Lower Big Beef Restoration	
2		1,2,3,4,5,6,7	IMW Fish Weir Modification	WDFW	\$390,000	\$390,000	\$0	NOAA	funding strategy		design	\$40,000	construction	I, E	Mainstem	5 acres	Upgrade fish weir to require less instream sediment management and improve habitat conditions				IMW Fish Weir Modification	
2		1,3,4,5,6,7	IMW Middle Big Beef Restoration, Phase 2	HCSEG	\$500,000	\$500,000	\$0	SRFB, PSAR, USFWS, NOAA			funding strategy		design and construction	\$500,000	I	Mainstem	200 acres; 2 miles	Restore woody debris loading in middle reaches above UW property and below Lake Symington through helicopter installations; treatment associated with IMW program		15-01-000	15-01-005	IMW Middle Big Beef Restoration, Phase 2
2		2,7	Dewatto Estuary	HCSEG	\$400,000	\$400,000	\$0	PSP, SRFB, ESRP, coastal wetlands	funding strategy		design	\$20,000	permitting, construction	\$380,000	E	Estuary	20 acres	Remove relic levees in sub-estuary and restore channel complexity; fill dredge hole; replant affected riparian areas		13-03-000		Dewatto Estuary
		1,3,4,5	IMW Little Anderson LWD Phase 3	HCSEG	\$350,000	\$350,000	\$0	SRFB, USFWS, NOAA	funding strategy		design	\$50,000	construction	\$300,000	I	Mainstem	0.5 miles	Next Phase of installing LWD in Little Anderson Cr.		16-01-003		IMW Little Anderson LWD Phase 3
4		1,2,3	Martha John Creek Estuary Conservaion Plan	GPC, PG S'Klallam Tribe	\$47,500	\$0	\$47,500	NFWF	planning	\$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		16-02-002		Martha John Creek Estuary Conservaion Plan	
									\$117,561			\$1,110,000										
Dungeness and Jimmycomelately (only summer chum stocks considered in HCCC process)																						
3		1	Dungeness River Large Wood Restoration		\$5,000,000			SRFB, PSAR, Donations, BIA	Feasibility Pending					I,R		50 ELJs	Build approximately 50 engineered and design/build logjams (ELJ's and DBLJ's) in the Dungeness River from river mile (RM) 2.7 to 18.8 and in the Gray Wolf River from RM 0.0 to 2.0.				Dungeness River Large Wood Restoration	
3		1,3,5	Dungeness River Riparian Habitat Protection	JSKT	\$9,000,000			SRFB, EPA, PSAR	Feasibility Pending					R,E		4 miles	The project will protect many previously identified Dungeness River riparian properties downstream of DNR ownership (approximately river mile 12.0) through the purchase of property and conservation easements. Riparian restoration involves three interrelated actions: to eliminate or control noxious weeds, plant unproductive or non-forested sites with appropriate shrubs and trees, and maintain the site until the desired forest community is established (5 years or more).				Dungeness River Riparian Habitat Protection	
3		1,3	Dungeness River Riparian Restoration		\$500,000			SRFB	Feasibility Completed					R		14 miles					Dungeness River Riparian Restoration	
3		6	Dungeness River Instream Flow Restoration - Irrigation Efficiencies		\$4,680,000			SRFB, PSAR, WCC	Design Completed					I,R		5 cf/s	This suite of projects includes multiple interrelated strategies that restore stream flows in the Dungeness River. One strategy is irrigation water conservation - primarily, irrigation ditch piping.				Dungeness River Instream Flow Restoration - Irrigation Efficiencies	

Domain Priority	Bio Rank / EDT	Primary Limiting Factors	Action name	Likely sponsor	Total cost	Unfunded Portion	Existing Funding	Source of other funds	2013		2014		2015		Restoration Type	Location w/in watershed	Performance	Brief Description	Action #	HWS link	HWS link Cont.	3 YWP Project Name
									Scope	Cost	Scope	Cost	Scope	Cost								
3		6	Dungeness River Instream Flow Restoration - Storage		\$350,000			SRFB	Feasibility Completed					I,R		5 cf/s	This suite of projects includes interrelated water storage strategies that contribute to Dungeness River late season stream flow restoration. These strategies include water storage in small off-channel reservoirs and shallow aquifer recharge (SAR).				Dungeness River Instream Flow Restoration - Storage	
3		1,3,4,5,6,7	Dungeness River Floodplain Restoration	Clallam County	\$15,000,000			SRFB, PSAR, Corps	Feasibility Completed					I,R		5000 ft	This project is floodplain restoration through the setback or reconfiguration of dikes or armored banks, from the mouth to Canyon Creek (RM 0 to 10.7).				Dungeness River Floodplain Restoration	
2+		2	Dungeness Drift Cell Conservation		\$7,000,000				Feasibility Completed					M,E		5200 acres	This project will provide long-term protection for Dungeness Spit and Dungeness Bay through the purchase of conservation easements and properties, and the relocation or decommission of structures and infrastructure along the entire Dungeness drift cell.				Dungeness Drift Cell Conservation	
2+		2,3	North Sequim Bay Drift Cell Conservation		\$5,000,000				Conceptual					M,E		269 acres	Permanent protection will be provided for Gibson, South, Travis and Paradise Cove Spits, all clustered near the entrances to WA Harbor and Sequim Bay, along with the 5.2 miles of coastal feeder bluffs that support the spits.				North Sequim Bay Drift Cell Conservation	
2		2, 7	Washington Harbor Habitat Restoration	JSKT	\$1,800,000	\$0	\$1,800,000	ESRP, SRFB, PSAR	Complete Construction	\$1,800,000				M,E		37 acres	Complete funded construction project to replace sewer line and bridge with new facilities to provide for fish passage and habitat forming processes.				Washington Harbor Habitat Restoration	
2		2	Washington Harbor Habitat Protection Project		\$1,020,000				Feasibility Pending					M,E		75 acres	This habitat protection project will purchase conservation easements to permanently protect a 150 to 450-foot wide riparian buffer (approximately 75 acres) surrounding Washington Harbor. The bed of Washington Harbor is state-owned.				Washington Harbor Habitat Protection Project	
2+		1,3,5	Meadowbrook Creek and Dungeness River Reconnection	NOSC	\$182,000			PSAR, Donations	Feasibility Completed, Design Completed					E,M,R		5000 ft	This project aims to improve access to valuable estuarine and off-channel habitat by enhancing and stabilizing the connection between Meadowbrook Creek and the mainstem of the Dungeness River.				Meadowbrook Creek and Dungeness River Reconnection	
2+		2,3	Gray's Marsh Restoration and Feasibility Design Phase 1	WDFW	\$100,000			SRFB	Conceptual					E,R		140 acres	Graysmarsh is an approximately 140-acre freshwater/brackish water marsh located at the mouth of Gierin Creek (WRIA 18.), which enters the Strait of Juan de Fuca immediately east of Dungeness Bay. The landowners are interested in learning what the available restoration alternatives are.				Gray's Marsh Restoration and Feasibility Design Phase 1	
2		2,5,7	Three Crabs Nearshore and Estuarine Restoration	NOSC	\$4,000,000			SRFB, ESRP	Land Acquisition Completed		preliminary design	\$50,000		E,M,R,W		40 acres	Removal of infrastructure,armor,fill, roadway from nearshore and estuary to allow restore of estuarine processes. restore ~5 acres of historic estuarine wetlands, reconnection of floodplain wetlands to improve habitat connectivity between 40 Acres of wetlands				Three Crabs Nearshore and Estuarine Restoration	
										\$1,800,000		\$50,000										
Regional																						
1,2,3, or 4		2	Derelict Gear Removal	HCSEG, NWSF	\$300,000	\$300,000	\$0	NOAA, private foundation, ESRP	Inventory and remove	\$100,000	Inventory and remove	\$100,000	Inventory and remove	\$100,000	E,M	Marine	?	Inventory marine subtidal areas of Hood Canal for derelict nets and pots and continue removal process		18-05		Derelict Gear Removal
1, 2 or 3		1,3,5	Regional Riparian Successional Strategy	Multiple	\$900,000	\$600,000	\$300,000	SRFB, Noxious weed boards, partner in-kind, DNR	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.		18-03,	Level Two Riparian for all Chum & Chinook watersheds	Regional Riparian Successional Strategy
1,2,3 or 4		2	Nearshore Science Gap for Juvenile Salmon Habitat Preferences	WFC, PGST, DFW, others?	\$554,472	\$440,000	\$114,472	SRFB, PSAR, NOAA, WDFW	Implement pilot project	\$114,472	Implement phase 2	\$220,000	Implement phase 3	\$220,000	E,M	Marine	?	This initiative is designed to fill the critical uncertainty about what habitats ESA species need and prefer during their early migration through the nearshore and marine habitats of Hood Canal and the Straits.				Nearshore Science Gap for Juvenile Salmon Habitat Preferences
1 or 2		1,2,3,4,5,6,7	Summer Chum and Chinook Riparian Conservation/Acquisition	Multiple	\$900,000	\$600,000	\$300,000	SRFB, PSAR, WWRP, Coastal Wetlands	community outreach, appraisals, transactions	\$300,000	community outreach, appraisals, transactions	\$300,000	community outreach, appraisals, transactions	\$300,000	L	All	?	Working with volunteer landowners, develop high priority land acquisitions that either protect high quality habitats at risk of conversion or impacted habitats which require restoration that is incompatible with current land uses or landowner desires.			Level Two Conservation for all Chum & Chinook watersheds	Summer Chum and Chinook Riparian Conservation/Acquisition
										\$814,472		\$920,000										
Hatchery Capital Projects																						
1			Mid-Hood Canal Conservation Hatchery Plan	LLTK, Tribes, DFW, HCCC	\$266,130	\$92,205	\$177,357		Implement SOW	\$177,357	Implement SOW	\$92,205						Assess genetic heritage of Chinook within the Dosewallips, investigate potential chinook stocks given context, develop recommendations for stock reintroduction; incorporate into RITT Common Framework		Not in HWS		Mid-Hood Canal Conservation Hatchery Plan
1			Skokomish Hatchery Facilities, per Cushman License	Skokomish, TP	?	?	?		Hatchery construction	?	Hatchery construction/operation	?	Operations	?				Capital facilities necessary for chinook supplementation, via Cushman FERC license and settlement agreement		Not in HWS		Skokomish Hatchery Facilities, per Cushman License
1		7	Lakes Cushman and Kokanee passage down/upstream	Tacoma Power	?	\$0	?	TP	adult & juvenile passage construction	?	monitoring	?		P	Mainstem	Remediate fish barrier	Create upstream (trap) and downstream (floating surface collector) passage past Cushman Project, including fish handling/sorting facility		Not in HWS		Lakes Cushman and Kokanee passage down/upstream	
			Could look at adding chum capture facilities (start with Crawford assessment)?							\$177,357		\$92,205										
TOTAL CAPITAL NEED:					\$112,904,958	\$47,835,400	\$13,240,990			\$13,328,778		\$13,819,301		\$33,978,311								

Keys to the categories of projects laid out in spread sheet columns:

Habitat Limiting Factors

- 1 - Degraded floodplain and in-river channel structure
- 2 - Degraded nearshore and estuarine conditions and loss of associated habitat
- 3 - Riparian area degradation and loss of in-river large woody debris
- 4 - Excessive sediments in spawning gravels
- 5 - Degraded water quality and temperature
- 6 - Impaired instream flows
- 7 - Barriers to fish passage

For Habitat Projects:

Acquisition

(note: If the project's scope includes just acquisition, with future restoration planned as part of a subsequent phase, list AR. If the project's scope includes both purchase and restoration, list both AR and R.)

AP- Acquisition for protection

AR-Acquisition for restoration

R -Restoration

Restoration Type & Performance

- I - Instream habitat projects (stream miles treated)
- W - Wetland habitat projects (acres created/treated)
- E - Estuarine habitat projects (acres created and treated)
- L - Land acquisition projects (acres/ miles acquired for protection and/or restoration)
- R - Riparian habitat projects (stream miles/acres treated)
- U - Upland habitat projects (acres treated)
- P - Fish passage projects (barriers removed/stream miles opened/fish screens installed)
- M - Marine shoreline projects (miles/acres) (pocket estuaries and shorelines outside of natal delta areas and tributaries to Puget Sound)
- F - Floodplain reconnection projects (miles/acres)

Location w/in watershed

Marine shorelines (pocket estuaries and shorelines outside of natal delta areas and tributaries to Puget Sound)

Estuaries

Mainstem

Tributaries (all tributaries to mainstem rivers)

Headwaters