
WRIA 6 (Island) 2013 3-Year Implementation Work Plan Narrative

This document reviews the WRIA 6 salmon recovery program's efforts over the past year, considers the current implementation status and strategies of our Multi-Species Salmon Recovery Plan (SRP), and outlines planned actions, needs, and priorities of the watershed over the next 3 years (2013-2015).

This year, the regional guidance for the work program included the goals of: 1) provide a format for watersheds to describe the current hypotheses that inform the recovery plan, the strategies based on those hypotheses, and to identify the near term actions needed for implementing the strategies; 2) allow for consistent documentation of changes to the Recovery Chapters (since 2005); 3) support the work of developing monitoring and adaptive management plans in all watershed chapter areas; and 4) allow for watershed chapter areas in the Puget Sound region to articulate priorities for implementation.

This version of WRIA 6's implementation work plan (IWP) addresses the stated goals. While WRIA 6's Recovery Chapter, our SRP, has remained unchanged (goal 2), the IWP outlines WRIA 6's efforts to address the SRP goals as written in 2005. The IWP includes many of the projects submitted in the 2012 version of the work plan as well as additional projects that have been started, or identified as important to local salmon recovery partners over the past year. Top tier projects are those that address priority actions, priority geographic areas, work to protect priority ecosystem processes, and priority habitats as identified in the WRIA 6 SRP. It should be noted that the work plan spreadsheet has inclusively listed projects sponsors are interested in attempting, and that many of the projects are unlikely to be accomplished without significant increases in funding resources and/or additional landowner/community support.

I. Context

The Island Watershed (WRIA 6) is home to two large islands, Whidbey and Camano, as well as seven small islands, has over 200 miles of freshwater and saltwater shorelines that are both privately and publicly owned and 312 square miles of the watershed is composed of marine waters that include Skagit Bay, Saratoga Passage, Port Susan, and Possession Sound to the East, and Admiralty Inlet and the Strait of Juan de Fuca to the West.

The Island Watershed's shorelines are interspersed with small lagoonal estuaries (known as pocket estuaries), twenty estuarine and salt marsh sites within the watershed are presumed to support, or have potential to support, salmonids - fifteen of which are identified to have the potential for restoration.

Coho, chum, and cutthroat trout spawn in streams within Island County. Rearing of juvenile Chinook from the Skagit, Snohomish, and Stillaguamish Rivers has been documented in streams and pocket estuaries across the islands. Juvenile steelhead have also been observed in similar coastal streams in the Whidbey Basin to the East of the WRIA 6. Juvenile pink and chum salmon utilize the shallow shoreline areas for rearing, and the marine waters surrounding the watershed are utilized by older salmon smolts throughout the year prior to their migration to the Pacific Ocean. The majority of all returning adult salmon to the Puget Sound pass through Admiralty Inlet on Whidbey Island's central western shoreline. Sockeye salmon, bulltrout and steelhead have also been documented using the nearshore habitats of Island County.

The 3YWP for 2013 was developed by distributing the 2012 3YWP project matrix to sponsors and stakeholders with the request that they remove projects no longer feasible, note which projects fit in the 10-50 year window (not likely to be started by 2015), editing

WRIA 6 (Island) 2013 3-Year Implementation Work Plan Narrative

existing projects with updated information (budget or status) and adding any new projects that have become possible but were not previously identified. The Lead Entity Coordinator (LEC) then compiled the edits and the resulting workplan matrix was reviewed by the Salmon Technical Advisory Group (TAG).

The sponsors and stakeholders include Tribes, agencies and organizations that have previously sponsored projects in WRIA 6, as well as members of the TAG and of the citizen advisory group. Harvest and hatchery managers may have been consulted by those stakeholders who work in Tribes or agencies that are involved with harvest or hatchery management.

II. Background/planning/logic of the Recovery Chapter

As stated in WRIA 6's 2005 Multi Species Salmon Recovery Plan (SRP), our overarching strategy involved learning more about salmon use of WRIA 6 habitats, then setting measurable goals, followed by establishing a robust protection strategy, all while working with the community to find solutions that work for fish and people. As of now, WRIA 6 still does not have quantifiable VSP targets for recovery metrics so continues to advance habitat and community support goals as outlined below. In the below section, each of the 4 SRP goals are briefly discussed in regards to status of implementation, and program priorities and challenges anticipated over the next three years. It is anticipated that VSP parameters, with regards to nearshore habitats, will be able to be incorporated into an update of the 2005 SRP when supplied the regional guidance for plan updates in 2014 or 2015.

Until then, the overall assumptions WRIA6's strategies are based on is:

1. that by providing the best protection and restoration possible in high importance areas, WRIA 6 is doing it's part to provide the resources necessary for juvenile salmonids to prepare for outmigration and survival in the open Ocean, and
2. that the best protection and restoration possible is only realized if supported by an engaged, informed and enabled public support system.

Goal 1 – Over the long-term, achieve a net increase in salmon habitat through protection, enhancement, and restoration of naturally functioning ecosystems that support self-sustaining salmon populations and the species that depend on salmon.

Objectives

1. Inventory and prioritize nearshore and fresh-water habitats.
2. Protect existing high-quality nearshore and stream habitats.
3. Restore critical rearing habitats for forage fish and salmon.

Over the past decade research has been conducted on juvenile salmon use of the nearshore and different habitats, the stock origins of juvenile Chinook found in WRIA 6 using DNA and juvenile Chinook use of small non-natal coastal.

In 2011, a summary report was completed to help identify priority WRIA 6 nearshore reaches for protection activities. A primary goal of this report was to provide guidance regarding appropriate actions related to protection including formal protection activities (acquisition) and as well as targeted outreach/education about nearshore processes, habitats, and species utilization. This product is intended to be a living guidance document and updated as new knowledge becomes available. This report was used to develop the Restoration Plan for the Shoreline Management Program.

WRIA 6 (Island) 2013 3-Year Implementation Work Plan Narrative

2013 Changes to Goal 1 Strategies

One of WRIA 6's strategies for 2013 is to incorporate the assessments and reports mentioned above to create a more strategic workplan. Currently, project development is driven by sponsor's interest and does not necessarily take efforts in other watersheds into consideration. Previous prioritizations of nearshore areas for restoration has been conducted but not incorporated into WRIA 6's workplan strategy. Project development could be more proactive rather than reactive if watersheds are focused up on as a whole and then projects identified within the watershed in question.

Goal 2 – Develop an understanding of habitat functions and the distribution of forage fish species, salmonids, and marine mammals in WRIA 6.

Objectives

1. Fill key ecosystem science data gaps.
2. Assess and regularly update aquatic habitat attributes.
3. Quantify and evaluate impacts of predation by marine mammals and other wildlife on salmonid and forage fish populations.

Over the past ten years several research projects have been conducted in, and adjacent to, WRIA 6 and have substantially increased our understanding of juvenile salmon use of nearshore habitat. This information helps describe how, when, and where juvenile salmon utilize the freshwater and nearshore habitat in WRIA 6. Recently completed (not yet published) examples include information collected on stock origins of juvenile Chinook found in WRIA 6 using DNA, and juvenile Chinook use of small non-natal coastal streams. These examples provide important insights about priority salmon habitat in WRIA 6. However, data gaps still exist and the existing research and data needs to be compiled, the linkages between the different research efforts need to be made, and an updated list of data gaps identified. Support to those holding unpublished manuscripts of existing data would ensure they are released and available for use.

In addition, information about local aquatic habitat attributes is continually being collected and updated by different organizations and agencies. An important challenge is finding a system to host these updates/changes and conducting the necessary QA/QC to ensure the final projects are of sufficient quality and able to be used appropriately.

No progress has been made to assess impacts of predation on salmonids or forage fish populations in WRIA 6.

2013 Changes to Goal 2 Strategies

One of the top priorities of Lead Entity Staff for 2013 involves creating a bibliography of research and assessments that have been created since the writing of the 2005 recovery chapter. Once this bibliography has been developed, a synthesis will be derived that will assist in adaptive management plan development, project prioritization, gap analyses and community engagement.

A new goal to identify and work with authorizing environments to develop a QA/QC plan for monitoring projects by WRIA 6's trained WSU Beach Watcher volunteers so that the results can be used appropriately.

Goal 3 – Engage an informed community in identifying, protecting, enhancing, and restoring salmon-supporting ecosystem processes and habitats.

Objectives

WRIA 6 (Island) 2013 3-Year Implementation Work Plan Narrative

1. Educate the community about juvenile and adult salmon distribution, ecosystem processes, and challenges through information, education, and communication activities.
2. Develop and implement a comprehensive communication strategy for internal and external communication.
3. Increase community participation in, and commitment to, salmon recovery activities.

The program to continue to work with partners to find ways to effectively engage the community and disseminate information in order to make gains in public support needed to take actions necessary to implement salmon recovery. Examples of completed and planned actions regarding these objectives include the completion of a communication strategy document, website updates, and Habitat Work Schedule updates and demonstrations at public venues.

2013 Changes to Goal 3 Strategies

A subcommittee of the Technical Advisory Group was formed to work specifically on education and outreach efforts. The goals of this subcommittee include incorporating the Communication Strategy recommendations as well as capturing lessons learned from previous project implementations that have had difficulties due to public outreach. Use of the Habitat Work Schedule as tool for the public to learn more about what salmon and watershed recovery projects are, or have occurred, in WRIA 6 will be encouraged and advertised more broadly than in previous years.

Goal 4 – Cultivate a supportive environment for salmon recovery by supporting policies that protect salmon habitats; advocating for adequate program staffing; encouraging cross-sector and public-private partnerships; pursuing adequate, reliable funding; and implementing effective project and program evaluations.

Objectives

1. Establish salmon recovery program policies that will cultivate public support for salmon recovery and adequate program staffing.
2. Obtain adequate reliable funding through a variety of public and private sources and use these resources cost-effectively.
3. Develop and implement a salmon recovery adaptive management plan.

The recovery program continues to address the necessity of integrating ongoing watershed efforts by partners, and integrate the work and efforts of groups such as the TAG, WRAC, and MRC.

Securing funding for organizational capacity for local salmon recovery partners continues to be a need identified in this matrix. The “Watershed Plan Implementation & Coordination” (worksheet titled “Capacity” section of the matrix addresses the need for funding for groups that have minimal staff capacity to participate in WRIA 6 salmon recovery activities, and groups that have historically chosen to have limited participation in the WRIA 6 process due to funding limitations. These groups provide critical scientific, technical, or policy support necessary for plan implementation. Identifying and securing basic capacity funding is a critical step if local salmon recovery activities are going to deliver protection and restoration results in this timeframe. This limitation of organizations will continue to impact the ability to fully implement the SRP.

2013 Changes to Goal 4 Strategies

Work with the Island Lead Integrating Organization has begun to identify local stressors and pressures that will lead to creating Near Term Actions that will address the associated Action Agenda sub-strategies. The recovery program provides the salmon recovery pertinent information, data and support into the watershed planning process. This work will continue into

WRIA 6 (Island) 2013 3-Year Implementation Work Plan Narrative

2014 and will parallel and coordinate with the program's adaptive management efforts and planning.

Plan and Gaps

Obstacles and barriers for implementing monitoring and adaptive management will become better known as progress is made on this task and as the effort evolves.

Currently, monitoring barriers are:

- Funding for pre and post restoration effectiveness monitoring,
- Publishing of reports on monitoring data,
- QAQC framework in order to validate volunteer gathered monitoring data in order to have it authorized for use, and
- Tracking and reporting of current monitoring efforts.

Currently, adaptive management barriers are:

- Long term capacity for plan development and completion of the PSP-directed process,
- and
- Quantifiable metrics for the nearshore component to Chinook recovery.

Support for the development of WRIA 6's adaptive management plan, in the near term, is provided for by a grant, managed by PSP, and will assist with providing capacity to meet workplan deliverables (Miradi diagrams and plan draft). Continued support for the transition from the adaptive management plan to an update of WRIA 6's SRP will be required. This will be a critical capacity issue in the coming years that may be in jeopardy due to an increased focus shifting to capital project support and away from capacity.

Support needs for WRIA 6's monitoring plan will need to be further investigated as the nearshore and statewide monitoring efforts are consolidated in reports by the Puget Sound Ecosystem Monitoring Program's Salmonid Work Group and the effort led by the West Sound Lead Entity. Monitoring will face the same difficulties with regards to capacity with the shift of focus to capital projects. For WRIA 6, significant capacity effort is required in order to be able to convince communities to support capital projects.

As stated in previous versions of this document and acknowledged in regional feedback provided to the watershed last year, although there has been progress made towards many of the objectives and actions of our SRP, it is difficult to evaluate the pace of implementation as our SRP does not include quantified habitat goals. Although we feel that the general guidance provided in the SRP provides the opportunistic actions to be initiated which might be challenging in a more rigid plan, this lack of specific quantifiable actions creates some uncertainty as to the effectiveness of actions meant to support the Goals. However, specific actions and timelines are described in the SRP and implementation of many of these actions is behind schedule.

While substantial barriers exist in WRIA 6 to achieving salmon recovery, the team remains generally optimistic that 10 years from now we will have made progress towards recovery goals. Progress will be made in the social acceptance of landuse practices that benefit multiple species, not only humans. Data gaps in knowledge of Chinook, their prey and habitat resources will be addressed to a greater extent and that the findings will be available for recovery efforts. Key nearshore and estuarine areas will be acquired and restored. The challenges will be in addressing population increase pressures, single family dwelling building in the nearshore, and achieving access to areas with large restoration potential but which have been inhabited for a very long time by landowners with visions for the use of their property that does not involve recent learning of the needs for Chinook and their dependent ecosystem components.

May 2013

WRIA 6 (Island) 2013 3-Year Implementation Work Plan Narrative

Island Watershed (WRIA 6) 2012-15 Three-Year Implementation Work Plan

2013: Red = Newly added this round; Blue = Completed in 2012
Green rows were active 2012; Yellow rows were newly added last year

Project Information and How it Relates to the Recovery Plan							Project Planning							Project Cost and Sponsor								
Project Name	Project Description	Priority tier of project	Limiting Factors	Habitat Type	Activity Type	Project Performance	Primary Species Benefiting	Secondary Species Benefiting	Current Project Status	2012 activity to be funded - scope	2012 Estimated cost	2013 activity to be funded - scope	2013 estimated cost	2014 activity to be funded - scope	2014 estimated cost	2015 activity to be funded - scope	2015 estimated cost	Likely End Date	Likely Sponsor	Total Cost of first three years	Local share or other funding	Source of funds
Capital Projects - Listed Species																						
Projects focused on restoration, acquisition for eventual restoration, and/or acquisition for protection.																						
Habitat Restoration																						
Ala Spit Enhancement & Protection	Restoration of sediment down drift processes to maintain spit habitats and associated pocket estuary (based on recommendations from completed assessment)	A = 2 GA = 1 H = 1 P = 1	Loss of Habitat	nearshore embayments	Estuary or Nearshore	remove 850 feet of riprap; action will restore natural sediment drift process with purpose to restore maintain and pocket estuary	Chinook	bull trout, chum, pink, forage fish	Completed	Post construction monitoring (see below)	\$20,000	2nd phase restoration jetty assessment (removal of 275 feet of bulkhead; beach nourishment); monitoring (see below)	\$220,000	Post construction monitoring	\$10,000			2015	Island County	\$250,000	\$35,000	SRFB; local; Island County; WSU beachwatchers
Derelict Net Removal	identification and removal of derelict fishing nets in Island County marine waters	A = 2 GA = all H = 2,3 P = 2	Loss of Habitat	nearshore rocky coast		Survey and remove remaining known derelict nets	Chinook	other salmon, rockfish, marine mammals, birds, others	permitted complete	remove 22 nets	\$65,000	Ongoing - approximately 22 nets remain; permitting complete						2012	NW Straits Foundation	\$65,000	\$146,000	Mostly funded with NOAA/Recovery Act funding through end of 2010; SRFB
Spartina Removal Projects	identification and removal of Spartina anglica throughout Island County as part of monitoring	A = 2 GA = all H = 1,2 P = 1,2	Loss of Habitat	nearshore embayments	Estuary or Nearshore	Monitor and remove spartina where located	Chinook		ongoing monitoring & removal		\$50,000	Large proportion of sites have been treated; ongoing monitoring & treatment of identified sites planned	monitoring & removal	\$50,000				ongoing	IC Weed Control, WDFW, Dept of Ag	\$150,000	\$60,000	WDFW; Marine Conservation Fund
Dugualla Heights Restoration	Restore tidal connectivity to historic pocket estuary, and enhance salt marsh and upland habitats	A = 2 GA = 1 H = 1 P = 1	Loss of Habitat	nearshore embayments	Estuary or Nearshore	Restore tidal connection to historic pocket estuary of 12 acres intertidal and 13 acres of high marsh and marine riparian area	Chinook	chum, bull trout	Feasibility complete; Permitting and final design ongoing	identifying	\$70,000	construction	\$50,000	construction	\$720,000	and revegetation and monitoring \$ 60,000.00		2014	WICD, WCLT	\$840,000	\$140,000	SRFB, USFWS, NRCS, others
Livingston Bay Pocket Estuary Restoration	restoration of tidal connectivity by removing section of dike	A = 1 GA = 1 H = 1 P = 1	Loss of Habitat	nearshore embayments	Estuary or Nearshore	Restoration of 10 acre pocket estuary through removal of dike, fill and tidal reconection	Chinook	Chum, Bull trout; forage fish	Completed	final design & permitting, construction	\$315,000	monitoring		monitoring					The Nature Conservancy	\$277,798	\$37,500	SRFB/PSAR; local; others sought
Cornet Bay Enhancement/ Restoration Phase 1 (East 1000' Nearshore)	Restore/enhance of shoreline processes and habitat through removal of creosote bulkhead and removal of shoreline fill; enhancement of eelgrass, marshland and forage fish habitat at Deception Pass State Park	A = 2 GA = 1 H = 2 P = 2	Reduced Habitat Capacity	nearshore beaches	Estuary or Nearshore	1000 linear ft	Chinook	Chum, Bull trout; pink forage fish	Completed	Release of RFP for 1000 linear foot restoration	\$248,000	Planting, monitoring and wetland planning efforts	\$50,000	work	\$100,000			2016	Island MRC	\$398,000		Complex mix of private and public funding (see source documents for details) MRC, NW Straits Comm
Cornet Bay Enhancement/ Restoration Phase 2 (West 1000' nearshore)	Restore/enhance of shoreline processes and habitat through removal of creosote bulkhead and removal of shoreline fill; enhancement of eelgrass, marshland and forage fish habitat at Deception Pass State Park	A = 2 GA = 1 H = 2 P = 2	Reduced Habitat Capacity	nearshore beaches	Estuary or Nearshore	1000 linear ft	Chinook	Chum, Bull trout; pink forage fish	proposed	Release of RFP for 1000 linear foot restoration		Planting, monitoring and wetland planning efforts	\$300,000	work				2016	Island MRC	\$300,000		Complex mix of private and public funding (see source documents for details) MRC, NW Straits Comm
Crescent Creek Restoration	Remove dike and restore historic stream channel alignment and floodplain habitat.	A = 2 GA = 2 H = 2 P = 1	Loss of Habitat	Nearshore freshwater confluence	Nearshore wetlands and riparian	Restore alignment and floodplain function to approximately 1,476 LF of stream habitat	Chinook	Coho	Proposed Design			Design	\$77,000	Permitting	\$17,000	construction \$ 550,000.00		2019	Skagit River System Coop	\$634,000		SRFB, Navy
Cornet Bay Enhancement/ Restoration Phase 3 Marine Pier	Restore/enhance of shoreline processes and habitat through removal of creosote bulkhead and removal of shoreline fill; enhancement of eelgrass, marshland and forage fish habitat at Deception Pass State Park	A = 2 GA = 1 H = 2 P = 2	Reduced Habitat Capacity	nearshore beaches	Estuary or Nearshore	300 foot Maring Pier	Chinook	Chum, Bull trout; pink forage fish	Conceptual					Pier replacement /repair assessment	\$500,000			2016	Island MRC	\$500,000		Complex mix of private and public funding (see source documents for details) See source documents
Cornet Bay Enhancement/ Restoration Phase 4 Wetland Connectivity	Restore/enhance of shoreline processes and habitat through removal of creosote bulkhead and removal of shoreline fill; enhancement of eelgrass, marshland and forage fish habitat at Deception Pass State Park	A = 2 GA = 1 H = 2 P = 2	Reduced Habitat Capacity	nearshore embayments	Estuary or Nearshore	7 acres of wetland	Chinook	Chum, Bull trout; pink forage fish	Conceptual							\$50,000		2016	Island MRC	\$50,000		Complex mix of private and public funding (see source documents for details) see source documents
Creosote Log & Piling Removal	identification and removal of creosote debris and derelict creosote pilings from Island County nearshore, particularly in forage fish spawning areas	A = 2 GA = all H = all P = 2	Water Quality	nearshore beaches	Estuary or Nearshore	Survey and remove creosote debris; remove 90% of creosote debris from identified areas	Chinook		Planned - dependent on funding	removal of creosote debris and pilings	\$20,000	removal of creosote debris and pilings	\$20,000	removal of creosote debris and pilings	\$20,000	and pilings \$ 20,000 unknown			WA DNR, local volunteers, MRC	\$60,000	\$0	Program not funded - WA DNR
Habitat Acquisition for restoration																						
Phase 1 North Livingston Bay High Priority Habitat Protection	acquisitions and conservation easements that protect intact top priority nearshore processes and functions	A = 1 GA = 1 H = all P = all	Loss of Habitat	nearshore embayments	Land Protected, Acquired, or Leased	conservation easements protecting nearshore habitat and processes, three phases	Chinook		Funded but Conditioned			top priority nearshore acquisitions (conservation easements)	\$450,000					2016	Whidbey Camano Land Trust	\$450,000	\$225,000	SRFB, ESRP, local, USFWS
Phase 2 North Livingston Bay High Priority Habitat Protection	acquisitions and conservation easements that protect intact top priority nearshore processes and functions	A = 1 GA = 1 H = all P = all	Loss of Habitat	nearshore embayments	Land Protected, Acquired, or Leased	conservation easements protecting nearshore habitat and processes, three phases	Chinook		Proposed			top priority nearshore acquisitions (conservation easements)	\$850,000					2016	Whidbey Camano Land Trust	\$850,000		SRFB, ESRP, local, USFWS
Phase 3 North Livingston Bay High Priority Habitat Protection Emrich	acquisitions and conservation easements that protect intact top priority nearshore processes and functions approx. 30 acre acquisition to	A = 1 GA = 1 H = all P = all A = 1	Loss of Habitat	nearshore embayments	Land Protected, Acquired, or Leased	conservation easements protecting nearshore habitat and processes, three phases one to three fee simple	Chinook	Chinook	Conceptual			top priority nearshore acquisitions (conservation easements)	\$350,000					2016	Whidbey Camano Land Trust Stilligamish Tribe	\$350,000 \$380,000		SRFB, ESRP, local, USFWS unknown

Habitat Acquisition for protection																		SRFB, ESRP, Local, NOAA, USFWS, private, other sources		
Barnum Point Protection	acquisition to protect high quality nearshore, shoreline, and marine riparian habitat	A = 1 GA = 1 H = 1 P = all	Loss of Habitat	nearshore embayments	Land Protected, Acquired, or Leased	one to three fee simple acquisitions protecting nearshore, shoreline, and marine riparian habitat and processes	Chinook			Completed	top priority nearshore acquisition (phase one of three)	\$1,500,000		top priority nearshore acquisition (phase two of three)	\$1,500,000	Island County, The 2015 Nature Conservancy	\$3,000,000	\$1,050,000		
Cultus Bay High Priority Habitat Protection	acquisitions and conservation easements that protect intact top priority nearshore processes and functions	A = 1 GA = 2 H = all P = all	Loss of Habitat	nearshore embayments	Land Protected, Acquired, or Leased	three conservation easements protecting nearshore habitat and processes	Chinook			Conceptual	top priority nearshore acquisitions (1 conser. Easements)	\$150,000		top priority nearshore acquisitions (1 conser. Easements)	\$1,200,000	Whidbey Camano Land 2014 Trust	\$1,350,000	\$200,000	Unknown	
Useless Bay High Priority Habitat Protection	acquisitions and conservation easements that protect intact top priority nearshore processes and functions	A = 1 GA = 2 H = all P = all	Loss of Habitat	nearshore embayments	Land Protected, Acquired, or Leased	one conservation easements protecting nearshore habitat and processes	Chinook			Conceptual	top priority nearshore acquisitions (2 conservation easement)	\$75,000		top priority nearshore acquisitions (1 conservation easement)	\$200,000	Whidbey Camano Land 2018 Trust	\$200,000	\$75,000	NAWCA	
Triangle Cove Protection	acquisition to protect high quality nearshore, shoreline, and marine riparian habitat	A = 1 GA = 1 H = 1 P = all	Loss of Habitat	nearshore embayments	Land Protected, Acquired, or Leased	one to three fee simple acquisitions protecting nearshore, shoreline, and marine riparian habitat and processes	Chinook			Conceptual; partial funding identified					Island County, Whidbey Camano Land Trust, The Nature Conservancy					
Phase 1 Swede Hill/Indian Point High Priority Nearshore Habitat Protection	acquisitions and conservation easements that protect intact top priority nearshore processes and functions	A = 1 GA = 2 H = all P = 1 & 3	Loss of Habitat	nearshore embayments	Land Protected, Acquired, or Leased	conservation easements protecting nearshore habitat and processes	Chinook			partial funding identified	top priority nearshore acquisitions	\$1,100,000					\$1,100,000		SRFB, ESRP, local, USFWS, Cons.Futures	
Phase 2 Swede Hill/Indian Point High Priority Nearshore Habitat Protection	acquisitions and conservation easements that protect intact top priority nearshore processes and functions	A = 1 GA = 2 H = all P = 1 & 3	Loss of Habitat	nearshore embayments	Land Protected, Acquired, or Leased	conservation easements protecting nearshore habitat and processes	Chinook			Conceptual										
Hatchery																				
Projects focused on hatchery program facilities and maintenance to rear fish, maintain fish health and diversity, and minimize domestication in fish of naturally spawning broodstocks.																				
NONE																				
NONE																				
Non-Capital Programs - Listed Species																				
Activities related to management of Chinook as they transit various management jurisdictions, and the design and implementation of harvest management actions intended to maintain and restore the diversity and productivity of Chinook populations.																				
Harvest Management Su																				
NONE																				
Future Habitat Project Development																				
Projects designed to assess future needs for habitat restoration projects.																				
Swantown Lake Tidal Connectivity - Final Design	feasibility assessment of enhancing tidal connectivity and fish passage	A = 2 GA = 3 H = 1 P = 1	Loss of Habitat, Water Quality	nearshore embayments	Estuary or Nearshore	Complete Final Design	Chinook	steelhead, coho, chum, pink		Feasibility complete; conceptual desing in progress	assessment and 30% design of preferred restoration alternative; outreach	\$160,000	Completion of study and final alternative analysis	\$50,000	Final Design	\$185,000	Skagit Fisheries Enhancement Group, 2015 Island County	\$395,000	\$125,000	SRFB; County; local
Crocket Lake	feasibility assessment of enhancing tidal connectivity and fish passage	A = 2 GA = 3 H = 1 P = 1	Loss of Habitat	nearshore embayments	Estuary or Nearshore	Feasibility study to determine restoration potential	Chinook	Chum		Conceptual	feasibility study	\$95,000		Design	\$75,000	Wild Fish Conservancy, SRSC; Seattle City 2014 Light	\$170,000	\$0	SRFB, ESRP	
West Deer Lagoon Feasibility Assessment and Neighborhood Outreach	feasibility assessment of enhancing tidal connectivity and fish passage, and outreach activities	A = 2 GA = 2 H = 1 P = 1	Loss of Habitat	nearshore embayments	Estuary or Nearshore	Prepare feasibility study and initial design, and conduct public outreach	Chinook	Chum		Feasibility study and outreach ongoing	Completion of alternative analysis and outreach	\$30,000		Geotechnical analysis of dikes	\$75,000	2016 Wild Fish Conservancy	\$105,000	\$0	SRFB/PSAR, WFC	
Iverson Marsh Restoration Feasibility and Outreach	feasibility assessment, modeling, and design of marsh restoration	A = 2 GA = 1 H = 1 P = 1	Loss of Habitat	nearshore embayments	Estuary or Nearshore	complete feasibility study and design	Chinook	Chum; Bull Trout		Conceptual; initial restoration assessment completed; Acquisition for protection completed; stewardship plan completed				feasibility study, design	\$160,000	Island County, Stillaguamish Tribe, 2012 Wild Fish Conservancy	\$160,000	\$0	SRFB; unknown	
Swantown Lake Feasibility Assessment and Neighborhood Outreach	feasibility assessment of enhancing tidal connectivity and fish passage	A = 2 GA = 3 H = 1 P = 1	Loss of Habitat	nearshore embayments	Estuary or Nearshore	Complete feasibility study and conduct public outreach	Chinook	Chum		Conceptual; initial historic condition and project scoping completed; ongoing hydrological monitoring	assessment and 30% design of preferred restoration alternative; outreach	\$160,000	Completion of study and final alternative analysis	\$50,000	Swan Lake Watershed Preservation Group; Skagit Fisheries 2013 Enhancement Group	\$210,000	\$25,000	SRFB; County; local		
County Club Lagoon	feasibility assessment of enhancing fish passage	A = 2 GA = 1 H = 1 P = 1	Reduced habitat function, access limited	nearshore embayments	Estuary or Nearshore	Study to improve feasibility of improving fish passage	Chinook	Chum		Conceptual; culvert upgraded and access improved	assessment of accessibility and feasibility	\$50,000			2013 Tulalip; Island County	\$50,000	\$0	unknown		
Camano Island State Park Pocket Estuary Restoration Assessment	improvement of internal hydrologic connectivity and restoration of tidal connectivity	A = 2 GA = 2 H = 1 P = 1	Loss of Habitat	nearshore embayments	Estuary or Nearshore	restore 4.4 acres of salt marsh habitat	Chinook	bull trout, chum, forage fish		Feasibility assessment completed in 2010	Outreach	\$45,000	feasibility study		Outreach, 30% design	\$90,000	Skagit River System 2016 Coop, WA State Parks	\$135,000 ?		SRFB
Dugualla Bay	feasibility assessment of enhancing tidal connectivity and fish passage approx. 30 acre acquisition to protect and potentially restore nearshore processes and functions.	A = 2 GA = 1 H = 1 P = 1	Loss of Habitat	nearshore embayments	Estuary or Nearshore	Feasibility study to determine restoration potential	Chinook	Chum		Conceptual; 10% design completed by PSNERP	feasibility study	\$175,000		Design	\$125,000	2014 Navy, SRSC, others	\$300,000	\$0	SRFB, ESRP, PSNERP, NAVY	
Emrich/Madamba Acquisition Feasibility Habitat Protection	Projects designed to assess, monitor, or participate in planning activities related to habitat protection. This includes monitoring.	A = 1 GA = 1 H = all P = all	Loss of Habitat	nearshore embayments	Land Protected, Acquired, or Leased	one to three fee simple acquisitions protecting nearshore habitat and processes	Chinook	bull trout, chum, forage fish		Conceptual				top priority nearshore acquisitions (conservation)	\$20,000.00	2016 Stillaguamish Tribe	\$20,000		unknown	
Port Susan Marine Stewardship Area																				
Planning & creation of MSA to promote stewardship and protection of the the marine and nearshore of Port Susan																				
Development of MSA plan in both Island and Snohomish Counties																				
Forage fish, salmonids, others																				
Ongoing																				
MSA planning and coordination																				
MSA planning and coordination																				
\$30,000																				
\$30,000																				
2013 MRC; Tulalip																				
\$60,000																				

Island County CAO (FWHCA)	Update of Critical Area Regulations; Fish and Wildlife Habitat Conservation Areas section of ordinance	A = 1 GA = all H = all P = all	Reduced Habitat Capacity	nearshore, stream and riparian	Estuary or Nearshore	Review and update CAO incorporating BAS	Chinook	Forage fish, Coho, chum	Wetland section complete; FWHCA beginning summer 2013		Review and update FWHCA section of CAO	\$95,000	Complete FWHCA	\$80,000	2015 Island County	\$175,000 ?	Island County; ?		
Island County SMP Update	Update of Shoreline Management Program	A = 1 GA = all H = all P = all	Reduced Habitat Capacity	nearshore	Estuary or Nearshore	Review and update SMP incorporating BAS and restoration plan	Chinook	Forage fish, Coho, chum	Completed. Final in ECY Review.	Complete draft ordinance	Adopt updated SMP ordinance	\$200,000	\$200,000		2013 Island County	\$400,000 ?	DOE; Island County		
Penn Cove and Admiralty Inlet Nearshore Water Quality Restoration	integrated protection planning, technical assistance and nearshore water quality remediation implementation	A = 1 GA = 2 H = all P = 2	Degraded habitat; landowner permission	nearshore beaches	Estuary or Nearshore	91 acre subbasin water quality improvement	Chinook	bi-valves	Implemented	Seal design document, complete permitting	Construction and beginning of monitoring	\$200,000	\$460,000	\$100,000	SeaGrant, WA DOE, Russell Family Foundation, Town of Coupeville	\$760,000	\$127,000 IC MRC, IC Health Department, Town of Coupeville and US Parks (easement)		
North Camano Nearshore Protection Project (Utsalady Bay focus area)	integrated restoration and protection planning, landowner outreach, & technical assistance	A = 1 GA = 1 H = all P = all	Loss of Habitat	nearshore beaches	Estuary or Nearshore	perform landowner outreach, and assessment of priority habitats, sites, and properties	Chinook	Forage fish, Coho, chum	Data collection, WDFW policy research	protection and restoration plan, landowner outreach and technical assistance	feasibility assessment, landowner outreach and fundraising for acquisitions	\$75,000	\$75,000	\$85,000	2015 MRC; Island County	\$235,000	\$10,000 MRC, NOAA, NWSC		
Synthesis of Geographic Area 1 Nearshore Protection Projects	evaluation of lessons learned through initial integrated protection projects	A = 1 GA = 1 H = all P = all	Loss of Habitat	nearshore beaches	Estuary or Nearshore		Chinook		Conceptual	synthesis	\$25,000 synthesis	\$25,000	\$25,000	2012 MRC; Island County	\$75,000	\$0 unknown			
Island County Owned Nearshore Protection Project	Review & update management plans for county owned lands in and adjacent nearshore	A = 1 GA = all H = all P = all	Reduced Habitat Capacity	nearshore beaches	Estuary or Nearshore		Chinook	Forage fish, Coho, chum	Conceptual					\$35,000	2013 MRC; Island County	\$35,000	\$105,000 unknown		
WRIA 6 State Owned Nearshore Protection Project	Review & evaluate management plans for state owned lands in and adjacent to the nearshore	A = 1 GA = all H = all P = all	Reduced Habitat Capacity	nearshore beaches	Estuary or Nearshore		Chinook	Forage fish, Coho, chum	Conceptual					\$50,000	2013 MRC; Island County	\$50,000	\$0 unknown		
WRIA 6 Federally Owned Nearshore Protection Project	Review & evaluate management plans for federally owned lands in and adjacent to the nearshore	A = 1 GA = all H = all P = all	Reduced Habitat Capacity	nearshore beaches	Estuary or Nearshore		Chinook	Forage fish, Coho, chum	Conceptual					\$50,000	2013 MRC; Island County	\$50,000	\$0 unknown		
Outreach & Education Projects designed to increase outreach and education related to watershed health and salmon recovery.																			
Shore Stewards Shoreline Landowner Workshops	outreach in shoreline communities focusing on nearshore functions for salmon, and opportunities for protection and enhancement	A = 1 GA = all H = all P = all	Community Engagement	nearshore	Estuary or Nearshore	2-3 workshops/year establish contact with willing landowners for restoration projects, improve public awareness, reduced non-point pollution	Chinook		Conceptual	2 workshops/year	\$4,000 2 workshops	\$4,000	\$4,000	2 workshops	\$4,000	ongoing	Island County; Shore Steward Program; Whidbey Watershed Stewards	\$12,000	\$6,000 local
Glendale Watershed Education Program	education and outreach related to Glendale Watershed	A = 2 GA = 2 H = 2 P = 3	Community Engagement	instream	Instream		Chum	Chinook	contacts made, and watershed education program completed 2010	outreach, education program	\$15,000 presentations	\$5,000	\$5,000	presentations	\$5,000	ongoing	Whidbey Watershed Stewards	\$25,000	\$5,000 Island County
Site Specific Seining Results	Annual updates summarizing results of Beach Watchers juvenile salmon seining efforts	A = 1 GA = 2 H = 1 P = all	Community Engagement	nearshore embayments	Estuary or Nearshore	Strategic seining to support education and outreach K-5 grade classes at Maxwellton Classroom; service-learning with middle school, high school, Scouts, and Community College students	Chinook		Seasonal monitoring, data collection, analysis and report writing	Seasonal monitoring, data collection, analysis and report writing	\$2,000 report writing	\$2,000	\$2,000	\$3,000	ongoing	Island MRC, Beach Watchers	\$7,000	\$2,500 US EPA, Island County	
K-12 School Programs	education about watershed and nearshore functions for salmon	A = 2 GA = all H = all P = all	Community Engagement	All	All		Chinook, forage fish	other salmon	Underway by sponsor	presentations	\$15,000 learning	\$15,000	\$15,000	presentations, service learning	\$15,000	ongoing	Whidbey Watershed Stewards, Fisheries Enhancement Groups, WSU Extension	\$45,000	\$15,000 partially funded by CSF
Soft Shore Armoring PSA "Keep Port Susan Healthy"	Educate Port Susan residents which involves four workshops	A = 2 GA = all H = all A = 2 GA = all H = all	Community Engagement	All	All		Chinook	forage fish; other salmonids	ongoing; workshops have occurred; home visits occurring ongoing; 1 workshop has occurred, 3 more in 2013	Two workshops one workshop	door to door visits with 30 homes around Port Susan			3 workshops		2013	NW Straits Commission		WDFW
Habitat Work Schedule Completed	online tracking of WRIA 6 efforts and progress	A = 2 GA = all H = all P = all	Community Engagement	All	All	All placeholder project profiles completed and passed verification	All		66% completed; contract in place to complete remaining		Approx 60 project profiles updated	\$3,000				2013	Whidbey Watershed Stewards	\$3,000	Island County
Community Knowledge Assessment	evaluation of citizen knowledge about salmon recovery issues and willingness to participate in recovery projects	A = 1 GA = all H = all P = all	Community Engagement	All	All				Conceptual; initial report finalized 2009		follow-up assessment	\$15,000					Island County; Island 2013 County MRC	\$15,000	\$15,000 unknown
Communication Strategy	Develop strategic plan to help in implementing communication activities in the watershed related to salmon recovery and improve knowledge and support for salmon recovery	A = 2 GA = all H = all P = all	Community Engagement	All	All		Chinook	forage fish; other salmonids	Completed	Finalize strategy, lessons learned, and project development guidance	implement and coordinate plan	\$15,000			implement and coordinate plan	ongoing	Island County; Whidbey Watershed Stewards, TAG	\$15,000	PSAR capacity; local
Marine Stewardship Area Signage	educational signs at parks highlighting importance of marine and nearshore for salmon, forage fish and other species	A = 2 GA = all H = all P = all	Community Engagement	All	Estuary or Nearshore	MRC installed signs for Marine Steward Areas as well as related nearshore features in context to flora, fauna and peoples.			Project data archiving	Project data archiving	Install at least 2 new signs	\$10,000	\$10,000	\$10,000	Install at least 2 new signs	ongoing	MRC & partners	\$22,000	\$20,000 NWSC (NOAA) via MRC

Watershed Stewardship Program	Educate shoreline residents on best practices	A = 2 GA = all H = all P = all	Community Engagement	All	All	Shoreline of Island County (up to 1000 landowners)	all	all	Low-level member data collection, newsletters	Low-level member data collection, newsletters	Moderate level member data collection, newsletters	\$20,000	Moderate level member data collection, newsletters	\$20,000	ongoing	Island MRC	\$49,000 n/a	US EPA, Island County, WSU	
Salmon awareness event	Annual community event to raise awareness of salmon use in Island County	A = 2 GA = all H = all P = all A = 1 GA = all	Community Engagement	All	All	Annual event aimed at awareness of community regarding salmon use and importance in ecosystem			Conceptual	event	\$5,000 event	\$5,000	event	\$5,000	ongoing	Whidbey Watershed Stewards; Orca Network	\$15,000	\$30,000 unknown	
Sportfishing Outreach	outreach campaign to sportfish community at boat ramps & projects designed to protect instream flows.	H = all P = 2	Community Engagement	All	Estuary or Nearshore	Presentations at sportfishing events			Conceptual	outreach	\$5,000 outreach	\$5,000	outreach	\$5,000	ongoing	Island County; Lead Entity staff	\$15,000	\$15,000 unknown	
Instream Flow Protection	Projects designed to protect instream flows.																		
NONE																			
Project Monitoring	Projects designed to monitor habitat projects. Includes adaptive management monitoring and post-construction monitoring.																		
Cornet Bay - Forage Fish Monitoring	pre and post restoration monitoring of habitat and fish use	A = 2 GA = 1 H = 2 P = 2		nearshore		1600 feet of shoreline monitoring for forage fish spawning	forage fish	salmonids	active pre-restoration monitoring	pre-restoration monitoring	Post-construction monitoring	\$5,000	Post-construction monitoring	\$5,000	\$5,000	2015 MRC, WDFW	\$15,000	WSU, Beachwatchers	
Cornet Bay - Salmonid Fish Use Monitoring	pre and post restoration monitoring of habitat and fish use	A = 2 GA = 1 H = 2 P = 2		nearshore		10 sites monitored at site	Chinook	chum, pink	active monitoring	pre-restoration monitoring	post-restoration monitoring	\$3,000	Post-construction monitoring	\$3,000	\$3,000	MRC, WSU 2015 Beachwatchers, NOAA	\$9,000	WSU, MRC	
WRIA 6 Eelgrass Mapping and Monitoring	Countywide survey of eelgrass	A = 2 GA = 1 H = 2 P = 2	Loss of Habitat	nearshore	Estuary or Nearshore	24 DNR segments per year	Chinook	Forage Fish	Seasonal monitoring, data collection, analysis and report writing	Seasonal monitoring, data collection, analysis and report writing	\$2,000	\$2,000	Seasonal monitoring, data collection, analysis and report writing	\$3,000	\$3,000	2015 ongoing	\$8,000	US EPA, Island County	
Post-construction Monitoring Crescent Marsh Restoration	post construction monitoring of habitat and fish use	A = 2 GA = 2 H = 1 P = 1	Loss of Habitat	nearshore embayments	Estuary or Nearshore	Monitor habitat and fish use in 200 acre restored salt marsh	Chinook		Construction Completed. Habitat and Fish monitoring in progress	habitat and fish surveys	habitat and fish surveys	\$35,000	habitat and fish surveys	\$35,000	\$35,000	2016 Beachwatchers	\$105,000	Partially Funded; \$0 Navy	
Dugualla Heights Lagoon Monitoring	pre and post restoration monitoring	A = 2 GA = 1 H = 1 P = 1	Loss of Habitat	nearshore embayments	Estuary or Nearshore	Restoration of 10 acre pocket estuary restoration site and adjacent nearshore	Chinook	chum, bull trout	Pre-restoration seining ongoing; restoration design funded	pre-construction monitoring (habitat & fish)	post-construction monitoring (habitat & fish)	\$25,000	post-construction monitoring (habitat & fish)	\$25,000	\$25,000	2018 WCLT; SRSC; Skagit Fisheries Enhancement Group; WSU	\$75,000	???	
Livingston Bay Pocket Estuary Restoration	restoration of tidal connectivity by removing section of dike	A = 1 GA = 1 H = 1 P = 1	Loss of Habitat	nearshore embayments	Estuary or Nearshore	Restoration of 10 acre pocket estuary through removal of dike, fill and tidal reconnection	Chinook	Chum, Bull trout; Forage fish	Restoration completed; post construction monitoring		monitoring	\$50,000	monitoring	\$50,000	\$50,000	2016 The Nature Conservancy	\$150,000	TNC/ unknown	
Ala Spit post construction monitoring	post construction monitoring of habitat and fish use	A = 2 GA = 1 H = 1 P = 1	Loss of Habitat	nearshore embayments	Estuary or Nearshore	Post construction/restoration at spit	Chinook	Bull trout; Forage fish; Chum	Monitoring plan completed; Restoration permitting and final design completed; 1st phase construction completed	post-construction monitoring (habitat & fish)	post-construction monitoring (habitat & fish)	\$20,000	post-construction monitoring (habitat & fish)	\$20,000	\$20,000	2015 Island County	\$60,000	WSU beachwatchers, Local, ?	
Stock Monitoring Support	Projects designed to monitor stocks.																		
Skagit Bay Nearshore/ Marine Salmonid Distribution	Intensively Monitored Watershed - assessment of distribution of out-migrating fish living in skagit estuary and nearshore areas of Skagit Bay, including WRIA 6 nearshore.	A = 1 GA = 1 H = all P = all	NA	nearshore	Estuary or Nearshore	10 year study monitoring Chinook in Skagit Bay. Study area includes area from Western edge of Deception Pass to Ponell Pt and across to Utsalady.	Chinook		On-going	monitoring; data synthesis	monitoring; data synthesis	\$200,001	monitoring; data synthesis	\$200,000	\$200,000	2015 Skagit River System Cooperative, NOAA, WDFW ??	\$600,001	\$200,000	Funded: NOAA, IMW SRFB, Tribes. Pacific Salmon Treaty Research
Port Susan and Saratoga Passage Neashore/Marine Salmonid Distribution	assessment of distribution of out-migrating fish	A = 1 GA = 1,2 H = all P = all	NA	nearshore	Estuary or Nearshore		Chinook		Final Report Completed; outreach of result needed	completion of synthesis of all WRIA habitat and fish data; results outreach (related to origins study)	completion of synthesis of all WRIA habitat and fish data; results outreach (related to origins study)	\$5,000	completion of synthesis of all WRIA habitat and fish data; results outreach (related to origins study)	\$5,000	ongoing	Tribes, NOAA, WSU Extension	\$10,000	\$150,000	partially funded: Tribes, NOAA, volunteers, SRFB, MCF
Admiralty Inlet Nearshore/ Marine Juvenile Salmonid Distribution	assessment of distribution of out-migrating fish	A = 1 GA = 2,3 H = all P = all	NA	nearshore	Estuary or Nearshore		Chinook	Chum	Final Report Completed; outreach of result needed	completion of synthesis of all WRIA habitat and fish data; results outreach (related to origins study)	completion of synthesis of all WRIA habitat and fish data; results outreach (related to origins study)	\$5,000	completion of synthesis of all WRIA habitat and fish data; results outreach (related to origins study)	\$5,000	ongoing	Tribes, NOAA, Wild Fish Conservancy	\$10,000	\$0	NOAA
WRIA 6 Juvenile Salmon Origins	genetic identification of distribution of stocks using WRIA 6 nearshore	A = 1 GA = all H = all P = all	NA	nearshore	Estuary or Nearshore		Chinook		Data has been collected and is being synthesized; final report to be completed and outreach	completion of synthesis of all WRIA habitat and fish data; results outreach	completion of synthesis of all WRIA habitat and fish data; results outreach	\$10,000	completion of synthesis of all WRIA habitat and fish data; results outreach	\$10,000	2011 Skagit River System Cooperative	\$10,000	\$140,000	funded: SRFB, SRSC, partners	
Whidbey Basin Trophic Interactions Scoping	evaluation of predator/prey assessments done to date; development of future scope of work	A = 2 GA = 1,2	NA	nearshore	Estuary or Nearshore		Chinook		Conceptual		evaluation of work to date; scoping	\$20,000		\$20,000	2014 Tribes, WDFW, NOAA	\$20,000	\$0	unknown	
Admiralty Inlet Trophic Interactions Scoping	evaluation of predator/prey assessments done to date; development of future scope of work	A = 2 GA = 2,3	NA	nearshore	Estuary or Nearshore		Chinook		Conceptual		evaluation of work to date; scoping	\$20,000		\$20,000	2010 Tribes, WDFW, NOAA	\$20,000	\$0	unknown	
Research																			
Small stream fish use in Island County and predictive modeling	Develop and test GIS based model to identify small coastal streams likely to have rearing juvenile salmon, conduct watershed analysis on WRIA 6 streams and, support inclusion of study/project results into SMP, CAO, and SRP.	A = 1 GA = all H = 2 P = 3	Limited habitat access	Instream	instream	100% survey of WRIA 6 shoreline for small stream mouths, electrofish and habitat surveys for 40+ streams.	Chinook	Coho, Cutthroat	Funded and initial field investigation completed	Stream habitat surveys, journal article publication, outreach, reference stream sampling	fish sampling in streams, watershed analysis, provide findings for use in CAO, SMP & SRP updates	\$92,461	Stream habitat surveys, journal article publication, outreach, reference stream sampling	\$92,462		2014 Tulalip, SRSC	\$184,923	\$52,640	funded DOE, DEP grant
Small stream non-natal fish use	Initial survey of small streams in WRIA's 4,5,6, & 7, and collection of fish presence and stream surveys.	A = 2 GA = 1, 2 H = 2 P = 3	Habitat access	Instream	Instream	Survey of 18 streams and collection of basic stream habitat information	Chinook	Coho, Cutthroat	manuscript is being drafted for publication	Draft manuscript to be completed and submitted to scientific journal	Findings published in scientific journal	\$15,000	Draft manuscript to be completed and submitted to scientific journal	\$15,000	2013 Tulalip, SRSC	\$30,000		EPA/NWIFC	

Puget Sound Shoreline Armoring Impacts to Nearshore Ecology and Shoreform	Improve understanding and ability to quantify impacts of shoreline armoring to nearshore ecology	A = 2 GA = all H = all P = 1	Reduced Habitat Capacity	shoreline	Nearshore	from several different Puget Sound locations over several years to help understand impacts of armoring on geomorphology.	Chinook	salmonids, forage fish, other nearshore species	Funded	sampling;	\$50,000	sampling;	\$75,000	2015 SRSC,	\$125,000	Seagrant				
WRIA 6 Literature Synthesis and Bibliography	To create WRIA 6-specific bibliography of research and assessments that have been conducted since 2005. Identify and work with authorizing authorities to develop QA/QC plan in order to use monitoring results appropriately	A = all GA = all H = all P = All	NA	All	All	Bibliography report and synthesis of new findings	Chinook	salmonids, forage fish, other nearshore species	Started. Will inform prioritization and Adaptive Management Program			gather documents and produce bibliography; draft synthesis	\$10,000	Finalize synthesis	\$5,000	Island County, Tulalip Tribes	\$15,000	Island County/PSP		
Citizen Science QA/QC Procedures		A = all GA = all H = all P = All	NA	All	All	QA/QC procedures	Report	Chinook	Conceptual			ID authorities responsible; draft QA/QC strategies		Produce QA/QC report		Island County, WSU Beach Watchers		unknown		
Priority Projects and Programs Benefiting Non-Listed Species																				
Island County Freshwater Water Quality Monitoring	baseline monitoring of streams and lakes; source id monitoring of streams with impairments	A = 2 GA = all H = 2 P = 3	Water Quality	instream	Water Quality Improvement	Continued monitoring			ongoing monitoring - in 5th year of baseline study	baseline and source identification water quality monitoring	\$250,000	baseline and source identification water quality monitoring	\$250,000	ongoing	Island County	\$500,000	\$750,000	funded: county, WA Ecology		
Maxwelton Smolt Counts	May survey of juvenile Coho in Maxwelton/Quade Creek system	A = 2 GA = 2 H = 2 P = 3	NA	instream	Instream	Ongoing survey	Coho	Cutthroat	Ongoing; annual outmigration survey of Coho in Maxwelton/Quade Creek	monitoring	\$3,000	monitoring	\$5,000	monitoring	\$5,000	ongoing	Whidbey Watershed Stewards	\$13,000	\$6,000	WWS Local contributions, MRC
Follow-up Monitoring Maxwelton Creek Tidegate	Coho spawner surveys	A = 2 GA = 2 H = 2 P = 3	Loss of Habitat	instream	Instream	Report prepared; monitoring fish use/returns	Coho	Cutthroat	ongoing; completed for 2007-12	spawner surveys	\$1,000	spawner surveys, gate survey	\$1,000	spawner surveys, gate survey	\$1,000	2012	Whidbey Watershed Stewards; Wild Fish Conservancy	\$3,000	\$6,000	WWS local contributions, MRC
Glendale creek stream rehabilitation	improve fish passage and stabilize channel, including riparian planting and instream restoration	A = 2 GA = 2 H = 2 P = 3	Reduced Habitat Capacity	instream	Riparian; instream	Improve fish passage and stabilize damaged channel	Chum, coho, cutthroat	Chinook	conceptual			design and permitting	\$50,000			WWS, Tulalip, local landowners	\$150,000		unknown	
Deer Creek culvert replacement	culvert upgrade to improve fish passage, and riparian planting	A = 2 GA = 2 H = 2 P = 3	Reduced Habitat Capacity	instream	Instream	Improve fish passage and maintenance requirements of existing culvert	Coho; cutthroat	Chinook	conceptual; feasibility report completed 2013			design and permitting; construction	\$250,000			2015	Island County	\$250,000		unknown
Maxwelton Watershed Fish Passage Culverts	replacement of fish passage barriers identified in 2005 creek inventory, and update culvert information	A = 2 GA = 2 H = 2 P = 3	Loss of Habitat	instream	Instream	Remove fish passage barrier, providing passage to upper 2 miles of stream habitat	Coho	Cutthroat	conceptual; landowner willing	design & permitting of Wildes Rd. culvert replacement	\$45,000	Final design, construction	\$250,000			Island County Public Works, Whidbey 2015 Watershed Stewards	\$295,000	\$85,000	unknown	
Maxwelton Watershed Fish Passage Culverts (Daisy Ln, Coyote Ln)	habitat restoration	A = 2 GA = 2 H = 2 P = 3	Loss of Habitat	instream	Instream	restore riparian habitat, enhance rearing habitat for coho	Coho	Cutthroat	completed; ongoing adaptive management needed	adaptively manage	\$4,000	adaptively manage	\$4,000			Whidbey Watershed 2015 Stewards	\$8,000	\$4,000	unknown	
Quade Creek Enhancement	culvert replacement and riparian planting	A = 2 GA = 2 H = 2 P = 3	Riparian Areas and LWD Recruitment	riparian	Riparian	Replace culvert	Coho	Cutthroat	Completed; now in maintenance phase	riparian maintenance	\$10,000	riparian maintenance	\$10,000	riparian maintenance	\$10,000	Whidbey Watershed 2012 Stewards	\$30,000	\$10,000	Community Salmon Fund, Whidbey Watershed Stewards	
Kristoferson Farm Riparian Restoration	riparian planting along Kristoferson Creek on Kristoferson Farm	A = 2 GA = 1 H = 2 P = 2	Riparian Areas and LWD Recruitment	riparian	Riparian	restore vegetative stream buffer			Completed planting; now in maintenance phase	maintenance	\$4,000	maintenance	4000	maintenance	\$4,000	2015	Landowner	\$12,000	\$8,000	funded: ???
Upper Kristoferson Creek Enhancement	4 tributary culvert replacements and riparian planting	A = 2 GA = 1 H = 2 P = 2	Loss of Habitat	instream	Instream	replacement of culverts in fish bearing stream			conceptual/planned			culvert replacement & riparian planting	\$40,000			2012	Landowner	\$40,000	\$0	FFFAA
Kristoferson Creek Enhancement-Barnum Rd	culvert replacement and riparian planting	A = 2 GA = 1 H = 2 P = 2	Reduced Habitat Capacity	instream	Instream	Replace partially blocking culvert			Design partially completed; funding sought			design and permitting	\$25,000	construction	\$85,000	2013	Island County	\$110,000	\$17,000	unknown
Island County Water Typing	Field survey of stream habitat to ground truth DNR fish distribution	A = 2 GA = all H = 2 P = 2	Altered Stream Morphology/Stream Flow Patterns	riparian	Riparian	determine water type classification in watersheds in Island County			conceptual			project development	\$5,000	surveys/implementation	\$90,000	Wild Fish Conservancy; 2013	Island County	\$95,000	\$0	unknown; SRFB
Drainage mapping and verification	evaluation of existing hydrography data layers; field verification	A = 2 GA = all H = 2 P = 2	Altered Stream Morphology/Stream Flow Patterns	riparian	Riparian				conceptual	field verification of stream outlets	\$20,000	field verification	\$20,000			2013	Tulalip Tribes	\$40,000	\$0	NWIFC
Penn Cove Watershed Contamination Remediation Project	Subsurface wetland installation	A = 2 GA = 2 H = 2 P = 2	Water Quality	nearshore	Water Quality Improvement	Penn Cove sub-basin I, adjacent to Coupeville waste water treatment plant	ESA listed Chinook Salmon	shellfish beds	Completing final design, beginning permitting	Seal design document, complete permitting	\$200,000	Construction and beginning of monitoring	\$460,000	Monitoring, evaluating and reporting	\$100,000	SeaGrant, WA DOE, Russell Family Foundation, Town of 2014	Coupeville	\$760,000	\$173,000	SeaGrant, WA DOE, Russell Family Foundation, Town of Coupeville
Camano Country Club Creek	Reparian planting/restoration; Instream restoration	A = 2 GA = 1 H = 2 P = 3	Reduced Habitat Capacity	instream; riparian	instream; riparian	Improve fish passage and restore native riparian vegetation	cutthroat	Chinook	conceptual			Instream and riparian restoration	\$25,000			20120	Tulalip; SCD	\$25,000		unknown
Unnamed Creek (Zook or Orr Crk) culvert replacement	culvert upgrade to improve fish passage, and riparian planting	A = 2 GA = 2 H = 2 P = 3	Reduced Habitat Capacity	instream	Instream	Improve fish passage and maintenance requirements of existing culvert	Coho; cutthroat	Chinook	conceptual			design and permitting; construction	\$100,000			2010	Tulalip; Island County	\$100,000		unknown

Key to Priority Tier Abbreviations

A = Action Priorities

- 1 = Marine Fish Distribution, Protection, Capacity Funding, Targeted Shoreline Education
- 2 = Restoration, Habitat Assessments, General Education

GA = Geographic Area

- 1 = Skagit Bay, Port Susan
- 2 = Saratoga Passage, SW Whidbey, NW Whidbey
- 3 = Central-West Whidbey

H = Habitat Priorities

- 1 = Mudflats, marshes, pocket estuaries
- 2 = Sand/gravel beaches, sandflats, instream/riparian
- 3 = cobble beaches, rocky shore, uplands

P = Process Priorities

- 1 = Shoreline Sediment Transport, Tidal Exchange, Hydrology
- 2 = Nutrient Cycles, Food Web, Animal/Plant Communities
- 3 = Upland / Coastal Stream Processes

Project Name	Project Description	Priority tier of project	Limiting Factors	Habitat Type	Activity Type	Project Performance	Primary Species Benefiting	Secondary Species Benefiting	Current Project Status	2012 activity to be funded -	2012 Estimate -	2013 activity to be funded - scope	2013 estimate -	2014 activity to be funded -	2014 estimate -	2015 activity to be funded -	2015 estimate -	Likely End Date	Likely Sponsor	Total Cost of first three	Local share or other funding	Source of funds
South Camano High Priority Habitat Protection	acquisitions and conservation easements that protect intact priority nearshore processes and functions	A = 1 GA = 1 H = all P = all	Loss of Habitat	nearshore embayments	Land Protected, Acquired, or Leased	seven conservation easements protecting nearshore habitat and processes	Chinook		Conceptual			top priority nearshore acquisitions (3 conser. Easements)	\$550,000	top priority nearshore acquisitions \$ (3 conser. Easements)	\$750,000			2015 Land Trust	Whidbey Camano	#####	\$200,000	Unknown
Strawberry Point High Priority Habitat Protection	acquisitions and conservation easements that protect intact priority nearshore processes and functions	A = 1 GA = 1 H = all P = all	Loss of Habitat	nearshore embayments	Land Protected, Acquired, or Leased	four conservation easements protecting nearshore habitat and processes	Chinook		Conceptual			top priority nearshore acquisitions (1 conser. Easements)	\$600,000	top priority nearshore acquisitions \$ (2 conser. Easements)	\$725,000			2014 Land Trust	Whidbey Camano	#####	\$200,000	Unknown
Kristoferson Creek High Priority Habitat Protection	acquisitions and conservation easements that protect intact top priority watershed processes and functions	A = 1 GA = 1 H = 2 P = all	Loss of Habitat	riparian	Land Protected, Acquired, or Leased	six conservation easements protecting watershed habitat and processes	Chinook		Conceptual			top priority drainage acquisitions (2 conservation easement)	\$220,000	top priority drainage acquisition \$ (3 conservati on easement)	\$600,000			2015 Land Trust	Whidbey Camano	\$820,000	\$125,000	Unknown
Holmes Harbor High Priority Habitat Protection	acquisitions and conservation easements that protect intact top priority nearshore processes and functions	A = 1 GA = 2 H = all P = all	Loss of Habitat	nearshore embayments	Land Protected, Acquired, or Leased	three conservation easements protecting nearshore habitat and processes	Chinook		Conceptual			top priority nearshore acquisitions (1 conservation easement)	\$75,000	top priority nearshore acquisition \$ (1 conservati on easement)	\$65,000			2020 Land Trust	Whidbey Camano	\$140,000	\$30,000	Unknown
Glendale Knotweed Removal and Maintenance	Remove knotweed and monitor post removal for regrowth	A = 2 GA = 2 H = 2 P = 2	Loss of Habitat	Riparian	Riparian	100% removal of knotweed and any regrowth	steelhead, coho		Conceptual			removal of knotweed	\$5,000	removal of knotweed, replanting with natives	\$20,000	Monitoring and Maintenance	\$5,000.00	2016	IC Weed Control	\$30,000		NRCS, WDFW, SRFB, WSDA