
WRIA 6 (Island) 2010 3-Year Implementation Work Plan Narrative

This three-year implementation work plan update was developed by the WRIA 6 Salmon Technical Advisory Group (TAG) and lead entity staff as a planning and tracking tool for local and regional WRIA 6 partners. This document reviews the WRIA 6 salmon recovery program's efforts over the past year, considers the current implementation status and strategies of our Salmon Recovery Plan, and outlines planned actions, needs, and priorities of the watershed over the next 3 years (2010-2012).

This version of the implementation work plan (IWP) includes many of the projects submitted in the 2009 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. Significant changes to project categories include additional project monitoring actions at planned restoration sites, future habitat develop projects, and completion of habitat acquisition projects. 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 Multi-Species Salmon Recovery Plan (SRP).

This update has attempted to address regional guidance intended to: 1) to facilitate communication between the local watershed groups and regional representatives (both Puget Sound Partnership [PSP] and Recovery Implementation Technical Team [RITT]) regarding work, status, and needs of salmon recovery at the local and regional levels; 2) to document work, status, and needs of salmon recovery over the next three years into a regional message; 3) identify priority projects for funding; and 4) document changes in implementation of the local recovery plan.

Also described in this narrative will be how key regional issues are being addressed at the local scale, issues facing local implementation, and priorities the Island County Salmon Recovery Program intends to discuss in the near future.

STRATEGY

The WRIA 6 SRP has adopted an integrated and comprehensive approach to salmon recovery. Salmon recovery should be an integral part of water resources management in the WRIA. The salmon strategy employs three core elements to address salmon recovery.

- Providing access to technologies and the best science
- Promotion of improved salmon recovery practices and facilities, and
- Support for long-term sustainability through the creation of an enabling environment in which salmon recovery activities can be supported and take place

We feel that this strategy is still appropriate and will be effective if each element is fully supported and adjustments are made as new science emerges and circumstances change. The ability to be successful in implementing the SRP will be hindered without finding social, political, and funding support.

Below is a discussion of the four SRP goals in regards to general status of implementation, priorities, and challenges anticipated over the next 3 years.

GOALS AND OBJECTIVES

Learning more about salmon use of WRIA 6 habitats, setting measurable goals, establishing a robust protection strategy, and working with the community to find solutions that work for fish and people are the underlying primary goals of the WRIA 6 Multi-Species Salmon Recovery Plan.

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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

Efforts towards a net increase in salmon habitat have been ongoing by multiple organizations working in WRIA 6. Specific actions that have been completed or are planned towards these objectives are discussed below in “2010 matrix discussion” (including the following sections: “Habitat Restoration”, “Habitat – Acquisition for Future Restoration”, “Habitat – Acquisition For Protection”, “Non – Capital Habitat Protection”).

Resources have been allocated to support the completion of a list of priority nearshore projects and outline appropriate actions. A primary goal will be 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 tool will assist organizations involved in such activities with helping them focus their efforts. It is intended that this guidance will updated as new knowledge becomes available.

Protection of existing function is a combination of regulatory and voluntary efforts. As described in the SRP, protection of intact habitat will continue to be a priority action given the challenges related to continued population growth in the county and demand for shoreline access. Updating and implementation of the Shoreline Master Program planned by the County over the next few years will be a critical regulatory tool in protection of shoreline habitat. It will also be a priority to foster and promote regulatory programs that support protection actions by citizens such as Public Benefit Rating System (PBRs) and Low Impact Development (LID).

Shoreline Management Program (SMP) Island County is on schedule to update their SMP by 2012. The implementation of habitat protection through regulatory means will be necessary for overall salmon recovery efforts to be successful in Island County. Communication between Island County Planning and Community Development and the TAG regarding the SMP update has been initiated. It will be a priority of lead entity staff to help support the exchange of information between salmon recovery program partners and county staff to support elements of the SMP related to protection of salmonid and nearshore habitats.

Goal 2 – Develop and 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

More research and monitoring are needed to both assess the current status of salmon and the results of restoration and recovery activities. There currently is not monitoring plan adopted by the watershed to guide monitoring activities nor are projects consistently being funded to support monitoring – a need both locally and regionally. This need has been highlighted by the addition of several new projects listed under the “Project Monitoring” section of the matrix.

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Developing an understanding of habitat functions and the distribution of forage fish, salmonids, and marine mammals is crucial to salmon recovery in WRIA 6. Our understanding of the function and role of the nearshore and small stream habitat for salmon in WRIA 6 is still evolving. Recent and ongoing work in the watershed related to fish distribution and habitat use will need to be reflected in updating and implementing our SRP.

As discussed in previous updates, the completion of the “West Whidbey Fish Assessment” study filled a knowledge gap related to fish use causing the watershed to revise our thinking related to geographic priorities. It is expected that ongoing studies and new knowledge will continue to be used to help refine our strategy as completed.

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

Objectives

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.

Education and outreach will be a key component to salmon recovery efforts in Island County as we work to develop community knowledge and support regarding the importance of our local habitats in regional salmon recovery. These activities are strengthened and increase project impact made when coordinated and implemented as part of a more systematic approach.

Involving the community and gaining participation of private citizens is important to the success of the WRIA 6 salmon recovery plan. Outreach to WRIA 6 communities is necessary to develop salmon recovery solutions that will support multiple interests. A critical component of the 10 year plan is to build relationships, foster an understanding of the key role WRIA 6 plays in regional salmon recovery, and implement projects that demonstrate positive outcomes for fish and people.

A committee has been formed from the Salmon TAG and other partners to help advance strategic education/outreach activities and help integrate ongoing efforts being made by partners that will help advance the Goal 3 objectives. A priority will be to develop a comprehensive communication strategy to help in integrating education/outreach efforts in a strategic manner. Consideration should also be made as to how to integrate with ongoing local efforts as well as emerging regional efforts aimed at helping coordinate educational efforts in the form of the EcoNet organizations, of which there are now two in Island County (Whidbey Island EcoNet and a Snohomish/Camano EcoNet).

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.

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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.

Goal 4 will be a priority to help ensure the success of implementing the SRP. Over the next year the watershed will need to address the necessity of integrating ongoing efforts within Island County by partners. It will also be important to integrate the work and efforts of groups such as the TAG, WRAC, MRC and other active local organizations.

Securing funding for organizational capacity for local salmon recovery partners continues to be a critical need identified in this matrix. The “Watershed Plan Implementation & Coordination” 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 not to participate 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 implement the SRP fully.

Building capacity of the Lead Entity organization, Island County, has been supported through PSAR capacity funds to help fulfill some of the key task related to overseeing the Salmon Recovery Program. These funds will ensure the Lead Entity coordinators position is funded fully.

Monitoring and Adaptive Management

Development of a monitoring and adaptive management plans are high priorities for our Salmon Recovery Program. Adaptive management discussions began in development of a subcommittee of the TAG to address these items last fall. While some progress has been made towards drafting a local framework, working towards developing indicators, and inventorying work completed towards the SRP actions, there remains a great deal of work. The subcommittee looks forward to working more closely with the RITT to develop and implement a realistic, useful and applicable monitoring and adaptive management plans. These discussions will continue over the coming months and we intend to review the progress completed in adjacent watersheds.

As called for in regional feedback regarding last years update, these plans will need to integrate all four SRP goals into a single adaptive management strategy. Completing of these tools will provide the watershed the ability to systematically revise and refine our SRP strategies, goals and objectives.

This process will also need to address the question of how monitoring will be funded and who and how the monitoring and adaptive management plans will be overseen within the watershed. As capacity is already an issue within the watershed as well as within the County itself regarding the Salmon Recovery Program, the question of how to efficiently manage and implement will need to be answered. The watershed looks forward to discussing this issue as the plans are developed.

Below are discussions regarding specific questions that have been asked in the 2010 Three-Year Work Plan/Program Guidance.

Consistency Question

1. *What are the actions and/or suites of actions needed for the next three years to implement your salmon recovery chapter as part of the regional recovery effort? (A template spreadsheet with general categories is provided to identify which actions and/or suites of actions are needed. Please note that you can use the HWS to produce a list of habitat actions)*

Matrix is attached with this narrative. Descriptions of each of the project categories included in this narrative.

Pace/Status Question

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

As pointed out 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.

3. *What is the general status of implementation towards your habitat restoration, habitat protection, harvest management, and hatchery management goals? Progress can be tracked in terms of ‘not started, little progress, some progress, or complete’ or in more detail if you choose.*

Habitat restoration: Some progress. See “Matrix Discussion” below.

Habitat protection: Some progress. Protection is a high priority action in the SRP and partners have been fairly successful in acquiring priority site for protection and future restoration opportunities. See “Matrix Discussion” below.

Harvest and Hatchery Management: Little progress made.

Sequence/Timing

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

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Priorities of the SRP have been discussed above and are listed in the “**Key to Priority Tier Abbreviations** (priorities are listed in column three of the IWP matrix)” below. This 3 year work plan is an inclusive list of projects which addresses all goals of our recovery plan. This approach to implementing the plan allows for flexibility as opportunities become available, and local prioritization of projects can be evaluated based on local priorities.

Next Big Challenge

5. Do these top priorities reflect a change in any way from the previous three-year work program? Have there been any significant changes in the strategy or approach for salmon recovery in your watershed? If so, how & why?

No, our priorities have not changed since the previous work program.

6. What is the status or trends of habitat and salmon populations in your watershed?

We are not aware of data that provides any comprehensive evaluation of salmon population or and habitat trends within the watershed.

7. Are there new challenges associated with implementing salmon recovery actions that need additional support? If so, what are they?

The needs and challenges facing the watershed are generally discussed above and are not new (including drafting monitoring and adaptive management plans which will be a priority over the next year).

Like most watershed, Island County has not been protected from the economic downfall. The county itself is facing budget shortfalls which could impact the local capacity to address key regulation updates, provide technical support to landowners, and will be generally challenged to initiate projects to support salmon recovery. Economics may also reduce the ability of partner organizations to be involved in work in the watershed as they evaluate their priorities given financial constraints.

The watershed may need support in considering the update of the WRIA 6 SRP to reflect new knowledge already obtained and expected to be available soon. Regional guidance will be needed to help in identifying how and when this should be addressed appropriately.

2010 Matrix Discussion

The following section discusses each of the categories listed in the matrix. This describes how each category of projects support SRP goals, fit within the local strategy, and briefly describes some of the significant results accomplished.

Key to Priority Tier Abbreviations (priorities are listed in column three of the IWP matrix)

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

Capital Projects-Habitat

At this time the WRIA 6 habitat goal is still quite general: "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". If further habitat losses are to be avoided, a continued commitment to long-term protection must be encouraged. In addition, where we have significant scientific knowledge and local commitment to restoration of key nearshore environments, we should pursue these projects.

Habitat Restoration

Purpose: Over the long-term, enhance and restore habitat functions which support Chinook, other salmonids, and forage fish where there is supporting scientific knowledge and local commitments. Protect and enhance WRIA 6 marine food webs for all salmon that migrate through WRIA 6 marine waters at all life stages. Habitat Restoration advances Goal #1 of the Island County Salmon Recovery Plan.

Strategy: Pursue restoration projects as identified through ongoing feasibility assessments and continue ongoing habitat projects. Act where there are willing landowners, scientific justification, and efficient use of funds. Pursue actions that coincide with ongoing regional efforts, such as ghost nets removal, creosote debris removal in key nearshore habitats, and Spartina control.

WRIA 6 Results: Funding secured to remove riprap from Ala Spit to restore natural sediment processes critical to maintain nearshore and pocket estuary functions. Removal of ghost nets from WRIA as part of northern Sound efforts. Removal of creosote debris from nearshore completed and continues. Spartina control has occurred with removal the majority of most meadows. Additional targeted restoration projects will be pursued where landowner willingness is established. **Result over past year:** Restoration of salmonid access to 200 acres of marsh at Crescent Harbor (north Saratoga Passage) completed in 2009. 234 ghost nets were removed during over the past year in WRIA marine waters (mostly at Foulweather Bluff, Urchin Rocks, and

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Lawson Reef); several sites still need to be investigated for nets, and 24 nets are known to need to be removed at time of writing this document. Spartina control resulted in the treatment of approximately 11 acres of infestation.

Magnitude/Sequence: The actions in this section are initial steps towards a net increase in Chinook, other salmonids, and forage fish habitats in Island County. They are also vital in the building of positive examples of how restoration can occur in a manner the community supports through balancing community concerns and significant benefits to salmon. Marine debris and invasive species can dramatically impact nearshore ecosystem functions for salmon. Many of these actions complement ongoing regional efforts.

Funding: Total estimated project costs are approximately \$2.08 million over the next 3-year period; approximately \$0.5 million has been secured

Changes between 2009 and 2010: No new projects have been added to this list. Spartina control continued as part of the “English Boom/Leque Island” project. SRFB funds have been allocated to fund design at the “Shorecrest Lagoon” site following the acquisition that was completed in 2009. Restoration of Ala Spit site has been funded and design and permitting should be completed in 2010, and restoration is expected in 2011. Restoration of Crescent Harbor Marsh was completed, restoring approximately 200 acres of tidal marsh. Restoration of a pocket estuary in Livingston Bay was funded and expected to occur in 2011 following completion of engineering/permitting. Derelict Net removal occurred in WRIA 6; it is likely that net removal efforts will be reduced in upcoming years as many nets have been removed. Creosote debris was removed from Livingston Bay area and on West Whidbey.

Habitat - Acquisition for Future Restoration

Purpose: Provide permanent protection for nearshore habitats in areas where there is opportunity for significant restoration. Acquisition for Future Restoration advances Goal #1 of the Island County Salmon Recovery Plan.

Strategy: Acquire and/or gain conservation easements where nearshore habitats provide an opportunity to increase the amount of nearshore habitat accessible to fish, focusing on opportunities to restore high priority habitats such as pocket estuaries and marshes. The SRP list one action as “Acquisition of one or more habitat areas that will lead to pocket estuary and /or marsh restoration.”

Results: Acquisition of pocket estuary, marsh, and upland Habitat in Port Susan, contiguous to over 7,000 acres of protected nearshore habitat. Additionally, past acquisitions for protection and/or restoration have occurred at Ala Spit, Deer Lagoon, and Swan Lake. **Results over past year:** Acquisition Shorecrest Lagoon and Skagit Bay Nearshore sites completed for future restoration consideration. Approximately 40 acres of nearshore were acquired in Livingston Bay, including 10 impaired pocket estuary for acquisition which will occur 2011-12. Both of these sites include nearshore and tidal lands in geographic priority 1, and provide the opportunity to remove and restore tidal influence to a pocket estuary habitat.

Magnitude/Sequence: Opportunities to purchase, or gain conservation easements on high priority nearshore habitat with restoration potential, should be pursued where the community shows a willingness to participate.

Funding: Total estimated project costs are approximately \$0 million over the next 3-year period; approximately \$0 million has already been secured.

Changes between 2009 and 2010: Both projects from 2009 IWP have been completed as described above. No new projects

Habitat – Acquisition for Protection

Purpose: Provide permanent protection for high quality nearshore habitats that are at risk. Acquisition for Protection advances Goal #1 of the Island County Salmon Recovery Plan.

Strategy: Acquire and/or gain conservation easements on high quality nearshore habitats that are at risk, focusing on top priority habitats.

Results: Acquisition of pocket estuary, marsh, and upland habitat in Port Susan, contiguous to over 7,000 acres of protected nearshore habitat. **Results over past year:** Approximately 40 of non-developed nearshore where acquired in Livingston Bay included a pocket estuary for

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restoration.

Magnitude/Sequence: Protecting high quality habitats is critical to the overall goal of a net increase in habitat. Opportunities to purchase, or gain conservation easements on high quality nearshore habitat, should be pursued as soon as possible. Population growth in Island County has been rapid in recent years resulting in significant residential development. Island County is now the 5th most densely populated county in the State. Development is likely to continue to be sought at desirable shoreline property.

Funding: Total estimated project costs are approximately \$21.74 million over the next 3-year period. Project sponsors have not clearly indicated how much of this funding has been secured and the bulk of it remains a need.

Changes between 2009 and 2010: It is unknown how much progress has been made regarding the nine new acquisition projects added during last years update. The Salmon TAG helped WCLT identify these nearshore projects using the draft nearshore protection prioritization discussed above. One significant project was added to the matrix which includes protection of an intact feeder bluff and significant portions of important nearshore near Barnum Point/Triangle Cove.

Non-Capital Projects

Harvest Management Support

Purpose: Assess harvest practices to inform improved management of fisheries. Harvest Management Support advances Goal #2 of the Island County Salmon Recovery Plan.

Strategy: Assess terminal area incidental harvest using test fishery procedures.

Results: Improve management of terminal area fisheries. **Results over past year: none**

Magnitude/Sequence: Small scale test fishery proposed to assess specific Whidbey Basin populations.

Funding: No projects are planned to occur for Harvest Management Support at this time. A previously planned project estimated costs of \$60,000/year for a three-year period.

Changes between 2009 and 2010: none

Future Habitat Project Development:

Purpose: Over the long-term, enhance and restore Chinook, sand lance, and herring habitat functions where there is supporting scientific knowledge and local willingness. Future Habitat Project Development advances Goals #2 and #3 of the Island County Salmon Recovery Plan.

Strategy: Many of the top priority nearshore restoration projects in WRIA 6, restoration of pocket estuary and marsh habitats, are constrained by existing beachfront communities. Securing landowner support for restoration projects require a detailed, site specific feasibility study. Studies are necessary to identify and alleviate community concerns, infrastructure constraints, and evaluate design alternatives.

Results: Secure landowner support, establish outreach to neighboring landowners, and evaluate project alternatives at potential project sites bordering Skagit Bay, Saratoga Passage, and West Whidbey. Develop initial project designs for sites where landowner willingness is established and site evaluation shows significant benefit for salmon. Funding was obtained to assess restoration options at Ala Spit. Recommendations outlining future needs of a feasibility study completed at Iverson. **Results over previous year:** The "Skagit Basin Neashore Assessment" was completed by SRSC which assessed the habitat and nearshore processes of 10 WRIA 6 pocket estuaries in Skagit Bay. SRSC also completed feasibility assessments regarding restoration of two pocket estuaries at "Possession Beach" and "Lowell Point". Funding was obtained to conduct a feasibility assessment and public outreach as Deer Lagoon which look at different options to improve tidal connectivity and fish passage to the lagoon. Funding was also obtained to undertake an initial investigation regarding historic connectivity and current hydrological conditions at "Swan Lake" with the goal of obtaining funds to support a detailed assessment of restoration options in the future.

Magnitude/Sequence: This category is critical in advancing priority projects through gaining community support and evaluating alternatives at priority sites.

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Funding: Total estimated project costs are approximately \$1,125,000 over the next 3-year period; approximately \$105,000 has already been secured.

Changes between 2009 and 2010: Funds were obtained to support initial scaled down assessment at Swan Lake, the results of which will define future funding and investigation needs. Funds were also obtained to assess Deer Lagoon restoration options. Two new projects were added to look at the feasibility of enhancing tidal connectivity and fish passage at “Crocket Lake” and “Dugualla Bay”.

Habitat Protection

Purpose: Complement regulatory protections through implementation of voluntary protection strategies along targeted shoreline reaches. Protect nearshore habitat through regular monitoring of habitat quality. When possible, incorporate salmon recovery information in updates of local code. Ensure that local, state, and federal agencies manage resources on public lands in a manner that supports salmon recovery. Non-Capital Habitat Protection advances Goal #1, #3, and #4 of the Island County Salmon Recovery Plan.

Strategies: Evaluation of nearshore protection needs and outreach to landowners to provide wide range of technical assistance. Initiate strategic implementation of stewardship outreach and other protection actions in these areas. Establish a local citizen assessment team to provide early assessment in case of nearshore and marine oil spills. Work with local, state, and federal agencies to evaluate and update habitat management plans on public lands.

Results: Establish methods for nearshore protection evaluation. Where there is a demonstrated willingness, protect high-quality nearshore habitats in areas of multiple private landowners. Preparation for early assessment of oil spill response needs. Establish assurances that management action on publicly owned nearshore properties protects known Chinook, sand lance, and herring habitats. **Results over previous year:** “Strawberry Point Nearshore Protection Project” completed which integrated protection planning, landowner outreach and technical assistance in a geographic priority area.

Magnitude/Sequence: Initial integrated protection projects focus on Geographic Area 1 which covers 26 Whidbey and Camano drainage basins that flow to Skagit Bay and Port Susan (approx. 40 sq. miles) and the nearshore areas along the shoreline of these basins. These nearshore areas are some of the widest in Island County, have the highest concentration of sand lance spawning sites, are recognized by WDFW as herring spawning habitat, and are generally within 5 miles of one of the Whidbey Basin natal rivers. This area is hypothesized to be critical for juvenile Chinook from the Skagit, Snohomish, and Stillaguamish rivers. These activities will provide templates for evaluation of the rest of the WRIA 6 nearshore. Over the last several years the importance of oil spill preparedness has been highlighted throughout the Sound. Early assessment and response is critical during spill events.

State and federal agencies own and manage significant areas of nearshore in Island County. While these agencies already address salmon needs in their management practices, the projects identified in this section are intended to broaden the relationships between agencies and local technical advisors and identify opportunities for additional protection and/or enhancement.

Funding: Total estimated project costs are approximately \$1,268,000 over the next 3-year period; approximately \$237,000 has already been secured (although a significant amount of the funding need will be for regulation updates which are likely to be grant funded).

Changes between 2009 and 2010: No new projects added. The Strawberry Point project discussed above was completed.

Watershed Plan Implementation and Coordination

Purpose: Coordinate and implement salmon recovery projects in WRIA 6. Secure basic level funding for local/regional organizations, allowing staff participation in WRIA 6 salmon recovery work. The organizations that are requesting capacity funding are keys to implementing high priority activities, but have limited capacity to participate in protection, restoration, and science planning processes and project review. Watershed Plan Implementation and Coordination advances Goal #4 of the Island County Salmon Recovery Plan.

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Strategy: Maintain funding for salmon recovery staff. Work with regional organizations to secure funds for other organizations that have expertise in basic salmon recovery support (protection, restoration, and/or nearshore science). Secure funding for development and future implementation of adaptive management program for the WRIA 6 salmon recovery plan.

Results: Increased efforts around targeted salmon and nearshore focused stewardship outreach, landowner technical assistance, project review, data synthesis and distribution, development of quantifiable habitat goals, key research needs, protection strategy, and adaptive management activities as needed. Continuation of local coordination of the following: Salmon Recovery Funding Board process; the Community Salmon Fund process; coordination between local salmon recovery partners, Puget Sound regional staff, and state Department of Fish and Wildlife Lead Entity staff. **Results over previous year:** Completion of 12 “PSAR- capacity” funded projects occurred resulting in watershed partner’s development of numerous future projects including many on listed on the 3 year work plan matrix.

Magnitude/Sequence: The groups that are requesting funding at this time are actively participating to some extent in salmon recovery activities, but are facing limitations to their participation due to funding constraints. Given the small size and rural character of WRIA 6, capacity funding will continue to be a key issue, if the plan is to be implemented. Initial development of an adaptive management framework and project prioritization are both high priorities watershed partners are interested in developing, with some development pursued through a partnership between University of Washington School on the Environment and the Marine Resources Committee. Basic capacity funding constitutes a need for most watershed sponsors if work is to continue towards filling data gaps.

Funding: Total estimated project costs are approximately \$1,176,500 million over the next 3-year period; approximately \$482,000 has already been secured. Figures do not include cost of implementing and overseeing an adaptive management plan which is expected to be completed during this time period.

Changes between 2009 and 2010: Capacity funding was secured through the Puget Sound Acquisition and Restoration funds to support capacity of the Lead Entity core functions, development of 3 year work plans in 2010 and 2011, support of the Habitat Work Schedule, and further development of the Protection Prioritization project to help in identifying priority nearshore sites and associated protection actions at each. Efforts by many partners to engage in implementing the SRP and participating in salmon recovery projects and programs will be limited by funding restraints. Initial steps are underway to develop recommendations needed to create a local adaptive management framework.

Outreach and Education

Purpose: Provide outreach to residents and visitors throughout WRIA 6 about the importance of nearshore habitats and opportunities to protect and restore habitats. Provide targeted outreach to residents and visitors throughout WRIA 6 about the importance of nearshore habitats to Chinook, sand lance, and herring. Landowner stewardship programs will focus first on communities in Geographic Area 1. Outreach and Education advances Goal #3 of the Island County Salmon Recovery Plan.

Strategy: Complete an assessment of citizen knowledge about salmon in WRIA 6 to gage the level of landowner willingness to participate in voluntary protection, enhancement, and restoration projects. Develop and implement targeted outreach strategies using existing programs, and when necessary, new materials and programs.

Results: Provide a baseline summary of citizen knowledge to salmon recovery partners and elected officials in WRIA 6. Increase community awareness of local salmon recovery issues, specifically the habitat needs of Chinook, sand lance, and herring; and links between upland and nearshore habitats. Direct shoreline landowner outreach to communities/homeowners associations in Geographic Area 1. **Results over previous year:** Community assessment of landowner attitude and knowledge completed by Island County and supported through NEP funds. This document also in detail discussed integration opportunities related to watershed partners involved in salmon recovery activities. Educational signage was installed at nine parks in

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the watershed highlighting the importance of marine and nearshore for salmon, forage fish and other species.

Magnitude/Sequence: This activity is meant to expand local knowledge about the community and make use of this to target current programs and develop complimentary programs. Outreach to local schools, and other community venues provide vital support for local salmon recovery efforts. The activities identified here are meant to target current and new programs.

Funding: Total estimated project costs are approximately \$414,000 over the next 3-year period; approximately \$100,000 has already been secured

Changes between 2009 and 2010: Parks and local municipalities were provided interpretive signage for posting on marine mammals through funding by NOAA marine mammal stranding grant. MRC has installed several signs at Marine Steward Areas to highlight importance of nearshore in context to flora, fauna and people, with additional signage to be installed in next few years. Capacity of sponsors to carry out all planned activities listed in plan may be limited depending on reduced funding.

In stream Flow Protection

Purpose: Maintain freshwater resource quantities sufficient to support salmon recovery and other beneficial uses. In-Stream Flow Protection advances Goal #1 and #2 of the Island County Salmon Recovery Plan.

Strategy: Assessment of coastal watershed freshwater resources to inform future project development.

Results: Increased habitat data about freshwater connectivity. **Results over previous year:**

Magnitude/Sequence: This issue is a data gap for WRIA 6 related to habitat structure and function.

Funding: Total estimated project costs are approximately \$40,000 over the next 3-year period; funds have not yet secured funding for this project.

Changes between 2009 and 2010: This is the third year that watershed assessment has been on the 3-year IWP. There continues to be a minimal amount of effort focused on In-stream flow protection in Island County.

Habitat Project Monitoring

Purpose: Initiate monitoring activities to evaluate salmon recovery projects in WRIA 6. Habitat Project Monitoring advances Goal #2 of the Island County Salmon Recovery Plan.

Strategy: Establish robust monitoring program to help in evaluating projects and strategy, and supporting adaptive management. Ensure pre and post - monitoring as appropriate

Results: Data from this monitoring program will be used as a part of the future WRIA 6 salmon recovery adaptive management program. **Results over previous year:** Project sponsored by MRC and WSU Beachwatchers to inventory eelgrass along WRIA 6 shorelines ongoing and seemingly very successful.

Magnitude/Sequence: These activities are the initial steps towards a robust project monitoring program.

Funding: Total estimated project costs are \$334,100 over the next 3-year period; minimal funds have been secured.

Changes between 2009 and 2010: A post-construction monitoring project was added for Ala Spit. Monitoring funding continues to be a need at the Crescent Harbor site to evaluate post-construction. Pre and Post-monitoring at Shorecrest Lagoon was added; restoration design underway.

Stock Monitoring Support

These activities should be a part of a regional monitoring program

Purpose: Initial quantification of the relationships between nearshore habitat functions and Chinook life histories based on data collected over the last five years. Stock Monitoring Support advances Goal #2 of the Island County Salmon Recovery Plan.

Strategy: Pursue fisheries science collaboratively at sub-region scale, addressing the Whidbey

WRIA 6 (Island) 2010 3-Year Implementation Work Plan Narrative

Basin and the west side of Whidbey as distinct sections of WRIA 6. Continue marine fish distribution surveys, identify stock origins, and initiate an evaluation of marine trophic interactions as an initial step in H-integration.

Results: Initial quantification of habitat goals and qualitative statement about likely VSP responses. **Results over previous year:** Completion of “WRIA 6 Juvenile Salmon Origins” project nearing completion.

Magnitude/Sequence: The funding amounts listed with these projects address the funding necessary for research in WRIA 6. Local activities should be linked to actions throughout each sub-region to provide the best results. These activities are necessary steps towards quantifiable recovery goals.

Funding: Total estimated project costs are approximately \$800,000 over the 3-year period; approximately \$350,000 has been secured

Changes between 2009 and 2010: Monitoring in Skagit Bay as an Intensively Monitored Basin is ongoing and funding for the juvenile Chinook origins project was secured through the 2007 SRFB/PSAR grant round. No new projects added to this section. Frankly, the status of many of the listed projects is unclear.

Research

Purpose: Increase specificity in identifying projects and habitat priorities; increase knowledge about species that support salmon in the nearshore. Research advances Goal #2 of the Island County Salmon Recovery Plan.

Strategy: Local understanding of the ways in which nearshore habitats provide functions for salmon is continuing to evolve. This section identifies two types of research: 1) hydrologic modeling for the Whidbey Basin and for Admiralty Inlet, which are considered to be key steps towards increasing our understanding of benefits to fish and the dynamics at individual sites; and 2) specific assessments on habitat components – forage fish and eelgrass.

Results: These research projects will be integral to creation of adaptive management of the salmon recovery plan. **Results over previous year:** Monitoring of pigeon guillemont burrows and life history continues. Guillemont’s dependence on forage fish and spend “nest” in Island County.

Magnitude/Sequence: Completing these projects are critical steps to increasing our ability to best prioritize habitat projects.

Funding: Lack of updated information does not allow for accurate

Changes between 2009 and 2010: No new projects added this year. A project monitoring shorebird habitat and lifestyle survey will be continued. These birds feed on forage fish and may help in understanding the ecosystem more completely. Frankly, the status of many of the listed projects is unclear.

Priority Projects and Programs Benefiting Non-Listed Species

Purpose: Protect and restore upland hydrology, water quality, and riparian habitats with value for multiple salmonid species, focusing on projects in salmonid bearing streams and projects with significant outreach components. This broad section of the work plan advances all goals of the Island County Salmon Recovery Plan. Projects focusing on the lower sections of stream systems may become a higher given ongoing studies looking at the use of these areas for Chinook rearing.

Strategy: The actions listed in this section target upland hydrology and water quality; and instream fish passage and riparian projects. These projects represent some of the key activities for both listed and non-listed species being pursued by local salmon recovery partners.

Results: Improved upland hydrology, water quality and riparian habitats benefiting salmon in the nearshore and the health of Puget Sound. Many of the projects added to this list have secured funding and focus on water quality improvements. **Results over previous year:** Water quality monitoring is now in its fifth year. Smolt surveys on the Maxwellton stream system continued with fish observed in Quade Creek.

WRIA 6 (Island) 2010 3-Year Implementation Work Plan Narrative

Magnitude/Sequence: Protecting and enhancing water quality and quantity feeding the nearshore is a key priority for maintaining the health of Puget Sound.

Funding: Total estimated project costs are approximately \$2.9 million over the 3-year period; approximately \$1.2 million has been secured

Changes between 2009 and 2010: A significant flood event occurred spring of 2009 in the Glendale stream which has required restoration and stream improvements, with more significant efforts likely to be focused on the lower section of the creek. Agencies are continuing to develop initial plans for addressing this disturbance. Significant outreach efforts have been undertaken by the County to support community understanding of the situation.

2010 Island County three-year Watershed Implementation Priorities

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	2010 Activity to be funded - Scope	2010 Estimated Cost	2011 Activity to be funded - Scope	2011 Estimated cost	2012 activity to be funded - scope	2012 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																				
Habitat Restoration																				
Ala Spit Enhancement & Protection	protection and/or restoration of 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 900 feet of riprap; restore natural nearshore processes to spit	Chinook		Feasibility Completed; Working on Permitting and final design	final design & permitting; landowner outreach	\$50,000	construction	\$265,000	Post construction monitoring (see below)		2010	Island County	\$315,000	\$48,000	SRFB (funded); local; Island County Mostly funded with NOAA/Recovery Act funding through end of 2010
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	Estuary or Nearshore	Survey and remove derelict nets	Chinook		Ongoing	survey and removal	\$234,000	survey and removal	\$50,000	\$0		2011	NW Straits Foundation	\$284,000		
Spartina Removal Projects	identification and removal of Spartina anglica throughout Island County	A = 2 GA = all H = 1,2 P = 1,2	Loss of Habitat	nearshore embayments	Estuary or Nearshore	Monitor and remove spartina; anticipation of approximately 15 acres in 2010	Chinook		Large proportion of sites have been treated; ongoing monitoring & and treatment of identified sites planned	monitoring & removal	\$25,000	monitoring & removal	\$25,000	\$25,000	ongoing	IC Weed Control, WDFW, NGOs	\$75,000	\$60,000	WDFW; Marine Conservation Fund	
Livingston Bay Pocket Estuary Restoration	restoration of tidal connectivity by removing section of dike (contingent on assessment recommendations and landowner willingness)	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 100 foot section of dike	Chinook	Chum	Acquisition complete; design and restoration funded	design & permitting	\$70,000	final design & permitting, construction	\$140,000			2011	The Nature Conservancy	\$210,000	\$62,000	SRFB/PSAR; local; others sought
Cornet Bay Enhancement/Restoration	enhancement of eelgrass, marshland and forage fish habitat at Deception Pass State Park nearshore in Cornet Bay	A = 2 GA = 1 H = 2 P = 2	Reduced Habitat Capacity	nearshore beaches	Estuary or Nearshore	Restore 2500 feet of nearshore	Chinook		Completing 100% Design documents, archeological work and pre-permitting	permitting and groin removal	\$150,000	permitting and segment construction	\$200,000	permitting and segment construction	\$150,000	2013	NOAA	\$500,000	\$319,000	NFWF, NOAA (MRC), USFWS, WA Parks Some Adaptive Management and Maintenance Elements Are not. Mostly funded: SRFB, ESRP, SRSC, Navy.
Crescent Harbor Marsh Restoration	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 200 acres of salt marsh habitat	Chinook		construction & connection completed in 2009; monitoring and adaptive management to follow construction	Adaptive Management Elements. Monitoring some maintenance.	\$77,000					2010	Skagit River System Coop, Navy	\$77,000	?	
West Deer Lagoon Tidal Restoration	restoration of tidal connectivity (contingent on assessment recommendations and landowner willingness)	A = 2 GA = 2 H = 1 P = 1	Loss of Habitat	nearshore embayments	Estuary or Nearshore	Restore tidal connection between to historic pocket estuary of approximately 400 acres	Chinook	Chum	Feasibility study funded	design, permitting, construction				\$350,000		2011	Wild Fish Conservancy	\$350,000	\$0	unknown
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		Ongoing	removal of creosote debris and pilings	\$20,000	No WA State funds		No WA State funds		unknown	WA DNR, local volunteers, MRC	\$20,000	\$0	partially funded: WA DNR
English Boom/Leque Island Tidal flood plain restoration	Restore tidal hydrology to dike tidal flood plains	A = 1 GA = all H = 1 P = 1	Loss of Habitat	nearshore embayments	Estuary or Nearshore		Chinook				\$250,000					WDFW	\$250,000		SRFB/PSP/ALEA; WDFW	
Total \$ Restoration =																		\$2,081,000	\$489,000	
Habitat Acquisition for restoration																				
COMPLETED - 2009 Skagit Bay Nearshore Protection	protection of high priority nearshore on NE Whidbey in Skagit Bay; provide potential for nearshore restoration	A = 1 GA = 1 H = 1 P = 1	Reduced Habitat Capacity	nearshore embayments	Land Protected, Acquired, or Leased	Acquire high priority nearshore for protection and future restoration; potential of up to approx. 30 acres of nearshore could be restored	Chinook		Acquisition completed							2009	Whidbey Camano Land Trust	\$0		funded: SRFB/PSAR, local
COMPLETED - 2009 Livingston Bay Nearshore Acquisitions & Restoration	protection and future restoration of high priority nearshore in N Port Susan	A = 1 GA = 1 H = 1 P = 1	Loss of Habitat	nearshore embayments	Land Protected, Acquired, or Leased	Acquisition of approximately 40 acres nearshore containing 10 acre pocket estuary for restoration	Chinook		Acquisition completed							2009	The Nature Conservancy	\$0		partially funded: SRFB, USFWS
Habitat Acquisition for protection																				
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 (1 conservation easement)	\$30,000	top priority nearshore acquisitions (3 conser. Easements)	\$550,000	top priority nearshore acquisitions (3 conser. Easements)	\$750,000	2015	Whidbey Camano Land Trust	\$1,330,000	\$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 conservation easement)	\$50,000	top priority nearshore acquisitions (1 conser. Easements)	\$600,000	top priority nearshore acquisitions (2 conser. Easements)	\$725,000	2014	Whidbey Camano Land Trust	\$1,375,000	\$200,000	Unknown

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 conservation easement)	top priority nearshore acquisitions (1 conser. Easements)	\$20,000	top priority nearshore acquisitions (1 conser. Easements)	\$150,000	top priority nearshore acquisitions (1 conser. Easements)	\$1,200,000	Whidbey Camano Land Trust	2014	\$1,370,000	\$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 (1 conservation easement)	top priority drainage acquisitions (2 conservation easement)	\$10,000	top priority drainage acquisitions (3 conservation easement)	\$220,000	top priority drainage acquisitions (1 conservation easement)	\$600,000	Whidbey Camano Land Trust	2015	\$830,000	\$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)	top priority nearshore acquisitions (1 conservation easement)	\$60,000	top priority nearshore acquisitions (1 conservation easement)	\$75,000	top priority nearshore acquisitions (1 conservation easement)	\$65,000	Whidbey Camano Land Trust	2020	\$200,000	\$30,000	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	three conservation easements protecting nearshore habitat and processes	Chinook	Conceptual	top priority nearshore acquisitions (2 conservation easement)	top priority nearshore acquisitions (1 conservation easement)	\$50,000	top priority nearshore acquisitions (1 conservation easement)	\$50,000	top priority nearshore acquisitions (1 conservation easement)	\$1,700,000	Whidbey Camano Land Trust	2018	\$1,750,000	\$275,000	Unknown
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	Chinook	Conceptual	top priority nearshore acquisitions (2 conservation easement)	top priority nearshore acquisitions (conservation easements)	\$50,000	top priority nearshore acquisitions (2 conservation easements)	\$50,000	top priority nearshore acquisitions (conservation easements)	\$1,500,000	Whidbey Camano Land Trust	2016	\$1,550,000	\$225,000	Unknown
Ebey's Reserve High Priority Habitat Protection	acquisitions that protect intact top priority nearshore processes and functions	A = 1 GA = 2 & 3 H = all P = all	Loss of Habitat	nearshore embayments	Land Protected, Acquired, or Leased	conservation easements protecting nearshore habitat and processes	Chinook	Conceptual	top priority nearshore acquisitions	top priority nearshore acquisitions	\$5,000,000	top priority nearshore acquisitions	\$5,000,000	top priority nearshore acquisitions	\$5,000,000	Whidbey Camano Land Trust	2012	\$5,000,000	\$750,000	Unknown
****NEW PROJECT ****	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 and Feasibility assessment underway	Project scoping, appraisal, and secure initial funding	top priority nearshore acquisition (phase one of three)	\$30,000	top priority nearshore acquisition (phase two of three)	\$2,500,000	top priority nearshore acquisition (phase two of three)	\$4,500,000	Island County, Whidbey Camano Land Trust, The Nature Conservancy	2015	\$7,000,000	\$1,050,000	SRFB, Local, NOAA, USFWS, private, other sources
Total \$ Habitat Acquisition for restoration =																		\$21,735,000	\$3,255,000	
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.																			
Other	NONE																			
Total Capital Need:																		\$23,816,000	\$3,744,000	
Non-Capital Programs - Listed Species																				
Harvest Management Support	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.																			
Future Habitat Project Development	Projects designed to assess future needs for habitat restoration projects.																			
****COMPLETED - 2009****	habitat and process assessment of 10 WRIA 6 Skagit Bay pocket estuaries	A = 2 GA = 1 H = 1 P = 1	Loss of Habitat	nearshore embayments	Estuary or Nearshore	Report/assessment 10 Skagit Bay Pocket Estuaries	Chinook	Data collection completed; Report completed								Skagit River System 2009 Cooperative		\$0		funded: SRFB, SRSC
Possession Beach Feasibility	feasibility assessment of pocket estuary restoration options	A = 2 GA = 2 H = 1 P = 1	Loss of Habitat	nearshore embayments	Estuary or Nearshore	Feasibility study to determine restoration potential	Chinook	Completed 2009: Feasibility study	feasibility assessment	\$40,000						Skagit River System Cooperative; S. Whidbey Port	2010	\$40,000	\$40,000	funded: Swinomish & Lummi
Lowell Point Feasibility	feasibility assessment of pocket estuary restoration options	A = 2 GA = 2 H = 1 P = 1	Loss of Habitat	nearshore embayments	Estuary or Nearshore	Feasibility study to determine restoration potential	Chinook	Completed 2009, Feasibility study	feasibility assessment	\$40,000						Skagit River System Cooperative; State Parks	2010	\$40,000	\$40,000	funded: Swinomish & Lummi
West Deer Lagoon Feasibility Assessment and Neighborhood Outreach	feasibility assessment of enhancing tidal connectivity and fish passage	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 funded	assessment	\$180,000						Wild Fish Conservancy	2010	\$180,000	\$0	SRFB/PSAR
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	Conceptual; initial conceptual study completed				feasibility study, design	\$160,000			Island County, Stillaguamish Tribe, Wild Fish Conservancy	2010	\$160,000	\$0	SRFB
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	Prepare feasibility study and conduct public outreach	Chinook Chum	Conceptual; initial conceptual study funded	initial site assessment funded	\$45,000	assessment	\$190,000				Swan Lake Watershed Preservation Group; Skagit Fisheries Enhancement Group	2010	\$235,000	\$25,000	SRFB; County; local
****NEW PROJECT ****	feasibility assessment of enhancing fish passage	A = 2 GA = 1 H = 1 P = 1	Loss of Habitat	nearshore embayments	Estuary or Nearshore	Study to improve feasibility of improving fish passage	Chinook Chum	Conceptual				feasibility study	\$50,000			2011 Tulalip; Island County		\$50,000	\$0	SRFB, ESRP
****NEW PROJECT ****	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 Lights	2013	\$170,000	\$0	SRFB, ESRP

****NEW PROJECT **** Dugalla Bay	feasibility assessment of enhancing tidal connectivity and fish passage	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	feasibility study	\$175,000	Design	\$125,000	Navy, Whidbey Camano LT, SRSC, 2013 others	\$300,000	\$0	SRFB, ESRP, PSNERP, NAVY	
Total \$ Habitat Project Development =															\$1,175,000	\$105,000		
Habitat Protection Projects designed to assess, monitor, or participate in planning activities related to habitat protection. This includes monitoring.																		
COMPLETED - 2009 Strawberry Point Nearshore Protection Project	integrated protection planning, landowner outreach, & technical assistance	A = 1 GA = 1 H = all P = all	Loss of Habitat	nearshore beaches	Estuary or Nearshore	education/outreach, protection planning, and technical assistance in priority nearshore area	Chinook		Completed March 2010					Island County ; Whidbey 2009 Conservation District	\$0	\$5,000	funded: SRFB	
Penn Cove and Admiralty Inlet Nearshore Water Quality Restoration	integrated protection planning, technical assistance and nearshore water quality remediation implementation	A = 1 GA = all H = all P = all	landowner permission	nearshore beaches	Estuary or Nearshore		Chinook	bi-valves	Implemented	installation and monitoring	\$75,000	phyto-remediation monitoring, evaluation and reporting	Continued monitoring and landscape scale phyto planning	2012 MRC, Island County Watershed Implementation Planning Unit, Town of Coupeville, US National Parks Service (easement)	\$113,000	\$127,000	IC MRC, IC Health Department, Town of Coupeville and US Parks (easement)	
North Camano Nearshore Protection Project	integrated 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 properties	Chinook		Conceptual			protection plan, landowner outreach and technical assistance	landowner outreach and fundraising for acquisitions	2012 MRC; Island County	\$150,000	\$0	unknown	
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	synthesis	2012 MRC; Island County	\$50,000	\$0	unknown	
Island County SMP & CAO Update	update of critical area regulations; wetland section completed	A = 1 GA = all H = all P = all	Reduced Habitat Capacity	riparian; nearshore	Riparian	Review and update F&W section of ordinance	Chinook	Forage fish, coho, chum	Planned	update of fish and wildlife section of ordinance; SMP	\$250,000	update of fish and wildlife section of ordinance; SMP	update of fish and wildlife section of ordinance; SMP	2010 Island County	\$750,000 ?		Island County	
Island County Owned Nearshore Protection Project	review & update management plans for county 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		Conceptual			ID of properties, draft management plan review/ evaluation of state ownership & discussion w/ agencies	finalize plan & evaluation	ongoing MRC; Island County	\$105,000	\$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		Conceptual					2010 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		Conceptual			review/ evaluation of state ownership & discussion w/ agency		2010 MRC; Island County	\$50,000	\$0	unknown	
Total \$ Non-Cap Habitat Protection =															\$1,268,000	\$237,000		
Watershed Plan Implementation & Coordination Projects designed to increase the capacity of watersheds to implement the recovery plan. T																		
Salmon Lead Entity Coordinator	Lead Entity tasks, Recovery Chapter coordination	A=1	Human Resources	All	All		Chinook		Ongoing	LE operational grant tasks, etc.	\$65,000	LE operational grant tasks, etc.	LE operational grant tasks, etc.	ongoing Island County	\$195,000	\$270,000	funded: Lead Entity operational grant	
Marine Resources Committee Coordination & Staff	MRC coordination	A=1	Human Resources	All	Estuary or Nearshore				Ongoing	MRC coordination	\$38,000	MRC coordination		ongoing WSU Extension	\$78,000	\$116,000	funded: NW Straits Commission	
Protection Capacity Funding	landowner outreach and fundraising for acquisitions	A=1	Human Resources	All	Estuary or Nearshore		Chinook			landowner outreach and fundraising for acquisitions; LE participation	\$27,000	landowner outreach and fundraising for acquisitions; LE participation	landowner outreach and fundraising for acquisitions; LE participation	ongoing Whidbey Camano Land Trust	\$81,000	\$0	unknown	
Protection Capacity Funding	stewardship outreach, landowner technical assistance, and LE participation	A=1	Human Resources	All	Upland Agriculture					stewardship outreach, landowner technical assistance, and LE participation	\$50,000	stewardship outreach, landowner technical assistance, and LE participation	stewardship outreach, landowner technical assistance, and LE participation	ongoing Whidbey and Snohomish Conservation Districts Skagit River System Cooperative, Stillaguamish Tribe, Tulalip Tribes	\$150,000	\$0	unknown	
Protection Capacity Funding	project review, stewardship outreach, & LE participation	A=1	Human Resources	All	Estuary or Nearshore		Chinook			project review, stewardship outreach, and LE participation	\$50,000	project review, stewardship outreach, and LE participation	project review, stewardship outreach, and LE participation	ongoing Marine Resources Committee	\$150,000	\$0	unknown	
Restoration Capacity Funding	project identification, scoping & fundraising	A=2	Human Resources	All	Estuary or Nearshore		Chinook			project identification, scoping, & fundraising; LE participation	\$15,000	project id, scoping, & fundraising; LE participation	project id, scoping, & fundraising; LE participation	ongoing Skagit River System Cooperative	\$60,000	\$0	unknown	
Restoration Capacity Funding	project identification, scoping, & fundraising; landowner technical assistance	A=2	Human Resources	All	Estuary or Nearshore		Chinook			project id, scoping, & fundraising, landowner technical assistance	\$20,000	project id, scoping, & fundraising, landowner technical assistance	project id, scoping, & fundraising, landowner technical assistance	ongoing Stillaguamish Tribe	\$60,000	\$0	unknown	
Restoration Capacity Funding	project identification, scoping, & fundraising; landowner technical assistance	A=2	Human Resources	All	Instream		Coho	Cutthroat		project id, scoping, & fundraising, landowner technical assistance	\$15,000	project id, scoping, & fundraising, landowner technical assistance	project id, scoping, & fundraising, landowner technical assistance	ongoing Whidbey Watershed Stewards	\$45,000	\$1,500	WWS Local contributions	
Restoration Capacity Funding	project identification, scoping & fundraising; landowner technical assistance	A=2	Human Resources	All	Estuary or Nearshore		Chinook			project id, scoping, & fundraising, landowner technical assistance	\$20,000	project id, scoping, & fundraising, landowner technical assistance	project id, scoping, & fundraising, landowner technical assistance	ongoing Tulalip Tribes	\$60,000	\$0	unknown	

Nearshore Science Capacity Funding	project scoping & fundraising, data synthesis, presentations	A=1	Human Resources	All	Estuary or Nearshore	Chinook		project scoping & fundraising, data synthesis, presentations	\$37,500	project scoping & fundraising, data synthesis, presentations	\$37,500	project scoping & fundraising, data synthesis, presentations	\$37,500	ongoing	Skagit River System Cooperative	\$112,500	\$0	unknown
Nearshore Science Capacity Funding	project scoping & fundraising, data synthesis, presentations	A=1	Human Resources	All	Estuary or Nearshore	Chinook		project scoping & fundraising, data synthesis, presentations	\$15,000	project scoping & fundraising, data synthesis, presentations	\$15,000	project scoping & fundraising, data synthesis, presentations	\$15,000	ongoing	Wild Fish Conservancy IC Marine Resources Committee, WSU Extension	\$45,000	\$0	unknown
Shore Stewards Coordination	program coordination - newsletters, events, technical assistance, etc.	A=1	Human Resources	All	Estuary or Nearshore			program coordination	\$33,000	program coordination	\$31,000	prog. coord	\$31,000	ongoing		\$95,000	\$95,000	IC MRC
WRIA 6 Monitoring & Adaptive Management Planning and Implementation	programmatic evaluation of projects/programs and ecosystem functions	A=1	Human Resources	All	All	Chinook		implement adaptive management plan		implement adaptive management plan		implement adaptive management plan		ongoing	WRIA 6 TAG; Island County ; MRC	\$0 ?		unknown
Total \$ Watershed Plan Imple. & Coord. =																\$1,176,500	\$482,500	

Outreach & Education Projects designed to increase outreach and education related to watershed health and salmon recovery.

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.	installation	install 4 signs	\$13,000	install 2 signs	\$6,000	install 2 signs	\$6,000	ongoing	MRC & partners	\$25,000	\$20,000	NWSC (NOAA) via MRC
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			Report assessing community knowledge and support	Conceptual; initial report finalized 2009	follow-up assessment			\$15,000		ongoing	Island County ; Island County MRC	\$15,000	\$15,000	baseline funded: Ecology Integration Grant	
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	Chinook		2-3 workshops/year	Ongoing; 2 workshops completed in 2008 (NE Camano & NE Whidbey)	2-3 workshops	\$6,000	unknown	unknown		ongoing	Island County ; MRC/Shore Steward Program	\$6,000	\$12,000	unknown; partially funded: County, MRC	
Deception Pass SP Salmon Outreach Campaign	develop educational materials and outreach events targeting park visitors	GA = 1 H = all P = all	Community Engagement	All	All	Chinook			Conceptual	design, develop outreach materials	\$100,000	materials, activities	\$100,000		ongoing	2010 State Parks	\$200,000	\$0	unknown	
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	Estuary or Nearshore	Chinook			Ongoing; some sites completed	2009 results	\$4,000	2009 results	\$4,000	2009 results	\$4,000	ongoing	SRSC, NOAA, WSU Extension, Island County	\$12,000	\$2,500	partially funded: county
Watershed Stewardship Program	upland link with Shore Stewards program	A = 2 GA = all H = all P = all	Community Engagement	All	All	Coho	Cutthroat	Increase participation; mobilize citizens promoting nearshore protection, increased knowledge of salmon; reduced non-point pollution	conceptual	design, outreach materials	\$30,000	outreach materials, outreach activities	\$20,000	outreach materials, outreach activities	\$20,000	ongoing	Whidbey Watershed Stewards, WSU Extension	\$70,000	\$20,000	unknown
Booklet: Salmon Swim Amongst Us	telling the story of salmon passing through Island County	A = 2 GA = all H = all P = all	Community Engagement	All	Estuary or Nearshore	Chinook		Provide and distribute strategically	Design completed; needs to be printed	development & printing	\$7,000	reprint	\$4,000		ongoing	Orca Network	\$11,000	\$0	unknown	
K-12 School Programs	education about watershed and nearshore functions for salmon	A = 2 GA = all H = all P = all	Community Engagement	All	All			K-5 grade classes at Maxwellton Classroom; 500-1000 students visits/yr; service-learning with middle school, high school, Scouts, and Community College students; boat trips for students and teachers	Underway by sponsor; no outside funding obtained	presentations	\$15,000	presentations, service learning	\$15,000	presentations, service learning	\$15,000	ongoing	Whidbey Watershed Stewards, Fisheries Enhancement Groups, WSU Extension; SEA; Oak Harbor; WA state parks	\$45,000	\$15,000	unknown
Sportfishing Outreach	outreach campaign to sportfish community at boat ramps &	A = 1 GA = all H = all P = 2	Community Engagement	All	Estuary or Nearshore			Presentations at sportfishing events establish contact with willing landowners for restoration projects, improve public awareness, reduced non-point pollution	Conceptual	materials, outreach	\$5,000	outreach	\$5,000	outreach	\$5,000	ongoing	Island County; Lead Entity staff	\$15,000	\$15,000	unknown
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 but project not yet begun	outreach	\$5,000	outreach	\$5,000	presentations	\$5,000	ongoing	Whidbey Watershed Stewards	\$15,000	\$0	unknown
****NEW PROJECT 2010 ***** "Return of the Salmon" celebration	Annual community event to raise awareness of salmon use in Island County	A = 2 GA = all H = all P = all	Community Engagement	All	All			Annual event aimed at awareness of community regarding salmon use and importance in ecosystem	Conceptual	event	\$10,000	event	\$10,000	event	\$10,000	ongoing	Whidbey Watershed Stewards; Orca Network	\$30,000	\$30,000	unknown
****NEW PROJECT 2010 ***** Communication Plan	Plan to help in strategically implementing communication activities in the watershed related to salmon recovery	A = 2 GA = all H = all P = all	Community Engagement	All	All	Chinook	forage fish, othe	Document outlining strategic actions related to implementing salmon recovery action and integrating ongoing efforts happening in the watershed	Conceptual	prepare plan/strategy					ongoing	Island County; TAG	\$0		unknown	
Total \$ Outreach & Education =																\$444,000	\$129,500			

Instream Flow Protection Projects designed to protect instream flows.

Watershed analysis	connectivity of water resources	A = 2 GA = all H = all P = all	Altered Stream Morphology/Stream Flow Patterns	instream	Instream				Ongoing;	analysis & data compilation	\$20,000	analysis & data compilation	\$20,000		ongoing	Tulalip Tribes	\$40,000	\$0	
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										Total \$ Instream Flow Protection = \$40,000 \$0							
Project Monitoring Projects designed to monitor habitat projects. Includes adaptive management monitoring and post-construction monitoring.																	
North Whidbey Forage Fish Monitoring (Cornet Bay)	pre and post restoration monitoring of habitat and fish use	A = 2 GA = 1 H = 2 P = 2				5000 feet of shoreline monitoring	Chinook	Forage Fish	active monitoring	restoration monitoring	\$3,000	post-monitoring, \$5,000		MRC, WDFW, WSU 2011 Extension	\$8,000		
North Whidbey Salmonid Fish Use Monitoring (Cornet Bay)	pre and post restoration monitoring of habitat and fish use	A = 2 GA = 1 H = 2 P = 2				10 sites monitored			active monitoring	restoration monitoring	\$3,000	post-monitoring, \$5000		MRC, NOAA, WSU 2011 Extension	\$3,000		
WRIA 6 Eelgrass Mapping and Monitoring	pre and post restoration monitoring of habitat	A = 2 GA = 1 H = 2 P = 2	Loss of Habitat	nearshore	Estuary or Nearshore	24 DNR segments per year	Chinook	Forage Fish	active mapping and analysis	continued mapping and data analysis	\$14,100	continued mapping and data analysis	continue mapping and data analysis	MRC, WSU Beach Watchers monitors 2015	\$28,100	\$21,000	NWSC (NOAA) via MRC
Follow-up Monitoring Crescent Marsh Restoration	post construction monitoring of habitat and fish use	A = 2 GA = 2 H = 1 P = 1	Loss of Habitat	nearshore	Estuary or Nearshore	Monitor habitat and fish use in 200 acre restored salt marsh	Chinook		Construction ongoing (see above description in Restoration); implementation following restoration	habitat and fish surveys	\$35,000	habitat and fish surveys	habitat and fish surveys	Navy, University of Washington; Skagit River System Coop; 2012 Beachwatchers	\$105,000	\$0	Partially Funded; Navy
****NEW PROJECT 2010 ***** Shorecrest Lagoon	pre and post restoration monitoring	A = 2 GA = 1 H = 1 P = 1	Loss of Habitat	nearshore	Estuary or Nearshore	monitor habitat and fish use in ~10 acre restored pocket estuary	Chinook	chum	restoration design funded	Pre restoration construction monitoring	\$50,000	Pre restoration monitoring	post-construction monitoring (habitat & fish)	WCLT; SRSC	\$150,000		???
****NEW PROJECT 2010 ***** 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	Estuary or Nearshore	Post construction/restoration at spit	Chinook	Bull trout; Forage fish; Chum	Feasibility Completed; Working on Permitting and final design and construction			post-construction monitoring (habitat & fish)	post-construction monitoring (habitat & fish)	2013 Island County	\$40,000 ?		Local, ?
										Total \$ Project Monitoring = \$334,100 \$21,000							
Stock Monitoring Support Projects designed to monitor stocks.																	
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	synthesis of all WRIA habitat and fish data	\$60,000			Skagit River System 2010 Cooperative	\$60,000	\$140,000	funded: SRFB, SRSC, partners
Skagit Bay Nearshore/Marine Salmonid Distribution	Intensively Monitored Watershed - assessment of distribution of out-migrating fish	A = 1 GA = 1 H = all P = all	NA	nearshore	Estuary or Nearshore	10 year study monitoring Chinook in Skagit Bay	Chinook		On-going monitoring; Results will be synthesized 2010	monitoring; data synthesis	\$200,000			Skagit River System Cooperative, NOAA, 2010 ??	\$200,000	\$200,000	Funded: NOAA, IMW SRFB, Tribes
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		Ongoing	beach seining	\$150,000	beach seining	\$150,000	ongoing Tribes, NOAA, WSU Extension	\$300,000	\$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		seining	\$100,000	seining	\$100,000	ongoing Tribes, NOAA, Wild Fish Conservancy	\$200,000	\$0	unknown
Whidbey Basin Trophic Interactions Scoping	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			2010 Tribes, WDWF, NOAA	\$20,000	\$0	unknown
Admiralty Inlet Trophic Interactions Scoping	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			2010 Tribes, WDWF, NOAA	\$20,000	\$0	unknown
										Total \$ Stock Monitoring Support = \$800,000 \$350,000							
Research																	
Shorebird habitat and lifestyle survey and monitoring	monitoring of pigeon guillemot burrows and life histories	A = 2 GA = 2 H = 2 P = 2				census and life history work of 100 burrows and fledglings			ongoing field work	field work, analysis	\$3,000	field work	\$3,000	ongoing IC MRC, Whidbey Audubon	\$9,000	\$9,000	IC MRC
Puget Sound Hydrodynamic Model	calibration of salinity and current model	A = 1 GA = all H = all P = all	NA	nearshore	Estuary or Nearshore		Chinook							PNNL Battelle, 2009 Tribes	\$0 ?		partially funded: tribes, NW Straits Commission, ?
Camano Forage Fish Study 2007-08	intensive monitoring of 50 beach sites (Sept 07-Sept 08)	A = 1 GA = 1,2 H = 2 P = all	Reduced Habitat Capacity	nearshore	Estuary or Nearshore		Chinook							2008 WDFW	\$0 ?		funded: WDFW
Whidbey Forage Fish Study 2008-2011	monitoring of beach sites	A = 1 GA = all H = 2 P = all	Reduced Habitat Capacity	nearshore	Estuary or Nearshore		Chinook			field work, analysis ?				2011 USGS - CHIPS	?	?	funded: USGS
										Total \$ Stock Monitoring Support = unknown \$9,000							
Other																	
Total Non-Capital Need:										\$5,237,600 \$1,325,000							
Priority Projects and Programs Benefiting Non-Listed Species																	

Small Stream Sampling	fish distribution assessment in streams where fish distribution is unknown	A = 2 GA = all H = 2 P = 2 A = 2	NA	instream	Instream					ongoing	seining, traps, electrofishing	\$20,000	seining, traps, electrofishing	\$20,000	2010 Tulalip Tribes	\$40,000	\$0	NWIFC			
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	\$750,000	\$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 Creek	monitoring	\$3,000	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 2008 & 2009	spawner surveys	\$2,000	spawner surveys, gate survey	\$10,000	ongoing	Whidbey Watershed Stewards; Wild Fish 2012 Conservancy	\$17,000	\$6,000	WWS Local contributions, MRC		
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	2012	Whidbey Watershed 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			2012	Landowner	\$4,000	\$8,000	funded: ???		
Penn Cove Water and Sewer Reclaimed Water Feasibility Assessment	feasibility of redirecting sewer outflow from Penn Cove to uplands north of cove	A = 2 GA = 2 H = 2 P = 2	Water Quality	nearshore	Water Quality Improvement						assessment	\$47,500			2008	Penn Cove Water and Sewer District	\$47,500	\$47,500	funded: WA Ecology Reclaimed Water Grant		
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	implementation	\$90,000	2011	Wild Fish Conservancy; 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					ongoing	field verification	\$20,000	field verification	\$20,000	2010	Tulalip Tribes	\$40,000	\$0	NWIFC		
Whidbey Stormwater Remediation Project	low impact development technical assistance for landowners	A = 2 GA = all H = all P = all	Water Quality	upland	Water Quality Improvement					Ongoing outreach & technical assistance for landowner LID	technical assistance	\$150,000	technical assistance	\$150,000	ongoing	Whidbey Island Conservation District	\$300,000	\$75,000	unknown		
Maxwelton Watershed Fish Passage Culverts	replacement of fish passage barriers identified in 2005 creek inventory	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	2015	Island County Public Works, Whidbey 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		conceptual/planned	adaptively manage	\$2,000	adaptively manage	\$2,000	2015	Whidbey Watershed Stewards	\$6,000	\$4,000	unknown		
Upper Glendale Creek Watershed Culvert replacement	culvert replacement and riparian planting	A = 2 GA = 2 H = 2 P = 3	GA H = P =	Community Engagement	instream	instream	improve headwater drainage, and improves fish passage	Chum		conceptual	preliminary feasibility	\$5,000	design & permitting	\$10,000	construction	\$50,000	2015	Whidbey Watershed Stewards	\$65,000	\$1,000	WWS local contributions
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			2011	Landowner	\$40,000	\$0	unknown		
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	2010	Island County	\$110,000	\$17,000	unknown
Lower Glendale Creek Restoration	instream habitat restoration to be determined	A = 2 GA = 2 H = 2 P = 3	GA H = P =	Reduced Habitat Capacity	instream	Instream	address restoration of lower 1 mile of stream caused during flood event	Coho; Chum Cutthroat		conceptual	assessment; design and permitting; replanting	\$150,000	Design/Permitting; construction	\$400,000	construction; Monitoring	\$200,000	2011	Island County Public Works; Tulalip	\$750,000 ?		unknown; SRFB
Coupeville Reclaimed Water Feasibility Assessment	feasibility of redirecting sewer outflow from Penn Cove to Ebeyes Prairie	A = 2 GA = 2 H = 2 P = 2	Water Quality	nearshore	Water Quality Improvement										2009	Town of Coupeville	\$0	\$173,000	funded: WA Ecology Reclaimed Water Grant		
Coupeville Parking Lot Low Impact Development Remediation	design and construction of LID infrastructure	A = 2 GA = 2 H = 3 P = 2	Water Quality	upland	Water Quality Improvement	LID development of parking lot; use as LID reference /example for community				Feasibility; initial design completed	construction	\$300,000			2010	Whidbey Island Conservation District, Town of Coupeville	\$300,000	\$0	unknown		
****NEW PROJECT 2010 ****		A = 2 GA = 1 H = 2 P = 2	Reduced Habitat Capacity	instream; riparian	instream; riparian	Improve fish passage and restore native vegetation	cutthroat	chinook		conceptual	restoration	\$25,000			2010	Tulalip; Island County	\$25,000		unknown		
****NEW PROJECT 2010 ****		A = 2 GA = 2 H = 2 P = 2	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		
Total Non-Listed Species Need:																\$2,902,500	\$1,182,500				