
Lead Entity Program

2002 Report and Evaluation



Table of Contents

Executive Summary.....	1
Statements.....	5
• Lead Entity Advisory Group, Chair	
• Washington Department of Fish and Wildlife, Director	
• Salmon Recovery Funding Board, Chair	
Background and History.....	6
Process Overview.....	11
Lead Entity Program in the Context of Related Planning Efforts.....	14
• Regional Salmon Recovery	
• Coordination with Watershed Planning	
• Subbasin Planning – Columbia Basin Fish & Wildlife Program	
2002 Lead Entity Survey – History, Methodology and Highlights.....	18
Recent Developments and Emerging Issues.....	25
Conclusions.....	29
Lead Entity Highlights.....	30

WDFW would like to acknowledge and thank the Salmon Recovery Funding Board for the use of several photos in this report (cover and pages 8 and 9).

Lead Entity Program

Executive Summary

BACKGROUND

In 1998, the Washington State Legislature enacted ESHB 2496 to empower citizens at the community level to engage in salmon recovery through a locally driven habitat protection and restoration program. The legislation recognized that active local participation is the key to ensuring public participation in, and support for, salmon recovery.



Under the Endangered species Act, NOAA Fisheries has listed 15 runs of wild salmon as threatened or endangered across 75% of Washington State.

The Washington Department of Fish and Wildlife administers grants to the Lead Entities with funds provided by the Salmon Recovery Funding Board. Lead Entities are funded to solicit salmon habitat projects and to establish priorities for projects that are submitted. Project selection is guided by a habitat strategy that each Lead Entity has developed to address problems specific to its watershed. Locally based citizen and technical committees strive to identify those projects that are both scientifically sound and in harmony with the needs of the community. In addition, projects must have the support of affected landowners so that implementation is likely to succeed. Under this process, state agencies play an important role in providing both financial and technical support to Lead Entities.



Habitat strategies developed by Lead Entities are being used to guide project funding that is aimed at protecting and restoring vital salmon habitat.

Lead Entities are

voluntary organizations that function to solicit, develop, prioritize and submit salmon habitat protection and restoration projects at the watershed level to the Salmon Recovery Funding Board for funding.

26 Lead Entities

are involved in salmon habitat protection and restoration efforts across Washington State.

Participation in

Lead Entities includes

- counties
- cities
- state and federal agencies
- tribes
- conservation districts
- conservation organizations
- landowners
- businesses
- citizens

PUBLIC SUPPORT

Lead Entities play a critical role in the overall salmon recovery effort that

encompasses a host of regulatory and non-regulatory programs and actions. It is the only program that brings science and local community values into the decision-making process for directing salmon recovery funds. Without that, it is unlikely that citizen support will continue for achieving the broader salmon recovery goals under the Endangered Species Act.

LINK BETWEEN LOCAL HABITAT AND STATE/FEDERAL FUNDS

The Lead Entity program is a cornerstone for the Salmon Recovery Funding Board's mission in distributing state and federal funds for salmon habitat protection and restoration projects. Currently, there is no other mechanism in the state to serve this vital function. The habitat recovery strategies developed by Lead Entities are guiding project selection towards projects that are technically sound, as well as responsive to community and social needs.

Lead Entities combine **science and local social values**.

Over \$60 million in match funds have been leveraged through the Lead Entity program from federal, regional and local sources.

FUTURE ROLE OF LEAD ENTITIES

Lead Entities have the potential for providing a greater contribution to salmon recovery. An enhanced role could include coordination with watershed planning and subbasin planning programs, as well as providing the "watershed habitat chapters" to a regional recovery plan and community outreach.



Lead Entities solicit project applications and create a habitat project list for the Salmon Recovery Funding Board. Projects are designed to protect and/or restore productive salmon habitat.

LEAD ENTITY SURVEY

Four years later, the question can be asked, "How is the program succeeding?" In order to answer this question, the Lead Entities initiated a self-evaluation in the form of a survey. A series of questions was formulated to measure performance in five broad categories – WDFW grants administration; Lead Entity communication; WDFW technical assistance; Lead Entity Advisory Group (LEAG)¹; and self-assessment. The survey was sent to 500 participants in the Lead Entity process in June 2002 and results were compiled and tabulated in September and October. This report summarizes and highlights the results of the survey.

¹ The Lead Entity Advisory Group (LEAG) was created to enhance the Lead Entity Program. It establishes a forum where lead entity issues can be explored and communication among local and state organizations can be improved.

SURVEY RESULTS

The survey results of the Lead Entity program portray a high degree of confidence by participants in the process and outcomes of locally driven salmon habitat project development. The results show that Lead Entities have been successful in connecting the mileposts between salmon habitat assessments (i.e. Limiting Factors Analysis), locally developed watershed strategies, and project development and prioritization. Through this investment, the public can be assured that projects for salmon habitat protection and restoration are:

- Likely to achieve salmon recovery;
- Fiscally accountable;
- Enjoying broad local support; and
- Monitored to demonstrate success.

As a tool for self-evaluation, the survey provides Lead Entities with the opportunity to engage in continuous improvement. For a program in the early stages of development, this is a crucial step that can make a big difference in coming years. Where areas for improvement have been identified, additional steps will be necessary. State agencies are committed to assisting Lead Entities in addressing areas where the need for improvement has been identified. Fortunately, there is strong local support for the program, which will translate into a salmon recovery effort that can be sustained, provided there is adequate funding.

Survey Results: Examples of Successes

79% agree that their citizen committee has a full diversity of members.

Citizen committee's understanding of integrating science and social issues is **very good to excellent – 59%**.

Over 85% agree that knowledgeable biologists are actively participating in the technical committees.

Approximately 84% agree that the project prioritization process is transparent, strategic, and rational.

82% agree that the Lead Entity program has been successful in gaining support from other processes and funding sources.

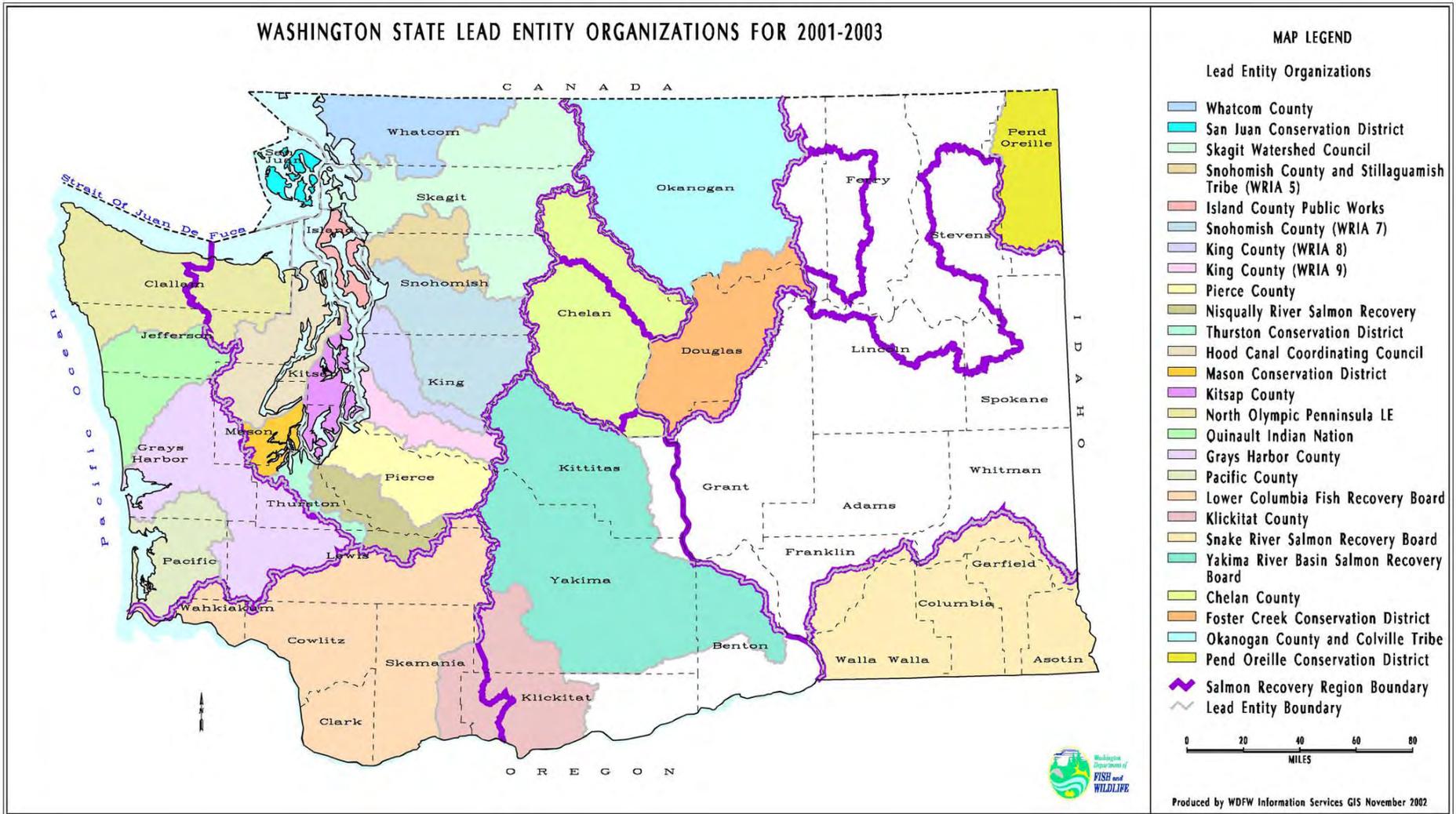
Survey Results: Areas for Improvement

Only 42% indicated that communication and information sharing between Lead Entities is very good or excellent.

Approximately 53% indicated that the current funding level is sufficient for **core** Lead Entity functions (i.e. project solicitation, committee support, project prioritization, and habitat work schedule activities).

However, only 32% indicated that funding is sufficient for an **enhanced** function (i.e. efforts related to regional salmon recovery, broader community outreach and education, and greater coordination with other related programs.)

MAP OF LEAD ENTITIES' GEOGRAPHICAL AREAS



Statements

JAY WATSON, CHAIR, LEAD ENTITY ADVISORY GROUP

This report is an effort to show what Lead Entities (groups of local folks working near their own homes and in their own communities) are accomplishing for salmon. Equally important, it shows that we are developing a critical asset: local community support for, and involvement in, salmon recovery. This document can also be considered a report card. We asked ourselves how things were working in our own local areas and received some strong input from our local partners. Some of that input was good and some recommended changes in various areas to make the process even better. We did not want just a pat on the back, but an honest evaluation of our efforts. I think this report provides that. I also think that the message is positive and supportive. While some things can be improved, it shows that we are getting better and that we are open to making the process at our local levels the most efficient, effective and citizen-driven as possible. While projects alone will not recover salmon, they are a huge and tangible step towards that goal. I personally hope that our efforts in the local Lead Entity process represent the leading edge of building community support for this incredible natural, economic and cultural resource, the Pacific Northwest salmon.

DR. JEFF KOENINGS, DIRECTOR, WASHINGTON DEPARTMENT OF FISH & WILDLIFE

In the span of only four years, Lead Entities have grown from an idea to an integral and essential component of our state's salmon recovery strategy. The program now includes 26 organizations covering approximately two-thirds of the state. The state's investment in Lead Entities has been considerable. Moreover, the Lead Entity program has been a great success because of the local knowledge and dedication that Lead Entity participants have brought to bear on the salmon habitat problems and opportunities. Clearly, experience through the Lead Entity Program has shown us that those who live in the watersheds are in the best position to know what needs to be done. The future holds an increasing role for the Lead Entities as the state proceeds with regional salmon recovery planning and implementation. Lead Entity strategies and project implementation need to be tied to the larger regional recovery efforts. How that integration occurs will require the Washington Department of Fish and Wildlife to work in partnership with the Lead Entities. Although challenging in this budgetary environment, our support for Lead Entities is a top priority for the Department. Salmon recovery is moving toward a new phase – one that will build on the present role of Lead Entities. We look forward to working with them in a continuing support role to achieve successful salmon recovery.

WILLIAM RUCKELSHAUS, CHAIR, SALMON RECOVERY FUNDING BOARD

From the standpoint of the Salmon Recovery Funding Board, Lead Entities are absolutely essential for identifying the highest priority habitat projects for funding by the Board. The people participating in the local Lead Entities understand the needs of the fish and of their watersheds and are developing strategies to meet those needs. Through their technical and citizens committees, Lead Entities establish priorities for projects that are scientifically sound and at the same time reflect the values of people living in the watershed. The success of the Lead Entities is central to our success in achieving salmon recovery statewide.

The Lead Entity Program – Background and History

WHAT ARE LEAD ENTITIES?

Lead Entities are voluntary organizations that function to solicit, develop, prioritize and submit salmon habitat protection and restoration projects for funding to the Salmon Recovery Funding Board (SRFB). Lead Entity areas typically follow Water Resource Inventory Areas (WRIAs). Each Lead Entity consists of, at minimum, a Coordinator (usually a county, conservation district, or tribal staff member), a committee of local technical experts, and a committee of local citizens.

WHY WAS THE LEAD ENTITY PROGRAM ESTABLISHED?

The state legislature established Lead Entities as part of the Washington State Salmon Recovery Act (ESHB 2496), which Governor Locke signed into law in April 1998 (Chapter 77.85 RCW). A major premise of the Salmon Recovery Act was to retain responsibility for managing Washington's natural resources rather than abdicate those responsibilities to the federal government. Thus, the Legislature created the Lead Entity Program to address salmon recovery at a local watershed level through habitat restoration and protection projects. Funding is provided to support Lead Entity infrastructure and capacity and to help them make effective habitat decisions for salmon recovery. There are currently 26 Lead Entities in place, covering 66% of the state.

WHAT KIND OF STATE SUPPORT IS PROVIDED TO LEAD ENTITIES?

Lead Entities receive assistance from WDFW's Watershed Stewardship Team in their local areas and from WDFW's Lead Entity Program staff and the Interagency Committee for Outdoor Recreation (IAC) project managers in Olympia. With technical and financial help from WDFW, the Conservation Commission, and the SRFB, Lead Entities examine factors in local streams and nearshore areas that limit recovery of wild salmon, develop and prioritize lists of science-based projects to address those factors, and submit project proposals to the SRFB for funding.

OTHER RELATED LEGISLATION

Lower Columbia Fish Recovery Board

In 1998, the State Legislature established the Lower Columbia Fish Recovery Board to serve as a model of regional fish recovery. The Lower Columbia Fish Recovery Board is a partnership comprised of five counties in southwest Washington encompassing five WRIAs. The Board works with local governments, tribes and a technical advisory committee to coordinate state and local salmon recovery and watershed planning within the Lower Columbia region. The legislation did not provide funds directly to the Board. The five counties funded the Board's initial startup.

Salmon Recovery Funding Board

Recognizing the efficiency of consolidating salmon recovery funding in one place, the state legislature established the Salmon Recovery Funding Board in 1999. The SRFB is responsible for funding salmon habitat projects and activities that are based on scientific assessment, reflect local priorities, and provide the greatest benefits to salmon. The SRFB provides Lead Entities with guidelines and criteria for developing habitat protection and restoration strategies for project identification and priority ranking.

Comprehensive Monitoring Strategy

The 2001 Washington State Legislature passed Substitute Senate Bill 5637 requiring the development of a comprehensive strategy and action plan for measuring success in recovering salmon and maintaining watershed health. Those involved in salmon recovery efforts often refer to this type of measuring as “monitoring.” Monitoring is a required element of any salmon recovery plan submitted to the federal government for approval under the Endangered Species Act. While numerous agencies and citizen organizations are engaged in monitoring a wide range of salmon recovery activities, there is a greater need for coordination of these efforts.

A comprehensive monitoring strategy and action plan for measuring the success of salmon recovery is due to the legislature in December 2002. The comprehensive monitoring strategy will include guidelines for carrying out monitoring activities, incorporating adaptive management principles into decisions and incorporating agency assistance.

Watershed Planning

Enacted in the same year as the Salmon Recovery Act, the Watershed Planning Act (ESHB 2514) provides for locally led, cooperative efforts to assess water resource needs and develop comprehensive and effective solutions at the watershed scale. The goal of the Watershed Planning Units, functioning under the 2514 legislation, is to produce a watershed management plan for current and future water resources, including water quantity and the optional elements of water quality, habitat and instream flows. Efforts to coordinate these watershed planning efforts with the Lead Entity program are improving. (See discussion below, under section - *Lead Entities in Context of Other Related Planning Efforts.*)

WHY ARE LEAD ENTITIES IMPORTANT TO SALMON RECOVERY?

Lead Entities provide an infrastructure to guide investments.

The Lead Entity infrastructure is built at the watershed level with the involvement of local stakeholders representing diverse interests. Involving the communities directly allows them to understand their watersheds and the needs of fish and provides the opportunity to build consensus on how to best protect and restore habitat. Accountability checkpoints are built in throughout the process in the identification, evaluation and ranking of projects based on the Lead Entity strategy and criteria (see details in *Process Overview* section.) This infrastructure helps ensure that the best projects – those that provide the highest certainty of success and greatest benefit to salmon – are funded and implemented.

Lead Entities build partnerships and trust.

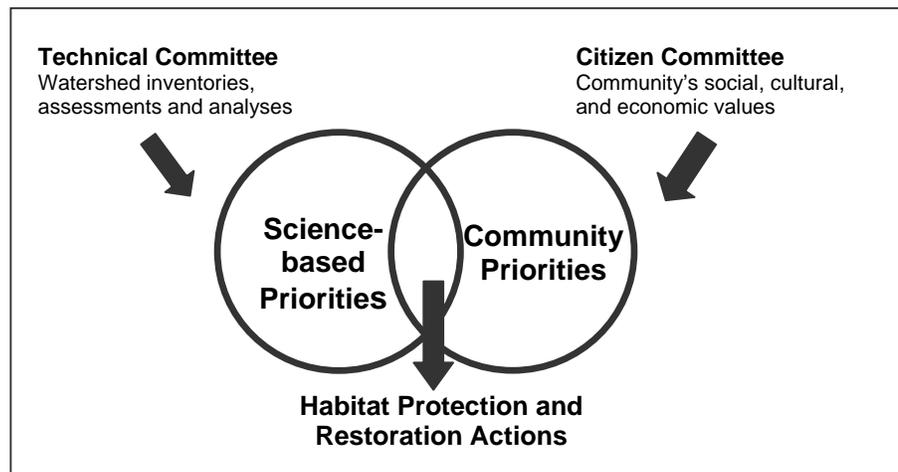


Lead Entities coordinate and facilitate meetings and field visits to help local citizen and technical committee members gain an understanding of the salmon habitat needs in the watershed and what types of projects can be successful.

Lead Entities engage a wide range of participants as project sponsors, committee members, agencies providing technical and process support, and on-the-ground volunteers. The partnerships and relationships forged through the Lead Entity program over the past four years constitute a sustainable network of individuals and organizations devoted to making salmon recovery a reality within each watershed. Lead Entities provide an arena for participants of diverse interests to work toward common solutions for salmon recovery, making difficult decisions possible. Participants have included landowners, tribes, non-profit organizations, fisheries and environmental organizations, neighborhood and other community groups, private business/industry, local, state, and federal governments, and local citizens.

Lead Entities combine local science and social values to identify salmon recovery projects.

The complementary roles of the local technical and citizens committees are essential to ensure that science and community priorities intersect. In this manner the highest priorities of the watershed rise to the top and the salmon habitat protection and restoration projects proposed for funding and implementation are cost-effective and balance technical and socio-economic factors.



Lead Entity projects funded by the SRFB leverage substantial funding and volunteers.

For the projects that received funding through the Lead Entity process between 1999 and 2002², project sponsors have leveraged millions of dollars in matching funds. Matching funds are leveraged from a variety of sources, including private landowners, industry, non-profit groups, as well as tribal, federal, state and local governments. Approximately 1,350 individuals have been directly involved in the 26 Lead Entity programs across Washington State.

² Prior to SRFB creation in 2000, other state processes provided guidance and funds to salmon recovery projects.

Additionally, each of the projects can attract the efforts of numerous volunteers, extending awareness of salmon recovery efforts to the broader community.

Lead Entities prioritize projects to maximize the public's investment.

Lead Entities use habitat strategies to guide habitat project lists and the Lead Entity work schedule.³ Habitat strategies ensure that salmon habitat projects will be prioritized and implemented in a logical sequential manner that produces habitat capable of sustaining healthy populations of salmon. The methodology must include a Limiting Factors Analysis, identify local habitat project sponsors, determine how projects will be monitored and evaluated, and develop an adaptive management strategy.



The Lead Entity Technical Committee uses information about the limiting factors related to habitat conditions in the watershed and identifies gaps in existing information so future data collection can be efficiently targeted.

Lead Entities use scientific tools to make sound decisions.

The Limiting Factors Analysis is one tool available to Lead Entities. It is used to prioritize projects for funding, by identifying habitat work that will address the problems in the watershed. Limiting factors are defined as conditions that limit the ability of habitat to fully sustain populations of salmon. These factors are primarily associated with fish passage barriers, degraded estuarine areas, riparian corridors, stream channels and wetlands.

Other assessment tools that have been funded by the SRFB include Ecosystem Diagnosis and Treatment (EDT), Salmon and Steelhead Habitat Inventory and Assessment Project (SSHIAP), and Instream Flow Incremental Methodology (IFIM).

³ The Salmon Recovery Planning Act (Chapter 77.85 RCW) directs Lead Entities to use a “critical pathways methodology” to develop a habitat work schedule. Lead Entities have developed habitat strategies that are based upon Limiting Factors Analysis and other assessment tools to achieve this purpose.

PAST SUCCESSES OF THE LEAD ENTITY PROGRAM

In the brief time since the inception of the Lead Entity Program, each Lead Entity has identified and prioritized projects to protect or restore salmon habitat. As a group, the Lead Entity Program has also had several major successes since 1998. These include:

Lead Entity Program has grown significantly.

Since its inception in 1998, the number of Lead Entities has increased from eight to 26 in 2002. Lead Entities now cover most of the state's salmon bearing streams.

Funding Cycle	Fiscal Year	Total No. Projects	Total Funds (\$)
Salmon Federal (GSR0)	1999	168	19,384,284
Salmon Barriers & Habitat (State - IRT)	1999	94	5,411,332
SRFB - Early 2000	2000	84	13,004,198
SRFB - Second Round 2000	2001	150	32,946,545
SRFB – Third Round 2001	2002	132	37,770,817
Totals		629	108,517,176

The Salmon Recovery Funding Board relies on Lead Entities for its project funding decisions.

The SRFB has recognized the value and efficiency of coordinating numerous local projects through one entity. As such, the SRFB requires all requests for salmon restoration and protection project funding under Chapter 77.85 RCW to go through the Lead Entity process for technical and citizen committee review and ranking.

The Lead Entity Program has enhanced state agency coordination for salmon recovery.

Agencies with major roles, including WDFW, Ecology, the Conservation Commission, and IAC, actively support and have specific staff dedicated to Lead Entities. These agencies have been steadily improving their deployment of staff resources as well as how they interact with each other.

WDFW funding for Lead Entities enables local leveraging.

Lead Entity operational funds provided by WDFW are a catalyst for broader watershed planning efforts. Most Lead Entity organizations use these funds in concert with other local, state and federal funds to enhance the coordination of salmon recovery efforts at the local level. Additionally, since WDFW's funds are distributed in a collaborative rather than competitive process, Lead Entities are not obligated to spend unproductive time on complicated grant applications.

Process Overview

HOW DO LEAD ENTITIES WORK?

Strategy

Each Lead Entity develops a recovery strategy to guide its selection and ranking of projects. The strategy prioritizes geographic areas and types of restoration and protection activities, identifies salmon species needs, and identifies local socio-economic and cultural factors as they relate to salmon recovery. These stakeholder-supported strategies increase effective decision-making by Lead Entities and define and clarify roles between Lead Entities and the broader salmon recovery planning environment.



Project Sponsors

Potential project sponsors can use the Lead Entity Strategy as a tool to identify and propose salmon habitat restoration and protection projects. Project sponsors typically are public or private groups or individuals, such as a Regional Fisheries Enhancement Group (RFEG), city, county, tribe, state agency, community group, non-government organization or private party. Project applicants fill out a project application and submit it to the Lead Entity for consideration. To ensure the success of projects funded through the Lead Entity process, project applicants are required to submit letters of support from affected landowners. The Lead Entity then applies its strategy through its local technical and citizens committees to evaluate and prioritize the projects in its own unique but consistent way.

Formed in 2001, the Yakima River Salmon Recovery Board Lead Entity includes representation from the jurisdictions of Benton, Yakima and Kittitas counties, the Yakama Nation, and all city jurisdictions within the watershed.

Technical Committee

The technical committee, made up of local technical experts, rates the projects submitted by project sponsors on their technical merit. These local technical experts are often the most knowledgeable about the local watershed, habitat and fish conditions. Their expertise is invaluable to ensure priorities and projects are based on ecological conditions and processes. They judge projects on the basis of their technical merits, benefits to salmon and the certainty that the benefits will occur.

Citizens Committee

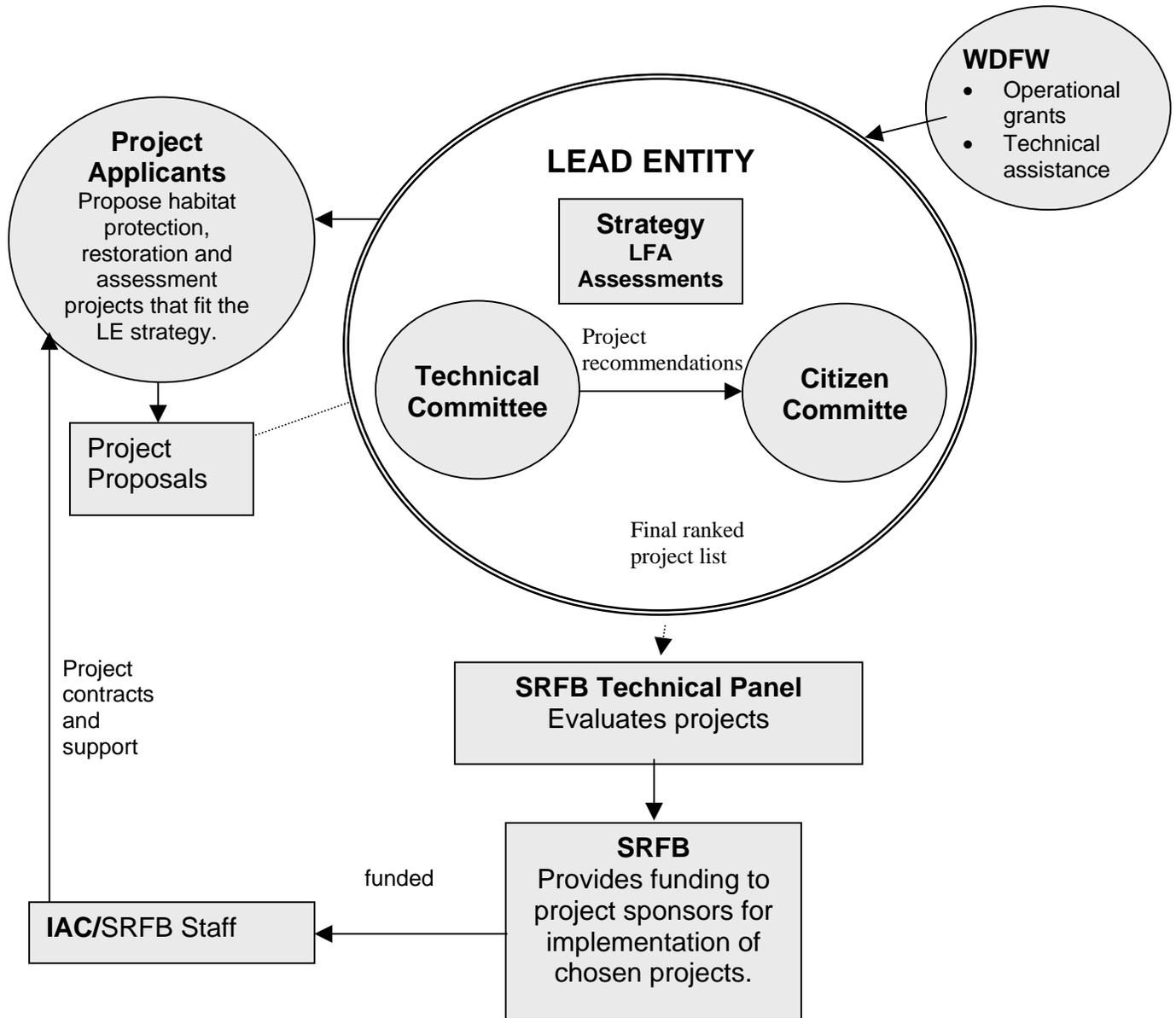
The technical committee submits its technical evaluation of projects to the citizens committee. In addition to local citizens, participants on citizens committees may include local, state, federal and tribal government representatives, community groups, environmental and fisheries groups,

conservation districts, and industry. The citizen committee is critical to ensure that priorities and projects have the necessary community support for success. Citizens committee members are often the best judges of the community's social, cultural and economic values, as they apply to salmon recovery, and of how to increase community support over time through the implementation of habitat projects. The citizen committee ranks the project list, and submits it through the Lead Entity for SRFB funding consideration.

Salmon Recovery Funding Board

The SRFB is made up of five Governor-appointed citizens and representatives from five state agencies. There are eight types of projects that can be submitted by applicants through the Lead Entity for funding consideration: acquisition, in-stream diversion, in-stream passage, in-stream habitat, riparian habitat, upland habitat, estuarine/marine nearshore, and assessments and studies. The SRFB Technical Review Panel meets with Lead Entities to learn about each Lead Entity's watershed and project identification process and to provide guidance on the Lead Entity's draft strategy and how proposed projects meet that strategy. The SRFB Technical Review Panel evaluates projects based on their benefit to salmon and certainty of success.

LEAD ENTITY PROCESS



Lead Entity Program in the Context of Other Related Planning Efforts

The local jurisdictions in the State of Washington are actively involved in a number of planning processes to address both state and federal legal requirements for aquatic species and their associated habitats. These include the Salmon Recovery Act (ESHB 2496), the Watershed Planning Act (ESHB 2514), the Endangered Species Act, and the Northwest Power Planning Act. Lead Entity work in each watershed will play an increasingly important role in salmon recovery as these various efforts are tied together at the regional population level.

WATERSHED PLANNING/LEAD ENTITY COORDINATION DIFFERENT BUT COMPLEMENTARY ROLES

Authorized by the Washington Legislature in 1998, the Watershed Planning Act (*ESHB 2514*) provides for locally led, cooperative efforts to assess water resource needs and develop comprehensive and effective solutions at the watershed scale. The Planning Units can address



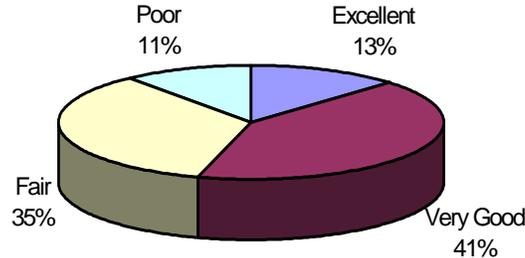
Currently there are 33 planning units that are engaged in the Watershed Planning program in Washington State – many of these areas encompass watersheds with Lead Entities.

three optional elements of watershed planning: instream flows, water quality, and fish and wildlife habitat.

Lead Entities can play an important role in the Watershed Planning program, especially where the local planning units have elected to pursue the fish and wildlife habitat element. For example, Planning Units can utilize a Lead Entity's habitat restoration strategy to address the habitat element and even as a basis for developing recommended instream flows. Conversely, Lead Entities can consider projects identified in the watershed management plan such as stream gauging, instream flow studies, water conservation projects, and purchase or leasing of water leasing. Hence, there is potential for considerable interaction between these two processes. The majority of Lead

Entities surveyed this summer indicated that they share participants and data as well as coordinate at the staff level with the Watershed Planning Unit(s) within their boundaries.

In the 16 watersheds where water is crucial for salmon, communication between the Lead Entity and the local watershed planning unit is ...



While there is room to tighten the connections to ensure good communication and sharing of data, it is important to note that the greatest link between the two programs will be through Regional Recovery Plans.

ENDANGERED SPECIES ACT REGIONAL RECOVERY PLANNING USING WORK AT THE WATERSHED SCALE FOR ESU RECOVERY

Congress enacted the Endangered Species Act (ESA) in 1973 in response to public and scientific concern about the decline and loss of many animal and plant species. The ultimate goal of the ESA is to recover the populations of listed species so that they no longer need the law's protections. The ESA has three basic missions:

1. Identify species needing protection and the means necessary to protect and recover those species;
2. Prevent harm to listed species and the destruction of their habitats; and
3. Develop recovery plans for listed species.

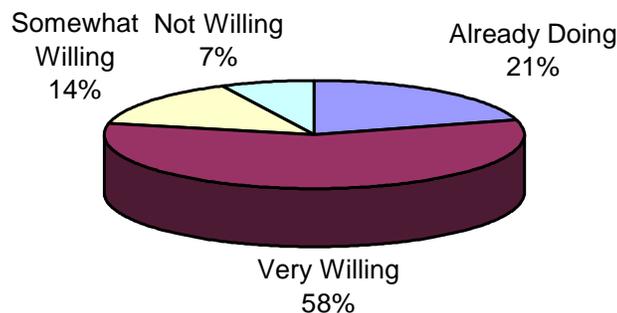


Under the ESA, all of the factors for decline must be addressed. The four factors of decline for salmon include improper hatchery operations, harvest, hydroelectric operations, and habitat loss and degradation (including marine conditions). To date, NOAA Fisheries has listed 15 runs of wild salmon as threatened or endangered across 75 percent of Washington State.

Under federal law, NOAA Fisheries and the USFWS are required to develop recovery plans that outline actions to recover listed runs. NOAA Fisheries has formally stated that the likelihood of developing practical and socially acceptable plans will increase if local stakeholders and governments are active participants in the recovery planning process. The current function of Lead Entities, to develop strategies to identify and prioritize habitat projects at a watershed level and considering both technical and local community priorities, follows this philosophy. However, regional efforts are needed to address groupings of watersheds that contain all of the components of a given salmon population identified by NOAA Fisheries and USFWS under the ESA.

In consultation with the federal government and the WDFW, the Governor's Salmon Recovery Office designated seven salmon recovery regions for Washington State. These regions correspond to Ecologically Significant Units (ESUs), which are the geographic units used for salmon recovery planning under the ESA. The main advantages of planning at a regional level are in economies of scale, partnerships, integration of efforts, and information sharing. Lead Entities are poised to enter this new and more complicated world of regional recovery planning. As part of this, Lead Entities will be asked to consider all freshwater and estuarine/nearshore factors of decline in the identification of habitat restoration and protection actions. Lead Entities could provide the structure and process needed to produce the watershed habitat "chapters" of a regional salmon recovery plan. But in order for Lead Entities to broaden their capacity and mission in this way, adequate resources will be necessary.

If adequate resources were available, my Lead Entity's willingness to actively participate in regional salmon recovery planning, beyond traditional Lead Entity roles would be ...



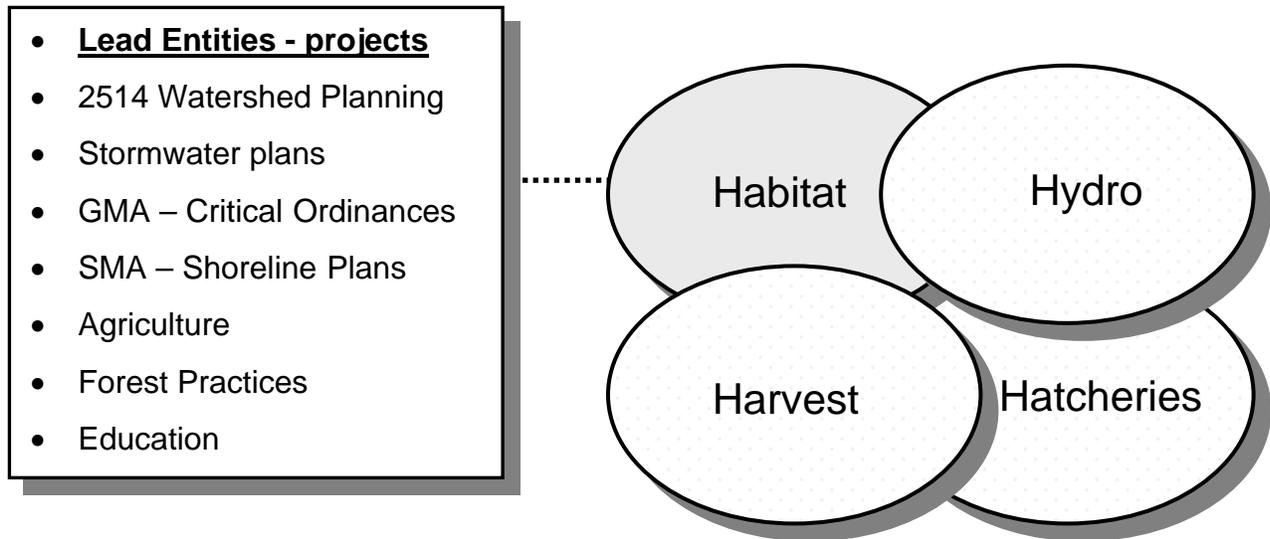
SUBBASIN PLANNING – COLUMBIA BASIN FISH & WILDLIFE PROGRAM SHARING VALUABLE RECOVERY TOOLS

The Northwest Power Planning Council's (Council) 2000 Fish and Wildlife Program establishes a basinwide vision for fish and wildlife along with biological objectives and action strategies that are consistent with its vision. Ultimately, the program will be implemented through subbasin plans developed locally in the more than 50 tributary subbasins of the Columbia and amended into the program by the Council. These plans will be consistent with the Council's basinwide vision and objectives, and its underlying foundation of ecological science. In Washington State, the Council has directed \$4.1 million over two years for subbasin plan development. The final group of these plans is due by May 2004. Regional recovery boards are working within the boundaries set by the Council to produce subbasin plans that will be part of their regional recovery plans.

Lead Entities play an important role in the development and implementation of subbasin plans. Similar to the watershed planning process, the habitat restoration and protection strategies developed by the Lead Entities can inform the subbasin planning process. To the extent that

subbasin plans build upon the efforts of Lead Entities, local project sponsors will be well positioned to compete for additional fish and wildlife funds administered through the Bonneville Power Administration.

CURRENT LEAD ENTITY ROLE IN SALMON RECOVERY



2002 Lead Entity Survey—History, Methodology and Highlights

SURVEY BACKGROUND AND PURPOSE

The Lead Entities requested that WDFW conduct a survey to evaluate the effectiveness of the overall Lead Entity program as well as their own local programs. The request for an objective assessment of their work reflects the Lead Entities' commitment to adaptive management. Just as adaptive management is necessary to ensure the technical success of a long-term salmon recovery process, interim evaluations and adjustments are needed by Lead Entities to ensure success on the process end. The survey results will be used by everyone involved in the Lead Entity program to determine what is working well and to make adjustments where needed.

WDFW designed and distributed two questionnaires aimed at two different sets of respondents. Each was designed to:

- Evaluate the effectiveness of state agency support at the statewide program level; and
- Evaluate the effectiveness of local programs.

The *WDFW Watershed Steward and IAC/SRFB Project Manager Survey* was aimed at the state agency staff supporting Lead Entities in the field. The *Lead Entity Program Survey* was aimed at Lead Entity Coordinators, Technical Committee members and Citizen Committee members—the people working within the Lead Entities.

SURVEY DESIGN AND METHODOLOGY

A total of 186 individuals responded to the surveys. All responses were submitted anonymously to encourage candid answers and to most accurately reflect the view of the respondents. A consulting firm, Triangle Associates, Inc. compiled the results of these surveys and provided analysis.

Triangle Associates utilized these analyses in the development of this report to characterize the history of the Lead Entity program, highlight successes of individual Lead Entities and the program as a whole, and provide recommendations on how the Lead Entity role fits into the dynamic landscape of salmon recovery.

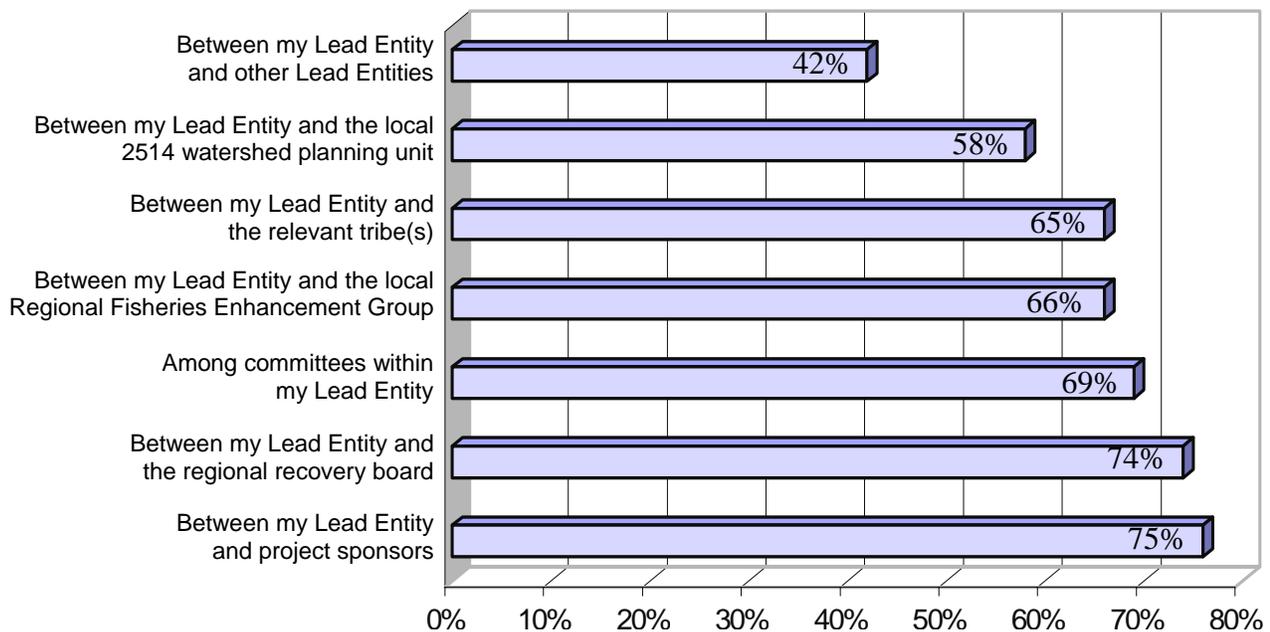
WDFW will distribute survey results to Lead Entity Coordinators pertaining to their individual programs. Lead Entity Coordinators are expected to discuss these results with their committees and watershed stewards, and make adjustments and improvements as appropriate.

SURVEY RESULT HIGHLIGHTS⁴

Communication and Coordination

A strength of the Lead Entity Program is the ability to coordinate and facilitate salmon recovery activities and programs at the local level and to link existing and new organizations involved in salmon recovery. However, salmon recovery will also need to occur at the regional scale in order to meet ESA requirements. Lead Entities provide a forum in which scientists and stakeholders interested in salmon recovery in each watershed can come together.

The chart below identifies the percentage of respondents that rated communication excellent or very good in the following areas:



⁴ Percentages in this section are based on the pool of responses (e.g. excellent, very good, fair, poor). "Don't Know" and "Not Applicable" responses were not factored in to the percentages.

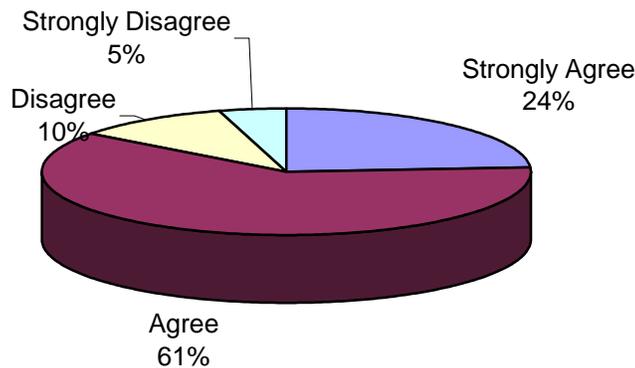
Technical Assistance

Many state and federal agencies provide valuable technical support and expertise to each Lead Entity. The Conservation Commission's Limiting Factors Analysis, IAC Project Managers, Ecology's watershed assessments, tribal spawning surveys, and WDFW Watershed Steward assistance all contribute to providing sound science in each watershed.

Each Lead Entity is assigned a WDFW Watershed Stewardship biologist who:

- Participates at Lead Entity committee meetings, with project sponsors, in the identification and technical prioritization of projects;
- Provides a link between WDFW personnel, Lead Entities and project sponsors;
- Cultivates partnerships and facilitates linkages between the Lead Entity and the local community, other state and federal agencies, tribes and others; and
- Provides technical assistance on engineering issues (side-channel construction, large woody debris) and culverts, barriers, fish screens and securing HPA permits.

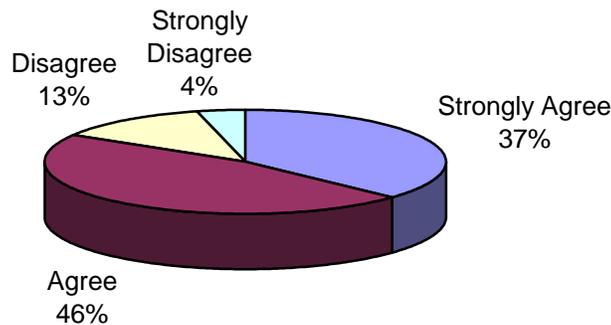
Technical assistance received from WDFW experts (watershed stewardship biologist or other WDFW staff) on culverts, barriers, and/or fish screens is responsive and useful.



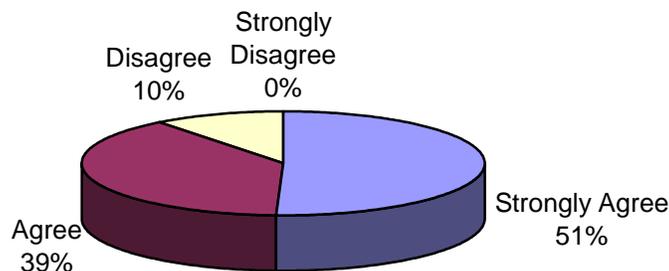
Lead Entity Local Committees

Sponsors are able to implement effective projects because of the Lead Entities' commitment of their technical and citizen committee members. Lead Entity citizens committees typically represent a variety of interests including local citizens, community groups, environmental and fisheries groups, and businesses. Statewide the Lead Entity program has directly involved over 1350 individuals in the process of developing habitat strategies and prioritizing and implementing projects. Local biologists and scientists, who understand their watersheds, lend their knowledge and guidance to ensure each project will yield a high benefit to salmon.

Our Citizen Committee has a full diversity of members including community & government leaders, members representing individuals and larger organizations, and members whose main interests are greater/different than salmon recovery.



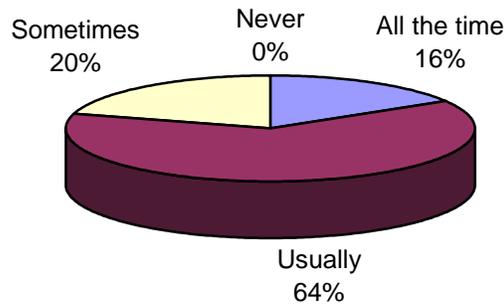
Our Technical Committee has active participation of engaged and knowledgeable local biologists.



Projects and Sponsors

Ultimately, the Lead Entity process must lead to quality restoration and protection projects. Eighty percent of survey respondents indicated that project sponsors have the capacity and capability to deliver the best projects. It is important that the Lead Entity process continue to assist potential landowners and project sponsors to bring cost-effective projects forward.

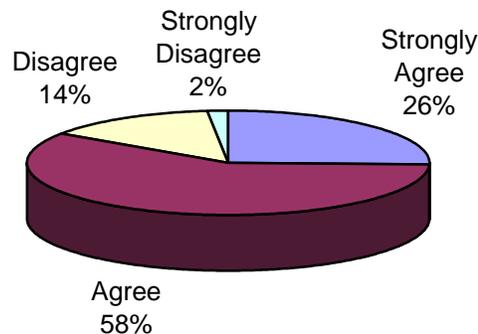
Projects submitted by sponsors reflect the needs outlined in the Lead Entity Habitat Strategy...



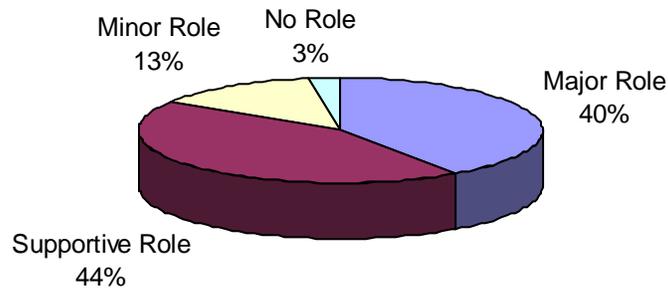
Habitat Restoration and Protection Strategy

Although Lead Entities are not mandated under legislation to develop strategies, they realize that a "critical pathways methodology" or guidance document will ensure the highest priority projects are completed. The sometimes difficult and laborious process to develop a strategy at the watershed level ensures that only fully supported and cost-effective projects (both scientifically and socially) rise to the top. Lead Entity strategies can also be useful tools to water, land use, and regional recovery planners.

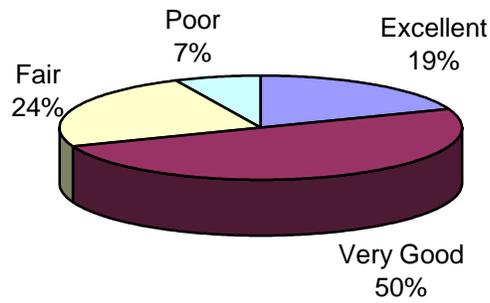
Our prioritization process is transparent, strategic and rational.



The role that stakeholders played in developing our existing Lead Entity strategy is a...



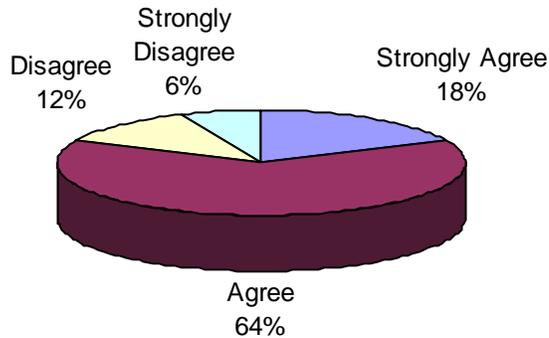
The degree to which our project prioritization decisions are balanced technically and socially is...



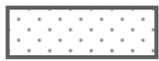
Funding

Protection and restoration of salmon habitat is successful at the local level because of the commitments within each Lead Entity. While the Lead Entity program relies upon the contribution of numerous partners, support from the state is crucial to position Lead Entities to support regional salmon recovery planning.

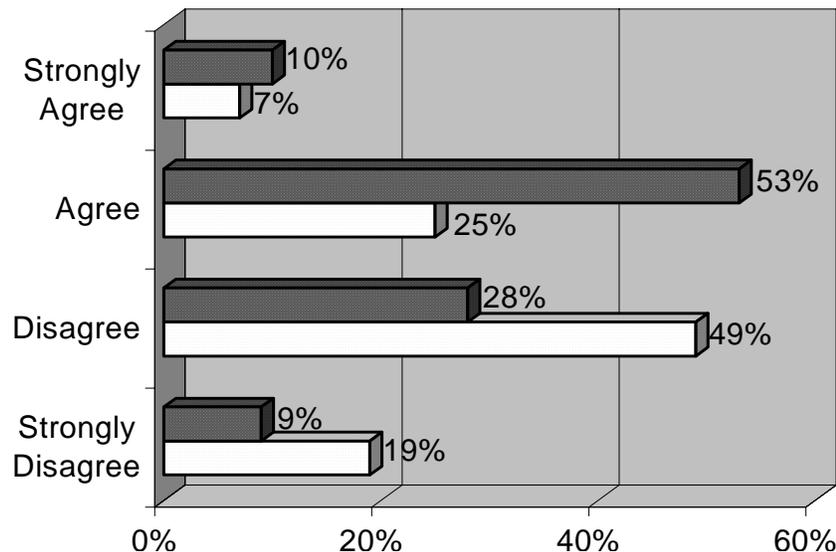
Our Lead Entity has effectively used the benefits of this program to gain support from other processes and funding sources.



*The current funding level from WDFW is sufficient to enable the Lead Entity to fully engage in **core** Lead Entity functions (i.e., project solicitation, committee support, project prioritization, and habitat work schedule activities).*



*The current funding level from WDFW is sufficient to enable the Lead Entity to fully engage in **enhanced** Lead Entity functions (i.e., strategy development, broader coordination with other watershed groups, greater cross-Lead Entity program activities, regional salmon recovery planning, etc.).*



Recent Developments and Emerging Issues

LEAD ENTITY PROCESS IMPROVEMENTS

Lead Entities are becoming more strategic.

Lead Entities are embracing a more strategic approach to habitat project prioritization by developing and/or updating existing local habitat protection and restoration strategies. These strategies include biological, technical, and socio-economic considerations and are stakeholder-supported. The strategies increase effective decision-making by Lead Entities and define and clarify roles between Lead Entities and the broader salmon recovery planning environment (including state and federal agencies and other local conservation groups).

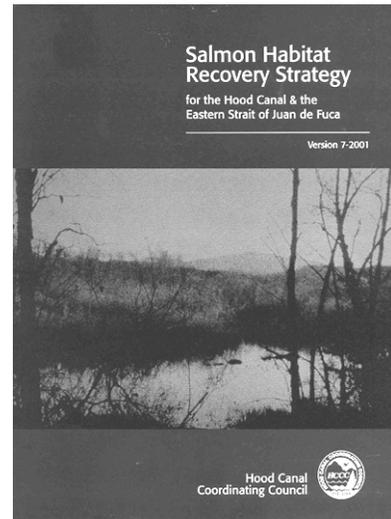
An example of Lead Entities' increased strategic awareness is the April 2002 Wenatchee Strategy Workshop in which 90 people participated. The purpose of the workshop was to enhance the effectiveness of Lead Entities and the SRFB by sharing strategy ideas and experiences for salmon habitat recovery efforts at the watershed level. Participants gave the workshop high marks with 87% rating it as very relevant to their work and 83% indicating that the information and discussions made available at the workshop will greatly help them to improve their efforts. Participants requested that similar forums be made available on a regular basis.

Lead Entities are practicing adaptive management.

By working closely with project sponsors, Lead Entities throughout the state are consistently improving their local processes through the practice of adaptive management. They evaluate and adjust all aspects of their operations, as needed, including prioritization processes, committee structures, internal coordination, and landowner and project sponsor outreach. Lead Entities continuously improve both the projects proposed for funding and the process by which they do their work. The surveys, upon which much of this report is based, demonstrate the commitment of Lead Entities, and the state agencies that support them, to evaluate their own program. Other measures of success (improvements) include the large increase in the number of participants directly involved in the Lead Entity process (see *Lead Entity Highlights* section), and the generally consistent scientific evaluation of projects at the local and state review level.

Lead Entities are coordinating with other watershed efforts.

The Lead Entity Program provides an opportunity for coordination at the local watershed level among groups, such as Watershed Planning Units and Regional Fisheries Enhancement Groups (RFEGs)⁵. Watershed Planning Units, established under HB 2514, address water



Each Lead Entity has prepared a salmon habitat recovery strategy – these have been revised to include both science and social aspects of salmon habitat recovery.

⁵ The Regional Fisheries Enhancement Group (RFEG) program is a legislative program (RCW 77.95) designed to include citizens in salmon restoration efforts. Twelve non-profit groups of volunteers cooperate with the Washington Department of Fish and Wildlife (WDFW) to improve salmon resources

resource issues at a local level. All Planning Units address water quantity, with the option of addressing water quality, instream flows and habitat. RFEGs have been developing and implementing salmon recovery projects with dedicated funding from USFWS, WDFW and others, since 1990.

Lead Entity participants often are active members of Watershed Planning Units. In a few cases, the Lead Entity and the Watershed Planning Unit are the same body. This and other coordination can streamline participant education, committee development, process and funding, and avoid overlap. RFEGs are often project sponsors through the Lead Entity process. This crossover increases participants' awareness of the relationships among these processes with regard to salmon recovery. While coordination exists among these and other efforts in some watersheds, there is room for guidance and assistance to ensure that efforts are not duplicated and information and data are shared, whenever possible. This is especially critical between Lead Entities and local Watershed Planning Units that have selected the optional habitat element.

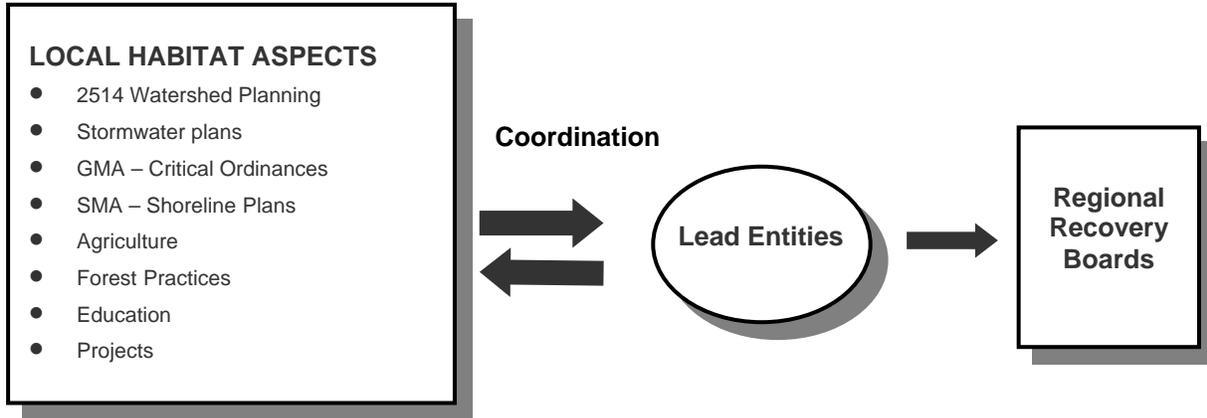
LEAD ENTITIES EMERGING ROLE IN REGIONAL SALMON RECOVERY PLANNING

In 2001, the Legislature provided state funds for coordination and development of regional salmon recovery plans. Currently, there are Regional Salmon Recovery Planning Boards in five of the seven salmon recovery regions designated by the Governor. These efforts harness the collective leadership from around their regions – tribes, state agency staff, local governments, Lead Entities, Watershed Planning Units, and large stakeholder groups – and use watershed-scale plans to address all factors of salmon recovery. These regional efforts currently rely on the watershed level work of Lead Entities, specifically, to identify limiting factors to salmon and the highest priority habitat projects, to recruit project sponsors, and to leverage project funding.

In the future, Lead Entities may serve a larger role in regional recovery planning, providing an essential link between local and regional efforts. Since development of salmon recovery plans is a compilation of many plans that are underway or are already completed, regional recovery planning will lead to coordination among Lead Entities, Watershed Planning Units, county Critical Areas Ordinances, shoreline plans, land use plans, forest practices, Clean Water Act and other local planning processes, as appropriate. Lead Entities may be able to expand their mission beyond habitat projects to include identification of a list of recommended actions. In other words, Lead Entities could present the big picture of the local watershed to both regional recovery boards and local planners (see schematic below).

throughout the state. RFEGs propose and develop habitat improvements, salmon production, outreach and education and research projects.

POTENTIAL LEAD ENTITY COORDINATION ROLE IN SALMON RECOVERY



In this vision, the Lead Entities would coordinate the full suite of potential watershed-scale actions that would produce the greatest benefit to salmon. In some cases Lead Entities already have the appropriate players at the table to coordinate such recommendations. In other cases, Lead Entities would need to start by broadening their representation and their mission. In either case, it is critical that Lead Entities receive funding to allow them to participate fully in regional recovery planning.

THE YEAR OF INTERAGENCY COORDINATION

In May 2002, the Governor's Office requested the Director of the Salmon Recovery Office, the SRFB Chair and the Fish and Wildlife Commission Chair to advise him on how the state's approaches to salmon recovery can be supported and sustained most effectively. Their initial response emphasized the importance of the Governor's Salmon Recovery Office as a vehicle to help coordinate state agency assistance and provide a central contact point for assistance and guidance through development of the recovery plans.

During tough budgetary times, there is an even greater need to be efficient. Coordination among related efforts provides one way to attain efficiency by pooling resources and eliminating overlap. The WDFW and IAC/SRFB joint sponsorship of the April 2002 Wenatchee Strategy Workshop, mentioned above, is one example of this type of interagency coordination. Another example is the monthly work group meeting among all natural resource agencies who support local watershed efforts and organizations.

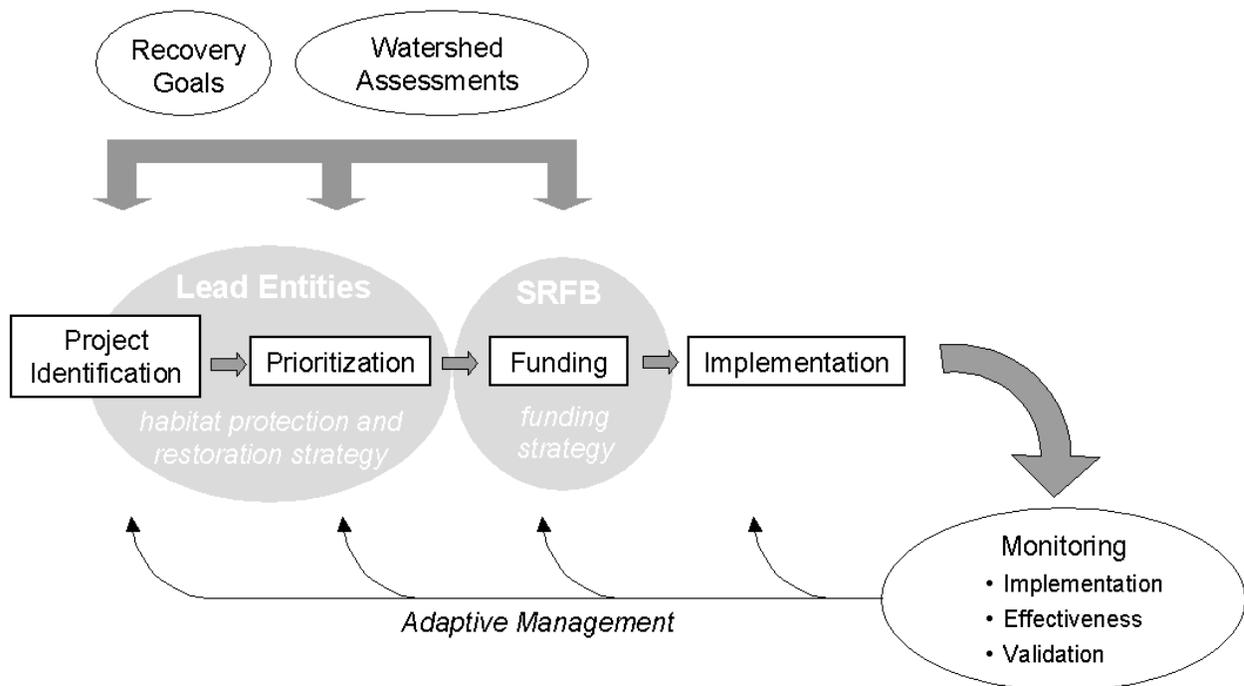
ACCOUNTABILITY CHANGE

As Lead Entities become more sophisticated, they may be able to take a stronger leadership role regarding the selection of their projects. The goal is to make Lead Entities self-supporting and functioning at a high level. This increases authority and responsibility at the local level, and allows Lead Entities to function without as much bureaucratic oversight.

MONITORING

Monitoring is key to ensuring that the habitat projects funded through the Lead Entities are effective to salmon recovery. The schematic below illustrates how adaptive management and monitoring are incorporated at all key stages of the Lead Entity process. Lead Entities are excited and ready to participate in the coordination and sponsorship of monitoring within their watershed.

FUNDING SALMON HABITAT PROJECTS



FUTURE FUNDING FOR OPERATIONAL SUPPORT OF LEAD ENTITIES

In response to a major revenue shortfall, the 2002 Legislature eliminated WDFW operational funding for Lead Entities and shifted expectations for funding to the SRFB. The SRFB agreed to provide operational funds to allow the Lead Entities to continue their work through June 2003. Longer term funding will be addressed as the legislature develops its 2003-2005 budget.

Conclusions

The Lead Entity Program has proven to be successful in many ways:

- Bringing **diverse stakeholders** to the table.
- Combining **science and local social values**.
- Developing **salmon recovery strategies** sensitive to the local geographic and salmon needs.
- **Leveraging an approximate overall 60%** federal, regional and local match for SRFB funds.
- Exposing salmon recovery projects to the broader public by **engaging volunteers and providing educational opportunities**.
- **Increasing direct involvement** through project sponsorship, coordination and committees over the years to **1350 individuals currently**.
- Continually improving their processes through **adaptive management**.
- **Coordinating with other watershed efforts**, including 2514 Watershed Planning and Regional Fisheries Enhancement Groups.

These successes illustrate the effectiveness of the state's funding.

Without the involvement of local stakeholders and integration of local science and social values inherent in the Lead Entity process, public support for salmon recovery would not be possible. To maintain the momentum of this process, including the public support and involvement, the numerous partnerships, and the increasing sophistication of local recovery strategies, **continued funding is necessary**.

These program successes also suggest that **Lead Entities could do more**, expanding their efforts beyond local habitat project identification and prioritization. The input from participants, through the Lead Entity Survey, shows that if adequate funding were available the **Lead Entities are very willing to take this step**. With a successful infrastructure in place, involving local citizens, key players in related planning efforts, and watershed-specific expertise, Lead Entities are **well positioned to provide the critical link between local and regional salmon recovery planning**.

Lead Entity Highlights

Chelan County

LEAD ENTITY



INVOLVEMENT

The number of people directly involved in the Chelan Lead Entity process has increased from two to 62 between 1998 and 2002.

PROJECT SPONSORS

The number of project sponsors has ranged from 2 to 8.

CITIZEN COMMITTEE MEMBERSHIP

The number of committee members has ranged from 5 to 8.

MATCH FUNDS FOR PROJECTS

Year	SRFB	Match
1999	\$372,527	\$192,139
2000	\$346,568	\$1,040,975
2001	\$2,295,779	\$391,263
Totals	\$3,014,874	\$1,624,377

MOST SIGNIFICANT ACCOMPLISHMENT

The Chelan County Lead Entity's greatest success has been the public support for salmon habitat restoration and protection developed through the Lead Entity process. While there is still a long way to go, the development of salmon habitat projects, planning processes, and studies and assessments has allowed citizens and agencies at the local level to engage significantly in salmon recovery efforts. Chelan County's involvement in the regional salmon recovery effort – the Upper Columbia Salmon Recovery Board – has promoted salmon recovery at the ESU level and enlisted even more public support. Without the Lead Entity process and the integration of other watershed planning processes at the County level, legitimate public support for salmon recovery would not be possible.

GREATEST CHALLENGE

The biggest challenge for the Chelan County lead entity is the integration of the various salmon recovery processes. Between Lead Entity activities, watershed planning, subbasin planning, NMFS recovery planning, and the Mid-Columbia Habitat Conservation Plan, the risk of redundancy and public burnout is high. Lead Entity activities must find relevance within the myriad planning process or potentially lose public support gained thus far. Most likely, the Lead Entity process will be a key process at the regional level and will coordinate at that level, although the financial resources to accomplish that goal do not appear to be forthcoming.

PROJECT EXAMPLE

BLACKBIRD ISLAND HABITAT DEVELOPMENT – EARLY ACTION PROJECT

SRFB: \$60,132; Match: \$13,000; Total cost: \$70,132;

Partners: Trout Unlimited, WDFW, the City of Leavenworth

The Blackbird Island Habitat Development project, located along the Wenatchee River in Leavenworth, is an example of a successful locally based partnership between Trout Unlimited, WDFW, the City of Leavenworth and many others. Critical instream habitat including rocks, logs, rootwads and aquatic vegetation were placed to help restore a half-mile section of high quality off-channel salmon and steelhead spawning and rearing habitat. The half-mile of old river terrace and relic stream channel were excavated to a depth that allows groundwater percolation and flow to enter and fill the old channel until exiting via surface water flows to the mainstem Wenatchee River. In addition to the instream habitat, the area was hydroseeded with native erosion control grasses and planted with native woody vegetation. This project provides a benefit to salmon with critically needed habitat, food production areas, shade and erosion protection. Trout Unlimited local involvement and effort was crucial to the success of this project. From coordinating, planning and drawing upon local experts to managing the project and working in the stream themselves, their commitment made this project happen.



Lower Columbia Fish Recovery Board

LEAD ENTITY



INVOLVEMENT

Approximately 56 people have been directly involved in the Lower Columbia Fish Recovery Board Lead Entity process annually from 1998 to 2002. (This does not include the extensive involvement of those individuals assisting the organizations involved and implementing numerous projects.)

PROJECT SPONSORS

The total number of project sponsor organizations is 24 from 1998 to 2002. Most apply annually.

COMMITTEE MEMBERSHIP

Board: 15 Citizens

Technical Committee: 18

SRFB AND MATCH FUNDS FOR PROJECTS

Year	SRFB	Match
1998 (GRSO)	\$176,236	\$113,600
1999 (WDFW)	\$2,759,500	\$1,479,139
Fast Track	\$261,000	\$166,958
1 st Round 2000	\$1,057,742	\$3,737,989
2 nd Round 2000	\$3,367,584	\$3,064,837
3 rd Round 2001	\$2,709,588	\$1,164,648
TOTALS	\$10,331,650	\$9,727,171

MOST SIGNIFICANT ACCOMPLISHMENT

As the regional Lead Entity responsible for developing a strategic- and science-based plan for evaluating and ranking all habitat projects for the region, the Lower Columbia Fish Recovery Board has secured more than \$11.4 million for 68 habitat projects awarded to 24 sponsors since 1998. The Board places a high value on partnerships with local volunteers. During the SRFB's early 2000 funding cycle sponsors received \$1.1 million for nine projects. Eight of the nine project sponsors were non-profit organizations working in cooperation with other groups and agencies. These sponsors provided \$1.6 million or 61% match for these projects.

GREATEST CHALLENGE

Project sponsors, the Board and the Technical Advisory Committee have noted that permitting has been one of the significant roadblocks in implementing on-the-ground restoration projects. Several projects have been delayed one or more seasons due to the permitting bottleneck, especially from the federal agencies. Whether they are a county public works department or a non-profit volunteer group the permit process is a major hurdle that has nothing to do with their size, capacity or title.

PROJECT EXAMPLES

CARTER-MALINOWSKI-SHIMANO (CMS) CEDAR CREEK RESTORATION

Project Sponsor: Fish First

Landowners: Carter, Malinowski and Shimano

Partners: Friends of the East Fork

SRFB: \$66,421; Match: \$16,377; Total Cost: \$82,798

Contributors: Fish First, Friends of the East Fork, Duck Unlimited, Vancouver-Clark Parks and Recreation, Clark Public Utilities, Clark County Conservation District, Clark County Public Works, PacifiCorp, WDFW, WA Department of Ecology, WA Conservation Commission, USFS, USFWS, NMFS, and US Army Corp of Engineers.



The CMS Cedar Creek Restoration project is part of a broader effort within the lower Columbia to restore both the North Fork and East Fork of the Lewis River. Numerous non-profit organizations, private citizens, and local, state, and federal agencies are making significant contributions to this intense restoration effort.

Cedar Creek, a tributary of the North Fork Lewis River, is cited in the WRIA 27 Limiting Factors Analysis as providing “the majority of spawning and rearing habitat left for all species of anadromous fish in the North Fork Lewis River system.” Fish First, which developed a comprehensive strategy for the Cedar Creek watershed, created instream spawning beds anchored by large rock vanes, and placed root wads and other LWD to recover .4 miles of habitat near Amboy. This project is in the final stages of completion in conjunction with similar efforts on 0.3 miles immediately upstream. Another 1.7 miles is also scheduled for restoration.

The first year of WDFW’s counting facility operation on the lower end of Cedar Creek resulted in the following numbers of adults: 260 Steelhead, 183 Chinook, and 983 Coho. Chinook adults are already using their new home, resting in created pools. The USFWS will conduct monitoring efforts in coordination with Fish First to evaluate the success of these projects.

EAGLE ISLAND ACQUISITION

Project Sponsor: Clark County

Partners: Columbia Land Trust, PacifiCorp, WDFW, WDNR

SRFB: 108,649; Match: \$916,615; Total: \$1,025,264.

The North Fork of the Lewis River is home to the last viable wild fall Chinook run in the lower Columbia River. Eagle Island provides critical rearing habitat for these fish during their juvenile life stage. Native steelhead and salmon use the shoreline margins, associated wetlands, and off-channel rearing areas of this 259-acre island at river mile 10.

Protecting this habitat for wild chinook is vital because there are four hydroelectric dams located in the upper watershed above river mile 19. Furthermore, WDFW operates two hatcheries in the watershed raising steelhead, spring chinook and coho. Not only does Eagle Island provide critical habitat, but it is also a priority for protection given its proximity to the growing Vancouver/Portland area.



DUNCAN CREEK DAM BLOCKAGE REMOVAL

Project Sponsor: Skamania Land Owners Association (SLOA)

Partners: GSRO, Bradley Foundation, NFWF, WDNR, WDFW

SRFB: \$261,480; Match: \$261,798; Total Cost: \$523,278

Contributors: Governors Salmon Recovery Office, Aquatic Lands Enhancement Account, Salmon Recovery Funding Board, National Fish and Wildlife Funds, the Bradley Fund and WDFW.

Duncan Creek Dam was originally constructed by Skamania Land Owners Association (SLOA) to provide summertime recreation activities on a man-made 17-acre lake. Although the dam included a fish passage culvert that met 1964 standards, it became apparent that the dam partially blocked adult steelhead and coho migration and completely blocked adult chum migration. Duncan Creek is considered critical habitat for lower Columbia River chum who prefer to spawn in spring fed tributaries. Historically, it provided the preferred spring water habitat for over 500 spawning adults annually. Currently, only two successful chum populations are present in ESU 4.

With private and SRFB monies, SLOA proceeded with the removal of Duncan Creek Dam to allow native species full access to Duncan Creek. SLOA and WDFW will be working cooperatively to monitor returning adult salmon and steelhead. Adaptive management will include evaluation of the spring spawning areas with additional habitat restoration, if necessary.

Foster Creek

LEAD ENTITY



INVOLVEMENT

The Foster Creek Conservation District is the Lead Entity Organization facilitating and administering the Citizen Advisory Group for Salmon Recovery in the Foster (WRIA 50) and Moses Coulee (WRIA 44) Watersheds. Approximately twelve people have been directly involved in the Citizen Advisory Group in 2001 and 2002.

PROJECT SPONSORS

The Foster Creek Conservation District Lead Entity had one project sponsor in 1999 and four in 2001.

COMMITTEE MEMBERSHIPS SINCE 2001

Citizen committee: 8

Technical committee: 4

MATCH AND SRFB FUNDS FOR PROJECTS

No SRFB projects funded

MOST SIGNIFICANT ACCOMPLISHMENT

The most significant accomplishment of this Lead Entity Program has been the development of the Lead Entity Organization. This diverse group has met on a monthly basis to define its responsibilities and group structure; to understand the connectivity among the 2496 Salmon Recovery Planning, 2514 Watershed Planning, the Upper Columbia Salmon Recovery Board (UCSRB), and the SRFB; and to develop a strategy to solicit projects. Members reviewed the UCSRB Regional Technical Team's *Strategy to Protect and Restore Salmonid Habitat in the Upper Columbia Region* and the *Foster and Moses Coulee Salmonid Habitat Limiting Factors Report*. Members meet to discuss projects with sponsors, concerns in the community of generating a habitat project list, and other ESA issues. Members developed a strategy to evaluate and prioritize projects and finalized a prioritized project list.

GREATEST CHALLENGE

Being in a low priority area the lead entity has not been able to get good projects funded from the SRFB. Other funding sources are being considered.

Grays Harbor County

LEAD ENTITY



INVOLVEMENT

The number of people directly involved in the Grays Harbor Lead Entity process has ranged from 60 to 75 with a growing number of stakeholder groups.

PROJECT SPONSORS

The number of project sponsors has ranged from 10 to 13.

COMMITTEE MEMBERSHIPS

Local Technical Review Team: 10-12

Citizen Group: 40-50

SRFB AND MATCH FUNDS FOR PROJECTS

Year	SRFB	Match
Early 2000	\$148,430	\$185,555
Late 2000	\$1,227,454	\$312,653
2001	\$587,083	\$188,411
Totals	\$1,962,967	\$686,619

MOST SIGNIFICANT ACCOMPLISHMENT

The Grays Harbor Lead Entity's most significant accomplishment is the development of the Chehalis Plan for Habitat Restoration and the consistent participation of project sponsors each SRFB grant cycle.

GREATEST CHALLENGE

The Grays Harbor Lead Entity's greatest challenge is finding new project sponsors and source dollars to use as match. There are many private landowners who would like to participate, but lack the matching funds.

PROJECT EXAMPLES

SINGER CREEK BARRIER REMOVAL PROJECT

One of the success stories in the Chehalis Basin is the removal of a barrier from Singer Creek, which is located along West Boundary Road in the Satsop basin. The project replaced a five-foot diameter blocking culvert that was elevated two feet above the stream with a 13-foot fish passable culvert. According to the Project Manager, Lonnie Crumley, "fish entered the project area before completion of the project." Crumley also noted that within the first year, coho, chum, steelhead, and cutthroat were observed. During spring monitoring, a huge number of juveniles were observed in the upper reaches. Barrier removal projects such as Singer Creek realize a big bang for the buck and immediate, positive results.



Before



After

WRIA 23 BARRIER ASSESSMENT

The goal of this project is to provide a holistic assessment of barriers in WRIA 23. The assessment includes county, state, private landowner, and private timber company parcels containing culverts or other types of barriers to streams and off channel habitat. The data will detail segments of streams containing blockages that may be overlooked by a single entity. This will give all stakeholders in the basin the ability to prioritize restoration efforts by detailing where the greatest amount of habitat can be opened up to salmon and steelhead of all lifecycles.

Hood Canal Coordinating Council

LEAD ENTITY



INVOLVEMENT

The number of people directly involved in the Hood Canal Coordinating Council Lead Entity process has ranged from 28 to 62 between 1998 and 2002. Approximately 54 people are currently involved.

SPONSORS

The number of project sponsors has ranged from five to twelve between 1998 and 2001.

COMMITTEE MEMBERSHIPS

1998 (GSRO round - HCCC area of Southwest Puget Sound Sub-region): 22

1999 (IRT round)

- Mason, Kitsap and Jefferson Sub-committees: 11
- Habitat Project List Committee: 42

2000 (SRFB 1st round)

- Technical Team: 17
- Mason, Kitsap and Jefferson Sub-committees: 49
- Habitat Project List Committee: 66
- Other Attendees/Project Sponsors: 4

2000 (SRFB 2nd round)

- Technical Team: 15
- Habitat Project List Committee: 38

2001 (SRFB 3rd round)

- Technical Team: 18
- Habitat Project List Committee: 17
- Other Attendees/Sponsors: 17

MATCH FUNDS

Year	SRFB	Match
1999	\$1,295,671	\$106,825
2000	\$1,104,470	\$257,698
2001	\$2,304,351	\$811,521
Totals	\$4,704,492	\$1,176,044

MOST SIGNIFICANT ACCOMPLISHMENT

The HCCC's most significant developments are the facilitation of discussion, understanding and cooperation among multiple groups of people with no previous relationships, from different areas, with different agendas. The HCCC has brought together people who would otherwise not work with one another. The manifestation of these groups working together is the HCCC Salmon Habitat Recovery Strategy. This Strategy was developed by these various groups working together toward a common set of goals, a process that required tradeoffs among the groups. No one group got everything they wanted, and some groups actually gave up more than other groups.

GREATEST CHALLENGE

The HCCC's biggest challenge is the maintenance of the dialogue and working relationships addressed above. Additionally, the continuing challenge is to keep the progressive momentum of our Strategy. In the process of annual revisions to the Strategy, it is challenging to keep everyone focused on the same set of goals and to marry the various agendas into a coherent whole – the revised Strategy.

PROJECT EXAMPLES

WEST FORK CHIMACUM CREEK PROJECT, JEFFERSON COUNTY, WASHINGTON

Sponsor: NFWF

Partners: North Olympic Salmon Coalition (NOSC) 99-02

SRFB: \$124,000; Match: \$60,000; Project Cost: \$184,000

This project re-meanders a portion of the West Fork Chimacum Creek to improve conditions for salmon and restore riparian buffer vegetation. The work involves excavation of a new streambed, filling portions of the existing ditch, placing excess soils in shallow discontinuous mounds near the stream to de-level the topography, installing woody material and spawning gravel into the stream, eradicating selected areas of reed canary grass, transplanting on-site vegetation, and constructing temporary and permanent erosion control features. Woody material is deeply buried so that it will not wash away and it will not require the use of artificial anchors. Also included in the scope of the project is installation of a 41-foot railroad flatcar with a clear 30-foot span between abutments to replace the existing concrete box culvert on the private access to four houses on Chimacum Creek. The existing concrete box culvert under the driveway was too small to accommodate peak flows, and blocked adult salmonid passage at high flow. The driveway periodically overtopped the culvert posing a threat of excessive sedimentation below. The project is unique in the number of cooperating landowners (4) and the variety of restorative treatments accomplished in the area.

The project adds 320 feet (about 20%) of stream length, protects and enhances existing wetlands, and increases flood capacity in the channel. Three acres of 180-foot wide riparian area will be replanted through the CREP program on one parcel and NOSC volunteers will plant a smaller area upstream. Stream restoration created sinuosity in the existing channelized streambed in one area and created a completely new channel in another reach. Both actions were designed to improve spawning and rearing habitat, create overwinter refugia for juvenile coho, add channel complexity with LWD placement. Pulling back the vertical channel sides creates additional floodplain capacity.

DISCOVERY BAY SUMMER CHUM RECOVERY

Stock Restoration

Summer Chum in Discovery Bay began its decline in the early 1980s. Stock restoration efforts, initiated and implemented by a local volunteer salmon restoration group, Wild Olympic Salmon, began in 1992 using local broodstock and have successfully increased the number of adult spawners returning to Salmon Creek. The majority of the funding for this project has come from the local regional fisheries enhancement group and NOSC, with additional funding from WDFW's Aquatic Lands Enhancement Account and Jefferson County Governor's Salmon Recovery Office dollars.

Habitat Restoration

The Jefferson County Conservation District received funding from the SRFB, NOSC and Jefferson County to conduct substantial habitat restoration in the lower 0.5 miles of Salmon Creek. The creek, which had been channelized for agricultural use, will be returned to its historic channel with meanders and structure (large woody debris) to provide bed and bank stability and ensure sustainable stock recovery. Work is scheduled to begin during the summer of 2003.

Habitat Acquisition

WDFW and the Jefferson Land Trust have received funding from the SRFB and USFWS to purchase and protect much of the lower river and estuarine habitats of Salmon and Snow Creeks. Negotiations are ongoing.

Project	SRFB	Match	Other Sources
Stock Restoration	\$ 0.00	\$0.0	\$120,000
Habitat Restoration	\$117,300	~\$20,250	~\$ 40,000
Habitat Acquisition	\$400,000	\$98,500	~\$700,000

Island County

LEAD ENTITY



INVOLVEMENT

The number of people directly involved in the Island County Lead Entity process has increased from 39 to 82 between 1999 and 2002.

PROJECT SPONSORS

The number of project sponsors has ranged from two to three from 1999 to 2001.

COMMITTEE MEMBERSHIPS

- Island County Water Resource Advisory Committee: 34
- Salmon Technical Advisory Group: 18
- Whidbey Salmon Recovery Working Team: 8
- Camano Salmon Recovery Working Team: 17

SRFB AND MATCH FUNDS FOR PROJECTS

Year	SRFB	Match
2000	\$866,867	\$369,375
2001	\$285,000	\$122,000
Total	\$1,151,867	\$491,375

MOST SIGNIFICANT ACCOMPLISHMENT

This Lead Entity has made monumental strides in the last three years. Its most significant accomplishment has been in the building of a strong network of local citizens, organizations, and agencies that are working together to develop and implement salmon recovery projects.

GREATEST CHALLENGE

The biggest challenge has been the lack of adequate state funding to support at least a ¾ FTE working on the local Lead Entity process. The development of a politically acceptable local salmon strategy, and the development of an outreach and education program to build local support for the program have been challenging to accomplish without adequate staffing.

King County - WRIA 8

LEAD ENTITY



INVOLVEMENT

Approximately 35 people were directly involved in the WRIA 8 Lead Entity Process between 1999 and 2001.

PROJECT SPONSORS

There were two successful sponsors each year between 1999 and 2001. Each year, most sponsors have submitted multiple applications.

COMMITTEE MEMBERSHIPS

Steering/Citizens Committee: 31 members

Staff/Technical Committee: 44 members

SRFB AND MATCH FUNDS FOR PROJECTS

Year	SRFB	Match
1999	\$570,000	\$5,201,272
2000	\$1,032,500	\$1,540,618
2001	\$630,000	\$135,731
Totals	\$2,232,500	\$6,877,621

MOST SIGNIFICANT ACCOMPLISHMENT

The WRIA 8 Lead Entity was part of a team that finalized the *Near-Term Action Agenda for Salmon Conservation (NTAA)*, which highlights and includes strategies for projects and actions that can be taken "now" to protect and enhance the watershed for salmon conservation. The Lead Entity Program and associated SRFB and NTAA funding have allowed some of these near-term actions to take place immediately. The positive progress made by this group towards salmon habitat protection and restoration has shown that by working together the participants can conserve and recover our salmon populations, even in urban areas.

GREATEST CHALLENGE

Finding funding for habitat projects in more urban parts of our watershed is a challenge in WRIA 8. It is essential to salmon recovery to improve conditions and create refuges in the urban areas that all salmon must migrate through to get to the spawning sites. Because human population will increase dramatically in the state and more areas will become urbanized in the next 20 years, it is critical that we learn how to protect and restore salmon habitat in densely populated areas.

PROJECT EXAMPLES

UPPER BEAR CREEK CONSERVATION AREA

SRFB: \$450,000; Match: \$4,589,000 Total: \$5,039,000.

This important conservation area was protected through a 10-year partnership among Snohomish County, the Cascade Land Conservancy, King County and the property owners. SRFB funding was used to acquire 791 undeveloped, forested acres. This project protects the headwaters and hydrology of Bear Creek, a core production area for WRIA 8. This action was identified in the Bear Creek Basin Plan and the Bear Creek Waterways program.



CEDAR RIVER - RICARDI REACH AQUISITION

SRFB: \$212,500; Match: \$37,500; Project cost:\$250,000.



King County's 2001 acquisition of 22 acres of forested riparian floodplain spans both sides of the Cedar River, a core production area for WRIA 8. The northern portion of floodplain on the right bank includes a spring-fed tributary of the Cedar River. The protection of this site not only preserved a crucial area (over 1,000 feet of river frontage) of the mainstem of the Cedar River and a small spring-fed tributary, but it protects future habitat enhancement opportunities to remove or set back the existing levee and reconnect the river to its floodplain. The project includes the buyout and removal of a frequently flooded home and creation of off-channel habitat on adjacent property. (The

property owner donated seven acres of adjacent property.) Preservation and restoration of Ricardi Reach was envisioned in the Cedar River Basin Plan.

ISSAQUAH WATERWAYS - CAREY CREEK REACH

SRFB: \$60,000; Match: \$13,372; Project cost: \$73,372.

The purchase of this conservation easement will protect approximately 10 acres of the forested riparian area and adjacent uplands in Carey Creek. Carey Creek is a headwater tributary of Issaquah Creek, and contains some of the best remaining lowland stream habitat in the Issaquah Basin, a core production area for WRIA 8. King County is finalizing the conservation easement and the King Conservation District will complete livestock fencing in 2002. Preservation of this area resource was identified in the Issaquah Basin Plan and the Issaquah Waterways program, and will serve as a model to encourage other adjacent property owners to participate in conservation efforts along the stream.

King County - WRIA 9

LEAD ENTITY



INVOLVEMENT

The approximate number of people directly involved in the WRIA 9 Lead Entity Process increased from 40 to 50 between 2000 and 2001.

PROJECT SPONSORS

The number of sponsors increased from 1 to 4 between 2000 and 2001.

COMMITTEE MEMBERSHIPS

1998-2002

Steering Committee Membership: The WRIA 9 Steering Committee is comprised of 27 organizations. Membership has been constant since 1998, with the only changes being the addition of two small cities, (including a Nearshore city) and the addition of the Vashon/Maury Island Community Council.

2000-02

Project Selection and Evaluation Committee Membership: 6-11 members

SRFB AND MATCH FUNDS

Year	SRFB	Match	Additional Match Expected
2000	\$500,000	\$1,411,000	\$2,285,000
2000	\$1,572,000	\$298,000	\$8,560,300
2001	\$1,806,000	\$579,000	undetermined
TOTALS	\$3,878,000	\$2,288,000	\$10,845,300

MOST SIGNIFICANT ACCOMPLISHMENT

The most significant accomplishment of the WRIA 9 Lead Entity Program is a high level of local government support and inclusiveness. With a strong commitment to salmon in this very urbanized watershed, all jurisdictions in the watershed cost-share salmon conservation plan development through an interlocal agreement. Moreover, environmental groups, businesses, and local, state, and federal agencies work together on the WRIA 9 Steering (Citizens) Committee to reach consensus on salmon habitat conservation planning and implementation efforts. The Steering Committee has overseen the development of the *Habitat Limiting Factors and Reconnaissance Assessment (2000)*, the *State of the Nearshore Report (2001)*; and the *Near-Term Action Agenda (2002)*. The Steering Committee uses these documents to guide its SRFB strategy development and maintenance, as well as to prioritize habitat projects for the annual SRFB funding program. This inclusive and integrated approach to salmon conservation planning, together with its sound scientific underpinnings, has strongly influenced the high level of leveraging of SRFB funds to date. WRIA 9 has leveraged 60% of the funds granted by the

SRFB (required amount is 15%). We anticipate leveraging an additional \$11 million for habitat restoration, sextupling the amount awarded by the SRFB.

GREATEST CHALLENGE

A big challenge for the WRIA 9 Lead Entity Program in meeting our objectives is continuing to find the funding necessary to advance our scientific knowledge of the watershed, thereby bolstering the technical foundation of the salmon habitat plan. While we have pulled together solid documentation on limiting factors and existing watershed conditions, research to fill key data gaps is necessary to meet NMFS technical needs. The scientific basis/framework of the conservation plan will need funding beyond what is now available.

Cost has proven to be an additional challenge in implementing salmon recovery projects in WRIA 9. Because large portions of the Green/Duwamish River, its tributaries, and the central Puget Sound nearshore in WRIA 9 are urbanized, land acquisitions and habitat restoration are costly.

PROJECT EXAMPLES

DUWAMISH SITE 1 ACQUISITION AND RESTORATION (2000)

SRFB: \$500,000; Match \$1,400,000; Project Cost: \$1,900,000.

Partners: Elliot Bay/Duwamish Restoration Panel, Washington State Department of Natural Resources-Aquatic Lands Enhancement, King County, and cities of Seattle and Tukwila.

The Site 1 Acquisition sets aside a 3.8-acre undeveloped parcel along the highly industrialized Duwamish River. This site represents some of the last open space along the estuary and is located along an important transition area for juvenile chinook. The site was purchased in May 2001 and planning for restoration work is underway.



KANASKAT REACH ACQUISITIONS – PHASES I & II(2001-02)

SRFB: \$515,000; Match: \$95,000; Project Cost: \$610,000

(Phase 1).

SRFB: \$795,000; Match: \$400,000; Project Cost: \$1,195,000

(Phase 2).

Partners: King County and Conservation Futures

The Kanaskat Reach along the Middle Green River is one of four locations along the Green/Duwamish River that offer the best chinook spawning and rearing habitat in the watershed. Phase I and II projects expand the ecological influence of previous acquisitions by adding 229 acres of protected habitat and creating a critical link between large blocks of public open space. This has resulted in over 850 acres of contiguous protected salmonid habitat. Protection of this high quality



habitat follows many years of research and planning by King County to identify habitat preservation opportunities important for salmon recovery. Appraisals have been completed for both phases, and offers have been sent to property owners (all of whom appear to be willing sellers). Once offers are recognized, active negotiation will occur.

SEAHURST SEAWALL ASSESSMENT (2001)

SRFB: \$82,000; Match: \$18,000; Total: \$100,000.

The Seahurst Seawall Assessment is a study to determine the feasibility of removing all or part of the Seahurst Seawall, supporting as much shoreline, nearshore, estuarine and stream habitat restoration within Seahurst Park as possible. In May 2002, the Burien City Council reviewed six alternatives for the seawall and park, and selected a preferred alternative with a strong nearshore restoration element. This alternative was included in a Seahurst Park Master Plan that was unanimously approved by the Burien City Council on July 15, 2002. The feasibility study is expected to leverage about \$5 million for nearshore habitat restoration.

Plans for beach restoration include removing two of the four existing seawalls; reducing one in length; and leaving the fourth in front of the Marine Technology Laboratory. The Master Plan also includes an environmental educational/interpretive area, back shore wetland, and tide pool area. Removal of the seawall and restoration of the beach will benefit salmon by protecting and enhancing existing surf smelt and sandlance spawning grounds; protecting and enhancing existing eelgrass beds; enhancing marine riparian vegetation; and restoring the nearshore environment.



Failing Seawall

Kitsap County

LEAD ENTITY



INVOLVEMENT

Approximately 87 people have been directly involved in the Kitsap County Lead Entity process since 2000.

SPONSORS

The number of project sponsors has ranged from three to fifteen between 1999 and 2002.

COMMITTEE MEMBERSHIPS

2001-2002

- Salmon Restoration (Citizens) Committee: 15
- Technical Advisory Group: 15-16

SRFB/MATCH FUNDING FOR PROJECTS

Year	SRFB	Match
1999	\$398,068	\$162,462
2000	\$2,529,700	\$573,150
2001	\$3,026,500	\$1,150,834
TOTALS	\$5,954,268	\$1,886,446

PROJECT EXAMPLE

GORST CREEK RESTORATION PROJECT (2001-02)
SRFB: \$368,000; Local Match: \$167,000
Partners: Kitsap County, Port of Bremerton, U.S. Navy, Suquamish Indian tribe, Washington Scuba Alliance, Kitsap Divers Association, SRFB, Washington Department of Ecology, WDFW, Kitsap Audubon Society, People for Puget Sound, Mid-Sound Salmon Enhancement Group, Kitsap County Stream Team, Conservation District, Sports Fishing groups, local community clubs, schools and watershed conservation groups.



The Gorst Creek stream improvements included removal of the stream from an enclosed channel, grading of a meandering path, and placement of gravel, large woody debris and native plantings along 1.5 miles of stream. Thousands of hours of volunteer time and several matches were seen as a result of coordinated efforts. Third Round funding will restore 1,200 feet of shoreline, adding 23,271 square feet of intertidal area, 2.5 acres of estuary of the Sinclair Inlet to a "vintage 1942" natural wetland/estuarine condition to benefit salmon and wildlife.

The benefits gained from these combined projects include recovery of essential migration channels as juvenile salmon adapt to and move into brackish estuarine water. Restored habitat will benefit several salmon species, increase survival of all juvenile salmon species that utilize estuarine habitat, and provide smolts natal to Gorst Creek with a gradual transition zone for migration and acclimatization to salt water.

I have been amazed by the transformation of the barren "chute" that was the creek's course through Jarstad Park into a functioning and attractive spawning area, with large woody debris and alternating areas of gravel runs and deeper, protected water. If I were a salmon I'm certain it would appeal to me! I am also most thankful for the attention being given to achieving a lasting restoration of the Sinclair Inlet ecosystem, particularly the estuary and marine areas into which Gorst Creek flows...I know it will take determined and coordinated efforts and investments of a multitude of government entities to arrest the decline and turn it into a long-term recovery. I realize that if it can be done here, and done well, we can demonstrate how it may be possible to tackle other complex sites of contamination and degradation around Puget Sound.



Phil Rockefeller, Kitsap area legislator and member of the Puget Sound Council and Kitsap Poggie Club

Klickitat

LEAD ENTITY



INVOLVEMENT

The approximate number of people directly involved in the Klickitat Lead Entity process has ranged from 10 to 13 since 1999.

PROJECT SPONSORS

The number of project sponsors has range from two to three per year since 1999.

COMMITTEE MEMBERSHIPS

The number of committee members has ranged from eight to ten since 1999.

SRFB AND MATCH FUNDS FOR PROJECT

Year	SRFB	Match
1999	\$526,000	\$164,000
2000	\$649,000	\$166,000
2001	\$704,000	\$174,000
Total	\$1,879,000	\$504,000

MOST SIGNIFICANT ACCOMPLISHMENT

In three funding rounds, SRFB has funded a total of fifteen salmon habitat recovery projects submitted through the Klickitat Lead Entity.

GREATEST CHALLENGE

It has been challenging to develop a credible salmon habitat recovery strategy that has a broad base of community support.

Nisqually River Salmon Recovery

LEAD ENTITY



INVOLVEMENT

The number of people directly involved in the Nisqually River Salmon Recovery Lead Entity Process increased from 32 to 61 between 2000 and 2001.

SPONSORS

The number of sponsors has increased from 1 to 5 between 1999 and 2001.

COMMITTEE MEMBERSHIPS

2000

- Nisqually River Council Natural Resources (Technical) Committee: 23
- Nisqually River Council (Citizens' Committee): 18

2001

- Nisqually River Council (Citizens' Committee): 20
- Nisqually Salmon Habitat Workgroup (NSHW) (Technical Committee): 16
- Nisqually River Citizens Advisory Committee: 16
- Natural Resources Committee Members: 1

SRFB AND MATCH FUNDS FOR PROJECTS

Year	SRFB	Match
1998	\$ 85,000	\$ 64,500
1999	\$ 110,000	\$ 60,000
2000	\$ 965,754	\$227,003
2001	\$1,155,605	\$299,545
Totals	\$2,316,359	\$651,048

MOST SIGNIFICANT ACCOMPLISHMENT

Our goal to be a cooperative, inclusive group that works together effectively to protect and restore the river and its watershed has been reflected in our work. In 2001, we released the Nisqually Chinook Recovery Plan, which identified all actions necessary to recover a sustainable locally adapted population of fall chinook salmon. We are currently working on a multi-species plan to directly address the needs of all Nisqually salmon species. We have produced SRFB project lists, consisting primarily of high priority projects that follow our strategy, by ensuring that all project sponsors understand our recovery plan. We have made substantial progress on our highest priority habitat actions with SRFB funding: restoration of nearly 40 acres of estuary habitat, acquisition of significant properties along the mainstem Nisqually River for permanent protection, and development of restoration plans in cooperation with local landowners along our two highest priority tributaries. With continued SRFB support we are confident that we will be able to continue to turn our salmon recovery plan into reality.

GREATEST CHALLENGE

Our greatest challenge as a Lead Entity has been ensuring that our process is as inclusive as possible, and that all the participants are fully informed of our strategy and what role they can play in implementing that strategy. We have met that challenge by forming the Nisqually Salmon Habitat Workgroup, which acts as our Lead Entity technical committee for our local project prioritization process. However our workgroup, instead of only meeting during the time when we need to rank projects, meets monthly year round to discuss the current status of Nisqually salmon habitat work as it relates to our recovery plan. Monthly meetings also help project sponsors to coordinate their efforts. Through this workgroup and our efforts to recruit all potential participants, we have been able to provide recovery strategy education and engage all participants in implementation of the strategy.

PROJECT EXAMPLES

NISQUALLY ESTUARY RESTORATION
SRFB: \$178,800; Match: \$31,200; Total cost: \$208,000
Sponsor: Nisqually Indian Tribe

The Nisqually Estuary Restoration project, located at the mouth of Red Salmon Slough in the Nisqually River Delta, will restore 31 acres of diked pasture to its original saltmarsh condition, providing habitat and food for out-migrating juvenile salmon and other wildlife. Restoration of saltmarsh conditions will be accomplished by removing perimeter dikes adjacent to Red Salmon Slough, a tributary to the Nisqually River, reconnecting the tide to the once saltmarsh habitat that has been cut off from saltwater intrusion for nearly one hundred years. Once reconnected, passive restoration of saltmarsh conditions will begin immediately as the habitat is inundated by daily tides. Monitoring will be conducted to ensure natural saltmarsh plant communities and fish utilization patterns are being created at the restoration site.



Restoration of estuarine habitat was identified in the *Nisqually Chinook Recovery Plan* as the highest recovery priority for Nisqually Chinook. Approximately 35% of the historic estuarine habitat has been lost due to dikes. If all of this habitat were to be restored, the Plan estimates the numbers of naturally spawning Chinook would double. Restoration of the estuary will also benefit the other salmonids present in the Nisqually: chum, coho, pink, steelhead and sea-run cutthroat. In addition, because the Nisqually River estuary provides important nursing habitat for stocks in South Puget Sound, this restoration project will provide significant benefits for regional salmon recovery efforts.

The project is supported by a number of public and interest groups throughout the watershed. While the Nisqually Tribe owns the property, the restoration site is located within the Congressional-approved boundary of the National Wildlife Refuge. Both the Refuge and the USFWS, which manages the Refuge, support the project. USFWS provided funding to develop

the inventory and preliminary restoration plan that identified this restoration project as top priority for restoration on the tribal-owned property.

The Nisqually River Estuary restoration project, which is restoring almost forty acres of salmon habitat in Pierce County, is an exciting example of how cooperative efforts can result in the successful implementation of high priority salmon recovery projects. Local, state, and federal agencies have worked together for many years to ensure that the Nisqually estuary is protected and enhanced.

– John Ladenburg, Pierce County Executive

MOSMAN SHORELINE ACQUISITION

Sponsor: Nisqually River Basin Land Trust (NRBLT)

SRFB: \$80,000; NRBLT Match: \$62, 943; Total Cost: \$142, 943.

The Mosman Shoreline Acquisition will permanently protect high quality shoreline and riparian habitat along the mainstem Nisqually – 35 acres of riparian habitat with 3500 feet of river frontage. The *Nisqually Chinook Recovery Plan* identified the acquisition of properties and/or development rights as the number one recovery action. Permanent protection of this high quality habitat will ensure the site continues to provide crucial riparian functions such as shade, leaf litter, bank stabilization and large woody debris recruitment.

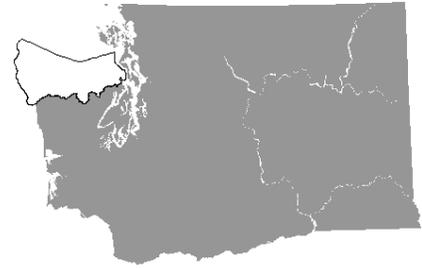
All six salmonids present in the Nisqually, including Chinook, steelhead, coho, chum, pink and searun cutthroat utilize this reach for migration, spawning and/or rearing. Coho utilize small streams and wetlands located on the property for overwintering habitat. This project fits in with the long-term salmon recovery priority in the Nisqually, which is to permanently protect the mainstem Nisqually shoreline and riparian habitat. Multiple entities within the watershed are coordinating to implement this strategy including Fort Lewis, Nisqually Wildlife Refuge, Nisqually Indian Tribe, Tacoma Power, Centralia City Light, Washington State Parks and NRBLT. NRBLT raised funds for the acquisition with support from private individuals and businesses in the watershed and region. The Nisqually Indian Tribe provides consultation on natural resource management needs and staff and volunteer support for site stewardship and maintenance.

The Mosman acquisition project is another important step in wise stewardship of the Nisqually River. In recent years the Nisqually River Basin Land Trust has worked with numerous property owners along the river to buy and permanently protect land along the river. Due to their efforts and others, two-thirds of the salmon-bearing portion of the river is now protected. This tremendous accomplishment is a great example of what can be accomplished when all people of a community work together cooperatively. We in the Nisqually are working hard to ensure wise stewardship of the Nisqually River and funds from the Salmon Recovery Funding Board are helping us to meet this challenge.

– Billy Frank Jr., NWIFC Chairman

North Olympic Peninsula

LEAD ENTITY



INVOLVEMENT

The number of people directly involved in the North Olympic Peninsula Lead Entity program ranged from 85 to 107 between 1999 and 2002.

PROJECT SPONSORS

The number of project sponsors ranged from six to eleven.

COMMITTEE MEMBERSHIPS

1999-2002 – Lead Entity Group: 11-18

2000-2002 – Technical Review Group: 14-18

SRFB AND MATCH FUNDS FOR PROJECTS

Year	SRFB	Match
1999	\$860,652	\$1,064,886
2000	\$3,354,797	\$1,052,356
2001	\$2,532,033	\$1,047,88
Total	\$6,747,483	\$2,117,242

MOST SIGNIFICANT ACCOMPLISHMENT

NOPLÉ developed a comprehensive strategy based on the philosophy that fish species that are currently strong will be protected, and species that are currently weak will be restored. This document guides all project review in the Lead Entity area. Development of this document took months, with the final product incorporating the unique challenge of our region: how to prioritize between protection and maintenance in a region that has both listed and non-listed salmonids.

GREATEST CHALLENGE

The North Olympic Peninsula is one of the most diverse and complex Lead Entity regions. The NOPLÉ region is a large geographic area, encompassing 90 independent watersheds, over 3,000 stream miles, and 215 linear miles of nearshore. Thus, within the geographic area that makes up this Lead Entity, there are different factors, such as economy, land management and climate, that effect not only how salmon restoration is perceived by citizens in this region, but how projects are reviewed by the Lead Entity.

The NOPLÉ region has both listed and non-listed salmonids. While much of funding is directed toward ESA listed species, funding is also needed to support, preserve, and enhance the stocks that are healthy. It is far more cost-effective to maintain healthy runs than to recover them.

PROJECT EXAMPLES

SOUTH FORK PYSHT RIVER LWD PLACEMENT AND FISH PASSAGE RESTORATION (2001)

Sponsor: Merrill and Ring

SRFB: \$131,900; Match: \$40,000; Total Cost: \$171,900

The South Fork Pysht River project seeks to restore habitat for rearing and spawning (Coho, chum, cutthroat, steelhead) in three phases: (1) removal of a fish barrier blocking access to a one acre pond/wetland and 1200 feet of stream; 2) construction of a channel between the pond and Pysht River for fish passage and spawning habitat; and 3) placement of LWD along 3,000 feet of the river. The work builds upon previous habitat restoration projects adjacent to the proposal area and elsewhere on the Merrill & Ring's ownership in the Pysht River watershed.

SEKIU RIVER LOG JAM CONSTRUCTION (2000)

Sponsor: Makah Tribe

SRFB: \$104,382; Match: \$21,581; Total Cost: \$125,963

The Sekiu River Log Jam project was the first project in the state to construct full-spanning log jams. Log jams were proposed in the Sekiu River in order to reduce stream energy, trap sediment, and increase cover, holding pools, tail-out spawning areas, and off-channel and side-channel habitat. Independent instream large woody debris will be placed downstream from the jams where needed to reduce bank destabilization.

Past activities, such as extensive logging, and on-going disturbance created a stream channel that lacked large woody debris and short-term sources for wood input. The Sekiu River's high flow during winter months allows it to flood most wood that comes into the channel. The proposed log jams trap wood until the riparian timber grows large enough to resist flushing. Over time, the project will result in the rebuilding of large complex jams and bars like those present before intensive logging began. The jams will provide significant habitat for salmonids and their prey.

JIMMYCOMELATELY RESTORATION (2000)

Sponsor: Jamestown S'Klallam Tribe

SRFB: Acquisition: \$133,607; Bridge design: \$590,000

Match: Acquisition: \$23,578; Bridge design: \$2,505,850

Total Cost: Acquisition: \$157,185; Bridge design: \$3,095,850

In 2000 the SRFB provided funding to restore the Jimmycomelately (JCL) Creek in the Sequim Bay Watershed. This is a four-phased project designed to restore the JCL ecosystem for recovery of ESA-listed Hood Canal summer chum and other salmon stocks, by: (1) relocating the creek to its historic, sinuous channel; (2) restoring the estuary; (3) constructing the Highway 101 bridge over the new channel; and (4) diverting flows into the new channel. The JCL Creek channel alignment was altered in the 1920s or 1930s, resulting in a loss of gradient, fluvial energy and corresponding sediment transport capability. Channel aggradation and severe habitat loss have resulted in low flows, channel instability, fish passage blockage, scour and fill of redds, and increased flood frequency/severity causing landowners to further channelize the creek.

Okanogan County/ Colville Confederated Tribe

LEAD ENTITY



INVOLVEMENT

The approximate number of people directly involved in the Okanogan/Colville Lead Entity process has increased from 8 to 48 between 1998 and 2002.

PROJECT SPONSORS

The number of project sponsors has ranged from one to thirteen each year since 1998.

COMMITTEE MEMBERSHIP

Committee membership has remained constant at 15, since its inception in 1999.

MATCH FUNDS FOR PROJECTS

Year	Match
1998	\$16,100
1999	\$76,250
2000	\$878,220
2001	\$253,531
2002	\$1,274,825
Total	\$2,498,926

MOST SIGNIFICANT ACCOMPLISHMENTS

We developed new rating criteria to better match those of the SRFB technical panel and IAC staff (e.g., good, very good, High, Medium and Low), and utilized socio-economic criteria in the fourth round project ranking process. We also developed a Fix-it-Loop process to improve project development and grant applications. This included three key meetings: a kick-off brainstorming session to introduce the Upper Columbia Biological Strategy to potential project sponsors; a Fix-It-Loop meeting where project sponsors received feedback from RTT members on how to improve project applications; and an RTT rating meeting with a summary slide presentation to aid in their final review. Finally, we have integrated our efforts and those of the Chelan and Douglas County Lead Entities with the Upper Columbia Salmon Recovery Board's regional efforts.

GREATEST CHALLENGE

The biggest challenge for the Okanogan County Lead Entity Program in achieving our objectives is the availability of funds. The geographic area of the Okanogan County Lead Entity is the largest Lead Entity in the state. In addition, the watersheds within the Lead Entity, the Okanogan and Methow, both have threatened and endangered species.

PROJECT EXAMPLES

METHOW CONSERVANCY

Over the past three years the Methow Conservancy has protected a total of 6.2 miles and 600 acres of riverfront habitat with conservation easements funded by the SRFB. All of these easements are located in designated “hotspots” for steelhead, spring Chinook and/or bull trout. According to the *Washington State Conservation Commission’s Limiting Factors Analysis* and the *Upper Columbia Salmon Recovery Board (UCSRB) DRAFT Biological Strategy*, protecting functional habitats is a top priority. The Methow Conservancy has a proven track record with conservation easements and community-based conservation planning. These easements instigate protection of corridors of extremely high-quality riparian habitat where side channels, large woody debris and spawning areas are abundant. A Fourth Round SRFB proposal will protect over 1000 acres and 6.8 miles of riverfront habitat. Funding of these projects has prevented the fragmentation from the residential development and dispersed recreation that is rapidly encroaching on these important spawning reaches.

UPPER COLUMBIA REGIONAL FISHERIES ENHANCEMENT GROUP (UCRFEG)

The UCRFEG has developed a phased project at and in the vicinity of the Similkameen/Okanogan Rivers’ confluence. The first aspect of the project is to design measures to protect and restore floodplain processes for nine miles of spawning, rearing and migratory habitat supporting listed steelhead, Chinook and sockeye salmon. The goal is to assess a suite of possibility restoration actions that might include dike modification, riprap removal, riparian plantings and acquisition of 90-acre Eyhott Island. Another aspect of the project will protect and restore riparian corridors on Eyhott Island and the North Shore property to further support rearing, and migratory habitat for listed steelhead, Chinook, and sockeye salmon at the confluence of the Okanogan and Similkameen Rivers.

OKANOGAN CONSERVATION DISTRICT (OCD)

SRFB: \$186,178; Match: \$63,720

Partners: OCD, the Upper Columbia RFEG and Okanogan County.

OCD implemented an inventory and assessment of fish passage barriers in the watershed. This project was identified as extremely important for the recovery of salmon by the *Conservation Commission’s Methow Limiting Factors Report*, the *UCSRB’s DRAFT Biological Strategy*, and the *Statewide Strategy to Recover Salmon*. Throughout the Methow/Okanogan watersheds, quality habitat is inaccessible to salmonids due to passage barriers. Identification of these barriers aids in strategic planning efforts. The OCD conducted this inventory, using proven protocols established by WDFW. Two crews comprised of Displaced Timber Workers were trained in assessment techniques by WDFW staff to conduct inventory throughout both watersheds over a period of two years. The inventory included barrier identification and evaluation as well as assessment of available habitat both upstream and downstream. Data collected was submitted to the WDFW database maintained by the SSHEAR staff in Olympia.

Pacific County/ Conservation District

LEAD ENTITY



INVOLVEMENT

Approximately 50 people have been directly involved in the Pacific County/ Conservation District Lead Entity process between 2000 and 2002.

PROJECT SPONSORS

The number of project sponsors has ranged from two to five between 2000 and 2002.

COMMITTEE MEMBERSHIPS

- Willapa Bay Water Resources Coordinating Council/Citizens Committee: 9
- Technical Advisory Group: 11

SRFB AND MATCH FUNDS FOR PROJECTS

Year	SRFB	Match
2000	\$1,176,700	\$5,481,728
2001	\$718,174	\$252,863
Total	\$1,894,874	\$5,734,591

MOST SIGNIFICANT ACCOMPLISHMENT

This Lead Entity has been able to develop a process that establishes an efficient and comprehensive evaluation to determine the highest quality project applications. This process was accomplished by developing a Strategic Plan, which defines the process to be followed by the TAG and Citizens Committee. A great amount of assistance has come from SSRFB/IAC, WDFW and other Lead Entities throughout the state. This has been an evolving process that has allowed us to improve the process and make our approach to salmon recovery more strategic. Using assessments to develop specific prioritized projects to benefit salmon in cooperation with landowners is the major focus of the strategy. We have accomplished this in two of the Watersheds (Nemah and Naselle) within WRIA 24, and are in the process of prioritizing culverts that are not within the Forest Practices rules for WRIA 24. Applications for two additional sub-watersheds are being requested this year (Palix and Willapa). The objective is to submit only the highest quality projects that have been well developed, using supporting data to demonstrate a high benefit to salmon and cost-effectiveness.

GREATEST CHALLENGE

The challenge has been to stay focused on salmon recovery without getting side-tracked into programs that have no benefit to salmon or that are not cost effective. There has been some challenge in updating the strategic plan to ensure that we are meeting our objectives of submitting the highest quality projects. This is especially critical with the expected decrease in salmon recovery funds. After four rounds of SRFB funding we feel there should be more emphasis placed on assuring projects are accomplished in a timely manner and within budget. Ever increasing complexity in submitting applications, with a decreasing amount of funds

available are divergent paths ways that may discourage sponsors. Certain sponsors have voiced concerns about the amount of time that is needed to go through the entire funding process (in some cases up to a year). Other concerns include streamlining the permit process, receiving initial contract prior to June and less focus on process.

PROJECT EXAMPLES

LEWIS AND PORTER POINT FISH LADDERS

Sponsor: Willapa National Wildlife Refuge

SRFB: \$75,000; Match: \$800,000;

This project, which has received national attention, opened 2.5 miles of spawning habitat and about 400 acres of fresh water rearing for salmon. The Directors of USFWS and Ducks Unlimited, the Deputy Director of WDFW, and the Chairman of Pacific County Commissioners attended the opening ceremonies to make awards for outstanding accomplishments for salmon restoration.

MILL POND CREEK

This community salmon restoration project restored a stream that had been blocked to salmon for 120 years. The project is part of a larger vision for the City of South Bend, which involves Boat Launch improvements, and a 125-acre estuary trail system to make wildlife and salmon rearing habitat visible to the public. Last year 50,000 Chum salmon eggs were planted in the stream. Smolt Coho are already using the stream for rearing.

This project has created extensive public awareness and education. Senator Snyder and Congressman Baird sent letters of support and visited the site. Congressman Baird presented Eagle Scouts badges to two Boy Scouts for their role in the restoration. The South Bend Boy Scout Troop received fourth place in a National Competition with over 2,000 entries. The South Bend School District has adopted this project and uses it as an open classroom for studying salmon, recording monitoring data on their website.

BUTTE CREEK

This project restored about 4,300 feet of stream that had been badly damaged over the years from poor land use practices. The owner of the property reported that salmon had been in this stream in great numbers until the 1950s. After restoration, four large runs of salmon returned to the stream for the first time in 54 years. The landowner was so pleased that he agreed to fence the stream for 6,000 feet. This project demonstrates the successful placement of large woody debris and spawning gravel to promote spawning.

Pend Oreille Salmonid Recovery Team

LEAD ENTITY



INVOLVEMENT

Approximately 30 people are directly involved in the Pend Oreille Lead Entity process each year since its inception in June 2000.

PROJECT SPONSORS

The number of project sponsors has ranged from one to two each year since 1999, including the following: County Public Works, WA Department of Fish and Wildlife, Kalispel Indian Tribe, and Pend Oreille Conservation District .

COMMITTEE MEMBERSHIP

Committee membership has remained about the same since inception with a Technical Advisory Group and Citizen Advisory Group making up the Pend Oreille Bull Trout Recovery Team.

SRFB AND MATCH FUNDS FOR PROJECTS

Year	SRFB	Match
1999	\$76,589	\$152,412
2000	\$241,993	\$332,713
2001	\$410,772	\$486,527
Totals	\$729,354	\$971,652

MOST SIGNIFICANT ACCOMPLISHMENT

Pend Oreille Salmon Recovery Team is the only Lead Entity currently functioning in Northeast Washington. We are proud that the Pend Oreille Conservation District, the Kalispel Tribe, the County and the PUD all worked together through the first four rounds to get various projects funded through the SRFB.

GREATEST CHALLENGE

Our biggest challenge is rallying County residents behind the bull trout recovery effort. Although many long time residents have fished for bull trout in the past, a large portion of the populace is unaware of the existence of bull trout in the watershed. Hence, it is difficult for our public to see the benefits of our recovery efforts. Therefore, public outreach is probably our biggest challenge.

PROJECT EXAMPLE

THE CEE CEE AH (CCA) CREEK FISH PASSAGE PROJECT

Sponsors: Pend Oreille County Public Works Department and the Kalispel Tribe

SRFB: \$80,000; Match: \$72,411; Total: \$152,412.

This project removed a double culvert at the intersection of CCA Creek and LeClerc Road North, that presented a velocity barrier to fish migrating during high flows.

Two existing 60-inch corrugated metal pipes were replaced with a precast 24-foot span, 32-foot wide, 6-foot rise concrete modular arch structure on precast footings with precast headwall and a wingwall anchoring system. Riparian areas were revegetated with native plant species to provide cover shade to the fish and stability to the stream channel. Boulders were placed in stream to provide resting pools for fish. The project was designed to



benefit both the bull trout and west slope cutthroat trout that currently inhabit the watershed.

Pierce County

LEAD ENTITY



INVOLVEMENT

The number of people directly involved in the Pierce County Lead Entity Process doubled from 20 to 40 between 1998 and 2002.

PROJECT SPONSORS

The number of sponsor organizations has ranged from 2 to 4. Altogether there have been nine different project sponsors.

COMMITTEE MEMBERSHIPS

1998 – late 2000

- Fish and Wildlife Project Review Committee: 15-19 members

2001 – 2002

- Fish and Wildlife Technical Committee: 10 members
- Citizens Committee: 14 members

MATCH AND SRFB FUNDS FOR PROJECTS

Year	SRFB	Match
1998	\$139,240	\$156,066
1999	\$1,784,000	\$124,100
Early 2000	\$203,091	\$131,105
Late 2000	\$1,418,270	\$1,275,460
2002	\$1,885,947	\$2,552,003
Totals	\$5,430,548	\$4,238,734

MOST SIGNIFICANT ACCOMPLISHMENT

The development of a documented strategy that incorporates both a science review process and a socio-economic review process. A technical committee provides the scientific review and recommendation, and socio-economic issues are considered by the citizens' committee in producing a final project list.

GREATEST CHALLENGE

The biggest challenge is to attract sponsors for the "big" projects. Generally such projects are not within the traditional mandates of local agencies. The agencies themselves cannot easily assume new responsibilities. Sometimes an agency can propose a project that fulfills multiple objectives, if some are within the agency's scope.

PROJECT EXAMPLE

COAL MINE CREEK FISH PASSAGE PROJECT

Sponsor: Pierce Conservation District

SRFB: \$67,680; Match: \$73,091; Total cost: \$144,000.

Partners: Town of Wilkeson; Mike Hancock, Landowner; Pierce County; Pierce Conservation District; National Fish & Wildlife Foundation; South Puget Sound Salmon Enhancement Group.

This project has permitted unimpeded fish passage to the headwaters of Coal Mine Creek. Besides removing two culvert barriers and replacing them with a 12 by 6-foot, 90-foot long box culvert that permits movement of salmon at all life stages, the project included construction of 500 feet of new stream channel. Installation of the box culvert along with the new stream channel will enhance downstream movement of stream bed-load, thus increasing the diversity of substrate size and quality of spawning habitat. Also, woody



debris will be allowed to move downstream to provide cover for fish, enhance channel diversity, and prevent accumulation during high water events. The new culvert and stream channel replaced a 700-foot portion of Coal Mine Creek that had been widely altered and included three culverts totaling over 370 feet in length.

Coal Mine Creek is a small spring fed stream on the eastern edge of the Town of Wilkeson. A tributary to the Wilkeson Creek drainage, Coal Mine Creek is regarded as one of the most productive streams in the basin because groundwater flow moderates stream temperature and flow rate throughout the year. The favorable water temperature and flow conditions have resulted in relatively large numbers of returning Coho Salmon to spawn. As a result, the Washington Department of Fish and Wildlife uses Coal Mine Creek as an index stream for Coho spawning escapement in the Puyallup River Basin.

Quinault Indian Nation

LEAD ENTITY



INVOLVEMENT

The number of people directly involved in the Quinault Nation Lead Entity program has grown from 7 to 19 between 2000 and 2002.

PROJECT SPONSORS

The number of project sponsors has grown from 1 to 4 between 2000 and 2002.

COMMITTEE MEMBERSHIPS

Committee membership has grown from 4 to 15 between 2000 and 2002.

MATCH FUNDS FOR PROJECTS

Year	Match
2000	\$17,500
2001	\$250,000
2002	\$525,091
Total	\$792,591

MOST SIGNIFICANT ACCOMPLISHMENT

Forging a coalition of technical staff and citizens to participate through the past six months in the development of a WRIA 21 vision and strategy for salmon habitat recovery. There were originally 25 people who began in April. The fact that 15 have remained involved is a testament to their commitment and interest. We are confident that as this committee grows in experience and knowledge, it will expand even further until it truly represents all interests across the WRIA.

GREATEST CHALLENGE

By far, our greatest challenge has been recruiting project sponsors. This year, we had three new sponsors come forward. We attribute much of the success this round to the new rules allowing state agencies to sponsor projects, and for federal matching funds to be applied. We hope this relaxation of the rule will continue to benefit our restoration efforts.

PROJECT EXAMPLE

LAKE QUINAULT SEDIMENT CORE PROJECT (2000)

Sponsor: QIN Fisheries Division

SRFB: \$46,500 ; Match: \$8,500 ; Total: \$54,500.

This project targeted habitat-rearing conditions for juvenile sockeye salmon. This species, known locally as Quinault Blueback, has always had high cultural and economic value to the Quinault people. The project assessed nutrient and historical biological activity in the lake for more than 100 years, enabling comparison of pre-white settlement conditions to recent years. It was possible to estimate sockeye spawning run sizes during the period. The goal was to identify nutrient limiting factors that could, through scientifically applied prescriptions, reintroduce increased nutrient levels into the lake for blueback juvenile residing and rearing in the lake. This project has lent support to a Round Four project to do just that: develop a prescription for lake fertilization. The fertilizer applications will continue for five years.

The primary benefit of the Round Four project is to support a nutrient prescription for nitrogen-starved Lake Quinault. The amount of nitrogen to be reintroduced into the system must be precisely calculated, and timed to accommodate flushing rate, stratification, and water levels. The project employed the latest scientific methods to model imported marine nitrogen via sockeye adults. The expected benefit will be an increase in outmigrating sockeye smolts. A smolt trapping system has already been in effect for several years. Increased juvenile to smolt numbers will be measured against the currently established baseline. More smolt migrating out should, ocean conditions permitting, result in more returning sockeye adults.

San Juan Conservation District

LEAD ENTITY



INVOLVEMENT

The number of people directly involved in the San Juan Conservation District Lead Entity has grown from 20 to 38 between 2000 and 2002.

PROJECT SPONSORS

The number of project sponsors has increased from five to seven between 2000 and 2002.

COMMITTEE MEMBERSHIP

Committee Membership has increased from nine to fourteen between 2000 and 2002.

SRFB AND MATCH FUNDS FOR PROJECTS

Year	SRFB	Match
2000	\$194,015	\$80,600
2001	\$212,229	\$80,600
Total	\$405,244	\$279,076

MOST SIGNIFICANT ACCOMPLISHMENT

The most significant accomplishment to date has been the progress made by the Friends of the San Juans in carrying out their forage fish spawning beach inventory. As of May 2002, trained volunteers under the direction of Friends staff had surveyed 401 beaches, a total distance of over 7.5 miles, and collected 529 samples for analysis. Samples included the first known surf smelt spawning sites for Orcas Island at two locations in Westsound. Data on spawning beach distribution collected to date has been recorded on a CD and distributed to the San Juan County Planning Department, Permit Section, for reference during the permitting of shoreline developments as one means of protection. This information will be combined with that collected during the upcoming eelgrass inventory to provide a comprehensive database for the identification of critical beach and nearshore sites meriting protection.

GREATEST CHALLENGE

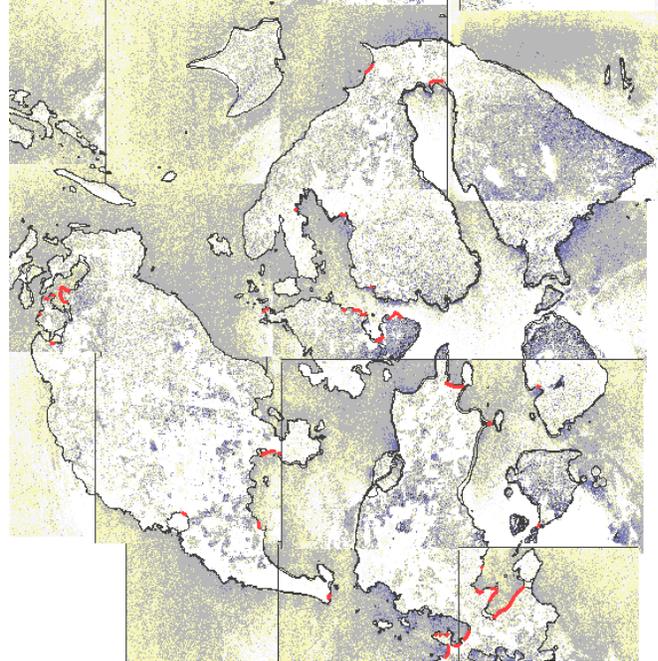
The greatest challenge for this Lead Entity has been to convince the SRFB Technical Panel, staff and Board members that the nearshore environment plays a vital role in salmon life histories and that the identification and protection of specific sites (i.e. projects) having high habitat value cannot be accomplished without an inventory of the nearshore. The corollary challenge is to identify those areas of critical habitat currently being used by salmon and forage fish and to gain some insight into areas now underutilized that will become critical as salmon recovery progresses toward attaining recovery goals.

PROJECT EXAMPLE

SAN JUAN COUNTY FORAGE FISH ASSESSMENT PROJECT

Sponsor: Friends of the San Juans

The first project in WRIA 2 to be funded by the SRFB, this survey will locate, describe and sample all beaches within San Juan County considered to be suitable spawning habitat for surf smelt and Pacific sand lance. Both species form a major source of food for juvenile chinook and coho salmon as they spend time in nearshore waters before continuing on to marine feeding grounds. The survey, currently in progress, employs protocols developed by Drs. Dan Penttila and Lawrence Moulton. Trained volunteers carry out the survey under the direction of staff employed by the project sponsor. When completed, the survey results will be analyzed and spawning beaches prioritized. Those beaches found to contain major spawning habitat will be monitored while specific beaches currently found to support populations of spawning surf smelt and sand lance will be the subjects of site-specific proposals for protection by acquisition, conservation easements or working with willing landowners to ensure the integrity of the spawning sites is not jeopardized.



Salmon will benefit directly from this project through the protection of a vital source of food, namely the forage fish species that spawn on sandy gravel beaches in the upper intertidal zone. Once these beaches have been inventoried, specific sites of greatest importance can be identified and protected by a variety of measures. Even if forage fish produced on these beaches are not currently being fed upon because salmon numbers are low, the production from these beaches will be necessary to support ever increasing numbers of salmon as recovery goals are attained within the Puget Sound watersheds.

The Forage Fish Assessment is a multi-year project. The following results represent survey efforts through June 2002. For more information, please contact Friends of the San Juans at 360.378.2319.

A memorandum of understanding attests to local Support for the forage fish spawning ground survey project from the San Juan County Board of Commissioners and the Mayor of Friday Harbor.

Skagit Watershed Council

LEAD ENTITY



INVOLVEMENT

The number of people directly involved in the Skagit Watershed Council Lead Entity process has grown from 60 (500 broader involvement) in 1999 to 74 (700 broader involvement) in 2001.

SPONSORS

The number of project sponsors has ranged from 7 to 8 for each of rounds 1, 2 and 3.

COMMITTEE MEMBERSHIPS

Administration Committee: 7

Project Prioritization Committee: 13-15

Restoration and Protection: 18-23

SRFB AND MATCH FUNDS

Year	SRFB	Match
Round 1	\$1,632,628	\$635,000
Round 2	\$2,719,710	\$885,000
Round 3	\$3,967,321	\$852,000
Total	\$8,319,659	\$2,372,000

MOST SIGNIFICANT ACCOMPLISHMENT

The Watershed Council can legitimately claim success on a number of fronts, from changing the way voluntary salmon habitat restoration and protection is conceived by the majority of those engaged in such activities in the Skagit to netting significant funding from the Salmon Recovery Funding Board. But our greatest accomplishment may well be the unusual forum that the organization has created. Convened under the banner of the Council are 38 diverse entities: federal, state, local and tribal governments; public and private utilities; national and local conservation non-profits; private timber companies; local fisheries groups; agricultural associations; and an environmental learning institute. Representatives from these member organizations participate in Council activities that range from substantive committee work that requires decision-making on any number of consequential issues to educational workshops, lectures, celebration dinners and river floats. We operate by consensus, guided by a set of agreed-to procedures, and enjoy a high level of participation from at least two-thirds of the member organizations. Participants as well as others in the community-at-large *like* the idea of such an inclusive body, particularly in light of all the local strife generated over the Growth Management Act implementation and other natural resource management decisions.

GREATEST CHALLENGE

The Watershed Council has been very effective in introducing a landscape process perspective and analysis in the Skagit and Samish watersheds, thereby effectively "raising the bar" for high priority, high quality protection and restoration activities. The Council has also been most successful in the numbers of projects funded and the amount of total funding secured. But we

have not been particularly successful in garnering widespread support and broad participation from the landowning community, particularly those in the Skagit delta. The delta area is considered to be a primary limiting factor for chinook and if we are not able to engage farmers in substantive restoration activity our long-term success will be inhibited.

PROJECT EXAMPLE

YOUNGS SLOUGH CONSERVATION EASEMENT

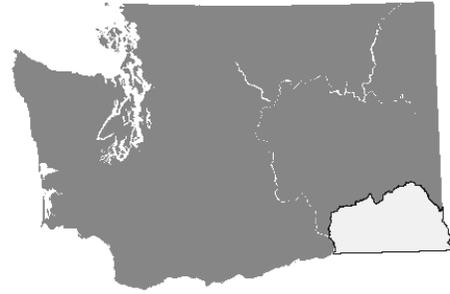
SRFB: \$77,112; Skagit Land Trust: \$17,176; landowners: \$28,000; Total Cost: \$94,288.

In May 2001, sixty acres of riparian habitat on the Skagit River and Youngs Slough, owned by Todd Wood and Judy Gamble, was protected with a conservation easement. The easement includes more than 6,000 feet of shoreline and 45 acres of diverse lowland forest that will be left in its natural state forever and may never be developed. The easement protects riparian areas and side-channel habitat on two sloughs and the mainstem of the Skagit River, as well as over 30 acres of mature riparian woodland. The easement prohibits development and subdivision, but allows for restoration. The property contains the mouth of Young's Slough, just east of Sedro-Woolley, which benefits all five species of salmon including spawning habitat for chinook and rearing habitat for coho.



Snake River

LEAD ENTITY



INVOLVEMENT

Approximately 25 people have been directly involved in the Snake River Lead Entity Habitat Project Scoring and Ranking Process.

PROJECT SPONSORS

Twelve project sponsors have applied for funding. Most have applied each year.

COMMITTEE MEMBERSHIPS

Citizens: 8

Technical: 6

SRFB AND MATCH FUNDS FOR PROJECTS

Year	SRFB	Match
1999	\$1,416,508	\$1,367,463
2000	\$1,943,915	\$1,000,000
2001	\$844,565	\$317,637
Totals	4,204,988	2,685,100

MOST SIGNIFICANT ACCOMPLISHMENT

Respect from the Independent Science Panel and SRFB for our ranked project list has placed considerable trust and confidence in our locally based project ranking process. Our habitat protection and restoration strategy and associated project scorecards has resulted in prioritization of the most beneficial projects for salmon recovery while respecting the values and opinions of landowners. This science-based process melded with community values has proven to be a significant accomplishment. The SRFB and Technical Panel have recognized the amount of work we have put into our scorecards and have valued the relationships we have locally with landowners, citizen and technical representatives.

GREATEST CHALLENGE

Our Lead Entity is geographically, the third largest in the state and biologically has the greatest number of ESA species, and creating a science-based strategy that works well across such a large landscape has been challenging. We have developed individual scorecards, but scorecards and projects do not always match. Making sure that best available science is used with the greatest benefit to salmon is challenging in an area that has not been prioritized for planning or monitoring type projects. Perhaps even more challenging is the permitting process; several projects have been delayed due to permitting process for instream habitat restoration.

EXAMPLE PROJECTS

PATTI CREEK BARRIER REMOVAL



Before



After

WHISKEY CREEK RESTORATION PROJECT

Sponsor: Mike Fletcher, Columbia County

SRFB Funds: \$56,665; Match: \$10,000

Location: Whiskey Creek, tributary to the Touchet River

Description: barrier removal, instream log and rock placement, and revegetation



Before



After

Snohomish County

LEAD ENTITY



INVOLVEMENT

Approximately 70 people per year have been directly involved in the Snohomish County Lead Entity Process.

PROJECT SPONSORS

The number of sponsors has ranged from three to eleven per year.

COMMITTEE MEMBERSHIPS

Forum Membership: 35-37

Technical Committee: 14-18

Policy Development Committee Membership: 11

SRFB AND MATCH FUNDS FOR PROJECTS

Year	SRFB	Match
1998	\$300,000	\$ 1,118,500
1999	\$375,000	\$ 139,222
2000	\$1,000,000	\$ 1,610,920
2001	\$1,670,000	\$ 599,937
2002	\$2,296,796	\$ 2,538,724
Total	\$10,683,592	\$6,378,181

MOST SIGNIFICANT ACCOMPLISHMENT

The Snohomish Basin Salmon Recovery Forum completed the *Snohomish River Basin Chinook Salmon Near Term Action Agenda* in December 2001. It contains the Lead Entity strategy for the basin and was based on the scientific foundation of the *Initial Snohomish River Basin Chinook Salmon Conservation/Recovery Technical Work Plan*. The Snohomish Basin was the first to complete a Near Term Action Agenda as outlined in the Tri-County proposal. The *Near Term Action Agenda* is the product of two years of collaborative and sometimes contentious discussions among the elected officials, agency staff, interest groups and concerned citizens participating on the Forum. Nearly every member of the Forum has recommended that all organizations interested in salmon conservation in the basin consider adopting and implementing those elements of the *Near Term Action Agenda* that fall within their scope of authority or interest.

GREATEST CHALLENGE

The Snohomish Basin Salmon Recovery Forum is a voluntary coalition of local governments and tribes, special purpose districts, businesses, non-governmental organizations, and interest groups. The Forum's current scope is to develop a long-term salmon conservation plan and to prioritize SRFB projects. Over time, however, this watershed group may evolve to also address issues such as water quantity and water supply. Snohomish County has made a significant time commitment to staffing this group over the past four years, with broad support from Forum members and citizens. Due to decreasing availability of local funds, future activities may be limited to core functions unless additional funding sources are obtained.

PROJECT EXAMPLES

TWIN RIVER QUARRY ACQUISITION

SRFB: \$819,776; Match: \$1,522,442;

Total cost: \$2,342,218.

In 2001, Snohomish County acquired the Twin Rivers Quarry property located at the confluence of the Snoqualmie and Skykomish rivers. The 157-acre property contains 51 acres of diked agricultural land within the floodplain along the right bank of the Snohomish River, downstream of the S.R. 522 Bridge. The floodplain and its associated riparian area (mature, conifer-dominated forest) encompass 66 acres. The remaining 91 upland acres feature two small creeks which descend a forested hill slope, merge, and flow through the bed of an historic side-channel that connected to the Snohomish River prior to diking. The site's 3,700 linear feet of riverfront has been armored with riprap along its entire length. The site provides an excellent restoration opportunity to remove bank armor, reconnect the side channel, and replant native riparian vegetation. The objective will be to restore rearing habitat for juvenile salmon in off-channel areas and along the main-stem edge. Dike removal would also restore habitat-forming processes by allowing the river to migrate laterally through its floodplain. Acquisition of the property connects 1,200 acres of natural area (Lord Hill Regional Park) currently in public ownership to 3,700 feet of Snohomish river shoreline.

The Twin River Quarry site represents an excellent opportunity to protect threatened habitat, and reconnect off-channel rearing habitat in a historic side-channel of the Snohomish River. The *Snohomish River Basin Chinook Salmon Conservation/Recovery Technical Work Plan* has identified a series of actions to improve salmon habitat in the watershed. The acquisition of

intact and restorable floodplain and the retention of forest cover in the riparian zone are key actions to assist in solving many of the problems in the watershed. The acquisition of this site allows for the reconnection of rearing habitat, increased cover, and the attenuation of peak flows. A shortage of rearing habitat, increased juvenile mortality due to lack of cover, and redd scour due to peak flows have been identified as limiting factors in the Snohomish River. Chinook salmon, which have been listed as a threatened species under the Federal Endangered Species Act, utilize this reach of the Snohomish for spawning and rearing. Several State of Washington priority habitat fish species use the area to be preserved under this proposal, including Chinook, Coho, Kokanee, Rainbow and sockeye salmonids. The property is used extensively by all species for rearing habitat.



The acquisition of the Twin River Quarry site provides an excellent example of innovation and cooperation between public sector, private sector and private non-profit organizations to achieve habitat and public access benefits. Snohomish County worked with Union Bank of California and Cascade Land Conservancy (CLC), who acted on the county's behalf to negotiate the final purchase and sale agreement. A portion of the property was transferred from CLC to the

County as part of a charitable remainder trust, which provided tax advantages for the property owner, and a lower purchase price to the County. The remaining property was received as a donation. The project, which utilized expertise in finance and property acquisition, is an exceptional example of cooperation to provide significant public benefit.

QWULOOLT ESTUARY (HDK ACQUISITION)

SRFB: \$850,000; Match: \$1,350,000; Total: \$2,200,000.

Partners: Tulalip Tribes, U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration (NOAA), and Washington State Department of Ecology.

This project acquires a critical and strategically located 34-acre parcel central to the initiation of an intertidal wetland restoration project in the lower Snohomish River. Currently, the property is zoned industrial and the landowners have been ready to initiate a major development or sell. More than 360 acres will be restored to intertidal estuarine habitat. Tributary creeks of Allen and Woods creeks would be accessible by salmon. For chinook and other salmon, this will provide forage and resting areas, out-migration transition habitat, and rearing potential with spawning ground access.

This project will have a direct positive impact on federally threatened chinook salmon and anadromous life history forms of bull trout by providing fresh to salt water transitional habitat for feeding, resting, and rearing. Allen Creek is currently blocked by a closed tide gate. Opening Allen Creek will provide critical spawning sites for chinook, chum, coho, and cutthroat trout.

The U.S. Army Corps of Engineers is currently conducting a hydrological feasibility analysis for the restoration phase, donating 75% of their staff labor with a match of 25% from the Trustees. NOAA has completed some early site sampling and necessary tidal analysis. The Natural Resources Conservation Service provides funding for conducting restoration work on properties covered under their Wetland Reserve Program, and have funded removal of old farm fencing, survey work, and a new perimeter fence. The acquisition project is located in the City of Marysville.

Interest in this specific industrial real estate parcel stems from the high ecological value of the adjacent Allen Creek and the potential for full restoration of this system. Since this property was historically the "delta" confluence of Woods and Allen Creeks with the Snohomish River, inclusion of both of these streams in the Qwuloolt Project is vital to restoration of a naturally functioning system.

– Mr. John McCoy, Tulalip Tribal official

Stillaguamish

LEAD ENTITY



INVOLVEMENT

The number of people directly involved in the Stillaguamish Lead Entity program has steadily increased from 30 to 60 between 1998 and 2002.

SPONSORS

The number of project sponsors has ranged from three to nine between 1998 and 2001.

COMMITTEE MEMBERSHIP

Stillaguamish Implementation Review Committee (SIRC) Members: 16 to 25
TAG members: 12

SRFB AND MATCH FUNDS FOR PROJECTS

Year	SRFB	Match
1998 (IRT)	\$20,219	\$104,755
1999	\$240,078	\$158,487
2000	\$848,500	\$484,089
2001	\$2,413,204	\$4,855,435
Totals	\$3,522,001	\$5,602,766

MOST SIGNIFICANT ACCOMPLISHMENT

The Stillaguamish Lead Entity has facilitated a strong stakeholder based process that integrates scientific principles with stakeholder involvement. This process is built on over a decade of local water quality and salmon resource planning. The Lead Entity has strengthened the SIRC organization and increased its membership by 40%. The co-lead of the County and Tribe has strengthened the essential bonds between local natural resource agencies while maintaining the integration of science and community.

GREATEST CHALLENGE

The Stillaguamish has a legacy of on-the-ground effectiveness and efficient implementation. State and regional planning frameworks can contribute to this but can also duplicate or redirect local efforts. An increased need for regional information sharing and coordination can stretch limited staff resources in small rural watersheds.

PROJECT EXAMPLES

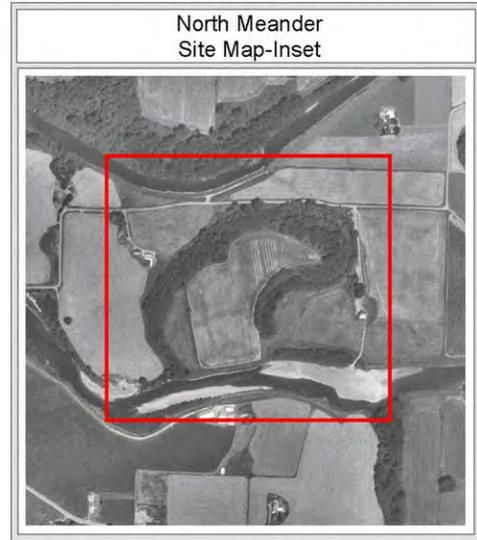
NORTH MEANDER SLOUGH RECONNECTION (2002)

SRFB Funding: \$679,000

Sponsor: Snohomish County

Co-Sponsor: US Army Corps of Engineers

This project will reconnect the North Meander slough to the Stillaguamish River, enhance it and restore natural habitat forming processes for the purpose of creating off-channel rearing for juvenile salmonids. North Meander slough, located along the lower mainstem, is a horseshoe-shaped channel of approximately 4,600 feet in length. Reconnecting the slough to the main channel would create approximately 12 acres of off-channel rearing and refuge habitat for juvenile salmonids. Using this area estimate and regional density estimates, this project will provide rearing for approximately 4,200 pre-smolt chinook per year. Reconnecting the slough would also provide foraging habitat for adult bull trout. Proposed restoration actions include removal of a plug dike, excavation of deposited material, channel reconfiguration, wood placement and riparian planting.



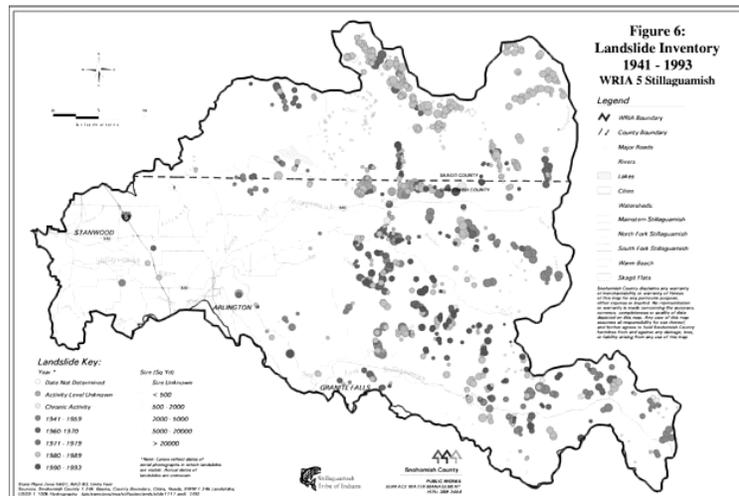
STILLAGUAMISH LANDSLIDE HAZARD ZONATION MAPPING (2001)

SRFB Funding: \$40,000

Sponsor: Stillaguamish Tribe

Cooperator: Washington Department of Natural Resources

The landslide inventory is a tool which analyses the parameters of past landslide activity and defines zones of high potential landslide risk for any future land use activity. This map could be used by any agency conducting land management activities in the basin. The ultimate goal of this project is to reduce the number of human induced landslides in the Stillaguamish watershed so that streams can flush fine sediment out of the channel. The Washington State Forest Practices Board has recently adopted new rules for managing forest activities on state and private lands. This WRIA specific map will provide a more reliable tool for the Stillaguamish watershed.



OLD STILLAGUAMISH CHANNEL RESTORATION (2000)

SRFB Funding: \$253,520

Sponsor: Stillaguamish Flood Control District

Co-sponsors: Stillaguamish Tribe and Snohomish Conservation District

The project will re-establish a base, freshwater flow in the Old Channel of the Stillaguamish River. A low-restriction tide gate structure will be installed to capture tidal inflows from Hatt Slough during summer months and force downstream 1.5 million cubic feet of freshwater per day. This will alleviate chronic low dissolved oxygen, high conductivity and elevated temperatures along the length of the Old Channel, which meanders 8½ river miles from Hatt Slough past Stanwood to Port Susan. This action would be combined with restoration and/or enhancement of approximately 85 acres of riparian vegetation (native trees and brush) along the length of the old channel.



Thurston County

LEAD ENTITY



INVOLVEMENT

The approximate number of people directly involved in the Thurston County Lead Entity process has ranged from 17 to 38 people a year between 1998 and 2002.

PROJECT SPONSORS

The number of project sponsors has ranged from 3 to 8 between 1999 and 2002.

COMMITTEE MEMBERSHIP

Committee Membership has decreased from 27 (during the years 1998 to 2000) to 22 members in 2001 and 15 in 2002.

SRFB AND MATCH FUNDS FOR PROJECTS

Year	SRFB	Match
1999	\$53,225	\$1,500
2000	\$322,300	\$51,500
2001	\$815,445	\$174,149
Totals	\$1,190,970	\$227,149

MOST SIGNIFICANT ACCOMPLISHMENT

Our most significant accomplishment was convening the Technical Advisory Group (TAG) and completing the Limiting Factors Analysis.

GREATEST CHALLENGE

Our biggest challenge has been holding together a sufficiently large and diverse committee in a watershed that has not traditionally had much cohesion. Aside from the Deschutes River, WRIA 13 is comprised primarily of small drainages that flow into separate, shallow inlets characteristic of South Puget Sound. This has presented some biological and geographic hurdles to creating a unified recovery process. Salmon stocks in this region are largely of hatchery origin, and are not wholly confined to WRIA 13 (e.g. Deep South Sound coho). Furthermore, citizen participation in watershed planning and restoration has traditionally been at the subwatershed level, resulting in a plethora of watershed councils with no single entity dedicated to issues at broader scale. Lacking a core foundation on which to build, this salmon recovery process has had further to go than in watersheds where public education and outreach were already underway.

PROJECT EXAMPLE

MCLANE POINT ACQUISITION

Sponsor: Capitol Land Trust

SRFB: \$224,701; Match: \$39,654; Total: \$264,355

This project purchases and protects *in perpetuity* over 2000 feet of marine nearshore habitat, and 25 acres of upland habitat, including a saltmarsh wetland complex. This area is in immediate threat of development.

Project benefits to chum, coho, sea-run cutthroat and steelhead include

- Protecting 2000 feet of marine shoreline on the eastern shore of Eld Inlet at the mouth of McLane Creek that is mostly forested with a conifer/deciduous mixed vegetation community, by providing well-shaded resting areas, refuge and protection from predator for adult and juvenile salmonids, and a rich food source for juvenile salmonids.
- Protecting a smaller inlet off of Eld that provides refuge habitat for juvenile salmonids leaving McLane Creek.
- Providing access to a high quality saltmarsh wetland and perennial stream that provides juvenile salmonids with a critical area for feeding, rapid growth, and salinity transition.



Eld Inlet



WRIA 1

LEAD ENTITY



INVOLVEMENT

The approximate number of people directly involved in the WRIA 1 Lead Entity Process has increased from 20 to 46 (from 200 to 300, including volunteers, field workers, and other non-process participants) people between 1998 and 2002.

PROJECT SPONSORS

The number of sponsors has ranged from four to six per year.

COMMITTEE MEMBERSHIPS

1998-2002

Joint Technical Advisory Group: increased from 5 to 16

1999-2002

Salmon Habitat Restoration Citizen Advisory Committee: decreased from 21 to 13.

SRFB AND MATCH FUNDS FOR PROJECTS

Year	SRFB	Match
1998-99	\$285,587	\$232,806
2000	\$1,739,216	\$1,240,925
2001	\$2,009,731	\$604,766
2002	\$3,536,821	\$1,302,770
TOTALS	\$7,571,355	\$3,381,267

MOST SIGNIFICANT ACCOMPLISHMENT

The WRIA 1 Lead Entity program major accomplishment has been facilitating the continued success of WRIA 1 restoration partners as they work to recover eight native salmonids species including two that are ESA-listed. There are four major benchmarks to this success. First, a technical habitat restoration strategy was developed to promote a more strategic approach to project identification and implementation. Second, citizen committee representatives play an active and central role in a science based salmon habitat restoration project grant selection process. Third, the Lead Entity program coordination efforts have aided WRIA 1 restoration partners in successfully funding priority projects through either SRFB or other grant sources. And fourth, a comprehensive salmon recovery plan for WRIA 1 that is respectful of both stakeholder needs and local and tribal governmental rights and responsibilities is in development. The plan is being carefully coordinated with other key efforts such as 2514 watershed planning and marine resource recovery programs.

GREATEST CHALLENGE

The single greatest challenge faced by the WRIA 1 Lead Entity program is creating a local decision-making structure that will provide long-term success in dealing with process, administrative, and technical needs while clearly addressing multiple processes, mandates and priorities related to the recovery of multiple salmonids stocks. Such a decision-making process

is essential to provide the long-term consistency and public confidence necessary to sustain the existing salmon restoration infrastructure already active in WRIA 1. In other words, ESHB 2496 did not provide a workable structure that would meet WRIA 1 needs and created enough ambiguity in interpretation to create friction between various groups within this Lead Entity. This has limited our ability to “get things done” on the ground. An inter-local agreement is currently in development to frame a decision-making structure and guidelines that ensures local governments are able to fulfill their statutory responsibilities, reflects treaty tribe status as sovereigns and salmon co-managers, incorporates citizens in meaningful decision making, and, most importantly, fosters the continued success of the well-established WRIA 1 salmon recovery implementation infrastructure.

PROJECT EXAMPLES

LARSON’S BRIDGE HISTORIC SCALE LOG JAMS

Project Cost: \$850,000

Match provided by Centennial Clean Water Fund, Department of Ecology (EPA 319), Crown Pacific, Whatcom Conservation District, and Lummi Nation.

Located in the South Fork of the Nooksack River in Skagit County, the Larson’s Bridge reach provides critical holding and spawning habitat for ESA-listed South Fork spring chinook and bull trout and other salmon species including a unique sockeye run. Lummi Nation’s Natural Resource Department began planning efforts in the early 1990s to restore key habitat functions lost due to historic land-use practices and large flood events. Working together with timber landowner Crown Pacific, key physical and biological analyses were conducted and a recovery plan developed for approximately 1 ½ miles of river. The plan envisioned placement of large-scale log jams designed to increase pool numbers and hiding cover used by adult salmon for holding; to create complex in-river juvenile rearing habitats in the same structures; to reduce erosion of landslide toes and the introduction of fine sediment that can smother salmon eggs; and to maintain or re-establish connections between the main flow of the South Fork and adjacent flood plain habitats used for spawning and rearing by a variety of salmonid species and by wildlife such as bald eagles.



The project was implemented during the summer of 2001 when six engineered structures were placed using several thousand individual logs, including some key pieces over five feet in diameter and eighty feet in length. The site is being monitored for key biological and physical factors in order to evaluate whether project objectives are achieved. This was truly a cooperative project integrating the best available science and multiple restoration partners.

NORTH FORK NOOKSACK RECOVERY

Project costs: \$1.6 million

Located in the North Fork Nooksack River watershed in Whatcom County, North Fork Nooksack Recovery placed 443 acres of functioning high quality chinook salmon habitats into perpetual conservation status. Sponsored by the Whatcom Land Trust, the project protects 2.7 miles of spawning and rearing habitat on two critical North Fork streams (Racehorse and Bear Creeks), preserves over one mile of North Fork adult chinook holding habitat, conserves 3.25 miles of riparian recruitment zone, and restores 51 acres of riparian forest. These ecological functions are considered critical to the recovery of the North Fork Nooksack chinook stock. The North Fork Nooksack area is rapidly developing with both recreational and residential growth. This project will protect the area from development and preserve existing fish habitat functions. Lummi Natural Resources Department and Nooksack Natural Resources Department are partners in the project and are providing riparian restoration and monitoring services. Previous work by Nooksack Recovery Team members, a local non-profit group facilitating salmon habitat projects, has treated root causes of habitat degradation in this area by completing riparian restoration and logging road storm proofing projects in Racehorse Creek and the North Fork basin. These previous efforts combined to ensure that North Fork chinook and other salmon will have functional habitats to return to complete their lifecycle and begin the next.

WRIA 14/Kennedy-Goldsborough

LEAD ENTITY



INVOLVEMENT

The approximate number of people directly involved in the WRIA 14 – Kennedy/Goldsborough Lead Entity Process increased from 40 to 75 between 1998 and 2002.

PROJECT SPONSORS

The number of sponsors ranged from 1 to 4 per year.

COMMITTEE MEMBERSHIP

A committee membership has increased from 24 to 30 members between 2000-2002.

SRFB AND MATCH FUNDS FOR PROJECTS

Year	SRFB	Match	TOTALS
1999	\$57,194	\$106,000	\$164,194
2000	\$436,619	\$80,926	\$517,545
2001	\$1,371,926	\$432,899	\$1,804,828
Totals	\$1,865,739	\$619,825	\$2,486,567

MOST SIGNIFICANT ACCOMPLISHMENT

In short, project development and completion. As a Committee, we continue to work through our differences and function very well as a Lead Entity that creates beneficial, successful fish habitat projects.

GREATEST CHALLENGE

Perhaps our biggest challenge has been the development of a cohesive, viable strategic plan that identifies quality projects and incorporates the crucial community roles and actions. For our Strategic Planning Committee, developing a science-based matrix and supporting rationale was simple, the difficulty arises as we attempt to integrate the social and economic factors into our considerations. How much weight do we put on those considerations and do we put a project that has excellent community outreach above one that provides exceptional benefit to fish? As a Technical Advisory Committee, we have worked extensively with our project sponsors in an attempt to incorporate a cohesive blend of the two sides of the spectrum, but defining broadly and inclusively in the strategy document have proven to be quite difficult. Crafting our strategy as the support tool for project development is our goal. In meeting that goal, we have discovered that defining guidelines to discover and work through the more difficult remaining projects is the true challenge.

PROJECT EXAMPLES

SHERWOOD CREEK BRIDGE

SRFB: \$821,600; Match (US Navy): \$320,000; Total cost: \$1,141,000.

Partners: South Puget Sound SEG; Congressman Norm Dicks; US Navy; Puget Sound and Pacific Railroad; Squaxin Island Tribe; Allyn SEG; Mason CD; and WDFW.

The Sherwood Creek Bridge Project exemplifies how a project can bring together unlikely participants to remedy a nearly 50 year-old blockage. The project site is a pair of 60 inch culverts, approximately 110 feet in length that are classified as slope and velocity barriers by WDFW criteria. The plunge pool is littered with 5-7 pieces of culvert and large riprap that was placed there to stabilize the failing culverts, making the leap for migrating and resident species nearly impossible. The culverts are buried beneath about 75 feet of fill material upon which railroad tracks, owned by the US Navy and maintained by Puget Sound and Pacific Railroad, rest.



Before

The South Puget Sound Salmon Enhancement Group identified the widely known but rarely discussed barrier during their culvert inventory. The WRIA committee chair called a meeting of all the local and representative interests, which culminated in a decision to move ahead with the project, a 54-foot pre-cast concrete bridge with 24-foot approaches and 110 feet of new streambed.



After

The project will benefit chum, Coho, sockeye and pink salmon in addition to cutthroat and steelhead trout. The replacement of a culvert with the bridge will vastly improve channel and streambed sediment conditions and provide unrestricted access to an estimated 30,000 meters of spawning and rearing habitat.

NEARSHORE HABITAT ASSESSMENT

SRFB: \$164,041; Match: \$28,926; Total cost: \$192,967.

Sponsor: Squaxin Island Tribe

Partner: Taylor Shellfish Company

This assessment responds to this area's need for Nearshore information, through design and implementation of a protocol for inventorying Nearshore habitat and identifying properly functioning and degraded habitat areas. The areas identified as properly functioning will be prioritized for preservation through acquisition, while the areas identified as degraded or minimally impaired will be prioritized for restoration. The sponsor has successfully obtained funding for a follow-up project that nearly completes the entire Nearshore for WRIA 14.



The resulting protection and restoration projects will benefit Chinook, chum, and Coho salmon and cutthroat and steelhead trout through protection and restoration of estuarine, riparian and Nearshore habitat.

CULVERT INVENTORY

SRFB: \$108,960; Match: \$19,500; Total cost: \$128,460.

Sponsor: South Puget Sound Salmon Enhancement Group (SEG)

Partners: Simpson Timber Co., Mason CD, Squaxin Island Tribe and WDFW.

The WRIA 14 Culvert Inventory will identify current barriers to fish passage, providing the Committee with a powerful tool to prioritize barrier removal projects. The sponsor employed a two-person crew who were then trained using WDFW fish passage criteria and a Microsoft Access database that can then be queried for applicable information. Using Mason County and Simpson Timber Company maps, they identified all the road crossings and identified addition unmarked culverts as they gathered the appropriate information.



As the identified culverts are replaced with structures that pass all species at all life stages, they will aid in the recovery of Chinook, Coho, chum, sockeye and pink salmon and cutthroat and steelhead trout. The study addresses channel, riparian and streambed sediment conditions, in addition to reclaiming historic spawning and rearing habitat.

Yakima River Basin Salmon Recovery Board

LEAD ENTITY



INVOLVEMENT

Approximately 70 people have been directly involved in the Yakima River Basin Salmon Recovery Basin Lead Entity process since its inception in 2001.

SPONSORS

The YRBSRB had five sponsor organizations in its first year, 2001.

COMMITTEE MEMBERSHIPS

Board Members: 16

Technical Advisory Group: 11

Citizens Committee: 16

SRFB AND MATCH FUNDS FOR PROJECTS

Year	SRFB	Match	Total
2001	\$712,270	\$1,770,000	\$2,473,270

MOST SIGNIFICANT ACCOMPLISHMENT

The most significant accomplishment of our Lead Entity was to bring together Yakima, Kittitas and Benton Counties and all the cities within WRIA 37, 38 & 39 located in those counties along with the Yakama Nation to work in a positive, consensus decision-making process to benefit the Yakima River Basin salmonid habitat.

GREATEST CHALLENGE

The biggest challenge for our Lead Entity is to keep all participants focused on the reason this diverse group joined together.

PROJECT EXAMPLE

AHTANUM CREEK FISH SCREENS

Sponsor: North Yakima Conservation District

SRFB: \$129,270; Match: \$52,200; Total: \$181,470 .

Ahtanum Creek lies partially within the Yakama Nation, and currently supports steelhead and bull trout, as well as chinook and coho salmon, making it a high priority stream for fish passage improvements. Screening of the upper eight diversions on Ahtanum creek will allow fish to safely access approximately ten miles of upper Ahtanum Creek habitat.

It has been exciting to see the progress of the Yakima River Basin Salmon Recovery Entity as it has expanded to include all of Yakima, Kittitas and Benton counties. In the 2002 Third Round we were successful in getting 16 projects funded across the three counties, projects based on their scientific merits, not their geography. As long as we keep coming together for the good of fish, we will continue to recommend projects such as the Ahtanum creek Fish Screen projects to the Salmon Recovery Funding Board.

– Robert L. Jones, Mayor