

Northwest Straits Marine Conservation Initiative Five-Year Evaluation Report

Submitted by the
Northwest Straits Evaluation Panel

William D. Ruckelshaus, Chair

Alyn C. Duxbury, Ph.D.

James W. Good, Ph.D.

Daniel Huppert, Ph.D.

DeWitt John, Ph.D.

Steven S. Rumrill, Ph.D.

Ann Seiter, M.S.

Edward P. Weber, Ph.D.

Staff support provided by the
Policy Consensus Center
University of Washington and Washington State University

Dan Siemann, Project Manager

April 6, 2004

THE POLICY CONSENSUS CENTER

WILLIAM D. RUCKELSHAUS

April 6, 2004

Dear Senator Murray and Governor Locke:

As Chair of the Northwest Straits Evaluation Panel, I am pleased to provide you with this evaluation of the Northwest Straits Marine Conservation Initiative. This report fulfills the mandate of Congressional legislation (HR 3461), under which the Initiative was to “be given a full evaluation at five years...by a nationally qualified group.”

The eight members of the Evaluation Panel unanimously recommend continued federal authorization and expanded support for the Northwest Straits Initiative to further Congress’ goal of protecting the enormous environmental and economic values of the Northwest Straits region. In these first five years, the Initiative has accomplished valuable research and restoration projects and has established a strong foundation of mechanisms, relationships, and capacity. The Initiative’s success thus far can serve as a foundation on which to build toward significant and sustained protection and restoration of marine resources in the Northwest Straits.

The panel has suggested a number of areas for increased emphasis that should serve to strengthen and advance Congress’s goals for the region and build on the institutional arrangements, relationships and activities already in place. These will require modest, but important additional funding. As a vehicle to promote locally-based marine conservation, we find that the Northwest Straits Initiative is an excellent investment.

It is with pleasure that I submit, on behalf of the Evaluation Panel, this report wholeheartedly recommending continuation and reauthorization of the Northwest Straits Initiative.

Sincerely yours,



William D. Ruckelshaus

Table of Contents

Table of Contents	iii
Executive Summary	iv
The Northwest Straits Initiative	iv
Findings	v
Recommendations	vi
Introduction	1
Overview of the Northwest Straits Initiative	2
Findings	4
Success of the MRC Model	4
Performance Benchmarks	5
Additional Criteria	16
Tribal Participation and Concerns	19
Recommendations	22
Reauthorization By Congress	22
Increased Federal Funding	23
Replication of the Initiative	25
Setting Priorities for the Future	26
Appendices	29
A. Letters from Senator Murray and Governor Locke	30
B. Excerpts from the Charge to the Panel	33
C. Evaluation Panel Members	35
D. Evaluation Hearings: Roundtable Participants and Presenters	36
E. Acronyms	37
F. Northwest Straits Initiative Projects and Associated Benchmarks	38
G. Scientific Activities Under the Northwest Straits Initiative	42
H. University of Washington Graduate Students Who Have Worked with the Northwest Straits Initiative	43
I. Documents Reviewed	44
J. Northwest Straits Marine Conservation Initiative	47
K. Policy Consensus Center	48

Executive Summary

The Northwest Straits Marine Conservation Initiative, established through legislation (HR 3461) passed by Congress in October 1998, was created to address extreme environmental stress on the marine areas of the Northwest Straits region in Washington State. The Initiative is a non-regulatory effort to educate the public and provide opportunities for collaboration among citizens, county governments, tribes, and other groups on marine conservation and restoration projects. This report is intended to satisfy Congressional requirements for a full review of the Initiative after five years.

As directed by Congress, the Initiative is based on the provisions of the Northwest Straits Citizen's Advisory Commission Report of August 20, 1998, which is known as the Murray-Metcalf report, after the two conveners of the Commission, U.S. Senator Patty Murray (D) and U.S. Representative Jack Metcalf (R). The Murray-Metcalf report recommended establishing a network of county-based Marine Resources Committees (MRCs) and a coordinating entity known as the Northwest Straits Commission. The report also mandated a five-year evaluation by a nationally qualified panel to determine whether established performance benchmarks had been met. The report stated that statutory authority of the Initiative would sunset six years after enactment unless affirmative Congressional action is taken.

At the invitation of U.S. Senator Patty Murray and Washington State Governor Gary Locke, former U.S. Environmental Protection Agency Administrator William D. Ruckelshaus chaired the Evaluation Panel. The seven other members of the panel, selected from throughout the United States, provided expertise in relevant areas such as oceanography, marine biology, natural resource management, marine conservation, tribal affairs, and citizen participation (see Appendix C). The evaluation process included interviews, a literature and document review, an e-mail survey of MRC members, site visits, and four days of hearings in which the Evaluation Panel heard from more than 50 individuals from all sectors involved with the Initiative. This report reflects the consensus findings of the Evaluation Panel based on all the evidence collected and presented and careful deliberation among the panel members. The panel's conclusion is that the Northwest Straits Initiative is an important and valuable effort and its work should be continued and expanded.

The Northwest Straits Initiative

The Northwest Straits Initiative includes a Northwest Straits Commission of 13 members that functions as a "board of directors," a director and two administrative staff, and seven county-based MRCs. Membership on the Commission is weighted toward the counties, with one representative for each of the MRCs (total of up to seven), one tribal representative selected by the U.S. Secretary of the Interior, and up to five representatives (but no more than the number of MRC representatives minus one) appointed by the governor. One of the Governor appointments must represent the Puget Sound Action Team.

The Murray-Metcalf report specifies that the Northwest Straits Commission's role is to provide an ecosystem focus, help mobilize science to focus on key priorities, guide and provide resources to the MRCs, and serve as a forum for coordination and consensus building. The MRCs are expected to be guided by sound science and the needs of the Northwest Straits marine ecosystem

in addressing local marine issues, recommending remedial actions to local authorities, and building local awareness of issues and support for remedies. The MRCs are the primary vehicle through which research, scientific surveys, and restoration projects are proposed and implemented.

Findings

While it is too early to directly measure benefits from many of the Initiative's activities, the Evaluation Panel found that the Initiative has successfully engaged a broad range of citizens and government agencies in projects that reflect local marine conservation priorities and contribute to broader marine conservation goals. They have made very useful progress with the time and resources available. Achievements thus far include:

- Mobilizing broad citizen support for marine conservation and increasing public understanding of the marine ecosystem.
- Bringing together citizens, tribal governments, county government, and state and federal agencies to work cooperatively and effectively on issues facing the Northwest Straits.
- Increasing voluntary compliance with conservation goals and gathering resources for enforcement of existing statutes.
- Tapping local energy to generate a series of practical, on-the-ground projects that are benefiting the ecosystem and the economy of the Northwest Straits area.
- Contributing to scientific understanding of the marine ecosystem by gathering data in accordance with standard protocols.
- Spreading innovative ideas from one county to another and thereby multiplying benefits and coordination, while also recognizing and respecting county-by-county differences.
- Creating a model of marine governance that can be adapted to other locations that face similar issues.

Many of the value-added research projects and on-the-ground restoration projects usefully address and in many cases meet the benchmark goals. These projects, among many others, include:

- **Forage fish spawning site inventory and mapping.** Inventory protocols were developed in conjunction with state agencies, and more than 275 volunteers helped map 4,600 survey stations and document 32.5 miles of newly discovered potential spawning habitat for species that are critical prey for salmon, marine fish, birds, and marine mammals.
- **Derelict fishing gear removal.** This project led to a change in state policy to encourage reporting of lost or abandoned gear. Many miles of gillnets and purse-seine nets, as well as hundreds of derelict crab pots, were retrieved as a result, leading to improved habitat and reduced mortality of marine species.
- **Oyster plantings for public education and improved water quality.** At a beach closed to harvest due to pollution problems, Pacific oysters were planted for the purpose of public education to encourage the community to improve water quality conditions. While it is too early to demonstrate results, this innovative approach is potentially more far-reaching than focusing on specific upland issues such as fixing septic systems.

The Evaluation Panel also identified some areas in which the Initiative could be improved:

- Baseline and monitoring data have not been collected on many of the benchmark criteria, making it difficult to demonstrate tangible results and to determine whether certain efforts are leading to improvements in the marine ecosystem as measured against the benchmarks.
- Because the Northwest Straits Commission and the MRCs have focused on the marine environment, most have not forged relationships with watershed entities that focus on upland issues related to marine resources, such as freshwater quality and upland runoff.
- Communication and coordination among the many entities working on marine issues in Puget Sound could be enhanced to ensure that research and projects contribute to broader marine conservation goals and to avoid duplication. This is not the sole responsibility of the Initiative, but the Commission and the MRCs are in a good position to facilitate more coordination.
- Marine Protected Areas (MPAs) in general and the MPA benchmark in particular have been controversial for many constituencies because they can potentially restrict harvests. The Northwest Straits Commission should be given flexibility in how the MPA benchmark is achieved so that habitat protection, tribal rights, and co-management authorities are all taken into account.
- Concerns over the authorizing language related to tribal participation and MPAs has interfered with progress in some cases. The Initiative should improve language in official documents to clarify how tribal sovereignty, treaty rights, and co-management status relate to participation in MRCs and establishment of MPAs.

Although important to address, the Evaluation Panel considers these concerns minor compared to the broader positive impact of the Initiative, and it believes that these concerns can be readily addressed in the Initiative's next phase of operations. Overall, the Initiative represents a highly successful application of coordinating and encouraging the efforts of multiple stakeholders to yield valuable results on a set of potentially contentious issues affecting marine communities and ecosystems. The degree of innovation and progress points to a model for addressing local ecosystem issues involving communities, tribal and state governments, businesses and others.

Recommendations

Based on its achievements thus far, its potential for providing greater benefits in the future, and the continuing need for action to improve the health of the Northwest Straits marine ecosystem, the Evaluation Panel strongly and unanimously makes the following recommendations:

- **Reauthorization by Congress.** The reauthorization should be for an extended period—perhaps 8 to 10 years—and another evaluation should take place at the end of that period. The Initiative's success thus far can serve as a foundation on which to build toward significant and sustained protection and restoration of marine resources in the Northwest Straits. The Northwest Straits Initiative is an excellent investment in locally-based marine conservation and should be continued.
- **Increased federal funding.** The Evaluation Panel recommends that federal support be increased to roughly \$1.6 million annually. The additional amount is based on the expected core costs of the additional broader tasks proposed for the next stage to meet the

mandates of the Murray-Metcalf Commission report, including regional projects and baseline and ecosystem research, as well as increasing the internal capacity of the MRCs. These funds would be used for projects and staff support to coordinate activities or to leverage other funds or support from agencies and other entities. Past federal funding allocations have been extremely small relative to the scope of the Initiative's task and relative to the accomplishments that have been leveraged from these funds.

- **Replication of the Initiative.** The initiative is applicable as a model for locally directed, regionally coordinated marine conservation nationwide, and the Evaluation Panel recommends that Congress consider piloting this approach in other areas to determine its transferability. Not only is this approach potentially applicable to other marine and estuary locations, but it might also be appropriate for terrestrial watersheds. The panel also recommends that the model be seriously considered for replication in the remaining, southern portion of Puget Sound.
- **Setting priorities for the future.** The Evaluation Panel recommends that the Initiative develop a set of priorities and an associated strategic work plan to interpret and focus the benchmark areas on valuable and achievable goals for the next 5, 10, and 20 years. This effort would help the Initiative link its diverse activities more closely to focus on broader, ecosystem-wide goals.

Introduction

The Northwest Straits Marine Conservation Initiative, established through legislation (HR 3461) passed by Congress in October 1998, was created to address extreme environmental stress on the marine areas of the Northwest Straits region in Washington State. The Initiative is a non-regulatory effort to educate the public and provide opportunities for collaboration among citizens, county governments, tribes, and other groups on marine conservation and restoration projects. This report is intended to satisfy Congressional requirements for a full review of the Initiative after five years.

HR 3461 stated that the Initiative should be “organized and operated in accordance with the provisions of the Northwest Straits Citizen’s Advisory Commission Report of August 20, 1998.” This report, known as the Murray-Metcalf report after the two conveners of the Commission—U.S. Senator Patty Murray (D) and U.S. Representative Jack Metcalf (R)—recommended establishing a network of local county-based Marine Resources Committees (MRCs) and a coordinating entity known as the Northwest Straits Commission. The report called for these entities to focus on developing coordinated science and “bottom-up” consensus building to help existing authorities make needed reforms to achieve conservation of the Northwest Straits marine ecosystem and involve local governments, tribes, and citizens in regional ecosystem conservation. The Murray-Metcalf report also set out eight performance benchmarks to guide activities and measure performance, and it mandated that the Initiative be given a full evaluation after five years to determine whether the benchmarks had been met. The report further stated that statutory authority for the Initiative should sunset six years after enactment so that affirmative Congressional action would be needed to continue it.

This evaluation report is being submitted to Congress, the U.S. Secretary of the Interior, and the Governor of Washington in fulfillment of the mandate for a full evaluation.

U.S. Senator Patty Murray and Washington State Governor Gary Locke invited former U.S. Environmental Protection Agency (EPA) Administrator William D. Ruckelshaus to chair the Evaluation Panel of the Northwest Straits Initiative. Senator Murray and Governor Locke jointly submitted a “Charge to the Panel” to guide the evaluation effort (Appendices A and B). This document directed the Evaluation Panel to evaluate the Initiative on the basis of the eight benchmarks plus six additional criteria.¹ Mr. Ruckelshaus assembled a panel of seven nationally qualified experts to assess the success of the Initiative in meeting its objectives (Appendix C). Panel members contributed their expertise in a range of relevant areas, including oceanography, marine biology, natural resource management, marine conservation, tribal affairs, and citizen participation.

The evaluation was staffed and organized by the Policy Consensus Center, a joint center of the University of Washington and Washington State University (Appendix K). The evaluation process involved interviews with more than 60 individuals who were involved or concerned with the Initiative, including local elected officials, MRC members, and representatives from environmental organizations, tribes, industry, and state and federal agencies. Additional information was gathered through attendance at MRC and Northwest Straits Commission

¹ The six additional criteria, detailed later in the report, relate to organizational structure, cooperative resource management, impacts and achievements attributable to the Northwest Straits Commission, sustainability of the Commission, national-level value of the Initiative, and recommendations for the future.

meetings, a substantial literature and document review (Appendix I), and an e-mail survey of MRC members that returned 46 responses (a 50-percent response rate).

Four days of evaluation hearings were conducted in La Conner (Skagit County), Washington, from January 17 to 20, 2004. The Evaluation Panel heard from more than 50 individuals from all sectors involved with the Initiative (see Appendix D), on topics that included institutional structure and funding, science, tribal interactions with the Initiative, project partnerships, MRCs, MPAs, outreach and education, community and local government interaction, interaction with business and industry, benchmarks, and the future of the Initiative. The Evaluation Panel also learned about many of the specific projects implemented by the Initiative and visited some project sites.

This evaluation report reflects the consensus findings of the Evaluation Panel based on all the evidence presented and careful deliberation among the panel members.

Overview of the Northwest Straits Initiative

The Northwest Straits region encompasses the marine, nearshore, and shoreline areas of the Strait of Juan de Fuca, the San Juan Islands, and the Northern Puget Sound, stretching from Snohomish County to the Canadian border. It includes all the inland marine waters of the seven counties participating in the Northwest Straits Initiative: Clallam, Island, Jefferson, San Juan, Skagit, Snohomish, and Whatcom (Figure 1).

The Northwest Straits is an area of natural beauty and rich species diversity. At least 220 species of fish, 26 species of marine mammals, 100 species of sea birds, and thousands of species of marine invertebrates are known to inhabit the area.² Once a booming commercial fishing region, the area now hosts busy shipping lanes, a thriving tourist industry, and a rapidly increasing human population. The many uses of the area offer economic opportunities but also create conflicts over appropriate use and lead to environmental problems such as point and nonpoint source pollution, overfishing, and habitat degradation. Many indicator species are in decline: rockfish spawning potential has declined 75 percent from the 1970s, the number of scoters wintering in Puget Sound are down 40 to 70 percent from the 1980s, and the herring stock at Cherry Point is down 92 percent since 1973. Chinook salmon was officially listed as endangered in 1999. Contamination has degraded water quality in many locations causing shellfish bed closures. Shoreline habitat has been altered extensively throughout the region.

Controversy erupted in the 1980s when the National Oceanic and Atmospheric Administration (NOAA) considered establishing a National Marine Sanctuary in the region after several environmental groups, tribes, and agencies expressed concern about the unprecedented decline of marine species. However, the proposal met with broad citizen opposition and all seven county governments passed legislation opposing the sanctuary. The opposition rested on concerns about loss of control of those waters to the federal government. The effort was officially terminated in 1996.

Concern about the declining health of the marine ecosystem remained, however, and it spurred Senator Murray and Representative Jack Metcalf to form the Northwest Straits Citizen's Advisory Commission. The Commission represented a diverse array of political, economic,

² Puget Sound Health 2002. Puget Sound Action Team.

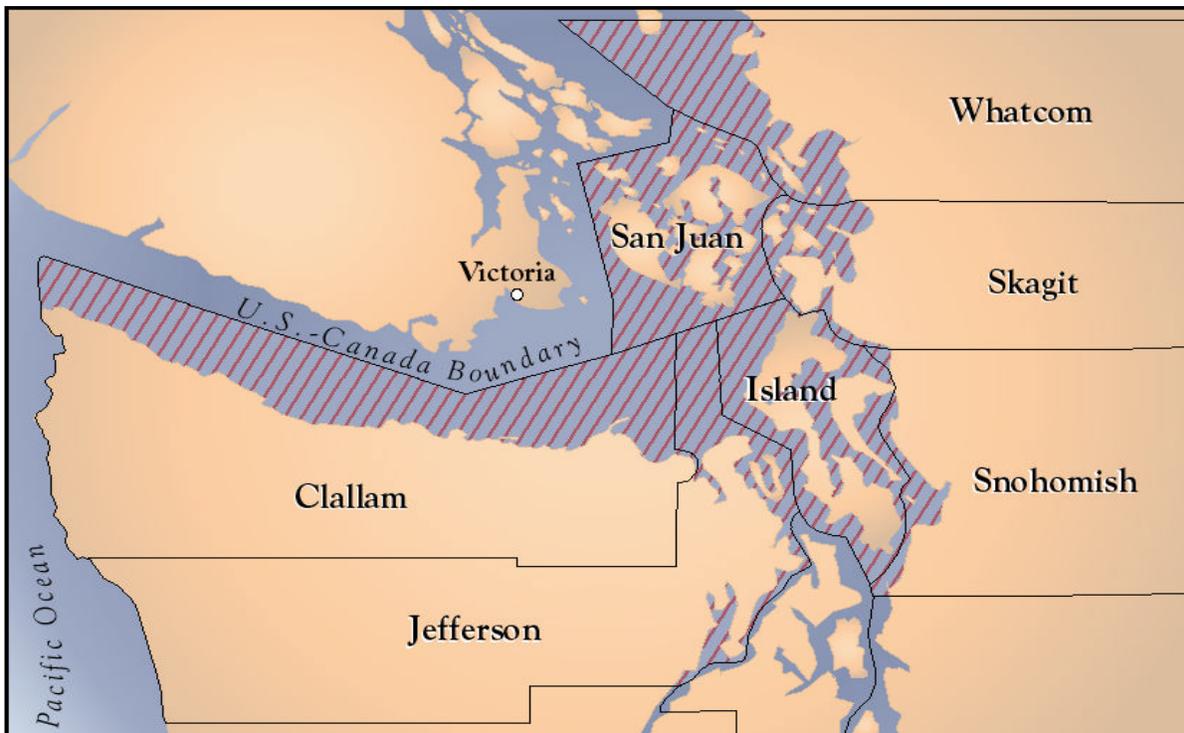
tribal, environmental, local government, and scientific interests, some of whom opposed and some of whom supported the federal sanctuary proposal. The role of the Commission was to assess the ecological health of the Northwest Straits marine ecosystem and to recommend appropriate action to protect and preserve the area.

The Murray-Metcalf Commission found ample evidence of serious decline of marine resources. It also found that this decline had harmed economies and communities of the Northwest Straits region, and that existing management strategies were insufficient to change this trend. The Commission called for urgent action to coordinate targeted scientific research, linkages between agencies, and broad citizen and political support. It recommended the formation of MRCs and a regional Northwest Straits Commission, and it provided specific goals for them by outlining eight performance benchmarks related to marine conservation objectives.

Structure of the Report

The following report provides an overview of the strengths of the Northwest Straits Marine Conservation Initiative and opportunities for improvement and growth during the next stage of its development. It assesses progress on each of the eight benchmarks and provides examples of projects that address those benchmarks. It also considers the six additional criteria outlined in the Charge to the Panel, and it discusses specific concerns related to tribal participation. The report then makes recommendations for the future of the Initiative.

Figure 1: Northwest Straits Initiative Area. The region incorporates seven counties and extends from Everett north to the Canadian Border and west to Neah Bay.



Findings

Success of the MRC Model

The Evaluation Panel found that the Northwest Straits Initiative, as implemented by the Northwest Straits Commission and the MRCs, has been a successful experiment in engaging a broad range of citizens in marine stewardship and in accomplishing research and restoration projects that reflect local priorities and contribute to broader marine conservation goals. While it is too early to measure tangible benefits from some activities, the Initiative has achieved success in several key areas, which include:

- Mobilizing broad citizen support for marine conservation and increasing public understanding of the marine ecosystem.
- Bringing together citizens, tribal governments, county government, and state and federal agencies to work cooperatively and effectively on issues facing the Northwest Straits. The MRCs serve as a bridge between citizens and government and can influence policy related to marine issues in ways that are supported by all interested parties.
- Increasing voluntary compliance with conservation goals and gathering resources for enforcement of existing statutes.
- Tapping local energy to generate a series of practical, on-the-ground projects that are benefiting the ecosystem and the economy of the Northwest Straits area. Using a citizen-driven, bottom-up approach, the Initiative has created a community problem-solving capacity that was previously absent in the counties.
- Contributing to scientific understanding of the marine ecosystem by gathering data in accordance with standard protocols. The MRCs have started to mature into local bodies of expertise that serve as a resource for regulatory agencies and local county governments.
- Spreading innovative ideas from one county to another and thereby multiplying benefits and coordination, while also recognizing and respecting county-by-county differences.
- Creating a model of marine governance that can be adapted to other locations that face similar issues.

These achievements are attributable in part to the careful structuring of the Initiative in the Murray-Metcalf report. In light of the contentiousness surrounding the federal proposal to establish a National Marine Sanctuary in the area, the results of the Northwest Straits Initiative are all the more impressive.

Opportunities for Improvement

While the Northwest Straits Initiative has been highly successful, in some areas additional effort is warranted:

- Baseline and monitoring data has not been collected on many of the benchmark items, making it difficult to demonstrate tangible results and to determine whether certain efforts are leading to improvements in the marine ecosystem.

- Because the Northwest Straits Commission and the MRCs have focused on the marine environment, most have not forged relationships with water resource planning units, salmon recovery groups working with Shared Strategy, and other watershed entities that focus on upland issues affecting marine resources. Many of these entities could assist with the Initiative’s goals regarding water quality and nearshore protection.
- Communication and coordination among the many entities working on marine issues in Puget Sound could be enhanced to ensure that research and projects contribute to broader marine conservation goals and to avoid duplication. This is not the sole responsibility of the Initiative, but the Commission and the MRCs are in a good position to facilitate more coordination.
- Marine Protected Areas (MPAs) in general and the MPA benchmark in particular have been controversial for many constituencies because they can potentially restrict harvests. The Northwest Straits Commission should be given flexibility in how the MPA benchmark is achieved so that habitat protection, tribal rights, and co-management³ authorities are all taken into account.
- Concerns over the authorizing language related to tribal participation and MPAs has interfered with progress in some cases. The Initiative should improve language in official documents to clarify how tribal sovereignty, treaty rights, and co-management status relate to participation in MRCs and establishment of MPAs.

The Evaluation Panel considers these minor concerns in relation to the broader positive impact of the Initiative and believes that they can be appropriately addressed in the next phase of operations.

Performance Benchmarks

The performance benchmarks are the principle evaluation criteria on which the Evaluation Panel was charged to judge the Northwest Straits Initiative. The Murray-Metcalf report established the benchmarks so the Initiative would be “guided by, and ultimately judged by, measurable standards of performance.”

Performance Benchmarks

Source: Murray-Metcalf Commission Report

1. Broad county participation in Marine Resources Committees (MRCs).
2. Achieve a scientifically-based, regional system of Marine Protected Areas (MPAs).
3. A net gain in highly ecologically productive nearshore, intertidal, and estuarine habitat in the Northwest Straits, and no significant loss of existing, high-value habitat; improve state, tribal, and local tools to map, assess, and protect nearshore habitat and prevent harm from upland activities.
4. Net reduction in shellfish harvest areas closed due to contamination.
5. Measurable increases in factors supporting recovery of bottomfish (such as rockfish)—including numbers of fish of broodstock size and age, average fish size, and abundance of prey species—as well as sufficient amounts and quality of protected habitat.
6. Increases in other key marine indicators species (including those identified in the 1997 West report on Puget Sound marine resources).
7. Coordination of scientific data (for example, through the Puget Sound Ambient Monitoring Program), including a scientific baseline, common protocols, unified GIS, and sharing of ecosystem assessments and research.
8. Coordinate with the Puget Sound Action Team and other entities on an effective outreach and education effort with measurements of the numbers of people contacted as well as changes in behavior.

³ Co-management refers to shared management of fishery resources between tribal governments that have treaty fishing rights and state and federal government agencies.

However, the report goes on to say: “One of the challenges in developing a system of benchmarks is the fact that ‘output’ measures—such as whether a species is recovering or continuing to decline, often require many years before clear conclusions can be drawn.... The benchmarks were intended to emphasize substantive action and keep the pressure on to produce measurable results. At the same time, the standards should be realistic and achievable, and not set this Initiative up for failure.”

In evaluating the Initiative’s performance relative to the benchmarks, the Evaluation Panel took into account the brief five-year time frame and the difficulty of attributing changes (either positive or negative) to the Northwest Straits Initiative as opposed to other actors or phenomena. In addition, the Evaluation Panel’s ability to evaluate performance was in some cases limited by a lack of sufficient baseline data to sense trends. Because of these limitations, the panel considers the benchmarks to be more appropriate as guides than as specific criteria for measurement.

The following sections review performance in each of the eight benchmark areas and provide a sampling of activities related to the benchmarks. A more complete description of activities can be found in the Initiative’s five-year report, *A Sound Investment: The Northwest Straits Initiative* (December 2003) (http://www.nwstraits.org/NWSC-Sound_Invest.pdf).

Benchmark #1: Broad County Participation in MRCs

The Evaluation Panel considers this benchmark to have been largely achieved. In 1999, during the first year of the Initiative, all seven counties voluntarily passed legislation establishing MRCs and pledging to work toward the benchmarks. Each county government appointed members to its MRC to represent important segments of the community, including business and industry, recreation, science, environment, ports, tribes, and local government liaison. This was an important achievement given that in 1994, during the attempt to establish a National Marine Sanctuary in the Northwest Straits, all seven county governments passed formal resolutions opposing the sanctuary proposal.

Participation in all the MRCs appears to broadly represent diverse interests. While some MRCs are better connected to county government than others, county Commissioners reported being aware of and pleased with the work of the MRCs. Informal relations are expanding, and some MRCs are being asked to provide input on county policy, which suggests that their credibility and stature is increasing.

One area of concern involves tribal participation in the MRCs. Currently, 12 of the 15 tribes with reservations or Usual and Accustomed (U&A) fishing areas⁴ in the Northwest Straits region participate in the Initiative, and five of the seven MRCs have tribal representation. However, many tribes voiced concerns about language in the authorizing documents specifying which tribes can participate in MRCs and how the tribes are invited to participate. Some have also voiced concern about resource constraints related to their participation. It should be noted that while language in the Murray-Metcalf report limits participation in MRCs to tribes with reservations in the county, all of the MRCs have also invited most tribes with U&A fishing areas in their jurisdiction to participate. However, concerns over authorizing language remain. (These concerns are detailed in a later section.)

⁴ Usual and Accustomed fishing areas refers to specific and often overlapping areas traditionally used by tribes for fishing and other activities. Rights to harvest in these areas were negotiated in treaties in the mid-19th Century. They were affirmed by a 1974 Federal Court decision (the "Boldt Decision") and upheld by the US Supreme Court.

Benchmark #2: Regional System of Marine Protected Areas

This benchmark seeks a scientifically-based regional system of Marine Protected Areas (MPAs). MPAs are among the more controversial aspects of the Northwest Straits Initiative, and the benchmark for establishing a network of such preserves has proved difficult to achieve. The Northwest Straits Commission and the MRCs have had little success in securing consensus on a scientific basis for establishing MPAs. This might reflect difficulties with the benchmark language and with differing understandings of what constitutes an MPA, and this has resulted in a lack of consensus on how to proceed.

One of the key obstacles appears to be lack of a commonly accepted definition of a Marine Protected Area. Many parties mistakenly assume that the term is synonymous with a no-take fishing zone, which makes the MPA idea unacceptable to many key participants, including tribal and commercial fishermen. Consequently, the issue has generally been avoided to allow for progress on other benchmark issues. A number of scientists and other participants still see merit in maintaining MPAs as a benchmark, particularly to ensure that the sporadic protected areas are expanded and linked so that conservation objectives can be met.

Although implementation of MPAs has been limited, some progress with regard to tribal concerns and research has occurred. The Northwest Indian Fisheries Commission adopted a tribal policy on MPAs that provides a coherent and reasonable approach to the MPA issue. It states that conservation objectives must be clearly stated and scientifically supported, and that the range of tools available to address those objectives should be broad and thoroughly reviewed; MPAs can then be considered if they appear to be the appropriate tool. This approach helps to distinguish MPAs from no-take zones but keeps the option open as a special case under specific limited circumstances.

In light of these concerns, the Northwest Straits Initiative has initiated public education efforts and has appropriately withdrawn efforts that met with significant opposition. In areas where protections have been enacted, the term “Marine Protected Area” has often been avoided in favor of alternative descriptors related to the place or purpose. A sampling of activities toward this benchmark includes:

- **Bottomfish Recovery Zones (San Juan County).** At the recommendation of the MRC, San Juan County established eight small, voluntary Bottomfish Recovery Zones in 1998 to enhance the survival and reproduction of bottomfish (Figure 2). These zones were the first of their kind in the state, relying on education and peer pressure rather than regulations and enforcement to discourage harvest of bottomfish. Public meetings were held to select sites and explain the goals of the program. Baseline data for bottomfish populations was collected for all zones and corresponding reference sites. The MRC is monitoring effectiveness of the zones through acoustic tagging and

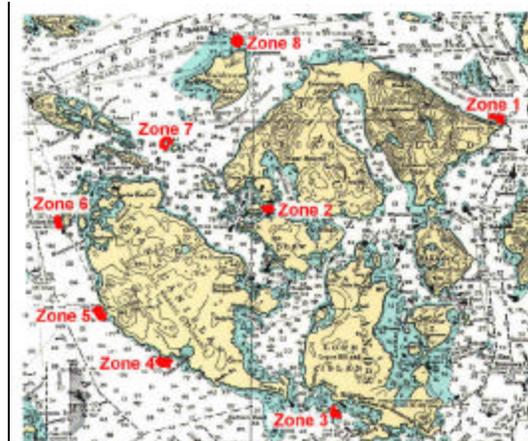


Figure 2: Locations of Bottomfish Recovery Zones in San Juan County.

SCUBA surveys to measure change in fish populations and through a fishing pressure assessment to measure changes in fishing activities in these areas. (Initial results comparing the protected zones with non-protected reference sites show no significant difference thus far in either fishing pressure or size and numbers of fish.)

- **Voluntary Anchor-Free Eelgrass Protection Zone (Jefferson County).** Eelgrass provides sensitive nearshore habitat, including critical feeding, refuge, and nursery areas for salmon, forage fish, bottomfish, Dungeness crab, and others.

Eelgrass surveys conducted by the MRC identified a one-mile stretch of rich eelgrass habitat in the heavily used Port Townsend Bay that was susceptible to damage by boat anchors and accidental groundings. Through public meetings, research, and partnerships with boating, business, and civic groups, the MRC identified protection zones, provided public education, and marked the boundary area with buoys (Figure 3). Volunteers collected baseline data on the effectiveness of the Initiative during a trial run and found that 20 percent of boats were anchored inside the protection zone. A public education booth received more than 300 positive responses from boaters and the public.

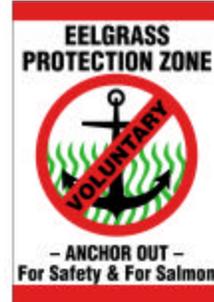


Figure 3: Logo on marker buoys.

- **Proposed MPA sites in Skagit County.** The Skagit MRC conducted extensive public outreach and technical work to identify important rocky reef habitat where dwindling rockfish species were once abundant. Using state and university data and baseline surveys, it selected eight candidate sites for protection. Because tribes expressed concern about the impact of MPA restrictions on their U&A fishing areas, including voluntary restrictions, the MRC withdrew its proposal and forwarded information to the co-managers (tribes and state) for consideration. The MRC continues to conduct baseline monitoring at the eight sites to provide data in the event that a management plan can be agreed upon.

- **Inventory of MPAs in the Northwest Straits region.** The Northwest Straits Commission supported a University of Washington graduate student's thesis research to catalog existing MPAs in the region and describe their level of protection. The resulting document is titled *Achieving a Scientifically-Based Regional System of Marine Protected Areas in the Northwest Straits: A Nearshore Perspective* (Smukler, 2002). The report identified and mapped 107 MPAs established in the region by federal and state agencies, local governments, and private organizations (Figure 4), and it noted that most were established independently and were not designed to function as a network.

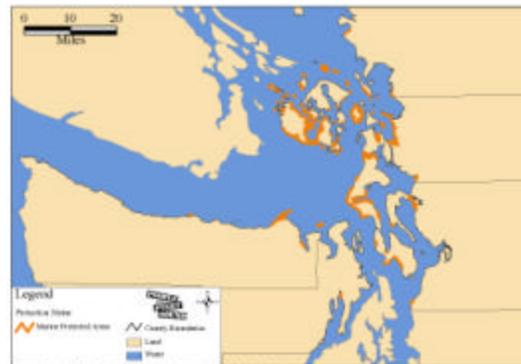


Figure 2: All Marine Protected Areas in the Northwest Straits

Figure 4: MPA locations in the Northwest Straits region (from Smukler, 2002).

In its review of the MPA benchmark, the Evaluation Panel learned of a wide variety of MPAs, including aquatic reserves, refuge systems, National Estuarine Research Reserves, shoreline parks, underwater dive parks, research areas (such as those associated with the University of

Washington's Friday Harbor Labs) and private holdings by The Nature Conservancy and other land trusts. These typically have no management plans, little enforcement and monitoring, and unknown connectivity between sites. MRCs could add value in this area by expanding their efforts in identifying threats, collecting scientific data, working with local partners, and making recommendations to the co-managers.

Benchmark #3: Habitat and Management Tools

This benchmark seeks a net gain in productive nearshore habitat and no significant loss of existing high-value habitat. It also seeks better tools to map, assess, and protect nearshore habitat and prevent harm from upland activities. Assessment of progress on this benchmark is difficult because long-term localized data on habitat conditions are rarely available. Scientific research on this topic is not yet sufficient to determine the types, distribution, and sizes of the marine and nearshore habitats throughout the Northwest Straits region. Thus, net habitat gain and loss relative to a baseline cannot be accurately measured. More time and effort will be required to acquire the necessary information. While the Northwest Straits Initiative is not a research organization and does not have basic scientific capacity or mission, it has contributed to useful collection and monitoring, and has encouraged research useful to this benchmark. However, there are many gaps in scientific work and information collection that the Initiative can more significantly contribute towards.

Recognizing the need for better and more geographically comprehensive habitat information, many MRCs focused their initial projects on data collection and research to help guide future actions. They initiated projects with strong possibilities for preservation and restoration and they developed locally useful tools such as protocols for data collection and maps and data-sets to guide priority identification. They also trained numerous citizen volunteer monitors in data collection techniques using the protocols, and in many cases the resulting data was integrated into appropriate local government data-sets and used in evaluating applications for local land-use and shoreline permits.

A sampling of activities related to habitat improvement includes:

- **Shoreline improvements in three locations.** At Cama Beach in Island County, a 30-year-old, 100-by-25-foot concrete boat ramp was removed from a forage fish spawning area, and a low-impact boat ramp and native vegetation will be installed. At Kayak Point in Snohomish County, volunteers replaced non-native plants with native plants and added interpretive signage. In San Juan County, volunteers planted native shade trees to enhance habitat at a summer surf smelt spawning beach and plan similar work at other sites.
- **Spartina removal.** Spartina is an aggressive, invasive cordgrass that has infested tideflats in approximately 700 acres of Puget Sound estuaries and has degraded a significant area of important habitat. If not stopped, it is likely to spread much further. Some MRCs have mapped spartina, and two MRCs have sponsored removal projects. In Island County, the MRC partnered with Langley Middle School to conduct a week-long Spartina digging event during the school's spring break. Spartina digging activities have focused on discrete patches of spartina and help minimize its spread while educating citizens.
- **Creosote log removal.** Creosote-laden wood has been used for years to build docks, piers, and other marine structures, but creosote is now recognized as a water contaminant

that can kill marine animals and harm humans. Creosote compounds and other wood preservatives continually leach from the treated wood. To address this issue, the Whatcom MRC partnered with the City of Bellingham to survey the entire Whatcom County shoreline for unsecured creosote logs, and more than 70 tons of these logs were removed from the shoreline and placed in a hazardous waste landfill. This activity has spread to other counties as well.

- **Derelict fishing gear removal.** Lost or abandoned fishing nets, lines, and pots—sometimes called “ghost nets”—indiscriminately capture fish and shellfish and degrade habitat. While the problem has been recognized for some time, state policies created disincentives to report and recover this gear until the Northwest Straits Initiative successfully led efforts for policy change. The Initiative showed sensitivity to the fishing industry by using the term “derelict gear” rather than the negatively charged “ghost nets,” and it successfully promoted a no-fault policy that encourages reporting of lost or abandoned gear. Protocols for removal were developed and adopted, and partnerships with key state agencies led to the agencies devoting greater efforts toward gear removal. In Whatcom County, 292 derelict crab pots were removed, containing more than 1,600 live or dead Dungeness crab. More than a mile of gillnets that restricted use of critical rockfish habitat and caused sediment buildup were removed; these contained dead salmon, crab, seabirds, harbor seals, rockfish, and lingcod. In San Juan County, a purse-seine net was removed that had been draped over critical high-relief rocky habitat, preventing access to rockfish. Also removed were two gillnets and a small section of purse-seine net that contained salmon carcasses, seabirds, and rockfish. Clallam County conducted a derelict gear survey and recovered 52 derelict pots containing 30 dead and 30 live Dungeness crab and 33 other crab, and it estimated that the remaining derelict pots might be killing 17,000 crabs per year. In Snohomish County, a derelict gear survey found 338 derelict crab pots; 57 of these, containing 145 live and 26 dead Dungeness crab, were removed. In Skagit County, several gillnets were removed from a rocky pinnacle near Sinclair Island. This project received the national Coastal America Partnership Award⁵ in September 2003 in recognition of outstanding partnership efforts and multi-agency projects.



Figure 5: Derelict gear project logo.

MRCs have also engaged in activities to improve tools for mapping and protecting habitat. These include:

- **Nearshore habitat mapping.** To prevent loss of existing high-value habitat, all seven counties are mapping surf smelt and sand lance spawning habitat, and two counties are mapping eelgrass beds. In Island County, the nearshore area along all 212 miles of shoreline has been inventoried using underwater videography. A comprehensive geographic information system (GIS) database was completed in January 2002, and more data is being added as it is collected. Three counties are using nearshore habitat data during shoreline permit reviews.
- **Protocol development.** Working with scientists from state agencies and academia, MRCs developed protocols for the measurement of forage fish, eelgrass, and bottomfish

⁵ The award is bestowed to a small number of outstanding projects each year by Coastal America, a partnership of the Executive Office of the President, 11 federal departments, and state, local and private organizations.

to make data collection consistent. The forage fish protocol was adopted by Washington Department of Fish and Wildlife (WDFW) and is used by all the MRCs.

Benchmark #4: Shellfish Harvest Areas

This benchmark seeks a net reduction in shellfish harvest areas closed due to contamination. Shellfish harvest closures are primarily related to degraded water quality resulting from human use of the land, including nonpoint source runoff and septic system failures. Most attempts to address these issues fall under the programs of other agencies, such as county health departments (septic systems) and municipalities (some of which have ordinances requiring pet owners to pick up waste). In addition, the State Department of Health monitors and regulates commercial shellfish growing areas. According to Washington state law, when a shellfish area is downgraded, the responsible local government must create a shellfish protection district. The *Puget Sound Water Quality Management Plan* also calls on local stakeholders and agencies to develop a closure response strategy to correct the pollution problem and restore the harvest classification for the shellfish growing area.

The Puget Sound Action Team (PSAT) reported in 2003 that 20 of 147 recreational shellfish areas in the Northwest Straits region were closed to harvest due to contamination and that 7 of 35 commercial shellfish growing areas were considered threatened due to degraded water quality. Between 1998 and 2003, 5,365 acres of commercial shellfish beds were upgraded to allow harvest, and 1,470 acres were downgraded to disallow harvest. The net result is a gain of 3,895 acres of commercial shellfish growing area.

While the net gain in commercial shellfish growing areas points to progress on this benchmark, it should be noted that most of the observed changes are probably the result of activities external to MRC projects. Most of the MRCs have not yet focused their efforts in the upland areas to address water quality impacts and, with one exception, it is too early to demonstrate direct results from most of the MRCs' efforts toward this benchmark.

However, the MRCs have implemented a number of projects related to shellfish harvest area increases and are to be commended for their creative and innovative approach to the issues. Activities primarily related to this benchmark are:

- **Source evaluation for contamination (Whatcom County).** The Whatcom MRC partnered with the Port of Bellingham and the Shellfish Protection District to observe and evaluate rat and bird populations at Blaine Marina that might contribute to fecal coliform contamination in Drayton Harbor waters.
- **Monitoring shellfish health parameters on remote beaches (Clallam County).** MRC volunteers regularly monitor beaches for paralytic shellfish poisoning (PSP) by collecting samples, using Washington Department of Health protocols. As a result, 48 miles of beach have been opened for recreational harvest.
- **Oyster plantings for public education and improved water quality.** Olympia and Pacific oysters were planted in more than 14 sites in three counties. In one instance, Pacific oysters were planted at the Bayview State Park beach to create local awareness of pollution problems and encourage the community to improve water quality conditions. This area was formerly open to harvest but closed due to elevated levels of fecal coliform resulting primarily from local septic system failures. The MRC has erected signage at the beach and has engaged the community in recognizing the issues in an effort to encourage

homeowners to help find solutions to the water quality problems. The Evaluation Panel finds this an especially creative and innovative approach to the problem—the MRC could have focused on fixing septic systems, but it instead took a potentially more far-reaching approach through public awareness and involvement.

Benchmark #5: Bottomfish Recovery

This benchmark seeks measurable increases in indicators of bottomfish recovery, including numbers of fish, abundance of prey species, and habitat protection. Bottomfish include Pacific cod, Pacific whiting, walleye pollock, all species of dabs, sole and flounder, lingcod, sculpin, all species of sharks and rays, all species of rockfish, and most species of surf perch. Many of these species are in decline but are not federally protected.

Five years is too brief a period for measuring changes in population abundance. It will likely take 5 to 10 years or more to determine whether habitat management produces measurable and meaningful changes in bottomfish populations. However, there have been identifiable improvements in protection and management of habitat and in public awareness.

Recovery efforts include:

- **Bottomfish Recovery Zones (San Juan County).** These voluntary no-take zones, which were described earlier, involve significant public outreach, tracking of adult home range, and testing the efficacy of the effort.
- **Bottomfish Recovery Zones (Skagit County).** As described earlier, the Skagit MRC

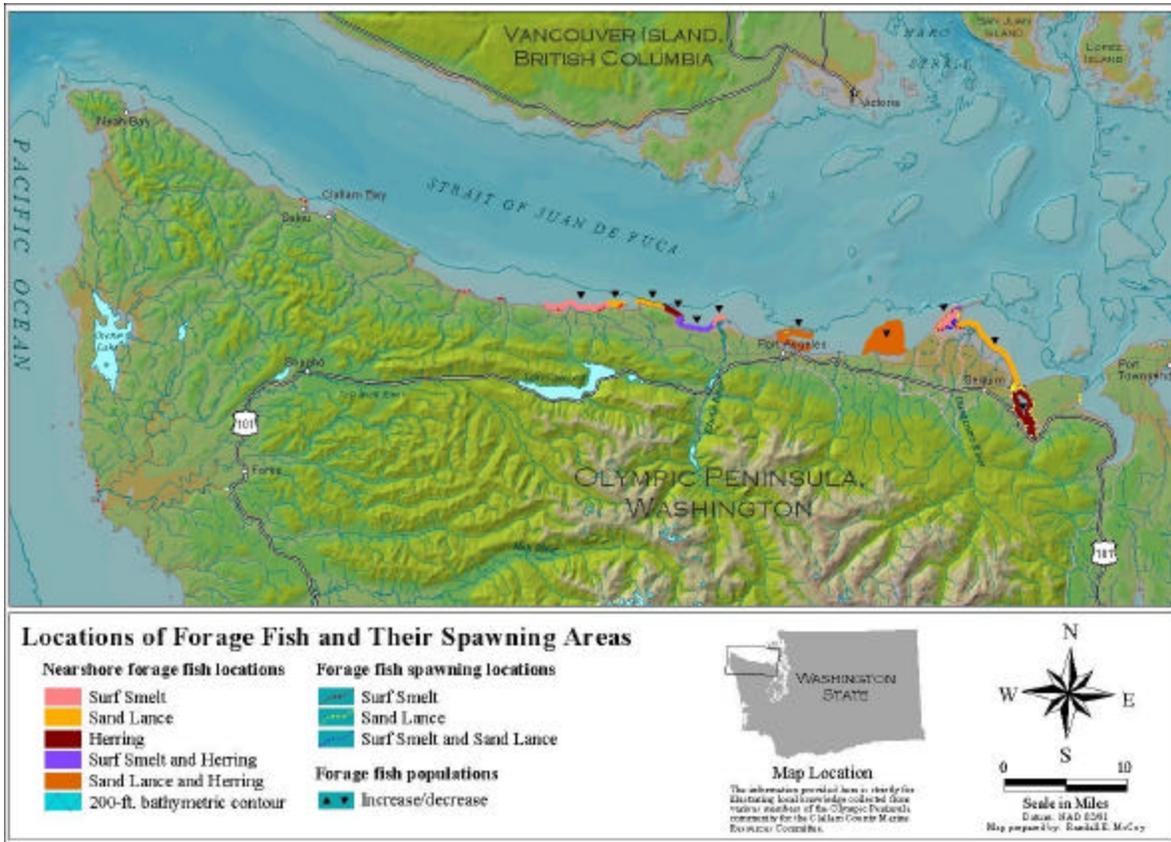


Figure 6: Forage fish and spawning area locations in Jefferson and Clallam Counties. This is an example of the maps created through the Nearshore Habitat Inventory.

initiated a process to identify and establish MPAs for bottomfish recovery and made recommendations to the state and tribal co-managers.

- **Public outreach on bottomfish (Whatcom County).** The Whatcom MRC hosted three community workshops to discuss bottomfish resources and potential restoration actions. Based on these meetings, the MRC submitted recommendations to WDFW to change sport fishing regulations to be more protective of bottomfish.

Benchmark #6: Key Marine Indicator Species

This benchmark seeks increases in key marine indicator species as defined in the 1997 report by Dr. James West, *Protection and Restoration of Marine Life in the Inland Areas of Washington State*. This report identified numerous species in decline, including pinto abalone, marbled murrelet, Olympia oyster, tufted puffin, harbor porpoise, Pacific cod, Pacific hake, walleye pollock, copper and brown rockfish, and lingcod.

Baseline and monitoring data are not available or are insufficient to adequately assess progress on this benchmark. In addition, species populations can be highly variable annually and interannually, with cycles ranging from months to decades. Judging significant changes and trends will require further data collection over a period of decades.

However, a number of activities have been implemented that address restoration of some of the key indicator species. They include:

- **Forage fish spawning site inventory and mapping.** All seven counties are cooperating in spawning site surveys of surf smelt and sand lance, which are prey species for salmon, marine fish, birds, and marine mammals. Protocols were developed in conjunction with WDFW, and funds from the Northwest Straits Initiative helped support three full-time WDFW fisheries biologists to lead surveys and mapping of spawning beaches (Figure 6). With the help of more than 275 volunteers, 4,600 survey stations were added to previously surveyed areas. Surveys from the first two years include 22 miles in Island County and 10.5 miles in Jefferson County of newly discovered potential spawning habitat. This data is being used by WDFW and county governments during reviews of shoreline permits and to implement critical area ordinances, which were previously less effective because data were not available to support them.
- **Olympia oyster restoration.** The Olympia oyster is native to Puget Sound and was once abundant, but current distribution is patchy and scarce in the Northwest Straits area. Three counties joined efforts to plant oyster seed in high-quality habitat areas (Figure 7). In 2002, 54,750 oysters were planted at seven sites. In 2003, 560,000 oysters were planted at 14 sites. Initial monitoring suggests quick growth and low mortality. Oysters in Clallam County doubled in size in the first year and had a 75.6-percent survival rate. However, additional time and monitoring will be required to determine whether the oysters will spawn naturally and

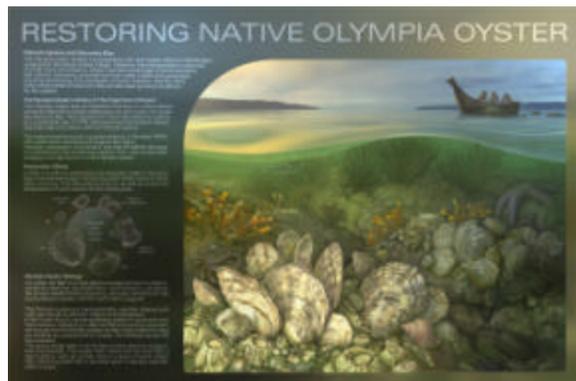


Figure 7: Interpretive signage for the Olympia oyster project in Jefferson County.

whether the spat will be able to set sufficiently to perpetuate the stock.

- **Salmon and kelp surveys.** The Jefferson MRC helped create a fish survey program that documented for the first time that Tarboo Bay in Dabob Bay provides important nursery habitat for juvenile salmon, including two federally listed species. The San Juan MRC collected information and facilitated dialogue with the local community and the whale-watching industry regarding concerns over orca whales. The MRC's efforts resulted in a voluntary 200-yard limit being endorsed by the local Tour Boat Operator Association to avoid harassing whales.

Additional activities relevant to this benchmark include a Dungeness crab stewardship plan developed by the Snohomish MRC in response to local concern that crabs were being unsustainably harvested, and a kelp habitat survey conducted by Clallam County designed to help better understand how juvenile salmon, surf smelt, and sand lance use the kelp bed habitat.

Benchmark #7: Coordination of Scientific Data

This benchmark directs the Northwest Straits Initiative to work with the Puget Sound Ambient Monitoring Program (an arm of PSAT) to coordinate data collection and analysis efforts in the areas of scientific baseline data, protocols, GIS, and ecosystem assessments and research.

The evidence suggests that significant data has been collected and that local data-gathering capability has also significantly improved. Agencies have been encouraged to share their data with the public and with each other, and some success in this regard has been reported. Attempts to identify and fill data gaps have been made, both at the Northwest Straits Commission level and at the MRC level, where local scientists have focused on collecting location-specific data for locally-specific projects. Importantly, effective mechanisms have been developed to transfer data and information between the Northwest Straits Commission and the MRCs, as well as among the seven MRCs.

The Evaluation Panel found that data gathering has been focused primarily at the county level rather than the regional level, and that a broader, ecosystem-wide approach to research is desirable for the future. In addition, more can be done to deliver county-level data collected by the MRCs into the data suites of state agencies to ensure that it is available for decision making at the broader state level. However, the work in this area has already been remarkable considering the limited resources and the focus on restoration activities.

Activities related to this benchmark include:

- **Data workshops.** In 1999, the Northwest Straits Commission organized a "Data Gaps" workshop involving more than 40 scientists to identify the data gaps that hamper marine resources management and protection efforts. Gaps were identified in three categories: physical/habitat; harvestable living marine resources, including fish; and birds, marine mammals, and nongame marine invertebrates. The workshop led to a 65-page report⁶ that compiled available information on the status of resources and habitat in the Northwest Straits. The Commission also organized a "Show Me the Data" workshop, attended by 87 people, to assist MRCs in understanding and locating data resources.

⁶ *Northwest Straits Overview: A Science Gap Report*. Washington Sea Grant Program, University of Washington. April 2000 (Draft).

- **Comprehensive Nearshore Habitat Evaluation.** This project compiled, organized, and analyzed existing nearshore habitat and resource datasets to provide MRCs, county planning departments, tribes, and natural resource agencies with a baseline to assess nearshore habitat conditions and identify priority restoration or conservation sites. It included GIS-based maps and was distributed via CD-ROM.
- **Protocol development and adoption by regulatory bodies.** The Northwest Straits Commission led the development of scientifically defensible protocols for data collection and analysis regarding forage fish spawn collection; derelict gear identification, verification, removal, and disposal; bottomfish monitoring and tagging; and shore-based eelgrass surveys.

The Northwest Straits Commission has also established many forums in which information is exchanged between the Commission and the MRCs and between MRCs. These forums include monthly Northwest Straits Commission meetings (MRC members represent a majority of the Commission members) in which each MRC provides an update on activities and issues, an annual two-day Northwest Straits Commission retreat in which MRC members make project presentations and share experiences, an annual Lead Staff and Chair meeting to review issues related to leadership and administration, and Commission subcommittee meetings (on education and tribal issues, for example). MRC members have also presented projects at other MRC meetings.

Benchmark #8: Outreach and Education

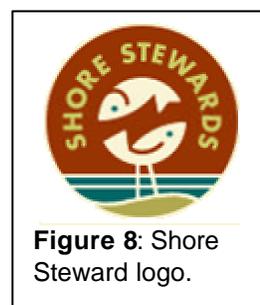
This benchmark directs the Northwest Straits Initiative to coordinate with the PSAT and others on an effective outreach and education effort and asks for data on the number of people contacted and changes in behavior. The PSAT is a central partner of the Initiative, and the PSAT liaison is currently chair of the Northwest Straits Education and Outreach Subcommittee.

All MRCs have undertaken substantial education and outreach activities, and nearly all projects have an identifiable education and outreach component. More than 120 articles have been published in the press featuring Northwest Straits Initiative activities. Hundreds of volunteers, including students and adults, have been trained to work on projects ranging from forage fish surveys and oyster plantings to spartina eradication, rapid shoreline inventory, and shore stewards. Numerous public meetings have been held in all counties on a range of subjects, informational videos have been produced on the derelict gear and the forage fish projects, and National Public Radio (NPR) aired a story on the derelict fishing gear removal project.

Public outreach and education appears to have been highly effective. Data on the number of people contacted and behavioral changes is difficult to obtain or is not available, but the Evaluation Panel believes that this benchmark has been adequately addressed.

A sampling of outreach and education projects initiated by MRCs includes:

- **Shore Stewards Program.** Initiated by the Island County MRC, this program encourages shoreline landowners to be good stewards of their property and the marine environment. It is modeled after the National Wildlife Federation's successful Backyard Wildlife Habitat program and offers recognition and information to help



landowners enhance the health of their property and shoreline as well as the value of the investment. The program provides a sign (produced by the Washington State Department of Corrections) to property owners to identify property certified as fish-friendly wildlife habitat (Figure 8).

- **Beach Expo.** Initiated in partnership with the Snohomish County Surface Water Management Department, the Beach Expo is a marine education effort that reaches the general public when they are most likely to be interested in marine issues. A tent is set up on the beach with displays about conservation issues and hands-on items such as eelgrass, barnacles, worms, crabs, shrimp, and algae. Beach Expos have reached more than 1,800 citizens and have helped raise awareness of the marine ecology and the MRCs' activities.
- **Marine Summit.** The Whatcom County MRC has hosted two marine summits designed to foster cooperation and coordination among the many entities working to protect and restore the marine environment. The first summit, in 2001, was attended by more than 50 people and helped the MRC identify community needs for marine protection and restoration efforts, including outreach, data coordination, and coordination between local efforts. The second summit, in 2003, was attended by more than 70 people and focused on coordinating efforts around two of the benchmarks: reduction in shellfish bed closures and an increase in high-priority nearshore habitat.

Additional Criteria

In addition to the performance benchmarks established by the Murray-Metcalf report, Senator Murray and Governor Locke requested that the Evaluation Panel consider six additional questions during the evaluation process. Five of the six questions are addressed below. The sixth item—"What coherent forward thinking will help carry the Initiative forward? What recommendations can the Panel make to improve upon the direction?"—is addressed in the Recommendations section.

1. Has the Commission developed an appropriate organizational structure and procedures to address their charge?

The organizational structure of the Northwest Straits Initiative was largely dictated by the Murray-Metcalf report. It includes a Northwest Straits Commission of 13 members that functions as a "board of directors" for the Initiative, an executive director and administrative staff, and seven county-based MRCs. Membership on the Commission is weighted toward the counties, with seven members (one each) representing each of the seven MRCs, one tribal representative selected by the Secretary of the Interior, and up to five (no more than the number of MRC representatives minus one) appointed by the governor. The Commission has established five subcommittees: Administrative and Planning (which functions as an executive committee for the Commission), Education, Tribal, Fundraising, and Technical. According to the Murray-Metcalf report, the Commission's role is to provide an ecosystem focus, help mobilize science to focus on key priorities, guide and provide resources to the MRCs, and serve as a forum for coordination and consensus building.

The Evaluation Panel has found that the Northwest Straits Commission has faithfully operated in accordance with the structure and purposes outlined in the Murray-Metcalf report. The decentralized structure was designed to push resources outward to the MRCs, and this has contributed to a sense of ownership at the county level and to significant local investment in a

broad range of well-chosen projects. Science and local priorities regarding concerns and interests have been well integrated.

During this formative period, the Commission has properly deferred to the MRCs and has primarily played a coordinating role rather than a leadership role. However, as the Initiative moves into its next phase, more will be required of the Commission. The Commission is thinly staffed and will require additional support to keep up with the many possibilities and needs being presented by the MRCs.

2. Has the Commission fostered a cooperative approach to resource management that adds value to the current state of marine conservation?

The work of the Northwest Straits Commission and the MRCs has been extremely cooperative and positive. Elected officials, business leaders, tribal representatives, and environmentalists who are often in conflict over environmental protection efforts testified to the careful and respectful manner in which MRCs have approached issues. One tribal representative noted that the MRC in his county is the only place where all the diverse interests come together and work together toward common goals regarding marine issues.

This positive view of the MRCs and the Commission contrasts sharply with perceptions of the regulatory, top-down approach of government agencies. Because the Northwest Straits Initiative is non-regulatory, it must rely on partnerships to be successful, and these partnerships have added significant value through data collection, project results, education and outreach, and citizen involvement.

3. What impacts and/or achievements can be attributed to the Commission as measured by: progress in other (non-benchmark) areas; capitalizing on new opportunities; creating mutually beneficial partnerships?

The Commission and the MRCs have been incubators of creative approaches to marine conservation, and the increasing credibility of these approaches is opening up new opportunities. The success of the forage fish habitat identification and derelict gear removal projects is commonly attributed to the efforts of the Northwest Straits Initiative. Indeed, the Northwest Straits Commission worked with the state legislature on legislation that allowed the derelict fishing gear project to succeed.

The MRCs are increasingly being asked to comment on county-level policy issues, including shoreline master plan updates, whale-watching, fish farming, and jet skis. They are a bridge between regulators and the regulated community, and they affect data gathering and data sharing. The MRCs have also formed numerous mutually beneficial partnerships with government agencies, local governments, tribes, ports, fishermen, businesses, landowners, recreational groups, foundations, and local philanthropists. Their careful and cooperative approach has made them prominent and well-respected players in marine conservation.

4. What has been done to enhance the sustainability of the Commission and its activities?

To enhance its financial sustainability, the Northwest Straits Commission established a tax-exempt 501(c)3 Northwest Straits Marine Conservation Foundation, which raised \$266,000 for projects in 2003. The Commission also established a fundraising subcommittee to pursue grant opportunities and held workshops for MRC members on fundraising and marketing. At least one

MRC has used Initiative funds to leverage external funding from the Salmon Recovery Funding Board and other sources. The Commission has also gained substantial additional capacity through financial and other resource partnerships on projects, and through a significant volunteer network which sometimes includes the extensive volunteer networks of other organizations.

Each of the MRCs has also leveraged additional funds and in-kind services through their county, city, and port governments, as well as from foundations, NGOs, personal donations, and academic institutions. These additional funds vary by MRC from \$80,000 to over \$600,000, and total more than \$2 million over the five years of the Initiative, more than doubling the federal support (Figure 9).

Figure 9: MRC funding levels

County	Initiative Funding	Funds Leveraged ⁷	Totals
Clallam	275,000	100,000	375,000
Island	275,000	507,343	782,343
Jefferson	275,000	122,000	397,000
San Juan	275,000	628,250	903,250
Skagit	275,000	80,000	355,000
Snohomish	275,000	309,068	584,068
Whatcom	275,000	406,500	681,500
Totals	1,925,000	2,153,161	4,078,161

The MRCs have also made themselves valuable to county governments on nearshore and marine issues and are increasingly seen as a forum for handling these issues without controversy and in a way that is beneficial for the community. Indeed, many county representatives noted that even if the Northwest Straits Initiative is not reauthorized, the local MRC will continue because it is a valued part of the community and provides an important service that is unavailable elsewhere. Further, in-kind county staff support shows local commitment and increased sustainability of the MRC.

5. What national-level value has been created through this Initiative? What lessons can be learned and applied to other regions?

The Northwest Straits Initiative and the county-based MRC structure appear to be an extremely effective approach for organizing the public to address marine conservation issues. The MRCs provide a model for identifying and implementing science-driven, locally initiated projects that have relevance on a regional or ecosystem level. The Initiative brings many lessons together on how to get grassroots activity seeded and moving on its own, and it demonstrates that local differences can be respected and integrated to achieve regional impact.

The following are some of the key features that have contributed to the success of the Initiative and that should be considered when applying the model to other areas:

- Local support for marine conservation galvanized around concerns about declining marine health in Puget Sound, including continuing concern after the National Marine Sanctuary proposal was withdrawn.
- The structure of the Initiative is weighted toward the counties. This locally-driven, regionally coordinated approach was in strong contrast to the perceived “top-down” National Marine Sanctuary proposal.
- Congressional authorization provides a clear mandate for the Initiative; Federal appropriations provide significant resources that supply critical external funding, offer

⁷ These amounts were provided by each MRC and are estimates representing financial and in-kind resources. Due to unique circumstances in each county, the amounts may not be consistently calculated across MRCs.

flexibility in allocation and local approval over disbursement, and create an opportunity to leverage additional resources from other sources.

- County participation is voluntary and elected county officials appoint MRC members and approve project funding. These features create an important link between the MRCs and the county political apparatus.
- The MRCs have achieved broad participation and are composed of members from diverse constituencies.
- The MRCs have no regulatory or enforcement authority, thereby reducing local concerns about additional layers of regulation and forcing the MRCs to be innovative in their approach to conserving the marine ecosystem.
- The performance benchmarks provided goals and criteria for measuring the success of the Initiative, and the five-year evaluation motivated participants to implement on-the-ground activities that would demonstrate progress toward the benchmark goals.
- Implementation is through a combined bottom-up and top-down process where MRCs typically suggest or initiate projects and the Northwest Straits Commission (whose composition is weighted toward MRC members) coordinates and provides guidance and resources.
- The Initiative is independent of any particular agency or level of government, but operates very much like a “Council of Governments.”
- The Northwest Straits Commission and the MRCs focus on building relationships and community at every level and among all marine stakeholders—shoreline landowners, the public, local and state government, tribes, marine resource users, marine industry, and others, and they focus on actions to address real problems.

The Northwest Straits Initiative model is already being considered elsewhere. Proposals have been made to replicate the model in the southern Puget Sound region, and NOAA’s MPA Center Training and Technical Assistance Institute has studied the Initiative to document “lessons learned.” Northwest Straits Commission staff have given presentations on the Initiative at the Gaviota Coast in California, where there is interest in developing a partnership between citizens and the federal and local governments as an alternative to the National Seashore Program. This model, with appropriate modifications, would seem to have high potential for use in other marine protection efforts, and possibly for other natural resource conservation.

Finally, many of the projects and protocols developed by the Northwest Straits Initiative have been innovative and are directly exportable. These include forage fish, derelict gear, and bottomfish projects.

Tribal Participation and Concerns

Twelve tribes have participated directly with the MRCs at meetings, in discussions, and in project planning and implementation. Three tribes with reservations or U&A fishing rights in the Northwest Straits area have not been directly involved with the MRCs, but they receive and review materials and information regularly. The current chair of the Snohomish MRC is a tribal representative. The Commission received a paddle from the Tulalip Tribes that reads, “Our

elders have taught us, through the paddle, to pull together. We must all work as one to restore marine resources.” The paddle is ceremoniously carried to every Commission meeting.

The Northwest Straits Commission has one tribal representative appointed by the Secretary of the Interior. It also has a tribal subcommittee to address tribal concerns and interests. The Commission funded a tribal liaison position for two years to facilitate communication and coordination between tribes and the MRCs. This person helped the MRCs understand how to work with the tribes and respect tribal sovereignty, and it organized a tribal workshop on marine conservation. This position ended in 2002 with a recommendation to redirect funds to support projects identified as priorities by individual tribes. Using these funds, two tribal contracts are underway:

- Five tribes (Swinomish, Sauk-Suiattle, Tulalip, Samish, and Stillaguamish) have been given funds to monitor the use of small estuaries by juvenile salmonids and identify restoration activities.
- The Port Gamble S’Klallam tribe has been given funds to complete a restoration project at Dosewallips State Park.

In addition, many tribes are involved in a leadership or partnership role in the Olympia and Pacific oyster restoration projects and in the Derelict Fishing Gear Removal project.

The Commission and MRCs have shown respect for tribal sovereignty and fishing rights, and a number of proposed projects have been postponed or abandoned due to tribal concerns. The Skagit MRC did not establish voluntary marine reserves for bottomfish species after learning of concerns of local tribal representatives. The San Juan MRC delayed work in establishing a marine stewardship area in order to have more time to communicate with local tribes. And the Commission has deferred endorsement of the Orca Pass stewardship area until tribal concerns are resolved.

Tribal concerns about the Northwest Straits Initiative are fairly consistent across the many tribes and have focused on the Initiative’s authorizing language, which they feel does not adequately address the tribal governmental and co-management role. These concerns include:

- The Initiative’s authorizing language specifies that tribal participation occur where a reservation is located in a particular county and does not acknowledge that tribal fisheries management responsibilities and territory are defined by historical “usual and accustomed” (U&A) fishing areas, as noted in the treaties. Tribal U&A fishing areas often exist outside of county boundaries that contain the tribe’s reservation. In addition, they often overlap and management within these areas is subject to intertribal and state-tribal negotiations. This situation initially created problems in implementing the Northwest Straits Initiative because of confusion over which tribes should participate where. Despite this confusion, the Northwest Straits Commission and the respective MRCs have made positive efforts to include tribes with U&A areas in deliberations and project development, and all of the MRCs have invited most tribes with U&A areas in their jurisdiction to join.
- Many tribes feel that the structure of the NW Straits Initiative does not properly recognize the government-to-government relationship of tribes to the State of Washington in the co-management of fisheries resources. Again, the Initiative’s authorizing language specifying tribal representation by county left the role of tribes to be

worked out by the local entities, with varying success. Some tribes believe that it is inappropriate that only the tribal side of the co-managers is present at the table and that the state (Washington Department of Fish and Wildlife) should be similarly involved. Most of the tribes, however, have acknowledged that the local county governments have extended genuine efforts to recruit tribes to participate in the MRCs, and that the Northwest Straits Commission has tried to provide opportunities for tribal projects, regardless of whether the tribes have chosen to participate in the MRCs. County representatives indicated that they welcome the tribes' perspective as well as the highly qualified staff and technical resources that some of the tribes have.

- Tribes that do not participate in the MRCs or the activities of the Northwest Straits Commission indicated that their lack of participation was mainly due to limited staff and financial resources and the difficulty of monitoring the many natural resources processes in western Washington. Tribal representatives indicated that additional funding would increase their ability to participate in or initiate projects.
- As noted earlier, tribal representatives voiced many concerns about the establishment of Marine Protective Areas. Tribes are legally restricted to the geographic boundaries of their U&A fishing grounds, and the establishment of MPAs (especially no-take zones) limits their ability to exercise treaty-reserved fishing rights. Tribes cannot relocate to another U&A area if their available area is reduced by pollution, delineation of shipping lanes, establishment of MPAs, or other limitations. Even though an MPA cannot preclude or preempt tribal harvest, establishment of an MPA can create difficulties between tribes and other resource managers and the public. The public simply does not understand how fishing can occur in an MPA, even though treaty rights take precedence and conservation objectives are incorporated into harvest plans.

Recommendations

Despite the remarkable accomplishments of the Northwest Straits Initiative, much work is left to be done, both in improving the marine environment and in capitalizing on the organizational capacity and work thus far of the Northwest Straits Commission and the MRCs. Although progress has been made and net improvements achieved on each of the benchmark criteria, five years is insufficient time to overcome the significant concerns identified in the Murray-Metcalf report. The scale of the problem is large, and the benchmarks remain relevant: many miles of nearshore habitat are still in need of restoration and protection, many shellfish areas remain closed and require improved water quality before they can be opened to harvest, many species of bottomfish have yet to show significant population gains, and additional behavioral changes are still needed among the growing human population in the Puget Sound area. The Northwest Straits Initiative has begun to address these issues in a balanced, respectful, and effective way and is well positioned to accomplish even more in the future.

The Evaluation Panel makes the following recommendations for continuing, supporting, and improving a well-functioning Initiative. The panel wishes to emphasize that as the Northwest Straits Commission prepares for, enters, and executes this next phase, and as Congress considers continued support and reauthorization, care should be taken to preserve the many important strengths of the Northwest Straits Initiative's structure and operations. These recommendations are intended to add to the capacity and impact of the Initiative, and care should be taken to not weaken the significant working mechanisms, relationships, or momentum of the effort.

Reauthorization By Congress

Based on its achievements thus far, its potential for providing greater benefits in the future, and the continuing need for action to improve the health of the Northwest Straits marine ecosystem, the Evaluation Panel strongly and unanimously recommends federal reauthorization of the Northwest Straits Initiative. The Evaluation Panel views the Initiative's success thus far as a foundation on which to build significant and sustained protection and restoration of marine resources in the Northwest Straits. The Commission and MRCs are poised to enter the next phase of activity, and they are deserving of federal support to do so. As a vehicle to promote locally-based marine conservation, the Northwest Straits Initiative is an excellent investment and should be continued.

The Evaluation Panel further recommends that reauthorization be made for an extended period of time—perhaps 8 to 10 years. While the Initiative's achievements have been remarkable, the brief six-year timeframe of the initial authorization created an incentive to focus on projects that offered quick results rather than those that required long-term investment but might have offered more significant benefits. Baseline data collection and broader ecosystem research were given lower priority as a result. If these activities are to be undertaken by the Northwest Straits Initiative in the next phase, the reauthorization period should be commensurate with the time frame necessary to make demonstrable progress toward its benchmarks and goals. The Evaluation Panel is confident that this extended time frame would be used well by the Initiative and would allow for greater achievement and consolidation of existing practices as well as for a meaningful launch of the new activities suggested. The Northwest Straits Commission has a track record of responsible and cost-effective approaches to marine conservation, and its

structure ensures that both local concerns and scientific discipline guide deliberations and funding decisions.

To track progress over this extended time period, the Evaluation Panel recommends that the Northwest Straits Commission submit a midterm progress report to Congress summing up activities and accomplishments over the previous five years and over the life of the Initiative.

The Evaluation Panel also recommends that another full evaluation be conducted at the end of the next reauthorization period to review the Initiative's progress in adapting to this next phase and also to provide an external review to help guide potential future work. Such an evaluation will offer an opportunity to consider the broader impact of the Initiative relative to its marine ecosystem goals and will encourage accountability for tangible, quantifiable results. Indeed, the looming presence of this first evaluation was cited as a strong motivator for implementing the projects and producing results that have helped drive the Initiative thus far. The next evaluation would differ from the current review, however, because the question of whether the concept of a citizen-based, regional marine conservation Initiative can be effective has already been answered.

Increased Federal Funding

A key component of the Initiative's success has been the core funds provided by Congress for projects and operations. This federal support has been efficiently employed and has been leveraged many-fold through volunteer efforts, agency staff support, and matching grant funds. Federal support has also given the MRCs flexibility in identifying and implementing locally relevant projects that have garnered the support of local leaders and officials, and it has funded the lean but effective Northwest Straits Commission staff. Without federal financial support, it is unlikely that this experiment in locally-based and regionally-coordinated marine conservation would have been successful.

The accomplishments of the Northwest Straits Commission and the MRCs are all the more remarkable in light of the limited funding over the past five years. Federal funding of the entire Initiative during recent years averaged about \$800,000 per year and a total of \$3,489,600 over five years.

The Evaluation Panel believes that this level of support will be insufficient to fulfill the mandate of the Murray-Metcalf report and support the Initiative through its next stage. To achieve the benchmarks and priorities suggested for the next stage, the Evaluation Panel recommends that federal support be increased to at least \$1.6 million annually. The additional amount is based on the expected core costs of the additional broader tasks proposed for the next stage involving regional projects and baseline and ecosystem research, as well as to build on previous work and to increase the internal capacity the MRCs. These funds would be used to support project activities, increase capacity to coordinate these activities, and to leverage other funds or support from agencies and other entities.

While recommending flexibility in allocation, the Evaluation Panel believes that the additional support in excess of current federal funding is needed to support the following activities:

- **Regional, multi-county and multi-tribal projects.** The current approach of the Commission is to allocate equal funds to all the MRCs for projects and other purposes.

This has great value in providing resources for local priorities that support the regional benchmarks and should be continued. However, the Evaluation Panel recommends that greater regional and ecosystem focus be applied in the future to both research and projects. Thus, the panel recommends providing an additional \$70,000 to \$150,000 annually to support integrated regional ecosystem projects. These funds would be used for on-the-ground projects that are well-grounded in science and focus on agreed-upon performance benchmarks. These funds might augment MRC action grant money as an incentive for regional collaboration and larger-scale ecosystem-oriented projects and research.

- **Baseline, monitoring, and ecosystem research and data.** In many cases it has been difficult to measure progress on specific benchmarks because sufficient baseline data have not been collected or compiled. At the completion of the next phase, the Initiative will have to have documentation of ecosystem improvements if it is to garner continued support. However, conducting (or helping others to conduct) broader-scale and longer-term research and data collection will require funds in excess of current core support. An additional \$70,000 to \$200,000 annually is needed to support research, assessment, and monitoring to establish baseline data and track trends over time on indicators related to benchmarks as well as broader ecosystem functioning (including both natural and social science topics). These funds are insufficient in themselves to support the breadth of work needed, but they could be used to leverage other funds or support other agencies in the effort. Some of these funds might also support an additional Commission staff member who could assist with planning, coordination, and management of these efforts. To ensure that data collection efforts are not duplicative, it will be important to coordinate with other entities involved in this work, such as Puget Sound Action Team (PSAT), Puget Sound Nearshore Ecosystem Restoration (PSNER) partnership, Pacific Northwest Aquatic Monitoring Partnership (PNAMP), NOAA Fisheries, and the Salmon Recovery Funding Board.
- **Tribal Support.** In some cases, tribes are not able to attend MRC meetings or participate in Northwest Straits Initiative projects due to limited staff and financial resources. The Evaluation Panel recommends that an annual allocation of approximately \$60,000 be made to assist tribes with participation, research or projects under the purview of the Initiative.
- **MRC Project support.** In the past five years, the MRCs have received an average of about \$55,000 per year to support their many on-the-ground projects. The MRCs have used this money wisely and have demonstrated the ability to direct resources to carefully chosen research and restoration projects and to leverage the support of significant volunteer labor. In this initial phase, the MRCs have largely been in the planning, inventory, and pilot stages of project implementation, and they are now poised to implement larger and more significant projects based on priorities identified thus far. To accomplish this useful work, including expansion of efforts to encompass region-wide projects, the Evaluation Panel recommends increasing project support to the MRCs to about \$120,000 annually for each MRC.
- **MRC staff support.** The MRCs identified limitations on county-based staff support as the primary obstacle to achieving greater success. Currently, the Initiative provides \$10,000 to each county for administrative support, and while staffing levels vary by county, each MRC is typically staffed by a county employee at about 0.5 FTE (Full Time Equivalent). Up to \$20,000 is also provided for technical support, outreach and education

and inventory activities. MRCs typically have four to seven projects ongoing at a time, each with financial, contractual, and activity tracking and reporting requirements as well as volunteer management needs. It can be a challenge to provide staffing to meet the needs of the many volunteer-based projects as well as other aspects of MRC administration. As the MRCs mature and take on more activities, the importance of and need for administrative support will only increase. In addition, coordinating MRC activities with watershed entities, as recommended previously, will also require increased staff effort. The Evaluation Panel recommends that additional funds be provided to increase county administrative support to one FTE for each MRC, at an estimated average cost of \$60,000 per MRC annually.

Replication of the Initiative

The Evaluation Panel believes that the Northwest Straits Initiative has national applicability as a model for locally directed, regionally coordinated marine conservation. This should be seen as a great compliment to both the Murray-Metcalf report's thoughtful structuring of the Initiative as well as to the members of the Northwest Straits Commission and the MRCs, who have carefully and effectively implemented the Initiative.

The Evaluation Panel recommends that Congress consider piloting this approach in other areas to determine its transferability. In addition to being applicable to marine and estuary locations, features of this approach might also be applicable to terrestrial watershed-based conservation. However, before replicating this approach elsewhere, the panel suggests that a careful review be conducted to determine the applicability and advisability of this model relative to the target area's current conditions and structures and to any on-going citizen-based conservation activities. Efforts to pilot this approach elsewhere should focus on achieving the results of broad citizen engagement in conservation projects rather than on the specific structures of the Northwest Straits Initiative, as the specific structures may not fit in other areas.

The Evaluation Panel also recommends that replication of this model be seriously considered for the remaining, southern portion of Puget Sound. Indeed, the South Sound counties are reportedly interested in establishing MRCs, and the model has been presented to Kitsap County Commissioners. Mason and Thurston counties are also involved in forage fish inventories using protocols developed by the Northwest Straits Initiative.

Although many of the goals and benchmarks of the Northwest Straits Initiative are relevant, the more urban nature of much of southern Puget Sound would need to be considered in determining appropriate local structures and coordinating bodies. Several current members of the Northwest Straits Commission cautioned against changes which would undermine the present strengths of the program, particularly in the realm of local involvement, and advised against expanding the Northwest Straits Initiative to a size that is no longer efficient. However, Commission members and the Evaluation Panel recognize the value in applying the Northwest Straits Initiative concept throughout Puget Sound in order to increase focus on marine resource issues, expand public involvement and awareness, and foster scientific collaboration and coordination.

If a similar entity is to be created in the southern Puget Sound counties, the effort should proceed based on a similar process of bringing together diverse local interests from each of the southern Puget Sound counties with regional experts to arrive at consensus regarding structure and

benchmarks. Because parts of southern Puget Sound are generally more urban than the Northwest Straits counties, the model would most likely need to be adjusted to accommodate the different jurisdictional, population, and developmental conditions found there. If such an entity were created, opportunities would obviously exist for coordination and collaboration with the Northwest Straits Initiative, but the two entities should not be combined under a parent organization.

Because replication in southern Puget Sound has implications and potential benefits for marine conservation in the Northwest Straits region, the Evaluation Panel encourages the Northwest Straits Commission to engage—when invited to do so and as opportunities arise—with other significant Puget Sound entities involved in efforts to create a southern Puget Sound Initiative, including the PSAT, Department of Ecology, Department of Natural Resources, WDFW, PSNER, the Governor’s Office, counties, and interested nonprofits and community groups. Further, it encourages state and federal authorities with responsibility for the protection of Puget Sound’s resources to invite the Northwest Straits Commission to discuss how its methods might be applied to possible Initiatives and revisions to existing regulatory and protection activities. (Care should of course be taken to ensure that the small and already thinly-stretched Northwest Straits Commission staff is not overwhelmed by requests for assistance related to replication.)

Setting Priorities for the Future

Throughout these initial years, the Northwest Straits Initiative has been faithful to the letter and spirit of the Murray-Metcalf report, but it has also been bound by it. At this point in its evolution, the Northwest Straits Commission acknowledges, and the Evaluation Panel agrees, that the Initiative is entering a new stage of maturity that would benefit from a thoughtful internal priority-setting process. Such a process should remain true to the spirit and purposes of the Murray-Metcalf report but must also adapt to new conditions and focus on the next phase.

Thus, the Evaluation Panel recommends that the Northwest Straits Commission engage the MRCs, tribes, agencies, governments, organizations, other interested parties and the broader public in an effort to fine-tune their priorities and goals to ensure that activities are focused on the highest-priority areas and that they are leading to integrated ecosystem improvements. The panel recommends that the Initiative develop a set of priorities and an associated strategic workplan to focus on realistic goals for the next 5, 10, and 20 years. This effort would help the Initiative link its diverse activities more closely to focus on broader, ecosystem-wide goals.

This recommendation is made with some trepidation. The panel does not want to encourage a lengthy and involved planning process, nor does it want to weaken or dismantle the features that have led to the success of the Initiative thus far or interfere with ongoing on-the-ground projects.

The Evaluation Panel believes that this priority-setting process should be conducted by the members of the Northwest Straits Commission and the MRCs themselves. They have demonstrated their familiarity with and sensitivity to the issues highlighted during this evaluation. They have also demonstrated their ability to engage the broader public and each other in thoughtful dialogue and to understand local priorities.

The Evaluation Panel proposes that the priority-setting process include consideration of the following topics, which surfaced during the hearings. Certain of these issues, such as water quality and sewage treatment, toxics, land use planning, and shoreline protection, are not

specifically mentioned in the benchmarks but play a substantial role in the marine ecosystem. A number of other topics were identified as barriers to operations or important opportunities to improve future performance. The panel defers to the Northwest Straits Commission and the MRCs to address these issues as they deem appropriate.

- **Regional and ecosystem approach.** Although some regionally coordinated projects have been implemented, more could be done. Project selection could be weighted toward projects that have potential for greater regional impact, and additional project financing could be offered as an incentive to create projects that support regional endeavors. Also, the Initiative's annual reports, in addition to reporting on county-level activities, might also provide an assessment of the region-wide impact. The Initiative could also play a valuable role in promoting an ecosystem orientation within the many state and federal agencies working in the area.
- **Tribal concerns.** The Northwest Straits Commission and the tribes have a mutual interest in addressing issues that impede tribal participation in and support for the Initiative. These issues include tribal rights, sovereignty, and co-management; tribal participation in MRCs; MPAs; and tribal resources. The Evaluation Panel believes that these concerns are best addressed by the Commission and the tribal representatives themselves, ideally involving all tribes with reservations or U&A fishing areas in the Northwest Straits region. The Evaluation Panel recommends that official documents that authorize the Northwest Straits Initiative be amended so that MRCs are inclusive of tribes with U&A fishing areas, rather than limiting tribal participation to those counties which include a reservation
- **Marine Protected Areas.** The MPA benchmark has been highly controversial for many constituencies in the Northwest Straits region and merits review so that this topic becomes less of a barrier to finding useful protections. The Evaluation Panel recommends that the intent of the MPA benchmark be maintained, but that the Northwest Straits Commission be given flexibility in how to achieve it. In considering a path forward, the panel offers the following suggestions:
 - Progress will be more likely if the parties can work from a common definition, preferably a widely accepted definition such as the President's Executive Order definition or other acceptable alternative.
 - Methods to achieve the protection of valuable and threatened species or habitat areas are a necessary part of the discussion on restoring or improving the ecosystem on the Northwest Straits region.
 - MPAs can take many forms; a variety of approaches are possible and encouraged
 - MPAs are more appropriate as a tool toward a broader marine protection goal than as a goal in themselves.
 - Species or habitat protections should be based on sound science
 - The Northwest Straits Commission should seek a mutually agreeable framework to allow for appropriate protection of key species and habitat areas when warranted by accepted scientific data.
 - The resulting approach should be respectful of the rights and sovereignty of local, state, tribal, and national entities and co-management authorities.

- The resulting approach should emphasize pursuing a network approach that links protective measures across the region so that conservation objectives are more effectively achieved.
- **Coordination with agencies, watershed planning groups, and salmon recovery groups.** The Evaluation Panel suggests that the Northwest Straits Commission and MRCs explore an expanded effort to selectively partner with agencies, tribes, local governments, and private organizations with common goals or interests related to marine conservation projects or policy. The Commission is also encouraged to continue bringing together those with data sets concerning the Northwest Straits region and to advocate for the sharing, availability, and integration of that data.
- **Support of policy-makers, funders and philanthropic foundations.** The Evaluation Panel suggests even greater emphasis, where useful, on forging closer communication channels with Congress, the governor, and the state legislature so that the Northwest Straits Commission can efficiently provide input on issues of direct relevance to the Northwest Straits region. In addition, the Commission might begin developing closer relationships with major foundations to gain financial support for the many worthy activities proposed by the MRCs.
- **Baseline data collection and monitoring.** The Evaluation Panel recommends that the Northwest Straits Commission expand collection of baseline and monitoring data on performance benchmark criteria, either through its own efforts or those of others. The ability to measure progress and detect trends in the Puget Sound marine and nearshore environment is hampered in many cases by insufficient information. While the panel agrees with the Commission's emphasis over the past five years on on-the-ground projects, future support for the Initiative will likely depend on demonstrated results. In this regard, the panel encourages a closer partnership with the Puget Sound Ambient Monitoring Program, which is already engaged in many components of marine resource monitoring and might be encouraged to expand its efforts to incorporate the data collection needs of the Northwest Straits Initiative, as well as other entities. The panel also recommends that attention be paid to socio-economic issues and data.

Appendices

- A. Letters from Senator Murray and Governor Locke
- B. Excerpts from the Charge to the Panel
- C. Evaluation Panel Members
- D. Evaluation Hearings: Roundtable Participants and Presenters
- E. Acronyms
- F. Northwest Straits Initiative Projects and Associated Benchmarks
- G. Scientific Activities Under the Northwest Straits Initiative
- H. University of Washington Graduate Students Who Have Worked with the Northwest Straits Initiative
- I. Documents Reviewed
- J. Northwest Straits Marine Conservation Initiative
- K. Policy Consensus Center

A. Letters from Senator Murray and Governor Locke

PATTY MURRAY
WASHINGTON

United States Senate

WASHINGTON, DC 20510-4704

November 21, 2003

William D. Ruckelshaus
Madrona Venture Group
1000 Second Avenue, Suite 3700
Seattle, Washington 98104

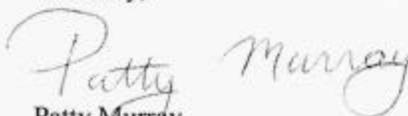
Dear Bill:

I want to express my deep appreciation for your willingness to serve as Chair of the Northwest Straits Initiative Evaluation Panel. As you know, this initiative represents an innovative experiment in grass-roots involvement and public-private partnerships to protect and restore the Northwest Straits' vital marine and nearshore habitat. The success of their efforts is of critical importance to the communities, economies and environment of the region.

Attached is the "Charge to the Evaluation Panel" agreed upon by Governor Locke and myself. This document sets out the criteria for assessing the progress of the initiative.

Governor Locke and I recognize the importance of informing Congress, the people of Washington State, and the communities of the Northwest Straits that meaningful progress is being made to protect and restore the region's vital marine resources, and of receiving guidance for any such future work. I am grateful to you for leading this effort.

Sincerely,



Patty Murray
United States Senator

PM/rh

GARY LOCKE
Governor



STATE OF WASHINGTON
OFFICE OF THE GOVERNOR

P.O. Box 40002 • Olympia, Washington 98504-0002 • (360) 753-6780 • www.governor.wa.gov

January 22, 2004

William D. Ruckelshaus
Madrona Venture Group
1000 Second Avenue, Suite 3700
Seattle, Washington 98104

Dear Bill:

I am writing to express my deep appreciation for your willingness to serve as Chair of the Northwest Straits Initiative Evaluation Panel.

The Northwest Straits Marine Conservation Initiative (Initiative) represents an innovative experiment in grass-roots involvement and public-private partnership to protect and restore marine and nearshore habitat. The success of the Initiative is very important to the communities, economies and environment of the region.

Enclosed is the *Charge to the Panel* agreed upon by Senator Murray and myself. This document sets the criteria for assessing the progress of the Initiative. Senator Murray and I realize the value of informing Congress, the people of Washington State, and the communities of the Northwest Straits that meaningful progress is being made to protect and restore the region's vital marine resources. We also recognize the importance of receiving guidance for future work on this project.

Again, I am grateful to you for leading this worthwhile effort.

Sincerely,

A handwritten signature in black ink that reads "Gary Locke".

Gary Locke
Governor

Enclosure

cc: Senator Patty Murray
Brad Ack, Chair, Puget Sound Action Team
Jeff Koenings, Director, Department of Fish and Wildlife
Linda Hoffmann, Interim Director, Department of Ecology



B. Excerpts from the Charge to the Panel

Overview

The Northwest Straits Marine Conservation Initiative, enacted by Congress in 1998 with support from U.S. Senator Patty Murray (D) and former U.S. Representative Jack Metcalf (R), is a citizen-driven approach to protect and restore the vital marine resources in the Northwest Straits. The purpose of the initiative was to develop and test innovative intergovernmental arrangements that may prove helpful in reversing the degradation of the marine ecosystem and to foster improved resource protection mechanisms with the support of interested and concerned parties living in the region. The legislation mandates a full evaluation at five years by a nationally qualified group to determine whether a set of established benchmarks have been met. The statutory authority for the commission will sunset in year six unless affirmative Congressional action, based on this evaluation, is taken.

Evaluation Criteria

The legislation establishing the Northwest Straits Citizens Commission (HR 3461) states that “The Commission shall be organized and operated in accordance with the provisions of the Northwest Straits Citizen’s Advisory Commission Report of August 20, 1998” (the Murray-Metcalf report). This report states that “the following benchmarks, among others, should be used as measurable standards of performance” upon which to evaluate the Commission. The Panel will determine how to evaluate the Commission’s progress regarding the following benchmarks:

- Broad county participation in Marine Resources Committees (MRCs).
- Achieve a scientifically-based, regional system of Marine Protected Areas (MPAs).
- A net gain in highly ecologically productive nearshore, intertidal and estuarine habitat in the Northwest Straits, and no significant loss of existing, high-value habitat; improve state, tribal, and local tools to map, assess, and protect nearshore habitat and prevent harm from upland activities.
- Net reduction in shellfish harvest areas closed due to contamination.
- Measurable increases in factors supporting recovery of bottomfish (such as rockfish)—including numbers of fish of broodstock size and age, average fish size, and abundance of prey species—as well as sufficient amounts and quality of protected habitat.
- Increases in other key marine indicator species (including those identified in the 1997 West report on Puget Sound marine resources).
- Coordination of scientific data (for example, through the Puget Sound Ambient Monitoring Program), including a scientific baseline, common protocols, unified GIS, and sharing of ecosystem assessments and research.
- Coordinate with the Puget Sound Action Team and other entities on an effective outreach and education effort with measurements of the numbers of people contacted as well as changes in behavior.

In addition, the following questions have been suggested as evaluation criteria:

- Has the Commission developed an appropriate organizational structure and procedures to address their charge?
- Has the Commission fostered a cooperative approach to resource management that adds value to the current state of marine conservation?
- What impacts and/or achievements can be attributed to the Commission as measured by:
 - progress in other (non-benchmark) areas
 - capitalizing on new opportunities
 - creating mutually beneficial partnerships
- What has been done to enhance the sustainability of the Commission and its activities?
- What national-level value has been created through this Initiative? What lessons can be learned and applied to other regions?
- Planning for the future: what coherent forward thinking will help carry the initiative forward? What recommendations can the Panel make to improve upon the direction?

C. Evaluation Panel Members

William D. Ruckelshaus, Chair

Mr. Ruckelshaus twice served as Administrator of the U.S. Environmental Protection Agency and has served as acting Director of the Federal Bureau of Investigation and as Deputy Attorney General of the U.S. Department of Justice. In the private sector, Mr. Ruckelshaus has served as Chairman and CEO of Browning-Ferris Industries and as Senior Vice President of the Weyerhaeuser Company. He is currently Strategic Director at Madrona Venture Group and is a director of several corporations, including Cummins Engine Company, Nordstrom, Vykor, and the Weyerhaeuser Company. Mr. Ruckelshaus is Chairman of the World Resources Institute in Washington, D.C., Chairman of the Salmon Recovery Funding Board for the State of Washington, and a member of the U.S. Commission on Ocean Policy. He has also served as Chairman of Enterprise for the Environment, special envoy to the Pacific Salmon Treaty between the United States and Canada, and a member of the President's Council for Sustainable Development. He is a graduate, cum laude, of Princeton University and Harvard Law School.

Alyn C. Duxbury, Ph.D., Associate Professor Emeritus, School of Marine Affairs and School of Oceanography, University of Washington; Former Director of Operations, School of Oceanography, University of Washington; Former Assistant Director for New Programs and Water Quality Specialist, Washington Sea Grant Program, University of Washington.

James W. Good, Ph.D., Professor, College of Oceanic and Atmospheric Science and Director of the Marine Resource Management Graduate Program, Oregon State University; Former Coastal Resources Specialist, Oregon Sea Grant.

Daniel Huppert, Ph.D., Associate Professor, School of Marine Affairs, Adjunct Associate Professor, School of Fisheries and Department of Economics, University of Washington; Member of the Independent Economic Analysis Board, Northwest Power Planning Council, Portland, Oregon; Former Chair, Economics Technical Committee on Snake River Salmon.

DeWitt John, Ph.D., Director of Environmental Studies Program, Bowdoin College; Former Director, Center for the Economy and the Environment, National Academy of Public Administration; Director, State Policy Program, Aspen Institute; Policy Studies Director for Economics, Trade, and Agriculture, National Governors Association; Director, Governor's Office of Policy and Assistant to the Director, Colorado Department of Natural Resources and Director, Colorado Division of Mines.

Steven S. Rumrill, Ph.D., Chief Scientist and Research Program Coordinator, South Slough National Estuarine Research Reserve; Graduate Faculty, College of Oceanic and Atmospheric Sciences (Marine Resource Management), Oregon State University; and Associate Professor of Biology (Adjunct), University of Oregon.

Ann Seiter, M.S., Environmental Science, Washington State University. Former Director of Natural Resources, Jamestown S'Klallam Tribe; 25 years experience with Pacific Northwest Tribes in natural resource management. Former Chair, Dungeness River Management Team; Former Vice-Chair, Clallam County Planning Commission. Recipient of the Olympic Peninsula Audubon Society's Conservation Award; Group Recipient of the Governor of Washington's Environmental Excellence Award for work on cooperative water management.

Edward P. Weber, Ph.D., Director of the Thomas S. Foley Institute of Public Policy; Assistant Professor of Political Science, Washington State University; Chair-Elect, Section for Environment and Natural Resource Administration, American Society of Public Administration.

**D. Evaluation Hearings:
Roundtable Participants and Presenters**
January 17-20, 2004
La Conner, Washington

Russel Barsh–Samish Tribe; Skagit County MRC
Phil Bloch–Department of Natural Resources
Ric Boge–Skagit County Department of Public Works;
Skagit County MRC
Ed Bowlby–Olympic Coast National Marine Sanctuary;
Clallam County MRC
Ginny Broadhurst–Northwest Straits Commission
Stephanie Buffum–Friends of the San Juans
Tom Campbell–Island County MRC
Vince Cooke–Makah Tribe
Andrea Copping–Washington Sea Grant Program;
Northwest Straits Commission
Tom Cowan–Northwest Straits Commission
Hilary Culverwell–Puget Sound Action Team
Ken Dahlstedt–Skagit County Commissioner
Bill Dewey–Taylor Shellfish
Paul Dinnel–Skagit County MRC; Shannon Point Marine
Center
Mike Doherty–Clallam County Commissioner
Louie Echols–Washington Sea Grant Program
Leigh Espy–Department of Natural Resources
Dan Evans–Gordon, Thomas, Honeywell, Malanca,
Peterson & Daheim Law Firm; Former State Director
for U.S. Senator Patty Murray
Duane Fagergren–Puget Sound Action Team
Chris Fairbanks–Whatcom County MRC
Kathy Fletcher–People For Puget Sound
David Fluharty–School of Marine Affairs, University of
Washington
Clare Fogelsong–Whatcom County MRC; City of
Bellingham
Joe Gaydos–SeaDoc Society, University of California,
Davis
John Giboney–Tesoro Refinery, Skagit County MRC
Don Gunderson–Aquatic and Fishery Sciences,
University of Washington
Sasha Horst–Northwest Straits Commission
Harlan James–Lummi Nation
Kirby Johnson–Snohomish County MRC
Amy Kraham–Whatcom County MRC
David Loyd–San Juan County MRC
Michelle McConnell–Jefferson County MRC
Scott McCreery–BP; Whatcom County MRC
Nancy McKay–Russell Family Foundation
Don Meehan–Washington State University Cooperative
Extension; Island County MRC
Buck Meloy–Commercial Fisherman; Whatcom County
MRC

Rhea Miller–San Juan County Commissioner
Tom Mumford–Department of Natural Resources
Don Munks–Skagit County Commissioner
Anne Murphy–Port Townsend Marine Science Center;
Jefferson County MRC
Betsy Peabody–Puget Sound Restoration Fund
Pat Pearson–Washington State University Cooperative
Extension; Jefferson County MRC
Kit Rawson–Tulalip Tribes; San Juan County MRC
Scott Redman–Puget Sound Action Team
Jeanne Robinette–Skagit County MRC
Jennifer Ruesink–Department of Zoology, University of
Washington
Kent Scudder–Snohomish County MRC
Mike Shelton–Island County Commissioner
Jim Slocomb–San Juan County MRC
Tim Smith–Washington Department of Fish and Wildlife
Terry Stevens–Padilla Bay NERR; Department of
Ecology
Mike Stoner–Port of Bellingham; Whatcom County MRC
Benye Weber–Port of Coupeville; Island County MRC
Tina Whitman–Friends of the San Juans
Daryl Williams–Tulalip Tribes; Snohomish County MRC
Terry Williams–Tulalip Tribes; Northwest Straits
Commission
Suzi Wong-Swint–Snohomish County Public Works;
Snohomish County MRC
Gary Wood–Island County MRC

Additional MRC Reception Participants

Pat Crain–Clallam County MRC
Ivar Dolph–Skagit County MRC
Sean Edwards–Snohomish County MRC
Polly Fischer–Skagit County MRC
David Hoopes–San Juan County MRC
Kirby Johnson–Snohomish County MRC
Charlie La Nasa–Snohomish County MRC
Gabrielle La Roche–Jefferson County MRC
Gerald Larson–Whatcom County MRC
Chuck Lockhart–Clallam County MRC
Heather McCartney–Snohomish County MRC
Sharon Roy–Whatcom County MRC
Anne Shaffer–Clallam County MRC
Roger Sherman–Island County MRC
Sally van Niel–Snohomish County MRC

E. Acronyms

EPA	Environmental Protection Agency
FTE	Full-time Equivalent
GIS	Geographic Information System
HR 3461	House Report 3461, 105 th Congress
MMA	Master of Marine Affairs
MPA	Marine Protected Area
MRC	Marine Resources Committee
MUP	Master of Urban Planning
NERR	National Estuarine Research Reserve
NOAA	National Oceanic and Atmospheric Administration
NPR	National Public Radio
NWS	Northwest Straits
NWSC	Northwest Straits Commission
PCC	Policy Consensus Center
PNAMP	Pacific Northwest Aquatic Monitoring Partnership
PNCERS	Pacific Northwest Coastal Ecosystems Regional Study
PSAT	Puget Sound Action Team
PSNER	Puget Sound Nearshore Ecosystem Restoration
PSP	Paralytic Shellfish Poisoning
SRFB	Salmon Recovery Funding Board
U&A	Usual and Accustomed
WDFW	Washington Department of Fish and Wildlife
WSGP	Washington Sea Grant Program

F. Northwest Straits Initiative Projects and Associated Benchmarks

PROJECTS	Benchmarks							
	P=Primary, S=Secondary							
	1. Broad participation	2. Network of MPAs	3. Protect nearshore habitat	4. Reduction in shellfish closure	5. Bottomfish recovery	6. Increase marine indicator species	7. Coordinate scientific data	8. Outreach and education
Clallam								
Create MRC and designate members	P							S
Public workshops								P
Forage fish spawning survey			S			P	P	S
Forage fish maps			P				S	
Kelp habitat study			S				P	
Green crab monitoring			P					S
PSP monitoring							P	S
Derelict gear survey							P	
Derelict gear removal			P			P	S	S
Olympia oyster seeding						P		S
Newspaper inserts								P
Island								
Create MRC and designate members	P							S
Homeowner eelgrass survey			S					P
Eelgrass inventory			S				P	
Eelgrass mapping			P				S	S
Shoreline features mapping			S				P	
Forage fish spawning survey			S			P	P	S
Forage fish maps			P				S	
Shore stewards program			S	S				P
Spartina digging events			P					P
Cama Beach restoration			P					S

PROJECTS	Benchmarks							
	P=Primary, S=Secondary							
	1. Broad participation	2. Network of MPAs	3. Protect nearshore habitat	4. Reduction in shellfish closure	5. Bottomfish recovery	6. Increase marine indicator species	7. Coordinate scientific data	8. Outreach and education
Jefferson								
Create MRC and designate members	P							S
Emergency response workshop			P					S
Marine resources bibliography							P	
Literature review							P	
Public workshops								P
MPA brochure		P						P
Technical meetings							P	P
Newspaper inserts								P
Olympia oyster seeding						P		S
Olympia oyster signage			S					P
Priority habitat study								
Forage fish spawning survey			S			P	P	S
Forage fish maps			P				S	
Fish surveys						P		P
No-anchor zone		P	P					S
San Juan								
Create MRC and designate members	P							S
Bottomfish recovery zone outreach		S			P			P
Bottomfish recovery zone monitoring		S			P		P	
Forage fish survey protocols							P	S
Forage fish spawning survey			S			P	P	S
Forage fish maps			P				S	
Transboundary agreement on MPA		P	S		S	S		
Whale-watching guidelines						P		P
Whale-watching workshop						S		P

PROJECTS	Benchmarks							
	P=Primary, S=Secondary							
	1. Broad participation	2. Network of MPAs	3. Protect nearshore habitat	4. Reduction in shellfish closure	5. Bottomfish recovery	6. Increase marine indicator species	7. Coordinate scientific data	8. Outreach and education
Marine stewardship workshops								P
Rockfish workshop					S		P	
Skagit								
Create MRC and designate members	P							S
Bottomfish project phase I		S			P		P	S
Bottomfish project phase II		S			P		P	S
Spartina digging events			P					P
Olympia oyster seeding						P		S
Rapid shoreline inventory							P	S
Derelict fishing gear outreach					S			P
Forage fish spawning survey			S			P	P	S
Forage fish maps			P				S	
Pacific oyster seeding				S				P
Nearshore restoration blueprint			P					
Snohomish								
Create MRC and designate members	P							S
Marine shoreline overflights								P
Beach expos								P
Crab stewardship plan						P		S
Fact sheets			S					P
Shoreline inventory			S				P	
Forage fish spawning survey			S			P	P	S
Forage fish maps			P				S	
Nearshore restoration blueprint			P					
Marine observation cruise with Remote Operated Vessel (ROV)							S	P

PROJECTS	Benchmarks							
	P=Primary, S=Secondary							
	1. Broad participation	2. Network of MPAs	3. Protect nearshore habitat	4. Reduction in shellfish closure	5. Bottomfish recovery	6. Increase marine indicator species	7. Coordinate scientific data	8. Outreach and education
Kayak Point restoration			P					S
Shoreline restoration incentives			P					S
Whatcom								
Create MRC and designate members	P							S
Marine summits							P	P
Marine resource data report			S				P	
Nearshore session at Salmon conference			S					P
Rapid shoreline inventory							P	S
Creosote log inventory and removal			P				S	
Forage fish spawning survey			S			P	P	S
Forage fish maps			P			S		
Forage fish video			S					P
Nuisance species survey				P				
Marine life fact sheets			S					P
Draft resolution on net pens						P		
Bottomfish project					S			P
Marine data map series			S				P	P
Northwest Straits Commission								
Data Gaps workshop							P	S
Show Me the Data workshop							P	S
Marine protected area report		P					S	S
Nearshore habitat database			S				P	
Derelict fishing gear removal			P			P	S	S
Derelict fishing gear outreach			S			S	S	P

G. Scientific Activities Under the Northwest Straits Initiative

Activity	Timing	Purpose	Players	Description
NWS Science Gaps Workshop	Late 1999	Identify key gaps in research, monitoring, restoration in NWS, set the scientific agenda. >40 scientists from region.	Research Community	Gaps identified in three categories: physical/habitat, harvestable living marine resources, including fish; birds, marine mammals, and nongame marine invertebrates.
Research Grant RFP	1999 for 2000 funding	Solicit research projects on MPAs.	Research Community	Administered by Washington Sea Grant Program.
Action Grant Solicitation	Annual funding 1999-2004	Provide QA/QC for MRC action grant projects. Assist MRCs in choosing, honing, and implementing projects. NWS providing technical assistance through NWSC members and partners.	MRCs, NWSC, and peer reviewers, mostly from the region	Letter of Intent: internal NWS review. Proposals peer reviewed. Administered by NWSC/Ecology.
Action Grants	1999-2004	Carry out projects to meet NWS benchmarks.	MRCs, contractors, partners	Total of approx 35 grants to seven MRCs between 1999 and 2003, representing about 140 projects.
MRC County Projects	Year-round, 1999-2004	MRCs compete for grants and contracts from sources outside NWS to supplement and extend activities.	MRCs, outside funding sources such as SRFB, foundations	Range of projects, including forage fish, habitat surveys and restoration, salmon habitat work.
Protocol Development	2000-2003	Develop scientifically defensible protocols for data collection and analysis.	MRCs, NWSC, contractors, partners	Forage fish spawn collection; derelict gear identification, verification, removal and disposal; bottomfish monitoring and tagging; shore-based eelgrass surveys.
Ecosystem Projects	Year-round, 2000-2004	NWSC competes for grants and contracts from foundations and agency sources.	NWSC, outside funding sources such as NOAA, foundations	Projects include derelict fishing gear, nearshore habitat inventory, and marine protected area network development.

H. University of Washington Graduate Students Who Have Worked with the Northwest Straits Initiative

Student	Degree	University Department	Year	Thesis Title or Topic	Work with Northwest Straits Initiative	Where are they now?
Shannon Winger (Davis)	MUP	Urban Planning	2001	Local-Level Natural Resource Planning and Management: An Evaluation of the San Juan County Marine Resources Committee	Worked with San Juan County MRC; thesis on San Juan County	Friends of San Juans, WA
Kate Smukler*	MMA	Marine Affairs	2001	Laying the Groundwork in the Nearshore to Achieve a Scientifically-Based Regional System of Marine Protected Areas in the Northwest Straits (WA)	Intern with NWSC on MPA project; thesis on NWS MPAs	NOAA MPA Office, Boston
Michele Pico*	MMA	Marine Affairs	2001	Analysis of Communication Between Scientists and Managers in the PNCERS Study Region	Intern with NWSC	National Fish and Wildlife Foundation, Wash, DC
Angelita Alvarado	MMA	Marine Affairs	2002	The Role of Environmental Education in Marine Protected Areas in Bohol and Negros, Philippines: A Freirean Assessment	Worked on NWS Education and MPAs with WSGP	Marine Conservation Biology Institute, Redmond WA
Chih-Fan Tsao	MMA	Marine Affairs	2002	Process Evaluation of Marine Environmental Education in the San Juan Islands	Thesis work with San Juan County MRC; worked on Education and MPAs with WSGP	Graduate school, U. of Illinois C/U
Eric Eisenhardt	MS	Aquatic and Fishery Sciences	2002	Effect of the San Juan Islands Marine Preserves on Demographic Patterns of Nearshore Rocky Reef Fish	Worked with San Juan County MRC; thesis on San Juan County fish issues	Seattle
Jennifer Hernandez*	MMA	Marine Affairs	2003	Local-Level Marine Resource Management in the Northwest Straits: Assessing the Implementation of the Proposed Dungeness Crab Stewardship Plan for Snohomish County	Worked with Snohomish MRC; thesis on Snohomish crab project	Staff Member, U.S. House of Representatives, Wash DC
Peter Stauffer	MMA	Marine Affairs	2004	Policy Analysis of Forage Fish Issues in NWS Counties	Working with Tulalip Tribes and Surfrider Foundation on NWS issue	Grad student at UW

* Selected as National Knauss Sea Grant Marine Policy Fellow for a year's service in Washington, D.C., after graduation.

I. Documents Reviewed

- Anchor Environmental, L.L.C., People for Puget Sound, January 2002. Northwest Straits Nearshore Habitat Evaluation, Northwest Straits Commission
- Balcomb-Bartok, Kelley, 2001. *State of the Orca: Population and Culture*, Voice for the Environment, Friends of the San Juans
- Bloch, Phil; Dean, Tom; White, Jacques, December 2002. Samish Island Rapid Shoreline Inventory, <http://www.nwstraits.org/reports-biblio.html>
- Braund, Claire, June 2003. *The Art of Communicating MPA Science*, MPA News, Vol 4, No.11
- British Columbia/Washington Marine Science Panel, 1994. The Shared Marine Waters of British Columbia and Washington, Report to the British Columbia/Washington Environmental Cooperation Council.
- Clallam County Marine Resources Committee, 2001. Clallam County Action Grant Report, <http://www.nwstraits.org/reports-biblio.html>
- Clallam County Marine Resources Committee, 2001. Summary Report: Clallam County MRC Interactive Public Workshop Series.
- Clallam County Marine Resources Committee, 2003. Clallam County Nearshore Mapping and Restoration: Derelict Gear Removal
- Crossroads Consulting, February 2003. 2003 Marine Resources Summit Summary Report, <http://www.nwstraits.org/reports-biblio.html>
- Dinnel, Paul; McConnell, Michelle, 2002. Rocky Reef Bottomfish Recovery in Skagit County: Phase II Final Report: Assessment of Eight Potential marine Reserve Sites & Final Site Recommendations, Skagit County Marine Resources Committee
- Eisenhardt, Eric, 2001. Effect of San Juan Islands Marine Preserves on Demographic Patterns of Nearshore Rocky Reef Fish. Master's thesis, Aquatic and Fishery Sciences, University of Washington
- Holmes, Jan; Meehan, Donald B., December 2000. Eelgrass Survey 2000: A Survey of Shoreline Property Owners of Island County in June 2000, <http://www.nwstraits.org/reports-biblio.html>
- Island County Marine Resources Committee, January 2002. Workplan 2002, <http://www.nwstraits.org/reports-biblio.html>
- Jefferson County Marine Resources Committee, 2000. Brochure: Marine Protected Areas: A Tool for Recovery. <http://www.nwstraits.org/reports-biblio.html>
- Jefferson County Marine Resources Committee, Restoring Native Olympia Oyster, Poster
- Jefferson County Marine Resources Committee, Voluntary Eelgrass Protection Zone, Brochure
- Johnson, Kirby; Snohomish Marine Resources Committee, April 2003. The Role of the Snohomish County Marine Resources Advisory Committee in the Northwest Straits Marine Conservation Initiative, <http://www.nwstraits.org/reports-biblio.html>
- Moulton, Lawrence L.; Penttila, Daniel E., June 2000. San Juan County Forage Fish Assessment Project: Forage Fish Spawning Distribution in San Juan County and Protocols for Sampling

- Intertidal and Nearshore Regions: Final Report, <http://www.nwstraits.org/reports-biblio.html>
- Murray-Metcalf Northwest Straits Citizen Advisory Commission, August 1998. Report to the Convenors, Washington Sea Grant Program, University of Washington
- Murray, Mike, 1999. The Status of Marine Protected Areas in Puget Sound, Volume I. Puget Sound Action Team, <http://depts.washington.edu/mpanews/MPA14.htm>
- National Research Council, 2001. Marine Protected Areas: Tools for sustaining ocean ecosystems, National Academy Press.
- Natural Resources Consultants, 2003. Derelict Fishing Gear Removal Project: Final Report, Executive Summary, Northwest Straits Commission
- Nightingale, Barbara, 2003. Priority Habitat Stewardship Project for Eastern Jefferson County, Jefferson County Marine Resources Committee.
- Norris, James; Wyllie-Echeverria, Sandy, 2001. Final Report: Videographic Eelgrass Survey of Island County Selected Areas, Island County
- Northwest Indian Fisheries Commission, July 11, 2003. Tribal Policy Statement on Marine Protected Areas, Marine Reserves, Marine Sanctuaries, and Fishery Conservation Zones.
- Northwest Straits Commission, Spring 2003. Northwest Straits Newsletter. <http://www.nwstraits.org/reports-biblio.html>
- Northwest Straits Commission, March 2003. Derelict Fishing Gear Project: First Year Accomplishments, <http://www.nwstraits.org/reports-biblio.html>
- Northwest Straits Commission, 2003. Citizen-based Marine Restoration and Protection in Action: A Progress Report from the Northwest Straits Initiative, <http://www.nwstraits.org/reports-biblio.html>
- Northwest Straits Commission, 2000. Brochure: Northwest Straits Marine Conservation Initiative. <http://www.nwstraits.org/reports-biblio.html>
- Northwest Straits Commission, 2003. Fact Sheets: Marine Resources Committees. <http://www.nwstraits.org/reports-biblio.html>
- Northwest Straits Commission, 2003. A Sound Investment: The Northwest Straits Initiative. www.nwstraits.org
- Palumbi, Steven 2002. Marine Reserves: A tool for ecosystem management and conservation, The Pew Oceans Commission
- Presidential Documents, May 26, 2000. Marine Protected Areas, Executive Order 13158, Federal Register / Vol. 65, No. 105
- Puget Sound Water Quality Action Team, 2002. Puget Sound's Health 2002: Status and trends of key indicators of Puget Sound's health, www.wa.gov/puget_sound
- San Juan County Marine Resources Committee. Voluntary No-Take Zones Maps. <http://www.nwstraits.org/reports-biblio.html>
- San Juan County Marine Resources Committee, 2003. 2003 MRC Work Plan, <http://www.nwstraits.org/reports-biblio.html>
- Shore Stewards, 2000. Guide for Shoreline Living, Washington State University Extension, Island County Marine Resources Committee. www.shorestewards.org

- Smukler, Kate, June 2002. Achieving a Scientifically-based Regional System of Marine Protected Areas in the Northwest Straits: A Nearshore Perspective, Master's thesis, University of Washington
- Snohomish County Marine Resources Committee, 2001. Project Completion Report Snohomish County Marine Resources / A Community Outreach and Education Program CZM Agreement No. G0100034
- Snohomish County Marine Resources Committee, February 2003. Proposed Dungeness Crab Stewardship Plan for Snohomish County, <http://www.nwstraits.org/reports-biblio.html>
- U.S. Congress, January 27, 1998. Governing International Fishery Agreement with Poland, HR 3461
- Washington Sea Grant Program / University of Washington, April 2000. Northwest Straits Overview: A Science Gap Report (Draft), <http://www.nwstraits.org/reports-biblio.html>
- Whatcom County Marine Resources Committee. Marine Creosote Piling Remediation Project, information sheets
- Winger (Davis), Shannon, 2001. Local-level Natural Resource Planning and Management: An Evaluation of the San Juan County Marine Resources Committee, Master's thesis, University of Washington

J. Northwest Straits Marine Conservation Initiative

10441 Bayview-Edison Road
Mt. Vernon, Washington 98273
Phone: (360) 428-1084
Fax: (360) 428-1491
info@nwstraits.org
www.nwstraits.org

Northwest Straits Commission Members

Marine Resources Committee Representatives

Paul Dinnel, Skagit MRC
Kirby Johnson, Snohomish MRC
Buck Meloy, Whatcom MRC
Anne Murphy, Jefferson MRC
Kevin Ranker, San Juan MRC
Joe Schmitt, Clallam MRC
Gary Wood, Island MRC

Governor's Appointees

Dave Anderson, Former state representative, Whidbey Island resident
Andrea Copping, Washington Sea Grant Program, University of Washington
Duane Fagergren, Puget Sound Action Team
Kathy Fletcher, People For Puget Sound
Michael Stoner, Port of Bellingham

Secretary of the Interior Appointee

Terry Williams, Tulalip Tribes

Northwest Straits Commission Staff

Tom Cowan, Director
Sasha Horst, Project Specialist
Ginny Broadhurst, Marine Program Coordinator

Resource Support

Terry Stevens, Padilla Bay Director

K. Policy Consensus Center

The Northwest Straits Evaluation was staffed and organized by the Policy Consensus Center.

The Policy Consensus Center is a partnership between Washington State University and the University of Washington that is dedicated to working as a neutral source of information and resources for problem-solving in the region. The PCC assists public, tribal, business, agribusiness, environmental, and other community leaders in their efforts to work together to build consensus and resolve conflicts around difficult public policy issues. In addition, the PCC helps advance the teaching, curriculum, and research missions of the two universities by bringing real-world policy issues to the campuses. The PCC's activities are intended to improve the capacity of parties and institutions to collaboratively solve their problems and to provide the appropriate resources, people, and processes when requested.

The Policy Consensus Center offers resources and services within Washington state, including:

- Providing a neutral and safe forum for parties to define the issues
- Conducting a conflict assessment to determine the most productive means of addressing the issues
- Marshaling the resources for collaborative problem solving
- Serving as a clearinghouse for resources and research to be used at the option of the parties
- Performing applied research
- Providing knowledge, training, and infrastructure development to improve the capacity of parties and institutions to collaboratively solve problems affecting the region
- Hosting policy discussions

The Policy Consensus Center is overseen by a board chaired by William D. Ruckelshaus and composed of prominent local and statewide leaders representing a broad range of constituencies and geographic locations in the region. The center is co-directed by Jonathan Brock at the University of Washington and Rob McDaniel at Washington State University. The Northwest Straits Initiative evaluation process was staffed by Dan Siemann (Project Manager), with assistance from Jonathan Brock, and Linda Lyshall, a graduate student in the Daniel J. Evans School of Public Affairs. The Policy Consensus Center thanks the members and staff of the Northwest Straits Commission for their cooperation and courtesy in this process.

To learn more about the Policy Consensus Center, please contact either location below:

Policy Consensus Center
University of Washington
Daniel J. Evans School of Public Affairs
Seattle, WA 98195-3055
Phone: (206) 543-7809
Fax: (206) 543-1096
wsuwpcc@u.washington.edu

Policy Consensus Center
Washington State University
Extension
Pullman, WA 99164-6230
Phone: (509) 335-2937
Fax: (509) 335-2926
wsuwpcc@wsu.edu