Report: Public and Marine Managers' Review of the San Juan County Marine Stewardship Area Plan

Introduction

This report provides the results of four community meetings held in March and April 2007 to review the Marine Stewardship Area (MSA) Plan for the San Juan Islands. The report identifies and discusses the protection and restoration strategies receiving the highest degree of support from the approximately 220 San Juan County residents who participated in meetings on Shaw, San Juan, Lopez and Orcas Islands. This report also summarizes the perspectives and findings of federal, tribal, state, county agencies and non-governmental organizations who met in May 2007 at the Marine Managers' Workshop to review the MSA plan.

The high level of attendance at the community workshops indicates a high degree of concern about the health of the County's marine environment. Some participants attended more than one workshop and a number provided their own transportation from islands not served by ferry. Participants, particularly at the Shaw and Orcas workshops, treated the workshop as a gathering of the community to the point of providing music by Island musicians. Almost the entire adult population of Waldron participated in the Shaw Island meeting. Even with the workshop with the smallest attendance, which was Lopez Island with approximately 33, had a Marine Resources Committee (MRC) member noting, "This is the largest attendance we have ever had for an MRC event."

Clearly, participants, as demonstrated by the large turn out and the number, variety and intensity of their comments, regard the County's marine resources as valuable in and of themselves and as contributing to the quality of their lives. To them, these resources are much more than abstractions in management plans.

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Facilitator's Recommendations

Given the high level of citizens' concern and involvement demonstrated in the community workshops, San Juan County, and federal, tribal and state agencies and non-governmental organizations have the opportunity and responsibility to initiate significant positive change in the County's marine environment. We recommend implementation of the six strategies the MRC describes in its report to the San Juan County Council (to which this report is Appendix B). In addition, based on the information and perspectives offered in our interviews

with 20 stakeholders and our facilitation of the community and marine managers meeting we recommend the following:

Take advantage of the widespread, vital public concern and local knowledge about the health of San Juan County's marine environment. County residents across the political spectrum are united in their concern about the future of the Islands' marine resources and in their dismay at the declines they have witnessed in the last 30 years specifically in herring, salmon and seabirds. As one of those interviewed said, "If you asked everyone in the County to stand on their head and spin for 24 hours if it would restore the health of the Islands' marine environment, everyone would do it."

The Marine Resources Committee and the County should respond vigorously and specifically to citizens' interest in participating in the stewardship of San Juan County's marine resources. The MRC should provide technical and other support for citizen-science initiatives such as the plankton sampling being conducted by Waldron Island residents. Water quality monitoring would benefit from citizen involvement as would other field monitoring.

Begin and continue ecosystem monitoring that will establish a baseline understanding of water quality, habitat conditions (specifically in relation to seagrasses and forage fish spawning) and wildlife status and trends (specifically Western Grebes and Common Murres). Calibrate precisely the characteristics of healthful marine water in the archipelago. (One of those interviewed said that the first order of business is to quantify what constitutes healthy marine water to establish a baseline with which to compare conditions in the MSA.) Involve citizens in and continue to work with the Friday Harbor Labs on ecosystem monitoring.

Continue to find innovative ways to inform and educate residents and visitors about the County's marine resources and their stewardship. Support the education of an expanded corps of Beach Watchers, and make use of Beach Watchers in outreach to the public.

Do more to quantify the economic value of the County's marine resources. Quantify the link between the County's economic vitality and a healthy marine environment. Engage the business, real estate and development communities in a realistic, frank, practical, scientifically sound discussion of opportunities for mutual benefit.

Through MRC and County communication and involvement, make managers of agencies, particularly Washington Department of Fish and Wildlife, directly aware of the consequences of agency decisions on the ability of County residents to enjoy and to sustain themselves with the County's marine resources. These resources play a vital role in many Islanders' lives. Involve agency managers in MRC meetings.

Make the MRC more inclusive. Secure the participation of a representative from Lopez Island. Meet on islands other than San Juan.

Offer incentives to encourage "green" landscape management and development practices particularly in relation to shoreline management. Economic and professional opportunities await enterprising individuals willing to pioneer a green approach to landscape management in the Islands.

Anecdotal reports indicate that no-harvest zones are effective in increasing the size and abundance of ling cod. Consider instituting additional no-harvest zones for

We Can't Continue Business As Usual

"In coming across President Channel from Waldron to attend this meeting (on Orcas) we observed 35 to 40 seabirds. This is a catastrophic decline in numbers at this time of year from 20 years ago. This great loss is correlated with growth in the County. The County Council needs to know that we can't continue business as usual."



Shaw and Waldron Island participants registering their votes on the polling boards.

other ground fish. Use the results of analyses of the new no-harvest zone around Yellow Island in making decisions concerning salmon and groundfish harvest.

Take seriously the signals that seabirds and herring are sending about the health of the marine environment in northern Puget Sound. Direct MRC, County and agency resources to protect and restore species and environments (e.g. benthic invertebrates, herring and seagrass beds) at the base of the food web.

Conduct a scientifically sound, public review of seal and sea lion management.

Community Workshop Overview

The purpose of the community workshops was a thorough public review of the MSA Plan developed by the San Juan County Marine Resources Committee.

The meetings were preceded by interviews with 20 San Juan County residents and tribal representatives. These interviews identified issues, concerns and questions that helped structure the community meetings. Observations from these interviews appear throughout this report. The interviews, particularly with San Juan County residents of long standing, also helped describe an environmental baseline and context for the protection strategies, which were the meetings' focus.

We organized the community workshops to enable thorough consideration of strategies identified in the Plan to protect and restore key species, critical habitats and human values indicative of a healthy marine ecosystem. We sought comment on the following topics:

- Enjoyment of the marine environment and thriving marine-based livelihoods
- Cultural traditions: ceremonial, subsistence, sustenance and spiritual uses and aspects
- Seabirds
- Pacific salmon
- Rockfish, lingcod and greenling
- Habitat
- Water quality
- Marine mammals

Participants registered their perspectives on each of these groups of strategies to protect and restore the County's marine resources by:

- Discussing their views with MRC members and other knowledgeable discussion leaders who served as "topic leads" at each of eight "listening posts" at the community workshops
- Using the discussion guides to write additional strategies and to rank strategies in order of priority within specific topics
- Registering their views about which strategies would be most likely to be supported by the community
- Ranking strategies in order of priority across all topics

Demonstrate the links between Economic Prosperity and a Healthy Marine Environment

"Unless we enlist the support of realtors, developers and investors, we cannot hope to succeed using voluntary (stewardship) measures." Hire an economist to show developers, builders, merchants, tour boat operators why it makes economic sense to restore the marine environment. Demonstrate the links between economic prosperity and a healthy marine environment.

Stewardship Makes Sense

"Good stewardship enhances our property values and economy." "Ownership is linked to a willingness to act."

The Past Should be our Guide

One participant remembers bays in the San Juans in the 70's being "black" with juvenile herring. This participant recalls flocks of Western Grebes covering 40 to 50 acres, and being joined on the water in the fall by thousands and thousands of Common Murres. Another participant remembered Friday Harbor being "plugged" with "firecracker" herring.



Marine Resources Committee member David Loyd operating the Waldron Island freight boat.

• Offering their observations about themes and findings after reviewing all the information at the conclusion of a meeting.

This report's appendices offer a complete transcript of participants' comments as well as the results of polling concerning the plan's strategies to protect and restore the County's marine resources. Please review the sample discussion guide in the appendix to see the range of ways participants could register their views.

Results of Polling Concerning Strategies

Distinct levels of support for strategies emerged as a result of the discussions at the community workshops. Participants registered their support for particular strategies through green dot/red dot polling, or voting, near the conclusion of each meeting. (Each participant was given 10 green dots and three red dots. Green dots indicated support for a strategy; red, opposition to or reservations about a strategy. Participants could vote with as many of their green dots as they wished, in any number from 1 to 10, and their red from 1 to 3. In other words, participants could choose to put all of their dots, green or red, on any one strategy if they felt very strongly about it, or they could vote on 10 strategies with one green dot each to spread their support.) Reflecting the level of support each strategy received, the following sections organize groups of strategies into tiers. Each tier represents a distinct break point in the vote tally. For example, the first and second ranked strategies received 101 and 93 votes respectively while the third ranked strategy received 56 votes, showing a clear break point in the vote total. A total of 1,203 votes were cast. Not all participants used all of their votes, saying, for example, that there were no strategies they opposed.

Tier 1

The following two strategies received the highest degree of participants' endorsement at all of the community meetings. The table *Strategy Polling Results* in this report's appendix gives the total votes for all strategies for all four community workshops.

Strategies are listed in **bold italics**.

Top ranked strategy: Foster projects that educate and engage the public (seasonal and year-round residents) in stewardship of the County's marine environment.

Polling results show that education and public involvement are high priorities for San Juan Islanders. Participants recommended, among other initiatives:

The development of clear stewardship messages for use on ferries, in news and feature articles, in agency communications and elsewhere

A "Marine Steward" program in schools

More Beach Watcher – type education and use of Beach Watchers as educators

More education about "green" landscaping options and professional opportunities

More information exchange with realtors, boat owners, land owners and developers

Promote Sustainability

"The best way to protect the quality of a natural resource is to build an economic activity around it."



Participants enjoy some music after the Shaw Island meeting.

Education for shoreline landowners to encourage sustainable practices such as "soft shore" management and eelgrass protection

Working with businesses and quantifying the link between the Islands' economic and ecological health.

Participants requested support for community-based stewardship and data-gathering projects such as the plankton surveys being conducted by Waldron Island residents. Participants endorsed citizen science, both for the benefit it brings of more current data gathered more widely and also for the connection it enables citizens to make with the marine environment.

Second ranked strategy: Better manage upland activities (development, stormwater runoff, wastewater, septic systems, etc.) that can harm marine habitat and water quality.

Some participants emphasized the value of greater care with the upland application of herbicides and pesticides. Some advocated the provision of public financial support to repair failing septic systems. Others noted the long-term value of the designation, and in some cases, the public acquisition of critical habitats. Some participants recommended that the community protect habitat by offering incentives for innovative development practices that reduce impacts to nearshore habitat. Low-impact development to reduce stormwater run-off and "soft-shore" alternatives to replace hard armoring of shorelines were offered as examples.

The strategies in this table received the highest level of support from participants at the four community workshops. The table shows the strategies listed by category, strategy number, and also which marine resources are protected by the strategy.



Participants in interviews and community meetings expressed concern about significant declines in sea bird populations in the San Juan Islands since the 1970s.

ults Strategies	Category	Category Protection strategies Marine resource(s) prospection strategy				% of total votes (1203)
Polling Results ands Tier 1 Stra	Stewardship & Education	23	Foster projects that educate and engage the public (seasonal and year round residents) in marine stewardship	Enjoyment/Livelihoods, Cultural Traditions, Habitat, Water Quality, Seabirds, Salmon, Rockfish, Lingcod and Greenling	101	8%
I All Isla	Protect Habitat	8	Better manage upland activities (development, stormwater runoff, wastewater, septic systems, etc.) that can harm marine habitat & water quality.	Habitat, Water Quality, Salmon, Rockfish, Lingcod and Greenling	93	8%

Tier 2

Meeting participants supported the following strategies, listed here in order of priority, consistently but to a lesser degree than those in Tier 1. Tier 2 encompassed strategies that received from 56 to 41 votes.

Preserve and increase public access to natural shorelines and marine views, coupled with a strong stewardship message and compatible behavior expectations.

Managers' discussion also centered on the challenge of connecting people with the natural environment while at the same time protecting resources from overuse and degradation.

Where consistent with sustainability, promote harvest opportunities in the San Juan Islands and the preservation and development of infrastructure so that as much as possible of the associated economic benefit is local.

This strategy was the subject of considerable discussion both at the community workshops and the Marine Managers' meeting. Some citizens and managers pointed out that people will more actively advocate for resources, particularly fish and wildlife, that they are able to harvest or to which they otherwise have access. One participant observed: "The best way to protect the quality of a natural resource is to build an economic activity around it." Other participants countered with the concern that declining populations of fish species required their protection from harvest. This divergence of perspective is demonstrated by the fact that the strategy receiving the next highest vote total calls for suspending direct harvest of selected species.

Suspend direct harvest of select species until recovery goals are met.

Participants endorsed this measure particularly in relation to rockfish. Although some participants opposed harvest bans, others across the political spectrum supported this approach. One of the stakeholders interviewed said, in essence: Between about 1920 and 1960 we "clearcut" the San Juans' marine environment. And now, through continuing harvest, we are not allowing Mother Nature to replenish herself.

Implement the local salmon recovery plan.

Participants noted the importance of coordinating local salmon recovery with regional efforts because many salmon stocks found in the Marine Stewardship Area are in transit through the San Juans.

Protect and restore spawning habitats for forage fish.

Participants recommended education on the value of forage fish as fundamental to the food web coupled with promotion of best management practices (BMPs) for identifying and protecting forage fish spawning habitat on privately owned beaches.

Support regional herring recovery.

Common and abundant up until the 1970s, herring balls were frequently recalled in interviews and in the discussion at community meetings. One of those interviewed remembers bays in the San Juans in the 70's being "black" with juvenile herring. This County resident recalls flocks of Western Grebes covering 40 to 50 acres, and being joined on the water in the fall by thousands and thousands of Common Murres. Another interview respondent remembers Friday Harbor being "plugged" with "firecracker" herring.

Share Information

Centralize and provide access to data, maps and other information about San Juan County's marine environment.

Promote and adopt innovative development practices such as low impact development, green building and smart growth to reduce harm to the environment.

In supporting this strategy, participants saw economic and professional as well as environmental benefits. Providing innovative products and services will benefit enterprising individuals and the nearshore and marine environments.

Reduce risk and improve response to oil spills.

Participants were concerned not only with the harmful effects of chronic small oil spills but with the catastrophic results of a large spill. One participant described the worst case scenario of a tanker losing its rudder and running aground in Haro Strait. Participants recommended that the County prepare to respond to a major oil spill, and the stationing of a rescue tug in the Strait of Juan de Fuca.

Work with federal, state and tribal fishery resource managers to promote sustainability of marine resources at levels that will allow reliable commercial, recreational and sustenance harvest in the San Juan Islands.

County residents participating in interviews and community meetings feel strongly that resource management agencies must be aware of the consequences of decisions, particularly those governing harvest. Many participants believe that over-harvesting of marine life, from herring to sea urchins has dramatically, and some fear irreversibly, depleted populations of species that County residents prize for sustenance and recreation. (One participant summed up the motivation for his participation in the Orcas community workshop by saying, "I'm here on behalf of my stomach.") During their meeting on May 14 and 15 marine managers discussed collaborative management of marine resources in the San Juans.

Minimize chronic pollution from land and marine sources.

This strategy reflects participants' strong support for better managing upland activities (development, stormwater runoff, wastewater, septic systems, etc.) that can harm marine habitat and water quality. It also registers participants' concern about persistent bioaccumulative toxins in the marine, and human, food chain.

The following table provides the order of priority and vote totals for Tier 2 strategies.



Elephant seals rely on the MSA's marine and terrestrial habitats.

Category	#	Protection strategies	Marine resource(s) protected by strategy	# of Votes	% of total votes
Improve Public Access To Beaches	36	Preserve and increase public access to natural shorelines and marine views, coupled with a strong stewardship message and compatible behavior expectations.	Enjoyment/Livelihoods	56	5%
Protect Fish	17	Where consistent with sustainability, promote harvest opportunities in the San Juan Islands and the preservation and development of infrastructure so that as much as possible of the associated economic benefit is local.	Enjoyment/Livelihoods	52	4%
Protect Fish	13	Suspend direct harvest of select species until recovery goals are met.	Rockfish, Lingcod and Greenling	50	4%

	Category	#	Protection strategies	Marine resource(s) protected by strategy	# of Votes	% of total votes
	Protect the Food Web	21	Protect and restore spawning habitat for forage fish.	Seabirds, Salmon, Marine Mammals	49	4%
Tier 2	Stewardship & Education	27	Promote and adopt innovative development practices such as low impact development, green building, and smart growth to reduce harm to the environment.	Habitat	48	4%
lands	Prevent Pollution	1	Reduce risk and improve response to oil spills.	Water Quality, Habitat, Seabirds, Salmon, Rockfish, Lingcod and Greenling	48	4%
ite i	Protect the Food Web	22	Support regional herring recovery efforts.	Seabirds, Salmon, Marine Mammals	44	4%
Polling Results Stra	Protect Fish	16	Work with federal, state, and tribal fishery resource managers to promote sustainability of marine resources at levels that will allow reliable commercial, recreational, and sustenance harvest in the San Juan Islands.	Enjoyment/Livelihoods	42	3%
Poll	Prevent Pollution	2	Minimize chronic pollution from land and marine sources (medium spills and chronic events such as bilge pumping and fuel spills).	Water Quality, Habitat, Seabirds, Salmon, Rockfish, Lingcod and Greenling,	41	3%

Tier 3

MRC members believed it important to identify those strategies with relatively less support from the public. While not the least supported strategies, (votes for which are tallied in the Strategy Polling table) Tier 3 strategies received between 36 and 30 votes. Strategies not grouped in Tiers 1, 2 and 3 received fewer than 30 votes.

The County and its citizens do their part to reduce greenhouse gas emissions.

Participants noted that this directive includes the need for the County to plan and prepare for the impacts of sea-level rise on marine habitat and species. Some participants, however, believe that this strategy is outside of the purview of the MRC.

Improve Understanding of Seagrasses

Participants emphasized the importance of taking care of the lower levels of the food chain in order to sustain marine life (seabirds, ground fish, salmon, Orca) at the upper levels. This concern was expressed in the admonition to protect and restore benthic, nearshore and spawning habitats.

Provide education and outreach on the importance of nearshore habitat and best marine uses/ shoreline practices to protect it.

Participants endorsed involving and informing the public through events such as "clam-ins" to highlight maintaining the health of County shorelines and locally-grown seafood. Participants supported education on the value of eelgrass linked with BMPs that stress minimizing docks and anchorages. Also supported was

outreach to convey BMPs to reduce nutrient and sediment laden run-off from upland activities.

Remove derelict fishing gear.

Participants expressed concern about fishing nets and crab pots made with non-biodegradable synthetic materials that continue to catch and kill fish and crabs long after the nets and pots are no longer retrievable. One participant also noted the importance of eliminating the sale and use of illegal fishing gear in the San Juan County MSA.

Reduce disturbance (of marine mammals) from vessels.

Participants recommended land-based whale watching. Some participants advocated initiating zones free of motorized vessels and delineating travel lanes for them. Others advocated returning to a wind-powered fishing fleet.

The following table provides the order of priority and vote totals for Tier 3 strategies.

	Category	Strategy #	Protection strategies	Marine resource(s) protected by strategy	# of Votes	% of votes
Strategies	Address Climate Change	34	The County and its citizens do their part to reduce greenhouse gas emissions. The County plans for sea level rise and other climate change affects.	Habitat, Seabirds, Rockfish, Lingcod and Greenling, Salmon, Marine Mammals	36	3%
Tier 3 Strat	Protect Habitat	9	Improve understanding of sea grasses (such as eelgrass) & environmental conditions causing its loss to protect and restore it.	Habitat	33	3%
All Islands Ti	Stewardship & Education	26	Provide education and outreach on the importance of nearshore habitat and best marine uses/shoreline practices to protect it.	Habitat, Salmon	32	3%
Results – ,	Protect Fish	15	Implement local salmon recovery plan (i.e., research to find how much salmon use the San Juan marine environment, conduct habitat protection and restoration projects, and improve hatchery and harvest management).	Salmon, Habitat, Marine Mammals	31	3%
Polling	Remove Derelict Fishing Gear	38	Remove derelict fishing gear.	Seabirds, Salmon, Rockfish, Lingcod and Greenling, Marine Mammals		2%
Δ.	Protect Marine Mammals	20	Reduce disturbance from vessels.	Marine Mammals		2%

Representative Recommendations and Conclusions

After engaging in discussions and considering the perspectives presented at the community meetings, participants were asked, in summarizing the "sense of the group", what messages they would like to convey to the Marine Resources Committee and the San Juan County Council. Participants offered the following:

"Unless we enlist the support of realtors, developers and investors, we cannot hope to succeed using voluntary (stewardship) measures." Hire an economist to show developers, builders, merchants, and tour boat operators why it makes economic sense to restore the marine environment. Demonstrate the links between economic prosperity and a healthy marine environment. "Good stewardship enhances our property values and economy."

"Align protection with livelihood."

"Ownership is linked to a willingness to act."

Address the lack of baseline data on water quality, habitat, and wildlife population status and trends. Initiate, fund and support long-term ecosystem monitoring. Provide meaningful opportunities for citizen participation in data gathering. Centralize and provide access to data, maps and other information about San Juan County's marine environment.

Provide opportunities at various levels for community and individual involvement in active stewardship of the environment.

Harmonize the county's tax structure with the MSA vision. Integrate MSA strategies into the County's tax structure. For example, make it easier to establish a shellfish bed than a large retail market. Align the County's policies and procedures with the goals and objectives of the MSA.

"Education should always precede voluntary efforts or regulation." Provide more Beach Watcher-type education. Make greater use of Beach Watchers in engaging and informing the public.

Support the development of the Friday Harbor Labs into a national center for marine research and employment like the Monterey Aquarium and research center.

"Freshwater supports all the other resources of the islands. It is critical that it be managed effectively."

"In coming across President Channel from Waldron to attend this meeting (on Orcas) we observed 35 to 40 seabirds. This is a catastrophic decline in numbers at this time of year from 20 years ago. This great loss is correlated with growth in the County. The County Council needs to know that we can't continue business as usual."



Orcas in the San Juan marine stewardship area with Mt. Baker in the background.

Marine Managers Workshop

The community meetings were followed, on May 14 and 15, 2007, by a workshop with managers of federal, tribal, state and county agencies and non-governmental organizations (NGOs) with responsibility for land or water conservation and management in the San Juan archipelago.

Tables in the appendix to this report summarize:

the managers' ranking, in order of priority, strategies for the MSA draft plan agency/NGO mandates, plans and opportunities for partnership.

Of note was the managers' concurrence with community participants in designating, as highest priority, the following two strategies:

Foster projects that educate and engage the public (seasonal and year-round residents) in stewardship of the County's marine environment.

In addition to their responsibilities for scientific assessment and compliance with regulations, many of the agencies and organizations represented at the workshop are responsible for informing and serving the public.

Better manage upland activities (development, stormwater runoff, wastewater, septic systems, etc.) that can harm marine habitat and water quality.

Marine managers concurred with the public's view, expressed in the community workshops, that the health of the upland environment contributes directly to the health of the marine environment.

The managers discussed at length the following strategy ranked third in priority by both managers and community participants:

Preserve and increase public access to natural shorelines and marine views, coupled with a strong stewardship message and compatible behavior expectations.

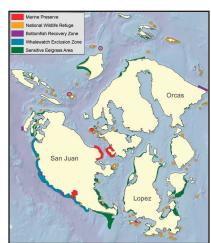
While acknowledging the importance of public access to natural shorelines, managers were concerned about protecting biodiversity and other natural values potentially damaged by too much or careless use. The managers recommended coordination among agencies to provide access in ways that protected shorelines' physical features and biodiversity.

The appendix of the report includes a summary of the Marine Managers' discussion and recommendations.

Marine Managers' Conclusions

To direct the meeting's concluding discussion, the facilitator posted the 17 strategies ranked highest at the community meetings. Each manager responded in writing to each strategy in terms of these points:

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We are doing....
We are planning to do...
We need partners to do...
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Marine resource protection areas in the San Juans.

The appendix of this report summarizes the outcome of this work. An immediate result was the agreement of federal, tribal, state, county and non-governmental marine managers to jointly consider the nomination of a site in the San Juan Archipelago for the State Department of Natural Resources Aquatic Reserve Program. This program protects state-owned aquatic lands through management plans for the conservation of habitat and species.

The managers agreed to meet more than once a year to identify, evaluate and undertake cooperative projects and programs in the San Juan County Marine Stewardship Area.

Appendices

Community Workshops Introduction

The following appendices document the comments and perspectives of participants in four community workshops held in March and April 2007 on Shaw, San Juan, Lopez and Orcas Islands. The purpose of the workshops was to review and discuss the San Juan County Marine Stewardship Area plan. Strategies to protect and restore the County's marine resources were organized, for discussion, according to the following "listening post" topics:

- 1. Enjoyment of the marine environment and thriving marine-based livelihoods
- 2. Cultural traditions: ceremonial, subsistence, sustenance and spiritual uses and aspects
- 3. Seabirds
- 4. Pacific salmon
- 5. Rockfish, lingcod and greenling
- 6. Habitat
- 7. Water quality
- 8. Marine mammals

Strategy Polling

The purpose of strategy polling was to determine which strategies, among all topics, were most important to participants. Participants voted on their top-ranked strategies using green and red dots. Each participant had 10 green and three red dots, which they could allocate to a strategy in any number they chose. Green dots indicated support for a strategy. Red indicated a participant's sense that the strategy was low priority, not supported by the community, an impediment to the stewardship of San Juan County's marine resources, or outside of the purview of the MRC. (The MRC instituted red dot voting after the Shaw meeting, so Shaw results reflect supporting votes only.)

	Strategy Polling Results							Orcas Island			
Category	Protection Strategies	Marine Resource(s) Protected By Strategy	Votes	Green Votes	Red Votes	Green Votes	Red Votes	Green Votes	Red Votes	Total Votes	% of votes
Stewardship & Education	Foster projects that educate and engage the public (seasonal and year round residents) in marine stewardship	Enjoyment/Livelihoods, Cultural Traditions, Habitat, Water Quality, Seabirds, Salmon, Rockfish, Lingcod and Greenling	46	12	0	9	0	34	0	101	8%
Protect Habitat	Better manage upland activities (development, stormwater runoff, wastewater, septic systems, etc.) that can harm marine habitat & water quality.	Habitat, Water Quality, Salmon, Rockfish, Lingcod and Greenling	18	26	0	12	0	37	1	93	8%
Improve Public Access To Beaches	Preserve and increase public access to natural shorelines and marine views, coupled with a strong stewardship message and compatible behavior expectations.	Enjoyment/Livelihoods	1	13	0	4	0	38	0	56	5%
Protect Fish	Where consistent with sustainability, promote harvest opportunities in the San Juan Islands and the preservation and development of infrastructure so that as much as possible of the associated economic benefit is local.	Enjoyment/Livelihoods	9	8	0	2	8	33	6	52	4%
Protect Fish	Suspend direct harvest of select species until recovery goals are met.	Rockfish, Lingcod and Greenling	12	19	7	8	0	11	0	50	4%
Protect the Food Web	Protect and restore spawning habitat for forage fish.	Seabirds, Salmon, Marine Mammals	18	12	0	6	0	13	0	49	4%
Stewardship & Education	Promote and adopt innovative development practices such as low impact development, green building, and smart growth to reduce harm to the environment.	Habitat	4	10	1	4	0	30	0	48	4%
Prevent Pollution	Reduce risk and improve response to oil spills.	Water Quality, Habitat, Seabirds, Salmon, Rockfish, Lingcod and Greenling	22	2	0	8	0	16	0	48	4%
Protect the Food Web	Support regional herring recovery efforts.	Seabirds, Salmon, Marine Mammals	22	4	0	5	0	13	0	44	4%

	Strategy Polling Results						Lopez Island		Lopez Island		Orcas Island		
Category	Protection Strategies	Marine Resource(s) Protected By Strategy	Votes	Green Votes	Red Votes	Green Votes	Red Votes	Green Votes	Red Votes	Total Votes	% of votes		
Protect Fish	Work with federal, state, and tribal fishery resource managers to promote sustainability of marine resources at levels that will allow reliable commercial, recreational, and sustenance harvest in the San Juan Islands.	Enjoyment/Livelihoods	2	7	1	1	4	32	1	42	3%		
Prevent Pollution	Minimize chronic pollution from land and marine sources (medium spills and chronic events such as bilge pumping and fuel spills).	Water Quality, Habitat, Seabirds, Salmon, Rockfish, Lingcod and Greenling,	17	1	0	4	0	19	0	41	3%		
Address Climate Change	The County and its citizens do their part to reduce greenhouse gas emissions. The County plans for sea level rise and other climate change affects.	Habitat, Seabirds, Rockfish, Lingcod and Greenling, Salmon, Marine Mammals	8	12	9	5	3	11	4	36	3%		
Protect Habitat	Improve understanding of sea grasses (such as eelgrass) & environmental conditions causing its loss to protect and restore it.	Habitat	6	11	0	6	1	10	0	33	3%		
Stewardship & Education	Provide education and outreach on the importance of nearshore habitat and best marine uses/shoreline practices to protect it.	Habitat, Salmon	1	17	0		0	14	0	32	3%		
Protect Fish	Implement local salmon recovery plan (i.e., research to find how much salmon use the San Juan marine environment, conduct habitat protection and restoration projects, and improve hatchery and harvest management).	Salmon, Habitat, Marine Mammals	7	6	0	5	0	13	0	31	3%		
Remove Derelict Fishing Gear	Remove derelict fishing gear.	Seabirds, Salmon, Rockfish, Lingcod and Greenling, Marine Mammals	1	5	0	14	1	10	0	30	2%		
Protect Marine Mammals	Reduce disturbance from vessels.	Marine Mammals	9	4	0	13	0	4	0	30	2%		
Prevent Pollution	Support efforts to reduce toxins that accumulate in the food chain.	Enjoyment/Livelihoods, Cultural Traditions, Marine Mammals	3	6	0	5	0	13	0	27	2%		
Protect Fish	Reduce bycatch of select species.	Rockfish, Lingcod and Greenling	1	1	0	6	0	18	0	26	2%		
Coordination & Partnerships	Continue and build upon joint tribal- community events, such as hosting the tribal canoe groups when they pass through the San Juan Islands.	Cultural Traditions	3	6	2	1	1	16	0	26	2%		
Prevent Pollution	Determine scope and nature of the water quality problem and develop implementation plan.	Water Quality	0	10	0	7	0	8	0	25	2%		

Strategy Polling Results							Lopez Island				
Category	Protection Strategies	Marine Resource(s) Protected By Strategy	Votes	Green Votes	Red Votes	Green Votes	Red Votes	Green Votes	Red Votes	Total Votes	% of votes
Transportation	Work with users, the County and port districts to develop criteria for facility siting (barge landings, marinas, docks, moorings) that balance the need for marine resource infrastructure with protection of ecosystem function.	Enjoyment/Livelihoods	0	10	0	2	0	13	0	25	2%
Stewardship & Education	Feature the work of local artists and poets, inspired by the islands' marine ecosystem, in stewardship messages	Enjoyment/Livelihoods	3	10	3	6	0	5	1	24	2%
Stewardship & Education	Develop a vision of a San Juan County economy based on sustainable marinebased livelihodds and a communication strategy to promote this.	Enjoyment/Livelihoods	2	7	1	5	0	9	1	23	2%
Prevent Pollution	Promote water quality protection through best management practices to keep toxins and pathogens out of seafood.	Enjoyment/Livelihoods, Water Quality	4	5	0	3	0	11	0	23	2%
Protect Habitat	Improve and coordinate incentives, regulations, enforcement and mitigation to better manage shoreline construction, bulkheads, docks and anchoring.	Habitat, Marine Mammals	5	4	2	8	0	6	4	23	2%
Protect Habitat	Improve understanding of kelp & the environmental conditions causing its loss to protect/restore it.	Habitat	3	7	0	2	0	10	0	22	2%
Prevent Pollution	Prevent pollution by product bans, incentives for substitutes, and better handling and disposal practices.	Water Quality	8	2	0	2	0	10	0	22	2%
Protect Fish	Educate public to understand the status and threats to rockfish, lingcod, and greenling and take ownership for recovery.	Rockfish, Lingcod and Greenling	7	5	0	1	0	8	0	21	2%
Protect Habitat	Minimize new bulkheads. Remove shoreline armoring—such as bulkheads, boat ramps, and docks (where appropriate). Educate and encourage shoreline landowners to choose soft shore treatments that do not harm the nearshore habitat.	Habitat, Salmon	1	4	0	7	0	8	6	20	2%
Coordination & Partnerships	Work with groups developing watershed management plans to include effects on the marine environment in those plans.	Enjoyment/Livelihoods	0	4	0	1	0	11	0	16	1%
Protect Seabirds	Reduce disturbance from humans.	Seabirds	3	3	2	3	0	5	0	14	1%
Coordination & Partnerships	Identify and engage key partners as active marine stewards.	Cultural Traditions	4	3	0	2	0	4	0	13	1%

Strategy Polling Results							FODEZ ISIAIIO		Orcas Island		
Category	Protection Strategies	Marine Resource(s) Protected By Strategy	Votes	Green Votes	Red Votes	Green Votes	Red Votes	Green Votes	Red Votes	Total Votes	% of votes
Protect Seabirds	Increase prey base for seabirds.	Seabirds	5	2	0		0	4	1	11	1%
Coordination & Partnerships	Coordinate with regional habitat protection efforts.	Habitat	0	3	0	1	0	4	0	8	1%
Coordination & Partnerships	Connect with regional salmon protection efforts.	Salmon, Habitat	0	2	0	2	0	3	0	7	1%
Stewardship & Education	Identify and collaborate with existing marine stewardship voluntary programs to coordinate marine stewardship in the County.	Enjoyment/Livelihoods	1	2	1	1	0	3	0	7	1%
Preserve Traditional/ Cultural	Support efforts to highlight traditional marine practices.	Cultural Traditions	0	1	0	1	0	2	0	4	0%

Themes and Findings

After discussing the draft plan's strategies and registering their priorities through polling, participants offered the following observations and conclusions:

Shaw/Waldron Islands

- Everything is important
- Many strategies are inter-related
- Those that are vague/idealistic won't get done
- Too much reliance on bureaucracy
- Focus on education
 - o Need to have say in how implemented
- Common theme: education
 - o Active learning
 - o Lean on local school boards to integrate into curriculum
- Lessen risk of oil spills (what is being done now?)
- Threat: no contingency plan for when a cargo ship loses power in storm
- Education effort focused to adults (residents/visitors) "30 stewardship ideas"
 - o Brochure on ferries & shops
 - o Displays in shops
- Speed limits on boats
- Bicycle & walking paths reduce oil
- Education: combine w/arts, learn thru exposure to actual events
 - o Instill some of "thrill" at environment

What can be done now?

- · Education has to come before others, and will increase likelihood of other measures getting done
 - o Videos on ferries emphasize environment & how it is being degraded, & how it can be protected
 - Workshops on ferries
 - o Focus on key things
 - o Get behavior to change
- Economics links "choir" to the rest of the population
 - o Everyone subject to economics
 - o Show that MSA plan will "pay off"
- Ought to do everything
- Cut off activities like labs dumping chemicals down the drain
- Alternative to bottom paint
 - o Store boats on dry land
- If enforcement should be a local presence
- Celebrate successes
 - o Focus on positive
- Tourist bureau: needs to communicate expected behavior
- Use music to grab people to get them involved
- Concept of shared sacrifices can be a selling point
- A lot that we don't know about & that needs to be acknowledged in plan

San Juan Island

- High level of concern
- Answers aren't easy (e.g. pollution).
- Solutions may conflict.
- Education is important.
- Look for opportunities.

- Think outside the box.
- Promote green building and sustainable industries.
- MSA plan is a work in process, which will continue to incorporate input from citizens.
- Climate change
 - o (red) hard for us (MRC) to do anything about it
 - o (green) obligation to future generations to act
 - o If we don't act as individuals, no one else will either.
- Learn from long-term residents and cultural traditional knowledge.
- Target newcomers and children with education.
- Use Beach Watchers.
- Engage development community hire economist to demonstrate the links between economic prosperity and a healthy
 marine environment.

Lopez Island

- Engage citizens in data collection citizen science connects people directly to marine resources.
- Timing of tourism coincides with important natural resource processes.
- Engage funders/marine managers in supporting grassroots efforts in the County.
- Define the impact of visitors and communicate their impact to them.
- Things are changing very quickly.
- Note differences among the islands perhaps Lopez has already incorporated some cultural stewardship ideas.
- Ownership is linked to a willingness to act. Develop economic structure that emphasizes incentives for protection.
- We care and take protection seriously.
- Action: share information to broaden perspectives.
- We are willing to consider extreme/serious action.
- Address the lack of baseline data water quality, habitat, etc.
- Educate broadly about individual responsibility followed by ownership and stewardship.
- Marine stewardship work across islands pan-county How can we educate our community?
- Align protection with livelihood.
- Focus of green dots may be biased towards practical/timely.
- Focus on speaking from the heart.

Orcas Island

- With education and outreach, folks' opinions about strategies could change, so mark the priority of strategies as before and after education and outreach.
- The more education and outreach, the more willingness there will be to participate in stewardship.
- It's difficult to prioritize strategies because they are interconnected.
- It's important to create venues for "cross-pollination."
- Find ways to integrate MSA strategies into the County's tax structure, for example make it easier to establish a shellfish bed than a large retail market. Harmonize the County's tax structure with the MSA vision.
- Focus on messages that stewardship is for the improved economic, mental and physical health and benefit of the County.
- In coming across President Channel from Waldron to attend this meeting we observed 35 to 40 seabirds. This is a catastrophic decline in numbers at this time of year from 20 years ago. This great loss is correlated with growth in County. The County Council needs to know that we can't continue business as usual.
- Continue the conversation and collaboration begun at this meeting concerning MSA issues. Incorporate MSA strategies into San Juan County procedures and governance.
- This workshop inspires hope for the future.
- Shellfish aquaculture has great potential in the waters of San Juan County.
- Fresh water supports all the other resources of the islands. It is critical that it be managed effectively.
- Tap islands' vitality kids. Choose "Stewards of the Month" at schools.
- Consider a stewardship tax.
- Develop a stewardship logo.
- Educate realtors.
- Encourage product "eco-branding." A big outreach effort is needed!



Listening Post Comments

Attendees discussed their views on these topics with Marine Resources Committee (MRC) members and other knowledgeable discussion leaders who served as Topic Leads at each of the eight listening posts. Each listening post brought together strategies from the Marine Stewardship Area (MSA) plan related to a particular topic such as water quality or seabirds. Meeting participants wrote the following comments either as responses to strategies already in the plan or as additional strategies. Participants wrote comments about existing strategies on "post-it" notes for display in the meeting rooms. Additional strategies were recorded in discussion guides on each of the eight topics. In addition, some attendees voted for some of these comments and strategies as high priorities during the meetings' polling. The following transcript notes these votes.

Enjoyment and Thriving Livelihoods

Shaw/Waldron Islands

Post-It Comments

- MRC takes on promotional role for local sea foods.
- Create market demand for SJC marine products through marketing "spin" e.g. the "copper river" salmon phenomenon.
- How do we know when we have a variety of sustainable marine-based livelihoods?
- Put survival and increase of sea life above our desire to harvest; allow harvesting, but at lower levels.
- Fishing is not a sport. All recreational fishing done from human powered or electric boats.
- Actions for communication strategies: (examples)
 - o Use local media effectively
 - Work in the schools
 - o Support local artists and poets
- Public access to shoreline is subject to stewardship.
- Access and prepare for rising sea levels and impacts on ecosystem as a whole including human economies/harvest.
- More value-added seafood products.
- Consider including SJC/Salish Sea Economy/Ecology as a high school course taught in public schools.
- Encourage local youth to develop strong sense of place through stories/folklore and use.
- Encourage local youth to pursue sustainable marine based livelihoods.
- Provide interactive learning opportunities for school children to participate and learn about the marine environment. Ideally do it K-12.
- Enforce San Juan County Nuclear Weapon Free Zone. Radiation kills marine life too.
- With a positive integrated foreseeable economic outcome, all of the potential outcomes should rate 4 or 5.

- New good rules, regulations, and enforcement.
- Create institutional mechanisms to give MRC and its base of local info a key role in setting sustainable fish levels.
- Have Nature Conservancy, Land Trusts play vanguard role in habitat management and coming up with good rules.
- Encourage residential and commercial sites to collect rainwater on site in storage to manage for storm events, rationing for salmonid habitat inland, natural disaster prep, on site gardening use.
- Incorporate a habitat rating for each property tax assessment, and excellent habitat. Receive a lower tax assessment than properties that have adverse impacts.
- Many of these strategies are rather fuzzy -- too much motherhood and apple pie.
- I like #6 for finfish and wild harvest, but I'm leery of more shell-fish farming. Privatizing the commons for someone's profit is very different from harvest that doesn't take over an area.
- Sustenance fishing and crabbing is very important to the citizens. The resources must be shared more equitably with commercial fishing. Citizens need to be out harvesting it's a huge part of stewardship of the environment.
- Regarding #1: if "marine based" includes tourism, then it's a poor idea. "Sustainable" is not possible with fisheries and current population. Regarding #4: marine transportation needs to be controlled. How many boats are too many? Regarding #5: Not all these things can be done. Recreational should be very restricted, commercial next, sustenance should be favored. Regarding #7: We have much shoreline. Have a moratorium on all waterfront building. Regarding #8: of course. Regarding #9: begin a buy-back program for waterfront. Regarding #10, nice idea, but low priority.

Enjoyment and Thriving Livelihoods (cont.)

- Close all bottom fisheries for 10 years.
- Set goal to remove all waterfront homes through attrition.
- · Put survival and increase of sea life above our desire to harvest; allow harvesting, but at lower levels.
- Too many to evaluate.
- Promote idea that part of human experience is to be an activist steward wherever one lives, express love of place for all who live on this good earth!
- Ban all boats except sailboats and human powered craft. No noise for the marine creatures. Quieter even for people.
- Does the public want things to work and not just be?
- Regarding #4: hard sell to people wanting docks! Regarding #7: another hard sell to laypersons. Regarding #8: a lot more.
- Education is necessary in order to gain support.
- Support is generally broad based. There are a lot of cultural groups who have a stake.
- Regarding #6: this may have dubious legality.
- Write lots of feature articles raising environmental I.Q. so all will be a 5.
- Regarding #1-5: with education.

San Juan Island

Post-It Comments

- · Support Friday Harbor Labs in becoming a center, like Monterey Bay Aquarium, for research and research jobs.
- Expand the purview of F.H. Lab research to focus on red tide analysis and other practical issues not only "arcane" subjects
- Support the growth of the Friday Harbor Labs in high-tech research.
- Open private tidelands to everyone and have owners enhance them.

(1 green dot)

- Restore clam gardens, (e.g. Reid Harbor; West Sound).
- Make seaweed culture legal.
- Used to be a thriving fishing fleet 23 years ago; now it's not here.
- Allow for sufficient access for freight e.g. barge landings.

(1 green dot)

- Should support land-based whale watching (access, etc., presentations)
- Property rights need to be compromised to control invasive species.
- Eliminate motorized recreational vessels

(2 red dots) (2 green dots)

Identify and educate concerning the effects of global warming on local fishing interests.

(2 green dots)

Discussion Guide Comments

- Ban WDFW from San Juan County.
- Mandate restoration of clam gardens.
- Stop all commercial invertebrate harvest.
- Promote extractive aquaculture (seaweed farms).
- Inform and employ WSU Beach Watchers more.
- Discontinue fishing derbies.
- Get rid of fishing derbies!
- Education is key.
- Regarding #1-5: if you include realtors and developers, 1 if you don't. Regarding #2: marine stewardship is a project! Regarding #3: neutral it depends on the programs. Regarding #4: use same rules applicable to a fresh water reservoir. Regarding #5: 3, but with incentives, 4 or 5. Regarding #6: this must be very carefully done, due to federal constitutional constraints. Regarding #7: neutral. Regarding #8: these rules need to be applied inland too. Regarding #9: But may require enforcement to balance increased vulnerability. Regarding #10: Have an annual song contest.
- Regarding #4-6: public support must include tribes and businesses.

Lopez Island

Post-It Comments

- Ban fishing derbies; support subsistence harvest.
- Establish a biodiesel plant using seal and dogfish oil.

Enjoyment and Thriving Livelihoods (cont.)

- Encourage the local marketing and consumption of local commercially caught seafood.
- Encourage local youth to engage in and pursue marine based livelihoods.
- Use San Juan County (SJC) fisheries to benefit local communities.
- Educate islanders about local seafood options.
- Conduct a comprehensive value-based assessment with residents of and visitors to SJC that identifies benefits, values and life outcomes which can be prioritized. Identify common values and recognize/acknowledge areas of autonomy. Incorporate the results of this assessment into SJC Comprehensive Plan and manage for these values.
- Educate locals (part-timers and full-timers) about the possible impacts of pesticides/herbicides they use on their gardens on the fisheries industry (the fish they eat).
- Systematically monitor pesticide/herbicide residue run-off from uplands.

Discussion Guide Comments

• Eliminate all fishing derbies and support subsistence fishing.

Orcas Island

Post-It Comments

- Have MRC meetings on islands other than San Juan. Meet on the ferries.
- The power and effectiveness of neighborhood education
- The runoff of petroleum into Eastsound is causing the flesh of clams to become gray. Ban outboards in bays.
- The Washington Department of Health provides regular updates of shellfish health on line at www.wa.doh.gov.
- Shellfish testing is conducted by
 - State
 - Shellfish farms
 - Individual owners
- Have the newspaper publicize the weekly results of shellfish testing.
- We are not conserving or preserving for a living museum. We are reestablishing and confirming an ecologically rich and economically vital community.
- "The best way to protect a resource is to create a viable economic activity around it."
- · Limited public and private access to shellfish areas
- Support environmentally conscious business owners.
- DNR maps of public beaches?
- How to deal with the "tragedy of the commons" and the harvesting of protected species
- We need formalized education from providers. Networks need to be linked.
- · Local landowners put land, specifically waterfront, in County "management area" for information and access
- Capitalize on the energy people have: "I want to care."
- Encourage "wild farming" beach enhancement for clam propagation.
- Have local control of local resources, for example urchins.
- Provide public education on clamming including sponsoring "clam-out days."
- Support ecosystem businesses.
- Create a-before-and-after survey concerning marine stewardship: ask "Did your experience/knowledge increase?"
- Educate newcomers about stewardship. Education starts at the realtor's office. Educate landowners prior to onshore development.
- Have a shellfish gardening seminar in Waterfront Park Bay of Eastsound. Write a proposal to the Community Foundation for a grant to conduct the seminar every year. (There are good models around Puget Sound).
- Encourage natural cultivation of shellfish through the San Juan Initiative. Increase local food production for own use.
- Become active stewards of shellfish.

- Teach cultural/livelihoods class at high schools.
- Need apprenticeships.
- Regarding #10: always a good idea.
- Work with Leave No Trace and Washington Water Trails groups.

- Make lessons about future affect on health, survival, and value of property.
- Local fishers sell their catch to local buyers.
- Fishers self-impose moratoriums on select species.
- Benefits/incentives for fishers who do least harm and who keep the seafood here.
- How about a Coho salmon net pen hatchery? The fish will stay in the islands and provide a selective fishery for sport fishermen and local commercial fishermen. In addition these fish will provide a valuable reliable food source for marine mammals. For example, the Squaxin tribe has done this with great success.
- Encourage local consumption of local fish.
- Reduce salmon derbies and other competitions impacting fish populations.
- Educate the public.
- Formalize an education plan and use existing environmental education groups. Train them to carry the MRC message of stewardship.
- Restore local residents' access to shellfish and seaweed beaches.
- Promote seaweed and shellfish aquaculture.
- Get WDFW out of San Juan County.
- Too hard to quickly prioritize all of these items, most of which I know little or nothing about. (They are written in columns instead of numbers).
- · Contamination education
- Regarding #4: clarity and simplification is critical.
- Reduce salmon derby and other competitions impacting fish populations.
- Regarding #5: this is controversial because it threatens "control."
- Restore local residents' access to shellfish and seaweed beaches.
- Promote seaweed and shellfish aquaculture.
- Get WDFW out of San Juan County.

Cultural Traditions

Shaw/Waldron Islands

Post-It Comments

- Support citizen science by ensuring the quality of the social experience.
- Complete the County-wide archaeological survey to enhance shoreline protection.
- Increase awareness about where our food comes from, stress importance of locally grown/caught/dug/etc. *Benefits to health of environment/human health, cultural survival. . .
- We need to make sure our CHILDREN get opportunities to develop THEIR OWN personal relationship with the ecosystem (e.g. time alone digging in the sand) not us telling them "how it is" (red dot)
- Embrace the diversity of tradition
- Mentor intergenerational relationships
- Invite tribal participation when opportunities occur involving economic or private activity which involves change to the environment.
- Create a book-list and database of cultural traditions and stories.
- Make stewardship into a route to the thrill of life on earth (wherever you live)
- Music and the arts keep a culture (such as the culture of stewardship) alive.
- It's not how many of us there are it's what we do.
- Beating ourselves over the head won't move us forward.
- To identify and engage organizations folks voted for: Get clear information to them about the huge \$ and health problems for adults and children when their choices go to treating land and Puget Sound like a dump. All adults hate garbage cans, simply hide them and feel happy. A lecture tends to do nothing, so have them watch a DVD showing damage areas and the horrible results on people's health, our nature and the enjoyment and value of property going down. This could possibly get them making more positive decisions and let them know as more damage happens the public should know they've had these lessons and chose ongoing damage.
- Identify what cultural traditions we want to encourage, share, and make our own. This is part of the educational process to adopt shared values to support voluntary actions or, if necessary, regulation.

- Examples of islander/tribal interaction
 - o Knitting yarn
 - o Storytelling
 - o Dance
 - o Host in the right way (how to introduce yourself/topic)
- Work in the schools, at all levels.
- Celebrate successes, to educate and draw people towards stewardship.
- Link the MRC to the ARC (agricultural)
- Population size control
- Use local and indigenous knowledge to create data about marine resources.
- Youth education
- Mythology/folk-lore/story
- Local tribes' memories/understanding of each island and its waters
- Legislation based on best available science
- Start young teach detailed knowledge of and love for local flora and fauna (so everyone stays engaged)
- CELEBRATE! Have celebrations and festivals focused on marine food and on marine environment.
- Publicize success stories (oyster catchers, bald eagles, etc.)
- Examine integration and balancing strategies among the listening post topics.

- Education: hire marine experts to act as guest lecturers in school system.
- Education: initiate school/4H hands-on activities, direct restoration, like raising and releasing salmon fry, restoring shell-fish beds, seeding herring eggs throughout the San Juans.
- Integrate locally grown agriculture interests with marine resources.
- Decentralized food production and consumption greatly diminishes habitat destruction, global warming, and pollution impacts.
- · Support programs for wine varieties and our own wine district, for our own fruit, veggies, and winter greenhouses.
- Please work aggressively for more protection from big oil spills.
- The pressures of growth and development impact cultural traditions. Realtors and CoC interests must not dominate the discussion of these issues.
- Prioritize local people doing local things over out-of-area people coming in and doing stuff not exclusion but prioritizing some.
- "Culture" includes the non-human community. What would plankton and grebes et al say if they could fill out these
- Education (especially our young community members) is a primary concern of culture. I think it extremely important to make possible (and frequent) authentic experiences with the ecosystem. That is to say, we need to make sure the next generation gets a lot of time in the sand/water/dirt in order for them to develop their own real relationship with the ecosystem.
- Compare and contrast contemporary culture with traditional culture.
- Raise environmental I.Q. invite people to know the miracle of everyday more so they sense the thrill of being engaged in their environment wherever they live.
- Identify what cultural traditions we want to encourage, share, and make all of our own. This is part of the educational process, and should precede others.
- County-wide and local resource celebrations a western grebe party!
- Change personal life style.
- Give more land back to the Indians soon.
- We should encourage sailing.
- Have signs on all the roads from the ferry landings that highlight conservation of marine resources and their threatened nature.
- The problem is one of perception. "Traditional" means "a threat to progress" or "out of date and inefficient" to many people, and "native" means "out to get more for me for no good reason". People don't value their own traditional and past it's even harder to get them to value other peoples.

- I support all these.
- Regarding #5: with education this is a 4 or 5, otherwise 2 or maybe 3.
- Regarding #5: depends on how well it's done.

San Juan Island

Post-It Comments

- Each island has its own longhouse.
- Build and support a Coast Salish Cultural Center for dialogue, connections, honoring, celebrations.
- Build a co-management long house.
- Incorporate newcomers.
- Marinas are dissemination points to reach the boater community.
- Use different strategies for different components of the communities.
- Mainstream culture is driven by economics, which includes everyone. Management of an economic resurgence requires all to participate, including the MRC, realtors, developers and investors.
- Celebrate reef nets, canoe journeys.

(1 red dot)

- Community theater
- Have a rendezvous: Aug 13 the fishermen came to Jensen's Beach and we had a party!
- Go to old-timers and record their knowledge (Indians especially).

(1 green dot)

- We should interact more with the tribes that are co-managing here.
- See what other islands around the world have done.

(1 green dot) (1 green dot)

- Connect people to their personal place (history, science, etc.)
- Activate the Beach Watchers (WSU extension).
- Empower neighborhoods to make management plans for their environment.
- Alternative energy low-impact lifestyle
- Create website highlighting knowledge, history, and activities for kids especially.
- Partner, acknowledge and include education efforts in MRC mission.

(1 green dot)

Discussion Guide Comments

- Work with tribes that have a county history.
- Use Beach Watchers more and better connect them to MRC.
- Encourage community gathering for story telling.
- Develop a Coast Salish Cultural Center.
- · Establish an economic vision that allows all cultures to be expressed, including, the culture of stewardship.
- Re-activate the "rendezvous" salmon beach BBQ at the peak of salmon season.
- Look to native traditions to develop local responsibility for all stocks to eliminate the "rush for fish," i.e. rules that promote the Tragedy of the Commons.
- Education is key.
- Establish an economic vision that allows all cultures to be expressed, including, the culture of stewardship.
- Regarding #1: who could object? Regarding #2: this is a plus for everyone. Regarding #3: depends on kind and degree of support. Regarding #4: particularly if tied to safety of upland water for humans. Regarding #5: this is an essential cultural change.
- Work with tribes that have a county history.
- Use Beach Watchers more and better connect them to the MRC.
- Regarding #3: lack of understanding.
- Regarding #2: must bring in tribal leaders, de-fuse regulation "rights" politics.
- Encourage community gathering for story telling.
- Develop a Coast Salish Cultural Center.

Lopez Island

Post-It Comments

• Educate people to know about and use "green" products.

- Teach a lot more biology in grade school.
- Conduct a comprehensive value-based assessment in San Juan County (SJC) and neighboring cultural areas which identifies benefits and values, life outcomes, and priorities. Incorporate the results of this assessment into the SJC Comprehensive Plan as values to be recognized and planned for.
- Encourage stewardship through music and celebrations.
- There should be more natural history information in our local papers. That's how you build culture through education and knowledge.
- This is the center of the universe! Protect the culture here.
- San Juan County government should be "green."
- Research ways to make local biofuels (from sugar beets?) Ethanol doesn't emit as much carbon (rather than renewable but non sustainable biodiesel.)
- Study what's been done in other marine stewardship areas such as those in New Zealand.
- Actively encourage vibrant communities and individual empowerment.
- Open an office of public archaeology to protect cultural sites with landowner support.
- · More barbecues!
- Create a program to educate a countywide team of stewards who have knowledge/pamphlets/reference system to actively educate neighbors/ landowners/summer folk/ etc. along their beaches/roads/mountain sides.

Discussion Guide Comments

- Recognize local cultural practices.
- Do not conflate Native American cultural practices with tribal government policy.
- Open an office of public archaeology.
- More education regarding what those cultural practices are/were. Regarding threat: marine cultural sites and practices aren't respected.

Orcas Island

Post-It Comments

- Sponsor traditional events involving food, storytelling, cultural songs and dances to share Orcas's tribal and immigrant culture and insights.
- Consider what resources we have and their sustainability before developing. Locally control resource management.
- Find an outlet for the spirituality that is already here, for example in songs and ritual, to support stewardship.
- Use the two public beach sites (Crescent Beach Camp Norwester and Obstruction Pass on Orcas) to re-establish long houses for celebrations and tourist education. (They'd have to be closed in winter for "spiritual sweeping.")
- Invest in scientific research and background knowledge before developing and before making management plans.
- The MRC should educate local environmental educators in stewardship talking points:
 - o San Juan Nature Institute
 - o Land Bank
 - o Friends of the San Juans
 - o Science teachers
 - o Sea Doc Society
 - o County Extension
 - o Parks Department
- Use biofiltration for water and stormwater. Look globally for solutions to local issues (L.I.D.)
- Talk to the tribes to help establish baselines for local habitat and wildlife.
- · Use scientific and tribal knowledge to observe and track climate changes and to mitigate their effects on our ecosystem.
- Coast Salish Chiefs' Council (80 from B.C., 20 from Puget Sound) should co-manage S.J.C. parties based on stewardship.
- Think about strategic beaver deployment to recharge aquifers and sequester carbon.
- Create ritual and educational events around what we already know.
- Foster a relationship between the tribes and the immigrants (and the wildlife and their habitat).
- First step: tribal and immigrant cultures should develop a relationship (Maybe through the Grange?)
- · Map the islands for cultural and spiritual sites that could be re-sanctified and held in trust. Make this generally known.

- Shift the focus away from development and growth areas to stewardship (especially W.R.T. water)
- Encourage large woody debris to be left to retain moisture on the forest floor (30 year trees could be bundled).
- · Create a forum for listening to and recognizing Native history and experience here. Apologize.
- Get churches and realtors on board.

Discussion Guide Comments

- Renew tribal cultural events to draw and educate locals and visitors.
- Promote archeological records as traditional harvest/stewardship strategies.
- Evaluate tribal crab harvest blitzes.
- Restore and increase intertidal clam gardens/clam terraces at all suitable beaches. (see: John Harper 2004-5)
- We could become walkers, or bicyclists, rowers, or one who travels by bus or train. Don't fly anywhere, except as a butterfly. The choir must change, too.
- Identify cultural sites for future set asides along shores.
- More interpretative/educational efforts to promote stewardship
- Formalize an education plan to carry message and make sure existing environmental educators receive and promote MRC stewardship information.
- Ban geoduck "mining."
- Promote aquaculture.
- Regarding #1: Re-establish a presence of Native American local tribes on Orcas Island.
- Build friendships and relationships with tribal people by hosting Native American cultural activities like classes on arts and handicrafts, sales of Native handwork at venues like Saturday Farmer's Market, ferry landing open-air, and etcetera.
- Build (with new Native American friends developed through the fun activities like this one and #1) a longhouse on Land Bank land at Crescent Beach, State Park land at Obstruction Pass campground, at old midden sites. Need sites for intercultural activities, including arts classes, demonstrations, sales to tourists and locals at Crescent Beach; longhouse camping; Obstruction Pass Park.
- Need to educate the public more regarding toxic contamination.
- Educate associations on small islands.
- Do not promote special tribal ecotourism on our islands. Keep that on the mainland.
- Conduct extensive analysis of toxins in seafood. Follow analysis by applying pressure on municipalities throughout the region to eliminate source of these toxins.
- Teach the history of European strategy in Puget Sound schools.
- Promote archeological record as traditional harvest/stewardship strategies.
- More interpretative/educational efforts to promote stewardship
- Regarding #2 and #3: include the Tribes!
- Restore and increase intertidal clam gardens/clam terraces at all suitable beaches. (see: John Harper 2004-5)
- Renew tribal cultural events to draw and educate locals and visitors.

Seabirds

Shaw/Waldron Islands

Post-It Comments

- Education and regulation are both needed need a list of recommended behaviors to protect seabirds and other marine resources.
- Regulate harvesting technology that has high bird mortality attached.
- Create citizen database site for people to enter, view data on a website.
- Interpretation of annual marine survey of ecosystem
- Consolidate all existing marine science studies and evaluate for how they all fit together.
- Ban all motor boats in San Juan County.
- Work in the school; connect kids with birds.

Seabirds (cont.)

Discussion Guide Comments

- The giant catches of herring that were allowed in the past took the food from the birds. White Rock used to be white, covered with gulls' nests, their guano, a huge populace of screaming birds. "Herring balls" were everyday.
- All others are equal import. #5 is top gill netting deaths!
- Winter bird watching contest!
- Educate people to not themselves or their dogs harass seabirds on land.
- Decrease toxins in food chain.
- Reduce rats in nesting areas.
- Aren't #1 and #2 the same thing?
- Reduce tourism.
- Regarding #1, 2, 3, 4: these three (2-4) feed into #1.
- Regarding #9: I think education regarding birds is likely to be effective because birds are pretty while sea cucumbers and plankton aren't so cute.
- Regarding #9: I'd like to see some sort of bird-watching education/bird count coordination network and I would help with that.
- Hard to have priorities.
- Regarding #2: 2 without education 4-5 with education; Regarding #4: 4 with education 3 without; Regarding #8: with education and the county cleaning up its own act-4.
- Generally high. Birds are cute and visible, sort of like whales.
- Everyone talks about salmon but herring are the basis of salmon feeding as well as seabirds and marine mammals.
- I strongly support all these measures. The greater public, however, would probably resist a number of them. (1 green dot)

San Juan Island

Post-It Comments

- Involve public in tracking birds.
- Bring back food sources.
- Have bird reports in local paper. People like birds. Help educate people.
- Dropping populations of Harlequin Ducks, Cormorants. Is food resource depleted all the way down to phytoplankton?
- Education and engagement of the public. People need to know how they can help. They want to help.
- Birds indicate presence of food. Need data throughout the year.
- Education big priority. Stewardship
- Use Beach Watchers to assist.
- Effects of global warming act locally.
- MRC create a database that is on a website.
- Rick Bonney, Cornell could come and help set up databases.
- Derelict fishing gear
 - o Cause of death for birds/mammals
 - o Fishermen want the nets back.
- Human disturbance of nesting areas.
 - Fishing boats
 - o Kayakers create more disturbance than motor boats.

Discussion Guide Comments

- Work with Beach Watchers more.
- Enforce existing law around sea bird colonies more.
- Carefully work out economics.
- Regarding #9: report bird counts monthly.
- Better communication and coordination with other agencies that deal with migratory bird needs when various birds are not here i.e.: summer, Harlequins in Idaho.
- Tell people what they can do to help.

(1 green dot)

Seabirds (cont.)

- Regarding #2: 4-5 with education, Salmon is an icon, and efforts to save it are more popular. Regarding #4: depends on how "reduction" is to be effected. Regarding #5: 5, but 3 if County taxpayer pays, probably. Regarding #8: 2-4 County must act on itself first. Best example is City of Seattle.
- Enforcement existing law around sea bird colonies more.
- Regarding #1: public may not understand what this means. Regarding #7: 3 or 2 resistance (bilge pumping) but all else 5. Regarding #8: lack of understanding; anticipate increase in near future.

Lopez Island

Post-It Comments

- The colors of the MRC map fade in two weeks. Print a color-fast map.
- Put the MRC map on rental kayaks.
- Partner with commercial / recreational operators to improve on-the-water behavior.
- Educate divers, kayakers and sport fishers about marine stewardship and the Marine Stewardship Area.
- Put signs on refuges.
- Engage BLM and other local, regional, state and federal agencies to coordinate consistency of management with similar ecosystems and landscapes based on proximity and shared management goals.
- Protect freshwater and wetland habitat for seabirds.
- Protect the abundance of benthic and intertidal invertebrates as food for seabirds.
- Be prepared for a big oil spill response to protect seabirds.
- Are overnight and gillnet closures necessary to protect seabirds? If so, why are these closures applied only to non-tribal commercial fishermen (not tribal or Canadian)?
- Evaluate the impact of fishing gear on birds. Is this the right thing to regulate? Are we missing the real impacts? And if modified fishing gear, like bird panels on gill nets, is super important for birds, then why isn't it applied to tribal and Canadian fishermen? The bird-net panel forces fishing in difficult areas. Birdnet panel requirements are applied unequally and unfairly.
- "Instead of getting rid of the fishermen, get rid of the monofilament."
- Do more to protect seabirds from small spills.
- Coordinate with the U.S. Fish and Wildlife National Wildlife Refuge System.
- Hold talks on seabird conservation for summer visitors in islands, on ferries.
- Sponsor topical works by artists to focus public attention on seabirds.
- The Islands have become a commodity. People get more value if informed. Use economics to advance stewardship.

Discussion Guide Comments

- · Coordinate with USFWS NWR's.
- Regarding #4: greater protection of habitat.

Orcas Island

Post-It Comments

- Write a plan for disseminating the marine stewardship message and identify providers to carry that message. The MRC could contract with providers with management by MRC.
- How can we control boaters' disturbance of seabirds?
- How can we get Shell Oil to protect eelgrass beds for forage fish for birds?
- · Bring back forage fish to increase prey for seabirds: big declines in seabird numbers are obvious.
- Educate realtors about the need to protect habitat. Inform potential buyers concerning the habitat being bought. Develop
 "preservation guidelines."
- How can bycatch of seabirds be avoided?
- Escort tugs are needed for oil tankers. A big oil spill would be a disaster for seabirds and for all marine resources.
- Consider a tax to fund marine management.
- Chart out which time of year would be most important to reduce bird disturbance. A full-time 200 yard buffer may not be needed.
- Assess and control runoff contributions to anoxic conditions and impacts on seabird populations.

Seabirds (cont.)

- Restore predator/prey imbalance (seals and sea lions) which will help the food supply for seabirds.
- Initiate a buy-back program for seabird habitat.
- Institute a tax similar to that supporting the Land Bank to support the MSA.
- Provide education on ferries.
- Have Beach Watchers aboard Deer Harbor Charters, and have naturalist to do bird counts.
- Local people can help collect and disseminate information.
- Protect seabirds' nesting and foraging habitat.

Discussion Guide Comments

- Remove all dams to facilitate spawning.
- Modify current fishing practice (site and method limits).
- Provide lessons on nature and how it supports economic vitality, value, health.
- Teach and emphasize biology, K-12.
- Eliminate salmon derbies.
- Regarding #7: Identify current environmental educators and train them in the MRC/stewardship message specifics of situations.
- Only a very small percent give a damn.
- Stronger political positions.
- Regarding #1-4 and 11-12: education and outreach will help increase these efforts.
- Regarding #12: more monitoring stations.
- Regarding #1: depends on how it affects upland owners. Regarding #3: if clear and consistently applied, otherwise 1.
- Regarding #5: too broad. Regarding #6: need to interface with upland owners. Regarding #11: too broad. Regarding #12: 5 if simplify regulations, make them clear/concise, understandable, otherwise 1.
- All above depends on education.
- Eliminate salmon derbies.
- Remove all dams to facilitate spawning.
- Modify current fishing practice (site and method limits).

Pacific salmon

Shaw/Waldron Islands

Post-It Comments

- Stop fishing for 5 years.
- Remove dams.
- Add a submerged float to mooring buoys where absent reduce drag of chain over eelgrass.
- Expand stewardship coloring book to "Best Practice Guide" for all of Puget Sound Distribute on ferries etc. (trifold format)
- Human power only fishing areas (with picture of person fishing from row boat)
- Stop commercial fish-farms.
- Prevent bottom-trawling.

- Good research has been done. Point here is to set up good regulations and enforce them.
- Severely restrict fishing MRC and local communities determine sustainable levels not fishing industry.
- Implement citizen involvement in study and long-term monitoring of nearshore habitat.
- Ban all marine motors only sailboats.
- Regarding #4: not just research!
- Regarding #3: subsidize solar power.
- More extensive study of seal populations as they affect both juvenile and adult salmon.
- Collect scale samples of fish, salmon, herring, etc. to trace their origins and map their migratory paths.
- #3 and #6 are the same. Move all homes 600 feet from shoreline by zoning and regulation allow building only with approved potable water and appropriate septic systems.

- No salmon sport fishing from petroleum power vessels.
- Regarding #12: what about all the toxins from "bottom paint" on boats?
- Prevent bottom trawling.
- #1 and 2; #7 and 8; #11 and #12 should be paired.
- County should study control of its own greenhouse gas generation.
- Unable to prioritize let it all rip.
- Educate, feature articles w/lots of info frequently in local papers.
- Stop all fishing until recovery.
- Regarding #1: people don't realize this is such a big deal.
- Regarding #7: involve people in data collection. Validate local knowledge by bringing locals into daily/weekly/monthly observations.
- Coordinate with fishing industry to gather better data and figure out solutions.
- Generally salmon are an interest of multiple factions of people from pretty broad-based backgrounds.
- Regarding #1 5: if voluntary zones protection could be established.
- Regarding #6: 2 to 4, depending on education and incentives used.
- Regarding #12: control of water use is related to control of energy use.
- Regarding #1: restores and improves food chain. Regarding #2: same. Regarding #3: guidelines and regulations need to be better communicated. Regarding #4: needs sufficient funding. Regarding #5: involve State and B.C. Regarding #6: see 3. Regarding #7: find ways to involve visiting public as well. Regarding #8: see 7. Regarding #9: i.e. ban all new 2-stroke engines etc. Regarding #10: need to enforce double hulled tankers. Regarding #11: how can this be planned? Regarding #12: enforce county regulations-make incentives available.
- Regarding #8: ride the wave Al Gore created!! Regarding #10: citizens must push the state on a tugboat escort.
- Education will provide public support in all areas.
- Note that first column what citizen supports second column what they think general public will support.

San Juan Island

Post-It Comments

• Manage as an ecosystem, not species by species

(4 green dots)

- Focus on herring recovery; engage regional and state authorities. Needs a real program. Important for birds and fish
- Balance management and consciousness raising.
- Permit future ponds so they will have capacity to release during low-water times

(1 green dot) (1 green dot)

- Maintain quality of San Juan Islands' freshwater streams.
- Make San Juan County a "no take" zone for marine organisms for 10 years.
- County-wide program regarding education about pesticides and herbicides and their effects: signage at local retailers. Possible local ban
- · Eliminate the "race for fish" management scheme; encourage local responsibility for sustainability.
- Encourage chipping rather than burning of land-clearing vegetation.
- Educate regarding beach erosion as a natural (inevitable) process. Enhancement alternatives
- "Education" could have a somewhat negative connotation so focus on providing information.
- Imperative to enlist support of business communities, landowners, boat owners as targeted audience for stewardship.
- Educate islanders about juvenile salmon (from regional streams) using local nearshore and estuaries and river/stream mouths for foraging (on local terrestrial insects, etc.)
- Restore salmon to benefit the whole environment, forests, other species, people.
- Discontinue salmon derbies.

(3 green dots)

- Bring back our clear water. Used to be able to see down to the bottom outside of kelp beds. Let's bring back the clear water.
- Rendezvous event at peak of salmon season, such as Salmon BBQ community event. Demonstrations of reef netting. Show shell middens. Showcase how life was.
- Education! How can I be a good steward? Small actions count.

- Inform and employ Beach Watchers.
- Protect pocket estuaries.

Pacific salmon (cont.)

- Make San Juan County a no-take of any marine species for about 10 years.
- Develop Best Management Practices for land/home owners.
- Contribute to reduction of air-borne flux of accumulating contaminants in the NE Pacific (and wherever else salmon forage).
- Discontinue salmon derbies.
- Protect and restore salmon spawning and rearing habitat.
- Nationalize oil companies.
- Regarding #1: 2 without education or incentives, otherwise 4. Regarding #2: 4-5 depending on nature of efforts. Regarding #3: may depend on incentives. Regarding #4: 4-5 with sufficient publicity, otherwise 3. Regarding #6: 2 if done by enforcement only, 3 to 4 if sufficient education of seasonal visitors/inhabitants. Regarding #9: 2 if not enforced, 4 if enforced. Regarding #10: 2 if not enforced, 4 if enforced. Regarding #11: 2 to 4; County must act on itself first. Regarding #12: 2 to 4, depends on incentives and education.
- Inform and employ Beach Watchers.
- Protect pocket estuaries.
- Discontinue salmon derbies.
- Develop best management practices for land/home owners.
- · Nationalize oil companies.

Lopez Island

Post-It Comments

- "If you/we restore it, they will come!" (Create bumper stickers to engage public interest in salmon restoration.)
- The San Juans should be seen as a unique laboratory for
 - o Science
 - o Economic development
 - o Human behavioral changes.
- Create and post signage at ferry landings highlighting important aspects of marine stewardship and the Marine Stewardship Area
 - o Bottom fish recovery areas
 - o Protecting eelgrass
 - o Etc
- Provide education especially with our children concerning
 - o Food web(s)
 - o Life cycle
 - o Stewardship actions
- Question the culture that determines that it is ok to kill/consume one species over another. Why kill any?
- Protect our locally spawning salmonids and their streams.
- Sell only legal fishing gear in San Juan County.
- Scientifically assess ecosystem changes including location and timing of dogfish and salmon numbers.
- Cull sea lions. Address the super abundance of dog fish.
- Don't build anything over eelgrass. Protect every piece/acre.
- Educate the public about the importance of creating shaded shorelines and riparian areas for juvenile salmon.
- Create and display visual presentations, for example for use on ferries: Educate about how special and fragile the area is.

- Protect our local spawning streams.
- Connecting with regional efforts is critical: salmon recovery is a regional problem.
- Make it illegal to sell illegal fishing gear!
- Protect our local spawning streams.

Pacific salmon (cont.)

Orcas Island

Post-It Comments

- Support the recovery of forage fish. Protect nearshore habitats where forage fish spawn.
- · Restrict fishing methods in certain areas to reduce by-catch. If fishing for salmon, use appropriate gear and methods.
- · Cities for climate protection (LLP) to highlight specific strategies for lowering greenhouse gases.
- The decline of recreational salmon fishing in the Islands has had a significant economic impact.
- No-fishing areas for salmon are not effective because salmon in the San Juan Islands are transitory.
- People's decisions of what they want will be modified by what they know.
- · A side benefit of recovering salmon is the economic benefit of local recreational fishing, salmon guides, etc.
- Increase herring hatcheries.
- Provide education and outreach concerning the benefits of "soft shore" enhancements.
- Institute no-fishing areas.
- Provide tax incentives for protection of spawning streams.
- Marine protected areas help salmon and other species. Target areas of biodiversity.
- Initiate an enhancement program for forage fish. Develop and operate hatcheries for forage fish. Release forage fish in areas with the best habitat.
- Create a statement/common theme of what we want people to take away about salmon conservation/stewardship.
- MRC should serve as a link and trainer of stewardship for all education programs.
- Provide technical and financial assistance for homeowners to maintain healthy septic systems.
- Require that information about septic systems be immediately forthcoming from realtors when people buy property.
- Support designated car wash facilities with interceptors for heavy metals.
- Provide to the public more information about the Long Live the Kings program.

Discussion Guide Comments

- Remove all dams to facilitate spawning.
- Modify current fishing practice (site and method limits).
- Provide lessons on nature and how it supports economic vitality, value, health.
- Teach and emphasize biology K-12.
- Eliminate salmon derbies.
- Regarding #7: identify current environmental educators and train them in the MRC/stewardship message the specifics of situations.
- Only a very small percent give a damn.
- Stronger political positions.
- Regarding #1-4 and 11-12: education and outreach will help increase these efforts.
- Regarding #12: more monitoring stations.
- Regarding #1: depends on how it affects upland owners. Regarding #3: if clear and consistently applied, otherwise 1. Regarding #5: too broad. Regarding #6: need to interface with upland owners. Regarding #11: too broad. Regarding #12: 5 if it will simplify regulations, make them clear/concise, understandable, otherwise 1.
- All above depends on education.
- Eliminate salmon derbies.
- Remove all dams to facilitate spawning.
- Modify current fishing practice (site and method limits).

Rockfish, lingcod and greenling

Shaw/Waldron Islands

Post-It Comments

- If this many people showed up at a fish and wildlife commission meeting we could change things for the better.
- There is no shortage of greenling in every kelp bed.
- Ling cod regs are working season opening and size limits <26" and >40" closed. Could this work for rockfish?

Rockfish, lingcod and greenling (cont.)

- Laws need to change the way WDFW sets fishing rules!
- W.R.T. suspending direct harvest who does MRC need to influence to make change? WDFW
- Dungeness crab
 - 1 Concern about local citizen access to resource.
 - 2 Concern about exhausting resource, commercial over harvest
- Important to look at competition between higher level predators seals and whale balance changed and affecting lower food resources. Should inform harvest management.
- Not enough emphasis on the bottom of the food web to support fish and whales at least not articulated in draft report.
- New Strategy work with Surfrider Foundation and R.E.E.F. to help educate public look at their programs, don't reinvent the wheel.
- Signs at all ferry landings about the endangered water ecosystem.
- Tell WDFW to publish smaller rules pamphlets by region save paper make them easier to use and follow (Region 7).
- Prevent harvest of fish by divers.
- Allow the older, mature, reproductive-age fish to exist to increase the species.
- Strategies for rock fish, ling cod and greenling look more like objectives what are the specific action items that will protect/recover marine fish?
- Not sure what priorities are for threats and strategies need research to show what is most important: Harvest? Bycatch? Pollution? Other?
- Establish chum salmon run on Waldron Island.
- Publish more widely info about age and vulnerability of rock fish.
- Publicize* when WDFW will be taking comments on fishing rules (*locally).
- How can we get citizen input, such as MRC, into fishery policy-making at State and Federal level?

- Real regulations and new enforcements. Are there new mechanisms?
- Focus on school kids develop teaching strategies that can be used all over the Puget Sound region.
- Give MRC a real voice in setting sustainable levels.
- Regarding 8 citizens not the problem, corporate interests are.
- Need more research to determine which threats/stresses are actually the top priorities to address.
- Strategies look like objectives (such as #1). What are the actions to achieve?
- Examine protecting and enhancing the bottom of the food web with respect to restoring the fish populations
- Examine the imbalances of predator numbers with respect to restoring fish numbers especially large seal population. 2% loss of predation by migrating orcas.
- If you have an educated public, any of the strategies will have wider acceptance. In general, greater public support for what will be perceived as "directly" helping, e.g. catch limits, etc. The more abstract, the less tolerated, e.g. proper disposal of wastewater when washing the car at home.
- Make all sport fisheries be human-powered, sail, or electric boats. Eliminate all takings by sport divers.
- So many of these are duplicates of other sheets.
- Allow the older, mature, reproductive fish to exist, so that they can increase.
- Prevent divers from harvesting.
- Regarding #5 and 6: if we don't want oil spills we can't have tankers coming through. We can't ask that to stop as long as we drive our big boats and cars.
- I think changing the ethic of car-dependence and oil dependence is important but I don't know exactly how to go about that. All these "island cars" that people seem to take pride in ("my-car-is-a-battered-wreck-so-I'm-more-island-style") are a problem.
- Everything. These fish are magnificent.
- Regarding #2: there is a knee-jerk reaction about fishing. It should not be a sport.
- Regarding #6: scored 2. If the County cleans up its act first, then it would be a 4.
- Regarding #3: long-term community-based studies w/sustained support from scientific community.
- I think I support all of these but who knows about the public.

Rockfish, lingcod and greenling (cont.)

San Juan Island

Post-It Comments

- Use Monterey Reserve as a model also Florida model
- Add voluntary no-take zones for San Juan Marine Preserves and then managed by WDFW (1 green dot)
- Resource allocation dedicated to non-consumptive use
- Redefine voluntary no-take zones to match scientific research for proven protective areas used by rockfish.
- Use bathymetry data to identify new reserve sites.

(1 green dot)

• Expand False Bay Marine Reserve to include Kanaka Bay and surrounding waters.

(1 green dot)

- Match no-take zones with public highly used areas on land with the goal of having concerned citizens assist with monitoring.
- Recommend limiting rockfish fishing season to lingcod season only. Currently: May 1 June 15 per WDFW regulations for sports fishing.
- Increase size of BFRZ's.

(2 green dots)

- · Protect rockfish prey base.
- Get WDFW out of S.J. County. Prohibit fish spear fishing. Prevent Geoduck mining of seabed.
- (2 red dots)
- MRC procure grant to develop "catch and release" device that is less likely to damage rockfish and establish distribution channel
 (1 green dot)
- Beach Watchers help educate beach users re: bottom fish recovery issues. Discover no-take zones. (Beach Watchers and MRC team in education)
- Develop internet site for general public that educates at high level (concise) picture of island species and their threats. Also habitats. (Target new-comers.)
- Change signage to look like U of W signs (purpose to increase visibility). Also add "No Bottom Fishing" to existing sign (changes possibly made last year)

- Add bottom fish no-take fish zones to WDFW San Juan Islands Marine Reserve.
- Initiate graduated boat decal fees link with engine horsepower.
- Establish large no-fishing sanctuaries to protect breeding fish stock.
- Ban all spear-fishing.
- Employ and inform Beach Watchers.
- Raise awareness of global warming effects on bottom fish.
- Protect and support rockfish prey base such as forage fish and perhaps others.
- Fish Board understands "allocation", or allocate a portion of catch to a preserve.
- Get WDFW enforcement agents along West Side to police fish preserve, too.
- Close bottom fishing along the West Side in orca critical habitat as mandatory experiment in conserving large females.
- Get high resolution bathymetry from Gary Greene and use it and side-scan-sonar habitat classifications to define new experimental marine preserve and get that reserve on the Marine Area and map (annual fishing regulations).
- Limit rockfish fishing to the lingcod season only.
- County divestment from major greenhouse gas producers
- Increase recycling; reduce input into landfills thereby reducing methane production.
- Education is key.
- Regarding #1-2: unless practical, then 4. Risk of no practical way to reduce by catch. Regarding #2: 2-3 without education. 4-5 with education. Regarding #4: 3 if regulation, 5 if sufficient education. Regarding #6: 4-5 if county moves first, otherwise 2.
- Add bottom fish "no take" zones to WDFW San Juan Islands Marine Reserve.
- Employ and inform Beach Watchers.
- Regarding #2: 2 but could be a 5 with convincing (Florida) model of sport fish environment.
- Establish large no-fishing sanctuaries to protect breeding fish stock.

Rockfish, lingcod and greenling (cont.)

Lopez Island

Post-It Comments

- · Make it easy to buy legal fishing gear
 - o Barbless hooks
 - o Crab traps with rot cord.
- Sell only legal fishing gear in Washington state, or at least, in San Juan County.
- Education
 - Write articles for local media
 - o Get information to the community.
- Enforce regulations in no-take zones! Assess the scope and size of zones.
- Create big no-take zones.
- Make existing bottom fish recovery zones bigger with mandatory compliance.
- Use buoys to mark sensitive habitats.
- Use open space program to protect tidelands and shorelines.
- Engage the community in stewardship of bottom fish. Provide education and outreach to build marine ethic/ownership of
 marine resources.
- The large population of dogfish may be reducing herring populations.
- Change fishing policy to NO rockfish catch permitted.

Discussion Guide Comments

- Reduce non-local harvests.
- · Start dogfish harvest industry.
- Maintain large no-take zones.
- Increase size of bottom fish recovery areas.
- Prevent over-fishing of all species.
- Juvenile habitat restoration.
- Implement milk carton idea for releasing rockfish.
- Make sale of illegal fishing gear illegal itself! No barbed hooks! No treble hooks!

Orcas Island

Post-It Comments

• Kill seals so that you have more herring so ling cod don't eat rockfish.

(4 red dots)

- Use the ferry system for education about protection of bottom fish provide mini seminars.
- Is there a database which organizes the information necessary to support bottom fish recovery and other recovery efforts?
- Dovetail education with the Salish Sea Community Atlas on Salt Spring Island.
- Link marine protected area to lighthouse restoration on Stuart Island. Education contact: Margaret Jonas.
- Why isn't the Bell Island bottom fishing restricted zone identified on the color map (in purple)?
- Identify the areas most important to protect rockfish.
- Isn't it time to really close fishing for rockfish in some or all of the San Juans?
- Take global warming into account in management of fisheries.
- Are sewage discharges changing the acidity of sea water?
- When you go out and can't catch a rockfish when you are trying, it's time to close the fishery.
- Produce the marine stewardship area map as a place mat and supply crayons to color in the key. Kids and parents will learn
 about the MSA and can take the information home.
- Provide education for boaters so they can respect habitat and can re-educate their colleagues.

- Ban all spear fishing.
- Education: Marine Stewardship Area Map Outreach (contact Marta Branch 376-8588 for more on this idea).
- Long-term suspension of fishing for rockfish.
- Teach and emphasize biology K-12.

- Regarding #1: ban derbies.
- Cull seal population.
- Believe only a very small percent give a damn.
- More septic taken and sewer regulations.
- Regarding #4: unaware! Regarding #5: education and economics (wood burning).
- Regarding #7 and #8: hope for 5.
- Regarding #7: urban mainland/Canada.
- Regarding #4: how to enforce? Regarding #6: too broad. Regarding #7: if regulations are clear and easy to apply, otherwise no support (1).
- Cull seal population.
- Regarding #1: too hard to enforce. Regarding #7: 5, if it can be shown that pollution threatens human health, otherwise 4.
- · Ban all spear fishing.

Habitat

Shaw/Waldron Islands

Post-It Comments

- Permitting process is confusing. County should make it easy for people to do it right.
- Using already engaged teacher-scientists to train and organize their students to gather data and do public outreach to
 engage more citizens.
- Abalone decline of concern
- Regulations to protect habitat are important; maybe even more effective is to engage residents' interests and ownership

 love, even of our home.
- Maintain eroding beaches.
- As population increases just to keep status quo each person has to pollute less.
- Sustained, long-term community involvement in long-term studies. (1 dot)
- · Involve people/students in activities which foster awareness and stewardship. Back up with enforcement.
- All these actions won't add up to much if there's a big oil spill. (1 dot)
- Research needs to be done on less beautiful marine animals and their place in the marine environment sea cucumbers, urchins what affect does heavy fishing have on marine environment regulation needed?
- Add threat: fast moving powerboats
- Oil spills/fuel in water
- Trim equipment leaks.
- Big wakes in small passages
- Wakes from boats are not consistent w/storm wave action. Limits needed in
 - o Wasp passage
 - o Approaches to Deer Harbor and West Sound.
- Avoid overharvesting by divers and derbies.
- Close Park's Bay to vessel for minimum 5 years, see if bottom fish recover.

- Ban all marine motors.
- Boat wakes, speed, hull and vessel, design as determinant of wake damage.
- Phase out two cycle outboard motors, which are much more polluting than four cycle engines.
- Do a study on how the absence of floating woody debris effects prey base populations. Consider that historically spring floods (with out migrating salmonids) provided shelter for these in the marine environment.
- Do a dock survey (with independent baselines) to evaluate if small fish (and to what extent) prefer dock areas as shelter. If so consider toxic management plan to change.
- Examine the impacts of loss of natural balancing forces, e.g. predation of seals by orcas and how that effects fish populations.
- Primary #1 citizens must push for carbon emission reduction. Local legislative efforts set example and help generate momentum nationally.
- Education should always come before regulation, so it's an automatic #1.

Habitat (cont.)

- Regulations are important to protection of habitat; maybe more effective is to engage residents' interests and ownership love of our house.
- Regarding #1: make it easy and cost effective to do things properly! Clear specs; smooth processing of paperwork, etc.
- Regarding #12: reduce population on the shoreline, encourage forest land for carbon dioxide reuptake. Regarding #13: education is great, but we'll never reach our goals without regulation.
- Restrict and reduce the two main industries in SJC, namely tourism and real estate.
- Regarding #10: anti-fouling paint.
- The eco-system is totally connected.
- Community involvement needs to be long term, sustainable. Scientists come and go with money and big ideas; locals stick around but when the scientists run off, the support structure for community science and involvement disappears.
- Educated in direction of everyone being a 5!
- Regarding #6: as this is regulatory, #3 and #5 should precede this. Regarding #12: but County has to clean up its own set first, then it would be a 4.
- Depends people will most likely suffer personal inconvenience if they understand the reason they have to put their moorings down in a certain way (or whatever).
- Regarding #1: no one wants to be regulated, but we must regulate ourselves. Regarding #8: very dull subject.
- Although I strongly support all these, I realize prioritizing will happen. It's frustrating to perform triage on these strategies, so I end up choosing the most general items on the list.

San Juan Island

Post-It Comments

- Educate/change property owners' understanding about shoreline erosion. It is a natural process. Also about enhancement/ protection options.
- Analyze/assess cumulative impacts of shoreline activities/development before it is permitted.
- Imperative to have business community/landowners/boat owners' support. These groups should be targets for info/education.
- · Connect data to personal action while being honest about data gaps.

(1 green dot)

- Prevent seabed disruption by commercial crabbing: stop all commercial crabbing.
- Get WDFW out of S.J. County.
- · Prohibit all motorized recreational boats.
- · Graduated boat decal fees according to horsepower
- Focus on degradation aspect of plastic you can't see the particle but it may be inhaled or ingested. (1 green dot)
- Focus on toxic releases from such places as Bellingham, airports nearby, etc. What is effect of styrene, jet fuel, etc.?(1 green dot)
- Suggest that the Town of Friday Harbor monitors water quality from the town's sewer outfall and Spring Street landing storm drain.
- Enforce shoreline/dock permits in a more fair and even manner.
- Educate newcomers to create a culture of environmental stewardship. Bring realtors on board to help educate newcomers. (1 green dot)
- Native vegetation is better than lawn; don't have an urban mindset; provide landscaping education (workshops); follow Arthur Kruckeberg's (naturalist) recommendations. (1 green dot)
- Tug/barge defined separately from pleasure craft in terms of landing/craft launching.
- Survey how much land-applied pesticides are sold in the Islands to quantify problems.
- Protect shoreline access for barge/landing craft for outer islands.
- Protect haz mat access to ferry-served islands. Identify propane/gasoline/hazmat removal.
- Educate homeowners to reduce pesticides, herbicides and other upland pollutants on a county level.
- Monitor amount of herbicides and pesticides in county as a way to gain perspective and educate users to their environmental harm.
- Allow ramps on outer islands for barge landings as essential public facilities.
- Commend MRC for letter/public stand on eelgrass protection continue aggressive stance on shoreline protection.
- Promote engineered natural habitats in response to shoreline armoring issues.

Habitat (cont.)

- Strong concerns regarding local and state permitting continuing to allow inappropriate armoring of local shoreline.
- Require an analysis of coastal processes affected by armoring or structures, before allowing development.
- Do not allow any shoreline development below 30' and above mean sea level to address sea level rise due to climate change.
- One week a year S.J. visitor and tourist and lodging businesses donate services to children's programs for environment for Puget Sound urban kids.
- Reduce methane emissions from landfills by recycling.
- How can we affect climate change?
- Bring pressure on local politicians to reduce greenhouse gasses.
- Divest from companies who are not environmentally responsible on a County level?
- Bring pressure on Victoria to treat their raw sewage.

Discussion Guide Comments

- Stop plastic use and littering.
- Moratorium on new docks.
- Support research into low impact docks.
- Inform and employ Beach Watchers.
- Good habitat equals higher real estate values and visitor attractions. Engage and inform business community, especially realtors, builders, bankers.
- Education is key.
- Use "popcorn" concrete for necessary ramps (expensive).
- There are so many more very large yachts (over 70') which go over 25-40 km through relatively small passages. They throw a large wake resulting in bottom and shore erosion.
- Regarding #1: 2-4 depending on incentives and education. Regarding #4, #5 and #6: Education is always = 5. Regarding #7: depends on plan! Regarding #8: same as education. Regarding #9: 2 if done by enforcement only; 3 4 if sufficient education of seasonal inhabitants. Regarding #10: 2 if no enforcement; 4 if enforced. Regarding #12: 2-4 depending on how! County must get on itself first.
- Stop plastic use and littering.
- Moratorium on new docks.
- Regarding #2: #6 is a positive way to achieve #2 which the public may be more open to. Regarding #6: will to go 5 from 4 as more info is made available. Regarding #12: lack of understanding: anticipate increase in near future.
- Regarding #1, #2, #4, #8, and #9: need more engagement of public to get results. Regarding #3: provide sufficient funding. Regarding #5: provide funding and engage visiting public. Regarding #6: more frequent information needed re: state of the art. Regarding #7: funding needed engage public. Regarding #10: engage local and all visiting boating public. Regarding #11: need to enforce double hulled tankers only. Regarding #12: how can the County plan for this? Regarding #13: absolutely at any age.

Lopez Island

Post-It Comments

- Target kayak companies, marinas (sport fishing), dive shops to partner for protection of stewardship areas, national wildlife refuges, etc.
- Algae blooms cause and effect noticeable in past 20 years, some years, highly noticeable
- Human population growth and our ruination of primary productive components of the environment must be severely curbed.
- Establish a San Juan County (SJC) value-based assessment which identifies benefits, life outcomes and values to be prioritized, protected and managed for.
- Marine stewardship area map
 - o Better to have black and white pattern coding for preserves and eelgrass areas
 - o Colors fade when the map is posted in sunny areas.

Habitat (cont.)

- Incorporate SJC ordinances tied to the County comprehensive plan to limit growth and home size and encourage "green" building. Establish no-development zones in view sheds and shoreline and sensitive "identified" areas. Establish "In Common" lands linked with habitat and SJC residents' values.
- Let our children witness us habitually walking and cycling. Don't fly anywhere.
- Water quality and habitat are critical/most important for everything else (other stewardship targets). These are the foundation
- Conduct more research to determine how habitats are used and how humans affect them.
- Seek national Congressional designation of habitat areas to be "held in common" representing shared values with shared management. Obtain and hold levels of autonomy including NGO, County, State and Federal.

Discussion Guide Comments

- Research to determine how habitats are used and what human activities impact them.
- Control activities to prevent over-fishing of all species.
- Restore depleted species.

Orcas Island

Post-It Comments

- Protect Eastsound's wetlands.
- Support efforts like IOSA.
- Require vents that seal off when full on boats (Boat design/elbows on fuel lines).
- Design oil separators for bilge pumps.
- Outlaw 2-cycle engines.
- Work with realtors. Go to realtor meetings.
- Provide habitat information and recommendations to new landowners.
- Provide the MSA Plan to commercial and recreational fishermen.
- A one-size-fits-all plan is challenging given the diversity of the islands.
- Work with shoreline property owners.
- Simplify and clarify regulations to make clear:
 - 0 What are the rules
 - o What counts where
 - Map based so rules are clear.
- Use volunteers like key club (Orcas school)
- Assess and control chemicals from upland/boat sources in terms of eelgrass.
- Eastsound's old septic systems leak into the bay.
- Provide incentives/grants to upgrade septic systems.
- Provide education and enforcement of boaters to prevent sewage from recreational boaters going into marine waters.
- Visit and provide education on other islands such as Crane and Blakely.
- Establish an inspection system for septic systems and marinas: Deer Harbor, Bell Port.
- Make sure boating facilities (buoys etc.) are available and have the correct design/location.
- Develop education plans that specifically identify providers/audiences.
- Eastsound sewage: Rosario needs a Class A system and an association to manage it.
- Maintain the connection and interface between uplands and the shoreline.

- Assemble regional database of available science.
- Regarding #5: over arching priority to help all public support!
- Look at programs like Leave No Trace for ideas about how to educate individuals.
- Advertisements like the one in the back of your book (pg. 19) are great because they relate people's behavior directly to habitat. Make it personal!
- All are important!
- Believe only a very small percentage give a damn.
- Teach and emphasize biology K-12.

- Regarding #9: 3-5 depending on if it's their land.
- Regarding #1: provided there is clarity in regulations and consistent application. Regarding #2: if there is good interface between upland/shoreline owners and regulation agencies. Regarding #7: depending on how it affects upland use. Regarding #9: little support from shoreline owners. Need clear regulations which are applied consistently. Regarding #12: strong support for concept, but what is the strategy?
- Clear, concise regulations that are easy to interpret and consistently applied.
- Map out areas to show where shoreline facilities allowed and prohibited.
- Assemble regional database of available science.
- Regarding #2: 5 if it can be shown that pollution threatens human health, otherwise #4.

Water quality

Shaw/Waldron Islands

Post-It Comments

- Eliminate dumping of pharmaceuticals into the water what are appropriate alternatives?
- Publicize household products by brands that are least harmful to the environment. (Surfactants!)
- Identify the toxics that are in our waters.
- Political pressure brought to bear on Canadian oil tankers that use waters around San Juans. They should measure up to our standards. Pilot ships required.
- Educate builders, loggers, property owners how to prevent or lessen erosion.
- Prevent realtors from selling properties which have no adequate sewage disposal or treatment on site; raw sewage does go
 into our seawater from homes.
- Need more data on how much water we have and where it is.
- Identify household products by brand that are less harmful and publicize list.
- Clamp down on sewage dumping into seawater.
- Stop selling plots of land without adequate sewage disposal.
- Use marine taxes to invest in green technology marina battery banks to charge electrical craft/solar tidal power.
- Toxin taxes to clean up impacts i.e. a gas tax at marina fuel depots. Added sales tax on pesticides.
- "Kill all the real estate agents and developers." Wm. Shakespeare
- Treat unused medicines as Hazardous Waste. County regulation especially with licensed facilities.
- Identify safer household products (consumer education)
- Market the eco aspects of SJC so as to attract the "right" property buyers (sales will happen, so let's choose the neighbors we want).
- Gather systematic baseline data on contaminants.
- End fossil fuel fishing (commercial and sports) by 2020.

- Use marina taxes to invest in green technology locally with marina battery banks to charge electrically powered marine
 craft (for a charge to users). This power could be generated with solar panel banks at marinas, and gradually investing in
 tidal power technology.
- Set a goal that by 2020 all fossil fuel fishing, both commercial and sports, be ended in WA State. For now, initiate pilot programs with supplemental fishing, seasons open only to non-fossil-fuel powered craft.
- Set goal that by 2050 all refineries in western WA will be closed.
- Identify household products by brand that are least harmful, and publicize list.
- Impound rainwater.
- No tankers in Puget Sounds.
- Lobby County officials to move forward on permitting and promoting grey water systems and catchment systems.
- Educate people!!
- I don't know how to prioritize any of these things! If an oil spill occurs it certainly tops the list, but day to day I think #3 or #1 because it happens frequently (bilge pumping).
- #2 and #4 should be paired.
- Clamp down on people's sewage-dumping into seawater. Stop realtors from selling plots of land without having sewage disposal on that land that treats it before release.

- Limitation on building near shoreline and size of structure minus larger houses equals more waste. Insure there is adequate water and septic systems away from water.
- Product education rating system for all products in regard to pollution.
- On Waldron Island, most people are already pretty aware and involved with water, as well as other stuff. In general, level of awareness about water (in and out) is pretty low.
- Regarding #1: try #6 first. Regarding #2: alone it's a 2, but with #4 it rises to a 4. Regarding #3: enforcement is difficult.
- Impound rainwater.
- Regarding #1: people don't think of what they flush. Perhaps use educational pressure? Regarding #2: support may be increasing-but imprison all developers. Regarding #3: education and regulation needed. Regarding #4: education and regulation by State of anchors.

San Juan Island

Post-It Comments

- · Boycott Victoria (raw sewage) vs. the possibility that mixing of H20 does adequately dilute Victoria sewage.
- San Juan County septic tank management plans need to be enforced. Single-point polluters are a big problem.
- How does pollution in San Juan County affect human health?

(1 green dot)

- Note: breast cancer incidence in SJ Co. is high (#2 in Washington State, which has the highest breast cancer incidence in the US.) Leukemia incidence is also high here. Are there other diseases occurring at high rates here possibly related to environmental pollution?
- Address changes to water quality that may occur due to global warming.
- Contact and employ SJC Beach Watchers for volunteer activities.

(1 green dot)

 Need to look at pollution inputs from outside San Juan County and how they impact us. (e.g. TRI facilities in Bellingham, Victoria BC sewage, etc.)

• Public access to cheap (free?) water analysis.

(1 green dot)

- 1. Get the results for person taking samples.
- 2. Record the results for analysis.
- 3. A test unit in the library might be a possibility.
- Increased level of water quality monitoring countywide surface, ground, marine
- Centralized database of WQ data
- Data distribution to relevant agencies for action

- Prohibit motorized recreational boats.
- Testing environmental samples to see what is a threat including to human health.
- San Juan County Septic System Plan
- Prohibit all sewage discharge into marine waters.
- Address change global warming could have on water quality.
- Start to monitor for a wide range of chemicals including pesticides/herbicides/medicines and publish results widely.
- Connect and employ Beach Watchers for help.
- Use water chemistry (wells, runoff, etc.).
- Assume forage fish prey are most important species for ecological effect of local water contaminants. Sponsor study of what contaminants accumulate in those species. Then mitigate flux of those contaminants at key (point or non point) sources.
- Better control on shoreline construction, such as siltation.
- Victoria should be forced (by treaty law?) to go to secondary sewerage treatment primary does not remove the bad stuff (mercury, PCB's, etc.).
- Regarding #4, research to accurately establish a believable basis for loss not just suspicion.
- Promote research education.
- Collection ponds for stormwater run-off.
- Regarding #1: 2, unless there is a published list of alternative products by brand then 4. Regarding #2: 4 is tied into safety of water, for human consumption. Regarding #3: 4 if evenly enforced, otherwise is may be ignored. Regarding #4: same as 2. Regarding #5: risk: depends on means of reduction.
- Test environmental samples to see what is a threat, not just to marine environment but also to human health.
- San Juan County Septic System Plan.

Water quality (cont.)

- Spectrophotometer (public access) provide results to person bringing in sample and record the data.
- Prohibit motorized recreational boats.
- Prohibit all sewage discharge into marine waters.
- Address change global warming could have on water quality.
- Connect and employ Beach Watchers for help.
- · Start to monitor for a wide range of chemicals including pesticides/herbicides/medicines and publish results widely.

Lopez Island

Post-It Comments

- Provide tax breaks or grant funds for waterfront owners to fix failing septic systems.
- Give residents the equipment (or access to it) to test water themselves.
- · Support independent and local monitoring of water quality.
- Stop allowing exempt wells.
- Get state support for rain catchment.
- High priority: seek funding for comprehensive collection of baseline data on water quality and use the data for local scientific research/facility/NGO such as Kwiaht.
- Establish baseline water quality data for shorelines including those of outer islands.
- Use water quality data from outer islands as baseline.

Discussion Guide Comments

- Develop a baseline of current water quality and hydrology. Update it frequently.
- Support independent water quality monitoring.
- Give landowners access to the tools to test water themselves.
- Water quality protection needs to be worked on a regional basis San Juan County makes a relatively small contribution to water quality problems.

Orcas Island

Post-It Comments

- Find a balance between voluntary and regulatory measures.
- Combine independent studies into a single comprehensive assessment.
- Provide water catchment systems for all new buildings.
- Require tertiary treatment for all sewer systems.
- Establish water quality monitoring stations.
- Conduct education concerning water quality including computer sciences where information could be posted on a website. This could be a senior project.
- Preserve wetlands!
- Label products in local stores. Create a display of earth-wise materials. Support local merchants in identifying earth-wise products.
- Allow hunting to cull the harbor seal population.
- Enable cities in our greater watershed to revamp their storm/waste water systems.
- Provide proper ditching and treatment for roadside run off.
- Clean bilge water before pumping it out.
- Enforce the ban on waste disposal in the marine environment.
- · Ban boat-based whale watching.
- Institute property tax reform to reflect real environmental value.
- Allow no building on land one meter or less above sea level.
- Study implication/impacts of different road surfaces.
- Enforce existing rules regarding water quality.
- Look at the broader geographical picture of contaminant zones; force the hand of other entities Canada, etc.
- The MRC should serve to link and educate other groups so that we are all working together.
- Beef up public water quality monitoring of septic and other waste water discharge.

Water quality (cont.)

- A goal for the MRC is to become a recognized lobbying force.
- Make use of bioremediation.
- Partner with tribes, which have legal right to protect water resources.
- Educate young people. Provide programs during the school day, not after hours.
- Sponsor local testing of water quality at septic outfalls, in upland streams, and at other water sources.
- Require septic tank inspections every six years.

Discussion Guide Comments

- Promote and facilitate public access to all shorelines in San Juan County.
- Community testing.
- Further development limited to low-impact development.
- Educate the public environmental educators in the Islands can be trained to carry stewardship and plan message schools non profit.
- Involve students in primary research.
- No building allowed on land one meter or less above sea level.
- · Additions to threats: rain water catchment system and road contamination of surface water and wetlands.
- Ditching and planting of road sides to keep bio accumulative poisons from entering wetlands. Prevent bottom paints on boats and zinc and copper from getting into fresh and marine waters.
- "Got to make it personal for it to matter."
- Make "water test" days available when people could test their own water! Or water test kits and education packets.
- Goal of water quality efforts assures health of marine mammals, including ourselves, who eat from this marine system.
- · More testing of local fish, crab, etc. for contaminants. Get mainland and Vancouver Island to clean up.
- Promote property owner testing of septic outfall, well water testing.
- Random county-sponsored testing of water.
- Develop low cost water analysis kits for priority pollutants or indicator pollutants unique to San Juan County.
- Create easy to use disposal processes for pollutants. Make proper disposal easier than dumping.
- Regarding #1: not necessarily bans, but better handling and disposal. Regarding #2: find better chemicals for making roads. Regarding #3, find a way to contain pumped substances to dispose of them correctly.
- Believe only a very small percent give a damn.
- Water catchment systems required for all new buildings.
- Require tertiary treatment for all sewer systems.
- Mandatory septic tank inspections every six years (paired with tax evaluations and statements of inspection required).
- MRC should be part of permitting process for all development!
- A stronger political position should be taken, not just studies.
- Community testing.
- Regarding #1: too broad. Regarding #2: 5 if regulations are clear and consistently applied, otherwise 1. Regarding #3: see above.
- Promote property owner testing of septic outfall, well water testing.
- Further development limited to low-impact development.
- Regarding #1: provided adequate publicity is provided about substitutes. Regarding #2: 5 only if it can be shown that pollution directly threatens human health, otherwise 4.
- Random County-sponsored testing of water.
- Involve students in primary research.
- Regarding # 1-4: education can help support.

Marine mammals

Shaw/Waldron Islands

Post-It Comments

• Ideas and research and local and MRC input needs to be translated into real mechanisms to give real leverage on good regulations and new good enforcement. Main issue: decline of fish. Think about underlying causes of your lists of causes and how to effectively address these – think politically. (10 dots)

Marine mammals (cont.)

- Marine Stewardship Best Management Practices brochure distribute throughout islands, ferries, coastal towns.
- Impose limits on realtors regarding communication about permitted shoreline activities and shoreline stewardship.
- Get County to enforce mooring buoy regs and dock permit applications. Pull abandoned mooring buoys.
- Need shoreline homeowners' package of guidelines for stewardship behavior/actions. One-stop shopping for help.
- Nearshore speed limits for boats needed to avoid marine mammal and bird injuries.
- Have a seal derby to maintain seal population at reasonable level too many now too much fish predation!
- Stop whale watching enterprises from harassing the whale pods every time they surface.

(1 dot)

- WA needs regulations regarding appropriate disposal of pharmaceuticals.
- Feature articles weekly on Marine Mammals and issues to introduce the other important resource issues using "charismatic megafauna" marine mammals as the "hook".

Discussion Guide Comments

- Think about workable regulations and institutionalization of such, and how to enforce them.
- Methods to restore prey/predator balance
- Consider near shore speed limits for boats, less than 20 knots.
- Add to threats: *Persistent organic pollutants from current industrial and historical sources. *Human disturbance on water.
- #1 and 5 should be paired.
- The orca pods aren't seen as frequently as they used to be. I understand people's desire to observe these tremendously hand-some, spectacular creatures in the wild. I would like to see whale watching discontinued. It's an insult to surround whales every time they surface their hearing is acute. Tourism is not a reason.
- Educate public better about driving on shellfish beaches. Make signage for vulnerable beaches. Develop citizen observation of seal activity. I've observed seals over years heavily impacting juvenile salmon, adult salmon, forage fish.
- All equal need!
- Public outreach article series in Seattle, etc. papers. Series collect, desktop published and distributed at museums.
- Add to threats: human disturbances and persistent toxins.
- · Regarding #6: hard to see how this directly related like the underlined parts as it relates to all policies.
- #2 and #3 are the same issue.
- Take seabird strategies and apply them to marine mammals. I do not understand why the seabird strategies are so much more detailed and broad.
- It is too difficult to prioritize. Need to know more.
- Ban chasing whales by while watching companies! I call them the paparazzi of marine mammals.
- Whale watching with telescopes only!
- Regarding #2: 2-4/5 depending on method used. Regarding #5: 2 to 4, depending on educational process/alternatives. Regarding #6: incentives are difficult.
- Most people know so little that it's hard to gain public support. It is either pocketbook driven, esthetics, or leadership driven.
- Regarding #4: most -lots of public demand. Regarding #5: could do at county level.

San Juan Island

Post-It Comments

- Use county permitting power to encourage marine-friendly development.
- County education to limit and eventually eliminate pesticide and herbicide use.

(1 green dot)

County could have permits cost less if native vegetation used instead of "manicured lawn"

(2 green dots)

- Funded website to provide central core of information pertaining to marine environment in San Juan County.
- Connect more with SJC Beach Watchers. Employ them they're volunteers.

(1 green dot)

- Stop disturbance of seals and whales by tour boats.
- Limited-entry sustenance hunting harvest of seals for food and hides
- Restrict vessel approach to seal haul outs.
- Respect seal privacy.

Marine mammals (cont.)

Discussion Guide Comments

- Think about workable regulations and institutionalization of such, and how to enforce them.
- Methods to restore prey/predator balance.
- Consider near shore speed limits for boats, less than 20 knots.
- Add to threats: persistent organic pollutants from current industrial and historical sources and human disturbance on water.
- #1 and 5 should be paired.
- "The orca pods aren't seen anywhere near as frequently as they used to be. I understand people's desire to observe these tremendously handsome, spectacular creatures in the wild. I would like to see whale watching discontinued. It's an insult to surround whales every time they surface their hearing is acute tourism is not a reason."
- Educate public better about driving on shellfish beaches. Make signage for vulnerable beaches. Develop citizen observation of seal activity. "I've observed seals over the years heavily impacting juvenile salmon, adult salmon, and forage fish."
- All equal need!
- Public outreach article series in Seattle, etc. papers. Series collected, desktop published and distributed at museums.
- Additions to threats include human disturbances and persistent toxins.
- #2 and 3 are the same issue.
- Take seabird strategies and apply them to marine mammals confusing why seabirds strategies are so much more detailed and broad.
- It is too difficult to prioritize. Need to know more.
- Ban chasing whales by whale watching companies! "I call them the paparazzi of marine mammals."
- Whale watching with telescopes only!
- Regarding #2: 2-4/5 depending on method used. Regarding #5: 2 to 4, depending on educational process/alternatives. Regarding #6: incentives are difficult.
- Most people know so little that it's hard to know public support. It is either pocketbook driven, esthetics, or leadership driven. Regarding #4: most -lots of public demand. Regarding #5: could do at county level.

Lopez Island

Post-It Comments

- Work with surrounding communities/counties to support efforts to reduce toxins in the food web.
- Impose stricter regulations on vessels.
- Coordinate international consistency for marine mammal health.
- Develop a non-motorized water-travel corridor through San Juan County ordinance and state law.
- Limit noise on the water by
 - o Encouraging non-motorized recreation
 - o Having zones of non mechanized travel for "safe areas"
 - o Limiting use based on migration patterns.
- Water quality
 - o Improve water quality by limiting population and waste generation on the island
 - o Organize weekly trash (beach) pickups (not just on Earth Day).
- Educate people in urban areas about the impact of waste disposed of in the marine environment.
- Educate regional residents about plastics in the pelagic environment and their impacts on marine mammals, fish, algae and invertebrates.
- Sponsor celebrations dedicated to different issues (animals, water, etc.); celebrations that have educational elements (workshops, videos, pamphlets) as well as fun/music/story telling.
- Make it illegal to sell illegal fishing/harvesting gear.
- Ban boat-based whale watching.
- By SJC ordinance/state law, reduce noise in the submarine environment. Designate and enforce zones with no sonar, radio frequencies and marine noise.
- Create a network of community stewards to educate the public during marine activities, i.e. fishermen educating other fishermen kayakers educating other kayakers.

Marine mammals (cont.)

- Develop a systematized naturalist stewardship training institute or program certification.
- Work with marine managers and their wildlife biologists to be more sensitive to wildlife and the protection strategies and needs identified in the MSA plan.
- Champion the National Wildlife Refuge system in the islands.
- Amend legislation to allow for subsistence harvesting of seals from abundant populations.
- Expand the kayak education and leadership program (K.E.L.P.) to other island areas including south Lopez.
- Restrict all non-emergency motorized traffic to specific marine travel lanes.
- Analyze the effect of vessel exhaust fumes at the water's surface.
- Marine noise pollution is an issue.
- Put Beach Watchers on ferries to educate people on stewardship practices.
- Expand the Soundwatch program in the San Juans and elsewhere in the Salish Sea.

Discussion Guide Comments

- Allow subsistence seal harvests.
- Work with surrounding communities/counties particularly with regards to #5.
- Need strict regulations on vessels

Orcas Island

Post-It Comments

- Buy habitat, such as is being done in Oregon, prior to its destruction (preserve vs. restore).
- Strengthen local control with less top-down, more bottom-up governance.
- Develop broad educational materials for the general public.
- Write a specific education plan and identify current non-profit providers.
- Establish a "Marine Steward of the Month" program with awards and outreach. Develop the curriculum and materials to encourage involvement.
- Initiate a 10 year "buy back." End take on all species with a full inventory of species in conjunction with and prior to management for future take. Metaphor: when you find yourself in a hole, stop digging!

- Continue to educate on the water at the point of impact, i.e. land-based whale watching, kayak tours, whale watch tours, museums, schools, and churches. Maybe ferries?
- Upland storm water control and low impact development
- Educate the public. Use an environmental education non-profit to carry MRC stewardship message.
- Limited entry seal hunt for food and fur.
- Raise standard for septic systems and require inspection for proper functioning.
- Ban whale watching.
- Support and coordinate the Whale-Wise and other conservation messages among the whale watching tour guides.
- · Ban boat-based whale watching.
- Allow seal hunting.
- Teach and emphasize biology K-12.
- More international cooperation with whale watchers
- Cull harbor seal populations.
- Regarding #4: add "and kayakers."
- Would have preferred to fill this out at home for better interpretation and understanding.
- Believe only a very small percent gives a damn.
- Limited entry seal hunt for food and fur
- Ban whale watching.
- Education and outreach will increase these scores.
- Continue to educate on the water at point of impact, i.e. land based whale watching, kayak tours, wale watch tours, museums, schools, churches and maybe ferries.
- Cull harbor seal populations.
- Upland storm water control and low impact development
- Raise standard for septic systems and require inspection for proper functioning.

Discussion Guide Priority Rankings

In their discussion guides, participants ranked in order of priority the strategies associated with each of the eight topics. The point here was to learn which strategies within a particular topic were important to individual participants. Some attendees wrote in additional strategies and ranked those as well. This appendix presents one table for each topic. The table includes the rankings from all four meetings. For each strategy, the table shows how many attendees voted that strategy as having high priority, and how many voted it their #1, #2, or #3 priority. The table shows other votes, which included Xs, check marks and words such as "priority" or "yes." The table also shows that some participants used a ranking scale of 1-5. A sample discussion is shown on the following two pages.

Pacific Salmon Discussion Guide

San Juan C **Marine Env**

Taking action to preserve our marine resources

Instructions

- Visit the Pacific Salmon Listening Post to discuss salmon, threats, and strategies.
 - Tell us what you think about the draft
- a. Review the strategies on the back of this discussion guide.
- b. Answer the questions #1-5 by recording one comment per sheet. Write large so your comment can be easily read from your comments on the Post It sheets, across the room. The recorder will assist you.
- c. For question #6, tell us which strategies should be priorities – in the "priority" column number your top 3 strategies (1 to 3).
- your level of support for each strategy d. For question #7, tell us, and indicate in the "level of support" column.
 - guide to the closing session to help us prioritize the strategies for all 9 e. Bring your completed discussion

developed a draft plan to protect and restore the County's natural resources. The plan identifies threats to salmon and strategies to narine environment. The draft plan describes marine resources The San Juan County Marine Resources Committee (MRC) has to be protected and restored. Pacific Salmon are among these protect and restore these species.



A lot of work has gone into these

Photo by Mark Saunders draft strategies but we need to know what you think:

Which strategies are most important? How can they be improved? Which are most likely to gain public support? Which should be carried out first?



Photo by Jim Slocomb

Pacific Salmon Strategy Questions

- Do these strategies address identified threats to pacific salmon? Why or why not?
- What would you add to the strategies to make them better able to address the identified threats?
- What specific actions do you suggest for implementing these strategies? ო.

What other strategies would you recommend to address threats to salmon?

4.

- Which strategies would you remove? Why? 5.
- Which strategies have the highest priority? 9.
- Which strategies do you believe you and your community would be willing to support and carry out? 7.



Threats	Non-local sources of salmon I. Productine	Predation by marine mam-	ri.	Shoreline modification co (docks, bulkheads, boat im	5. pollutants	9	Polluted stormwater runoff 7. Ex	∞:	9. M (n an an an an an	10. R	II. CA	12. Barra	13. Au	
Strategies	Protect and restore forage fish spawning habitat.	Support regional herring recovery efforts.	Improve and coordinate incentives, regulation, enforcement and mitigation to better manage shoreline construction, bulkheads, docks, and anchoring.	Implement local salmon recovery plan (i.e. research to find how much salmon use the San Juan marine environment, conduct habitat protection and restoration projects, and improve hatchery and harvest management).	Connect with regional salmon protection efforts.	Minimize new bulkheads. Remove shoreline armoring (bulkheads, boat ramps, and docks) where appropriate. Educate and encourage shoreline landowners to choose soft shore treatments that do not harm the nearshore habitat.	Educate and engage citizens in the stewardship of the County's marine environment.	Provide education and outreach on the importance of nearshore habitat and best marine use/shoreline development practices to protect it.	Minimize chronic oil pollution from land and marine sources (medium spills and chronic events such as bilge pumping and fuel spills).	Reduce risk and improve response to oil spills.	County and its citizens do their part to reduce greenhouse gases. Recommend that the county plan for sea level rise and other impacts from climate change.	12. Better manage upland activities (development, stormwater runoff, wastewater, septic systems, etc.) that can harm marine habitat and water quality.	13. Additional strategies you recommend.	
Priority?														
Level of Public Support? On a scale of 1-5, 1 = least supported and 5 = most supported														

Enjoyment & Thriving Livelihoods	Islands				S	an Ju	uan l	slan	d _		Lope	ez Isl	land			Orc	as Isl	and		
Priority Ratings	14	4 Res	spon	den	ts	2	3 Res	spon	dent	ts	1	1 Res	pon	den	ts	3	5 Re	spon	den	ts
Strategies	Total who voted this a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted this a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted this a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted this a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other
Develop a vision of a San Juan County economy based on sustainable marine-based livelihoods.	6	3	1	2	0	13	4	5	2	2	3	0	1	1	1	13	5	2	0	6
2. Foster projects that engage residents in marine stewardship.	6	3	2	0	1	7	2	0	4	1	3	2	1	0	0	13	6	3	3	1
Identify and collaborate with existing marine stewardship voluntary programs.	6	4	0	1	1	5	2	1	0	2	0	0	0	0	0	16	3	7	5	1
4. Work with users, the County and port districts to develop criteria for facility sitings.	3	1	1	0	1	9	2	3	2	2	3	3	0	0	0	11	0	4	1	6
5. Work with federal, state, and tribal fishery resource managers to promote sustainability of marine resources at levels that will allow harvest.	7	2	3	1	1	11	2	4	3	2	7	2	1	3	1	19	7	1	4	7
6. Where consistent with sustainability, promote harvest opportunities in the San Juan Islands.	7	4	2	1	0	0	0	0	0	0	7	3	3	0	1	10	1	4	1	4
7. Work with groups developing watershed management plans to include effects on the marine environment in those plans.	3	2	0	0	1	1	0	0	0	1	2	0	1	1	0	10	2	1	3	4
8. Promote water quality protection through best management practices to keep toxins and pathogens out of seafood.	4	0	2	2	0	0	0	0	0	0	3	0	1	2	0	14	4	1	2	7
9. Preserve and increase public access to natural shoreline and marine views, coupled with a strong stewardship message and compatible behavior expectations.	1	1	0	0	0	0	0	0	0	0	2	0	1	1	0	12	0	3	5	4
10. Feature the work of local artist and poets, inspired by the islands' marine ecosystem, in stewardship messages.	2	1	0	0	1	2	0	0	0	2	1	0	0	1	0	9	0	0	4	5
Additional strategies																				
New good rules & regulations & enforcement of these.	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Create institutional mechanisms to give MRC & its base of local info a key role in setting sustainable fish levels.	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Cultural Traditions Priority Ratings	S		/Wal		n	S	an Ju	ıan l	Islan	d		Lope	ez Isl	land			Orca	as Isl	and	
	1.	5 res	pon	dent	s	2	3 res	pon	dent	s	9	res	one	lent:	s	3	5 res	pon	dent	s
Strategies	Total who voted this a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted this a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted this a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted this a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other
1. Continue and build upon joint tribal-community events.	5	0	0	4	1	12	3	2	5	2	4	1	1	1	1	19	7	4	2	6
2. Identify and engage key partners as active marine stewards.	10	5	1	2	2	11	2	3	5	1	5	3	1	1		19	7	2	5	5
3. Support efforts to highlight traditional marine practices.	4	1	2	0	1	14	4	3	6	1	1	1	0	0	0	10	1	2	3	4
4. Promote water quality protection through established marine practices to reduce toxins and pathogens in seafood.	10	2	4	2	2	11	5	4	1	1	8	2	4	1	1	25	5	6	6	8
5. Educate and engage seasonal and year-round residents in the stewardship of the County's marine environment.	9	3	3	2	1	15	7	3	2	3	6	0	2	4	0	29	6	9	6	8
Additional strategies																				
Recognize local cultural practices.	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
Open an office of public archaeology.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Please work aggressively for more protection from big oil spills.	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Raise environmental I.Q invite people to know the miracle of everyday more so they sense the thrill of being engaged in their environment wherever they live.	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
County-wide & local resource celebrations - a western grebe party!	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Work with tribes that have a county history.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Use beach watchers more. Connect MRC with them better.	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Encourage community gathering - story telling.	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Develop a Coast Salish Cultural Center.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Renew tribal cultural events to draw & educate locals & visitors	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0
Promote archeological record as traditional harvest/stewardship strategies.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0
Evaluate tribal crab harvest blitzes.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Restore and increase intertidal clam gardens/clam terraces at all suitable beaches. (see: John Harper - 2004-5)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0

Seabirds	S		//Wal		n	S	an J	uan l	slan	d		Lop	ez Isl	land			Orc	as Isl	and	
Priority Ratings	1	9 res	spon	dent	ts	2	7 res	pon	dent	s	1	1 res	pon	dent	S	3	4 res	pon	dent	S
Strategies	Total who voted this a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted this a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted this a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted this a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other
1. Increase prey base.	7	3	3	0	1	7	5	0	1	1	5	2	1	0	2	9	2	3	1	3
2. Protect and restore spawning habitat for forage fish.	11	4	5	1	1	8	1	5	1	1	6	3	3	0	0	19	6	2	5	6
3. Support regional herring recovery.	8	2	5	1	0	11	2	3	5	1	6	3	2	0	1	12	1	6	3	2
4. Reduce disturbance from humans.	6	1	1	2	2	3	0	0	2	1	5	1	2	2	0	11	2	3	4	2
5. Remove derelict fishing gear.	1	1	0	0	0	5	0	2	1	2	4	2	1	1	0	10	3	0	2	5
6. Reduce risk and improve response to oil spills.	6	3	1	1	1	1	0	0	1	0	2	0	1	0	1	9	3	3	0	3
7. Minimize chronic pollution from land and marine sources.	7	0	3	3	1	6	1	1	1	3	4	0	0	4	0	13	1	3	3	6
8. Reduce greenhouse gas emissions. Plan for sea level rise.	2	1	0	0	1	4	1	1	1	1	0	0	0	0	0	6	0	3	1	2
9. Educate and engage citizens in the stewardship of the County's marine environment.	9	4	0	3	2	13	7	1	2	3	1	0	0	1	0	21	10	2	6	3
Additional strategies																				
Work with beach watchers more.	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Ban dogs on all beaches & rocky shores.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0

Pacific Salmon	Shaw/Waldron Islands 13 respondents						an Ju	uan l	Islan	d		Lope	ez Isl	land			Orc	as Isl	and	
Priority Ratings	1.	3 res	pon	dent	S	2	6 res	pon	dent	s	1	1 res	pon	dent	s	3	4 res	spon	dent	s
Strategies	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other
1. Protect and restore forage fish spawning habitat.	7	4	2	0	1	18	5	6	5	2	5	1	2	1	1	17	9	2	1	5
2. Support regional herring recovery.	8	6	1	0	1	11	1	6	2	2	7	2	1	4	0	9	0	4	1	4
3. Improve and coordinate shoreline management.	3	0	0	2	1	3	0	3	0	0	1	3	1	0	0	10	2	2	4	2
4. Implement local salmon recovery plan.	3	0	2	1	0	10	5	2	2	1	8	3	1	4	0	17	4	3	5	5
5. Connect with regional salmon protection.	1	0	0	1	0	5	1	1	1	2	2	1	1	0	0	6	1	0	3	2
6. Minimize new bulkheads. Remove shoreline armoring where appropriate. Encourage soft shore treatments.	2	0	0	1	1	5	1	1	2	1	1	1	0	0	0	6	2	1	0	3
7. Educate and engage citizens in the stewardship of the County's marine environment.	7	2	4	0	1	9	4	1	1	3	0	0	0	0	0	10	3	3	1	3
8. Educate about protecting nearshore habitat.	5	1	2	2	0	6	2	1	3	0	1	0	0	1	0	10	2	2	2	4
9. Minimize chronic oil pollution from land and marine sources.	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	7	1	0	1	5
10. Reduce risk and improve response to oil spills.	1	1	0	0	0	1	0	0	1	0	0	0	0	0	0	5	0	2	0	3
11. Reduce greenhouse gas emissions. Plan for sea level rise.	1	0	0	0	1	1	0	1	0	0	0	0	0	0	0	4	1	0	2	1
12. Better manage upland activities.	5	0	2	2	1	6	3	0	2	1	2	0	2	0	0	19	0	6	7	6
Additional strategies																				
Protect our local spawning streams.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Good research has been done. Point here is to set up good regulations & enforce them.	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Severely restrict fishing - MRC & local communities determine sustainable levels not fishing industry.	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Implement citizen involvement in study and long-term monitoring of nearshore habitat	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ban all marine motors - only sailboats.	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inform and employ beach watchers.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Protect pocket estuaries.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0

Pacific Salmon	9	Shaw/Waldron Islands 13 respondents				S	an J	uan I	slan	d		Lop	ez Is	land			Orca	as Isl	and	
Priority Ratings	1	3 res	spon	den	ts	2	6 res	pon	dent	s	1	1 res	pon	dent	s	3	4 res	pon	den	ts
Strategies	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other
Additional strategies (cont.)																				
Make San Juan County a no-take of any marine species for, say, 10 years.	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Develop best management practices for land/home owners.	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Remove all dams to facilitate spawning.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Modify current fishing practice (site & method limits)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0

Rockfish, Lingcod and Greenling	Shaw/Waldron Islands 16 respondents						an Jı	uan l	Islan	d		Lope	ez Isl	land			Orca	as Isl	and	
Priority Ratings	1	6 res	pon	dent	S	2	7 res	pon	dent	s	1	2 res	pon	dent	S	3	3 res	pon	dent	:s
Strategies	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other
1. Reduce bycatch of select species	7	2	3	1	1	9	1	5	3	0	4	2	1	0	1	10	2	4	2	2
2. Suspend direct harvest of select species until recovery goals are met.	12	5	3	1	3	17	8	4	2	3	6	3	3	0	0	33	19	6	2	6
3. Educate the public about threats to rockfish, lingcod, and greenling.	12	5	4	1	2	19	8	4	5	2	8	0	2	5	1	21	7	6	3	5
4. Minimize chronic pollution from land and marine sources.	4	2	0	2	0	7	1	2	4	0	2	0	1	1	0	10	0	2	4	4
5. Reduce risk and improve response to oil spills.	1	1	0	0	0	3	0	1	1	1	2	0	1	0	1	5	0	1	2	2
6. Reduce greenhouse gas emissions. Plan for sea level rise.	1	1	0	0	0	1	0	0	1	0	0	0	0	0	0	3	0	2	0	1
7. Better manage upland activities.	6	2	0	4	0	2	2	0	0	0	7	3	2	2	0	18	1	2	11	4
8. Educate and engage citizens in the stewardship of the county's marine environment.	5	3	2	0	0	9	3	3	3	0	2	0	0	1	1	12	5	2	0	5
Additional strategies																				
Reduce non-local harvests.	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
Have large no-take zones.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Prevent over-fishing of all species.	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
Juvenile habitat restoration.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Implement milk carton idea for releasing rockfish.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0
Real regulations and new enforcements. New mechanisms to do ???	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Add bottom fish no take fish zones to WDFW San Juan Islands Marine Reserve.	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Graduated boat decal fees.	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Establish large no fishing sanctuaries to protect breeding fish stock	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Ban all spearfishing.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0

Habitat	S		/Wal		n	S	an Jı	uan l	Islan	d		Lope	z Isl	land			Orc	as Isl	and	
Priority Ratings	1		pon		S	2	7 res	pon	dent	S	1	1 res	pon	dent	s	3	6 res	spon	dent	S
Strategies	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other
1. Improve & coordinate shoreline management.	3	1	0	1	1	8	4	1	3	0	5	3	1	1	0	9	6	1	0	2
2. Better manage upland activities.	3	1	1	1	0	10	1	3	3	3	7	0	4	3	0	21	3	7	6	5
3. Improve understanding of the ecology of sea grasses.	6	2	3	1	0	9	3	2	4	0	2	0	1	1	0	10	2	3	3	2
4. Improve understanding of kelp ecology.	4	1	2	1	0	5	1	1	2	1	2	0	1	1	0	8	1	1	2	4
5. Educate about protecting nearshore habitat.	3	0	2	1	0	14	4	4	4	2	1	0	1	0	0	12	4	1	3	4
6. Promote and adopt innovative development practices	6	1	2	2	1	7	1	2	4	0	4	2	1	1	0	16	3	4	5	4
7. Implement local salmon recovery plan.	1	0	0	1	0	4	0	1	3	0	3	1	1	0	1	6	0	1	0	5
8. Coordinate with regional habitat protection.	1	0	1	0	0	6	0	1	5	0	2	0	0	2	0	4	1	0	1	2
9. Minimize new bulkheads. Remove shoreline armoring bulkheads, boatramps, & docks (where appropriate). Encourage soft shore treatments.	1	0	0	0	1	9	1	3	4	1	3	2	0	1	0	5	1	2	1	1
10. Minimize chronic pollution from land & marine sources.	6	0	3	1	2	1	0	1	0	0	2	0	0	1	1	11	1	3	3	4
11. Reduce risk & improve response to oil spills.	4	1	1	1	1	3	1	1	0	1	0	0	0	0	0	2	0	0	0	2
12. Reduce greenhouse gas emissions. Plan for sea level rise.	3	2	0	0	1	3	1	2	0	0	0	0	0	0	0	4	0	2	1	1
13. Educate & engage citizens in the stewardship of the marine environment.	5	3	2	0	0	10	6	1	0	3	1	1	0	0	0	11	7	1	1	2
Additional strategies																				
Research to determine how habitats are used and what human activities impact them.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Better control of activities to prevent over-fishing of all species.	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
Ban all marine motors.	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Boat wakes - speed - hull & vessel design - as determinant of wake damage.	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Assemble regional database of available science.	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0

Water Quality	S		/Wal		n	S	an Jı	uan l	slan	d		Lope	ez Is	land			Orc	as Isl	and	
Priority Ratings	1	1 res	pon	dent	is	2	5 res	pon	dent	s	1	1 res	pon	dent	s	3	7 res	pon	dent	s
Strategies	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other
1. Prevent pollution	8	1	5	2	0	13	4	3	4	2	5	1	1	2	1	24	11	2	4	7
2. Better manage upland activities.	7	2	2	2	1	21	4	8	5	4	9	5	2	2	0	32	6	15	5	6
3. Minimize chronic pollution from land and marine sources.	5	1	1	3	0	17	1	6	7	3	9	1	4	3	1	27	3	7	10	7
4. Improve understanding of the ecology of seagrasses.	5	1	1	2	1	11	6	1	2	2	3	1	2	0	0	14	3	3	4	4
5. Reduce risk and improve response to oil spills.	7	3	2	0	2	5	1	0	3	1	2	1	0	0	1	11	3	1	3	4
Additional strategies																				
Develop a baseline of current water quality & hydrology & update it frequently.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Support independent water quality monitoring.	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
Give landowners access to the tools to test water themselves.	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
Toxins taxes: dedicated to cleaning up impacts. For example a gas tax at marina fuel depots, added sales tax on pesticides, other adverse chemicals.	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Use marina taxes to invest in green technology locally with marina battery banks to charge electrically powered marine craft (for a charge to users) this power could be generated with solar panel banks at marinas, and gradually investing in tidal power technology.	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Set a goal that by 2020 all fossil fuel fighting, both commercial and sports, be ended in WA State. For now, initiate pilot programs with supplemental fishing, sessions open only to non fossil fuel powered craft.	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Set goal that by 2050 all refineries in western WA will be closed.	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Identify household products by brand that are least harmful, and publicize list.	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Impound rainwater.	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prohibit motorized recreational boats.	0	0	0	0	0	2	1		1		0	0	0	0	0	0	0	0	0	0

Water Quality Priority Ratings		ls	/Wa slanc	ls					Islan			Lope						as Isl		
Trionty natings	1	1 res	pon	dent	ts	2	5 res	pon	dent	S	1	1 res	pon	dent	s	3	7 res	pon	dent	S
Strategies	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other
Additional strategies (cont.)																				
Do testing of environmental samples to see what is a threat - not just to marine environment, but also human health.	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
San Juan County Septic System Plan.	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Prohibit all sewage discharge into marine waters.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
address change global warming could have on water quality	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Start to monitor for a wide range of chemicals including pesticides/herbicides/medicines and publish results widely.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Promote and facilitate public access to all shorelines in SJ Co.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0
Community testing.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Further development limited to low impact development.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0
Educate public - environmental educator in the Islands can be trained to carry stewardship and plan message - schools - non profit.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Involve students in primary research.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
No building allowed on land one meter or less above sea level (un-mandate).	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0

Marine Mammals	Islands					an Jı	uan l	Islan	d		Lope	ez Isl	land			Orc	as Isl	and		
Priority Ratings	1.	3 res	spon	dent	ts	2	7 res	pon	dent	s	1	1 res	pon	dent	is	3	7 res	pon	dent	s
Strategies	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other	Total who voted it a priority	Number 1 Priority	Number 2 Priority	Number 3 Priority	Other
1. Implement local salmon recovery plan	7	3	1	3	0	16	4	4	5	3	5	0	1	3	1	22	7	4	5	6
2. Protect and restore spawning habitat for forage fish.	11	4	5	2	0	21	4	6	7	4	6	1	4	1	0	28	10	9	3	6
3. Support regional herring recovery efforts.	8	3	1	4	0	11	1	3	5	2	6	1	1	3	1	11	1	4	1	5
4. Reduce disturbance from vessels.	5	2	1	1	1	8	3	3	1	1	6	2	2	2	0	14	2	5	1	6
5. Support efforts to reduce toxins that accumulate within the food chain.	9	3	4	2	0	18	8	4	3	3	8	5	2	0	1	19	4	2	8	5
6. Improve and coordinate shoreline management.	3	0	1	2	0	12	1	1	6	4	2	1	1	0	0	13	3	3	4	3
Additional strategies																				
Think about workable regulations & institutionalization of such, & how to enforce them.	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sustenance (for food & hides) killing of Harbor Seals.	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Education of problem issues.	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Use Beach Watchers more.	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Discontinue Salmon derbies.	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Continue to educate on the water at point of impact. (land based whale watching, kayak tours, wale watch tours, museums, schools, churches Ferries?)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Upland storm water control - low impact development.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0
Educate public - use environmental education non-profit to carry MRC stewardship message.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Limited entry seal hunt for food & fur.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Raise standard for septic systems & require inspection for proper functioning.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Ban whale watching.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0

Discussion Guide Community Support Rankings

With a 1-5 ranking, participants registered their views about which strategies would be most likely to be supported by the community. 1 indicated a low level of support and 5 a high level of support.

Enjoyment & Thriving			Sh	aw				9	San .	Jua	n				Lop	oez					Or	cas		
Livelihoods Public Support Rankings		11 R	esp	ond	ent	S		16 R	esp	ond	ent	s		6 Re	espo	nde	ents		2	27 R	esp	ond	ent	S
Strategies	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other
1. Develop a vision of a San Juan County economy based on sustainable marine-based livelihoods.	0	0	3	1	3	1	0	0	2	2	8	0	0	0	0	2	2	0	0	1	5	4	9	1
2. Foster projects that engage residents in marine stewardship.	0	0	1	1	6	0	0	0	1	3	4	0	0	0	0	0	2	0	0	3	4	3	9	0
3. Identify and collaborate with existing marine stewardship voluntary programs.	1	1	3	0	4	0	0	0	3	2	2	0	0	0	1	1	0	0	1	3	5	5	8	0
4. Work with users, the County and port districts to develop criteria for facility sitings.	0	0	2	1	3	0	1	0	4	2	2	0	0	0	1	0	2	0	2	0	7	8	4	0
5. Work with federal, state, and tribal fishery resource managers to promote sustainability of marine resources at levels that will allow harvest.	0	0	0	2	5	0	0	0	2	3	3	0	0	0	0	0	4	0	2	0	6	6	8	0
6. Where consistent with sustainability, promote harvest opportunities in the San Juan Islands.	0	1	0	1	4	0	0	0	3	0	6	0	0	0	1	0	4	0	1	1	8	3	7	0
7. Work with groups developing watershed management plans to include effects on the marine environment in those plans.	1	0	1	4	2	0	0	2	3	3	1	0	0	0	0	2	1	0	1	3	3	7	4	0
8. Promote water quality protection through best management practices to keep toxins and pathogens out of seafood.	1	1	1	2	3	0	0	0	1	4	4	0	0	0	0	1	2	0	2	1	2	4	10	0
9. Preserve and increase public access to natural shoreline and marine views, coupled with a strong stewardship message and compatible behavior expectations.	0	0	3	3	2	0	0	1	1	3	4	0	0	0	0	0	3	0	2	1	5	5	10	0
10. Feature the work of local artist and poets, inspired by the islands' marine ecosystem, in stewardship messages.	0	1	0	2	4	0	0	1	0	2	5	0	0	0	1	0	2	0	1	4	2	3	9	0
Additional strategies																								
Public wants things to work not just be ????	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Cultural Traditions Public			Sh	aw				9	an.	Juai	n				Lop	oez					Ore	cas		
Support Rankings		6 Re	espo	ond	ents		•	18 R	esp	ond	ent	s		6 Re	spo	nde	ents		2	29 R	esp	ond	ent:	s
Strategies	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other
Continue and build upon joint tribal-community events.	0	0	0	3	1	0	0	0	3	2	7	0	0	1	0	2	2	0	2	0	8	6	9	1
2. Identify and engage key partners as active marine stewards.	0	0	1	1	3	0	1	0	1	1	7	0	0	0	3	0	2	0	1	3	3	9	8	0
3. Support efforts to highlight traditional marine practices.	0	0	1	1	1	0	0	1	5	1	2	0	0	0	1	1	1	0	2	3	6	5	6	0
 Promote water quality protection through established marine practices to reduce toxins and pathogens in seafood. 	0	0	1	1	3	1	0	0	2	5	5	0	0	0	2	2	1	0	0	2	1	7	12	1
5. Educate and engage seasonal and year-round residents in the stewardship of the County's marine environment.	0	0	0	2	2	0	0	1	5	3	6	0	0	0	3	1	2	0	3	0	2	5	16	0
Additional strategies																								
Establish an economic vision that allows all cultures to be expressed, including, the culture of stewardship.	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Work with tribes that have a county history.	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Use beach watchers more. Connect MRC with them better.	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Encourage community gathering - story telling.	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Develop a Coast Salish Cultural Center.	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Teach in schools the history of Europeans strategy in Puget Sound.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Promote archeological record as traditional harves/stewardship strategies.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
More interpretative/educational efforts to promote stewardship.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Restore and increase intertidal clam gardens/clam terraces at all suitable beaches. (see: John Harper - 2004-5)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Renew tribal cultural events to draw & educate locals & visitors.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0

Seabirds Public Support			Sh							Juai					Lop							cas		
Rankings		8 R	espo	ond	ents		:	21 R	esp	ond	ent	s		6 Re	espo	onde	ents			26 R	esp	ond	ent:	
Strategies	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other
1. Increase prey base.	0	0	0	2	2	0	0	0	3	1	5	0	0	0	0	1	1	0	1	1	6	3	7	0
2. Protect and restore spawning habitat for forage fish.	0	0	1	3	2	0	0	0	3	5	6	0	0	1	1	0	1	0	0	3	3	6	10	0
3. Support regional herring recovery.	0	1	1	3	2	0	0	0	3	1	8	0	0	0	0	1	3	0	0	2	4	4	9	0
4. Reduce disturbance from humans.	0	1	2	0	2	0	1	1	5	2	0	0	0	0	2	1	2	0	2	0	7	3	6	0
5. Remove derelict fishing gear.	0	0	1	0	4	0	0	3	1	1	6	0	0	0	2	1	1	0	1	2	2	2	10	0
6. Reduce risk and improve response to oil spills.	0	0	0	3	3	0	1	2	0	5	3	0	0	0	0	0		0	0	1	4	4	10	0
7. Minimize chronic pollution from land and marine sources.	1	0	3	2	1	0	1	2	4	2	3	0	0	0	2	1	1	0	2	1	5	5	8	0
8. Reduce greenhouse gas emissions. Plan for sea level rise.	0	0	0	2	2	0	2	4	6	2	0	0	0	0	0	1	1	0	2	1	7	3	5	0
9. Educate and engage citizens in the stewardship of the County's marine environment.	0	0	1	3	3	0	0	0	2	8	6	0	0	0	0	0	2	0	1	1	4	6	12	0
Additional strategies																								
More enforcement of existing law around sea bird colonies.	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pacific Salmon Public		Shaw 8 Respondents					5	San	Jua	n				Lo	pez					Or	cas			
Support Rankings		8 R	espo	ond	ents		- 2	21 R	esp	ond	ent	s		6 Re	espo	onde	ents	;		26 R	lesp	ond	ents	5
Strategies	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other
Protect and restore forage fish spawning habitat.	0	1	1	3	3	0	0	1	2	5	5	0	0	1	1	0	2	0	0	3	3	4	6	0
2. Support regional herring recovery.	0	2	1	3	3	0	0	0	2	5	3	0	0	0	0	0	5	0	0	2	5	2	7	0
3. Improve and coordinate shoreline management.	0	3	1	2	1	0	0	2	6	1	0	0	1	1	1	0	1	0	1	1	5	8	2	0
4. Implement local salmon recovery plan.	1	0	0	5	3	0	0	0	3	2	7	0	0	0	0	1	4	0	0	3	7	2	8	0
5. Connect with regional salmon protection.	0	1	1	3	2	0	0	0	0	5	7	0	0	0	0	0	2	0	0	3	1	4	6	0
6. Minimize new bulkheads. Remove shoreline armoring where appropriate. Encourage soft shore treatments.	2	0	2	0	2	0	0	2	8	3	0	0	0	0	2	1	1	0	3	4	5	2	2	0
7. Educate and engage citizens in the stewardship of the County's marine environment.	0	0	1	1	5	0	0	0	3	5	5	0	0	0	0	0	3	0	1	1	2	4	9	0
8. Educate about protecting nearshore habitat.	0	0	1	1	3	0	0	0	3	5	5	0	0	0	1	0	3	0	1	1	2	2	12	0
9. Minimize chronic oil pollution from land and marine sources.	0	1	2	0	2	0	0	4	1	1	4	0	0	0	0	0	3	0	1	3	3	3	8	0
10. Reduce risk and improve response to oil spills.	1	0	0	1	3	0	0	3	0	1	5	0	0	0	0	0	3	0	0	3	3	2	9	0
11. Reduce greenhouse gas emissions. Plan for sea level rise.	1	2	1	1	1	0	2	2	2	3	0	0	0	0	1	0	1	0	3	1	4	6	0	0
12. Better manage upland activities.	0	1	3	2	1	0	1	2	4	2	2	0	0	1	0	1	1	0	2	1	4	3	8	0
Additional strategies																								
Note: first column what citizen supports - second column what they think general public will support.	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inform and employ beach watchers.	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Protect pocket estuaries.	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Discontinue salmon derbies.	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Develop best management practices for land/home owners.	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nationalize oil companies.	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Protect our local spawning streams.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0

Rockfish, Lingcod and			Sh	aw				9	an.	Juai	n				Lop	oez					Or	cas		
Greenling Public Support Rankings		10 R	esp	ond	ent	S	2	22 R	esp	ond	ent	S		6 Re	spo	onde	ents			24 R	lesp	onc	lent	S
Strategies	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other
1. Reduce bycatch of select species	0	1	2	2	2	1	0	3	3	2	2	0	0	0	0	1	2	0	0	2	3	5	3	0
2. Suspend direct harvest of select species until recovery goals are met.	1	2	1	1	4	1	1	4	7	2	1	0	0	1	2	1	1	0	2	2	3	5	10	0
3. Educate the public about threats to rockfish, lingcod, and greenling.	0	0	0	2	7	0	0	1	2	8	6	0	0	0	1	0	3	0	1	3	3	2	9	0
4. Minimize chronic pollution from land and marine sources.	0	0	0	4	2	0	0	1	4	1	4	0	0	0	0	1	2	0	2	4	4	6	2	0
5. Reduce risk and improve response to oil spills.	0	0	0	3	4	0	0	1	2	1	1	0	0	0	1	0	3	0	0	2	3	4	6	0
6. Reduce greenhouse gas emissions. Plan for sea level rise.	0	1	1	2	2	0	1	1	3	2	0	0	0	0	1	0	2	0	5	1	2	5	1	0
7. Better manage upland activities.	0	2	0	2	3	0	1	0	7	0	1	0	0	1	0	3	1	0	4	1	7	3	5	0
8. Educate and engage citizens in the stewardship of the county's marine environment.	0	0	3	1	4	0	0	0	1	5	4	0	0	0	0	0	4	0	1	1	2	3	8	0
Additional strategies																								
Add bottom fish no take fish zones to WDFW San Juan Islands Marine Reserve.	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Employ and inform beach watchers.	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Establish large no fishing sanctuaries to protect breeding fish stock.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Cull seal population.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Ban all spearfishing.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0

Habitat Public Support		Shaw 8 Respondents						San	Jua	n				Lo	oez					Or	cas			
Rankings		8 R	espo	ond	ents		2	21 R	esp	ond	ent	s		6 Re	espo	nd	ents			26 R	esp	onc	lents	5
Strategies	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other
In Improve & coordinate shoreline management.	1	2	2	2	1	0	1	2	8	1	2	0	0	1	1	2	0	0	1	0	7	10	3	0
2. Better manage upland activities.	0	1	2	5	0	0	1	2	6	1	2	0	0	1	1	3	0	0	1	2	6	5	7	0
3. Improve understanding of the ecology of sea grasses.	1	1	1	3	3	0	0	2	1	1	4	0	1	0	1	1	0	0	1	1	7	3	7	1
4. Improve understanding of kelp ecology.	1	0	3	1	3	0	0	1	1	4	4	0	0	0	2	1	0	0	1	1	8	4	4	1
5. Educate about protecting nearshore habitat.	0	1	1	3	3	0	0	2	3	5	6	0	0	0	0	3	1	0	2	0	4	1	12	0
6. Promote and adopt innovative development practices	0	2	3	0	3	0	1	0	2	9	0	0	0	0	0	3	2	0	0	0	4	10	7	0
7. Implement local salmon recovery plan.	0	1	1	1	5	0	0	0	3	1	5	0	0	0	0	0	3	0	1	0	4	4	8	0
8. Coordinate with regional habitat protection.	1	0	1	3	2	0	0	0	0	0	0	0	0	0	0	1	2	0	0	1	3	5	8	0
9. Minimize new bulkheads. Remove shoreline armoring bulkheads, boatramps, & docks (where appropriate). Encourage soft shore treatments.		2	1	3	1	0	2	2	6	1	0	1	1	1	0	3	0	0	3	2	10	1	1	0
10. Minimize chronic pollution from land & marine sources.	1	0	2	2	3	0	1	2	1	0	2	0	0	1	1	1	1	0	0	0	9	6	7	0
11. Reduce risk & improve response to oil spills.	0	0	2	2	4	0	3	1	0	1	3	0	0	0	1	0	2	0	1	3	2	2	9	0
12. Reduce greenhouse gas emissions. Plan for sea level rise.	0	2	2	2	2	0	2	2	3	1	0	0	0	0	1	1	1	0	0	4	5	6	2	0
13. Educate & engage citizens in the stewardship of the marine environment.	0	0	0	0	0	0	0	0	1	5	7	0	0	0	0	1	2	0	0	2	3	3	12	0
Additional strategies																								
Stop plastic use & littering.	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Moratorium on new docks.	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clear, concise regs which are easy to interpret and consistently applied.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Map out areas which shoreline facilities allowed/prohibited.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Assemble regional database of available science.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0

Water Quality Public			Sh	aw				9	an.	Jua	n				Lo	oez					Or	cas		
Support Rankings		8 R	espo	ond	ents		:	21 R	esp	ond	ent	s		6 Re	espo	nde	ents	;		26 R	esp	onc	lent:	5
Strategies	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other
1. Prevent pollution	0	2	0	1	1	0	3	0	6	7	1	0	0	0	2	2	1	0	3	2	6	7	8	0
2. Better manage upland activities.	0	2	1	0	2	0	1	3	5	5	5	0	0	1	1	4	0	0	2	1	7	5	12	0
3. Minimize chronic pollution from land and marine sources.	0	1	1	0	2	0	0	2	3	4	5	0	0	1	2	2	2	0	0	3	7	3	10	0
4. Improve understanding of the ecology of seagrasses.	1	0	1	1	2	0	0	2	3	4	3	0	1	0	1	1	0	0	1	1	5	1	12	0
5. Reduce risk and improve response to oil spills.	0	2	1	0	3	0	1	0	1	1	5	0	0	0	1	1	3	0	2	4	1	1	13	0
Additional strategies																								
Waldron - yes - most already are pretty aware and involved w/H2O in and out, as well as other stuff. In general, level of awareness about H2O in & out is pretty low. (written in column instead of numbers)	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Impound rainwater.	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Limitation on building near shoreline and size of structure - larger houses = more waste. Insure there is adequate water & septic systems away from water.	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Do testing of environmental samples to see what is a threat - not just to marine environment, but also human health.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
San Juan County Septic System Plan.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Spectrophotaner(sp?) (public access) provide results to person bringing in sample and record the data.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Prohibit motorized recreational boats.	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prohibit all sewage discharge into marine waters.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Address change global warming could have on water quality.	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Connect and employ beach watcher for help.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Start to monitor for a wide range of chemicals including pesticides/herbicides/medicines and publish results widely.	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Marine Mammals Public			Sh	aw				9	San .	Jua	n				Lo	oez					Or	cas		
Support Rankings		9 Re	espo	ond	ents		2	22 R	esp	ond	ent	s		6 Re	espo	nde	ents		:	25 R	esp	ond	ent:	S
Strategies	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other	Number 1	Number 2	Number 3	Number 4	Number 5	Other
1. Implement local salmon recovery plan	1		1	2	5	0	0	0	2	3	10	0	0	0	0	0	3	0	2	1	3	7	9	0
2. Protect and restore spawning habitat for forage fish.	0	2	2	2	2	0	0	1	4	5	4	0	1	0	0	0	1	0	2	1	7	7	7	0
3. Support regional herring recovery efforts.	0	1	2	2	2	0	0	0	3	3	3	0	0	0	1	1	3	0	3	1	7	1	6	0
4. Reduce disturbance from vessels.	0	2		3	2	0	0	4	4	1	3	0	0	1	0	3	1	0	2	4	6	3	5	0
5. Support efforts to reduce toxins that accumulate within the food chain.	2	1	2	2	2	0	0	0	1	6	7	0	0	0	1	2	3	0	2	1	6	5	6	0
6. Improve and coordinate shoreline management.	1	3	1	2	1	0	0	2	8	2	0	0	0	1	2	1	0	0	0	2	6	8	2	0
Additional strategies																								
Publish a "best practices" list of detergents, cleaners, degreasers, etc. by brand.	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sustenance (for food & hides) killing of Harbor Seals.	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Re: #3: lack of understanding. #4: both lack of understanding & resistance. GO SOUNDWATCH! #6: resistance.	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Education.	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Discontinue Salmon derbies.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0

Marine Managers' Meeting Introduction

The following appendices documents the Marine Managers Meeting. Managers of federal, tribal, state and county agencies and non-governmental organizations with stewardship responsibilities in the San Juan Islands met on May 14 and 15, 2007 to discuss the Marine Stewardship Area Plan and the results of the community workshops. Managers considered ways their agencies and organizations could collaborate in supporting strategies important to citizens. Managers ranked the plan's strategies for protection and restoration in order of priority and then discussed possible collaboration on highly ranked strategies by responding to a three-part template:

- We are doing ...
- We plan to do ...
- We need partners to do ...

Marine Managers' Strategy Polling

The following table presents the results of managers' ranking of strategies in order of priority. Each manager was given 10 green dots and three red dots with instructions to show support for a particular strategy by allocating 1-10 green dots and lack of support by allocating 1-3 red dots.

Strategy Polling

Category	#	Protection Strategies	Marine Resource(s) Protected By Strategy	Green Votes	Red Votes
Stewardship & Education	23	Foster projects that educate and engage the public (seasonal and year round residents) in marine stewardship	Enjoyment/Livelihoods, Cultural Traditions, Habitat, Water Quality, Seabirds, Salmon, Rockfish, Lingcod and Greenling	16	0
Protect Habitat	8	Better manage upland activities (development, stormwater runoff, wastewater, septic systems, etc.) that can harm marine habitat & water quality.	Habitat, Water Quality, Salmon, Rockfish, Lingcod and Greenling	12	0
Improve Public Access To Beaches	36	Preserve and increase public access to natural shorelines and marine views, coupled with a strong stewardship message and compatible behavior expectations.	Enjoyment/Livelihoods	12	10
Protect Fish	12	Reduce bycatch of select species.	Rockfish, Lingcod and Greenling	10	0
Protect Habitat	9	Improve understanding of sea grasses (such as eelgrass) & environmental conditions causing its loss to protect and restore it.	Habitat	9	0
Prevent Pollution	1	Reduce risk and improve response to oil spills.	Water Quality, Habitat, Seabirds, Salmon, Rockfish, Lingcod and Greenling	8.5	0
Protect Fish	13	Suspend direct harvest of select species until recovery goals are met.	Rockfish, Lingcod and Greenling	8	3
Stewardship & Education	26	Provide education and outreach on the importance of nearshore habitat and best marine uses/shoreline practices to protect it.	Habitat, Salmon	8	0
Protect Habitat	7	Improve and coordinate incentives, regulations, enforcement and mitigation to better manage shoreline construction, bulkheads, docks and anchoring.	Habitat, Marine Mammals	8	0
Protect the Food Web	21	Protect and restore spawning habitat for forage fish.	Seabirds, Salmon, Marine Mammals	7	0
Protect Marine Mammals	20	Reduce disturbance from vessels.	Marine Mammals	7	0
Stewardship & Education	25	Identify and collaborate with existing marine stewardship voluntary programs to coordinate marine stewardship in the County.	Enjoyment/Livelihoods	7	0
Coordination & Partnerships	29	Work with groups developing watershed management plans to include effects on the marine environment in those plans.	Enjoyment/Livelihoods	6	0
Protect Seabirds	19	Reduce disturbance from humans.	Seabirds	6	0
Coordination & Partnerships	30	Identify and engage key partners as active marine stewards.	Cultural Traditions	6	0
Coordination & Partnerships	32	Connect with regional salmon protection efforts.	Salmon, Habitat	6	0

Strategy Polling

Category	#	Protection Strategies	Marine Resource(s) Protected By Strategy	Green Votes	Red Votes
Prevent Pollution	2	Minimize chronic pollution from land and marine sources (medium spills and chronic events such as bilge pumping and fuel spills).	Water Quality, Habitat, Seabirds, Salmon, Rockfish, Lingcod and Greenling,	5.5	3
Protect Fish	15	Implement local salmon recovery plan (i.e., research to find how much salmon use the San Juan marine environment, conduct habitat protection and restoration projects, and improve hatchery and harvest management).	Salmon, Habitat, Marine Mammals	5	0
Remove Derelict Fishing Gear	38	Remove derelict fishing gear.	Seabirds, Salmon, Rockfish, Lingcod and Greenling, Marine Mammals	5	0
Prevent Pollution	3	Prevent pollution by product bans, incentives for substitutes, and better handling and disposal practices.	Water Quality	4.5	1
Address Climate Change	34	The County and its citizens do their part to reduce greenhouse gas emissions. The County plans for sea level rise and other climate change affects.	Habitat, Seabirds, Rockfish, Lingcod and Greenling, Salmon, Marine Mammals	4	9
Protect Habitat	10	Improve understanding of kelp & the environmental conditions causing its loss to protect/restore it.	Habitat	4	0
Protect Seabirds	18	Increase prey base for seabirds.	Seabirds	4	0
Coordination & Partnerships	33	Coordinate with regional habitat protection efforts.	Habitat	4	0
Stewardship & Education	27	Promote and adopt innovative development practices such as low impact development, green building, and smart growth to reduce harm to the environment.	Habitat	3	0
Protect the Food Web	22	Support regional herring recovery efforts.	Seabirds, Salmon, Marine Mammals	3	0
Coordination & Partnerships	31	Continue and build upon joint tribal- community events, such as hosting the tribal canoe groups when they pass through the San Juan Islands.	Cultural Traditions	3	0
Protect Habitat	11	Minimize new bulkheads. Remove shoreline armoring—such as bulkheads, boat ramps, and docks (where appropriate). Educate and encourage shoreline landowners to choose soft shore treatments that do not harm the nearshore habitat.	Habitat, Salmon	3	0
Protect Fish	17	Where consistent with sustainability, promote harvest opportunities in the San Juan Islands and the preservation and development of infrastructure so that as much as possible of the associated economic benefit is local.	Enjoyment/Livelihoods	2	3
Protect Fish	16	Work with federal, state, and tribal fishery resource managers to promote sustainability of marine resources at levels that will allow reliable commercial, recreational, and sustenance harvest in the San Juan Islands.	Enjoyment/Livelihoods	2	0
Prevent Pollution	4	Determine scope and nature of the water quality problem and develop implementation plan.	Water Quality	1	0

Strategy Polling

Category	#	Protection Strategies	Marine Resource(s) Protected By Strategy	Green Votes	Red Votes
Prevent Pollution	5	Promote water quality protection through best management practices to keep toxins and pathogens out of seafood.	Enjoyment/Livelihoods, Water Quality	1	0
Preserve Traditional/ Cultural	37	Support efforts to highlight traditional marine practices.	Cultural Traditions	1	0
Prevent Pollution	6	Support efforts to reduce toxins that accumulate in the food chain.	Enjoyment/Livelihoods, Cultural Traditions, Marine Mammals	0	0
Transportation	35	Work with users, the County and port districts to develop criteria for facility siting (barge landings, marinas, docks, moorings) that balance the need for marine resource infrastructure with protection of ecosystem function.	Enjoyment/Livelihoods	0	2
Stewardship & Education	28	Feature the work of local artists and poets, inspired by the islands' marine ecosystem, in stewardship messages	Enjoyment/Livelihoods	0	2
Stewardship & Education	24	Develop a vision of a San Juan County economy based on sustainable marine-based livelihodds and a communication strategy to promote this.	Enjoyment/Livelihoods	0	6
Protect Fish	14	Educate public to understand the status and threats to rockfish, lingcod, and greenling and take ownership for recovery.	Rockfish, Lingcod and Greenling	0	0

Marine Managers' Meeting Notes

The following summarizes managers' discussion and recommendations on May 14 and 15.

May 14 Round Table I Notes

- How can Tribes be assured that community-supported strategies are in line with science-supported strategies (see 5-S process workbook for documentation)? Such assurance is important for Tribes/agencies' ability to commit.
- Some threats that may be significant to agencies and Tribes did not make it to final level of serious threat in 5-S process. This group should flag these threats for MRC.
- Lack of data lending themselves to spatial analysis—we're getting there, but need help from the agencies and Tribes.
- NOAA: Turn "Be Whale-Wise" guidelines into regulations. Add as strategy to marine mammal threat.
- Education and outreach should be done in addition to, rather than "in lieu of" more rigorous management.
- Education regarding by-catch should be included in education/outreach efforts, specifically regarding seabirds, marine mammals, rockfish (WDFW).
- DNR: involved with eelgrass restoration, buoy management, creosote removal. The following are areas and examples of how the DNR is involved with partners:
 - o Runoff issues
 - o Cable crossing sitings
 - o Barge landing site approval
 - o Conservation/leasing programs
- Consider closing some bedland areas to harvesting, similar to Yellow Island salmon fishing closure example of partnering to protect/restore resources.
- Rethink concept that salmon are here because it's a healthy habitat-it may be all they have.

May 14 Round Table II Notes

- Split public access strategy into two different strategies in order to protect spawning beaches or other resource needs.
- "Increase public access" is too general. Increasing access may conflict with disturbance issues.
- Need for public access. All educational and spiritual resources are critical—balance with need for protection of resources.
- Public access doesn't necessarily conflict with environmental protection (land bank examples).
- Overall County public access plan needed. Combine agencies' resources, jurisdictions to achieve this, while preserving sensitive areas. Examples: X number of miles of shoreline/ X number of people is publicly accessible.
- List public beaches for public agencies. Pool educational outreach efforts on these, including education on which areas need restrictions and why.
- Connect public areas with trails to increase access, i.e. County Park to State Park to National Park, and etc. Example: trail to Granny's Cove whale watching area. Agencies support with money and/or politically.
- Share impact reviews regarding resources at areas proposed for public access.
- #34: red dots due to difficulty for agencies to impact greenhouse gas issues. Or not the purview of their agency; or agency can't take a stand for various reasons. Or not a good use of limited resources too much time and effort, little "bang for the buck."
- Reds #13 on suspending harvest-may waste hatchery fish, or not part of recovery plan. Conclusion: need to be specific with strategy wording. "Tease out specifics."
- Recognize that some agencies don't naturally partner on several issues.
- Suggestion to lump categories to indicate partner areas.
- Oil spill reds why? Explain concern to Carl Andersen, Ecology.
- Restoration of terrestrial habitat—needs to be emphasized in partnership discussion. Need more opportunity for public involvement and this is a good one.
- Access points—multi-use-very limited. County has responsibilities for zoning along shoreline. But responsibility for environmental issues falls to agencies.
- Include local health department in Marine Managers meetings.
- DNR endorsement of aquatic environmental reserve for Haro Strait.
- Focus impact where it exists today not "willy-nilly".

May 15 Recommendations

- Consider nominating particular aquatic reserves, such as the south end of Lopez or Haro Strait. Form a San Juan County reserve working group to nominate and propose site(s).
- MRC would like agencies/NGO's to take MSA strategies back to leadership level for their active support/assistance in implementation.
- Facilitate collaborative process for groups to advise agencies on tough issues and management actions, such as no-fishing in rockfish areas.
- MRC could act as advisory group to resource agencies.
- MRC should provide 5-S workbook to agency partners. Agencies can use it to support their own work, as well as to support MRC in proposals before County Council.
- Work together to develop and support new Critical Areas Ordinance (CAO) to provide protection to marine resources.
- MRC facilitate public participation in stewardship, via bringing in agency expertise on specific citizen-appropriate activities, to train whoever is interested.
- Review target species identified in 5-S plan.
- Connect strategies with specific programs and plans.
- Agencies review strategies and suggested partnerships; then discuss and commit to actions to achieve strategies.
- Have another "reality check" meeting of marine managers/MRC six months from now.



Opportunities for Collaboration Among Agencies and NGOs

The following list provides abbreviations of the agency names and programs used in the table *Opportunities for Collaboration*.

This list is provided as a legend for the table that follows.

Acronym	Agency	Acronym	Agency
ALEA	Aquatic Lands Enhancement Account	IOSA	Islands Oil Spill Association
BFRZ	Bottom Fish Recovery Zone	LEED	Leadership in Energy and Environmental Design
BLM	Bureau of Land Management	NPS	National Park Service
CDPD	Community Development and Planning Department	NWR	National Wildlife Refuge
DOE	Washington State Department of Ecology	PPS	People for Puget Sound
DNR	Washington State Department of Natural Resources	PWD	Public Works Department
ERPs	Enterprise Resource Planning	SJC	San Juan County
FHL	University of Washington Friday Harbor Laboratories	TNC	The Nature Conservancy
FSJ	Friends of the San Juans	USFWS	United States Fish and Wildlife Service
HPA	Hydraulic Project Approval	UW	University of Washington
IAC	Interagency Committee for Outdoor Recreation	WDFW	Washington State Department of Fish and Wildlife

Opportunities for Collaboration	We are doing:	We plan to do:	We need partners to do:
#13 Suspend Direct Harvest of Selected Species	WA State Parks Support Bottom Fish Recovery Zones around parks Education PPS Building constituency among divers, recreational boaters, scientists, etc. TNC Yellow Island Steward educating boaters and fishers on MPA status at Yellow and Low Islands MPA Petition WDFW to close salmon fishery in Yellow Island MPA (directed at rockfish bycatch)	TNC ☐ Work with co-managers and local fishing community to identify new areas as rockfish nurseries/sanctuary ☐ Work with community to mobilize on-water stewards to educate public about refuges and BFRZs	TNC ☐ Need MRC, co-managers and fishing interest to identify areas for further rockfish protection ☐ Work with MRC, Whale Watch, USPWS, NGOs to develop conservation Power Squadron
#38 Remove Derelict Fishing Gear	WDFW ✓ Maintains data base and internet report form USFWS ✓ Supporting NW Straits through permitting access to refuge islands and letters of support for grants ✓ Reporting derelict gear around our preserves	Tulalip Tribes ☐ Tribal divers train to remove derelict gear	WDFW ☐ Educate fishers and divers to report gear

Disturbance als from Ves Maring	WA State Parks tion on whale watch vessel guidelines WDFW e bird surveys stopped due to funding te (have 10 years bird distribution data)	USFWS Educate boating public to non-intrusive wildlife viewing techniques	WDFW □ Investigate the impact of recreational vessels
# 20 Red Warine Marine	USFWS ed monitoring FSJ sed vessel traffic ordinance to SJ Council TNC cting boats too close to haul-outs near eserves and NWRs	TNC Work w/ partners to develop conservation Power Squadron to educate	on marine bird foraging DNR Conservation programs (conservation leases, withdrawal, reserves)FSJ SJ County ordinance on vessel safety needs to be approved USFWS Investigate impacts of boating to seabird resource (disturbance, mortality) Work on educating using public
# 17 Promote sustainable harv and preserve ifrastructure for Selling conomic benef	WDFW ate and manage fisheries (Steve Burton 75–1311 x126) DNR rizations for marinas and other water- ident uses ish authorizations Tulalip Tribes ge fisheries	TNC Explore conservation lease of aquatic lands - partners w/shellfish growers	
bivond ⊠ Workin	regulation of upland activities to nize development impacts DNR ote cleanup and piling removal FJS ling stewardship guide to new land rs TNC ng to increase public funding for salmon ery in Puget Sound	SJC CDPD Will improve regulations with update to CAO SJC Land Bank Restore freshwater wetlands for juvenile salmon TNC Continue to identify and increase funding for salmon recovery	SJC CDPD Help with science Help identify regulatory changes Provide support in public process DNR Conservation programs (conservation leases, reserves, withdrawals) Skagit River System Cooperative We want to continue to partner with local organizations in further refining needed elements of the Salmon Recovery Plan TNC Need partners to identify good projects and advance for funding
idential of the second of the	electric vehicles g about sea level rise ging lighting to compact fluorescent BLM g my bike, kayaking grides	BLM ☐ Increase green transport in my area	SJC Land Bank Plan for change WDFW Develop list of "carbon foot print"" make up options" in marine environment BLM Share boat rides

Opportunities for Collaboration	We are doing:	We plan to do:	We need partners to do:
#36 Preserve and increase public access to natural shorelines (where appropriate) and marine views, coupled with a strong stewardship message and compatible behavior expectations	Port of Friday Harbor Promote access - beach and boat ramp, small sail boat and canoe access SJC Land Bank Acquiring private lands SJC Parks Many shoreline access properties WA State Parks Provide access Continue to look for new opportunities for new trails WDFW Survey and map black oystercatcher nests DNR ALEA grants (through IAC) Public access through lease negotiations NPS Improving trail access to park units in concert w/ Island Trails Plan BLM Improving accessibility and infrastructure to enrich visitor experience TNC Preserving but not increasing public access	SJC Land Bank Acquiring private lands BLM Seek opportunities for acquisition	SJC Parks Could use educational materials Partner to present stewardship message - evening slide shows or presentations WDFW Implement seasonal dosures where necessary Survey for birds, mammals and resources that shouldn't be disturbed DNR Acquisitions of tidelands NPS Help trails committee acquire easements and corridors BLM Need partner support to demonstrate the need for BLM participation and more public access
#8 Better manage upland activities (development, stormwater runoff, wastewater, septic systems, etc.) that can harm marine habitat and water quality	SJC CDPD ☑ Updating Critical Areas Ordinance (CAO) SJC PWD ☑ Eastsound stormwater outfall treatment SJC Parks ☑ We use no chemicals in grounds maintenance and no pesticides ☑ We scale new construction and limit impervious surfaces BLM ☑ Working on corrective trail maintenance PPS ☑ Educate and advocate for strong CAO/SMP, septic system regulations, stormwater regulations	SJC PWD Incentives for Low Impact Development WA State Parks Replace pit toilets with composting toilets BLM Work on connectivity with adjacent land owners - public/ private PPS Involvement in Puget Sound Partnership planning, SJC regulations	SJC CDPD Help us identify and understand science to guide the regulations (CAO) Identify specific regulations needed Provide support in public process SJC PWD Prioritize sensitive areas (water quality/stormwater) Public education re: water quality impacts of stormwater SJC Parks Develop waste water management and stormwater runoff BLM Identify shared interests, values, possibilities Skagit River System Cooperative We will work with SJC in the development of its revised CAO FSJ Local and state funds for outreach on stormwater PPS Coalition partners

Opportunities for Collaboration	We are doing:	We plan to do:	We need partners to do:
#26 Stewardship and Education	SJC Parks ✓ We have public facilities where education projects could be conducted (venue to post materials) SJC Land Bank ✓ Set use guidelines for our shoreline properties DNR ✓ Nearshore education ✓ Creosote cleanup BLM ✓ Working with kids, developing environmental education programs FSJ ✓ Survey and educate shoreline property owners ✓ Providing stewardship guide to new land owners	BLM Seek interpretive opportunities for more outreach PPS Alliance for Puget Sound Shorelines "Mud Up!" program	BLM Help define a cohesive, comprehensive, unified priority message
#21 Protect and restore spawning habitat for forage fish	SJC CDPD Some regulation of upland activities to minimize impacts on eelgrass and forage fish habitat SJC Land Bank Acquiring and restoring tidelands WA State Parks Creosote surveys/removal WDFW Mapping and data base (Dan Penttila 360-466-4345 surveys) DNR Creosote removal Beach cleanup of garbage BLM Creosote log inventory on Lopez USFWS Maintain clean beaches on refuge islands TNC Protecting eelgrass habitat and potential spawning beaches Protecting and managing shoreline preserves in the San Juans - specifically Waldron Island shoreline	SJC CDPD Improve development regulations DNR Habitat Conservation Plan for state aquatic lands Policy changes on leasing of docks (consistent with Shoreline Management Act) BLM Work w/ DNR to acquire/protect designated areas Broaden inventory to all of SJC FSJ Providing stewardship guide to new land owners TNC Buy and protect new shoreline preserves	SJC CDPD Summarize related science Identify regulatory changes Provide support as we take regulations through public process BLM Identify shared interests, protection values Remove logs - partner to ensure coverage USFWS Survey islands w/ potential forage fish spawning habitat for presence/absence FSJ Better coordinated review of plans by County Health, CDPD and PWD TNC Continue to get project ideas from SJC Land Bank, San Juan Preservation Trust, FSJ, agencies, citizens

Opportunities for Collaboration	We are doing:	We plan to do:	We need partners to do:
#22 Support regional herring recovery efforts	WDFW ✓ Mapping and data base (contact Steve Burton 425-775-1311 ext 126 or Curt Stich 360-466-4345) DNR ✓ Creosote removal ✓ Garbage removal FSJ ✓ Ongoing survey of priority bays in SJC ✓ Providing stewardship guide to new land owners	SJC Land Bank Restore former herring spawn area DNR Policies to address leasing of docks Habitat Conservation Plan identifies best management practices for nearshore protection	
#1 Reduce risk and improve response to oil spills	Port of Friday Harbor Support IOSA – provide moorage and many members Sell oil spill pads, educate Work with others to remove derelict vessels SJC Parks Provide IOSA w/ water access points WA State Parks Member IOSA Recruit more park staff members WDFW Oil spill response team data base Marine bird and mammal surveys (no budget now, stopped) DNR DOE Education Staging spill response equipment New mobile transfer rules Training Enforcement Bellingham staff Local contractor USFWS Maintain species use data base Review ERP BLM Working w/ IOSA PPS Work for state and federal legislation funding for year round tug to increase protection	DOE Education Enforcement Drill, train BLM Outreach more w/ IOSA USFWS Promote drills - actual and table-top PPS Lobby fed, lobby state	Get the word out Local "eyes" Respond BLM Help identifying areas which may need boom anchors and BLM participation PPS Join in

dopt ment low t, etc.	WDFW		
#27 Promote and adopt innovative development practices such as low impact development, etc.	Regulations via HPA rules (David Brock 425–775–1311) DNR Policies restrict use of creosote in overwater structures	Port of Friday Harbor □ LEED certification goal in new building DNR □ Habitat Conservation Plan will include best management practices for overwater structures	Port of Friday Harbor □ Promote green building standards in public buildings □ Support county solar initiatives
#16 Promote sustainability of marine ources at levels that will allow reliable harvest in the San Juan Islands	WDFW Seal food habitat study Marine bird and forage fish research Black oystercatcher survey and study Contact Steve Burton 425-775-1311 ext 126) DNR Mild stock geoduck harvest and management Geoduck aquaculture Clam, oyster, mussel leasing NPS Writing long-term management plan that includes nearshore environment USFWS Refuge comprehensive conservation plan TNC Work w/ MRC to develop MSA plan and strategies	TNC Work w/ MRC, San Juan Initiative, County, agencies to define goals and identify funding	NPS □ Partner with DNR to promote protection of wider marine zone
Improve understanding grasses and causes of los protect and restore them	DNR Nearshore science studies Derelict structure removal NPS Issue research permits for inventory and monitoring FSJ Ongoing survey and dialog w/ local/ state/federal seagrass experts in priority embayments TNC Eelgrass mapping around Yellow Island (contract w/ FHL)	WA State Parks ☐ Replacing moorage anchors w/ screws ☐ Establishing no-anchor zone - Sucia ☐ Monitoring eelgrass program - Sucia TNC ☐ Continue yearly surveys for three consecutive years, then go to every third year monitoring	WA State Parks ☐ Interpretive information for bulletin board

Opportunities for Collaboration	We are doing:	We plan to do:	We need partners to do:
#2 Minimize chronic pollution from land and marine sources	DNR ☑ Best management practices for marinas (pumpouts, construction) ☑ Derelict vessel removal DOE ☑ Education ☑ Response to spills ☑ Enforcement FSJ ☑ Educate shoreline property owners (see brochure)	DNR Buoy planning Reduce impacts to eelgrass from docks DOE Respond to spills Educate Enforcement	DOE ☐ Respond to complaints ☐ Educate ☐ Notify

