Inform Decisions and Improve Understanding: Public Comments Received 1/24/2011-4/29/2011

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Name

Tracy Phillips

Organization

Which Priority Objective would you like to provide comment on?

Inform Decisions and Improve Understanding

What near-term, mid-term, and long-term actions would most effectively help the Nation achieve this policy objective?

- 1) Fishermen, conservationists, environmentalists, oceanic scientists, tourists, and everyone benefits from a clean functioning ocean. These often battling people should be brought together in the near term with a shared understanding and respect for the ocean. In addition, other industry must be made to understand the importance and value of clean functioning water. We should use competition rather than punative fines and measures to force industries to stop abusing this precious need. If that doesn't work, then double the fines, even triple the fines for irresponsible practices that lead to toxic waters. This phase should begin all manner of testing, review of expertise, reports of expertise, and should build on a solid scientific foundation.
- 2) An early coalition of leaders from the above mentioned groups will lead to the most creative solutions to even the most baffling problems, such as acidification and run off. Nobody wants to eat poisoned fish, nobody wants to swim in toxic waters etc. The mid term goal should be the raising of public/industry awareness through PSAs that are created by the Council using the coalition you have formed and the solid scientific expert analysis. At this stage, some decisions would have been made and so it will be critical to release these PSAs to industries and media alike. I would not include industries who pollute as members of the council, nor any off shore drilling industries whose primary goal is to exploit oil, not the stewardship of the ocean.
- 3) The ocean is a complex living environment that abides by interconnectedness. We may not be able to stop the bleaching and death of all the coral reefs which are expected to be dead by 2030. Although we do not have those on our shores, we do have a dwindling wetland which is a protection barrier. The final stage should be the actual implementation of all plans that address the actual barrier these ecosystems provide between land and water, the planting of grasses and trees, the monitoring of acid, using trees as barrier for run off at river mouths etc.

*A scientist of oceanic studies should be the chair of this council.

What are some of the major obstacles to achieving this objective; are there opportunities this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes?

- 1) Industry is an obstacle and expect them to drown out the PSAs by several millions more \$\$\$ in an attempt to paint the council as a hostile government take over of fishing etc. The solution to that is to build a coalition of various parties who can all agree the health and prosperity of the waters is a win win for everyone. (except polluters)
- 2) This is a great opportunity to bring those who may previously have opposed one another like fisherman and environmentalists together to work for a common goal. Both groups have an interest in the health of the humans, fish, and waters. Healthy waters mean abundant fish etc.
- 3) It's a great opportunity to bring everyone on board and up to date scientifically.

What milestones and performance measures would be most useful for measuring progress toward achieving this priority objective?

- 1) Was a coalition of supporters formed?
- 2) Were the experts reports useful?
- 3) Did the experts and coalition supporters along with the council find new creative ways to redefine the shrinking coasts?
- 4) Have the trees and grasses been planted at run off sites?
- 5) Have industry polluters created new ways to handle their pollution?
- 6) Testing and developing a response to acidification and warming is complicated. We may not be able to do anything about it. You should approach the uncertainty by avoiding alarmist reactions to it. Instead embrace the challenge and use it as a competition of the best scientific minds and oceanic scientists to come up with creative ways to deal with the changes. Some of the changes could involve no longer abundant sea life. We should be realistic but not reactionary.

The major milestones and performance measures should reside in the actual results. There is a possibility that coastal regions populations will need to be relocated inside 2 decades in the lower coastal regions of the south where the wetlands are receding to the ocean.

*With an increase in violent weather and storms, the top priority should be safety of the humans. You cannot force people from their homes on the coast. But you can help them to relocate inland and then ban further rebuilding of homes in the path of imminent devastation. All people living within a few miles of any large body of water or on a flood plain will be faced with imminent devastation. As the ocean warms it brings more rain, more severe storms, longer lasting and more powerful monsoons etc. If we are to be good stewards of the ocean and other waters, perhaps we can start by being good stewards of our friends who live nearby these danger zones.

Attachment:



Name

Eileen Brinker

Organization

www.fit2c.com;

Which Priority Objective would you like to provide comment on?

Inform Decisions and Improve Understanding

What near-term, mid-term, and long-term actions would most effectively help the Nation achieve this policy objective?

start at bottom: reading comprehension currently very poor among U.S. low-mid classes.

this does NOT become rectified via information distribution by television and radio. the problem is the understanding and adequate vocabulary for the english language. in other words: you can explain WHAT you are doing or planning to do until the cows come home. but if the people don't COMPREHEND the nature of those explanations, it leaves a vulnerability for enemies to twist those understandings.

they have to have a bigger vocabulary or it's not going to work

What are some of the major obstacles to achieving this objective; are there opportunities this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes?

reading comprehension is not aided by "books that read to you" or "parents that read to you." it's aided by reading, period. the digestion of information WITHOUT other repositories to question meaning outside of context.

it is quantity, as well as quality. they need the time to read and fully grasp the language for effective communicative-reception. more funding to libraries and children's after-school/summer reading programs essential.

doing that ... yea. but you're not doing it fast enough. we are LOOSING touch with the lower class because we can't communicate with them! not good.

What milestones and performance measures would be most useful for measuring progress toward achieving this priority objective?

can do a stat study via internet social networks: percentage 'stream' messages that show english comprehension trouble. do not use a bot - has to be human-determined. that would work as a meter.

PS: on the oceans -- lost a lot of beaches anyway on west coast. much of footage is no longer usable as tides encroach. suggest strategically allowing drills where "tar on feet syndrome" won't be a factor. ca needs the money anyway.

~eebrinker 1/25/2011

Name

Lora Fleming

Organization

University of Miami

Which Priority Objective would you like to provide comment on?

Inform Decisions and Improve Understanding

What near-term, mid-term, and long-term actions would most effectively help the Nation achieve this policy objective?

I am surprised that oceans and human health (ie the impact of humans on the health of the oceans and the impact of the oceans on human health) is a) not one of the major priorities and b) almost non-existent in the entire policy. Not only are there increasing examples of negative examples of oceans and human health (including climate change, harmful algal blooms, microbial pollution of marine waters, anthropogenic chemicals in the food chain, decrease in fisheries, use of antibiotics in aquaculture and in runoff, use of pharmaceutically active products), but there are also increasing numbers of positive examples of oceans and human health (ie. drugs and other products from the seas, sentinel marine species, marine models of human disease, the Blue Gym and other interactions with the natural environment to increase exercise and decrease obesity and depression in humans, etc). This theme of oceans and human health is intelligible to general audiences and it is a policy objective that has many different targets that can be met. And many different existing agencies already have ongoing programs (NSF, NIEHS, NOAA, EPA, etc) which can be expanded and leveraged to address this area.

What are some of the major obstacles to achieving this objective; are there opportunities this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes?

What milestones and performance measures would be most useful for measuring progress toward achieving this priority objective?

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Steve Robinson

Organization

SR Productions

Which Priority Objective would you like to provide comment on?

Inform Decisions and Improve Understanding

What near-term, mid-term, and long-term actions would most effectively help the Nation achieve this policy objective?

Increased public knowledge of the actual status of fresh water resources as they relate to the ability to meet both the domestic consumption requirements of our population and the needs of fish and wildlife so fundamental to our ecosystem would, in itself, encourage conservation.

What are some of the major obstacles to achieving this objective; are there opportunities this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes?

Ignorance, empathy and misleading impressions

What milestones and performance measures would be most useful for measuring progress toward achieving this priority objective?

Using simple bar graphs, extend the point of intersection (between population growth and available water) well out into the far, far, future. Return instream flows to our rivers, e.g., let's allow the Colorado River to reach the ocean again.

Name

Philip Wheeler

Organization

Which Priority Objective would you like to provide comment on?

Inform Decisions and Improve Understanding

What near-term, mid-term, and long-term actions would most effectively help the Nation achieve this policy objective?

Re: Libya

See the Wash. Post quote below. Come on -- take a stance Mr. Obama. Quadaffi must let go. Its great that you are sending Ms. Clinton to help deal with it but YOU, Mr. Obama, need to take a strong stance for once.

What are some of the major obstacles to achieving this objective; are there opportunities this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes?

But Obama did not call for a change in Libya's autocratic government or announce specific sanctions that the United States would support to punish the country for actions that he said "violate international norms and every standard of common decency." "

What milestones and performance measures would be most useful for measuring progress toward achieving this priority objective?

Name

Gary Poyssick

Organization

The Online Fisherman, Inc.

Which Priority Objective would you like to provide comment on?

Inform Decisions and Improve Understanding

What near-term, mid-term, and long-term actions would most effectively help the Nation achieve this policy objective?

Establish Congressional Oversight hearings on Magnusson/Stevens, and investigate the role that politically active 501c3 and 501c4 organizations have had in determining regulations then carried out by any of the Fishery Management Council.

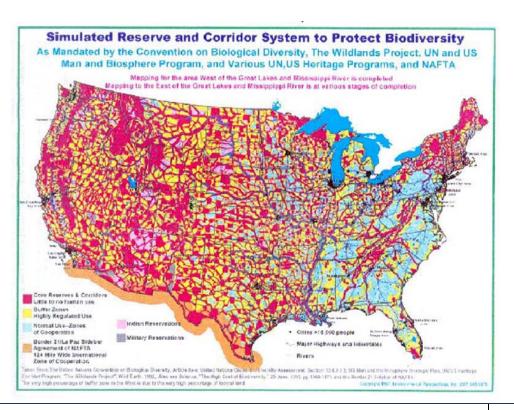
What are some of the major obstacles to achieving this objective; are there opportunities this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes?

The close and as-yet undefined relationship(s) between the EDF, PEW, TIDES, The Packard Foundation, the Ocean Conservancy, and other tax-exempt ideological globalists and our federal government.

What milestones and performance measures would be most useful for measuring progress toward achieving this priority objective?

Overturning Magnusson.

Attachment:



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phillip schrader

Organization

tax payer

Which Priority Objective would you like to provide comment on?

Inform Decisions and Improve Understanding

What near-term, mid-term, and long-term actions would most effectively help the Nation achieve this policy objective?

Asking the people who are the most knowledgable. These are the people who activly use and work on a regular basis. Proffesinal fisherman, organized clubs, People who live it.

What are some of the major obstacles to achieving this objective; are there opportunities this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes?

The MAJOR problem is scientist who do NOT consider the input and skills of the people who utilize our lakes, seas and oceans. Government policy is just that. They seem who hold people as less than dumb. They rely on lab results and tech. info. That is often misleading.

What milestones and performance measures would be most useful for measuring progress toward achieving this priority objective?

The continued involvement and results of that involvement on a quarterly basis. With a repert stating what and who locally was involved in their analysis. Government organized by picked and selected participants has seldom been successfull. These participants should be from volunteers and organizations that DO_NOT have a private agenda.

Name

Nina Hemphill

Organization

Trinity River Restoration Program

Which Priority Objective would you like to provide comment on?

Inform Decisions and Improve Understanding

What near-term, mid-term, and long-term actions would most effectively help the Nation achieve this policy objective?

I believe it is important to incorporate NFHAP implementation strategy into the strategic action plans under development for the Inform Decisions and Improve Understanding priority objective. The NFHAP has undergone substantive review and input from a wide range of stakeholders. NFHAP as a state-led partnership between state, federal, private, and NGO entities.

What are some of the major obstacles to achieving this objective; are there opportunities this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes?

Stewardship of fisheries resources across the US and its coastal waters are in need of major revision. We have a wide range of stakeholders in these resources often with conflicting views and needs. Declining fish stocks are huge concerns to coastal economies and regulatory agencies. Over harvest is difficult to address and non point pollution as well. A National policy that addresses this society, economic and cultural issues would go a long way towards a solution. The National Fish Habitat Action Plan (NFHAP) contains elements that would assist in the development of Objective 3.

What milestones and performance measures would be most useful for measuring progress toward achieving this priority objective?

The NFHAP contains useful milestones and metrics for measuring progress.

Name

Patrick Welsh

Organization

University of North Florida

Which Priority Objective would you like to provide comment on?

Inform Decisions and Improve Understanding

What near-term, mid-term, and long-term actions would most effectively help the Nation achieve this policy objective?

The best mid term and long term action is to enhance our sparse data inventory, by fully funding the IOOS regional associations and coastal

Governor's Alliances. The US Commission on Ocean Policy concluded we needed a decentralized, regional policy do to the vastly different needs of the regions. Federal Agencies (particularly NOAA) have resisted this need.

What are some of the major obstacles to achieving this objective; are there opportunities this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes?

Federal Agencies in times of tight funding will resist every effort to move funding to Regional efforts, instead they will continue to attempt to create uniform national programs...the very flaw in US Ocean Policy noted by the US Commission on Ocean Policy.

What milestones and performance measures would be most useful for measuring progress toward achieving this priority objective?

Performance Measures to prevent Agency centralization tendency:

- 1) Percent (and dollar amount) annual increase in authorized Federal funding for IOOS RAs and Coastal Governors Alliances.
- 2) Percent (& dollar) annual increase in offshore data buoys.
- 3) Percent (& dollar) annual increase in University oceanographic grants.

Name

Sarah Hays

Organization

TDW South Plains

Which Priority Objective would you like to provide comment on?

Inform Decisions and Improve Understanding

What near-term, mid-term, and long-term actions would most effectively help the Nation achieve this policy objective?

Near term, please stop deep-water off-shore oil production until the needed improvements to the implements used, including but not limited to the use of blowout preventers designed specifically for offshore operations, are in place.

Mid-term, please support replacing fossil fuel production both offshore and onshore with domestic energy production from renewable resources, such as wind power or solar power or hydropower. The environmental benefits and the reduction in national security vulnerability are significant, not to mention the positive impact on anthropogenic climate change.

Long-term, please support total remediation of all pollution generated by fossil fuel production at the expense of the corporations for all oil-and-gas-production-related damage to water, air, land, and wildlife. Our seas, skies and lands are not expendables. Fossil-fuel production puts drinking water, agricultural production, and the seas as well as land and air at risk every day; coal mine collapses destroy roads, farmlands, and kill workers around the world regularly. Gas leaks kill workers and people who live near gas fields and oil fields / pipelines as well, including one year ago today the 11 rig workers who died aboard the Deepwater Horizon. The Macondo well disaster is but one example of the damage done, the lives lost, in pursuit of an antiquated, dangerous, overpriced resource that puts us in political, ecological, and financial jeopardy.

What are some of the major obstacles to achieving this objective; are there opportunities this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes?

Major obstacle: the influence through corporate donations to political campaigns of oil-and-gas-production companies on the electoral and political operations of most of the Earth's nations.

Opportunities that could arise from outgrowing fossil fuels include more jobs that cannot be outsourced, better economic conditions around the world, pollution reduction and prevention, reduction in climate change stimulation as a result of greenhouse gases, and improved health not just of people living near refineries and wellfields or shale formations, but safer workplaces and fewer catastrophic incidents such as the BP refinery explosion in Texas City in 2005 and the Macondo well blowout in the Gulf of Mexico in 2010.

Moving into cleaner production of energy will benefit our economy by making energy available to more people at lower costs and by making energy production safer not just for the workers involved but for the neighboring communities of people, livestock, and wildlife.

What milestones and performance measures would be most useful for measuring progress toward achieving this priority objective?

Milestones:

- 1. Achieve total national energy independence from foreign oil.
- 2. Achieve compliance with national clean air and water standards.
- 3. Eliminate "brownfields" and / or Superfund sites through completion of remediation.
- 4. Eliminate wildlife casualties resulting from exposure to pollution resulting from fossil-fuel production.
- 5. Eliminate pipeline leak / explosion dangers.
- 6. Eliminate underground uncontrolled fires in mines.
- 7. Eliminate mine cave-ins.
- 8. Eliminate leaching of poisonous chemicals from "tailings" or mining processes into groundwater, surface streams or runoff.
- 9. Reduce the US national defense budget currently necessary to maintain US access to or control of foreign nations' fossil fuel resources (e.g. oilfields in Iraq, Libya, etc.)
- 10. Improve access to affordable, renewable energy worldwide.

Name

Daniel Paladino

Organization

Montana State University

Which Priority Objective would you like to provide comment on?

Inform Decisions and Improve Understanding

What near-term, mid-term, and long-term actions would most effectively help the Nation achieve this policy objective?

Educating and warning the general public about the pressing issues facing our oceans is as important as mitigating the extensive damage that has already occurred. By improving consumer awareness, the Interagency Ocean Policy Task Force can have a positive effect not only on our own coastlines, but in all the world's oceans. As one of the major purchasers and consumers of unsustainable seafood, this step, if executed correctly, has the potential to profoundly effect the highly unregulated fishing industry abroad. A near term objective would be to implement a program to monitor incoming seafood from suspect and unregulated fisheries (like those in the EU or Africa) and require the imported seafood packaging to carry a warning message to consumers. Consumers would thus be better informed about their purchasing decisions. A mid term goal would be to insure that half of the imported seafood carries this label. A long term goal would be to mandate that all imported seafood must be labelled with the status of the specie (stable, endangered, etc.) how it was caught, and its location. As education improves, an informed consumer could look at a package of frozen shrimp, examine the label information, and make their own decision about whether or not their purchase would be sustainable.

According to Professor Boris Worm, we can expect global fish stocks to collapse around 2048, if current fishing trends continue. If consumers were aware of this, they might make smarter seafood decisions. The Marine Stewardship Council has already issued an ecolabelthat certifies a seafood or ocean product as sustainable (www.msc.org). Currently, the MSC has certified over 8,000 products, helping informed consumer make the right choice. If the Interagency Ocean Policy Task Force were to strive to implement a seafood labeling program, it would be an effective way of utilizing the global influence that American consumers have on our oceans.

What are some of the major obstacles to achieving this objective; are there opportunities this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes?

According to Dr. Steve Palumbi, education and a fix for the threatened oceans needs to start at the community level. I believe education is the best way to jumpstart this process, focussing on local efforts to conserve. One of the major obstacles to educating an incredibly uninformed nation is that it is a monumental and expensive task. Implementing a mandatory requirement targeting K-12 students would be effective, but the funds to actually accomplish something like this are scarce. Perhaps by pressing for raises on import taxes on seafood that is known to be unsustainable, some funds can be raised to finance this education. Another obstacle is getting restaurants that sell seafood to get onboard with the education project. Imagine if McDonald's made the decision to sell and advertise the use of sustainable seafood in their fish sandwiches. The implications would be huge, and I hope that our nation can get to that point soon.

What milestones and performance measures would be most useful for measuring progress toward achieving this priority objective?

For education, the best indicator of success would be a survey of college students in twenty years. If the plan was successful, these students should have learned about the issues facing our oceans, and the importance of finding fixes. A failure would be a result of less than half of those polled identifying any threats to the ocean. Another milestone would be when major seafood retailers start selling more sustainable and certified seafood products than unsustainable ones.

Name

Todd Harwell

Organization

Florida Institute of Technology

Which Priority Objective would you like to provide comment on?

Inform Decisions and Improve Understanding

What near-term, mid-term, and long-term actions would most effectively help the Nation achieve this policy objective?

- Near-Term:
- Identify and prioritize the most important issues and topics that are influencing coastal zones the most in the United States. This should not be limited to those that are most apparent or immediate, but also those that will have a large and significant impact over time, such as sea level rise and climate change.
- 2. Formal and non-formal curriculum should be developed and implemented to better educate youth as well as the general public about scientific and environmental information pertaining to climate change and the current environmental state of not only the United State but also globally.
- 3. Develop and implement educational programs to be delivered in K-12 classrooms throughout the United States. Attention should be given to adhering to national and/or state science curriculum standards.
- ii. Mid-Term:
- Develop and provide a more comprehensive awareness of environmental conditions and trends, as well as human impacts and activities that affect the coastal zones. This awareness and educational information needs to be developed and presented for specific audiences in both formal and informal settings, whether it be school children, young adults, baby boomers, senior citizens, potential stakeholders, businessmen and women, blue-collar individuals, or any other demographic.
- Continued education curriculum should be delivered to more isolated audiences that are unknowledgeable of climate change.
- iii. Long-Term:
- Implement routine integrated ecosystem assessments and forecasts involving a collaborative and comprehensive approach. The assessments should include impacts related to climate change and areas of vulnerability, risks, and resiliency.
- 2. Continued delivery of formal and non-formal educational programs.

What are some of the major obstacles to achieving this objective; are there opportunities this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes?

- i. Funding to develop and introduce educational programs.
- Difficulty in reaching isolated or smaller populations that are unfamiliar with scientific evidence related to ii. climate change.

- iii. Lack of basic scientific and environmental knowledge and understanding by the general public audiences.
- iv. Gaps in linking ecosystem conditions to human health.
- Ignorance or indifference of audiences to understand the importance of coastal, marine, and Great Lakes v. health, and how these ecosystems impact human life and well-being.
- Funding and nationwide adoption of formal and informal educational programs that provide awareness of the current state of our coastal ecosystems, as well as the current work being done to improve coastal areas.

What milestones and performance measures would be most useful for measuring progress toward achieving this priority objective?

- i. Immediate implementation of the National Ocean Policy and the Nine Priority Objectives.
- Creating, delivering, and evaluating assessments related to the knowledge currently held by the public in ii. terms of coastal zone health and the impacts of global climate change.
- Creating and delivering awareness and education programs related to coastal zones and ecosystem health, tailored to specific audiences based on the previous knowledge assessments.
- Establishing a visible web-based platform for the importance and significance of the health of coastal ecosystems, and how it can be linked to human life.
- Using widespread and varied techniques to gather information related to the current state of the nations coastal zones, including new technologies of remote sensing and unmanned aerial vehicles in addition to the latest scientific data available.
- Assessing and analyzing the effectiveness of the educational programs after they have been developed and vi. delivered by distributing surveys to those who participated.
- vii. Revising educational programs and information based on assessment feedback, and delivery of new programs developed from public input.

Attachment: Attachment included in index: "Todd A. Harwell (2 pages)." Found on page 62 of document.

Name

Wayne W. Becker

Organization

Which Priority Objective would you like to provide comment on?

Inform Decisions and Improve Understanding

What near-term, mid-term, and long-term actions would most effectively help the Nation achieve this policy objective?

Effective representation of communities of interest, including provision for those arising in the future.

What are some of the major obstacles to achieving this objective; are there opportunities this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes?

Lack of concern, inability to conceptualize the future good that could come of restricted assets, inadequate communication and ineffective representation of communities of interest, including potential for other, future uses. Inability or unwillingness to weigh intangibles such as proposed actions' affects on freedom of use or inquiry into a transparent process for defining permitted actions in an ocean area.

What milestones and performance measures would be most useful for measuring progress toward achieving this priority objective?

May I recommend the attached paper:

"A Community Safety System Balancing Risk, Cost and Freedom," which summarizes a project to develop a model of such decision processes for marine application. The abstract is found here: http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=5664270.

The last two pages propose an NOC decision model.

Attachment: Attachment included in index: "Wayne Becker: 'A Community Safety System Balancing Risk, Cost and Freedom' (2 pages)." Found on page 32 of document.

Name

Michael De Luca

Organization

National estuarine Research Reserve Association

Which Priority Objective would you like to provide comment on?

Inform Decisions and Improve Understanding

What near-term, mid-term, and long-term actions would most effectively help the Nation achieve this policy objective?

In the near term, support needs to be given to EXISTING needs-based decision maker and public education programs that provide training and technical assistance to communities. This support needs to come in the form of appropriate funding to keep on-the-ground capacity necessary to engage decision makers and the public. Existing programs are known in their communities, trusted by decision makers and already understand how best to engage their audience. New programs have no capacity to hit the ground running and will instead compete for very limited funds to address the issues of the Nation.

Also in the near term, it is necessary to develop audience appropriate messaging. One message does not fit all, and not all can understand the level of detail or, alternatively, would be satisfied with less detail. Each group within the broader category of general public is interested in various aspects of these national priorities and should be addressed individually, with information they can understand, process, and then use to make decisions regarding management, policy and response to change.

In the mid-term and long-term, it will be necessary to support the actual communities through programs and grant opportunities that will provide a way for them to use the information and training provided by the programs discussed above. Communities are strapped for funds and staff, and adding new projects or priorities to their already full plates will best be achieved by monetary and staff support.

What are some of the major obstacles to achieving this objective; are there opportunities this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes?

Major obstacles are the lack of time communities have to address new topics. They need to see how these new priorities fit into what they are already doing. Both they and the programs that are working to support them are short on staff, funding, and time. These are all very real obstacles that need to be addressed, not ignored and believed to be the job of the community to overcome.

Another major obstacle is actual knowledge of the decision makers and public regarding how they can be better educated and what they already know. There is a real need to understand gaps and complete needs assessments ad knowledge assessments of the audiences. Many existing government programs skip this step in developing their program and thus are not meeting the needs of the audience. Those programs that do complete needs assessments should be used as models for future interaction with the public and information should be shared between programs to keep from overtaxing audience members with assessments.

Transformative opportunities exist if we allow programs to focus on what is important to the community, not on what is a federal priority. Communities are really are not able to address new priorities outright because they have so many other issues they are addressing, however,

program coordinators can work information on federal priorities into programs that the community has asked for or is interested in, as opposed to offering just programs on topics that are federal priorities. As a specific example, in many ways the national system is becoming climate change centric. Residents in some of the fastest growing states are faced daily with issues that threaten to degrade their natural resources, and by extension their quality-of-life. Issues like managing stormwater are today proximal and highly visible to our coastal communities; climate change is neither. If they are not dealt with effectively now the resources that form the foundation of our economy will be compromised. Climate change can be addressed within the purview of issues like stormwater, but stand alone programming on this topic will neither be effective or efficient use of funds.

What milestones and performance measures would be most useful for measuring progress toward achieving this priority objective?

In the end, the purpose of improving management and policy decisions is to improve the health of our ocean, coasts and Great Lakes. Countless studies have shown that it is difficult to measure improvements in resource health, and maintaining environmental health is many times ignored as a gauge for effective actions. One possible way to measure progress towards improved ocean, coastal and Great Lakes heath would be to focus on measuring behaviors that impact the resources. While it is important for programs to measure if they have increased knowledge, that in itself does not mean that resource health will be impacted. Rather, programs should begin measuring specific use of information and tools provided.

Another important aspect of this objective to measure is the likelihood that communities will continue using the program that is aiming to increase their knowledge. If the program is not seen as a good use of the decision maker or public's time, or if they are not interested in sharing the information they received with others, then it may be that the program is not addressing their needs and communities will not continue seeking them for help. It would be important to assess programs already functioning and meeting this objective. Many of them have examples of how their program is meeting this objective and these programs should receive continued support.

These types of performance measures are, however, something that needs to be assessed through the development and implementation of a program. It's necessary to have baseline data in order to evaluate progress. Those programs that are not presently measuring this need to seek out guidance from programs that have learned what is and is not effective in measuring change and progress.

Name

Peter Saundry

Organization

National Council for Science and the Environment

Which Priority Objective would you like to provide comment on?

Inform Decisions and Improve Understanding

What near-term, mid-term, and long-term actions would most effectively help the Nation achieve this policy objective?

In order to inform and improve management and policy decisions and the capacity to respond to change and challenges. Better educate the public through formal and informal programs about the ocean, our coasts, and the Great Lakes, the Federal Government and its agencies should:

- A. Develop a federal interagency communication and education strategy addressed to decision makers and the public.
- B. Encourage and support environmental literacy in collaboration with state and local government, NGOs, and foundations.
- Increase funding for formal and informal science education. One specific recommendation is to direct 10% C. of each relevant federal grant related to aquatic sciences for K-12 formal and informal education and outreach.
- D. Support increased NOAA efforts to ensure that the public understands the importance of oceans and coasts to their well being, particularly in urban areas where they are most vulnerable and where coastal states represent 83% of the nation's GDP.
- Ensure interoperability of existing data systems, for example, IOOS, OBIS, MMC, NAMERA, National Atlas of Ecosystem Services
- Recognize that the lack of public understanding of climate science and the role of the ocean in climate is a national security issue and that this issue is inadequately understood by the public and by decision makers. In connection to this:
- There should be an increased effort to communicate to target audiences the ocean's role in weather, climate, transportation/commerce, recreation and fishing.
- Recognize the importance of communicating the time frame of possible impacts in the perspective of 50 years and provide understanding of how societal action can impact ameliorating problems.
- iii. Improve understanding of the terminology of "tipping points" and "thresholds," and differentiate between changes that are irreversible (tipping points) and reversible (thresholds) in ecological time.
- Recognize the importance of communicating the degree of certainty associated with possible changes and iv. impacts (esp. related to "tipping points") and the "what" and "where" context of an impact on an audience (e.g., health, economic, etc.).
- Use existing authorities to enhance and expand public-private partnerships in support of education, research, monitoring and management, of protected areas.

- H. Develop an interagency online clearinghouse and community of practice for coastal adaptation information, databases, and models.
- I. Collect, evaluate, integrate, and share ocean monitoring and surveillance data that are relevant to human health, and that can be used to inform modeling and risk and economic assessments. In connection with this, determine the top 10 threats to oceans and humans and widely publicize what can be done to curtail them.
- Utilize communication and outreach tools such as citizen scientists to increase observations of biodiversity and to elevate public awareness of the importance of marine biodiversity.
- K. Emphasize programs that utilize existing protected areas to offer field experience, hands-on data collection, opportunities to gain interdisciplinary perspectives, and that contribute to time-series observations of global change.
- Emphasize greater public awareness of the importance of the remaining, intact marine ecosystems, through L. expanded management, outreach and education programs.
- Employ social media and emerging communication and data technologies to provide greater effectiveness of risk communication for health warnings, beach closures, and other events that require quick action by recipients.
- Establish an Oceans and Human Health "teach the teachers" (K -12) program, using the "AMBIENT" program as a model.
- O. BOEM should lead in coordination with other federal agencies, NGOs, private industry and pertinent state agencies, to further educate the public about the strengths and weaknesses of offshore wind as an energy source.
- Have the new BOEM systematically study and apply the environmental, economic and regulatory history of wind energy development in Europe and make this information readily available to the U.S. public.
- O. Monetize the impacts of ocean acidification.
- Increase monitoring of chemical, biological, and physical data within hatcheries, coastal waters, essential fish habitat, and open ocean (food web effects).
- Create a U.S. map of ocean acidification hotspots and use that information to guide research and marine spatial planning.

What are some of the major obstacles to achieving this objective; are there opportunities this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes?

What milestones and performance measures would be most useful for measuring progress toward achieving this priority objective?

Attachment: Attachment included in index: "Peter Saundry: National Council for Science and the Environment's 11th National Conference on Science, Policy and the Environment: Our Changing Oceans (3 pages)." Found on page 26 of document.

Name

Anne Nelson

Organization

Which Priority Objective would you like to provide comment on?

Inform Decisions and Improve Understanding

What near-term, mid-term, and long-term actions would most effectively help the Nation achieve this policy objective?

First off, thank you for all the great work towards this effort and for the opportunity to comment. For truly informed decision and improved understanding, a multi-pronged educational effort is necessary. Increase funding to develop new training capacity and expand on the expertise and program delivery of the Coastal Services Center, NERRS Coastal Training Program, Sea Grant, National Marine Sanctuary Program, regional governance partnerships (such as the West Coast Governors Agreement) and other NOAA and NGO programs. Through these programs, develop regionally relevant, comprehensive training on marine spatial planning, inclusive of a sound foundation in basics of local marine ecology, oceanography, water quality issues, development impacts and tools (green infrastructure) to lessen impacts, mechanics and impacts of wave and tidal energy, coupled with an understanding of future implications of climate change and ocean acidification. Great educational programming with follow-up programming via group webinar viewing, field trips, diverse group discussions and independent study can be delivered using time and funding resources efficiently and effectively. Provide strong multi-faceted understanding for planners, planning commissions, engineers, policy makers, commercial interests, coastal resource users (including inland dwellers who visit and spend resources at the coast.) As part of this training, develop strong partnerships with K-12 and college/universities and a train the trainers component so as to build long-lasting and flexible institutional knowledge. Use the momentum in the beginning to develop model for sustained programming with a diverse funding and delivery base.

What are some of the major obstacles to achieving this objective; are there opportunities this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes?

Funding and a strong guidance that decision makers, engineers and project planners at all levels (staff and management) should have at least a minimum (a week or several days of solid well-thought out training) to give a broad base of the ecological, economic, political and social fundamentals that are a part of every decision made in coastal development, coastal resource use (consumptive and non-consumptive), engineering projects and overall marine spatial planning. These trainings can not only inform individuals but help build multi-disciplinary working networks that can continue to inform each other and work together in the future, building an informed community along the way.

What milestones and performance measures would be most useful for measuring progress toward achieving this priority objective?

Milestones:

- * Comprehensive training program developed
- * Training program delivered to ____ % planning commissions, local government staff and management, local user groups and NGOS
- * Demonstrably effective partnerships established

*Local planning and project decision-making teams include members from the social and biological sciences
* Long-term funding source secured
*% of groups, planners, policy makers, project managers have completed training
Performance measure:
* Demonstrate how marine ecology and water quality issues informed decision making for development &/or new energy project - show alternatives analysis used in decision making process
* Partnerships developed and demonstrated result of those partnerships (innovative training module, successful delivery to wide audiences)
* Knowledge base increase after completing training
* Increase in participation in marine spatial planning process
* Increase in requests for training and/or resources to help implement water quality protection tools or studies for further understanding of biological resources in local areas

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Attachments to Comments And Letters Received Pertaining to Inform Decisions and Improve Understanding



Comments for the National Ocean Policy Strategic Action Plans from the

National Council for Science and the Environment's 11th National Conference on Science, Policy and the Environment: Our Changing Oceans

For three days in January 2011, the National Council for Science and the Environment (NCSE) convened 1,250 leaders in ocean science, policy, management and education, conservation and business to explore issues affecting the world's changing oceans. Their objectives were to advance science based decision-making on oceans by:

- 1. sharing the most current state of the science;
- 2. linking science to policy and other decisions;
- 3. communicating key messages and reframing issues;
- 4. developing targeted and actionable recommendations; and,
- 5. catalyzing long-term collaborations

Meeting participants put forth a spectrum of ideas on specific challenges facing the world's oceans. Here we present those recommendations that are germane to the National Ocean Policy process, mapped onto the nine Priority Objectives from the Final Recommendations of the Interagency Ocean Policy Task Force. Recommendations that were not targeted for the National Ocean Policy Strategic Action Plans (e.g., recommendations directed at Congress or the private sector) are not included here.

Because there is considerable overlap among these priority areas, some recommendations are included in more than one area, but we also encourage those working on individual priorities to view recommendations in related areas (for example, ecosystem-based management is very much connected with marine and spatial planning).

Because of the nature of the conference, there is considerable diversity in the types of ideas put forth research, policy, education and outreach; regional, national and international; single agency, multiagency and public-private partnerships. There is also considerable diversity in the budgetary implications of the recommendations. We recognize that the current budgetary situation places considerable constraints on the NOC process; constraints that may limit that ability of the government to implement some excellent ideas contained in this document. We ask you to be a forward looking as possible in considering the recommendations included here and "do your best."

In addition to the nine priority areas, we encourage the National Ocean Council to develop sets of crosscutting recommendations in the areas of education (including public education, and pre-professional STEM and workforce education as well as attention to diversity of those knowledgeable about the oceans) and science (inventory and monitoring, observations, and fundamental and applied research). We are concerned that without such cross-cuts, the need for a comprehensive and integrated approach to ocean and coastal education and research, is not likely to be addressed. We also encourage cross-cutting looks at particular issues such as the importance of oceans for human health and well-being and energy – both traditional (oil and gas) and alternative (wind and waves).

These recommendations are presented in spirit of constructive suggestions from the conference participants. Not all of the conference participants endorse all of the recommendations, and no recommendation should be interpreted as official input from the organizations where conference participants work. For additional information about the conference please go to www.OurChangingOceans.org.

We hope that you find this input helpful. We would be pleased to meet with the members of the National Ocean Council and your various teams and to assist in other ways.

Best wishes and success with your important work.

Margaret Leinen Conference Chair Peter Saundry
Executive Director

Priority Area 3. Inform Decisions and Improve Understanding

In order to inform and improve management and policy decisions and the capacity to respond to change and challenges. Better educate the public through formal and informal programs about the ocean, our coasts, and the Great Lakes, the Federal Government and its agencies should:

- A. Develop a federal interagency communication and education strategy addressed to decision makers and the public.
- B. Encourage and support environmental literacy in collaboration with state and local government, NGOs, and foundations.
- C. Increase funding for formal and informal science education. One specific recommendation is to direct 10% of each relevant federal grant related to aquatic sciences for K-12 formal and informal education and outreach.
- D. Support increased NOAA efforts to ensure that the public understands the importance of oceans and coasts to their well being, particularly in urban areas where they are most vulnerable and where coastal states represent 83% of the nation's GDP.
- E. Ensure interoperability of existing data systems, for example, IOOS, OBIS, MMC, NAMERA, National Atlas of Ecosystem Services
- F. Recognize that the lack of public understanding of climate science and the role of the ocean in climate is a national security issue and that this issue is inadequately understood by the public and by decision makers. In connection to this:
 - i. There should be an increased effort to communicate to target audiences the ocean's role in weather, climate, transportation/commerce, recreation and fishing.
 - ii. Recognize the importance of communicating the time frame of possible impacts in the perspective of 50 years and provide understanding of how societal action can impact ameliorating problems.

- iii. Improve understanding of the terminology of "tipping points" and "thresholds," and differentiate between changes that are irreversible (tipping points) and reversible (thresholds) in ecological time.
- iv. Recognize the importance of communicating the degree of certainty associated with possible changes and impacts (esp. related to 'tipping points') and the "what" and "where" context of an impact on an audience (e.g., health, economic, etc.).
- G. Use existing authorities to enhance and expand public-private partnerships in support of education, research, monitoring and management, of protected areas.
- H. Develop an interagency online clearinghouse and community of practice for coastal adaptation information, databases, and models.
- I. Collect, evaluate, integrate, and share ocean monitoring and surveillance data that are relevant to human health, and that can be used to inform modeling and risk and economic assessments. In connection with this, determine the top 10 threats to oceans and humans and widely publicize what can be done to curtail them.
- J. Utilize communication and outreach tools such as citizen scientists to increase observations of biodiversity and to elevate public awareness of the importance of marine biodiversity.
- K. Emphasize programs that utilize existing protected areas to offer field experience, hands-on data collection, opportunities to gain interdisciplinary perspectives, and that contribute to time-series observations of global change.
- L. Emphasize greater public awareness of the importance of the remaining, intact marine ecosystems, through expanded management, outreach and education programs.
- M. Employ social media and emerging communication and data technologies to provide greater effectiveness of risk communication for health warnings, beach closures, and other events that require quick action by recipients.
- N. Establish an Oceans and Human Health "teach the teachers" (K 12) program, using the "AMBIENT" program as a model.
- O. BOEM should lead in coordination with other federal agencies, NGOs, private industry and pertinent state agencies, to further educate the public about the strengths and weaknesses of offshore wind as an energy source.
- P. Have the new BOEM systematically study and apply the environmental, economic and regulatory history of wind energy development in Europe and make this information readily available to the U.S. public.
- Q. Monetize the impacts of ocean acidification.
- R. Increase monitoring of chemical, biological, and physical data within hatcheries, coastal waters, essential fish habitat, and open ocean (food web effects).
- S. Create a U.S. map of ocean acidification hotspots and use that information to guide research and marine spatial planning.

Objective 3: Inform Decisions and Improve Understanding: Increase knowledge to continually inform and improve management and policy decisions and the capacity to respond to change and challenges. Better educate the public through formal and informal programs about the ocean, our coasts, and the Great Lakes.

- Integrated Data Networks: Support the development of integrated data systems to inform decision-making.
- Public Awareness Campaign: Launch a national campaign to educate the public about ocean stewardship.
- K-12 Education: Sponsor and fund integration of ocean literacy principles into curriculum.

Access to the best available scientific data is crucial for sound decision making regarding our ocean and coastal resources. The three West Coast states have invested significantly in research and in tools (such as Coastal Atlases) that allow for the integration of spatially explicit data to aid in decision making. Furthermore, having a citizenry knowledgeable about the importance of the ocean to our collective well-being is critical in gaining public support for efforts to protect and manage these important resources.

As mentioned under Priority Objective 2 for CMSP, the federal government should support state and regional efforts to develop integrated data networks to inform better decision making by policy officials.

The federal government should launch a nationwide public awareness campaign to educate the public about the importance of the ocean. The federal government should consider whether the Thank You Ocean campaign in California could be a model for a nationwide campaign—we propose it is such a model.

Sponsoring and funding integration of National Science Standards and Ocean Literacy Principles, currently being developed by National Research Council and ACHIEVE, into our K-12 curriculum, is both a short- and long-term investment in our nation's future and the stewardship of our ocean and coastal resources.

3. Inform Decisions and Improve Understanding: Increase knowledge to continually inform and improve management and policy decisions and the capacity to respond to change and challenges. Better educate the public through formal and informal programs about the ocean, our coasts, and the Great Lakes.

1. What near-term, mid-term, and long-term actions would most effectively help the Nation achieve this policy objective?

Near-term actions should focus on translating the general concepts of Ecosystems-Based Management (EBM) into terms and examples to which decision makers can relate. Priorities for doing so can be related to the urgency of decision making now underway that can be improved through the use of EBM, coastal and marine spatial planning tools, and adaptive management. Examples of this include decision making related to leasing of Wind Energy Areas for alternative energy projects in the Atlantic continental shelf. The Bureau of (BOEMRE) is currently conducting such decision making and the opportunity to use such decision making as a model for how to implement EBM should not be missed. Similar opportunities for demonstrating the use of EBM and the tools that support it should be identified within each regional ocean council area.

Mid-term and long-term actions should focus on integrating EBM principles and tools into decision making at all levels of government, but especially at the state and local levels where important decisions need to be made in coming decades as to how to respond to the projected changes from climate change, including sea level rise, ocean acidification, and potentially more frequent and intense storm events.

2. What are some of the major obstacles to achieving this objective; are there opportunities this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes?

As we point out elsewhere in our public comments, the necessary infrastructure for supporting regional planning with CMSP and adaptive management tools does not appear to yet be in place, based on our experiences with attempting to use CMSP related to wind energy leasing decisions in the federal waters identified as the Massachusetts Request for Interest area.

While there may be major obstacles, there are also major opportunities for fully employing EBM and related tools, as our country faces unprecedented changes related to climate change over coming decades. At the same time, we face political and economic pressures for bringing our national debt under control. Use of EBM, and especially the decision support tools associated with it offers the opportunity to develop and select

alternatives that make the best use of limited funds for achieving EBM goals and objectives.

3. What milestones and performance measures would be most useful for measuring progress toward achieving this priority objective?

Important milestones would include those instances where the use of EBM and related tools can be documented to have made a difference in substantive decision making related to implementation of the National Ocean Policy. Performance measures should be related to measurable improvements in EBM goals and objectives, especially those related to improvements in water quality and the health of coastal ecosystems. The widespread presence of "dead zones" in coastal areas across the country shows we have major challenges and opportunities for showing progress.

A community safety system balancing risk, cost and freedom

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ABSTRACT

The primary purpose of this paper is to demonstrate that a range of proposed government actions can and often should be evaluated in a way that includes their effects on personal freedoms. This is illustrated in the case of efforts directed toward recreational boating safety in the United States, and evolves from a multi-year study to recommend the composition of an appropriate risk management system for that subject. The proposed system seeks to determine best safety/security decisions, in a way that reflects Community roles, values and resources, and that includes effects on "freedom" in the calculus of costs and benefits associated with alternative actions. Its extension to Regional Coastal and Marine Spatial Planning is discussed. There were 738 reported deaths in U.S. recreational boating accidents in 2009. There is a community interested in preventing boating accidents that includes the U. S. Coast Guard, agencies of each of the States and many localities, various non-profits and interest groups, and, of course, boaters themselves. The ethos of boating and related law are such that proponents for imposed safety measures, including boat and operator requirements and restrictions, must take into account the discretionary nature of this activity. Thus, the question, familiar in U.S. public decision-making, is how best to balance and apportion the risks, costs and changes in participant enjoyment or freedom to act connected with choices that might be made to enhance safety. This paper describes a proposed risk management system the development of which took place over a ten year period by a varied group of participants under a grant to the Marine Safety Foundation. The proposed system recognizes that any policy analysis must consider multiple objectives for different stakeholder groups. It is intentional in incorporating the views, values and resources of Community members in its analyses of proposals for safety actions. It is also intentional about incorporating - - "freedom" as a value in play, (along with the costs to different parties and changes in risk/safety that might result,) in the quantitative analysis of its choices for safety interventions. Thus, these risk management guidelines comprise a structure of values reflecting U.S. political outlook, group relational elements, analytical processes and critical characteristics of its subject. As presented in its final report, published last winter, it includes a computer-enabled process, (developed by participants from Innovative Decisions, Inc.,) to weigh changes in risk, cost and "freedom"

connected with proposed safety options. This model for an integrating framework incorporates probabilistic risk analysis, value-focused thinking for examining critical tradeoffs using multi-attribute utility analysis, and analysis of alternatives across multiple stake holders and boating classes. An in-depth analysis of the human-error causes of fatal boating accidents was also performed during the course of this project. It points out the most serious accident causes, which are seen to vary across different boat types, and provides another basis for identifying needed safety interventions. The outlook and approach developed in the course of this project are useful in a wide range of government decisions where actions intended to provide security or other aspects of the "greater good" demand a balance of rights and obligations among multiple stakeholders with different values, helping to rationalize the essential give-and-take of our political process.

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Attachments to Comments

And Letters Received

Pertaining to Inform Decisions and Improve Understanding and Other Strategic Action Plans

These comments are being submitted on behalf of the National HAB Committee – an elected group that represents the community of researchers and managers within the United States that is concerned with harmful algal blooms (HABs). HABs are now recognized as one of the many threats to public health, fisheries resources, and ecosystem health in US coastal waters. We offer the following comments to support the efforts of interagency teams working to elaborate additional actions that need to be included in national ocean policy.

The diverse nature of HAB phenomena represents a significant challenge that can be met only through strong interagency coordination. HABs thus represent an excellent opportunity for federal agencies to work together to demonstrate the power of interagency partnerships in addressing an ocean-related problem that falls within the mandates of a wide range of agencies and programs. The US HAB community has worked to develop a national program called HARRNESS (Harmful Algal Research and Response: A National Environmental Science Strategy; HARRNESS, 2005) that describes a framework of programs and activities that can lead this country forward in its efforts to forecast, prevent, control, or mitigate HABs. As detailed in HARRNESS and other reports (e.g., Dortch et al., 2008; Bauer, ed. 2006), major actions within this framework that should be undertaken by NOAA and other federal agency partners include the following:

- 1. Coordinated Research. HAB research needs are broad, and encompass the interests of multiple agencies. Basic science programs such as ECOHAB, which is currently supported predominantly by NOAA, need to be reinvigorated as interagency partnerships to develop the fundamental science underlying HABs and their impacts. Coordinated research support is also needed for more applied programs such as those focused on oceans and human health (OHH), monitoring and event response (MERHAB), and prevention, control and mitigation of HABs (PCMHAB). The science plans for these programs are established. What is needed now are coordinated interagency partnerships that lead to efficient allocation of resources to meet the needs of all relevant agencies.
- 2. Event Response. Management responses to HAB events to protect human and animal health and coastal economies usually occurs at the state and local levels. However, HAB events can occur suddenly and overwhelm existing event response capabilities, especially in the case of a newly emerging HAB problem or a large-scale or persistent event. A national HAB Event Response program is needed to improve access to existing resources through better information sharing, communication, and coordination and provide essential new resources. At the least, this would involve participation by NOAA, EPA, FDA, CDC, and several other federal agencies. Note also that current versions of the Harmful Algal Bloom and Hypoxia Research and Control Act include the need for an Event Response program, demonstrating strong Congressional interest in this topic.
- 3. Infrastructure. As HAB research and response has matured, the infrastructure needs of the community have also increased. These core requirements form the foundation upon which the science and its management applications depend. Many of the associated costs are far greater than can be borne by individual investigators or end users, and would need support from a variety of federal and state agencies. Needs include increased availability of

- analytical facilities for HAB toxins, reference and research materials, toxin standards, culture collections, tissue banks, technical training, and access to data.
- 4. Human dimensions. A NOAA-sponsored study of the human dimensions of HAB research and response identified the need for substantial investments in socioeconomic research so that communities, scientists, resource managers, and public health experts can develop and implement coordinated, effective responses to HAB events (Bauer, ed., 2006). To date, only limited efforts and few studies have been undertaken to characterize the economic costs of HABs as coastal hazards and the potential benefits of responding to those hazards with a wide array of feasible measures. Importantly, research on the human dimensions of HABs offers a model for planning and decision-making concerning coastal hazards more generally. Further research is clearly warranted to provide decision support for policy-makers, coastal managers, and other stakeholders as they weigh the trade-offs fundamental to policy and management decisions with respect to HABs.
- 5. Impact mitigation. Many opportunities exist to develop or improve strategies to reduce the impacts of HABs. A few examples include new methods for monitoring and forecasting HAB cells and toxins, maintaining safe seafood, water, and beaches to limit exposure to HABs and their toxins, preventing exposure and treating human, as well as animal, disease syndromes, assessing the socioeconomic impacts of HABs, and advancing education and outreach. This area would benefit greatly from the perspectives and experience of a range of federal agencies confronted with aquatic and terrestrial pests or weeds. A great deal can be gained through the exchange of knowledge and approaches across natural and social science disciplines and agencies. For example, much can be learned from prior research on control strategies for insects, aquatic vegetation, other pest infestations, and from bioremediation strategies used for heavy metal contamination, oil spills, and pollution events.
- 6. Operational forecasting of HABs. A specific recommendation is that NOAA be given the mandate and funding to coordinate implementation of operational monitoring/prediction networks for HABs. This should be accomplished by partnering with local/state/regional groups that have developed monitoring and forecasting programs as part of research efforts (often funded by NOAA ECOHAB, MERHAB, and PCMHAB). Successful projects can be moved to operational monitoring and forecasting systems within (e.g.) NOAA's Center for Coastal Monitoring and Assessment (CCMA). As an operational agency, NOAA is best equipped to coordinate this effort, and has already demonstrated this capability with pilot systems in the Gulf of Mexico and the Great Lakes. A nationally coordinated network, operating within NOAA's regional framework, will benefit from economies of scale and standardization of methods and products that are not achievable at the local/state level.
- 7. Improved HAB monitoring and forecasting. A promising development in ocean monitoring and forecasting is the advent of ocean observing systems arrays of moored and mobile instruments that can collect and transmit data continuously from remote locations to shore-based scientists and managers. The potential benefits from ocean observing systems are many, and improved monitoring and management of HABs is frequently cited to justify the investment of resources in these systems. However, none of the observatory systems being deployed in the US have any HAB components at present. This omission is in part

because some of the technologies needed to achieve HAB cell or toxin detection are still under development, and in part because other scientific priorities have been used in observatory siting decisions, such that available funds are being used to build and deploy instruments that are well proven for oceanographic measurements, but which do not provide the species-specific data needed for HABs. Efforts are thus needed to develop and incorporate new sensor technologies into ocean observing systems, leading to improved detection of HABs and other biological features of interest. Efforts are also needed to incorporate these data into numerical models that can be used to forecast the development, transport, and landfall of HABs in different parts of the US.

In summary, HABs represent a problem that transcends the mandate and capabilities of any single federal agency. Implementation of the actions listed above will not be easy and will require substantial financial investment. The costs to society of not addressing these needs, however, are likely much larger than the needed investments. Strong interagency coordination is needed to achieve improved mitigation, control, prevention, and education.

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Congress of the United States Washington, DC 20515

April 29, 2011

Chairwoman Nancy Sutley National Ocean Council Council on Environmental Quality 722 Jackson Place, NW. Washington, DC 20503

Director John Holdren National Ocean Council Office of Science and Technology Policy 725 17th Street NW Washington, DC 20502

Dear Chairwoman Sutley and Director Holdren,

We are writing to comment on the development of Strategic Action Plans for the nine priority objectives identified in the National Policy for the Stewardship of the Ocean, our Coasts, and the Great Lakes, established under Executive Order 13547.

The United States has exclusive environmental and economic jurisdiction over approximately 4.5 million square miles of ocean, which supports 2.3 million jobs and generates more than \$138 billion annually. It has also been projected that nearly 75 percent of the U.S. population will live in coastal counties by 2025. Given the heavy burden that we continue to place on our oceans and coasts, we commend the National Ocean Council for addressing some of the most pressing challenges to ensure healthy oceans for present and future generations.

We offer comments on the nine priority objectives, the development of strategic action plans for said objectives, and examples of opportunities, obstacles, and ways to gauge progress, as follows:

Ecosystem-Based Management

This management approach affords the opportunity to preserve and restore ecosystems to ensure that the necessary services they provide will be available now and well into the future. Ecosystem-based management should work to reveal the benefits, including recreational and aesthetic uses, as well as the hidden costs of current and future uses to ensure comprehensive management of our oceans. We cannot afford to overexploit our ocean and coastal resources and to lose ecosystem services that incur costs to society. These services, such as carbon storage or shoreline protection from wetlands, meet critical needs for humans and should be incorporated into management decisions. For example, in Washington and California, the Puget Sound Partnership and Morro Bay Ecosystem-Based Management Program, respectively, assessed tradeoffs between stakeholders and management strategies by linking ecosystem and human health through an ecosystem services based framework. In Massachusetts, the Ocean Act is structured around ecosystem services balancing the compatibility of current ocean uses and

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future needs. We encourage you to learn from these programs as you develop this Strategic Action Plan.

Coastal and Marine Spatial Planning

Effective and transparent communication regarding the use of our ocean and coastal areas is vital to coordinating and initiating coastal and marine spatial planning activities without jeopardizing existing or future marine activities. Federal, State, Territorial, Tribal, regional, and local entities must communicate efficiently with each other and the public as our reliance on ocean resources increases, and the National Ocean Policy must serve to coordinate these efforts. The Strategic Action Plan should provide specific guidance for the Regional Planning Bodies on public and stakeholder participation, including defined expectations, establishment of public advisory committees, and ongoing evaluations of the effectiveness of public and stakeholder engagement.

The Massachusetts Ocean Act, for example, established an Ocean Advisory Commission, consisting of State legislators, agency representatives, and stakeholders, and a Science Advisory Council, coordinating six agency work groups, to acquire and analyze existing data and information regarding habitat; fisheries; transportation, navigation, and infrastructure; sediment; recreation and cultural services; and renewable energy. Using this information, the State of Massachusetts was able to request a refinement of the area considered for offshore wind energy development to take into account certain areas identified as important to the fishing industry. These planning efforts were able to reduce conflict and provide certainty for the development of new off-shore energy technologies and for Massachusetts' iconic and vibrant fishing industry. Furthermore, the ability to coordinate and streamline the permitting process for such projects leads to substantial ecological, social, and economic benefits. Only through an open and transparent process will we be able to effectively address these and other pressing ocean issues, like climate change, ocean acidification, and water quality. Additionally, as the National Ocean Policy implementation process continues, it is imperative that the National Ocean Council and the involved agencies highlight examples of successful coastal and marine spatial planning efforts. There is an abundance of misinformation regarding the intention and purpose of coastal and marine spatial planning, and education is key to accomplishing the end goals.

Inform Decisions and Improve Understanding

Adaptive management requires increasing knowledge to continually improve management decisions to ensure the common goals of healthy and productive oceans alongside vibrant coastal communities. The National Estuarine Research Reserve System, including Padilla Bay, Elkhorn Slough, Narragansett Bay, and Waquoit Bay, provide excellent examples of integrating research and education to help communities develop strategies to address coastal resource issues. Specifically, the Narragansett Bay National Estuarine Research Reserve collaborates with partners to conduct coastal and estuarine research and monitoring throughout the Narragansett Bay and makes this data and related education programs and activities available to Rhode Island schools, colleges, and universities to increase public awareness and understanding of the importance of this estuary.

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Similarly, the National Estuary Program takes a collaborative, community-wide approach to protecting and restoring watershed and estuary resources. The Morro Bay National Estuary Program in California has partnered with landowners and conservation groups over a period of seven years to develop site-specific best management practices for their properties. Dedicated community members generate valuable long-term water quality data as part of the volunteer monitoring program and work with program staff and scientists at local universities and agencies to improve our understanding of the complex health of the estuary. The estuary program's education efforts range from field trips and presentations to the development of a free, public-friendly estuary center in Morro Bay. When developing this Strategic Action Plan, we encourage the council to support the development of ocean and environmental education and outreach programs, including citizen science-based research projects. Educating the public on these issues will encourage public participation in the policy decision-making process and will ultimately lead to better policy and more effective implementation.

Coordinate and Support

During these fiscally austere times, it is particularly critical that we reduce duplication and increase efficiency in governmental operations. It is imperative that this effort moves forward from the ground up relying on existing local, regional, Tribal, Territorial, and State programs and entities through a transparent process, which facilitates the direct involvement of stakeholders. Coordinating efforts in permitting processes, as an example, will provide greater clarity for permittees and will reduce time and costs for all stakeholders. The National Ocean Policy must help to coordinate these efforts without adding additional layers of management.

Regional Ecosystem Protection and Restoration

Regional ecosystem protection and restoration should be developed within a comprehensive process for defining, identifying, and evaluating areas of ecological importance. For example, through the Marine Life Protection Act, California is in the process of re-designing the state's system of Marine Protected Areas using information from regional stakeholders in the planning process. Three of the five designated regions have been completed with a process involving the public in a variety of ways including direct communication with regional stakeholder group members, attendance at workshops and public meetings, and providing input on public documents and proposals as they are developed.

Ocean, Coastal, and Great Lakes Observations, Mapping, and Infrastructure

The integration of Federal and non-Federal ocean observing systems, sensors, data collection platforms, data management, and mapping capabilities will provide authoritative, timely, and interoperable data, products, and services to address multiple needs, including for maritime safety, natural hazards mitigation, and environmental protection. This Strategic Action Plan should identify data gaps within these observing systems and additional resources to fill these gaps, expand observations, and outline a system where data is readily accessible to all stakeholders.

We appreciate the opportunity to comment on these Strategic Action Plans and to share examples from our States, which demonstrate existing and effective actions to help the Nation

Chairwoman Sutley Director Holdren April 29, 2011 Page 4

MIKE HONDA

achieve these policy objectives and ensure the balanced use of our oceans, coasts, and Great Lakes. We look forward to working with you as this process moves forward.

Sincerely,

SAM FARR CHELLIE PINGREE RUSH D. HOLT

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Chairwoman Sutley
Director Holdren
April 29, 2011
Page 5

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GREGORIO SABLAN

April 29, 2011

Ms. Nancy Sutley, Council Chair National Ocean Council White House Council on Environmental Quality

Dear Chair Sutley,

On behalf of the Northeast Regional Ocean Council (NROC), the Northeast Regional Association of Coastal and Ocean Observation Systems (NERACOOS), and the Gulf of Maine Council on the Marine Environment (GOMC), we are pleased to provide comments on the National Ocean Council Strategic Action Plans. We applaud the Council for their work to forward the development of Strategic Action Plans for the nine priority objectives, following the guidance provided by the Interagency Ocean Policy Task Force in the July 2010 document *Final Recommendations of the Interagency Ocean Policy Task Force*.

Woven through our comments on the priorities and actions is a need to address clarity and understanding of issues. This includes support for the collection of data for scientists, development of tools for decision makers, and the need to engage stakeholders. An improved understanding of our appropriate management, science or engagement roles in advancing these priorities and actions will greatly enhance our ability to succeed.

NROC, NERACOOS, and GOMC members are available to provide additional information based on our state and regional experiences and expertise.

Respectfully,

Ted Diers, State Chair

Northeast Regional Ocean Council

J. Ru. Morrison, Ph.D., Executive Director

Northeast Regional Association of Coastal & Ocean Observing Systems

Kathleen Leyden, Chair

Gulf of Maine Council of the Marine Environment

The following are combined comments from the Northeast Regional Council on the Ocean (NROC), Northeast Regional Association of Coastal and Ocean Observation Systems (NERACOOS), and Gulf of Maine Council (GOMC) on the National Ocean Council's Strategic Action Plans.

Issue Area - Ecosystem-Based Management

Objective: Adopt ecosystem-based management as a foundational principle for the comprehensive management of the ocean, our coasts, and the Great Lakes.

Actions that would most effectively help the Nation achieve this national priority objectives associated with this issue area:

Near-term:

- Identify and engage the right social and natural scientists to uncover the most relevant data and latest thinking about ecosystem services science and resilience science
- Develop an assessment of social science data gaps and needs in addition to economics

Mid-term:

- Create a suite of decision-support tools for State managers to assess trade-offs and cumulative impacts
- Provide tools to visualize user conflict scenarios such as, tools with a gaming interface
- Develop a suite of ecosystem indicators that can be used in a variety of planning contexts (current work of NCEAS working group, OHI, CI and others)

Long-term:

- Use resilience science as a conceptual framework for management and governance approaches
- Develop evaluative tools to improve messaging of policy and management goals (i.e. how does audience hear the information given and what do they do with it once they hear it, etc)
- Improve connection between regional partnerships and indicator and monitoring programs, to enable indicator measurement of ecosystem health (social and natural) at various scales

Major obstacles to achieving this objective **and opportunities** this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes:

Obstacles:

- Complexity of EBM will hamper stakeholders' capabilities to understand approach in concept and apply the approach to their management strategies
- Lack of social science on stakeholder perceptions, attitudes and behavior beyond economics (e.g. psychology, sociology, communication, etc).
- Opportunities:

- Jane Lubchenco's recent lecture at Clark University and small-group discussions centered around the dire need to engage social scientists, perhaps starting with a relationship between NOAA and Clark
- Marine InVest as a tool to analyze trade-offs
- The extent to which regional governance partnerships can engage fisheries managers in discussions could lead to more integration and perhaps in the long-term additional policy measures toward resilient fisheries.

Milestones and performance measures that would be useful for measuring progress toward achieving this priority objective:

Milestones	Performance measures
All New England States are integrating EBM components into their management strategies and policy directives	This could include many different aspects of EBM or a select few – perhaps the region needs to decide whether there are particular aspects about the EBM approach that are of higher priority than others for States to embrace
The Regional partnership has strong relationships with key social scientists that cover a variety of disciplines	# of social scientists engaged in regional meetings
Regional CMSP plans are adaptive	Performance indicators written into the Plan and discussed in the planning process

Issue Area - Inform Decisions and Improve Understanding

Objective: Increase knowledge to continually inform and improve management and policy decisions and the capacity to respond to change and challenges. Better educate the public through formal and informal programs about the ocean, our coasts, and the Great Lakes.

Actions that would most effectively help the Nation achieve this national priority objectives associated with this issue area:

Near-term:

- Develop a nationally consistent framework to capture regional priority issues and information needs through engaging with the Regional Ocean Partnerships such as NROC.
- Use the annual regional gap analysis that each IOOS region is required to perform as part of the ICOOS Act (2009) as a basis for identifying additional information capacity needed. This regional process, based on the input from the variety of regional

- scientific and technical experts, managers, and other users would provide the detail needed to ensure that the national plan(s) addresses the scale and diversity of the nation's ecosystems.
- Continue the development of a National Information Management System that ensures that diverse types and sources of information can be effectively and efficiently brought together. This needs to include geospatial, historical and realtime information and build on national efforts to develop standards. Regional scale implementation of information systems is the appropriate scale for connection to a number of management needs.

Mid-term:

- Empower regional educational collaboration through such organizations as the Northeast Ocean Sciences Education Collaborative (www.neosec.org).
- Adopt the Ocean Literacy Principles to provide a consistent framework for engaging the public in the importance of the oceans.
- Use distance learning techniques to bring the oceans to the country's interior and underserved populations.

Long-term:

 Provide sufficient funds to allow collection and delivery of regional scale ocean information to address priority needs.

Major obstacles to achieving this objective **and opportunities** this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes:

Obstacles:

- Lack of communication and cooperation between and within agencies.
- Lack of sufficient investment at appropriate scale to indentify and fill information gaps.
- Fragmentation of efforts to provide ocean and coastal information and inform the public on the importance of the oceans

Opportunities:

 Regional Ocean Partnerships provide a unique opportunity to identify information needs and the necessary communication between interested parties to fulfill these needs.

Milestones and performance measures that would be useful for measuring progress toward achieving this priority objective:

Milestones	Performance measures
Nationally consistent synthesis of regional scale information needs assessments	Gaps analysis by IOOS regional associations
Regional Observing Systems operating a specified base capacity	50% of regional information needs delivered

Issue Area - Resiliency and Adaptation to Climate Change and Ocean Acidification

Objective: Strengthen resiliency of coastal communities and marine and Great Lakes environments and their abilities to adapt to climate change impacts and ocean acidification.

Actions that would most effectively help the Nation achieve this national priority objectives associated with this issue area:

Near-term:

- Follow the recommendations of the Ocean Acidification Strategy of the National Research Council and the ORRAP Ocean Acidification Task Force regarding research and monitoring needs. The council should develop a schedule for implementation of their recommendations.
- Where possible existing observing assets operated by the IOOS Regional Associations should be used to deploy additional pH/pCO2 sensors across a representative diversity of coastal and estuarine locations, especially in areas of marine resource vulnerability (e.g., coral reefs, shellfish beds, etc.). This should build upon efforts such as those of NOAA's Pacific Marine Environmental Laboratory and regional ocean acidification plans.
- Compile information at the scale not larger than a state to identify the known changes resulting from climate changes as a means to educate the public and decrease the number of skeptics.

• Mid-term:

- Refine regional and subregional forecasts for key climate change parameters such as precipitation, sea level rise, and temperature for the use of use of different forecasts by states creates confusion for planners at all levels of government. Develop a standardized methodology for surge forecasting. In the Northeast, the U.S. Army Corps of Engineers should update the tidal flood profiles.
- NOAA/USGS should continue to provide states with data and products to hindcast and forecast rates of shoreline change (e.g., 5-year interval for generation of new mean high water shorelines).
- Develop more accurate models for flooding from storm surge.
- Continue to develop federal assessments of coastal vulnerabilities for all regions of the nation (e.g., the U.S. DOT transportation assessments) to identify storm and inundation vulnerabilities that are critical to regional economies.
- Conduct of investigations to identify offshore sand reservoirs that can be used for beach nourishment.
- Provide technical and data support for each state to identify priorities that are vulnerable sea level rise/coastal storms and identify those that are regional priorities.
- Provide adequate funding to the U.S. Army Corps of Engineers to support the survey of coastal erosion and flood control structures. NOAA/US Corps of Engineers/USGS develop models to identify how the level of protection changes with sea level rise.

Long-term:

- Provide adequate levels of funding to allow the IOOS regional associations to implement coastal hazard observing priorities.
- Support each state in the formulation of a state adaptation plan.

Major obstacles to achieving this objective:

- Obstacles:
 - Federal and state governments support post disaster response and planning but not pre-disaster planning that is need for adaptation planning.
 - New England is a home rule region but adaptation planning requires all levels of government to work together.
 - Adaptation planning requires the conduct of expensive coastal process studies to evaluate the potential impact of potential flood and erosion control solutions.

Milestones and performance measures that would be useful for measuring progress toward achieving this priority objective:

Milestones	Performance measures
Data, tools and observations	# of data, tools and observations
	developed/implemented
	# of state fact sheets about climate
	changes
	# of ocean acidification
	recommendations implemented
Vulnerability Assessments	# of state assessments
Adaptation Plans	# of state plans
	# of regional plans
	# FEMA certified communities

Issue Area: Water Quality and Sustainable Practices on Land

Objective: Enhance water quality in the ocean, along our coasts, and in the Great Lakes by promoting and implementing sustainable practices on land.

Actions that would most effectively help the Nation achieve this national priority objectives associated with this issue area:

- Near-term:
 - Reduce of NOx gases in the atmosphere which contribute to eutrophication of estuaries, embayments and near shore waters.
 - Fund stormwater retrofits of outdated systems in coastal areas. Increase funding for CWA Section 319 and CZARA 6217 funding for state programs.
 - Develop and provide consistent funding for integrated coastal monitoring networks in near shore waters under the frameworks of the National Water Quality

Monitoring Council and the Integrated Ocean Observing System that focus on locally important issues.

Mid-term:

- Improve outreach and education about sustainable land use practices via national campaigns.
- Strengthen state Coastal Zone Management Act programs' ability to work on watershed-wide water quality issues.

• Long-term:

- Align federal policy and funding to focus on sustainable development practices, limiting sprawl and decreasing the impacts of transportation-related pollution.
- Develop more cost effective water quality treatment processes, especially focused on distributed, low-maintenance systems

Major obstacles to achieving this objective **and opportunities** this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes:

Obstacles:

- Decreased funding for addressing non-point source related pollution, both CZMA
 Section 6217 and CWA Section 319 have been reduced.
- Public perceptions about the importance of water quality given competing social and economic problems.

Opportunities:

- Ability to build on existing programs such as EPA's work on nutrient pollution, MS4 permits and other NPDES activities
- Trend towards increased coordination on data sharing and management at all levels of government and academia.

Milestones and performance measures that would be useful for measuring progress toward achieving this priority objective:

Milestones	Performance measures
Decreased eutrophication in	Impaired waters
estuaries, embayments and near	BMPs installed
shore waters.	
Public is aware of importance of	Increased incorporation of BMPs in
water quality	local and state regulations; increased
	use of BMPs by homeowners and
	developers
	Public perception surveys
	Academic research on social and
	economic costs of impaired water
	quality.
Decreased trend in the amount of	Mapping of impervious surfaces by
imperviousness in coastal	coastal watershed

watersheds.	Increased use of infiltration and
	treatment technologies

Issue Area: Ocean, Coastal, and Great Lakes Observations, Mapping and Infrastructure

Objective: Strengthen and integrate Federal and non-Federal ocean observing systems, sensors, data collection platforms, data management, and mapping capabilities into a national system and integrate that system into international observation efforts.

General comment: The goal of this issue area to "Strengthen and integrate Federal and non-Federal ocean observing systems, sensors, data collection platforms, data management, and mapping capabilities into a national system and integrate that system into international observation effort" is essentially a reiteration of the purposes and intent of the Integrated Coastal Ocean Observing System Act (ICOOS) of 2009. The ICOOS act codified the United States Integrated Ocean Observing System (IOOS) as a partnership of Federal agencies (with a lead at the National Oceanic and Atmospheric Administration) and Regional Associations (RAs) to integrate Federal and non-Federal systems. IOOS provides a stakeholder driven end-to-end mechanism to supply key ocean, coastal, and Great Lakes information to meet regional and national needs including the areas of special interest. NROC, NERACOOS and GOMC have Memoranda Of Understanding to work collaboratively to address regional needs.

Actions that would most effectively help the Nation achieve this national priority objectives associated with this issue area:

Near-term:

- Endorse the full implementation of IOOS as the mechanism for achieving this goal. The NOC should work closely with the Integrated Ocean Observing Committee (IOOC), established as part of the ICOOS Act, to ensure that the IOOS program priorities align with the NOC priorities and that the limited resources are allocated in the most productive and effective manner.
- Develop a National and Regional Observation Plans. The need for observations has long been recognized; but the nation still lacks a cohesive plan that describes what observations are needed. The NOC should engage the IOOC, the IOOS Program Office, and the IOOS RAs to develop a national plan from individual regional plans for observations, modeling, mapping, and data management to fulfill user needs. This effort is already underway as part of the implementation of the ICOOS Act.
- Build off the IOOS Data Management and Communication (DMAC) and modeling systems "for the timely integration and dissemination of data and information products".

• Mid-term:

- o Commitment to achieve necessary capacity to inform areas of special interest.
- Alignment of federal activities into a single coordinated integrated ocean observing system, one federated system to inform multiple needs and mandates.
- Long-term:

 Continual evaluation of system capacity and functionality to allow adaptation to novel issues, concerns and technologies.

Major obstacles to achieving this objective **and opportunities** this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes:

- Obstacles:
 - A lack of understanding of and engagement with the IOOS program at the national level.
 - o Lack of resources for implementation of a truly effective system.
- Opportunities:
 - A national stakeholder and issue driven program with both regional and national level implementation (IOOS) exists to achieve this goal.

Milestones and performance measures that would be useful for measuring progress toward achieving this priority objective:

Milestones	Performance measures
National and Regional Observations	National and Regional Capacity
Plans	Assessments (Gaps Analysis)
Data Management Integration	Efficiency of integrating disparate
	data sets.

Participating Organizations

Alliance for a Living Ocean
American Litoral Society
Arthur Kill Coalition
Asbury Park Fishing Clab
Bayberry Garden Club
Bayshore Regional Watershed Council
Bayshore Regional Watershed Council
Bayshore Salvater Flyrodders
Belford Seafood Co-op
Belmar Fishing Club
Beneath The Sea
Bergen Save the Watershed Action Network
Berkeley Shores Homeowners Civic Association
Cape May Environmental Commission
Central Jersey Angless

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Bergen Save the Watershed Action Network
Berkeley Shores Homeowners Gric Association
Cape May Environmental Commission
Central Jersey Anglers
Citizens Conservation Council of Ocean County
Clean Air Campaign, NY
Coalition Against Toxics
Coalition for Peace & Justice / Unplug Salem
Coast Alliance
Coast Allersey Parrot Head Club
Communication Workers of America, Local 1034
Concerned Gizzens of Bensonhurst
Concerned Gizzens of GOA
Concerned Gizzens of GOA
Concerned Gizzens of Montauk
Concerned Students and Educators of COA
Eastern Monmouth Chamber of Commerce
Fisher's Island Conservancy

Eastern Monmouth Chamber of Commerce
Fishermen's Conservation Association, NJ Chapter
Fishermen's Dock Cooperative, Pr. Pleasant
Friends of Ishand Beach State Park
Ji Friends of Ishand Beach State Park
Ji Friends of Liberty State Park, NJ
Garden Club of Englewood
Garden Club of FRD Middletown
Garden Club of RFD Middletown
Garden Club of RFD Middletown
Garden Club of New Jersey
Garden Club of Short Hills
Garden Club of Swashington Valley
Garden Club of Washington Valley
Great Egg Harbor Watershed Association
Green Party of Monmouth County

Hudson River Fishermen's Association
Jersey Shore Captains Association
Jersey Shore Captains Association
Jersey Shore Parot Head Clab
Jersey Shore Running Club
Junior League of Monmouth County
Keyport Environmental Commission
Kiwanis Club of Manasquan
Kiwanis Club of Shadow Lake Village
Leonardo Party & Pleasure Boat Association
Leonardo Tax Payers Association
Main Street Wildwood
Mantoloking Environmental Commission
Marine Trades Association of NJ
Monmouth County Association of NJ
Monmouth County Association of Realtors
Monmouth County Friends of Clearwater
National Coalition for Marine Conservation
Natural Resources Protective Association
NJ Commercial Fishermen's Association
NJ Commercial Fishermen's Association
NJ Commercial Fishermen's Association
NJ Environmental Lebde-entation
NJ Environmental Federation
NJ Environmental Lebde-entation
NJ Environmental Federation

Nottingham Hunting & Fishing Club, NJ
NYC Sea Gypsies
NY State Marine Education Association
NY/NJ Baykeeper
Ocean Week Divers, NJ
PaddleOutorg
Picatinny Saltwater Sportsmen Club
Raritan Riverkeeper
Religious on Water
Riverside Driver Association
Rotary Club of Long Branch
Rotary District #7510—Interact
Saltwater Anglers of Bergen County
Saltwater Anglers of Bergen County
Save Barmegat Bay
Save Barmegat Bay
Save Barmegat Bay
Save Romenouth
Seaweeders Garden Club
Shark Research Institute
Shark River Cleanup Coaltion
Shark River Start Anglers
Shore Advenuer Club

NI Main Ship Owners Group

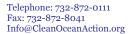
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Shore Adventure Claib
Sierra Club, NJ Shore Chapter
Sisters of Charity, Man's Stella
Sons of Ireland of Monmouth County
Soroptimist Club of Cape May County
South Jersey Dive Club
South Monmouth Board of Realtors
Staten Island Tuna Club
Strathmere Fishing & Environmental Club
Surfers' Environmental Alliance
Surfrider Foundation, Jersey Shore Chapter
TACK I, MA
Terra Nova Garden Club
Three Harbors Garden Club

Terra Nova Garden Club
Three Harbors Garden Club
Unitarian Universalist Congregation/Monm. Cnty.
United Boatmen of NY/N]
Village Garden Club
Volunteer Friends of Boaters, N]
WATERSPIRIT
Women's Club of Brick Township
Women's Club of Stoyport
Women's Club of Long Branch
Women's Club of Keychantville
Women's Club of Keychantville
Women's Glub of Spring, Lake
Women Gardeners of Ridgewood
Zen Society

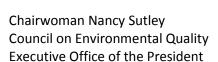
Clean Ocean Action

18 Hartshorne Drive, Suite 2 Highlands, NJ 07732



www.CleanOceanAction.org

April 29, 2011



Ocean Advocacy

Since 1984

Director John Holdren
Office of Science and Technology Policy
Executive Office of the President

Re: Comments on Strategic Action Plans for the Priority Objectives for the National Ocean Council

Dear Chairwoman Sutley and Director Holdren;

The National Ocean Council (NOC) announced its intent to prepare strategic action plans for nine priority objectives for National Ocean Policy goal implementation and solicited comments from the public on January 24, 2011. See 76 F.R. 4139. These public comments should, according to the announcement, inform the preparation of the strategic action plans. Clean Ocean Action has prepared the following comments in response to that request.

Clean Ocean Action (COA) is a regional, broad-based coalition of 125 conservation, environmental, fishing, boating, diving, student, surfing, women's, business, service, and community groups with a mission to improve the degraded water quality of the marine waters of the New Jersey/New York coast. For over 25 years, COA has been actively engaged in ocean management to ensure a vibrant, diverse, economically robust ecosystem. From successfully closing eight ocean dumpsites and thwarting offshore drilling and exploration to promoting clean beaches, citizens have worked hard to ensure a clean ocean economy. Clean Ocean Action has, in addition to this letter, signed onto two other comments for this notice, one general comment and one comment on strategy item five.

Framework

In the announcement requesting comments for the strategic action plan development phase of the National Ocean Policy Framework, the NOC requested that for each of nine priority areas, we (broadly) answer these questions:

- What near-term, mid-term, and long-term actions would most effectively help the Nation achieve this policy objective?
- What are some of the major obstacles to achieving this objective; are there opportunities this objective can further, including transformative changes in how we address the stewardship of the oceans, coasts, and Great Lakes?
- What milestones and performance measures would be most useful for measuring progress toward achieving this priority objective?

Data and Mapping

Priority areas:

- (3) Inform Decisions and Improve Understanding
- (9) Ocean, Coastal, and Great Lakes Observations, Mapping, and Infrastructure

One Action that needs to be taken immediately is an across-the-board expansion of data collection—we simply do not know enough about many parts and aspects of the ocean environment, and we don't know enough about the industries that are operating within this environment. This broad data collection initiative should be done in an environmentally-unobtrusive manner. Furthermore, ecosystem and socioeconomic data should not be used to inform only a select few researchers or institutions, but should be available to all agencies and institutions and should be publically accessible.

The NOC should undertake an assessment of the state of the science in each "area" of the ocean and attempt to coordinate research to systematically fill gaps in knowledge, eliminate redundant research projects, and encourage more ecosystem-wide studies. Part of this initiative should be to develop, again for each marine area, one clearinghouse of coastal and ocean knowledge where methodologies, research projects, and data can all be accessed by any interested individual. Regional monitoring programs that have long-term funding are needed – especially for areas such as the Mid-Atlantic Bight which currently lacks a comprehensive regional program.

Obstacles to sharing data and informing decisions are plentiful, but not unresolvable. First, data collected by one agency or institution (the EPA, for example), may be in a form that doesn't comport with the needs of local decision-makers or state agencies. Second, collection methods that one agency uses may not be, by regulation, guidance, or policy, "admitted" by other agencies. Third, priorities in data collection vary by program and geographic location. Fourth, different research methods and tools may be used by different researchers. Fifth, technological and methodological innovation can result in differences within the same type of data collected over time – in other words, trends and time series might not mean that situations are changing, just that we've learned how to better measure a variable.

These challenges, and more, can be addressed through data collection standardization. If all agencies at all levels of government are working from the same methods documents and datasheets, we will improve our collective understanding of the state of our marine ecosystems. However, the process of data standardization needs to integrate some flexibility in order to avoid stifling innovation in scientific research.

Another impediment to informing decisions and improving mapping, infrastructure, and ecosystem understanding is the disconnect between the lay-public and expert scientists. Politics and communication play an important role in the implementation of the National Ocean Policy; if the public cannot understand why they need to protect these ecosystems, regional ocean managers will face an uphill battle in trying to convince people otherwise.

Many aspects of the National Ocean Policy itself (including associated frameworks, regulations, and policies) are not written in an easily-understandable form for public education. The NOC should try to distill and re-frame its mission and the steps it will be taking into a message easily transmitted to the public. Regulations and policies developed as a result of this process should also be communicated in "plain" English.

Coordination and the Decision-Making Processes

Priority areas:

- (1) Ecosystem-Based Management (EBM)
- (2) Coastal and Marine Spatial Planning (CMSP)

Actions that immediately need to be taken include data collection and information dissemination. EBM and CMSP implementation will (and should) rely heavily on baseline studies, pilot programs, and cumulative impact analyses. No decisions should be made to approve new uses of the coastal and ocean zone (including Outer Continental Shelf energy production, exploration, or siting), or to affect existing uses, without these pre-planning studies and research projects. The NOC should also advocate for legislation and regulations to prohibit programs from allowing ecological harm to the ocean – all too often discretion is given, under the guise of flexibility, to damage resources.

Aside from data collection and research studies, the NOC should also take immediate steps to require that EBM principles and policies are implemented across the nation in land use, environmental, and energy decisions. Decisions are now being made, daily, which should take EBM and scientific knowledge into account but do not. From stormwater permits to development plans and mitigation banks, incorporating understanding of ecosystems is critical to prevent and minimize impacts from actions taken.

While a top-down approach to managing the ocean and coastal zone (which is much of what the NOC will be doing) is needed, so too is a bottom-up approach. Requiring regular, sustained inclusion of the interested public at all stages of the process leads to stronger, more resilient plans and policies by identifying conflicts, providing knowledge about issues/problems present at all scales (national, regional and local) and allowing for the development of common solutions that lead to public support and ownership of policies, programs and activities. Getting the public to "buy in" to a policy developed from the top down is often not successful. Instead, the best public policies start from the grass-roots up. The interested public must "be in" on policy development early at the most local level, often and sustained, including regular and continuous communication and dialogue. Ultimately, determinations regarding appropriate ocean uses, allocation of space and resources, and protection of those resources will be based on societal choice. Public support for the preservation and protection of environmental resources is based on their understanding of environmental issues and their active role in developing management solutions. Therefore, the development and implementation of a National Policy must continue to include an explicit requirement for robust and ongoing public participation.

Obstacles may arise in implementing EBM and CMSP where the NOC tries to make ocean maps and use-plans without a truly comprehensive understanding of the ecosystem, where local managers make decisions that do not comport with the needs of the ecosystem, where state-by-state goals and uses are not aligned, and where there is not public support for the "hard" decisions that will need to be made. To overcome these obstacles, science and communication are key – especially where there are social and economic pressures that conflict with ecosystem needs or where there are overlapping and contradictory governance systems.

Implementing a National Ocean Policy

Priority areas:

- (5) Resiliency and Adaptation to Climate Change and Ocean Acidification
- (6) Regional Ecosystem Protection and Restoration
- (7) Water Quality and Sustainable Practices on Land

Action that needs to be taken by the NOC include empowering localities to make politically challenging decisions on coastal watershed uses and plans and developing toolkits and funding sources to enable coastal managers to encourage that these tough decisions are environmentally protective. Adaptation, resiliency, and sustainable practices, for ocean and coastal ecosystem management, tend to require local efforts more than national efforts. One major problem that towns and counties run into when, for example, they try to preserve wetlands, limit development in flood zones, de-harden coastlines, track pollution and sewage sources, or fix and upgrade water and wastewater infrastructure, is a lack of financial and technical support. Citizens need to be informed that adaption will mean accepting the loss of land due to sea level in certain areas. Data standardization, public disclosure, and inter-agency collaboration and coordination can all be conditions to financial and technical NOC support for these local programs – doing so would tie local actions to the NOC's national strategy and allow all stakeholders to play a part in protecting, restoring, and adapting coastal ecosystems.

Obstacles for each of these priority areas (resilient coasts, ecosystems, and water quality) arise because most of these require local and state-level agencies expand their permitting, enforcing, monitoring, and regulating departments and may also require regulatory changes. The NOC can (and should) develop model programs and guidance for local and regional regulators, but many of the changes needed under these program areas can only be accomplished by local action. Local action, in turn, requires a renewed nation-wide investment in environmental programs – something the NOC must make a priority.

Conclusions

In general, regarding the NOC strategy for implementing the National Ocean Policy, Clean Ocean Action opposes regional governance systems that lack a public connection, accountability, and meaningful involvement in decision-making. Most of the decisions that will be required by the NOC's plans depend on public support, so the NOC needs to ensure there is public accountability and involvement in actual, implementation and regulatory decisions – not just for purposes like this comment solicitation (public comment on strategy development). Along this vein, citizens, states, and regions have already begun ocean policy changes – and the NOC should inventory, analyze, and work within the goals these planners and managers have set for their own ecosystems.

As the NOC moves to develop strategies for National Ocean Policy implementation, priority should be given to (1) building a robust system of data standardization and dissemination, and (2) funding regional clearinghouses of information and policy discussion. The NOC should refrain from making conclusions as to coast-wide "use" maps or CMSP systems until baseline studies and ecological performance indices can be developed. Finally, because most of the changes called for in the National Ocean Policy will rely on local support and local change, the NOC should work, at state and federal levels, to secure more funding and support for local environmental programs – from enforcement to planning and research.

Sincerely,

Cindy Zipf Executive Director Sean Dixon
Coastal Policy Attorney

Heather Saffert, Ph.D. Staff Scientist

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April 29, 2011

National Ocean Council Nancy Sutley, Co-Chair Dr. John P. Holdren, Co-Chair Washington, DC 20503

Dear Ms. Sutley and Dr. Holdren:

As the nation's largest organization of recreational boaters, with over one-half a million members nationwide, BoatU.S., the Boat Owners Association of The United States, appreciates the opportunity to comment on National Ocean Council's strategic action plans. Recreational boating is a significant contributor to our nation's economy and society. It supported \$30.4 billion of economic activity in 2010 and nearly 300,000 jobs. Boating is one of the most popular outdoor family activities with 75 million participants last year and can be a key element in achieving the objectives of the America's Great Outdoors initiative.

We have reviewed the Council's nine priority objectives and are pleased to provide our views on some of the proposed actions.

1. Ecosystem-Based Management: Adopt ecosystem-based management as a foundational principle for the comprehensive management of the ocean, our coasts, and the Great Lakes.

Management actions must consider current uses as their starting point. While it is laudable to take a holistic approach to management of marine resources, it must be recognized that there are many long-standing stakeholders who will want to see tangible benefits from policy prescriptions. Management actions undertaken to implement ecosystem-based management must be based in firm science coupled with public input from those stakeholder most affected. Such actions must receive periodic reviews of their effectiveness from both a socio-economic and scientific perspective with timely reports to stakeholders and the public.

Any actions undertaken in pursuit of this goal must guarantee public access to marine resources for both consumptive and non-consumptive uses. For any ecosystem-based management policy prescriptions to achieve support from the boating public will require as few restrictions as possible on how they currently enjoy their boating activities.

Participation rates in the various recreational boating activities would provide a gauge of the impact of new management practices. Thoughtful use of consumer surveys, market research and public data such as boat registration and fishing licenses sales could provide valuable insight to inform regional planning efforts.

A particularly tangible measure of participation in boating and fishing is revenue generated for the Sport Fish Restoration and Boating Trust Fund (SFRBTF), long supported by the boating and angling communities. These funds are generated by taxes placed on fishing tackle and equipment, motorboat fuel, imported boats and fishing equipment, and small engines. These funds are then directly used to support a myriad of aquatic resources conservation programs, boating access and infrastructure, and aquatic education programs.

2. Coastal and Marine Spatial Planning: Implement comprehensive, integrated, ecosystem-based coastal and marine spatial planning and management in the United States.

Maine spatial plans should reflect a bias for shared use of resources among a wide range of stakeholders. While certain user groups may seek to create exclusive use areas (security zones, no-take areas, energy extraction, etc...) marine spatial plans must be based on the premises that our oceans, lakes and rivers are held in common by all citizens. The development of these plans must provide ample opportunity for recreational boating stakeholder input. It should also be noted that the full range of recreational users should be consulted, not just one "recreational" representative i.e. beach-goers would not represent the interests of power-boaters particularly well.

In order for CMSP to receive recreational boating stakeholder support the benefits of such activities must be clearly articulated. Without a clear understanding of what CMSP is and is not, boaters will likely draw the conclusion that such planning is only being undertaken to exclude them from large areas to which they currently have access or in some ill-define objective of "protection."

3. Inform Decisions and Improve Understanding: Increase knowledge to continually inform and improve management and policy decisions and the capacity to respond to change and challenges. Better educate the public through formal and informal programs about the ocean, our coasts, and the Great Lakes.

The recreational boating community could support policy initiatives based upon objective science. If they perceive that a particular policy action is being undertaken based on agenda-driven science they will strongly object. If policies are put in place to restrict activities with the objective of achieving a particular goal, catch limits to rebuild fish stocks for example, a mechanism for periodic review and revision of the restrictions must be in place.

Recreational boating has a long-standing history of supporting marine education. As the direct beneficiaries of clean water, vibrant ecosystems, and abundant fish populations, boaters have a keen appreciation for these resources. Support for recreational boating in decision making will expose a broader cross-section of the public to the aquatic

environment, enhancing their understanding and appreciation while building advocates, not adversaries, for broader National Ocean Policy goals.

4. Coordinate and Support: Better coordinate and support Federal, State, tribal, local, and regional management of the ocean, our coasts, and the Great Lakes. Improve coordination and integration across the Federal Government and, as appropriate, engage with the international community.

The recreational boating community supports this policy objective. Particular emphasis should be place on the coordination of the various, often duplicative, permitting regimes now required to complete boating access projects. National guidance to regional planning councils should also be used to promote uniformity in management policies among the various agencies.

9. Ocean, Coastal, and Great Lakes Observations, Mapping, and Infrastructure: Strengthen and integrate Federal and non-Federal ocean observing systems, sensors, data collection platforms, data management, and mapping capabilities into a national system and integrate that system into international observation efforts.

The full range of observation and mapping functions of Federal agencies along with state, local and tribal undertakings in this field is strongly supported by the recreational boating community. As consumers of many of these products (weather reports, navigation charts, tide and current tables, etc...) we have direct interest in the promotion of these efforts. In particular we would encourage emphasis on making these products widely available in forms that are usable in day-to-day operation of recreational boats.

Again, we appreciate the opportunity to provide our views on the strategic objectives of the National Ocean Council. Please call upon us at anytime to provide the perspective of recreational boaters as this effort moves forward.

Sincerely,
Muguet B. Podlich Margaret B. Podlich

Vice-President, Government Affairs



Hoh Indian Tribe 2464 Lower Hoh Road Forks WA 98331



Makah Tribe P.O. Box 115 Neah Bay, WA 98357



Quileute Tribe P.O. Box 279 LaPush, WA 98350



Quinault Indian Nation P.O. Box 189 Taholah, WA 98587

April 29, 2011

National Ocean Council 722 Jackson Place, NW. Washington, DC 20503.

Re: Comments on the National Ocean Council's Nine Strategic Action Plans

National Ocean Council Representatives:

The Coastal Treaty Tribes (CTT's), Hoh, Makah, and Quileute Tribes and the Quinault Indian Nation, of the Olympic Coast submit for your consideration comments and recommendations regarding the development of the National Ocean Council's Nine Strategic Action Plans.

We have individually and collectively been consistent in our messages that ocean management in the Pacific Northwest must be inclusive of the four coastal treaty tribes. Our concerns extend to all Nine Priority Objectives as not only does our usual and accustomed fishing grounds in marine waters, but our reservations and communities border the open ocean as well. We have been stewards of our land and waters since time immemorial. Preserving our fish and wildlife resources, as well as access to them, is essential to our economic, cultural, and spiritual well being.

Our legal standing and management status regarding ocean resources and governance is unique. Each of our tribes' has treaty secured hunting and fishing rights with the United States. These treaties retained rights to protect our way of life and reserved rights of hunting, fishing and gathering and are inclusive of our rights to manage and utilize marine resources in perpetuity. We are co-owners with the United States of these marine resources, and our co-management authority is legally recognized to include both state and federal waters. The development of a National Ocean Policy and Strategic Actions Plans must acknowledge and accommodate tribal values and activities with our usual and accustomed areas.

We are encouraged that the inaugural meeting of the Governance Coordinating Committee included identification of the tribes along with the state and federal representatives as co-leads in the Regional Planning bodies. We strongly urge the National Ocean Council to ensure (through communication and funding venues) that tribal participation is a high priority in the development and implementation of the National Ocean Policy. We expect that the Regional Planning Body for the West Coast will be created in keeping with the expressed intent of Executive Order 13547. Furthermore, it is our expectation that our

tribal governments will each have designated seats at the table given our status as sovereigns with treaty resources and management authority in ocean waters.

Specific and dedicated funding will be needed for the CTT's to engage at all levels of the National Ocean Policy. As sovereigns, the CTT's will need to be fully engaged due to their role as managers of the marine resources in order for the Nine Priority Objectives to successfully move forward. Dedicated funding for the CTT's will be especially important within the areas of CMSP, mapping and infrastructure, and resiliency and adaptation to climate change and ocean acidification. Funding is needed for education as well, both to get tribal knowledge out to educators, managers, scientists, and policy experts and to bring education opportunities to tribal communities.

The CTT submit the following for your consideration as the NOC develops the Nine Strategic Action Plans):

Coordinate and Support:

- Proper consultation with tribes is vital to the success of implementing the Action Plan and the National Ocean Policy in the northwest as tribal Usual and Accustomed Areas (U & A's) occupy the marine waters north of Point Chehalis to the U.S. Canadian border. We strongly suggest that this action plan will benefit from establishing a formal policy and protocol for consultation and consideration of the tribes at the NOC level. A couple of examples are:
 - Coordination and Consultation Policy Plan of Action developed by the Environmental Protection Agency http://www.epa.gov/indian/consultation/index.htm or:
 - Work done by National Marine Fisheries Service, Alaska Region at http://www.fakr.noaa.gov/tc/
- All of the action plans need to have a common theme that is in support of the United States governments' responsibility to uphold the treaties established between the federal government and the Coastal Treaty Tribes.

Ecosystem-Based Management:

- As stewards of ocean resources for thousands of years, the mainstream shift of marine resource
 management from single species to ecosystem-based is not a new principle in the management
 strategies of the coastal tribes. However, in order for Ecosystem-based management to become
 a fully integrated part of the National Ocean Policy there will need to be the establishment of
 the following:
 - 1. Creation of secure financial resources;
 - 2. The development of standards for data acquisition and processing
 - Protocols for data and report availability
- In addition, we encourage the NOC to work with the regional fishery management councils and appropriate management authorities to ensure coordination with their existing efforts.

Ocean, Coastal, and Great Lakes Observations, Mapping, and Infrastructure:

 This will need to include a strong research component that identifies gaps in data that hinder or limit resource management decisions. With shifts in climate already a reality, it is critical to include a long term monitoring element that will establish both baseline conditions of ocean ecosystems as well as documenting the changes over time. Finally there are numerous assessments and inventories that in the short term can assist in guiding management decisions. Some examples of short term programs are:

- Complete a data GAP analysis to identify the data needed to bring coastal waters off
 of Washington to an equal level of available data in Oregon and California coasts.
- Conduct habitat and coastal current mapping.
- Develop and complete stock assessments that forward understanding of important stocks at a regional scales.

Coastal and Marine Spatial Planning:

- The Regional Planning Bodies for the West Coast Region must include seats for tribal representatives as the CTT will be directly affected by CMSP. In short, planning for implementation of NOP or CMSP cannot occur off the Olympic Peninsula without each of the 4 coastal sovereign tribes being part of the discussion and planning.
- Currently, it appears that the NOC views the West Coast Governors Agreement on Ocean Health (WCGAOH) as the potential entity for the regional ocean partnership for the west coast region.
 This is not acceptable because WCGAOH does not satisfy the terms of a ROP as described by the NOC and most importantly, because the tribes are not part of the WCGAOH.
- As with the west coast states the CTT will require dedicated funding for the duration of the
 planning effort for coastal and marine spatial planning. Expecting the tribes to access funding
 through a competitive grant process wrongly puts the needs of tribal ocean policy and
 management as sovereigns in competition with stakeholders who already have a voice through
 their state elected officials.

Resiliency and Adaptation to Climate Change and Ocean Acidification:

- Tribes and coastal communities are experiencing climate change now, not only are resources
 affected by climate change but also the characteristics of the regions culture as well. Tribes can
 offer a unique perspective to how the NOC addresses Climate Change within the National Ocean
 Policy for our region.
- The effects of ocean acidification on the exercise of treaty rights to harvest marine resources both commercially and for subsistence are largely unknown. Tribal communities rely on these resources for our cultural and economic wellbeing. The potential changes or impacts as a result ocean acidification is beyond comprehension.

Regional Ecosystem Protection and Restoration:

- The large size of each of the regions indentified by NOC must be taken into consideration. As
 we stated in earlier correspondence: the "West Coast Region" may be too large; we must
 remember that the "large California current ecosystem" is the result of multiple smaller systems
 that function with some independence.
- Dedicated financial support for understanding the chemical and biological relevance of these sub-systems would help ensure that conservation and restoration efforts are effectively distributed. Effective distribution must be based on sound science so that areas of low population and high need do not lose out to areas of high population.

Inform Decisions and Improve Understanding:

 While not always considered, local knowledge such as that preserved in Tribal cultures can provide information that is not available elsewhere, to inform management decisions

The CTT would like to reiterate their support for the National Ocean Council and its critical role in implementing the National Ocean Policy. Thank you for this opportunity to comment and we look forward to working with the Council as you draft the Strategic Action Plans.

Sincerely,

Coastal Treaty Tribes of the Olympic Coast

Hoh Indian Tribe

Makah Tribe

David Hudson

Micah McCarty

Quileute Tribe

Quinault Indian Nation

National Ocean Council Priority Objectives for Implementation of the National Ocean Policy Public Comment Letter Todd A. Harwell

To Whom It May Concern:

Thank you for the opportunity to provide public comments in regards to the nine priority objectives of the National Ocean Policy proposed by the National Ocean Council. This comment letter will address four of the nine objectives, presented in the order of perceived priority.

- I. Objective 3: Inform Decisions and Improve Understanding
 - a. Actions that would most effectively help the Nation achieve this policy objective
 - i. Near-Term:
 - 1. Identify and prioritize the most important issues and topics that are influencing coastal zones the most in the United States. This should not be limited to those that are most apparent or immediate, but also those that will have a large and significant impact over time, such as sea level rise and climate change.
 - 2. Formal and non-formal curriculum should be developed and implemented to better educate youth as well as the general public about scientific and environmental information pertaining to climate change and the current environmental state of not only the United State but also globally.
 - 3. Develop and implement educational programs to be delivered in K-12 classrooms throughout the United States. Attention should be given to adhering to national and/or state science curriculum standards.

ii. Mid-Term:

- 1. Develop and provide a more comprehensive awareness of environmental conditions and trends, as well as human impacts and activities that affect the coastal zones. This awareness and educational information needs to be developed and presented for specific audiences in both formal and informal settings, whether it be school children, young adults, baby boomers, senior citizens, potential stakeholders, businessmen and women, blue-collar individuals, or any other demographic.
- 2. Continued education curriculum should be delivered to more isolated audiences that are unknowledgeable of climate change.

iii. Long-Term:

- 1. Implement routine integrated ecosystem assessments and forecasts involving a collaborative and comprehensive approach. The assessments should include impacts related to climate change and areas of vulnerability, risks, and resiliency.
- 2. Continued delivery of formal and non-formal educational programs.
- b. Major obstacles to achieving this objective
 - i. Funding to develop and introduce educational programs.
 - ii. Difficulty in reaching isolated or smaller populations that are unfamiliar with scientific evidence related to climate change.
 - iii. Lack of basic scientific and environmental knowledge and understanding by the general public audiences.
 - iv. Gaps in linking ecosystem conditions to human health.

- v. Ignorance or indifference of audiences to understand the importance of coastal, marine, and Great Lakes health, and how these ecosystems impact human life and well-being.
- vi. Funding and nationwide adoption of formal and informal educational programs that provide awareness of the current state of our coastal ecosystems, as well as the current work being done to improve coastal areas.
- c. Milestones and performance measures most useful for measuring progress toward achieving this priority objective
 - i. Immediate implementation of the National Ocean Policy and the Nine Priority Objectives.
 - ii. Creating, delivering, and evaluating assessments related to the knowledge currently held by the public in terms of coastal zone health and the impacts of global climate change.
 - iii. Creating and delivering awareness and education programs related to coastal zones and ecosystem health, tailored to specific audiences based on the previous knowledge assessments.
 - iv. Establishing a visible web-based platform for the importance and significance of the health of coastal ecosystems, and how it can be linked to human life.
 - v. Using widespread and varied techniques to gather information related to the current state of the nation's coastal zones, including new technologies of remote sensing and unmanned aerial vehicles in addition to the latest scientific data available.
 - vi. Assessing and analyzing the effectiveness of the educational programs after they have been developed and delivered by distributing surveys to those who participated.
 - vii. Revising educational programs and information based on assessment feedback, and delivery of new programs developed from public input.

II. Objective 5: Resiliency and Adaptation to Climate Change and Ocean Acidification

- a. Actions that would most effectively help the Nation achieve this policy objective
 - i. Near-Term: Routine integrated ecosystem assessments and forecasts of factors and activities contributing to climate change should be implemented and conducted, including briefings delivered to Congress. This will allow the National Ocean Council to determine the areas or entities most prominently contributing to climate change that should be addressed on a priority level.
 - ii. Mid-Term: Make efforts to transition to more renewable energy practices that will ultimately reduce greenhouse gas emissions. Such practices have been introduced in the Report to Congress by the EISA in 2009. Introducing more renewable energy practices, such as marine hydrokinetic energy in the form of offshore wind farms, will not only allow the United States to become more energy independent, but it will also reduce greenhouse gas emissions and the level of carbon dioxide in the atmosphere.
 - iii. Long-Term: Institute and enforce stricter regulations on humans to protect the environmental health of our ecosystems. Some of these regulations may include introducing more National Marine Sanctuaries and reserves, stricter fishing regulations and enforcement to reduce overfishing, reduction of fertilizer use in commercial and residential coastal areas, and ultimately limiting and reducing the carbon dioxide amounts released in the atmosphere by businesses and industries.
- b. Major obstacles to achieving this objective
 - i. The numerous, widespread, and various impacts of climate change may be difficult to monitor, especially in collaboration with other agencies and organizations.

- ii. Media, politicians, and stakeholder groups that strongly oppose and refute the validity of climate change and the scientific evidence that supports it.
- iii. Increasing human impacts on our ecosystems and the increasing contributions to perpetuating climate change such as greenhouse gas emissions.
- c. Milestones and performance measures most useful for measuring progress toward achieving this priority objective
 - i. Immediate implementation of the National Ocean Policy and the Nine Priority Objectives.
 - ii. Continued support and reporting of climate change-related findings from NASA.
 - iii. Assessments and updates on the level of carbon dioxide in the atmosphere.
 - iv. Assessments of industrial greenhouse gas emissions.
 - v. Monitoring and reporting of continued climate change evidence such as sea surface temperatures, sea level, ice sheets in the Arctic, and levels of carbon dioxide in the atmosphere.

III. Objective 2: Coastal and Marine Spatial Planning

- a. Actions that would most effectively help the Nation achieve this policy objective
 - i. Near-Term: The establishment of nine regional planning areas that mirror those of the Regional Fishery Management Councils. This will allow for relief from the sector-by-sector approach to management that has been practiced in the past, as well as reduce any previous overlap or ambiguity in management jurisdictions.
 - ii. Mid-Term: Improve ecosystem health and services of coastal zones by planning human uses on conjunction with conservation of important ecological areas. These improvements would lead to the protection of areas that are vital for the resiliency and maintenance of healthy ecosystems services and biological diversity, as well as providing marine resources and supporting human use.
 - iii. Long-Term:
 - 1. Facilitate sustainable economic growth in coastal communities by introducing projects for economic investments related to coastal and marine industries.
 - 2. Economic incentives should be established for both public and private entities that choose to sustainably develop and manage their use of the coastal zone.
- b. Major obstacles to achieving this objective
 - i. Preexisting agencies and management jurisdictions that may unenthusiastic about adhering to the new federal regions and policies.
 - ii. Unwillingness of agencies and governments to form cohesive partnerships and cooperation that support the Council.
 - iii. Stakeholder groups that are unsupportive of the new regions, policies, and partnerships, and the impacts that each will have on their industry or cause
 - iv. Possible hesitation or unwillingness of individual coastal communities to adapt to the proposed policies, and lack of support for sustainable economic growth and incentives.
- c. Milestones and performance measures most useful for measuring progress toward achieving this priority objective
 - i. Immediate implementation of the National Ocean Policy and the Nine Priority Objectives.
 - ii. Establishment of the nine regional planning areas.
 - iii. Introduction of economic incentives.
 - iv. Formed partnerships and cooperation among agencies and governances.

- v. Observed and measured improvement of ecosystem health based on environmental assessments and monitoring.
- IV. Objective 9: Ocean, Coastal, and Great Lakes Observations, Mapping, and Infrastructure
 - a. Actions that would most effectively help the Nation achieve this policy objective
 - i. Near-Term:
 - 1. Establish and maintain a national integrated network of ocean, coastal, and Great Lakes observing systems, allowing agencies and organizations to compile and share observations, data, and information. Cooperating international partners and organizations may also access this network.
 - 2. Formal technology training programs should be created and delivered for governmental and environmental agency employees. This will ensure that new technologies are not only accessible, but also able to be used properly in order to observe and monitor coastal areas.
 - ii. Mid-Term: Introducing and integrating new technologies and techniques of monitoring and collecting coastal information, such as unmanned autonomous vehicles (UAVs) and remote sensing satellites and technology. Using sophisticated forms of data collection, the Council would be able to monitor the health and productivity of coastal zones, and address any potential threats as they are discovered.
 - iii. Long-Term:
 - 1. Development and launching of more satellites that measure and record environmental and geographical data. This data should be linked and shared on an accessible national or global network as previously mentioned.
 - 2. Expansion of the National Oceanographic fleet of ships and facilities. More vessels should be added to the fleet in order to monitor and manage for coastal areas.
 - 3. Facilities and laboratories should be expanded and updated so that they are equipped to address any potentially hazardous threats to the health of our ecosystems as they are discovered.
 - b. Major obstacles to achieving this objective
 - i. Cooperation among agencies and organizations to share observations among the coastal systems network.
 - ii. Funding and maintenance of proposed new monitoring technologies in the form of UAVs and remote sensing satellites.
 - iii. Full and complete integration of ocean, coastal, and Great Lakes observations and data.
 - iv. Cohesive and well-coordinated infrastructure related to the national observing systems integrated network.
 - c. Milestones and performance measures most useful for measuring progress toward achieving this priority objective
 - i. Immediate implementation of the National Ocean Policy and the Nine Priority Objectives.
 - ii. Willingness and agreement from agencies and organizations to participate in the observing systems network.
 - iii. Implementation of UAV and remote sensing technologies in coastal monitoring.
 - iv. Assessment and evaluation of the effectiveness and efficiency of the new monitoring technologies.
 - v. Creation of an accessible database of observations and recorded data related to coastal monitoring.

I would like to thank you again for the opportunity to provide comments on the National Ocean Policy and these Priority Objectives.

Regards, Todd A. Harwell



CITY OF FORT BRAGG

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April 25, 2011

National Ocean Council 722 Jackson Place, NW Washington, DC 20503

Subject: Comments from Fort Bragg City Council on Strategic Action Plans

Fort Bragg is a coastal city in northern California that is located midway between San Francisco and the Oregon border. Our City has a port, Noyo Harbor, that shelters commercial and sport fish fishing boats, whale watch tour boats and recreational boats. Commercial and recreational uses of the ocean are an important component of our local and regional economy. Recreational use of the ocean is important to our citizens. The ecological health of the ocean is important to all of us.

The North Coast region of California has recently engaged in extensive public discussion of ocean issues during the California Marine Life Protection Act implementation process to establish marine reserves in this region. The following comments on the National Ocean Council's Strategic Action Plans are informed by that discussion:

1. Ecosystem-Based Management:

The tribal communities, fisherman and other ocean users of the North Coast of California stand ready to participate in management of our ocean resources. Please include co-management by these groups in your management strategy.

2. Coastal and Marine Spatial Planning (CMSP):

Much of the ocean resource is currently utilized. Please take full account of existing uses as a baseline for CMSP. The tribal and non-tribal local jurisdictions of the North Coast have experience with planning and vast knowledge of existing uses. Please consult our local jurisdictions early in the CMSP process. Local and tribal jurisdictions should be represented on the Regional CMSP recommending group.

- Inform Decisions and Improve Understanding; and 4. Coordinate and Support: 3. The tribal and non-tribal local jurisdictions of the North Coast have vast experience and knowledge of our Ocean resource. Please consult our local jurisdictions. Local and tribal jurisdictions should be represented on any Regional recommending group.
- Resiliency and Adaptation to Climate Change and Ocean Acidification: 6. 5. Regional Ecosystem Protection and Restoration; 7. Water Quality and Sustainable Practices on Land: and 8. Changing Conditions in the Arctic: We agree with the above four items as objectives, but have no specific comments. We stand ready to cooperate on these goals as they apply to our City.
- 9. Ocean, Coastal, and Great Lakes Observations, Mapping, and Infrastructure: Much more information and mapping is needed to characterize the ocean resource in the North Coast area of California sufficiently to establish good policy. Please do all that you can to direct resources to our area for further mapping and scientific study. Further knowledge is a pre-condition to the establishment of good policy for our ocean resource.

Sincerely.

Dave Turner

Mayor

Dan Gierde

Councilmember

Meg Courtney

Ul. Cous

Vice Mayor

Councilmember

Councilmember