

The logo features a stylized orange swirl icon to the left of the text "Spotlight on Oceana". "Spotlight on" is in a smaller, white, sans-serif font, while "Oceana" is in a larger, bold, orange, sans-serif font.

Spotlight on Oceana

**Beth Lowell, Federal Policy Director,
Discusses the Challenges
Facing the World's Oceans**

SHARING THE SPOTLIGHT for this issue of *Currents* is Beth Lowell, Federal Policy Director at Oceana. Founded in 2001, Oceana is the largest international organization focused solely on protecting and restoring the world's oceans.

This is the fourth in a series of interviews with representatives of environmental non-governmental organizations (NGO) intended to broaden our understanding of the NGO community and to enhance Navy-NGO environmental cooperation and partnerships.

This interview was conducted on 3 December 2009 in Oceana's Washington, D.C. offices by Tracey Moriarty, Director of Environmental Outreach and Information for the Chief of Naval Operations Environmental Readiness Division, Bruce McCaffrey, Managing Editor, *Currents* and Kathy Kelley, Contributing Writer, *Currents*.





Oceana

Currents: Good afternoon Beth. Thanks for taking the time to sit down with us today. Can you start by telling us a little bit about your background?

Beth Lowell: I've been at Oceana for five years. Although I've

worked in conservation for much of my adult life, this is the first time I've worked for an organization focused solely on protecting marine life. When considering that water covers roughly 70 percent of the earth, yet how few groups are working to protect the oceans, it's hard to imagine where my efforts would be of more value.

Before Oceana, I spent five years focused on endangered and threatened species and defending the Endangered Species Act (ESA) at the Endangered Species Coalition, which is a coalition of about 400 groups working to protect endangered wildlife.

My first job in the environmental field was as an organizer. I worked with college students in New Jersey on a range of environmental issues and then moved to Washington, DC for an organizing position with the national organization. After spending time in DC, I realized that my real interest was in advocacy.

Currents: What is the overall goal of Oceana?

Lowell: Our overall goal is to protect and restore the oceans—and our campaigns address this in several different ways. The oceans face a lot of problems and we try to focus on issues where we can have a direct impact. Our main areas of focus are responsible fishing, protection of marine wildlife, pollution and climate change issues.

Currents: Can you tell us about some of those campaigns?

Lowell: Sure. Each of our campaigns runs between three and five years, and at the end of that time, we're expected to have tangible results in place. As the Federal Policy Director, I work on all of our campaigns at some level, but mainly focus on responsible fishing issues and shark finning, which I'll talk about later.

One of our campaigns focuses on the protection of sea turtles. Commercial fishing poses a huge threat to sea turtle populations. Each of the six sea turtle species found in U.S. waters is listed as either "threatened" or "endangered" under the ESA. One commercial fishing technique called bottom trawling has had a large impact on sea turtles. These fisheries use massive trawl nets that are

The Basics About Oceana

IN 1999, A group of five foundations commissioned a study and discovered that no organization was working exclusively to fight ocean threats on a global scale. Further, less than half of one percent of all resources spent by environmental nonprofit groups in the United States went to ocean conservation. To fill this gap, the foundations formed Oceana in 2001.

Oceana's vision statement is simple: "Oceana seeks to make our oceans as rich, healthy and abundant as they once were." To achieve this mission, Oceana is dedicated to achieving measurable change by conducting specific, fact-based campaigns with fixed deadlines and articulated goals.

Oceana's work falls into six general categories:

1. Pollution prevention
2. Responsible fishing
3. Protecting marine wildlife
4. Climate and energy issues
5. Preserving marine spaces
6. Monitoring and exploring the marine ecosystem

In fewer than ten years, Oceana has achieved dozens of concrete policy victories for marine life and habitats. For more about their past and current projects, visit www.oceana.org.



towed behind their fishing boats. The problem is that, in addition to shrimp and other fish, sea turtles can get caught in these nets as well. For every pound of shrimp caught, five pounds or more of bycatch is discarded. (Note: Bycatch is the unintended catch of species not targeted in a commercial fishery that often results in huge amounts of fish and other marine life being thrown back into the ocean either dead or dying.)

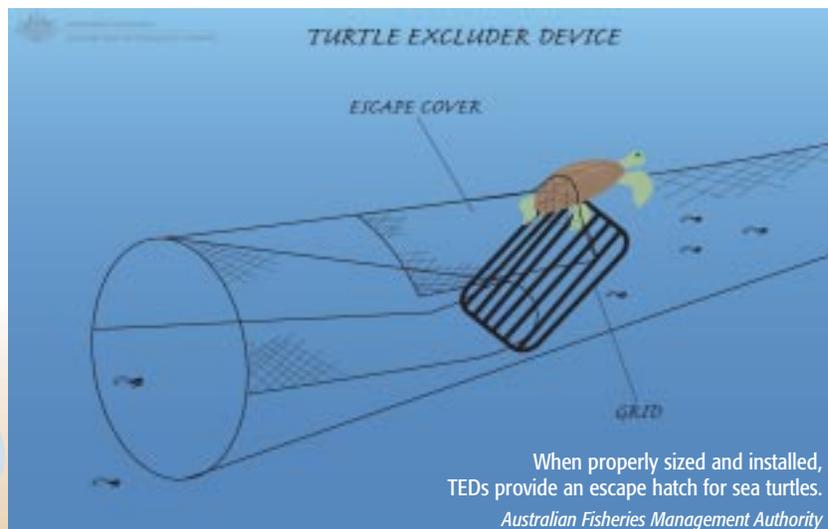
For every pound of shrimp caught, five pounds or more of bycatch is discarded.

Currents: I saw on your web site that there are devices they can be installed on trawl nets that would allow sea turtles to escape.

Lowell: Yes, they're called Turtle Excluder Devices (TED). Essentially, they're escape hatches for sea turtles. A TED allows a sea turtle to free itself from the trawl net with minimal if any harm. A TED is a grid of bars in the neck of a net that allows sea turtles to escape, reminiscent of an escape hatch. The bars are spaced far enough apart so that shrimp and fish can pass through to the tail of the net while larger species, such as sea turtles, are allowed to escape. These devices are actually required in shrimp and summer flounder fisheries. Unfortunately, there are a number of fisheries around the country that use trawl nets without TEDs. We found that an average of 770 sea turtles are captured each year in mid-Atlantic trawl fisheries alone. We're trying to make these devices required in all trawl fisheries.

Currents: What other kind of work are you doing in that area?

Lowell: We work at the regional fishery management council level on responsible fishing issues like ensuring that their fishery management plans end overfishing. We believe that in all commercial fisheries



When properly sized and installed, TEDs provide an escape hatch for sea turtles.
Australian Fisheries Management Authority



ABOVE: Today, industrial fishing worldwide yields between 80 and 100 million tons of fish, but it also generates 27 million tons of discards or bycatch, including loggerhead turtles.

NOAA

RIGHT: A sea turtle ensnared on a long line. Commercial long lines are up to 40 miles long with thousands of hooks. Each year thousands of turtles are unintentionally killed by long lines.

Carlos Perez, Oceana



that we should count what is caught—everything, even the bycatch. Set limits on catch and bycatch. And have control measures in place to ensure that fisheries are following the limits. We call it the “Count, Cap and Control” approach. One way to achieve the counting is to put fishery observers on fishing boats. These scientifically trained observers are there to count the catch. Oceana has been working to increase funding for this program in the federal budget

process to increase observer coverage in fisheries. The federal government is doing a better job of accounting for bycatch and increasing observer coverage, but there is definitely room for improvement. We would like every fish to be accounted for when fish limits are set. You may have a scallop fishery that’s catching scallops but they’re also catching a significant amount of yellowtail flounder, which is neither used nor counted. Other fisheries are doing the same thing. So the

only yellowtail flounder that are actually being counted are the ones caught by the yellowtail flounder fisheries. As a result, a huge amount of bycatch is unaccounted for. There needs to be some kind of limit so we’re not allowing fisherman to indiscriminately discard all of their bycatch.

Our responsible fishing campaign also looks at international fisheries subsidies. Countries are basically promoting unsustainable fishing practices across the world by providing their fishermen with money that allows them to fish further offshore for longer periods of time. And now they’re fishing on the high seas because coastal waters are already fished out.

About 20 billion dollars a year in subsidies is being spent world-wide to promote these bad fishing practices. For instance, some European countries are paying for their fishermen to fish off of the coast of Africa because most African countries don’t have the money or the boats to fish their coasts. This also leads to a global security issue. More than a billion people depend on fish as a primary source of protein. We need to stop stealing fish from poor countries that rely on the oceans.



Commercial fishermen haul in a trawl net. Trawl nets can stretch 40 feet in height and spread over 200 feet wide.

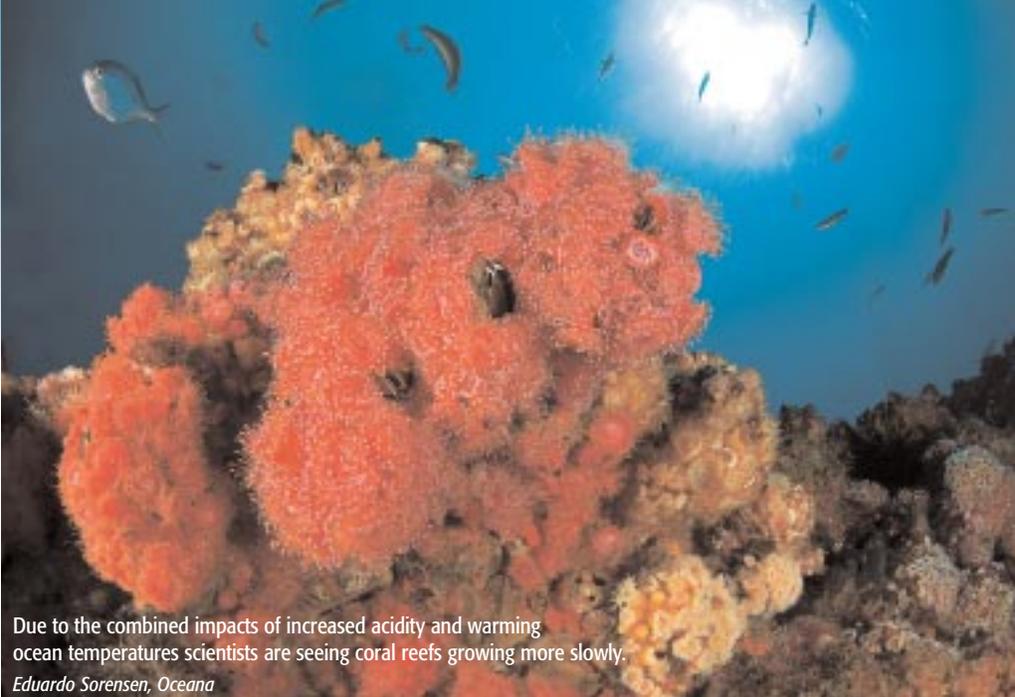
Juan Cuetos, Oceana

We're working at the World Trade Organization to address fishing subsidies in the international trade agreement that would require countries to limit fisheries subsidies—eliminate the really horrible ones, reduce the questionable ones and report on the status of all of them—in essence, have a more transparent system.

We also have a climate change campaign. For us, climate change is especially important—not only because the oceans are impacted by climate change and ocean acidification but because the oceans are a driver of the climate system.

We focus on a few different issues regarding climate change. Specifically, we are working to increase awareness that the oceans are directly impacted by the carbon dioxide that we are producing due to a process it causes called “ocean acidification.” The acidification of the oceans needs to be addressed in any and all comprehensive global warming legislation or treaties. This is one of the issues that I find especially scary—that the more carbon dioxide humans emit, the more carbon dioxide the oceans absorb. The oceans have done us a great service by lowering the amount of carbon dioxide in the atmosphere and therefore lessening climate change. Unfortunately this is making the oceans sick, causing them to become more acidic. Carbon dioxide is changing the chemistry of the ocean itself. If we continue on the current trend, we may see some collapses in the global food web.

The oceans are 30 percent more acidic than they were prior to the industrial revolution and we are already seeing impacts of this change, most importantly across coral reefs. Due to the combined impacts of increased acidity and warming ocean temperatures scientists are seeing coral reefs growing more slowly. They have observed this on the Great Barrier Reef in Australia and reefs in Thailand and the Caribbean. Similar results are being seen in laboratory experiments where researchers are able to adjust the pH level of water. Experiments have shown that many species, including corals, oysters, mussels, and pteropods (swimming sea snails), have greater difficulty



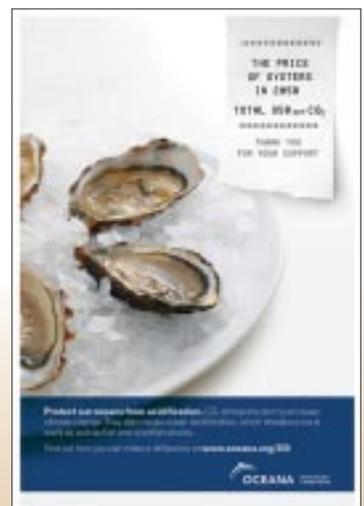
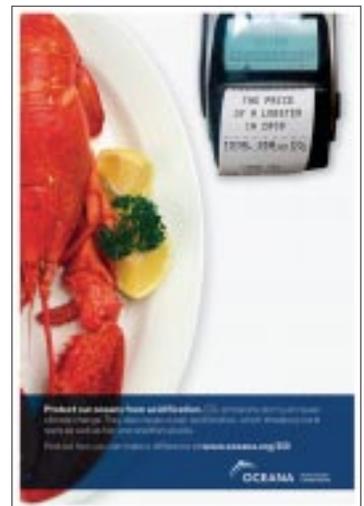
Due to the combined impacts of increased acidity and warming ocean temperatures scientists are seeing coral reefs growing more slowly.

Eduardo Sorensen, Oceana

building their shells and skeletons in more acidic conditions. And when you realize that some of these shelled animals are the basis of the marine food web or provide vital habitat to millions of marine species, you wonder what will happen when their very survival is threatened. So we're working on raising awareness about ocean acidification and its potential impact on the global food chain. We had an advertising campaign—which was highly visible in Copenhagen, Denmark at the United Nations Framework Convention on Climate Change—regarding the number 350. 350 parts per million (ppm) is the safe upper limit of carbon dioxide for our atmosphere if we are to prevent the worst impacts of ocean acidification.

If we continue on the current trend, we may see some collapses in the global food web.

The Intergovernmental Panel on Climate Change concludes that atmospheric carbon dioxide levels must be reduced to under 350 ppm. Oceana used advertising pieces such as these to raise awareness at the Copenhagen summit.





Oceana

Currents: How are you raising awareness? Other than the 350 campaign?

Lowell: All of our campaigns include five components—policy (or legislative), media, science, legal and grassroots advocacy. We’re trying to get ocean acidification language inserted into the climate bill. We’re meeting with congressional staff and administration officials to inform them about the need to get emissions to a level that will halt the acidification of the oceans. And we work with Oceana’s “Wavemakers” (more than 300,000 members and e-activists in over 150 countries) to make them aware and ask them to take action. And as we are moving forward, it is critical that we look back at policies already in place to make sure they are doing enough for the ocean—especially on ocean acidification.

Currents: Thinking about areas where your work might overlap with the Navy—obviously the Navy has a vested interest in understanding the behavior of a number of species of marine mammals. Does Oceana do much work pertaining to marine mammals?

Lowell: Right now we don’t have a dedicated marine mammal protection campaign per se, but we work on marine mammal issues when they arise. We also participate in various

Take Reduction Teams which are stakeholder groups that create Take Reduction Plans under the Marine Mammal Protection Act (MMPA). A lot of our wildlife-related efforts in the last several years have been focused on upholding our existing environmental laws, such as fishery laws, the ESA and the MMPA. Our ongoing wildlife campaign is focused on sea turtles. We’re trying to move forward on the Sea Turtle Protection Act, which would be similar to the MMPA. We wanted to address shortfalls in current turtle protections and make sure that if sea turtles are de-listed they have other protections in place.

The Basics About Ocean Acidification

BY NOW, MOST of the risks associated with climate change are well-known. Sea levels are likely to rise, droughts and flood events will intensify, and worldwide temperatures will increase. A lesser known and more insidious impact of our carbon dioxide emissions is the process of ocean acidification.

The oceans absorb roughly 30 percent of global carbon emissions and 80 percent of the heat generated by increased levels of greenhouse gases. This absorption helps to protect us from some of the immediate impacts of climate change, but the increased levels of carbon dioxide are quietly changing the chemistry of the ocean. This is bad news for marine organisms like hard corals, clams and crabs. There is evidence that these organisms may not be able to form shells and skeletons in the more acidic waters. If ocean acidification continues, the water in which these organisms live could become so corrosive that it would destroy their shells and skeletons directly.

Coral reefs are highly vulnerable to changing pH levels. Since 1980, nearly 30 percent of the world’s tropical corals have already vanished, mainly due to warming events. At current rates of emission growth, tropical corals could be gone before the end of this century—and deep sea reefs could be even more vulnerable to the ocean’s rising acidity, although not much is known at the moment about how they are likely to respond.

The disappearance of coral reefs would be devastating on many levels. Reefs are home to a quarter of all marine species and are critical to the livelihoods of many humans. To prevent the loss of coral reefs, scientists conclude that atmospheric carbon dioxide levels must be reduced to 350 ppm or below. Levels are currently at 385 ppm and rising.

In December 2009, a resolution was introduced in the U.S. House of Representatives that urges the U.S. to adopt national policies and support international agreements to address ocean acidification, and to study its effects on marine ecosystems and coastal communities.

Currents: Are you proposing some draft language for this act?

Lowell: It's already been drafted. First, we wanted to make sure that we have some idea of how many sea turtles are out there. All population estimates from the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (FWS) have been based on nesting females. So we know how many females come to shore and how many hatchlings there are from monitoring. Unfortunately, we don't know what happens to the juveniles or the status of adult males. We're estimating the entire sea turtle population on nesting females, which could be quite inaccurate. So this act would require NMFS and FWS to:

1. Develop an accurate inventory of sea turtle populations, and
2. Determine how many sea turtles can be "taken" from a population without jeopardizing it.

Currents: The Sea Turtle Protection Act would be similar in structure to the MMPA?

Lowell: Exactly. The same system of determining potential biological removal levels, but just related to sea turtle populations. So we can then tell the fishermen, this is how many sea turtles you can take.

Currents: But fishermen don't have take limits now?

Lowell: They actually get an incidental take limit at the fishery level.

Currents: How is the incidental take limit enforced?

Lowell: That's the whole problem. That's the reason we developed the legislation, because the NMFS issues Incidental Take Statements for each

fishery, but does very little to follow up on the actual number of sea turtles caught. We asked the NMFS how many turtles they authorize to be caught each year and they didn't have an answer. So we requested all of their Biological Opinions and Incidental Take Statements, reviewed their own documents, totaled them and found that they authorized a huge number of sea turtle takes—over 10,000 sea turtles killed and an additional 334,000 harmed each year.

Currents: Where do these limits fall?

Lowell: Since sea turtles are an endangered species, these take limits fall under the ESA. NMFS is authorizing a large number of sea turtle takes. And those numbers don't include efforts like U.S. Army Corps of Engineers dredging projects. When we reviewed the authorized levels of sea turtle takes and compared it with the bycatch estimates in fisheries, the take levels were often exceeded. But instead of taking any action, NMFS has issued higher take authorizations instead of requiring any corrective action.

A couple of years ago there was an ESA oversight hearing in the U.S. House of Representatives. The Committee asked the FWS if they ever consulted with NMFS when authorizing sea turtle takes. By law, FWS is supposed to conduct an analysis of the impact of takes before issuing new limits. FWS admitted that they were not consulting NMFS prior to issuing revised take limits.

The Threats Facing Sea Turtles

SEA TURTLES HAVE been swimming the world's oceans since the dinosaur era, more than 110 million years ago. Just decades ago, sea turtles were plentiful, but now all six species found in the United States are listed as threatened or endangered.

The major threats to sea turtle populations are fishing gear such as longlines and bottom trawls, and loss of nesting beaches. TEDs are a partial solution. These devices, installed in trawl nets, allow turtles to escape. Nets equipped with properly functioning TEDs could lead to a 97 percent reduction in sea turtle entrapment. Currently, however, only shrimp and summer flounder fisheries are required to use these devices.

Oceana is working with Congress on the first comprehensive sea turtle legislation in American history. The Sea Turtle Protection Act will provide expansive protection for sea turtles in U.S. waters by:

- Recovering sea turtle populations and maintaining healthy populations thereafter
- Reducing sea turtle bycatch
- Analyzing the cumulative impacts of all authorized takes of sea turtles
- Capping the number of takes so that sea turtles can maintain healthy population levels
- Designating protected sea turtle habitat areas
- Coordinating sea turtle conservation and management among all federal agencies

Part of this proposed act will require the use of properly sized TEDs in all trawl fisheries operating in seasons or locations where sea turtles are present.

For more about sea turtles and the threats facing them, go to www.oceana.org, and click on "Our Work" and "Protecting Marine Wildlife."



That's when we realized that something needed to be done.

We are currently working on legislation that requires the U.S. government to find out how many sea turtles there are, do a cumulative analysis of the

takes and determine the Potential Biological Removal (PBR) for each species of sea turtles. The PBR is a formula that takes into account the current population of the species and provides the number of sea turtles that can be taken from a population without impacting the species' ability to reach an Optimal Sustainable Population. The appropriate agencies would then use the PBR to authorize and limit takes.

Currents: Are there sections in the proposed sea turtle protection legislation for habitat restoration and designation?

Lowell: We do have habitat protection in it as well. Currently, once a species is delisted or no longer needs the protection of the ESA, it will have no habitat protections in place. We only have two critical habitat areas designated for sea turtles in the U.S.—one in Puerto Rico and a second in the U.S. Virgin Islands. Sea turtles were listed before the critical habitat provisions were added to the ESA so the federal government was not required to designate critical habitat at that time. Sea turtles now rely on existing state protections and FWS refuges, but run into issues with spending, staffing and enforcement constraints. What sea

The Interagency Ocean Policy Task Force

ON 12 JUNE 2009, President Obama signed a memorandum establishing an Interagency Ocean Policy Task Force, led by the White House Council on Environmental Quality. The task force, a group of 24 senior policy level federal officials, is charged with developing recommendations for a national ocean policy, a framework for improved stewardship, and guidelines for effective coastal and marine spatial planning.

"This plan shows vision, and a commitment to promoting healthy oceans and taking an integrated approach to maintain and protect oceans," stated Beth Lowell. "It also recognizes the need for proactive, science-based management for the Arctic Ocean, which is already stressed by rapid climate change and threatened by expanding industrialization," she continued.

The task force immediately initiated a public engagement process to gather information and recommendations from a broad range of stakeholders and interest groups, including energy, conservation, fishing, transportation, agriculture, human health, state, tribal and local governments, ports, recreational boating, business, and security. The information gathered at these roundtables, combined with comprehensive reports from the U.S. Commission on Ocean Policy and the Pew Oceans Commission, were combined to produce the task force's interim report, issued in September 2009.

The interim report contained the following objectives for a national ocean policy:

1. A vision of what a national policy should achieve for the ocean, our coasts, and the Great Lakes
2. A brief description of the value of these important areas and the various issues confronting them
3. A statement of our national policy
4. A set of overarching guiding principles for management decisions and actions affecting the ocean, U.S. coasts and the Great Lakes

The report also included recommendations for improving the existing coordination framework regarding ocean stewardship, focusing in particular on the Committee on Ocean Policy. The task force is expected to release its final recommendations in early 2010.

Read the full report at www.whitehouse.gov/assets/documents/09_17_09_Interim_Report_of_Task_Force_FINAL2.pdf.



turtles need is dedicated habitat protections of both onshore and offshore areas that are important to the conservation of the species. We're hoping to get this legislation introduced in 2010.

Currents: Are there other campaigns that you want to talk about?

national ocean policy to protect, maintain and restore marine ecosystem health and a framework and guidance on how agencies can implement the policy, coordinate with one another and how conflicts are resolved.

One of the things that we've been pushing for years is the need for a national ocean policy to protect, maintain and restore the marine ecosystem.

Lowell: I'd also like to talk about some of the other things that we're working on—like the Interagency Ocean Policy Task Force. One of the things that we've been pushing for years—even before the Pew Ocean Commission and the U.S. Commission on Ocean Policy were formed—is the need for a national ocean policy to protect, maintain and restore the marine ecosystem. Right now, there are about 140 laws governing and over 20 federal agencies managing various aspects of the ocean. Yet we don't communicate particularly well. This can lead to conflicts over shipping lanes, fisheries, offshore energy development, marine protected areas and other issues.

There needs to be a common vision; so we were excited when President Obama announced the formation of the task force in June 2009 whose primary purpose will be to develop a national ocean policy as well as a framework for marine spatial planning. (For more information, see our sidebar entitled "The Basics About Marine Spatial Planning."). We are looking forward to the final report from the task force. This should include a strong

We feel strongly that the marine spatial planning piece of this Interagency Ocean Policy Task Force is a tool to implement the national ocean policy. Marine spatial planning done poorly would be bad for conservation. We're viewing this policy as a Clean Air Act of sorts for the oceans—but without the legislative element.

There were six public hearings held by the task force and a lot of NGOs participated, including Oceana and the Ocean Conservancy. There were a lot of various industry representatives, fishermen and other ocean stakeholders there as well.

We think the task force is a great opportunity to explore the best way to coordinate ocean conservation management decisions across all agencies. We'd like to see the National Oceanic and Atmospheric Administration (NOAA) have a stronger role in the process, especially since they have a lot of the relevant in-house science and management expertise. We're happy with the process so far, but I think it's going to come down to the



details. The interim report was as specific as it needed to be but there are certainly a lot of questions remaining about how the final policy will be implemented.

Currents: What opportunities do you see for Oceana and the Navy to collaborate?

Lowell: There are a number of areas where we could collaborate. First, I'd like to point out that the Navy is doing a lot of great things for the environment. And I have firsthand experience with this. I had an opportunity to tour Camp Pendleton, San Clemente Island, Coronado, Kaneohe Bay and other military installations as part of my work with the Endangered Species Coalition. The military brought conservation organizations onto their installations to show us what they were doing, to engage in active dialog and to develop relation-



Beth Lowell kayaking in Alaska.
Oceana

ships with the resource managers. This was a great opportunity for organizations to see the challenges the military faces on the ground with encroachment and how the military is using workarounds or proactive measures like conservation buffers to address these challenges. So I know about the great things going on there.

But you need to get better about telling your story.

The Navy is doing a lot of research and involved in a lot of conservation activities. While I think the military services are getting a lot better at telling their stories, there's more that can be done. You should share some of the great work you're doing on

things related to climate change, emissions reductions, alternative energy platforms and so on.

Also, I think the Services are getting better at trusting and working with environmental conservation organizations. They're realizing that we're not trying to shut down everything the Services are doing. There is a benefit in collaboration where possible and we should actively look for and pursue those opportunities.

Currents: What advice would you give us on how the Navy can get our message out to your community?

Lowell: That is always a challenge. Active outreach to the organizations

The Basics About Marine Spatial Planning

ON 12 JUNE 2009, Marine spatial planning (MSP) is a planning and decision-making process that brings together multiple users of the ocean, including business, industry, government and conservation. Essentially, MSP is similar to land-use planning.

As more and more people compete for the same resources, the need for MSP is growing. Many world governments and some U.S. states have adopted some form of MSP. However, U.S. coastlines and the Great Lakes are still governed by more than 140 laws and 20 federal agencies; each with different goals and missions.

In December 2009, the Interagency Ocean Policy Task Force released an interim framework for MSP in the United States. Under this framework:

- Coastal and marine spatial planning would be regional in scope, instead of sector-by-sector or statute-by-statute.
- MSP would be developed cooperatively among federal, state, tribal, local authorities and regional governance structures.
- All decisions would be science-based.

- Stakeholder and public input would be ongoing.

The full report may be accessed at www.whitehouse.gov/administration/eop/ceq/initiatives/oceans/interim-framework.



near an installation can be helpful. Here in DC, informal lunches that bring together conservation organizations and resource managers to have discussions could help. Someone should be constantly thinking about how to get your success stories out of the military world and into the public arena. Additionally, send representatives to conferences about offshore wind and other relevant energy and environmental issues. A lot of networking takes place at these conferences.

Currents: Do you think that tours of our installations, like the one you took of Camp Pendleton, would be valuable in educating the NGO community about some of the environmentally progressive things that we're doing? Do you think it would be helpful to resurrect those tours?

Lowell: I think that those tours are helpful for a number of reasons. It builds rapport and relationships, which I think is paramount to anything anyone is trying to do.

Right now, there are no technologies available for cleaning up oil spills in the Arctic's frigid environment.

I think that inviting representatives from the local community—folks who live around your installations—would also be very helpful. A lot of the time, too many people have no idea “what goes on behind that wall” and they assume the worst. I think that sort of outreach is critical.

And of course, once we learn about some of the things that you're doing, we can also promote that perspective with your neighbors. There are groups that focus on alternative energy. Getting some of these folks into your facilities could become a great form of technology transfer.

Currents: How about other opportunities for collaboration?

Lowell: I think attending and/or hosting stakeholder meetings and technical conferences is a good idea. That would be an opportunity to identify issues and areas where collaboration is possible. I'm sure you're already involved in joint research projects with other NGOs.

Currents: Yes. In fact, we're working on publicizing our research on our marine mammal efforts now. We're putting it all out there to share with the NGOs, the stakeholders and the person on the street who wants to know. It's a pretty good summary of everything that we're doing.

We're gaining a better understanding of the behavior of the marine mammal populations on our ranges.

Currents: What about Oceana's habitat work?

Lowell: Our destructive trawling campaign is protecting corals and other areas that have important ecological functions. I'm sure that the Navy's installations have some system in place capable of monitoring deep sea habitat to ensure that their training exercises are not impacting it. It's probably reflected in your Integrated Natural Resource Management Plans (INRMP)?



Arctic sunset.
Caleb Pungowiyi, Oceana

Currents: Well, we don't have INRMPs for our at-sea activities but they play a crucial function on our shore facilities. We do have offshore protection efforts underway as well. For example, as part of our efforts to monitor and protect marine mammals on the Navy's at-sea ranges, we have implemented a robust marine mammal research program.

Obviously there are some parallels with the work that both of our organizations are doing to protect sea turtles and coral reefs. Is there anything else you would like to talk to our readers about?

Lowell: The Arctic. We're very concerned with what's happening in the Arctic with regard to the loss of sea ice and shipping, oil exploration and drilling. It seems like it's very much a “full speed ahead” process—something that concerns us. We need to step back and figure out what the impacts are on this very sensitive environment and on the communities that depend on it—what should be allowed



LEFT: A bag of shark fins illegally removed from living sharks. *Oceana/LX*

BELOW: Estimates suggest that between 26 and 73 million sharks are finned each year, all for the Chinese delicacy, shark fin soup.



and what shouldn't. Right now, there are plans in place to move ahead with offshore oil development without having any technology in place that can clean up oil spills in the Arctic's frigid environment.

Before anything moves forward, we need a comprehensive science-based plan in place for the Arctic. The plan should include a comprehensive scientific assessment of the health, biodiversity and functioning of Arctic ecosystems, as well as the benefits and consequences of specific industrial activities. A precautionary, science-based approach must be applied to all oil and gas leasing, exploration and development activities in Arctic waters to determine if those activities should be conducted and if so, when, where and how.

I would also like to talk about the Shark Conservation Act. Right now in the U.S., we have finning restrictions in place for the Atlantic Ocean and the Gulf of Mexico. These restrictions require fisherman to "land" sharks with their fins still attached. Fishermen on the west coast are not bound by these restrictions. There are different fishery

Shark Finning & The Shark Conservation Act

ANOTHER GROUP OF animals in great danger due to today's fishing practices are sharks. Sharks now represent the greatest percentage of threatened marine species on the International Union for Conservation of Nature's "Red List" of threatened species.

Sharks are at the top of the marine food chain, making them essential for a healthy marine ecosystem. Because they are slow-growing, late-maturing and give birth to few young, they are extremely vulnerable to overexploitation.

Like sea turtles, many sharks are inadvertently captured as bycatch. But the largest threat to the global shark popula-

tion is the killing of sharks for their fins, and dumping the bodies overboard, also known as "finning." Shark fin soup is a delicacy in China, and as the Chinese economy continues to grow, so does the demand for this food. Shark's fin soup is virtually tasteless; but because the fin is said to have medicinal qualities, and because it is expensive and prestigious, its consumption has continued to soar.

The Shark Finning Prohibition Act of 2000 was passed to prevent the practice of finning, but this act contains loopholes, is difficult to enforce, and allows fins to be imported from countries that don't have finning bans. Oceana is currently working to pass a fins-

attached bill, known as the Shark Conservation Act. If enacted into law, it would provide consistent and enforceable shark protection, and would allow the U.S. to take action against countries that allow finning.

Meanwhile, Oceana is working for more effective shark management in the European Union, including fins-attached regulations, catch limits and quotas, bycatch reduction, the elimination of shark discards and the implementation of a European Plan of Action for Sharks.

For more information, go to www.oceana.org, and click on "Our Work," and "Protecting Marine Wildlife."

Beth Lowell (left) poses with actress January Jones, Senator John McCain and Oceana staff member Elizabeth Griffin. Jones is a spokesperson for the Shark Conservation Act.

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management councils in place on the west coast and they are not required to land sharks with their fins attached. But we have proposed a bill—the Shark Conservation Act—which would require all sharks in U.S. waters to be landed with their fins still attached. The bill would also permit the U.S. to take action against countries that don't have this finning restriction in place.

Currents: Why is the shark fin significant?

Lowell: Shark fins are the most lucrative part of the shark. In a lot of Asian countries, shark fin soup is a luxury item—especially in China where more and more people are moving into the middle class and have more disposable income. It's always been something they serve at special events like weddings and, now that people have more money, it's being consumed more often.

So instead of catching and hauling the entire shark onto their boats, fishermen slice off the fins and throw the shark—usually alive—overboard. It will eventually die. Fishermen can fill their entire holds with shark fins.

Sharks are very long-lived, slow-growing animals. Each year, commercial fishing kills more than 100 million sharks world-wide—including tens of millions just for their fins. As a result, many shark species have declined to levels where they are unable to perform their roles as top predators in the ecosystem, causing drastic and possibly irreversible damage to the oceans.

The bill has passed the U.S. House of Representatives twice and the U.S. Senate's Commerce Committee. We are hopeful that it will pass the U.S. Senate this year and be signed into law ending shark finning once and for all in U.S. waters.

The Shark Conservation Act will establish consistent requirements for landing sharks in all U.S. waters. And we can become a global leader on this issue.

Currents: Among the threats to the ocean—pollution, climate change and overfishing—which is the most pressing?

Lowell: That's like asking me to choose among my children! I think they are all important. Pollution is an ongoing problem. It affects health and development, and it is tied to climate change. And climate change is a very big issue—getting something accomplished will be very difficult. Regarding sound fishing practices, that's an area where we can have an impact. But we need the U.S. government to be a leader and make the hard decisions to ensure that our own fisheries are adhering to their limits. Of course, our fisheries



are governed by fishery management councils that are mainly run by fishermen, and it's hard for fishermen to say, "I'm going to catch less fish this year so I can catch fish in the future." There are some fishermen that get that. But when you have a boat, it's really hard to make that decision. So I think the government needs to step in and be an enforcer. And then the U.S. really needs to encourage other countries to do the same. Oceana is working in its offices around the world to promote responsible fishing practices in other countries. Responsible fishing is something that we can do something about. We just need to step up and do it.

Currents: Thanks for your time today, Beth.

Lowell: Thank you. 🐟