



## Saving the Oceans: Taking Action

The future health of the oceans will depend on two things: transforming public policy through laws, treaties and regulations that sustain rather than endanger ocean life; and harnessing market forces to support sustainability in marine fisheries and other ocean resources. The Monterey Bay Aquarium is working on both fronts through its Center for the Future of the Oceans and through our Seafood Watch initiatives.

## Center for the Future of the Oceans

The mission of our Center for the Future of the Oceans is to inspire action for conservation of the oceans. Through the Center, we aim to empower individuals, influence policy and contribute to the protection of the oceans for future generations. The Center focuses on four priority areas that encompass a range of ocean policy initiatives. We work to leverage the strong scientific credibility of the Aquarium and to muster the support of our diverse constituencies, including an online community of advocates.

### Ocean Policy Priorities

**1. Support implementation of California's Marine Life Protection Act (MLPA) and other efforts to create a new network of marine protected areas.**

Worldwide, less than one percent of ocean waters are set aside in protected areas. We continue to support the development of a new network of marine protected areas—including fully protected marine reserves—in state and federal waters on the West Coast. Our first priority was to help forge the consensus necessary to implement the MLPA, beginning on California's central coast. The Center helped motivate local constituencies—including Aquarium guests (through a dedicated exhibit and postcard action), an online community of advocates, and our staff and volunteers—to submit comments, attend hearings and provide testimony through all phases of the central coast process.

In April 2007, following extensive public input and scientific analysis, the California Fish and Game Commission established a network of 29 marine protected areas off the central coast. Those regulations went into effect in September 2007 and created the nation's largest network of marine reserves. In August 2009, a similar network of 21 marine protected areas was created off the state's north central coast.

As the process moves into the waters of northern and southern California, we will continue to support the MLPA process and work with colleagues and partner institutions to ensure that the strongest possible conservation measures are adopted along the entire California coastline.

We are also working with state and federal authorities to promote effective management of the new protected areas on the California coast, including outreach, monitoring, and enforcement. To that end, we have encouraged federal agencies such as the National Marine Sanctuary Program to work closely with the California Department of Fish & Game and other state agencies to ensure maximum protection for state marine reserves and conservation areas. We continue to work with these agencies to identify new sources of funding for these important efforts.

**2. Work with partner organizations and the state of California to promote enactment of ocean policy reform at the statewide, regional, and national levels.**

At all levels of government, this is a time of great opportunities to advance ocean conservation policies, and we are fully engaged in several key arenas.

At the national level, President Obama in June 2009, created a high-level federal task force to propose sweeping changes in how we manage our oceans, and to offer recommendations for a national ocean policy that provides better stewardship of our oceans and Great Lakes. Draft recommendations were released in September 2009, with a December 2009 deadline for the final plan to coordinate 18 federal agencies that manage our oceans and to establish a planning framework for managing competing uses proposed in offshore waters.



Our Executive Director Julie Packard testified before a federal panel seeking comments on critical national ocean policy issues that the plan will address, and we will be deeply involved throughout the process.

Until President Obama acted, the federal government had generally received disappointing marks for its lack of progress when the Joint Ocean Commission Initiative released its annual Ocean Policy Report Card.

This Ocean Commission has given its highest marks to governance reform at the state and regional level, where the Center has been active for the past five years. California and other coastal states are leading the way with significant

progress in ocean management and funding. In 2006, we actively supported Proposition 84—the largest conservation bond initiative in U.S. history—whose passage provided nearly \$100 million to the state's Ocean Protection Trust Fund. The fund supports projects administered by California's Ocean Protection Council, which was itself created following adoption of the state's Ocean Protection Act.

In 2006, our policy team helped draft an historic West Coast Governors' Agreement on Ocean Health signed in September 2006, by the governors of Washington, Oregon and California. We also worked with senior officials in the three states to harness the collective political will to sign the agreement.

In 2007, we led an effort on behalf of the ocean conservation community to draft a joint letter to the West Coast governors urging them to take specific action to implement their agreement. Ten organizations outlined an ambitious agenda for the governors to join forces and support innovative solutions to crucial ocean and coastal challenges.

We are now working with Stanford University, COMPASS (the Communication Partnership for Science and the Sea), and some of the best legal and scientific minds in the country to promote widespread adoption of ecosystem-based management of the oceans. We are also tracking proposals to reauthorize and strengthen ocean management statutes, such as the National Marine Sanctuaries Act, and working with our partners to incorporate the principles of ecosystem-based management into these existing laws.

### **3. Advocate for policies to conserve and restore key threatened marine wildlife and ecosystems with an emphasis on the California coast and the Pacific Ocean, especially the southern sea otter and pelagic species such as sharks, tunas, and sea turtles.**

Internationally, new research findings are giving us a window into the movements of pelagic species such as tunas, sharks and sea turtles. At the same time, fishery management agreements have come under renewed scrutiny, opening up the potential to use scientific advances to stimulate better decision-making by relevant organizations.

We are using data from our conservation research programs and our partners' research to inform marine conservation policy initiatives, focusing primarily on the California coast and the Pacific Ocean. Our large and informed audience base, our exhibits and outreach venues, and genuine public concern for the fate of charismatic marine animals all help raise awareness about key threats faced by marine wildlife and ocean ecosystems of California. Our focus is on species and systems that are showcased in our live exhibits, such as sea otters, tunas, sea turtles, sharks, albatross and other pelagic species. We work with conservation organizations and other partners to inform state and federal policymakers and legislators about key threats and policy needs, and compel them to take action. Conservation of the great white shark in California waters and securing state funds for increased investment in sea otter research are two immediate priorities.

In 2006, a visit to the Aquarium inspired a California legislator to introduce a bill to further protect the threatened population of sea otters

in California. The law expands sea otter research, increases the fine for killing or harming sea otters, and requires a warning label on cat litter, alerting consumers to the danger of disposing of cat feces in municipal sewer systems, which can transmit toxoplasmosis and other diseases to sea otters.

Since 2007, we have helped generate funds for sea otter research and conservation by promoting a California Income Tax check off authorized by the new sea otter legislation. Contributions by California taxpayers since 2007 have exceeded \$750,000.

Through our grassroots advocacy efforts, we are able to support important local, state and national legislation or regulations which further protect these key species. For example, our constituency weighed in on the proposed re-opening of drift gill net fisheries in California which was likely to endanger migrating endangered Pacific leatherback sea turtles. The Pacific Fishery Management Council voted to keep the fishery closed during the three-month migration window; thanks to the many comments of support they received to continue the closure.

On the U.S. east coast, results from our Atlantic bluefin tuna tagging research have allowed for creation of a mathematical model that can be applied toward improved fisheries management. We have worked to ensure that regulatory agencies know about this research, understand its policy implications and apply it to new management measures. For the first time in history, rates of mixing of the eastern and western Atlantic bluefin tuna stocks on North Atlantic feeding grounds identified through tagging research will be incorporated in the upcoming stock assessment to better estimate the number of remaining adult Atlantic bluefin tuna.

#### 4. Advocate for policies and other actions to mitigate and adapt to the impacts of climate change on oceans and coasts.

Rising greenhouse gas emissions and increasing temperatures are causing profound impacts in the world's oceans. To help address these impacts, in 2009 we added climate change to our agenda. We strive to generate awareness among our audiences about the linkage between climate change and the oceans and inspire people to act. In 2008, we hosted a summit with leaders of more than 40 North American and international aquariums to build commitments for communicating with visitors about this critical issue. We continue to collaborate with aquarium colleagues on effective climate change messages and communications strategies. With our partner organizations in Washington, DC, we also support enactment of federal legislation and policies that adequately address, through mitigation and adaptation, the impacts of climate change on the oceans.

## Take Action for the Oceans

One important function of our Center for the Future of the Oceans is to find opportunities to engage our constituents—members, e-newsletter subscribers and guests—in policy related actions.

Our guests can take action during their visit by writing postcards to elected officials. In 2009, these actions included encouraging the California governor to protect essential sea-horse habitat and other critical coastal regions by establishing marine protected areas in southern California, and writing to U.S. Senators to express concern about the impacts of climate change on our oceans.

We also offer take-action opportunities through our monthly e-newsletter and action alerts. These calls to action, which reach an audience of more than 140,000 subscribers, support key policy goals and often highlight species that would benefit from the action: sea otters, great white sharks and tuna; as well as other charismatic exhibit animals such as albatross and sea turtles. Our subscribers are asked to submit public comments, write letters or e-mails to elected officials, or attend hearings and meetings.

Since the creation of the Center in 2004, we have submitted more than 60,000 letters, postcards and e-mails from our members, guests and friends who spoke out in support of ocean-friendly legislation and policy reform.

## Partnerships for Change

The threats facing the oceans are tremendous, from pollution to the impacts of global climate change. Relationships and partnerships with colleagues and key institutions are essential to our work, and help us to meet these challenges head-on. While we work collaboratively with many non-profit, policy, communications and legal entities, we work especially closely with two. Working with these partners we can create the political will necessary to enact policies that give rise to true, long-lasting marine conservation outcomes.

- **COMPASS.** The Communication Partnership for Science and the Sea, or COMPASS, is an innovative marine communication partnership between the Aquarium, Oregon State University and SeaWeb. COMPASS works to advance marine conservation science and accelerate the pace of solutions to pressing marine conservation problems.

COMPASS achieves its mission through five key strategies:

- Training scientists to be better communicators with opinion leaders;
- Synthesizing existing science into an understandable and accessible form for non-scientific audiences;
- Catalyzing the development of new science relevant to societal problems;
- Informing policy and management decisions with the latest, credible marine conservation science; and
- Engaging in science outreach via the media to create a public better informed on marine conservation issues.

Since its launch, COMPASS has developed as a science-focused initiative with substantive research, policy, and communications/media expertise, as well as extensive networks within the science, media, and policy worlds. This enables it to work quietly and nimbly behind the scenes to champion scientists and scientific research, and to catalyze a dialogue on key marine issues from a scientific perspective. This work in turn has helped scientists to emerge as a powerful and credible voice for maintaining the health and resilience of ocean ecosystems in important policy and media venues nationally and regionally. The combined effect of increased news coverage and advocating for science-based ocean conservation decisions on Capitol Hill creates the context for more informed decision-making.

COMPASS has been engaged in a number of issues central to the strategic priorities of the Center. COMPASS played a key role

in engaging and coalescing a multidisciplinary community of scientists investigating the science of marine reserves. By facilitating the development of a Scientific Consensus Statement, COMPASS helped create common understanding and acceptance of the key issues underpinning marine reserves. The development of multi-media materials, that translated the science in an accessible and compelling fashion, was an essential element to the success.

In 2008, we helped COMPASS organize a successful science conference in Santa Cruz on Ecosystem-Based Management of the California Current. The target audience for this meeting was senior staff of agencies responsible for managing the ocean and coastal environment, including the governors' staffs responsible for implementing the West Coast Governors' Agreement on Ocean Health. We also participated in a workshop sponsored by COMPASS and the Stanford Law School to begin developing legal standards for ecosystem-based management in the marine environment.

- **Center for Ocean Solutions.** In January 2008, Stanford University created the Center for Ocean Solutions, a new collaboration involving Stanford University, the Monterey Bay Aquarium, and the Monterey Bay Aquarium Research Institute (MBARI). Its aim is to develop and implement enduring solutions to some of the greatest challenges facing the oceans. What really makes this new institution unique is its interdisciplinary and collaborative nature. This will be much more than a research institute or policy think-tank. By bringing together law, business, science and communication, the Center for Ocean Solutions will develop the answers and political clout needed to address the ocean's most pressing problems.

This new collaboration will work to bring together international experts in marine science and policy to find innovative new ways to protect and restore the global oceans. The three initial collaborating institutions bring substantial scientific and policy capacity to the table, and we anticipate working closely with other institutions in the area.

The Center for Ocean Solutions has identified three of the most urgent issues facing the oceans: the effect of climate change on the oceans; the overexploitation of living marine resources (e.g., bluefin tuna); and land-based threats to the oceans. This extraordinary collaboration holds real promise to make a difference for the oceans. Its work will inform the range of issues we take on, and the messages we deliver to guests, students, teachers, members and our other audiences.

## Conservation Outreach

In 2009, we continued building a national constituency for ocean conservation, initially focusing on our Seafood Watch program.

## National Outreach

Our national outreach initiative will build an informed and active constituency for ocean conservation. As it evolves, this initiative will adopt several strategies:

- Reaching out to potential supporters nationally and internationally, linking them to our conservation efforts and to each other. The goal is to build an action-oriented, networked community in which people volunteer their time and take concrete actions to support the oceans.
- Broadening the scope and depth of our advocacy, public policy and constituency-building programs, including an Aquarium-wide initiative to interpret the effects of climate change on the oceans and to advocate for including the oceans in the national debate of climate change solutions.
- Using a wide range of communications strategies to reach new audiences—from online and web-based communication programs to conservation-oriented, interactive exhibits and films that reach people in a variety of public venues.
- Encouraging aquariums around the world to embrace ocean conservation as their primary mission. We will share our expertise about inspiring conservation awareness and action, as well as foster collaboration among our colleagues to conduct more social science research to inform their conservation initiatives.

## Close-up: Aimee David



Climate change. Declining fisheries. Threats to species like sea turtles, great white sharks and sea otters. The challenges confronting the oceans today are daunting. For Aimee David, ocean conservation policy manager with the Center for the Future of the Oceans, it's all in a day's work.

"The Monterey Bay Aquarium is a force for change," says Aimee. "People across the country trust what we have to say about ocean conservation. It's a great responsibility, and an amazing opportunity to raise awareness about how to solve the biggest challenges facing our oceans."

Aimee's on the front lines of the effort to create a network of marine protected areas along the California coast. And she's helping bring other aquariums on board as advocates on big issues like climate change.

"I fell in love with the ocean when I was growing up in Florida," she says. "I always knew my work would focus on oceans and the environment, and I was drawn to questions about the relationship between humans and oceans. How can we manage our activities to reap the bounty of the oceans without causing their decline?"

Aimee's involvement on behalf of marine protected areas is a prime example of her efforts in that direction.

"Scientists know that marine protected areas are an important tool for restoring and preserving marine life," she says. "Our role at the Aquarium is to bring the science to life for people, and to build a constituency that wants to do the right thing for our oceans."

She brings the same enthusiasm to our work to address global climate change.

"Most people have no idea that climate change is intricately connected to the health of our oceans," Aimee says. "By telling this story—and offering effective solutions—we can inspire people to help shape a better future for the planet."

At the end of the day, she says, "Everyone who works at the Aquarium plays a direct role in improving the health of the ocean. It's my job to harness and focus the energy people feel when they visit. When that happens, we can all work together to ensure a sustainable future for marine life."

## Sustainable Seafood Initiative

Our Sustainable Seafood Initiative and Seafood Watch program seek to raise conservation awareness among seafood consumers and transform the seafood market so that commercial incentives favor sustainable fisheries and fish-farming practices. We work to broaden awareness of the links between the seafood on our plates and the health of our oceans. We help consumers and businesses choose seafood that supports environmentally responsible fishing and fish farming practices. By harnessing market forces and the power of consumer choice, we are creating a demand for seafood that comes from sustainable and environmentally responsible sources.

Our research analysts gather all of the latest available data on fisheries and fish farms, and using rigorous standards and criteria, make recommendations regarding the most ocean-friendly choices. The science-based, peer-reviewed program develops and shares sustainable seafood recommendations, advises consumers and businesses to avoid certain seafood products, suggests good alternatives and identifies the best choices for healthy oceans.

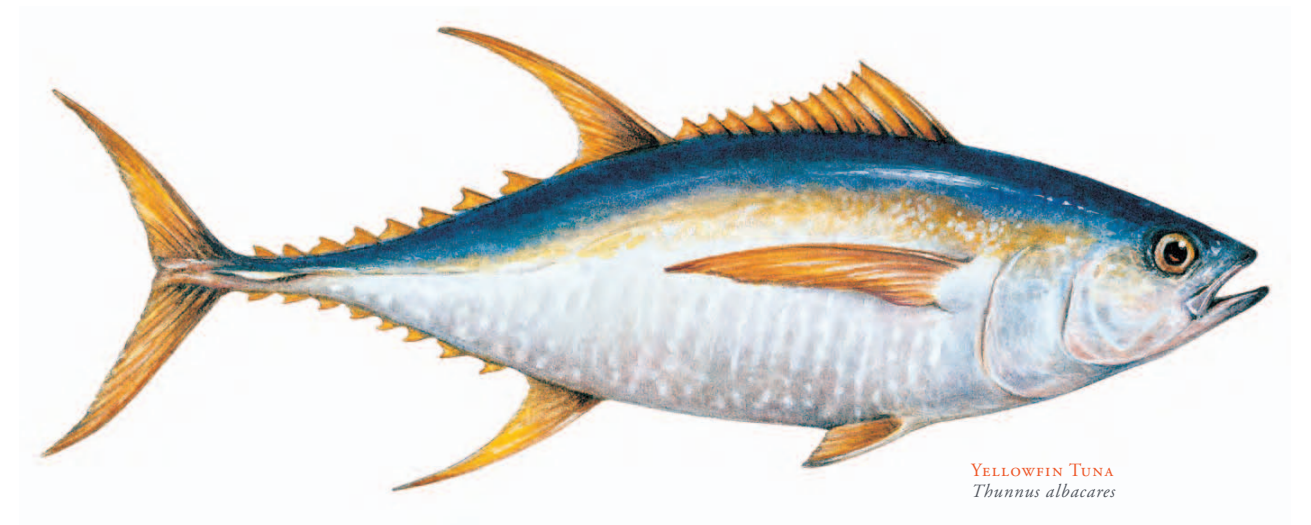
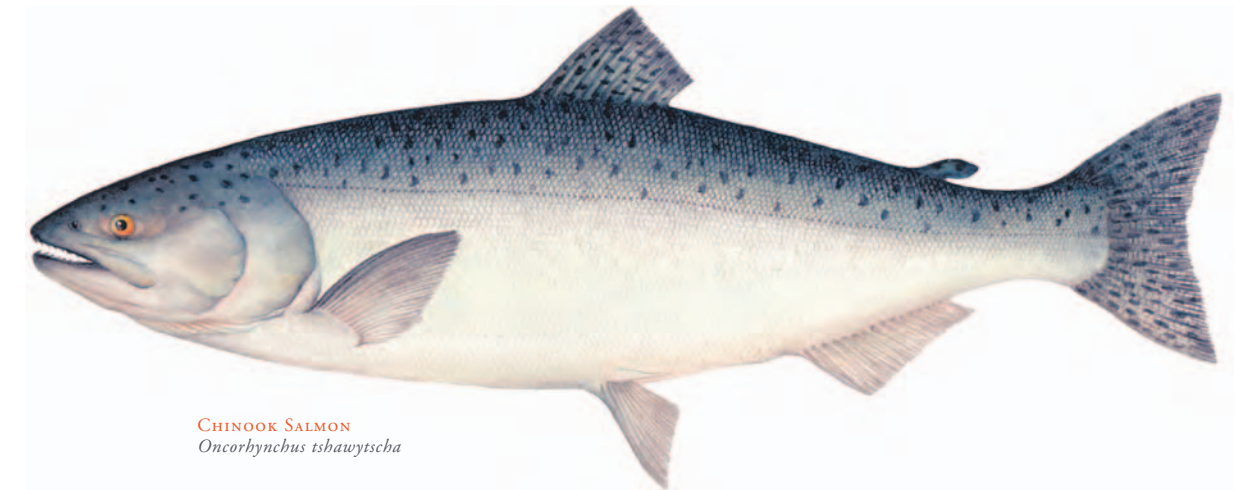
Since its debut in 1999, our Seafood Watch program has grown to include six regional pocket guides, with two Spanish-language options, featuring popular seafood found in different regions of the United States. We also publish a national version in English and Spanish and in 2008 added a consumer guide to sushi. Pocket guides are updated every six months to reflect the latest research. In partnership with aquariums, zoos and other institutions across the U.S., we have put more than 32 million Seafood Watch pocket guides in the

hands of consumers; over nine million of those guides were included in the 2007 DVD release of the Academy Award-winning animated film *Happy Feet*. The Seafood Watch website ([seafoodwatch.org](http://seafoodwatch.org)) has attracted more than one million visitors since 2001, and more than 800,000 pocket guides have been downloaded, together with thousands of seafood reports, the scientific documents that underpin the recommendations for each species. A mobile version of the pocket guide is also available for cell phones or other mobile devices with Internet connection and our new free iPhone app has been downloaded more than 200,000 times.

In 2006, Seafood Watch developed a free DVD package of restaurant training materials, which was nominated for an award at the 2007 Jackson Hole Wildlife Film Festival. Consumers, advocates and partners also have access to a wealth of materials, both print and electronic.

Our annual "Cooking for Solutions" event brings together celebrity chefs to prepare gourmet dishes using sustainable seafood and organic ingredients, paired with organic and sustainable wines. Reaching 6,000 to 8,000 attendees, including environmental and food media, major seafood buyers and restaurateurs, the event strengthens the connection between what we eat and the health of the planet. Notable chef participants have included Alice Waters, Jacques Pépin, Diana Kennedy, Martin Yan, Rick Bayless, Susan Feniger, Mary Sue Milliken, Rick Moonen and Thomas Keller. Well-known television personalities John Cleese and Alton Brown have also helped us bring attention to this important message.

The event includes a daylong "Sustainable Foods Institute," for invited media. The institute



brings together panels of experts to discuss the latest in the world of sustainability. Stories generated by media who have covered past events include more than 100 articles and broadcast segments. The influential journalists who participate bring a greater awareness about issues relating to sustainable seafood and agriculture to their writing.

Over the years, these events have attracted leading journalists from consumer and trade media outlets, both print and broadcast, including the *New York Times*, *Washington Post*, *Los Angeles Times*, *San Francisco Chronicle*, *Sunset Magazine*, *TIME Magazine*, *Coastal Living Magazine*, KGO-AM radio, the MediaNews Group in the San Francisco Bay Area, and a host of blue-chip freelance writers representing a range of magazines, newspapers and online media outlets.

Our Sustainable Seafood Initiative has moved beyond building the salience of the issue through consumer awareness. We are also working with the nation's largest corporate seafood buyers to guide the development of new purchasing policies that favor seafood from sustainable sources. Through our efforts, and those of the broader sustainable seafood movement, major seafood buyers are making new commitments to give preference to well-managed and environmentally responsible fisheries and aquaculture. The growing list of companies committed to purchasing sustainable seafood includes Walmart (the nation's largest food retailer) and Bon Appétit Management Company (with 400 corporate, university and institutional clients nationwide).

In 2007, Compass Group North America—the largest food service company on the continent and the corporate parent of Bon Appétit Management Company—committed

to buy one million pounds of seafood from sustainable sources. The company is working to eliminate the purchase of all seafood on the Seafood Watch red “avoid” list, and especially to find sustainable alternatives to Atlantic cod and farmed salmon.

In 2008, we signed a similar agreement with ARAMARK, one of the nation's largest facilities management and food service companies. ARAMARK pledged to buy seafood from sustainable sources within a decade. ARAMARK's operations in the United States alone employ about 180,000 people and serve tens of millions of consumers at businesses, universities, schools, sports and entertainment facilities, parks and other locations. ARAMARK's action is the latest in a series of significant commitments by leading retailers and food service providers to work with our Sustainable Seafood guidelines and similar programs around the world.

The Aquarium is also a founding member of the Conservation Alliance for Seafood Solutions, a collaboration among 15 nongovernmental organizations that is using a range of approaches to bring conservation expertise to companies that buy and sell seafood. The goal of the Alliance is to preserve the health of ocean and freshwater ecosystems and ensure a long-term seafood supply.

The Alliance has crafted A Common Vision for Environmentally Sustainable Seafood to guide its work: an ambitious, but realistic guide to environmentally responsible seafood for businesses. It provides clear guidance on actions companies can take to ensure the healthy seafood supply that is essential to long-term business success.

