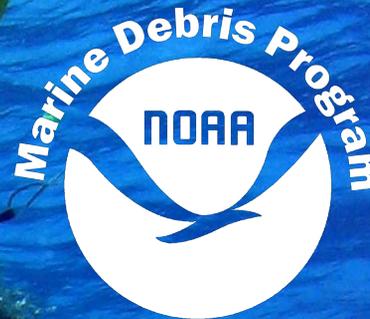


Photo: Dwyane Meadows/ NOAA



[www.MarineDebris.noaa.gov](http://www.MarineDebris.noaa.gov)

*Keep the sea free of debris!*

# 2012 ACCOMPLISHMENTS REPORT

It has been quite a year for the NOAA Marine Debris Program. The majority of our focus, time, and activities were dominated by leading an unprecedented response effort to marine debris generated by the March 2011 tsunami that struck Japan.

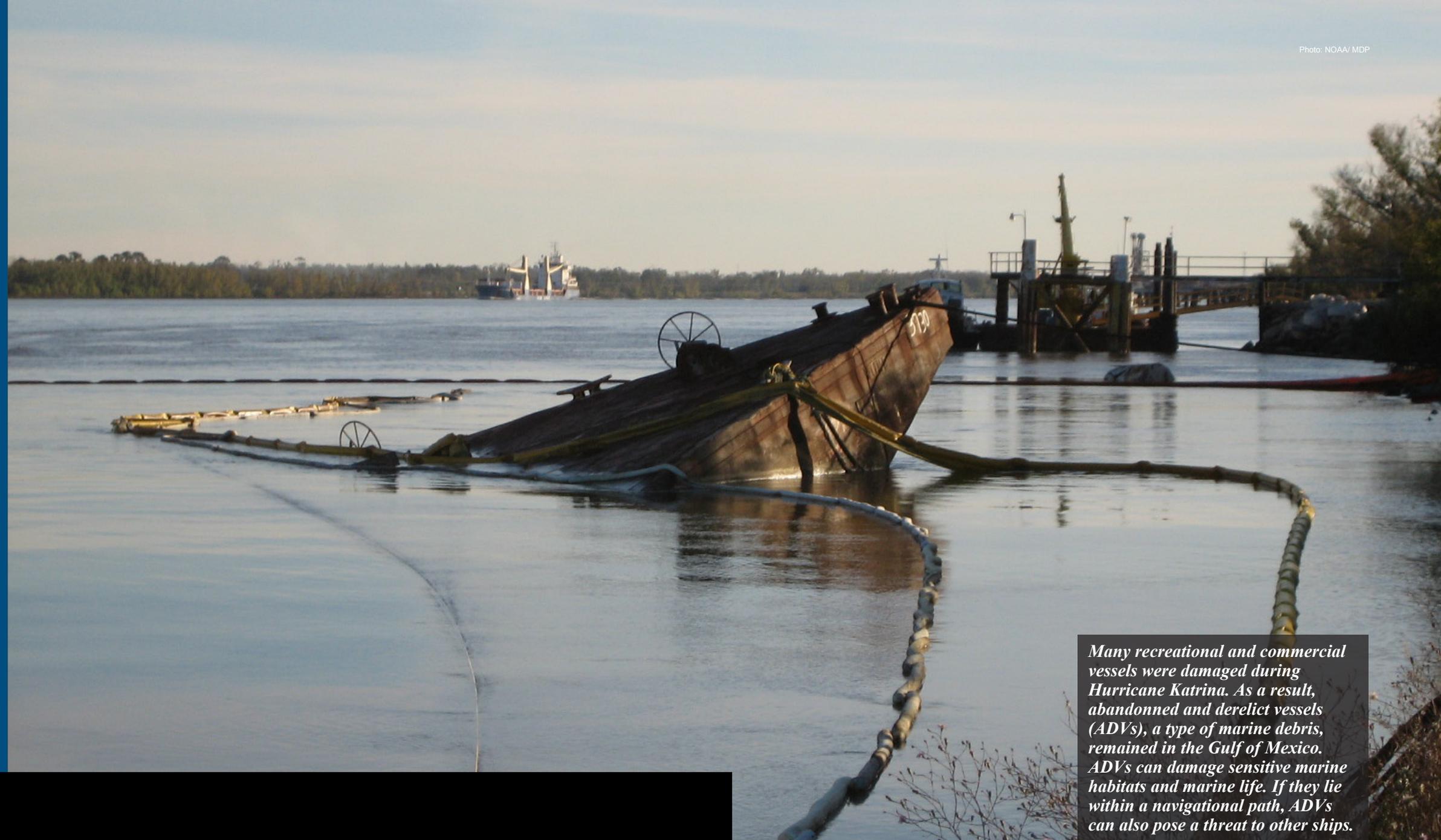
Never before has our small program attempted to predict and prepare for a slow moving disaster of this kind. We turned to our expertise, focusing on detection, modeling, monitoring, contingency planning, communications, and coordinating the incredible network of people who already work on marine debris issues. Through this effort, there have been many successes – and some missteps as well – but we have consistently reviewed our way of doing business and changed direction when needed. We will continue to learn and improve our capacity to respond.

This tragedy that took so many lives has constantly reminded us how small our planet really is. Debris from a disaster across the huge Pacific Ocean, thousands of miles away, is now having an impact on our shores. While we can only hope that we will not see disaster of this magnitude again in our lifetimes, the lessons that we learned this year will help us reduce the impacts of the everyday marine debris that litters our oceans and coasts.

Through it all, we were still able to pursue our mission of preventing, reducing, and researching the impacts of marine debris. We focused on regional activities this year, recognizing that every part of the country is different and requires a unique approach to address marine debris challenges. We developed our first-ever research strategy, which identifies gaps in research and sets priorities for the next five years. The program also supported numerous projects to remove accumulated debris across the nation and strengthened partnerships that further our goal of changing behavior through outreach and education.

With that, I am very pleased to present the NOAA Marine Debris Program's 2012 Accomplishments Report. As the years go by, and we reflect on our accomplishments, my hope is that the need to remove debris decreases as our prevention efforts are more and more successful. I look forward to the year ahead and our program making new strides to reduce the impacts of marine debris across our nation.

Nancy Wallace, Director  
NOAA Marine Debris Program



*Many recreational and commercial vessels were damaged during Hurricane Katrina. As a result, abandoned and derelict vessels (ADVs), a type of marine debris, remained in the Gulf of Mexico. ADVs can damage sensitive marine habitats and marine life. If they lie within a navigational path, ADVs can also pose a threat to other ships.*

**FROM THE DIRECTOR**

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*Artwork from the Program's "Keep the Sea Free of Debris" 2012 art contest. Each year, students Kindergarten through eighth grade have the opportunity to send in artwork showing how marine debris impacts the ocean environment.*



## ACCOMPLISHMENTS REPORT OVERVIEW

This past year marked an exciting and dynamic time for the NOAA Marine Debris Program (MDP). While we laid out our 2012-2016 research strategy, tsunami-related marine debris from Japan started to wash ashore along West Coast states—a topic that has garnered global attention. Working with regional partners across the nation on marine debris research and removal efforts, the MDP strengthened its role within the community through a series of events to engage the public and stakeholders on the issues surrounding marine debris.

This report highlights our achievements from 2012. As you begin to read, it is important to remember that marine debris is an everyday problem. Each year, the Program strives to not only raise awareness through research, outreach and education, but to also change behavior and to ultimately “keep our seas free of debris.”

## ABOUT THE NOAA MARINE DEBRIS PROGRAM

The NOAA MDP leads national and international efforts to research, prevent, and reduce the impacts of marine debris. Our staff is positioned around the country leading marine debris projects in partnership with state and local agencies, tribes, non-governmental organizations (NGOs), academia and industry. The program spearheads national research efforts and works to change behavior through outreach and education.

**For more information, visit us online:**  
<http://www.MarineDebris.noaa.gov>



*On August 13, 2012, a small Japanese fishing vessel (20 ft) was found on Spring Island, off the west coast of Vancouver, British Columbia. After matching the vessel's registration and general appearance to the lost vessels reported to the Japan Coast Guard, the vessel has been confirmed as resulting from the tsunami.*

## JAPAN TSUNAMI MARINE DEBRIS

In March 2011, a 9.0 magnitude earthquake and subsequent tsunami struck Japan, causing one of the worst human tragedies in the nation's history. The disaster took nearly 16,000 lives and destroyed countless buildings.

As the tsunami receded from land, it washed much of what was in the inundation zone into the ocean. Heavier materials sank closer to shore, while buoyant materials went on to make up the debris fields initially captured by satellite imagery and aerial photos of the waters surrounding Japan immediately after the tsunami. The debris fields dispersed after a few weeks, and some buoyant debris continued to float across the North Pacific. Over the past year, debris items, carried eastward by ocean currents and wind, have reached U.S. and Canadian shores.

In March 2012, one year after the event, the first piece of confirmed JTMD – a Japanese fishing vessel – was found adrift off the shores of British Columbia. The arrival of JTMD highlighted the need to develop contingency plans in the five affected states. The MDP has played an important role in this collaborative effort.

The Program recognized the need for additional funding for cleanup efforts

in response to tsunami debris. In 2012, the MDP allocated \$50,000 for debris projects to each of the impacted states – Alaska, Washington, Oregon, California, and Hawai'i – to aid in removal and cleanup efforts.

This year the MDP also implemented shoreline-monitoring protocols, working with partners from NGOs, federal, state, and local agencies. To date, 157 monitoring sites have been established across the West Coast and Hawai'i to gather baseline marine debris data that will assist in identifying if an increase of debris is occurring, which could be from the tsunami.

JTMD has garnered attention from the global media and general public. The MDP has organized and worked with partners to communicate current information and address concerns to international, federal, state, local stakeholders and the public through public meetings. These meetings have brought the issue of marine debris to the forefront and have improved on-the-ground outreach efforts.

For the most recent updates regarding JTMD, please visit the NOAA Marine Debris Program website: [www.marinedebris.noaa.gov/tsunamidebris.html](http://www.marinedebris.noaa.gov/tsunamidebris.html)



## ALASKA

### *Tsunami debris: monitoring in Alaska*

Addressing marine debris in Alaska is a unique challenge; it has the largest coastline in the U.S. and accumulation sites are often in rugged and remote areas. It became apparent this year that in addition to this reality, Alaska was also an area of high impact for marine debris generated by the Japan tsunami. In preparation and response to this arrival, the MDP worked with NMFS ABL scientists to conduct shoreline monitoring in areas of impact. In Alaska, this effort included a total of 87 sites, the majority of which required boat or plane access. Some of these areas have been monitored since the 1980's, and continuing this project provided an invaluable baseline that can be used to directly measure the changes in composition and quantity of debris that have come with the arrival of tsunami debris. This study, completed in September 2012, will be combined with other data to provide guidance to planning and scoping efforts for 2013.

## WASHINGTON

### *JTMD State Contingency Planning*

In January 2012, the state of Washington established a team to address JTMD. The team included the WA Dept. of Ecology, WA Department of Health, and WA Emergency Management Division. The MDP collaborated closely with the team on public outreach, including public meetings and presentations, and on a response plan to address JTMD. Over 50 representatives from federal and state agencies, coastal counties, tribal governments, NGOs and industry attended a one-day workshop to draft the Washington State Japan Tsunami Marine Debris Contingency Plan. With close coordination and support from the MDP, the plan was finalized in September, and Washington became the first of the West Coast states to complete a contingency plan to respond to heightened coastal marine debris impacts.

## OREGON

### *JTMD Biofouling Regional Preparedness & Response Workshop*

After an assessment of damage from the tsunami, the Government of Japan reported that three large docks were missing from its ports. One of these missing docks, a 66-foot long concrete structure draped in non-native and invasive species, washed ashore on Agate Beach in Oregon on June 16, 2012. Concern over the invasive species prompted state, local and federal agencies to put together the Japan Tsunami Marine Debris Biofouling Regional Preparedness & Response Workshop. During the two-day regional workshop at Portland State University in Oregon, the MDP and approximately 80 aquatic invasive species experts from federal (U.S. and Canada), tribal, and state government agencies, academia, and NGOs developed a regional, science-based approach to biofouling and tsunami-specific marine debris response.

## CALIFORNIA

### *MDP Funds the Adopt-A-Beach Program for JTMD*

Volunteer interest in marine debris removal efforts has surged along with anticipation and concerns over JTMD arriving on California shorelines. This year, the MDP provided funding for the Adopt-A-Beach program, an educational program that brings together volunteers to participate in beach cleanups across the state. The program also provides educational resources for the public about marine debris.

## HAWAII

### *Planning for JTMD Arrival*

Early debris modeling forecasts predicted that the Northwestern Hawaiian Islands would be the first U.S. region to be potentially impacted by JTMD. In January 2012, dozens of federal, state, and local representatives came together in Honolulu during an MDP-led workshop to share information and begin discussions on contingency response to this debris. The MDP also led the creation of a federal interagency contingency plan for the Main Hawaiian Islands. A plan for the Northwestern Hawaiian Islands has also been drafted, and will eventually become a part of the Papahānaumokuākea Marine National Monument's Emergency Response Plan.

In June 2012, the MDP and its partners launched a Puma Unmanned Aircraft System (UAS) off the coast of Hawai'i to see if it could detect simulated marine debris in the ocean. Researchers placed simulated debris of varying sizes, shapes and buoyancies in the water and launched the UAS (which resembles a model airplane) from a vessel over the items. This test was one of NOAA's proactive efforts to identify effective technologies for locating marine debris at sea—including debris from the Japan tsunami. There is still much work to do on whether this technology can be used, but the test was a good step forward in the process.

*66-foot dock found on Agate Beach in Oregon. This dock sparked interest in state and federal agencies, along with the science community, to take a closer look at biofouling as it relates to marine debris.*

Photo: Oregon Department of Parks and Recreation

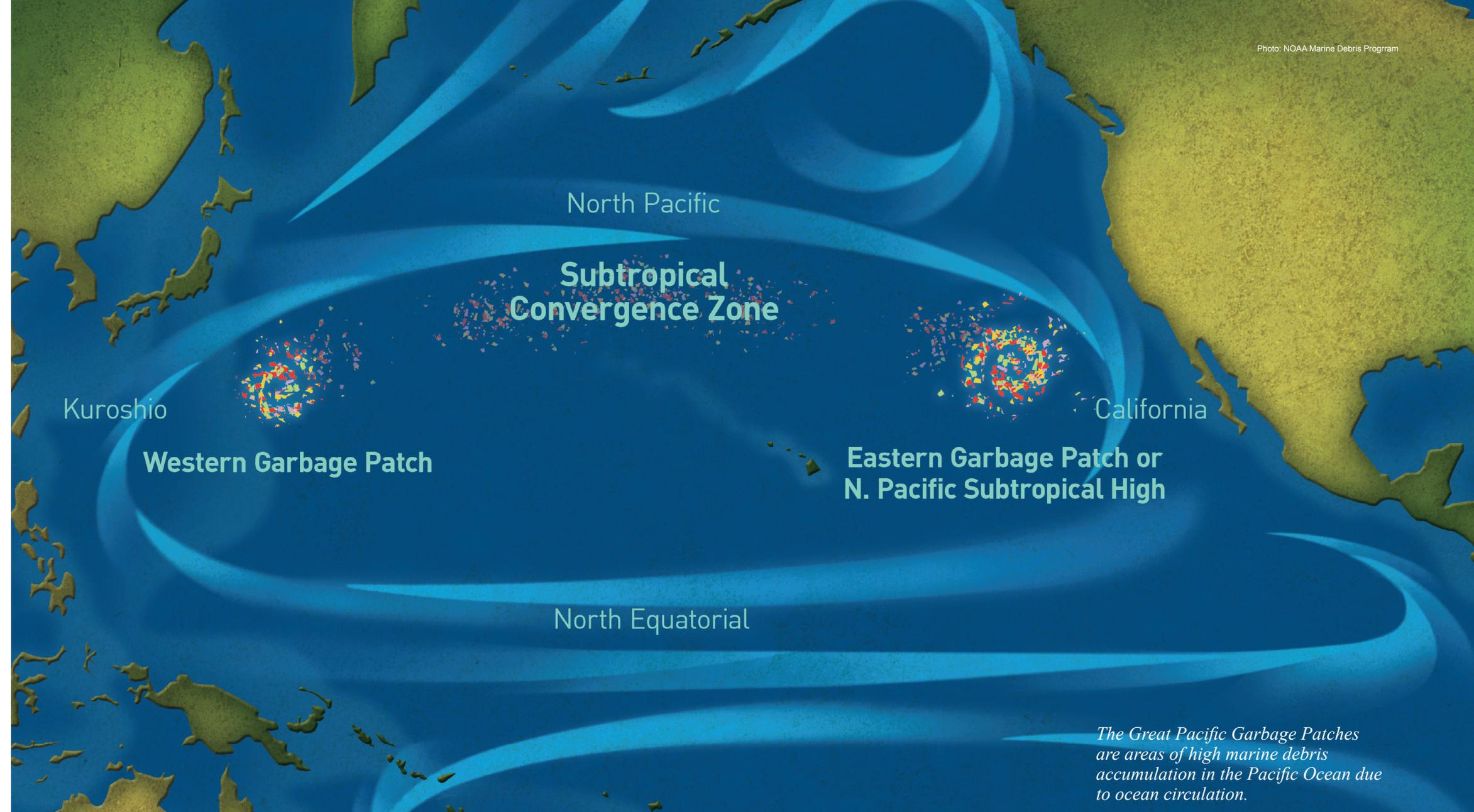
## HONOLULU STRATEGY

In March of 2011, NOAA co-hosted the Fifth International Marine Debris Conference (5IMDC) in cooperation with the United Nations Environment Programme and other agencies and organizations. The conference brought the marine debris community together to develop and create a document known as the Honolulu Strategy. The Honolulu Strategy is a framework for a comprehensive and global effort to reduce the ecological, human health, and economic impacts of marine debris globally.

It is intended for use on multiple levels—global, regional, national, and local—involving the full spectrum of civil society, government and intergovernmental organizations, and the private sector. The framework aims to reduce, prevent manage marine debris from at-sea and land-based sources and includes the removal and processing of accumulated marine debris. NOAA finalized this Strategy and began implementing its guidelines in early 2012.

Download a copy of the Honolulu Strategy and learn more about the 5IMDC:

[www.marinedebris.noaa.gov/projects/intlmdconf.html](http://www.marinedebris.noaa.gov/projects/intlmdconf.html)



*The Great Pacific Garbage Patches are areas of high marine debris accumulation in the Pacific Ocean due to ocean circulation.*

## NORTHEAST COAST

### *Engaging Diverse Maine Communities In Derelict Lobster Gear Removal and Disposal*

In the Northeast region, lost or abandoned derelict lobster traps pose a significant threat to the marine environment and local fisheries. Beginning in 2011, the Gulf of Maine Lobster Foundation, with support from the MDP, engaged coastal stakeholders in the Northeast region in a two-year cleanup effort to remove lost and derelict lobster traps from marine and coastal habitats. The project, which ended this year, has helped remove 20 metric tons of at-sea debris, 13 tons of shoreline debris, restored two acres of coastal-marine habitat and enlisted the help of 100 volunteers, totaling 572 volunteer hours.

### *New England Derelict Gear Workshop and State Manager Roundtable*

In February 2012, the MDP led a workshop in the Northeast with representatives in the coastal community to discuss derelict fishing gear (DFG) issues in the region. Representatives from nine states, including members of non-profits, the fishing industry, federal agencies, and state agencies, came together to build a regional research agenda and prioritize project outcomes to help state managers effectively address DFG in their states. State managers also began exploring solutions to reduce, work around, or remove unintended barriers to voluntary DFG removal in New England.

## SOUTHEAST COAST

### *Engaging Diverse Maine Communities In Derelict Lobster Gear Removal and Disposal*

The MDP worked with the University of Georgia to establish the Southeast Atlantic Marine Debris Initiative (SEA-MDI)—a tri-state consortium spanning North Carolina, South Carolina and Georgia to strategize local and federal marine debris efforts. In 2012, with support from the MDP, the SEA-MDI funded six education and outreach projects, which included projects such as Clean Marine: Debris Free Waterways in Beaufort County, SC – a multi-agency project set-up to raise marine debris awareness in South Carolina, and the Georgia Sea Turtle Center Marine Debris Citizen Science and Education Program—an outreach and standards-based education program presented in classrooms to students along Georgia's coast. The program also created a citizen science program using the Marine Debris Tracker smartphone app.

To learn more about the SEA-MDI and all MDP projects along the East Coast, visit us online:  
[www.marinedebris.noaa.gov/about/ecoast.html](http://www.marinedebris.noaa.gov/about/ecoast.html)

## GREAT LAKES

### *Fordson Island Rids its Banks of Abandoned Boats*

Since May 2011, the MDP has supported a project to remove derelict and abandoned vessels from Fordson Island, a heavily urbanized and once under-appreciated area in the Rouge River. The river's watershed is the oldest and most heavily populated and industrialized area in southeast Michigan. Funding from the MDP and Great Lakes Restoration Initiative, through NOAA's Great Lakes Habitat Restoration Program, created jobs for volunteers to clean up the shoreline and remove the vessels in the near-shore area. To date, through five separate events, volunteers removed 21 derelict boats, roughly 40 tires, and other surface debris from the island for a combined total of 122 metric tons of debris.

Plunge into Great Lakes to find out more about Fordson Island and other local projects in the region:  
[www.marinedebris.noaa.gov/about/grtlakes.html](http://www.marinedebris.noaa.gov/about/grtlakes.html)

Photo: Anna Manyak/NOAA

*Lobster trap buoys found on the Isles of Shoals during a cleanup hosted by Blue Ocean Society for Marine Conservation and NH Sea Grant. Working closely with local fishermen and New Hampshire Department of Fish and Game, staff and volunteers removed enough derelict lobster gear in one day to fill a 30 yard dumpster.*

Photo: Jacek Maseko/NOAA

*A cluster of buoys found by a team of NOAA scientist along the Gulf of Alaskan shoreline while conducting marine debris monitoring and assessment protocols.*

## GULF OF MEXICO

### *Cleaning up the Pascagoula River*

The lower Pascagoula River in Mississippi, home to numerous threatened and endangered species such as the Yellow-blotched Map Turtle and Gulf Sturgeon, is an area negatively impacted by marine debris. With support from the MDP, Coastal Rivers, a local NGO, has developed a Litter Free Waterways Initiative focused on debris removal efforts along the lower Pascagoula River. The two-year project culminated in 2012 with volunteers removing over 40 tons of debris, which included more than 20 pieces of “white goods”—items such as refrigerators, freezers and other large household appliances. Through the initiative, Coastal Rivers has educated local groups such as the National Wildlife Federation Habitat Stewards Program and Pascagoula River Basin Alliance Board on the prevalence and impacts of marine debris on their local environment.

To learn more about this project and others in the Gulf of Mexico Region, visit our Gulf of Mexico page online: [www.marinedebris.noaa.gov/about/gom.html](http://www.marinedebris.noaa.gov/about/gom.html)

## WEST COAST

### *A Coast-Wide Effort: The West Coast Governors Alliance Marine Debris Team*

The Marine Debris Action Coordination Team (MD ACT), formed by the West Coast Governors’ Agreement in 2008, has been working to address marine debris along the West Coast in a coordinated, ecosystem-based approach. In 2012, the MD ACT, representing the three states, Federal agencies, Tribes, NGO, and industry, met at three action-oriented workshops to discuss derelict fishing gear, land based debris, and the best strategies to address these issues. The result of these workshops was a comprehensive strategy addressing marine debris, a marine debris coalition of experts and stakeholders to facilitate coordination and communication, and the development of a West Coast Marine Debris Database.

### *Clean Coast Alliance: Coast Savers Annual Cleanup*

The Washington Clean Coast Alliance was formed in 2007 and launched the Coast Savers program to coordinate the efforts of volunteer groups and individuals who have been cleaning up Washington’s Pacific Coast since 1971. With funding from NOAA, the Alliance developed a comprehensive coastal cleanup guideline document and used it to conduct well-managed and effective volunteer cleanups that netted over 25 tons of marine debris on average per year. In 2011, the Alliance and NOAA formed a 5-year regional partnership that allowed the MDP to support the program even more, and Coast Savers to continue its excellent efforts in the face of a massive recession. Thanks to the hard work of the Alliance volunteers and leadership team, the annual cleanup continues to be highly successful in mobilizing volunteers and removing marine debris from the entire length of Washington’s outer coast, and in 2012 over 1,000 volunteers removed 30 tons of marine debris.

Want more information on the MDP’s work in the West Coast? Visit us online: [www.marinedebris.noaa.gov/about/wcoast.html](http://www.marinedebris.noaa.gov/about/wcoast.html)

## ALASKA

### *Dungeness Crab Pots: New Gear Technologies*

In 2012, the MDP continued to work actively in the state of Alaska. Culminating a two-year study of derelict crab pots, the MDP worked with NMFS ABL scientists to examine behaviors of Dungeness crabs entrapped in pots. Their experiment uncovered a crucial fact: the lack of a gap in the closure of the crab pot prevented escapement. When a gap was present between the pot lid and the frame, crabs were able to escape. The MDP worked with the scientists to test multiple alternate escape mechanisms, identifying potential changes to crab pot designs which could reduce ghost-fishing impacts of lost gear. The findings of this study will be communicated to the Alaska Department of Fish and Game, the lead regulating agency for gear in the Dungeness fisheries, for evaluation and potential integration into regulations moving forward.

Check out the MDPs on-going projects in the Alaska region: [www.marinedebris.noaa.gov/about/alaska.html](http://www.marinedebris.noaa.gov/about/alaska.html)

## CARIBBEAN

### *Derelict Fish Traps in the U.S. Virgin Islands*

In St. John and St. Thomas, local fish stock has been a valuable resource for generations of fishermen both economically and culturally. The occurrence of Derelict Fish Traps (DFTs) can negatively impact not only the health of fish stocks in the area but also the viability of active commercial fishing equipment. With the support of the MDP, NOAA's National Centers for Coastal Ocean Science (NCCOS) assessed the causes and potential impacts of DFTs, provided an initial estimate of derelict fishing traps (DFTs) stranded in 20-40m of water depth, and established a method to quantify derelict trap abundance using autonomous underwater vehicles. The project has led to a better understanding of DFTs in the U.S. Virgin Islands, and will be used to support management decisions and removal efforts.

Find out more about this and other MDP projects in the Caribbean:  
**[www.marinedebris.noaa.gov/about/carib.html](http://www.marinedebris.noaa.gov/about/carib.html)**

## PACIFIC ISLANDS

### *O'ahu Marine Debris Response Protocols*

In the state of Hawai'i, there is not a single government agency or organization responsible for removing marine debris, making it a multi-jurisdictional issue. In addition, responsible agencies have limited resources and capacity to respond. The MDP, working with TetraTech, Inc., assisted response agencies on O'ahu to streamline coordination and collection of marine debris sighting information. The result is an inter-agency protocol to assist in effective coordination among government agencies primarily responsible for removing marine debris on the Island of O'ahu. This protocol provides a listing of response agencies, jurisdictions, and support organizations that may be able to assist with removal on a voluntary basis. It also lays out methods for processing marine debris reports to facilitate timely removal and tracking of those reports and responses. The release of this product has aided state and county agencies in response planning for potential Japan tsunami marine debris.

### *Hawai'i Island Marine Debris Removal Project*

The windward Wai'ōhinu-Ka Lae coastline (east of South Point) on the Big Island of Hawai'i has long been known as a marine debris accumulation site. Most of this shoreline is very remote and difficult to access, and it is probably the most debris-littered coast in the state. The Hawai'i Wildlife Fund (HWF), with support from the MDP since 2005, has continued to clear this coastline of marine debris.

In 2012, HWF and volunteers removed over eight tons of marine debris in 282 volunteer workdays, during 10 cleanup events and 10 net removal patrols, covering 51 miles. With MDP funding, HWF and hundreds of volunteers have removed nearly 104 tons of debris from this shoreline since 2005. Volunteers collected data during each effort and hauled the marine debris to a nearby transfer station, where the nets, line, and rope were shipped to the Island of O'ahu by Matson Navigation Co. The debris was then used to create electricity in Hawai'i's *Nets to Energy* Program.

### *Marine Debris Removal in the Northwestern Hawaiian Islands*

Begun in 1996, this cleanup effort is NOAA's largest marine debris removal effort in the nation. Since 2006, NOAA has focused on targeted removal efforts in high-density areas for derelict fishing gear, one of the most harmful types of marine debris in the Northwestern Hawaiian Islands. Each year, trained NOAA divers with the NOAA Pacific Islands Fisheries Science Center's Coral Reef Ecosystem Division painstakingly remove derelict nets and gear from the coral reefs and coastlines throughout this World Heritage Site. These nets, line, and rope are brought back to the Island of O'ahu where they are used to create electricity in Hawai'i's *Nets to Energy* Program. In 2012, a team of 17 NOAA staff removed nearly 52 metric tons of harmful marine debris, all of which was used to create electricity. In 2012, funding and support was provided by the Papahānaumokuākea Marine National Monument, the MDP, and NOAA's Damage Assessment, Remediation, and Restoration Program.

Dive deeper into this and other MDP projects in the Pacific Islands:  
**[www.marinedebris.noaa.gov/about/pacislands.html](http://www.marinedebris.noaa.gov/about/pacislands.html)**

*NOAA diver removes a nest of derelict fishing gear (DFG) in this case nets, from the ocean column. DFG not only negatively impacts the environment, but can also pose a navigational hazard for ships.*

Photo: PIFSC/NOAA

*NOAA divers survey marine debris on the ocean floor.*



## MARINE DEBRIS RESEARCH MONITORING

In 2012, the MDP made important strides forward in marine debris research by finalizing its first-ever research strategy. This document represents a major milestone for the Program, as it identifies gaps in research and sets priorities for the next five years. As part of this strategy, funding for projects in 2012 focused on understanding the economic impact of marine debris and monitoring shorelines to better understand debris concentrations and movement.

Also in 2012, the MDP fully engaged in a working group, chaired by the United Nations' Joint Group of Experts on the Scientific Aspects of Marine Protection (GESAMP), that is investigating the sources, fate, and effects of micro-plastics in the marine environment. This working group brings together international experts in varied disciplines to assess the state of knowledge and complete a global assessment of micro-plastic marine debris. Prior microplastics workshops and initiatives from NOAA have spurred increased interest in this topic, and contribution to this working group will be the Program's major microplastics initiative over the next three years.

The Marine Debris Monitoring and Assessment Project (MD-MAP) made major steps forward in 2012. In previous years, the MDP developed standardized methods for monitoring and assessment of marine debris on shorelines and in surface waters. This year, in partnership with Versar, Inc., the MDP completed a project to test the protocols and develop guidelines for the frequency and amount of sampling needed. The results of this project will be published in 2013, and will include guidelines for monitoring in benthic, water column, and marsh environments.

In addition, the MDP and NCCOS Cooperative Oxford Laboratory completed a multi-year field component of a pilot project on Chesapeake Bay tributaries to test and refine the MD-MAP protocols.

The MDP also developed and distributed a user-friendly Marine Debris Shoreline Survey Field Guide which was met with much interest; nearly 300 individuals and/or organizations have requested the field guide to-date. In January 2012, the MDP began to partner with various groups on regular monitoring at sites potentially impacted by Japan tsunami debris for a period of two years. As a result, the MD-MAP quickly grew to over 87 shoreline sites across Alaska, Washington, Oregon, California, and Hawai'i.

Delve into our monitoring projects online:  
[www.marinedebris.noaa.gov/projects/monitoring.html](http://www.marinedebris.noaa.gov/projects/monitoring.html)

## OUTREACH & EDUCATION

Every year, the NOAA MDP actively participates in outreach events across the country to spread awareness about marine debris and its impacts, and encourage changes in behavior to address the issue. This year, the MDP participated in over 100 outreach events, educating nearly 20,000 people on current topics such as the 'Great Pacific Garbage Patch' and JTMD. Event participants were encouraged to be a part of the marine debris solution by spreading awareness on the issue and taking part in coastal and waterway cleanups.

## TEACHABLE SCIENCE: OCEAN EDITION -- TEACHER'S WORKSHOP

In June, the NOAA MDP participated in the "Teachable Science: Ocean Edition" teachers professional development workshop lead by the NOAA National Marine Fisheries Service. Twenty elementary school teachers from across the Montgomery County Public School District took part in the two-day event, held at the Lathrop E. Smith Environmental Education Center, which covered ocean properties, diversity of life, ocean exploration and stewardship, and marine debris. The purpose of the workshop was to increase ocean literacy and encourage ocean stewardship, in order to help integrate the Ocean Literacy Principles into the classrooms. By linking presented marine debris material and lesson plans to both the Maryland State Department of Education and Montgomery County Public School System's environmental education standards, it encouraged the integration of marine debris education into the required curriculum.

Dive into and download our outreach and education materials online:  
[www.marinedebris.noaa.gov/outreach/welcome.html](http://www.marinedebris.noaa.gov/outreach/welcome.html)



Photo: Dianna Parker/NOAA

*Volunteers from the International Coastal Cleanup at the Anacostia Park in Washington, D.C. show their completed debris data card.*

## FISHING FOR ENERGY

Fishing for Energy is a partnership between Covanta Energy, the National Fish and Wildlife Foundation, the NOAA MDP, and Schnitzer Steel, designed to provide a cost-free disposal solution for derelict or otherwise unusable fishing gear to commercial fishermen across the nation. The program gives fishermen a place to dispose of derelict gear they come across while on the water and eases the financial burden associated with the disposal of unusable fishing gear in landfills. By placing bins at busy fishing ports, the program significantly increases the likelihood that derelict gear does not become marine debris. This year, the partnership added Montauk, NY and Newburyport, MA to its ports list, bringing the total participation to 31 ports in nine states.

[www.marinedebris.noaa.gov/projects/fishing4energy.html](http://www.marinedebris.noaa.gov/projects/fishing4energy.html)



## ALICE FERGUSON FOUNDATION

The Alice Ferguson Foundation connects people to the natural world, sustainable agricultural practices and the cultural heritage of their local watershed through education, stewardship and advocacy. For the past six years, the NOAA Marine Debris Program has helped sponsor the annual Potomac Trash Summit hosted by the Alice Ferguson Foundation. This year, the Trash Summit brought together representatives from approximately 20 organizations and municipalities with a stake in the cleanliness of the Potomac. Highlighted topics included waste-related policies, waste containment, and in-stream trash reduction technologies, among others.

[www.fergusonfoundation.org](http://www.fergusonfoundation.org)



## OCEAN CONSERVANCY

Ocean Conservancy is a national non-profit group advocating healthy oceans and leads the annual International Coastal Cleanup (ICC) effort. The MDP has supported the ICC since the inception of the Program in 2005, and this year marked seven years of dedication to cleaner waterways. The Program has also worked with the Ocean Conservancy on Keep the Coast Clear--an online, multimedia platform to engage the public and raise general awareness about marine debris in the public. The website, [www.keepthecoastclear.org](http://www.keepthecoastclear.org), is developed in partnership with Ocean Conservancy and includes innovative tools and educational content to communicate effective marine debris messages and campaigns created and shared through social media, video and various other platforms.

[www.oceanconservancy.org](http://www.oceanconservancy.org)



## THE LEGACY FOUNDATION

Legacy Foundation develops programs that address the health effects of tobacco use. In 2012, the MDP began working with the Legacy Foundation on a very specific facet of marine debris - cigarette butt debris, the most collected item at beach cleanups. The filters of cigarettes are made of cellulose acetate, a type of plastic. Plastics can persist in the marine environment for long periods of time and harm human and animal health. Working together with the Legacy Foundation, the MDP is using this knowledge to raise awareness of the harm that cigarette-butt debris has on the ocean environment.

[www.legacyforhealth.org](http://www.legacyforhealth.org)



## THE AMERICAN CANOE ASSOCIATION

The American Canoe Association (ACA) is a national nonprofit organization serving the broader paddling public by providing education related to all aspects of paddling; stewardship support to help protect paddling environments; and sanctioning of programs and events to promote paddlesport competition and recreation. This past year, the MDP partnered with the American Canoe Association to help fund the production of cleanup bags specific to kayak and canoe cleanup events. The reusable mesh bags are perforated for the water environment and make capturing and discarding debris directly from our waters more efficient.

[www.americancanoe.org](http://www.americancanoe.org)



We are proud to look back on our accomplishments from 2012 from across the nation. The MDP has a dedicated and passionate team working to raise awareness on marine debris issues and work with local partners. 2013 will be an exciting year as we broach new partnerships in marine debris research, outreach and education – working towards “keeping our seas free of debris.”

**Want to stay informed?**

Keep up with NOAA Marine Debris Program’s work by subscribing to our monthly e-newsletter:

**[www.MarineDebris.noaa.gov/publications/weekly.html](http://www.MarineDebris.noaa.gov/publications/weekly.html)**



Photo: Jacek Maselko/NOAA

*Aerial view of the pristine waters off the Gulf of Alaska. We work to “Keep Our Seas Free of Debris.”*

**NATIONAL OCEANIC AND  
ATMOSPHERIC ADMINISTRATION**

U.S. Secretary of Commerce  
Rebecca Blank, Secretary (Acting)

Undersecretary of Commerce for  
Oceans and Atmosphere and NOAA Administrator  
Jane Lubchenco, Ph.D.

Assistant Administrator for  
Ocean Services and Coastal Zone Management,  
National Ocean Service  
David Kennedy



**[www.MarineDebris.noaa.gov](http://www.MarineDebris.noaa.gov)**