TESTIMONY PRESENTED BEFORE
THE SUBCOMMITTEE ON FISHERIES AND OCEANS
AND THE
SUBCOMMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION
ON

S. 362
THE MARINE DEBRIS RESEARCH, PREVENTION AND REDUCTION ACT
LONGWORTH HOUSE OFFICE BUILDING

SEPTEMBER 29, 2005
JOINT LEGISLATIVE HEARING

ON BEHALF OF
CLEAN OCEAN ACTION

INTRODUCTION

Thank you, Chairman LoBiondo and Chairman Gilchrest for the opportunity to testify before this joint legislative hearing of the Subcommittee on Fisheries and Oceans and the Subcommittee on Coast Guard and Maritime Transportation on the Marine Debris Research, Prevention and Reduction Act, S.362.

My name is Dr. Jennifer Samson, Principle Scientist for Clean Ocean Action (hereinafter "COA"). I am here with my colleague, Nicole Simmons, COA Water Policy Analyst and Staff Attorney. COA is a broad-based coalition of conservation, environmental, fishing, boating, diving, student, surfing, women's, business, service, and community groups. Our goal is to improve the degraded water quality of the marine waters off the New Jersey/New York coast. Clean Ocean Action identifies sources of pollution and mounts attacks on each source by using research, public education, and citizen action to convince our public officials to enact and enforce measures that will clean up and protect our ocean.[1] Marine debris is an issue of utmost concern for COA due to its negative affects to water quality, marine life, public health, navigation, and shore economies.

Like many coastal states, New York and New Jersey's environment and economy is dependent upon clean water and beaches. However, New Jersey is particularly qualified to speak to the harm caused by marine debris by the distinctive events of the Summers of 1987 and 1988, during which vast slicks of garbage, including medical wastes, washed ashore. Indeed, "New Jersey lost an estimated $2 billion in revenue as a result of debris washing ashore in the 1987 and 1988 beach seasons."[2] New Jersey Congressional Representatives took action, including members of this joint session, and regional

[1] Visit http://www.cleanoceanaction.org for more information.
[2] NOAA, "Perspective on Marine Environmental Quality." In *Year of the Ocean Discussion Papers*, Washington, D.C., 1998.

officials consequently followed through to avoid future losses by developing the Floatables Action Plan (hereinafter "FAP") in 1989. Objectives of the multi-agency FAP include:

- Minimizing the amount of floatable debris escaping the Harbor Complex;
- Maintaining an effective communication network to coordinate floatable debris removal activities and to respond to the spotting of slicks;
- Ensuring timely notification of beach operators of potential wash-ups of floatable debris; and
- Minimizing of beach closures due to floatable debris.

The coordinated efforts of FAP have resulted in a significant reduction in the number of floatable debris slicks, timely clean-up of reported slicks, and a near elimination of beach closures due to debris wash-ups in the New Jersey/New York area.

While this approach is successful, it is vulnerable to apathy and lack of enforcement. S. 362 provides a much needed national mandate for waterways to adopt strategies and enhance programs with identification and prevention, education, funding, and enforcement with national and international cooperation. It is an important step forward to address marine debris hazards.

MARINE DEBRIS IS A HAZARD

Marine debris is a harmful and serious problem of national and international significance. Marine debris impacts water quality, marine life, public health, navigation, and shore economies.

- Water quality impacts include the prevalence and persistence of plastics that can linger in the marine environment for hundreds of years, all the while continuing to poison, maim and kill aquatic life. The complete degradation of plastics can take 500 years or more, as the pieces become smaller and smaller but never actually disappear. Plastic fragments attract and accumulate hydrophobic toxic chemicals such as DDT, PCBs and PAHs, and the small, toxic-laden fragments are then ingested by jellyfish and salps.[3] These organisms are eaten by other organisms such as fish, allowing the toxicants to move through the food web, eventually reaching humans.

- Marine organisms become entangled in marine debris, which can lead to death through drowning, lacerations and infections. Sublethal effects include reduced fitness, increased metabolism due to drag during swimming, and chronic infections. Starvation can also result from ingestion of debris and blockage of the digestive tract. Marine debris has been shown to be a significant source of

[3] Moore, Charles. 2003. Trashed: Across the Pacific Ocean, plastics, plastics, everywhere. Natural History, p.46.

mortality for several endangered species, including the Hawaiian monk seal and the Northern fur seal.[4] Very few species are spared from the wrath of marine debris -- 86% of the world's sea turtles, 28% of the world's marine mammals, as well as countless numbers of seabirds, fish and crustaceans have been entangled in derelict fishing gear alone.[5]

- The impact of marine debris to public health from stepping on needles and other sharp objects was the main catalyst for the formation of the New York/New Jersey FAP. The public fears of injury and infection from medical waste and other debris washing up on the shoreline created national headlines and local economic losses in the millions of dollars.

- Marine debris is also a significant navigational hazard, entangling rudders and propellers and clogging vessel intakes resulting in engine failure. The US Army Corps of Engineers (hereinafter "US ACOE") estimated that floating debris in the New York/New Jersey Harbor in 1987 (prior to the FAP) damaged 17,800 vessels and resulted in $48 million dollars in damage.[6] The US ACOE estimates that the removal of drift and floatables each year results in the avoidance of approximately $23 million dollars of damage to vessels using the NY/NJ Harbor.[7] Keeping the Harbor waters safe and navigable is of utmost importance considering "[t]he Port of New York and New Jersey is the largest container port on the east coast of the United States. The port generates more than 228,000 direct and indirect jobs and $30 billion in regional economic activity."[8]

- New Jersey and New York coastlines attract millions of people every year, bringing millions of dollars with them. The wash-up of marine debris, including raw sewage and medical waste, in consecutive summers of 1987 and 1988, not only tarnished the image of area beaches, but also had a dramatic economic impact to the local and state economies. One estimate that included direct and indirect costs of the events of 1988, put losses between $820.7 million and $3,060.8 million dollars (estimate is in 1987 dollars).[9] These losses include

[4] Boland, Raymond C.; Mary J. Donohue. 2003. Marine debris accumulation in the nearshore marine habitat of the endangered Hawaiian monk seal, Monachus schauinslandi 1999-2001. Marine Pollution Bulletin 46: 1385-1394.

[5] Donohue, Mary J.; Russell Brainard; Michael Parke; David Foley. 'Mitigation of environmental impacts of derelict fishing gear through debris removal and environmental monitoring'. Issues Paper 5. *Proceedings from the 4th International Marine Debris Conference on Derelict Fishing Gear and the MarineEnvironment.* August 6-11, 2000. Honolulu, Hawaii. 58-78.

[6] Final Comprehensive Conservation and Management Plan for the New York-New Jersey Harbor Estuary Program including the Bight Restoration Plan, March 1996. Management of Floatable Debris. Pgs 181-196.

[7] New York Harbor, NY & NJ Drift Removal, Operations and Maintenance Phase, Drift and Floatables Collection and Removal Vessels, US Army Corp of Engineers, New York District, August 2005.

[8] New Jersey Department of Environmental Protection's Division of Fish and Wildlife's Reef News (2002).

[9] Ofiara, Douglas D. and Bernard Brown, "Marine Pollution Events of 1988 and Their Effect on Travel, Tourism, and Regional Activities in New Jersey," referenced as an "Invited Paper presented at the

tourism related dollars (an estimated 72% of the annual economic activity in NJ[10] and 62.5% of the state economy in NY[11]), and significant impacts to both the recreational and commercial fishing industries. According to the American Sportfishing Association, recreational anglers generate approximately $1,363,259,834[12] in retail sales to the state of New Jersey and $2,011,716,251 to the state of New York.[13] These extraordinary figures reiterate the economic importance of maintaining clean beaches and waterways.

All of these impacts of marine debris are both manageable and preventable, but they require a coordinated effort to keep debris off the beaches, out of the harbors, and out of the marine environment.

Citizens also play an essential role through anti-litter campaigns and litter cleanups. Clean Ocean Action has been doing its part to clean up New Jersey beaches. Since 1985, COA has organized twice yearly beach cleanup days, or "Beach Sweeps", where volunteers pick up debris and record their findings at over 147 sites covering 85 miles of coastline. The 2004 spring and fall beach sweep resulted in 92,000 pounds or 45.2 tons of debris removed, with plastics making up 71% of the total items collected.

CONTROLLING MARINE DEBRIS ON A REGIONAL LEVEL

New Jersey and New York addressed marine debris on a regional level through the Floatables Action Plan (hereinafter "FAP"). The FAP has shown that regional, interagency marine debris control programs can be successful. As stated briefly above, the FAP was developed in 1989 in response to the wash-up of extensive floatable debris, including medical waste, along the NY and NJ coastlines resulting in the closure of roughly 70 miles of bathing beaches and the loss of 1-4 billion dollars to each state. The successful development and implementation of the FAP is the result of Interagency Coordination between US ACOE, Environmental Protection Agency (EPA), New Jersey Department of Environmental Protection (NJ DEP), US Coast Guard (USCG), New York State Department of Environmental Conservation (NYDEC), New York City Department of Sanitation (NYCDCS), New York City Department of Environmental Protection (NYCDEP), and the Interstate Environmental Commission (IEC). The FAP involves a number of coordinated efforts including:[14]

Conference on Floatable Wastes in the Ocean: Social Economic and Public Health Implications. March 21-22, 1989 at SUNY- Stony Brook."

[10] NJ Commerce, Economic Growth and Tourism Commission, "Frequently Asked Questions: Tourism in New Jersey," prepared for consideration by the Blue Ribbon Panel on Offshore Wind, April 2005.

[11] Coast Alliance, "State of the Coasts: A State-by-State Analysis of the Vital Link between Healthy Coasts and a Healthy Economy," p.109, June 1995.

[12] American Sportfishing Association, Fishing Statistics, "Economic Impacts of Fishing" available at http://www.asafishing.org/asa/statistics/economic_impact/state_allfish_2003.html (last visited July 14, 2005).

[13] Id

[14] Floatables Action Plan Assessment Report. 2004. Prepared by Larry Gaugler, Floatables Coordinator, EPA Region 2.

- Daily overflight of the NY/NJ Harbor Complex and New Jersey beaches during the summer season including:
    - EPA daily overflights of the NY/NJ Harbor Complex during summer season (except Sundays);
    - NJ DEP daily aerial surveys of Raritan Bay and the NJ coastline (except Wednesdays);
    - EPA sampling of 46 bathing beaches, from Sandy Hook to Cape May, every Wednesdays.

- Floatable slick notification includes a coordinated effort for siting and removing a slick. All sightings of debris are reported to the EPA Regional Floatable Coordinator, who then reports the slick to the US ACE, which then collects the debris using drift collection vessels. Oil slicks are reported to the USCG for clean-up. The US ACOE program has collected 339,059 cubic yards of debris since 1989.
- Clean up procedures that include a communication network for routine and non-routine cleanups.
- Strategic placement of USACE drift collection vessels the day of and two days after each full and new moon period when tidal surges are at their maximum.
- NY City Boom and Skim Program collects and removes floatables discharged from many of its Combined Sewer Overflows. This program employs several skimmer boats that have collected 11,122.75 cubic yards of debris since 1994.
- Passaic Valley Sewage Commissioners Skimmer Vessel Program includes two skimmer vessels similar to those used by the NYCDEP Boom and Skim Program. These vessels are responsible for removing slicks and debris in the Passaic River and Newark Bay. These vessels have removed 2934.3 tons of debris since 1999.
- New Jersey's Operation Clean Shores program utilizes inmates to clean debris off shorelines, has resulted in the clean up of 52,332 Tons of debris since 1989.
- New Jersey's Adopt-a-Beach Program utilizes volunteers to clean trash and debris from coastal beaches twice a year. This program has collected 873,299 items since 1993.
- New York's Special Projects Beach Clean-up is similar in principal to NJ Adopt-a-Beach Program. It began in 1998 and has collected 1600 cubic yards of debris from three general regions of the shoreline.
- The Ocean Conservancy also conducts an annual International Coastal Cleanup Day that includes NY area beaches. This program has collected 779.83 Tons of debris since 1993.

In the Summer of 2004, a 7-mile slick of debris, including medical waste, washed up on several northern beaches in New Jersey, prompting lifeguards to close the beaches in those areas. Clean Ocean Action demanded an explanation from the agencies responsible for the FAP program. Public outcry and investigation revealed that apathy had creeped into the FAP program and a loss of vigilance resulted.

Congressional leadership including from Representatives LoBiondo, Saxton, and Pallone swiftly revived the program. The FAP was revisited and changes were made to improve the program to get it back on track. But it is important to note that without constant pressure on the agencies to remain diligent and vigilant to the problems and issues of marine debris, apathy towards the program can occur on a federal level.

CONTROLLING MARINE DEBRIS ON A NATIONAL LEVEL

The vast amount of debris collected in cleanup programs around the country and world as organized by the Ocean Conservancy and NOAA, is evidence that current laws are insufficient in controlling marine debris. **It is essential to stop marine debris *before* it gets into the global ocean system.** Once in the open ocean, it is becomes a more difficult and expensive recovery operation.

The current Bill meets several of the recommendations of the US Commission on Ocean Policy (USCOP), including stressing interagency coordination through the re-establishment of the Interagency Committee on Marine Debris (USCOP Recommendation 18-3[15]), and the establishment of a marine debris management program within NOAA (USCOP Recommendation 18-1&2[16]) which will also address the issue of preventing and reducing fishing gear loss (USCOP Recommendation 18-5[17]).

This Bill provides the opportunity to address marine debris issues on a national scale. The USCOP recommends a regionally coordinated federal effort,[18] similar to the effort currently being demonstrated by the New Jersey/New York FAP program, which illustrates that many layers of decision-making in a region can work together towards a common goal. Focusing on interagency coordination and cooperation, a federal marine debris program must utilize the expertise and existing programs of many different federal agencies to accomplish the extensive objectives that are necessary for a comprehensive and successful program.

USCOP states “a first step in enhancing the management of oceans and coasts, and a central part of the new National Ocean Policy Framework, is improving coordination among many federal programs” but also noted “a lack of communication, coordination, and a strong sense of partnership continues to inhibit effective action.”[19] The success of this Bill will depend on the ability of the many federal programs to work together to identify inconsistencies in agency mandates, policies, regulations, practices, or funding that jeopardize the ability of the program to prevent and remove marine debris from our waterways.

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[15] Id, Reducing Marine Debris, Pg.269.
[16] Id, Reducing Marine Debris, Pg.267-269.
[17] Id, Reducing Marine Debris, Pg.270.
[18] An Ocean Blueprint for the 21st Century. Final Report July 22, 2004. U.S. Commission on Ocean Policy. Enhancing Federal Support for a Regional Approach, Pg. 92.
[19] Id, Enhancing Ocean Leadership and Coordination, Pg. 77.

CONCLUSION

Marine debris is a costly nationally and international hazard. **It is essential to stop marine debris *before* it gets into the global ocean system.** Once in the open ocean, it is becomes a more difficult and expensive recovery operation. Clean Ocean Action has reviewed S.362 and finds that the Marine Debris Research, Prevention, and Reduction, Act would be a significant, and important, improvement to the existing national and international framework of legislative and regulatory rules. It will enhance efforts the control marine debris reducing the adverse impacts, which cause billions of dollars of economic and environmental harm to the nation. This Bill will also provide a federal requirement that is necessary to sustain the diligent vigilance to stay focused on the national and international issues associated with marine debris. The Bill also provides measures to work through the conflicts and issues that inevitably arise with interagency cooperation.

It's all one big ocean and what leaves the NY/NJ Harbor, or the Mississippi River, or the San Francisco Bay, and every river and tributary, impacts the global marine system. This Bill can create the national and international level of control that is needed to tackle such a significant problem. Again, Clean Ocean Action would like to thank you for the opportunity to testify on this important piece of legislation.