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#### Funding Partners

Major funding for the Fishing for Energy partnership is provided by the National Oceanic and Atmospheric Administration and Covanta Corporation. Additional in-kind support is provided by Schnitzer Steel Industries, Inc.



#### A NEW TACTIC TO REDUCE MARINE DEBRIS

Fishing for Energy launched in 2008 through a partnership among Covanta Corporation, the National Fish and Wildlife Foundation (NFWF), the National Oceanic and Atmospheric Administration (NOAA) Marine Debris Program, and Schnitzer Steel Industries, Inc. to provide a cost-free solution to fishermen to dispose of old, derelict (gear that is lost in the marine environment) or unusable fishing gear and to reduce the amount of derelict fishing gear in and around coastal waterways.

#### OUR STRATEGY

Fishing for Energy supports four strategic initiatives that seek to reduce the amount of derelict fishing gear and the impact of that gear in and coastal and marine ecosystems:

- (1) *Disposal Opportunities*: provide collection bins at strategic ports for commercial fishermen to unload gear;
- (2) *Management*: collaborate with state managers to address legal impediments to derelict fishing gear removal;
- (3) *Technological Innovation*: identify, test, and deploy innovations to reduce accidental introduction of derelict fishing gear into the marine environment and innovations to reduce the impact of gear if lost; and,
- (4) *Outreach and Education*: increase public awareness about the environmental and economic harm of derelict fishing gear and Fishing for Energy initiatives to make measurable improvements for coastal environments and communities.

#### GENERATING NEW ENERGY FROM OLD GEAR

The NOAA Marine Debris Program has identified derelict fishing gear as one of the major types of debris impacting the marine environment. Marine debris threatens important living marine resources and their habitat, and hinders navigational safety. Studies show that inactive or derelict fishing gear continues to “fish” commercially-valuable species targeted by fishermen and can snag on active fishing gear – creating high costs to fishermen in both time and money. Derelict gear also catches non-target species, including species that may be listed as endangered or threatened like marine mammals and sea turtles. Marine habitats, which are smothered when derelict nets sink from the weight of their catch, are further damaged when nets on the bottom are shifted by storms creating a scouring action on the ocean floor.

#### WITH COMMUNITIES, FOR COMMUNITIES

With support from the partners, the Fishing for Energy partnership continues to identify priority ports for the program, support innovative prevention strategies through technological advancements in fishing gear, and increase public awareness of derelict fishing gear. These efforts help prevent derelict fishing gear creation and accumulation.

The partnership also works closely with state and local agencies, community groups, and local ports to install bins at convenient and strategic locations for fishermen to deposit gear. When these bins fill up, the gear is collected and transported to a nearby Schnitzer Steel facility where the metal (i.e. crab pots, gear rigging) is pulled for recycling, and rope or nets are sheared for easier handling for disposal. From there, the gear is brought to a Covanta Energy-from-Waste facility where the gear is recycled into electricity for local communities.

## RESULTS TO DATE

Thanks to the Fishing for Energy partnership, a national understanding of the problems associated with derelict fishing gear is better known. More importantly, Fishing for Energy demonstrates that solutions do exist to tackle a conservation need that once appeared insurmountable. The partnership has established a foundation for a multi-pronged approach to creating disposal opportunities, developing prevention mechanisms, and increasing awareness to reduce the generation of derelict fishing gear and marine debris.

- Each partner plays a distinct role in the successful execution of the disposal program. NFWF works with NOAA to identify priority ports and high-need locations to participate in the Sustainable Port Disposal Program. After fishermen dispose of gear, Schnitzer Steel receives the load and extracts any metals in the bin. The remaining gear, mostly nets, is then sheared and shipped to a Covanta Energy facility. The Covanta facility then converts the gear into renewable energy and puts it on the electric grid.
- More than 2.5 million pounds of fishing gear has been collected at bins placed in 41 communities across the country.
- State resource managers from New England states have collaborated with counterparts across the U.S. to reevaluate outdated regulations and implement new policies to reduce gear loss and streamline removal efforts.
- Grant funding has resulted in the removal of 250 tons of derelict fishing gear, established a new technology that makes crabs five times more likely to escape derelict crab pots than other release mechanisms, and has engaged more than 1,000 fishermen as environmental stewards.
- In 2012, FfE launched a partnership with the Association of Zoos and Aquariums (AZA)-accredited institutions to increase visibility on the impacts of derelict fishing gear and marine debris. You can learn more by visiting the National Zoo in Washington, DC and Mystic Aquarium in Mystic, CT.

As a public-private partnership, Fishing for Energy has impacted the lives of fishermen and coastal communities as well as the health of the marine environment. The partnership has invested more than \$2.5 million to address the issue of derelict fishing gear across the U.S., to remove debris in ten states, and to generate enough electricity to power 183 homes for one year.



Figure 1. Map identifies all locations that have participated in the Fishing for Energy Sustainable Capacity Program since 2008. In total, 41 locations in ten states have hosted bins to collect derelict fishing gear.