

# Marine News

JUNE 2017

[www.marinelink.com](http://www.marinelink.com)

## Combat & Patrol Craft

*U.S. Yards Deliver Custom Designs, Now*



**Shortsea Shipping:**  
Container on  
Barge Redefined

**Lubricants:**  
Innovation matches  
Regulatory Changes

**Pollution Prevention  
& Response:**  
Preparation, Response –  
and Equipment





# *It All Flows Downstream*

## **Oil Spills, Trash, Debris, Sediment, Chemicals: How Do We Keep Our Waterways Clean?**

By Linda Henning, Marketing Director, Elastec

If an oil spill happens on water, the Oil Pollution Act of 1990 (OPA90) has very clear rules on who is responsible for paying for cleanup costs. Most oil spills can be traced to the spiller – a pipeline owner, oil tanker, shipper, railroad or trucking company. “Pointing a finger” at the alleged party may be why this type of pollution is referred to as “point source.” If the oil spill is ruled an accident and the polluter is not legally responsible, funds from the Oil Spill Liability Trust Fund (OSLTF) may be used to cover the cleanup cost. [Resource: [https://www.uscg.mil/npfc/about\\_npfc/osltf.asp](https://www.uscg.mil/npfc/about_npfc/osltf.asp)]

“Nonpoint source” water pollution is seemingly endless and cannot be easily tracked to a distinct source making it difficult to “finger” a perpetrator. Who are the “perps” who toss beer cans, Styrofoam containers and plastic water bottles from vehicles and vessels – and flush drugs down toilets into the water system? Who is responsible for the storm water runoff that carries silt, sediment and chemicals

into our streams and rivers? Trash, debris, silt, sediment, drugs, chemicals – they all flow downstream – polluting our inland waterways, oceans and potentially our drinking water.

### **Stewards of the Waterways**

Who is responsible for cleaning up nonpoint source water pollution? The onus falls on municipalities – specifically, MS4 (Municipal Separate Storm Sewer System) Stormwater Managers – women and men who are often unnoticed, underpaid and under-funded for the work they do to keep our inland waterways clean. Their job descriptions are broadly and deeply detailed and can be found on the U.S. Environmental Protection Agency’s website. Stewards of the waterways, these individuals have a passion for keeping our surface waters clean.

Even more overlooked are the volunteers, the “Friends of” groups, who spend countless hours picking up trash and



**Omni Catamaran  
Cleaning Chicago River**

debris from our streams, rivers, marinas and harbors, because they care.

Many of our U.S. municipalities have Combined Sewer Systems (CSS) which are major sources of nonpoint source pollution, especially after stormwater events. During heavy downpours, stormwater runoff can create high volumes of water that can overburden the waste water treatment plant causing sewage water to be discharged through outfalls directly into waterways. This is called a Combined Sewer Overflow (CSO).

The Metropolitan Water Reclamation District of Greater Chicago (MWRD) has spent years and millions of dollars to upgrade its water system. The MWRD is located primarily within the boundaries of Cook County, Illinois. The MWRD serves an 883 square mile area which includes the City of Chicago and 125 suburban communities. The MWRD

owns and operates one of the world's largest water reclamation plants and treats an average of 1.4 billion gallons of wastewater each day. The MWRD controls 76.1 miles of the Chicago Areas Waterways (CAWS), which are part of the inland waterway system connecting the Great Lakes with the Gulf of Mexico.

The MWRD receives flow from combined sewer collection systems, which means that wastewater and stormwater flow together in a single pipe. Some of the excess water is stored into the MWRD's Tunnel and Reservoir Plan (TARP) system, but too much runoff finds its way to the CAWS – and so does trash. Floating debris such as Styrofoam, plastic bottles and cigarette butts create health risks, kill marine life and cause flooding.

### **Using Omni Catamarans to Skim Floatables from the River**

One of the many initiatives in the MWRD plan was to skim floatables to keep the Chicago River clean. A Carmi, Illinois company, Elastec, with a core competency in oil spill recovery systems, worked with MWRD to develop two custom trash and debris skimming and collection boats, the ELASTEC Omni Catamarans. Originally characterized as a “trash boat,” this 23-foot/7-meter aluminum vessel has interchangeable pods for various waterway tasks. One of the pods that can be positioned between the hulls is designed specifically for floating trash collection. Elastec also offers pods for quay wall and river walk wash down, boat sanitation pump-out, cargo hauling and an A-frame for winching.

With the deck plates in place, the Omni Catamaran is prepared to support a variety of maintenance missions. MWRD requested a simple

design, with few moving parts, and easy to operate. The 23 foot MWRD boats, named Skimmy Dipper and Skim Pickens, are designed for daily trash skimming near Navy Pier and along seven miles of the river.

Elastec's Vice President of North American Sales, Shon Mosier, explains, “The ELASTEC Omni Catamaran is a unique way to skim trash and debris from stormwater runoff's ‘first flush.’ Trash flows downstream and into our waterways. Elastec's main mission is to manufacture simple solutions to protect our waterways. From oil spill response equipment to river utility boats, we develop simple and economical methods to clean our waterways.” To that end, Shon recently delivered a third boat to the City of Chicago as well as to the cities of Waco and Austin, Texas, and the Browns Ferry Power Plant in Athens, Georgia.

### **The Watershed Steward**

Separately, another ELASTEC Omni Catamaran was delivered to a very special individual, Lenny Arkinstall, who has made it his personal goal to clean up Long Beach, California's Los Cerritos Wetlands. Known as the “Watershed Steward,” Lenny has spent almost 25 years protecting the unique tidal salt marsh wetlands by removing trash and debris from one of the ‘most biologically productive places in the world.’ (<http://lcwstewards.org/>)

A local waterway hero, Lenny used the Omni Catamaran to corral debris and managed to tow a couple of tons of trash across the L.A. River. The “Swiss Army Knife-like” multi-purpose waterway and marina maintenance vessel is just one work boat in an evolving line of river utility boats manufactured by Elastec. The vertically integrated company not only



## CLEANUP & RESPONSE

*“The ELASTEC Omni Catamaran is a unique way to skim trash and debris from stormwater runoff’s ‘first flush.’ Trash flows downstream and into our waterways. Elastec’s main mission is to manufacture simple solutions to protect our waterways. From oil spill response equipment to river utility boats, we develop simple and economical methods to clean our waterways.”*

– Elastec Vice President of North American Sales, Shon Mosier



builds sturdy, purpose-built boats, it also manufactures the relevant cleanup tools to perform the tasks from the boats: oil skimmers, containment booms, BoomVane (a boom deployment system) turbidity curtains, trash, debris and aquatic weed barriers.

### Elastec’s Inlander for Shallow Draft Work

The newest member of Elastec’s river utility boats, the Inlander, will soon be introduced. It is 24 feet (7.3 meters) long, 8.5 feet (2.6 meters) wide, and can be powered by one or two engines. It has the ability to handle a cargo of up to 4,000 pounds (1,815 kg). Elastec’s Don Johnson, special projects manager, who has decades of experience in boat manufacturing, noted that some inland oil spill responders were using “glorified Jon boats” designed for fishing. “Jon boats have their place, but not in oil spill

response or for waterway maintenance. It’s a utility as well as a safety issue,” Johnson stated.

“At our fall 2016 Inland Oil Spill workshop,” Don said, “we discussed with people in attendance that Elastec was thinking of building a smaller boat than our landing crafts, but larger than a Jon, and we asked them what they’d like to see.” The overwhelming response: more space. Fewer built-in elements to get in the way. Lower cost. Safer. With shallow draft.

### Versatile Aluminum Landing Craft Workboats

Elastec has solutions for more challenging inland operations, as well. The firm’s landing craft boats provide well-designed, stable, high-performance hulls that can be configured in a wide variety of ways. The 26- and 28-ft. landing crafts feature an open bow with retractable bow



ramp that ease the transfer of equipment from land to water. Even vehicles as large as ATVs for work and RTVs for play can be accommodated. And the vessels can be used as diving platforms and marine research, as well. Elastec has built these models for years, and they're in use across North America, South America, Europe – and now – in the Middle East, as well.

### How Do We Keep Our Waterways Clean?

We can try and keep our waterways clean with passionate volunteers like Lenny Arkinstall, responsible and enforced environmental regulations, dedicated MS4 Stormwater Managers and companies like Elastec – but the real issue is not to pollute our streams, rivers and oceans in the first place. The next time you flush, toss or pour contaminants down the drain, think about how it all flows downstream – and eventually back into our drinking water.

