

# OCEAN REVOLUTION

[Editor's Note] This is the third article in our series on putting the Pew Ocean Commission and US Commission on Ocean Policy (Ocean Reports) into action at the grassroots level. Those reports on the state of our coasts and ocean highlighted some alarming trends in environmental degradation – and some root causes. Among them, the reports concluded our management of our coasts and oceans has failed to take a holistic “ecosystem-based management” approach. A glaring example of this failure is in the management of our beaches, especially along the East Coast where the filling of eroding beaches under the guise of beach “nourishment” is rampant. The Ocean Reports call for nothing short of a revolution in our thinking about protecting our oceans, beaches and waves—an ocean revolution.

One of the key recommendations that came out of both Ocean Reports was the need to incorporate “ecosystem-based” thinking into the way we manage our coastal and ocean resources. The Pew Commission on Ocean Policy states:

*We must redefine our relationship with the ocean to reflect an understanding of the land-sea connection and organize institutions and forums capable of managing on an ecosystem basis.*

The US Commission on Ocean Policy underscores this recommendation by stating:

*U.S. ocean and coastal resources should be managed to reflect the relationships among all ecosystem components, including humans and nonhuman species and the environments in which they live. Applying this principle will require defining relevant geographic management areas based on ecosystem, rather than political, boundaries.*

While it may seem obvious to many of us that marine organisms and their environments are inextricably linked together, many of our agencies and practices have divided the world into little isolated pieces. For example, we tend to manage the fishing of individual species of fish based on keeping that population sustainable without consideration of how it relates to other species or habitats. Further, we have divided management responsibilities into local, county, and state agencies and have separated the management of land and sea without recognizing the way these systems interact across these arbitrary boundaries. It may be obvious that thinking about the interactions of these systems makes sense but what does ecosystem-based management really mean?

What is Ecosystem-based management?

Communication Partnership for Science and Sea (COMPASS), an organization dedicated to helping coordinate and communicate important marine conservation science issues defines ecosystem-based management as the following:

Ecosystem-based management is an integrated approach to management that considers the entire ecosystem, including humans. The goal of ecosystem-based management is to maintain an ecosystem in a healthy, productive, and resilient condition, so that it can provide the services humans want and need. Ecosystem-based management differs from current approaches that usually focus on a single species, sector, activity or concern; it considers the cumulative impacts of different sectors.

In other words, ecosystem-based management means taking the entire ecosystem, the way it interacts, including humans, into the equation when making decisions. While this may be revolutionary for a myriad of government agencies, the concept is very intuitive for Surfrider’s grass roots activists. Our advocacy tends to take a community-based or area-based approach in addressing coastal issues,

which tends to be inherently ecosystem-based. For this reason, many of Surfrider Foundation’s local campaigns are excellent examples of eco-system based approaches to protecting and conserving our coastal and marine environments.

A classic example where local, state and federal agencies have failed to take an ecosystem-based approach and where the Surfrider Foundation has been leading the charge to incorporate this approach is beach-fill projects (also known by the misnomer “beach nourishment”).

Given the numerous ecological functions that beaches provide, it is surprising and disconcerting that coastal management has so often failed to adequately protect these systems. Perhaps due to their unique location between land and sea, beaches have generally languished in the bureaucratic black hole between marine and terrestrial management. And, while beaches are consistently valued in our society for the aesthetic, recreational, and storm buffer services that they provide, their ecological contributions have too often been ignored.

Fortunately, Surfrider Foundation chapter activists, particularly along the East Coast, have been at the helm for change. Through a string of successful local campaigns the beach-fill project paradigm is shifting so that consideration is given to cumulative ecosystem impacts, the interconnectedness of the land and sea and to the human dimension.

## The Ocean Revolution is Alive:

### Long Beach, NY

Just last May in Long Beach, New York, Central Long Island and New York City, chapter activists recently convinced the City Council to unanimously oppose a US Army Corps of Engineers (Corps) project to fill the accreting beaches of Long Beach with sand because the project failed to account for the impacts to nearshore ecosystems, surfing or fishing. The Corps’ unidirectional thinking and “take it or leave it” focus on hazard reduction without consideration of an integrated approach flies in the face of the Ocean Report’s recommendations. Fortunately, Surfrider Foundation activists and the Long Beach City Council didn’t allow this myopic thinking to define this project. The Chapter remains convinced that an ecosystem-based approach that accounts for recreation (swimming, surfing and fishing) and nearshore ecosystem protection while also providing protection from storms can be accomplished. A clear example of Surfrider Foundation activists instigating the ocean revolution.

To learn more about the Central Long Island and New York City Chapter’s efforts visit: [www.surfridercli.org/committees/longbeach/](http://www.surfridercli.org/committees/longbeach/) or [http://www.surfrider.org/nyc/programs\\_beachscape\\_lb.html](http://www.surfrider.org/nyc/programs_beachscape_lb.html)

### St. Lucie County, Florida:

In January 2006, the Treasure Coast Surfrider chapter was successful in saving Waveland Beach in St. Lucie County, Fla. from a terrible emergency

dune-restoration / beach-fill project. When a coastal engineering firm severely botched a beach-fill project, allowing a clay/road fill-like material to be used in lieu of native beach sediment, the Treasure Coast Chapter took a stand against this ecosystem-based disaster. The project would not only increase the rate of erosion on this barrier island with beachfront homes, it also would decrease the success of the second most important turtle nesting area in the state, choke federally-protected nearshore hard bottom in re-suspended silt, and create a “murky” water that increased the incidences of an inadvertent shark attack on surfers and swimmers.

Through continued vigilance, the Treasure Coast Chapter convinced Florida’s Department of Environmental Protection to halt the horrible project and restore the area with appropriate sand.

Expending a colossal amount of energy on this campaign clearly made government agencies realize that an ecosystem-based approach that integrates the interests of surfers, anglers, divers, and conservationists must be used and that bad beach “nourishment” projects will not be tolerated. Thanks to the Treasure Coast chapter, perhaps in a few years we’ll be surfing in emerald water again here in South Florida. This is another example of the ocean revolution in action.

To learn more about the Treasure Coasts efforts visit: [www.surfrider.org/surfriderblog/blogs/shaping\\_room/archive/2006/3/6.aspx](http://www.surfrider.org/surfriderblog/blogs/shaping_room/archive/2006/3/6.aspx)

## Paradigm Shift:

These are but two examples of Surfrider Foundation chapter campaigns that are highlighting and shifting the way our coastal agencies and communities approach beach-fill projects. These successes and others like them are generating great momentum. We hope that there will be a cumulative effect to change the design of beach-fill projects nationwide, so that future projects embody the recommendations of the Ocean Reports to consider the interconnectedness of ocean and beach ecosystems and also take into account the community who use those beaches and oceans.

The ocean revolution will not be televised. The ocean revolution begins at the local level by people like Surfrider Foundation activists, changing the way beaches are managed. The ocean revolution is alive.

## For more information visit:

Ecosystem-based Management: <http://compassonline.org/?q=EBM>

“Beach Is Alive” Making Waves Series: Articles #1, 2, 3, 4, 5, 6.

The theme of this series - Ocean Revolution - is inspired by J. Wallace Nichol’s Ocean Revolution campaign that is dedicated to inspire a youthful movement towards ocean protection. To learn more, visit [www.oceanrevolution.org](http://www.oceanrevolution.org).



LONG BEACH, N.Y.

(EARLY '70S)



(CURRENT CONDITIONS)

As you can see, the beaches in Long Beach, N.Y. have actually grown since the 1970s. Are these beaches desperately in need of beach fill that doesn't account for the community and ecosystem issues? The New York and Central Long Island Chapters do not think so and the Long Beach City Council responded with a unanimous "no."

