

Great Blue Herons on the Ballona Wetlands

PHOTO: SARAH WOODARD



Letter from the Director

Oil Spill—When Tragedy Strikes, Healthy Wetlands Are Our Best Protection

PHOTO: LORNA APPER



We all watched with sickening despair as oil washed ashore this summer in Louisiana, Mississippi, Alabama, and Florida, and as even more oil swirled in giant, toxic, underwater pools, likely killing millions of tiny organisms that bigger fish eat as well as the fish, turtles, and dolphins that

swim through it. The oil spill was a tragedy of monumental proportions that has brought continuing hardship to thousands of people, killed millions of animals, and crippled one of the most productive ocean ecosystems in the world.

This tragedy illuminates for us the stark truth that, once a large spill occurs, there is little we can do to protect precious wetlands and other natural resources. Containing large amounts of oil, on the sea's surface and especially underwater, is extremely difficult, and all the technology in the world doesn't guarantee a quick and painless clean-up. Walling off our wetlands from the ocean's life-giving tides, as was proposed in Louisiana and bitterly opposed by local scientists and environmental groups, is simply irrational because it would prevent those same areas from functioning naturally and providing the habitat and biodiversity that should be their hallmarks.

Instead, we need to ensure that the ecosystems we treasure and rely upon for our livelihoods are healthy and robust. Intact ecosystems—wetlands, estuaries, and kelp forests—are the best protection we can offer. Healthy systems can absorb some damage, while large robust systems buffer against changes in conditions, in part because many important functions are duplicated—where there are many different species thriving, one can become scarce for a time because there are other similar species to take its place, at least for a while, allowing the harmed species to make a comeback.

Healthy ecosystems also have a greater ability to recover from changed conditions. In a degraded wetland that has been filled in, paved over, and dried out by blocking tidal flows, invasive plants that find their way in can quickly spread, choking out the few patches of native plants that are hanging on. However, in a diverse wetland where native species thrive, exotic plants may try to invade but are less likely to gain a foothold because there are many different plants to compete with the interlopers and the native species are in good enough condition to hold their own.

This healthy ecosystem model will protect against other things too, including the predicted—and the unpredictable—impacts of a changing climate. In a warming world, some things will be irrevocably lost. The best hope we have of maintaining some level of biodiversity and a livable planet is to ensure that our ecosystems are healthy and robust now, before disaster strikes.

There is no doubt that we need better protection against oil spills. Safety precautions and spill response plans need to be much more rigorous, and actually enforced. Governments and individuals need to support alternative energy development and move away from fossil fuels altogether. We need to recognize that as long as we are drilling for oil, we are at risk of the next, bigger-than-ever spill. In the meantime, restoring healthy, functioning tidal wetlands and marine systems is the best protection our coastlines have.

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