



Turtle Protections Could Sink Wave-Power Plans

Agreement would shield endangered leatherback turtles from pollution and other threats

By: John Upton

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Waters outside the Golden Gate would be protected to provide a safe haven for the world's heaviest reptiles under a plan that could jeopardize nascent efforts to develop ocean-based renewable energy plants.

A vast stretch of California's coastline would be protected from pollution and other threats to leatherback turtles by November under a legal agreement between environmental groups and the federal government that was filed Tuesday.

If approved by a judge, the settlement agreement would protect 70,600 square miles of the leatherback turtle's West Coast stomping grounds from pollution and other threats faced by the species.

The move would help protect a dwindling species that swims annually between breeding grounds in Southeast Asia and feeding grounds off the coasts of California, Oregon and Washington.

The protections would force federal energy regulators to increase their scrutiny of the potential impacts of proposed wave- and tide-power farms on the jellyfish populations that provide food for the turtles, potentially affecting a handful of proposed alternative energy projects.

The leatherback turtle has a long list of unusual characteristics. Its shell is soft instead of hard, it migrates farther and weighs more than any other reptile living in the world today, and it eats between 20 and 30 percent of its body-weight in jellyfish every day.

Population numbers have plummeted in recent decades due to hunting, fishing and other threats. The federal government lists the species as endangered.

"The leading killer of the leatherback turtle is commercial fisheries," said Chris Pincetich, a marine biologist at the nonprofit Turtle Island Restoration Network. Leatherback turtles die after they become tangled or hooked in commercial fishing gear. The turtles and their eggs are also hunted for food and oil.

The turtles can be killed when they eat floating plastic that they mistake for jellyfish. Their habitat is jeopardized by development, pollution and climate change.

To protect the species, environmentalists sued the federal government in 2007, alleging it had failed to protect the species's habitat under the Endangered Species Act.

Following years of legal wrangling, environmental groups and the National Marine Fisheries Service filed a proposed settlement agreement in U.S. District Court Tuesday that would protect swaths of West Coast habitat.

The protected area would extend out to sea from south of Point Arena in Southern California to north of Point Vicente in Northern California. A separate swath of protected ocean habitat would extend south of the Canadian border to Umpqua River in Oregon.

The protections outlined in the agreement would not directly affect the fishing industry, which is already heavily regulated in the area. But after the regulations become law, farmers and energy companies would be forced to study their likely impacts on the species and could be forced to curtail or modify their operations to protect the turtles.

That could affect existing power plants, including the Diablo Canyon nuclear power plant and some natural-gas-burning plants, which use seawater for cooling. Such cooling systems can have a deadly effect on the jellyfish swarms that feed the turtles.

The rules could also affect ocean-energy plants that have long been proposed but are not expected to be built for at least several years, including a potential wave-energy plant that San Francisco is considering building off Ocean Beach.

Pacific Gas and Electric Company has considered building West Coast wave-energy plants, which would use underwater devices to capture the force of swells as they roll in from Alaskan storms, but the company is not presently pursuing any of the projects because existing technology is considered financially unfeasible.

The protections could also affect proposed aquaculture operations and coastal farms.

“[I]t is reasonable to assume,” the fisheries service wrote in an economic impact analysis, “that there may potentially be adverse impacts to leatherbacks and their habitat in any nearshore waters receiving runoff from lands where pesticides are used.”

The economic tradeoffs could provide more benefits for the Pacific Ocean than merely protecting its leatherback turtle populations, according to Catherine Kilduff, a lawyer for the Center for Biological Diversity, which was a party to the settlement agreement along with the Turtle Island Restoration Network and another nonprofit, Oceana.

“If you don’t have leatherback, you’re going to have huge blooms of jellyfish,” Kilduff said