

Protecting sea life: New marine reserves, wave energy a bad mix for Oregon

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By Guest Columnist

By BRIAN TISSOT and MARK HIXON

We take exception to the notion, expressed in a recent editorial, that wave energy facilities should be sited within the newly proposed marine reserves off the Oregon coast ("Leave room for wave energy," Nov. 27).

We agree that "Oregon's marine reserves are more or less the sea equivalent of wilderness" so it makes no sense to place the massive infrastructure of wave energy buoys, cables, and anchors in such conservation areas. The three new proposed marine reserves at Cape Falcon, Cascade Head and Cape Perpetua, combined with the pilot sites at Otter Rock and Redfish Rocks, will protect less than 5 percent of Oregon's territorial sea in no-take marine reserves and provide a valuable demonstration of how these management tools can protect Oregon's near-shore ecosystems. That will leave the vast majority of coastal waters open for fishing and other uses while helping to secure the future productivity of Oregon's oceans.



Brian Tissot

From ocean acidification to invasive species, the pressures on marine ecosystems are growing each year. To ensure that our marine life and habitats are as resilient as possible to such onslaughts, we must fully protect key areas where plants and animals can achieve their full natural diversity. Marine reserves can not only teach us about how ocean ecosystems work in the absence of direct human impacts, but also create an ecological savings account on which we can depend into the future.

Wave energy facilities are large-scale industrial projects that contain many tons of heavy structures placed on the seafloor, suspended in midwater, and floating on the surface, which can generate substantial electromagnetic fields. These facilities thus have the potential to affect migrating whales and other sea life,

change the local ocean environment, and impact the seafloor and associated life, including valuable fishing grounds.

Therefore, although we support the responsible and prudent development of wave energy off Oregon's shores, we believe that mixing the locations of marine reserves and wave energy fields is a bad cocktail.

After a decade of public process, representatives from the science, conservation, fishing, business and recreation communities have ensured that Oregon's marine reserve plans respect and minimize impacts on local needs.



Mark Hixon

We rely on our ocean for food, transportation, recreation and a good quality of life, and soon, we may add sustainable energy to that list. Let's be careful how we balance ecological protection, economic diversity and industrial development in Oregon's ocean. A network of marine reserves, unfettered from the effects of wave energy facilities, will ensure that future generations will enjoy the same benefits of Oregon's ocean as do those of us living today.

Brian Tissot is a professor at Washington State University Vancouver and has been studying marine reserves in Hawaii for 11 years. Mark Hixon is a professor at Oregon State University and former chairman of the Marine Protected Areas Federal Advisory Committee. Both serve as scientists on Oregon's Marine Reserve Community Teams.

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