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Toward Best Practices for Public Acceptability in Wave Energy

Issues Developers Need to Address

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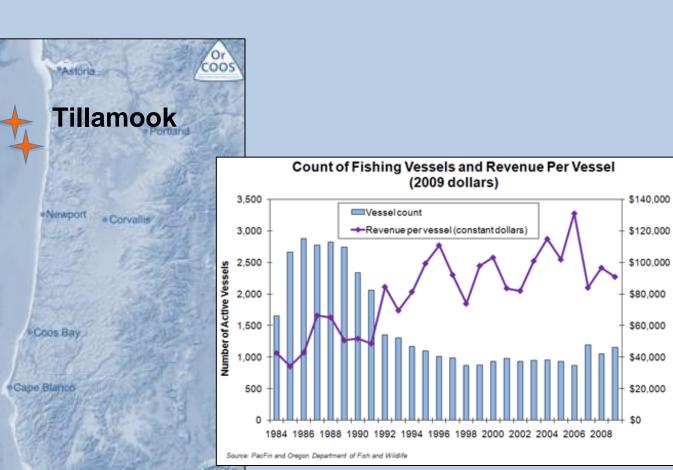
Toward Best Practices for Public Acceptability in Wave Energy:

Issues Developers Need to Address









ISSUES TO ADDRESS

ENVIRONMENTAL

NIMBY ISSUES

IMPACT CONCERNS

COMMUNITY WELL-

BEING CONCERNS

Commercial fishing

CONFLICTS OF USE

Recreational fishing & boating Surfing

DESCRIPTION

- Bottom species habitat
- ·Marine mammals & other species, including birds
- Entanglement
- Reproduction
- Migration
- Visual impact
- Noise impact
- Aesthetic impact
- Employment
- •Income
- Benefits / costs
- •Tourism



"Achieving a positive endorsement of wave projects among stakeholders without energy alienating key members of the local to the project communities."

3 CASE STUDIES

Wave Dragon

Wales

Columbia Energy Partners, Tillamook, Oregon County obtained preliminary permit

members •Fishermen objections: lost fishing & crabbing grounds; block transit routes & crowd North Coast waters with displaced fishermen; aesthetic concerns; concerns on heat of undersea cables reducing fish stocks.

•Early meetings with TIDE & FACT

Agreement terminated

Deployment areas cons

SSG Kvitsøy **Mutriku Pilot** Plant, Spain **Ocean Test Berths**

Douglas County, Winchester Bay, Oregon

Deployment site

- Integrating a wave energy plant into an existing jetty
- •Great surfing spot
- Public meetings held early on to identify info gaps and research areas
- Active participation from the surfing community
- •Plans for license application in 3 years

LESSONS LEARNED

- 1. Public involvement should be a combined effort by the developer and the local authorities
- 1. Acceptance increases after construction
- 2. Explore the issues in an open environment and identify them early; be flexible in communicating
- 3. In the presence of strong fishermen opposition – reconsider

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•J. Fernandez Chozas, M. Stefanovich, H.C. Soerensen (2010): Toward best practices for public acceptability in wave energy: Whom, when and how to address. ICOE, Bilbao, Spain.







- •Integrating a wave energy plant into a breakwater
- •Few engagement practices
- Major event after a storm producing loud noise that could be heard 3-10 km away
- •Main opposition from the Green **Party**
- •Fishermen support
- •Increased tourism flow
- •To be operational by mid Oct. 2010

