HECETA HEAD COASTAL CONFERENCE WORKSHOP RESPONSES
October 28, 2006

Issue I: WAVE ENERGY

How and on what scale should Oregon move forward with proposals for research and commercialization on ocean wave energy conversion?

Table 1**:** (Names of leaders/participants are not included.). Table numbers do not correspond to original table numbers at the conference).

- There should be lots of emphasis on energy production.
- There are obvious economic benefits. But a careful systematic process is necessary. A new industry should not be on a fast track without full understanding of all impacts especially potential adverse or downside impacts.
- Energy production must be brought along carefully; scale up but make careful analysis including environmental impacts and cost/benefit considerations.
- The cumulative impacts won't be known for some time; exercise caution.
- Economics will prove out but natural resource impacts require some level of diligence to better address biological considerations and environmental impacts.
- It is suggested that a team approach with engineers and natural scientists (at OSU) be used.
- Is county oversight needed? Federal and State oversight should be adequate/sufficient. The role of the county should be taxation and franchise fees not site selection.

Table 2:

- The buoy parks should be considered to be marine reserves (actual or de facto). Wave energy need a good deal of research and thought. There may be more fish, but that's because of new structures being placed over soft sediment.
- Encourage continued progress of the testing and evaluation; the offshore development needs to happen quickly; FERC should move quickly. Probably should start with a group of buoys not just a single one but make sure the multi-buoy park is closely studied. There needs to be someone or some group serving as a constructive critic/skeptic. Make sure same mistakes as occurred with dams are not repeated.
- Someone needs to be assessing EMF impacts on fishes and other organisms.
- Before the "gold rush" to develop wave parks along the entire Oregon coast begins, the state need to develop a carrying capacity for the coast. How many parks allowed; how/where they will be sited.

Table 3:

- Proceed as rapidly as possible to test different technologies on a pilot scale
- Coordinate research, planners, regulatory and outreach efforts
- Address potential conflicts and integration with the fishing industry which is already stressed
- Integrate wave energy sites with other spatial set asides (sanctuaries or marine reserves).

Table 4:

- How does this address or affect global warming? This should be assessed and researched.
- Stay to guidelines; go slow; to go fast stay on a thoughtful course of progress and include research.
- Development should stay at the state level – research costs, development costs are too much for a county to bear. Federal level may dilute; county might be too expensive. Permits issued at the county level is ok.

- State should provide overall context with planning goals.
- There is a need to develop clean. local energy sources. If commercially viable proceed with greater emphasis. There needs to be collaboration with public/private groups with control at local of impact to streamline and be in touch with stakeholders.
- Energy is a foreign policy issue. Feds need to be involved in at least the funding.

Table 5:

- There are many trade-offs: Research and development before deployment: This can generate efficiency and therefore reduce costs. It can evaluate environmental impacts.
- Move quickly within these constraints.
- Expand only if cost-effective and continue to promote power conservation simultaneously.
- Wave energy is an exciting possibility; Oregon can become a leader in new technologies

Table 6:

- Wave energy is an example of a technology being used in our environment not initially thought of in the past.
- The proposals in this morning's presentation seemed reasonable.
- The ability to find a portion of the coast for a wave energy park needs to be balance with other needs and uses.
- Look into environmental and ecosystem impacts during the testing process.

Table 7:

- Will there be contamination of effects: marine mammals, whales?
- It's environmentally friendly including the OSU equipment
- Needs to be integrated with reserve planning
- There are positives and negatives with this new technology
- Identify research protocols
- Be aware of technology of other nations

Table 8:

- Research should proceed with a variety of technologies at diverse sites so as to identify the best option for commercialization.
- Care should be taken to protect the environment and preserve the natural beauty of our coast.
- Possibly combine wave energy farms with marine protection areas which are off-limits to fishing.
- Inevitable conflicts will arise over state and local (county) jurisdiction and need to be addressed up-front.

Table 9:

- Move forward based on mandates for renewable energy sources. Policy is inevitable… technology needs to catch up.
- The harsh nature of the marine environment suggests very significant maintenance issues for a wave energy array. This will be another element of a long learning curve.
- There is a need to develop broader marine technology base within Oregon. There will be a spin off of marine technology needed to support wave energy; this may be an opportunity for community colleges. For example: sea deployment and maintenance of energy converters, cables, moorings, etc.
- Wave energy development needs to be linked to ecological studies of its effects.

Table 10:

- Five million dollars needed for research now.
- A one to two year study will be needed to investigate impacts.
- Identify specific interests of any negatively affected stakeholders.
- Continue work to communicate with broad fishing community.
- Provide ongoing information to public. For example: use Town Hall meetings convened by local organizations with invited "experts"
- An issue to contemplate: Ownership- public ownership vs. private commercialization.
- First do a prototype and then scale up.
- Keep a focus on how to really create good-paying jobs locally.
- Foster the industry so that it develops in Oregon.
- Document the process since it appears to be having good cooperation.

Table 11:

- Oregon should move forward
- Progress with Gardiner site uses existing infrastructure, test technique there
- Pace is good; we need the energy source
- Pace may be too slow; we have an energy crisis and need to move forward
- Permit process is new; it may need some figuring out
- Initial process should one buoy then an array will allow information.
- Even 12 buoys not enough; may need 24 to 36.
- Focus on alternative fuels determines need.
- Must get going to get over inertia and government bureaucracy.
- Priority for a research facility at OSU.
- Look at recent studies on fisheries and oil platforms particularly effects on vertical habits and recruitment.

Table 12:

- Start with the prototype; continue contact with local council of stakeholders and agency folks.
- Ongoing research and scientific monitoring needed then add more as data suggest.
- (We are) very supportive with a couple of cautions.
- Try at more than one location with more than one device.
- Oregon should be a leader
- (We) agree with the presentation.
- Start small in steps with caution; lots of unknowns.

Table 13:

- Move forward on R &D
- Caution on commercialization; i.e. pilot projest
- Coordinated plan with all stakeholders
- Review plan/model with community
- Impact from wave 'take'
- Local stakeholder input is critical
- The challenge is to move forward cautiously and dampen the 'Gold Rush' mentality.

Table 14:

- It could be a big boost to the local economy but there are numerous questions regarding seafloor impacts; noise plus other impacts on fish, mammals and on fisheries which depend on them. Also of concern is impact on views from shore.
- Move forward carefully and make sure fishermen, and other users get a seat at the table.

§ The state should take a stronger leadership role; not let one county take the lead for such an important state asset or encourage other local governments to get involved.
§ Wave energy should be science driven—test plot on a decent scale
§ Glean science from other countries—don't reinvent the wheel if not necessary

Table 15:

§ Research should be coupled to impact
§ Test prototypes and scaling from 1 – 12 using several locations
§ Put in places with existing infrastructure
§ Go county by county to give later counties the advantage of expansion.
§ Should know if small ones sprinkled around vs large ones more effective
§ Statewide oversight needed.
§ Work with industry to define high transit areas' some small boats might not be aware of them
§ Use education to capture imagination to get people aware and involved
§ Base movement forward on experience of other counties.
§ Know impact on marine life before large implementation
§ Be a little skeptical of new technology.

Table 16:

§ Develop as soon as possible.
§ Determine scale based on ecological impacts.
§ Take advantage of flexibility
§ Need a coalition of coastal communities. Coastal voice is underrepresented at county level; counties need a strong voice.
§ Governor could help make a coastal coalition with teeth a reality.
§ Source of the power will be on the coast; but the people pulling the strings are in the valley.
§ Check with the whales!

Issue II: NATIONAL SANCTUARY

How would you advise the Governor on his proposal for an Oregon Coast National Marine Sanctuary?

Table 1:

« The governor should expedite OPAC process by virtue of his authority—he needs to provide money, staff, and resources to facilitate results. Lack of governor's leadership is an obstacle to progress.
« Coordinate sanctuaries with Washington and California Governors to ensure an Oregon NMS would provide support to Channel Islands and Olympic NMS/planning.
« Regard the sanctuary as a regional ocean system with coordination, objectives and goals.

Table 2:

« He must do the public scoping process – make presentations about the sanctuary concept; get ideas about how it should be sized (not just "love it" vs. "hate it")
« Hold scoping meetings inland and along coast; it's the state's coast, the state's potential sanctuary.
« We need to produce maps of habitat area, and human use areas. And must get the coastal habitat mapping initiative off the ground.
« The ecosystem-based approach is the right one.
« The coast-wide approach (the entire coast of Oregon) creates too many problems; it is too big. But there are many options that could be considered that are oriented around important ecological areas in Oregon.
« Find the compelling ecological stories and evaluate a possible sanctuary over each of them, not the whole coast.

Table 3:

« A National Marine Sanctuary will provide access to federal funds but also federal authority
« A question is: Under a NMS would Oregon have autonomy and flexibility to incorporate: fisheries; marine reserves (OPAC), local communities and goals

Table 4:

« Start with a marine reserves from Pt Gregory to Cape Arego with maybe five reserves
« Create a sanctuary, with a system of reserves within, but these not publicly accepted just reserves where you get more bang for buck
« Start with reserves then later build a sanctuary around them though there could be conflict between state and federal
« Prior to making or defining a marine protective area ensure public buy-in through extensive educational program using scientific studies on pros and cons of establishing MPAs.
« It's important to provide general public input, not just stakeholders
« They should not be based on total consensus but based n science to address needs weighed against issues

Table 5:

« Pros: brings federal funding and national recognition
promotes EBM and ocean stewardship
needs much more stakeholder input included
has clear goals and management plan
good for prohibiting oil drilling and ocean mining
« Cons: proposed size is too big and unrealistic
no clear goals for it yet
« The differences between NMS and marine reserves (MRs) unclear and confuse public; need to clearly integrate NMS and MRs with clear goals and objectives for both
« listen to natural and social scientists regarding goals and objectives

Table 6:

« A Marine Sanctuary for the whole coast is a 'non-starter'
« Criteria should be equitable in respect to other uses such as fishing interests
« If concerned about oil/gas then focus on those areas specifically.
« There is concern over state participation in decisions.

Table 7:

« How far upstream would a NMS designation protect water quality? Jurisdictions must be clarified.
« Build on existing research sites.

« Our discussion group is still unclear ON MANAGEMENT… WHO IS IN REAL CONTROL?
« We support more funding for research.

Table 8:

« Local input is necessary for a coast-wide NMS, especially on the South Coast where we don't have OPEC representation.
« We don't need a strengthened NOAA with another set of regulatory hurdles to overcome in order to get anything accomplished. A sanctuary may be necessary to protect ocean environment from intrusive activities like sea-mining, oil/gas exploitation, etc. but should preserve/encourage activities like fishing.

Table 9:

« A border to border (CA –WA) sanctuary would essentially cede OR coastal waters to Federal Government; therefore shrink proposal or drop proposal.
« Major concern is loss of local control
« If NMS … then Governor K should demand strong OR leadership over sanctuary Governing Board
« Pursue NMS only if does not cede local control to Fed Govt.
« Large NMS—requires plan to have more activities. A smaller NMS can be more restrictive.
« Provide for accommodations for fiber-optic cable landings.

Table 10:

« Let the public see the options and experiences of other sanctuaries
« Keep on talking about it.
« Try to take away fears and myths.
« Continue to work out federal/state relationship on management.
« Highlight the educational opportunities tat can happen with NMS
« Find best example of a NMS and use it to develop Oregon's option(s)
« IDEAS: Thankyouocean.org campaign in CA. Work with youth to get the idea going.

Table 11:

« A sanctuary has to fit Oregon—must match local needs but it is a viable idea
« Governor wants autonomy and Federal money—can it be negotiated?
« Yes, we should have one.
« Must be a state thing, not a county thing; Governor should seek funding.
« State should look at reserves first then maybe a sanctuary offshore but just a portion.
« Current structure of sanctuary program does not meet governor's desire for local control.
« Perhaps a smaller scale would work.
« Need to make a stronger case than CA and WA one.
« Is there a special place?
« Dead Zones? Can a sanctuary help them?
« Scientists and users could look at biology and seamounts/banks and connectivity and pick a representative assemblage.

Table 12:

« (All participants at this table) are in favor of a sanctuary.
« Possible Federal money is good.
« There are concerns about the manager being able to overrule an advisory committee.

Table 13:

« Control/Size/Location?
« Clarify Marine Sanctuary from governor
« Clarify/define State, Local federal roles
« Guarantee State control?
« Another layer of bureaucracy
« Fisheries expand beyond territorial sea
« Guarantee minimal impact on fisheries
« Define Oregon model
« Need more resources/capacity to educate/outreach
« Input from those affected

Table 14:

« A sanctuary is a good idea. The governor must, however, back up to where he should have started—work with scientists, local governments and stakeholders to scope out a new plan that has local and inland support (the oceans belong to everyone in the state) and is of appropriate scale.

Table 15:

« Start smaller to work kinks out.
« It should be non-political-not managed by governor—policies should be consistent and laid down effectively so that they don't change with each governor
« start bigger with different management areas on the whole coast—too difficult to go back to the public many times
« more education of public on marine sanctuary is needed

Table 16:

« Get whatever we can get—a reserve or sanctuary
« Need to get fishermen at the table
« Can learn from reserve experience in a limited area
« Whole coast is unrealistic; but, some type of sanctuary would be appropriate near pointing (?) reserves
« Not whole coast but representative reserve and offshore areas
« Can have areas with fishing gear restrictions
« Should pursue if it helps get federal funding
« Prevent offshore drilling
« Encompassing whole coast avoids pandering or picking on a certain part of coast.
« Scientists can help identify biological hot spots that should receive sanctuary designation with especially sensitive areas designated as reserves.

Issue III: MARINE RESERVES

If Oregon were to establish Marine Reserves in state waters, what criteria would you suggest be used for their design and location?

Table 1:

Ø Most of the following comments also apply to marine reserves
Ø Premise: the ocean is a public good and all citizens' values and ocean uses/needs must be considered. Fishing industry or any industry (coastal or otherwise) should not be dominant.

- Premise: do no harm, start with inclusion of entire Oregon ocean as valuable and justified for protection. Then nominate areas to exclude from protection for fishing, other industry, and recreational uses. You need to maintain integrity of the whole system with careful consideration of what you remove from the natural system (you can remove one kidney but not both) and still ensure vitality/health.
- Policy convergence of top down (science based, agencies, government policy, guideposts direction with stakeholder bottom-up influence,(All interests represented) Lots to deliberate.
- Compensation for economic losses and sensitivity to families and cultural heritage
- Compensation of $40 million to commercial fishing; this is small relative to state's $6 billion budget. It's very important to consider impacts to fishing fleet via compensation and economic transition. But a healthy ocean's value is in the billions/trillions and should not be sacrificed for a $40 million interest. (Fishing's representation is too dominant relative to its own power.)
- How much of the $40 is from state waters vs. federal waters landings? Is commercial fishing in state waters a significant industry?
- Ocean use/exploitation is not an entitlement.
- Compatible uses and all values/uses must be regarded; increase the integrity of the whole system to ensure ocean health and sustainable uses of many services.

Table 2:

- Protect representative habitats
- Protect distinct genetic populations
- Protect/consider local current residues, upwelling jets, etc. Factor recruitment into thinking.
- Evaluate the MLPA science criteria and consider applying the.
- Create a process that clearly involves diverse stakeholders
- Have a science panel that presents the latest science to stakeholder group and the public.
- Use a process that generates multiple options
- Find funding
- Locate then where scientists can actually get to them to monitor their effectiveness
- Provide measures for enforcement
- Look for locations that have actively managed watersheds to reduce that impact on the reserves.

Table 3:

- Establish baseline information
- Flexibility to local conditions
- Consideration of fisheries
- Include diversity of habitat
- Research investment is necessary to evaluate effectiveness
- Have clear goals and objectives
- Adaptable to conservation needs and communities needs
- include monitoring and evaluation component

Table 4:

- Essential fish habitat (as established by PMCC)
- Invertebrate protection
- Criteria that would be conjunctive and supportive to estuary nurseries and areas near estuaries to keep them vibrant and healthy.
- Include non point and point source impacts on key areas considering as reserves
- Areas that are at risk for pollution or future threats should be protected now.
- Protect key habitats and an array of marine ecosystems. Make some of the rocky intertidal areas into full

reserves.
Ø

Table 5:

Ø economics: reach objectives with least overall cost/trade off analysis
Ø implement as ecological reference areas protecting representative ecosystems and habitats (shallow and deep)
Ø (1) GIS: resources/uses/threats/habitats
(2) clear goals and objectives – stakeholders and public education
(3) natural and social science-based alternative designs (e.g. MARXAN program)
(4) sufficient time and money for monitoring and adaptive management
Ø include unique areas including "dead zone" reference areas

Table 6:
Criteria:

Ø (1) equitable with respect to other uses such as fishing areas
Ø (2) monitoring of reserves to determine its impact
Ø (3) incremental implementation and analysis
Ø (4) Devise benchmarks to evaluate over time
Ø (5) Adequate funding for research, monitoring, and enforcement and evaluation
Ø (6) Determine the objective/purpose for a particular marine reserve

Table 7:

Ø Local community approval and public endorsement
Ø educational process
Ø needs to protect marine biodiversity—identify key areas to protect including 0 – 25 stewardship area

Table 8:

Ø Marine reserves should be small and located in sites where effectiveness can be evaluated
Ø Need to show local people, including fishermen, that they would be benefited

Table 9:

Ø consider all ecosystem/habitat types with prior research into habitat types and how they are used by species
Ø identify and focus on areas that are used least now - keep the pristine pristine.
Ø high energy surf zones warrant particular consideration
Ø prioritize sites sensitive for other reasons e.g. Oregon Islands National Wildlife Refuge
Ø consider estuaries as part of the MR siting criteria (and then duck)
Ø reference to sites as 'set-asides' is counterproductive rhetoric- give them special credit for ecological products/services they produce

Table 10:

Ø places where you can regenerate fisheries (nurseries)
Ø most 'broken' places (in ecosystem terms). Look at what could rebound the most if protected.
Ø Figure out why problem exists and describe why a reserve is needed.
Ø Base fisheries data
Ø Work to retain fisheries; minimize impact on industry

** IDEA: overlap MRA with areas already closed
**Create Oregon coast vision statemenet

- Ø Educate on different types of MRAs
- Ø Foster community dialogs and develop ongoing information stream (Blog)

Table 11:

- Ø Represent habitat across the regions
- Ø Look at Colombia River Plume (?) ; look at Rocky Headlands; look at sandy beaches and pick some as a start
- Ø You need to be selective; sample seafloor habitats and geology
- Ø Some should be limited take
- Ø Need to consider other activities like cables that may need to go in
- Ø There are no unperturbed sites, need to put them in some fishing areas
- Ø Testing approach: do some then do more, modify, etc.
- Ø Long term: give it time to work
- Ø Geographical spread- not just one area
- Ø Select a whole variety of habitat types
- Ø Start with a handful
- Ø It need to be clear why some areas are no-take and others aren't
- Ø Zoning
- Ø You need to consider all of the above in a coordinated plan where the state acts first

Table 12:

- Ø Put it near a Coast Guard Station so it could be patrolled
- Ø It should generate good scientific research
- Ø A reserve is preferable to a sanctuary—gives full protection
- Ø It should start at the shoreline.
- Ø It should include land (watershed) and estuaries
- Ø It should provide a diversity of marine habitats

Table 13:

- Ø Control/Size/Location
- Ø How to reach stakeholders
- Ø No Federal Reserve Program
- Ø Alternative to Marine Reserves?
- Ø Expand to more than just fish issues-
- Ø More resources needed
- Ø Placement/Location
  - Science based
  - stakeholder (specifically fishermen)
  - Goal/Objective (Biodiversity/Fisheries Management
  - Away from ports and Prime fishing grounds
  - Sport/Recreation uses
  - Percentage of Ecosystem designated ass reserve?
  - Share Information/Communication
  - How to have non-polarizing conversations
- Ø

Table 14:

- Ø Should be driven by science

- Must be community based—like Port Orford Process

Table 15: Criteria

- must be representative of habitat
- less populous coastal areas should be used so as to minimize controversy and lesson economic impacts
- use a few areas that can be enforced located in larger areas
- use areas that are already in relatively healthy condition so we can see benefits more quickly
- you need to know financial impact on high value fisheries; measure before and after impacts so you can measure change within and without
- consider linkage between land and sea and species that require land/sea resources
- don't depend on consensus; move forward. Industry should not dominate; the oceans are for everyone
- science should be used as the basis for decision making
- consider protection of other species besides fish (and their habitat)

Table 16:

- Need adequate funding
- Need to protect especially endangered species
- Need flexibility to adapt to changes in ocean conditions
- need to pay attention to complementary or competing oceans uses (e.g. wave energy sites)
- Need monitoring to make science based decisions
- Need to engage all stakeholders, get fishing community to the table
- Shouldn't focus only on state areas- need to have federal waters as part of the equation
- Follow the ecological features
- Oregonians need to maintain control
- Reserves can help protect the public interest and trust in offshore areas