Ocean SAMP Stakeholder Meeting #6 Notes, April 7, 2009 Hazard Rooms A & B, URI Bay Campus

Purpose of the Meeting:

 Present information on acoustics and electromagnetics related to the Ocean SAMP.

Welcome and recap of the Ocean SAMP process – Ken Payne/Jennifer McCann URI

Ken Payne, facilitator, told the audience of 80 people that important and productive meetings on Ocean SAMP fisheries issues have taken place since the March 19 stakeholders meeting. He also said that he had provided testimony the week before on fisheries issues to the Rhode Island Senate – not as a SAMP facilitator, but as a private citizen. Part of the challenge of addressing industry issues is being able to fully understand how development impacts fisheries and its infrastructure both directly and on the indirect services and resources that support them.

Jennifer McCann then provided the group with a brief overview about where we are in the SAMP process (issue identification) and how the next year of the SAMP in 2010 will be defined by research results, recommendations, and the eventual Rhode Island Coastal Resources Management Council (CRMC) SAMP adoption process. A powerpoint slide depicted the process with a timeline. She also acknowledged Chris Damon, a URI Environmental Data Center manager and SAMP staff member, for the extensive array of maps provided to the project and public thus far.

New Ocean SAMP Developments – Grover Fugate, CRMC

Fugate said that the SAMP continues to get national attention and that many states are reaching out to CRMC to learn more about it. He also said that some of the interest is being driven by the President's focus on developing alternative energy resources and the U.S. Minerals Management Service (MMS) promulgating rules for the development of windfarms in offshore waters. Another aspect of the quickly changing field is the emergence of new windfarm technologies: "It's a dynamic field with a lot of interest in it and lot of activity going on." Fugate said that CRMC will continue to study and gather information as potential proposals for Rhode Island take shape. "We have a lot of screening and studying to do before anything is settled," he said.

Acoustics and Electromagnetics – Dr. James Miller, URI

Dr. Miller provided a presentation about the growing body of research regarding how:
1) marine animals hear; and 2) the substantial amount of work still needed to assess

how animals, including fish, respond to noise generated by human activity and development. "There is exciting stuff coming in about this; this is state-of-the-art" he said. Miller explained that while science has been able to determine that while a range of marine animals, from seals to whales to cod, process sound, there is not enough information yet about behavior responses upon which to base development recommendations. Study shows that many animals, fish included, often seem to steer clear of ocean development, but little is known about how their bodies process and react to sound, and whether and to what degree they will either be attracted to, neutral to, or in avoidance of an offshore ocean development such as a windfarm (especially during construction). Twenty years of international experience with windfarms has provided initial information that while some animals may avoid the farms, others, including fish, have adapted to them.

Miller indicated that as a SAMP researcher, he will be carrying out studies this summer on marine life to learn more about how sound effects animals such as fish. Fisherman at the meeting indicated they want to know whether a windfarm would temporarily and/or permanently drive away fishstocks. Miller said that their interest mirrors a growing worldwide focus on the impacts of sound on fish, and said that increasingly research on this topic is happening on national and international levels. Answers, he said, in terms of predicting how fish will react to a local windfarm, are still a ways off, although a great deal of important information and criteria about maine life and sound has been developed. And as far as electromagnetic challenges go, the likely exposure to animal life is low, although the exact effect of such exposure on marine life is still unknown. Overall, he said, "The point is to take the ambient conditions, put in a model showing noise and electromagnetics, and then make some predictions and assessments about how these things will impact animals, the environment and human world."

Q & A

Q. Is the government listening to the reports coming out about whales and ship sonar? A: (Miller): Yes, but it's new and it will take some time for recommendations overall to catch up.

Q. When are we going to see more work on fish?

A. (Miller): It's coming. It started with the mammals because of lawsuits, and now we have some hearing curves for fish, but nobody has agreed on (how to use and apply) the curves thus far.

Q: Where is good information about this to be found?

A: (Miller): Go to <u>www.dosits.org</u> – it's a peer reviewed website with good information for people to make decisions.

Q. Do you know how noise levels from windfarms compare to data collected here? A. (Miller): We'd like to do this, but we're not there yet.

Q. What kinds of mitigation techniques are available?

A. (Miller): Bubble curtains are like earmuffs for the ocean – they work in shallow areas' there are also seal bombs, and ramping up noise activity (to temporarily warn animal life to leave a construction area).e away

Q. What can we do to move forward with this so we can see that damage isn't done to (fishing) stocks?

A. (Miller): Getting the research done as soon as possible is key.

Q. What if the SAMP project isn't quick enough to catch up and there's not enough time to study these things?

A. (Fugate): The federal government is dictating that we try to go above and beyond the Cape Wind effort -- we have to protect and manage the resources – so we're working to get the money so we can do this research as quickly as possible.

Next meeting: June 30, Hazard Rooms A & B, URI Coastal Institute, URI Bay Campus