

Scientific and Technical Advisory Committee
OCEAN POLICY ADVISORY COUNCIL

Report and Suggested Action from a Workshop on
Spatial Mapping of Marine Data and Information
Held on March 23, 2007 at the Hatfield Marine Science Center, OSU

A half-day workshop was convened by the OPAC-STAC to better understand what mapping programs exist and in what formats, and what it would take to make mapping information useful to a broad audience. The workshop was held in response to OPAC's request (memo from Jim Good dated 1 November 2006) "for STAC advice on the design and implementation of an *Oregon Ocean Information System* to support OPAC's work on a variety of issues requiring an understanding and incorporation of the best available science."

The workshop started with presentations on a variety of west-coast mapping efforts presented by four invited speakers (agenda, along with useful URLs, appears below). A general discussion of mapping and the way forward was held at the end of the half-day mapping workshop, during which STAC, OPAC and audience members asked questions of the four invited speakers.

The STAC reconvened after the mapping workshop to formulate a response to OPAC's November 2006 request. It was agreed that the mapping workshop illustrated the breadth of the mapping enterprises, the availability and quality of data, and a better sense of where various data sets reside. It was observed that a number of data sets related to fisheries regulations, which would be valuable for a fuller mapping picture, are not in a GIS form and perhaps not easily tracked since they change with time through the year. Maintaining such data sets in a timely fashion in a form suitable for input to a mapping system will require constant monitoring and updating. Confidentiality of information – for example, logbooks – is also a concern. Spatial fisheries management illustrates the challenges of the interplay between static information and dynamic realities. It was recognized that extensive mapping of the seafloor is an obvious early high priority, that a mapping inventory is needed, that opportunities for integration of existing information is very much warranted, and that assessing data quality is critical. It is also very clear that there is a distinction between data acquisition, consolidation and mapping versus using data in the decision making process.

OPAC-STAC endorses nearshore mapping of Oregon coastal waters and strongly advises that any Oregon Ocean Information System not "reinvent the wheel," since there are several groups with sufficient expertise and experience on which to base a useful system for OPAC's use.

STAC advises OPAC that:

1. An inventory and assessment of mapping efforts and available data from the continental margin off Oregon be conducted. This should be done by a group of experts on spatial mapping and ocean data. This effort should include identification of gaps in data, including socioeconomic data, and which data sets are not in a useable form for spatial mapping, for example fisheries management data. The inventory and assessment should be made available via a web portal. The limitations of existing data and mapping efforts should also be determined, especially identifying what maps do *not* adequately describe (e.g., life history information of marine species). OPAC-STAC advises that the group of experts include:
 - Dr. Dawn Wright, OSU
 - Dr. Chris Goldfinger, OSU
 - A NOAA Fisheries mapping expert
 - An ODFW Fisheries mapping expert
 - A mapping expert familiar with the use of spatial maps in implementing the California Marine Life Protection Act (for example Will McClintock or Dr. Satie Airame, both of UCSB)
 - A liaison from OPAC-STAC
2. An Oregon Ocean Information System be designed, based on *existing* mapping efforts and available data, and targeted for OPAC's use, by the group of experts described above. The group should provide advice on the level of support required to build such a system.
3. An Oregon Ocean Information System, based on the design envisioned by the group of experts, should be built.
4. OPAC-STAC should periodically review the status and functioning of the Oregon Ocean Information System. This review should occur at least once per year.

Spatial Mapping of Marine Data and Information

A half-day workshop sponsored by the
Science and Technology Advisory Committee (STAC) of the
Oregon Ocean Policy Advisory Council (OPAC)

March 23, 2007

Guin Library Seminar Room, Hatfield Marine Science Center, Newport, Oregon

The purpose of this workshop is *to better understand what mapping programs exist and in what formats, and what it would take to make mapping information useful to a broad audience*. The focus of discussion will be among STAC membership and invited speakers, but we'd be delighted to have involvement by OPAC members.

A G E N D A

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| 8:30 a.m. | Welcome / Purpose of the Workshop -- Jack Barth, OSU, STAC member |
| 8:40 | Experiences with Essential Fish Habitat Mapping – Waldo Wakefield, NOAA, National Marine Fisheries Service |
| 9:10 | Oregon Experiences: The Oregon Coastal Atlas and Decision Support Tools – Dawn Wright, OSU |
| 9:40 | Oregon Experiences: Essential Fish Habitat Mapping and the Pacific Coast Ocean Observing System (PaCOOS) Web Portal – Chris Romsos and Chris Goldfinger, OSU |
| 10:10 | Break |
| 10:30 | California Experiences: Mapping in the Marine Life Protection Act Central CA Coast Effort -- Will McClintock, UCSB |
| 11:00 | Discussion of Challenges and Opportunities; Next Steps |
| 12:00 noon | Lunch |
| PM | STAC Meeting |

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Useful Web Links

Essential Fish Habitat: <http://marinehabitat.psmfc.org>

The Oregon Coastal Atlas: <http://www.coastalatlus.net>

The PaCOOS Web Portal: <http://nwioos.coas.oregonstate.edu>

MarineMap: <http://marinemap.org>