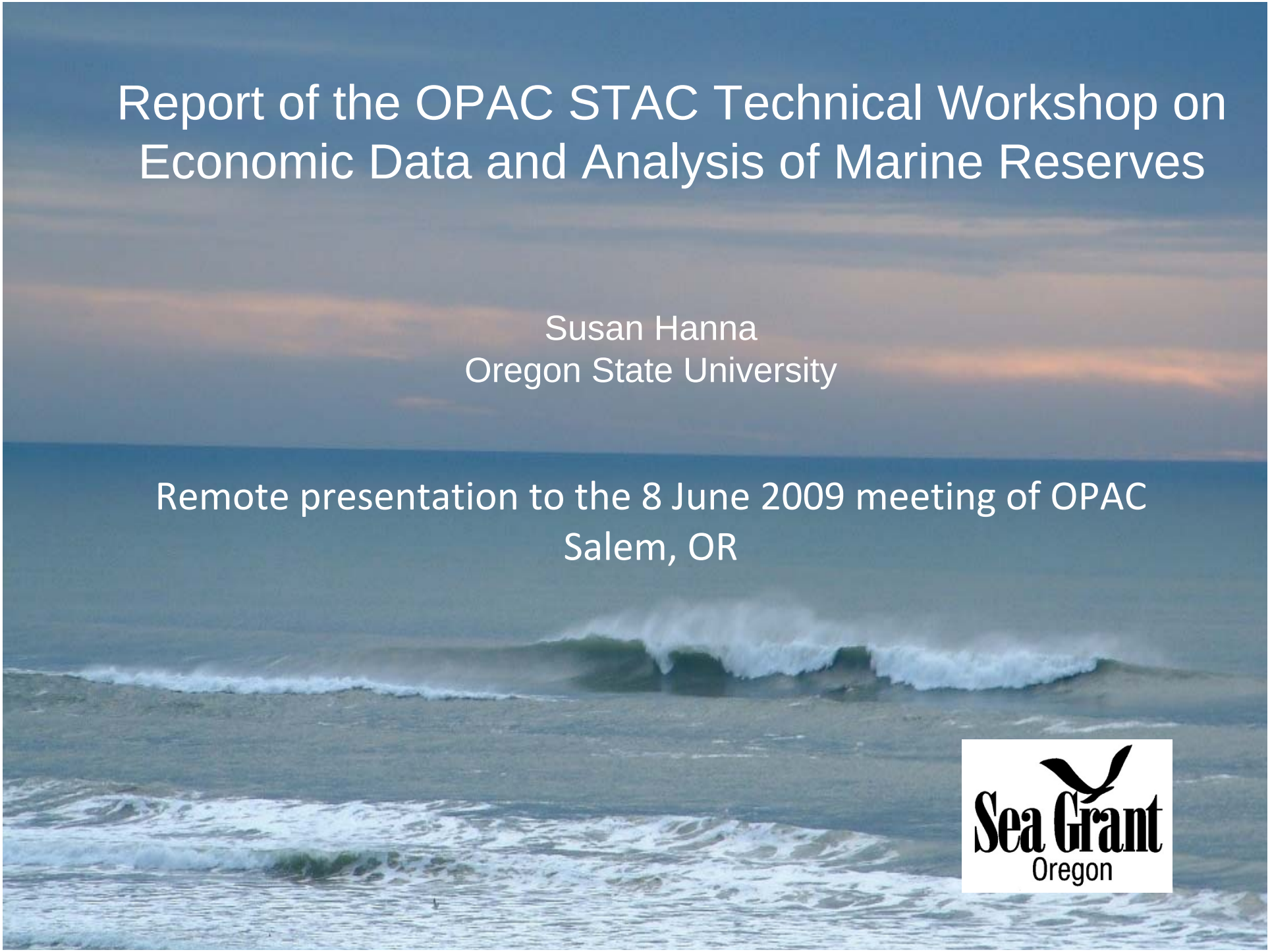
Report of the OPAC STAC Technical Workshop on Economic Data and Analysis of Marine Reserves

Susan Hanna
Oregon State University

Remote presentation to the 8 June 2009 meeting of OPAC
Salem, OR



Outline

Workshop and Report Process

Report Structure

Findings and Recommendations

Workshop Participants

Christine Broniak
Chris Carter
Dave Colpo
Shannon Davis
Jeff Feldner
Dave Fox
Susan Hanna
Michael Harte
Dan Huppert
Sarah Kruse
Arlene Merems
Hans Radtke
Jay Rasmussen
David Sampson
Carla Sowell
Charles Steinback
Gil Sylvia
Linda ZumBrunnen

Workshop on Economic Data and Analysis

Oct 21-22 2008, Hatfield Marine Science Center

Objective:

To assess the status of economic data and analysis with regard to siting and management of marine reserves in Oregon waters;

To reach a series of findings and recommendations regarding the availability and adequacy of data.

- a technical workshop
- focus on data and methods
- no advocacy for particular policy outcomes

Workshop and Report Process

Workshop

- Participants selected for knowledge of Oregon marine data and analysis (Appendix A)
- Public comments were taken (Appendices B&C)
- Included presentations and discussions (Appendix D)
- Two note takers

Report

- Drafted from workshop notes
- Primary authors Hanna and Sampson
- Review and comment by participants 1/09
- Revised and finalized 2/09
- Adopted by STAC 3/09
- Submitted to OPAC 3/09

Report Structure

Definition, goal, objectives, principles, and guidelines

Economic elements of marine reserves

Economic analytical methods relevant to MRs

Models

Economic data needs

Existing Oregon economic data

Economic data gaps

Findings and recommendations

Appendices

Findings and Recommendations - General

Finding 1: OPAC MR objectives require the assessment of economic impacts on ocean users and coastal communities.

Finding 2: The assessment of economic impacts (both positive and negative) of marine reserves has several dimensions:

- documenting existing ocean uses and their economic contribution
- predicting human behavioral responses
- identifying benefits and costs.

Findings and Recommendations - General

Finding 3: E.O. 07-08 lists ocean users and coastal communities as the focus of impact assessment for marine reserves; however, marine reserves may also have impacts beyond coastal areas.

Finding 4: Several methods and models are appropriate for analyzing economic impacts of marine reserves.

Findings and Recommendations - Specific

Finding 5: Existing economic data are limited in their geographic specificity and are therefore inadequate to analyze the impacts (both positive and negative) of Oregon marine reserves on ocean users and coastal communities.

Fundamental gaps in

- baseline data
- spatially explicit data
- recreational fishery data
- coastal community economics
- public valuation of marine reserves
- public valuation of other marine activities

Findings and Recommendations - Specific

Finding 6: There is no comprehensive documentation of:

- spatial uses of the Territorial Sea
- value produced
- economic contribution to coastal communities

The absence of a pre-reserve baseline severely restricts the ability to quantify post-reserve implementation effects.

Most existing data are on fishery uses.

- limited information about harvest locations
- ports of delivery
- residence of fishing industry workers

Findings and Recommendations

***Recommendation 6.1*:** OPAC should highlight the inadequacy of economics data needed to:

- avoid significant adverse economic impacts on ocean users and coastal communities
- estimate the potential of positive long-term economic impacts

***Recommendation 6.2*:** In the short term, OPAC should recommend that spatially explicit economic data be collected for specific marine reserve sites through expert opinion methods that involve ocean users and managers.

Findings and Recommendations

***Recommendation 6.3*:** In the short term, OPAC should recommend the collection of information about likely user group and community response to spatial exclusion through surveys of affected groups.

***Recommendation 6.4*:** As the lead agency for marine reserves, ODFW should create a web space to host the economic information they fund, with links to other pertinent marine economic information, to enhance its circulation and application.

Findings and Recommendations

Finding 7: Some state-level marine economics data are collected. However, the process of data collection is *ad hoc*, incomplete, and uncoordinated.

***Recommendation 7.1*.** OPAC should recommend the formation of an Oregon Marine Economics Data Work Group charged with defining an ongoing core economic data-collection program.

Findings and Recommendations

Recommendation 7.2. OMEDWG should consider methods to involve ocean users and coastal communities in data collection, including incentives.

Recommendation 7.3. OPAC should recommend state funding of the core data program developed by the OMEDWG.

Findings and Recommendations

Finding 8: Economic impacts are one element of marine reserve performance. Investing in economic data and research provides opportunities to learn about economic impacts.

***Recommendation 8.1*:** OPAC should ensure that economic performance indicators are a component of the monitoring and periodic performance review of marine reserves.

Recommendation 8.2: OPAC should recommend cooperative research to learn from existing and ongoing studies of marine reserves on the U.S. West Coast and elsewhere.

Findings and Recommendations

Finding 9: Economic data are also needed for the planning and analysis of other spatial uses of Oregon's Territorial Sea, such as wave and wind energy.

***Recommendation 9.1*:** OPAC should recommend that the economic data collection program designed by the OMEDWG include the full range of uses of the Oregon Territorial Sea.