

Sustaining Natural Resources

The background of the slide is a photograph of a vast, deep blue ocean. The water is calm with subtle ripples. A bright sun is visible on the left side, creating a shimmering reflection on the water's surface that extends towards the horizon. The sky above is a clear, light blue with some wispy clouds near the horizon line.

Sustaining Natural Resources

Challenges

- Create a more effective and efficient governance structure that integrates natural resource policies and facilitates interagency collaboration (3)
- Public outreach, engagement, and education to support integrated management outcomes and make responsible decisions (3)
- Develop and Implement Ecosystem Based Management (including Humans) (2)
- Address limited knowledge of species and systems (2)
- Integrate transdisciplinary research and knowledge (2)
- Evaluate the effectiveness of management using decision support tools and employ adaptive management (2)
- Differentiate between natural and anthropogenic change (1)
- Reduce overexploitation of ocean resources and restore habitat (1)

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Expected Results

- A public that views information supporting management as accurate, credible, and unbiased, becomes more fully engaged in the decision process, and is supportive of the outcomes (3)
- Improved natural and social scientific assessments including analysis of risk, tradeoffs and benefits of policy alternatives supporting adaptive approaches to management (3)
- Effective and efficient governance structures that facilitate collaborative decision making and timely response (3)
- Predictable and sustainable natural resource yields through effective management and enhancement (2)

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Research Needs

- **Assessment and monitoring of the abundance, distribution, and diversity of natural resources and human use patterns (3)**
- **Enhanced modeling, prediction and forecasting incorporating multiple living and non-living resources and human activities (3)**
- **Understanding the cumulative impacts of human activities (2)**
- **Integrated research to support geographically specific management (2)**
- **Support for emerging technologies including energy development and new products (2)**
- **Address basic data needs including gaps in current information (2)**
- **Earth systems/interface between oceans with atmosphere and watersheds (1)**

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Infrastructural and Technology Needs

- Well trained, educated, and diverse work force (3)
- Adequate support for fixed and mobile platforms (labs, ships) to support research and monitoring (3)
- Adequate support for remote sensing technologies including tracking of mobile organisms, and new sensor development (3)
- Infomatics support (e.g., information storage, security, processing, integration and communication) (3)
- Development of marine genomic tools (1)

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Potential New Cross-Cuts

- Human Dimensions Research and Information
- Ecosystem Management
- Modeling

FOR US, IT'S PERSONAL!

IT'S UP TO
US TO BRING
THE OCEAN
TO OTHERS!

