

Laying the Foundation for MSP

Collaborative Science
off the Olympic Coast

Treaty Rights

- Secure the right to fish
- Co-management responsibility
- Are specific to “Usual and Accustomed” areas
 - They are place-based

Tribes have been doing MSP since time immemorial



Coastal Tribes and MSP

- Makah, Quileute, Hoh, and Quinault – coastal U&As
- Concern over potential for conflicting uses in U&As or impacts to treaty resources
- Need for national framework that is flexible
 - Different areas/scales will have different needs
 - Connection between land and sea

Effective MSP*

- **Ecosystem-based**, balancing ecological, economic, and social goals and objectives toward sustainable development
- **Integrated**, across sectors and agencies, and among levels of government
- **Place-based or area-based**
- **Adaptive**, capable of learning from experience

* Taken from "Marine Spatial Planning: a step-by-step approach toward ecosystem-based management"

Planning to be Effective

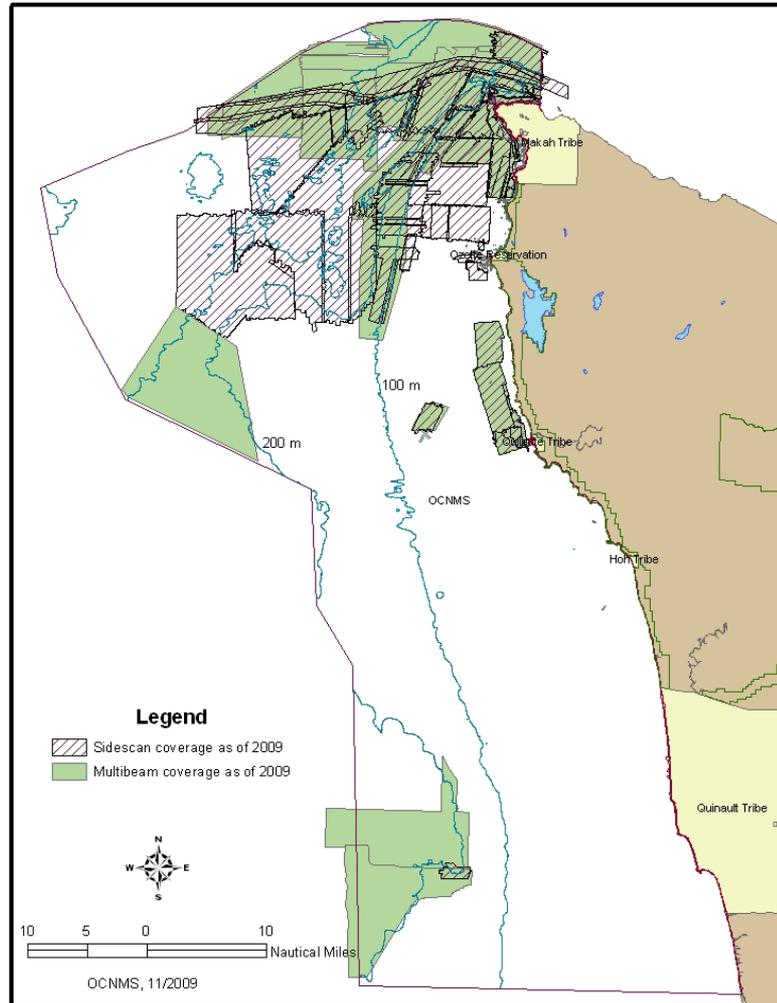
- There is considerable work needed to understand the ecosystem of the Olympic Coast
- The work should be collaborative across agencies
- It should be continuing in order to gain increasing information about the region

Ocean Monitoring and Research Initiative

- Developed across agencies and governments including coastal tribes, state of Washington, NOAA, and USGS
- Designed specifically to improve EBM
- Represents mutually agreed-upon high priority data needs for the Olympic Coast region
- Provides for continuing information gathering
 - Both project data and capacity for future work

Habitat Mapping

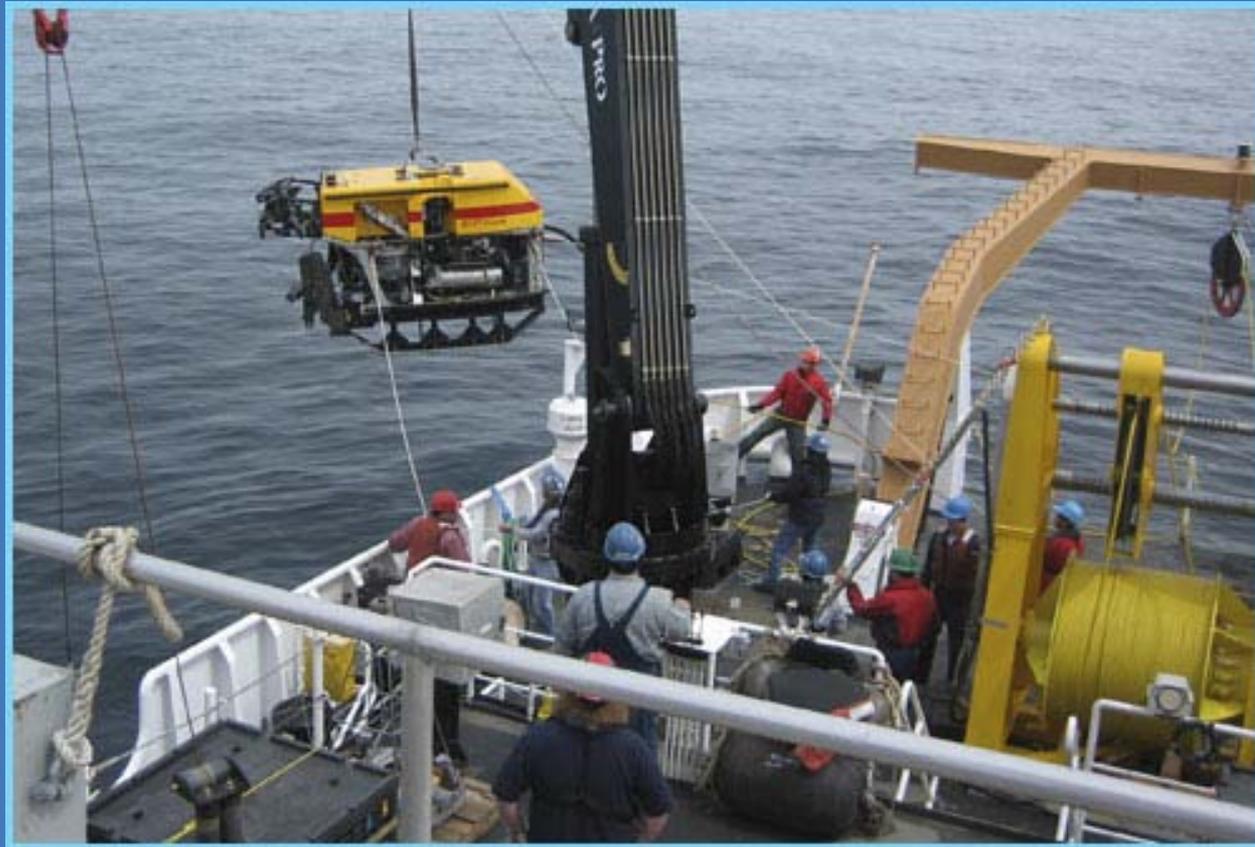
Mapped WA Coastal Seafloor as of November 2009



Habitat Mapping

- Less than 25 % of the seafloor has been mapped
- Seafloor geology
- Habitat characterization
- Corresponding biological communities
- Predictive modeling

Visual Rockfish Surveys



Visual Rockfish Surveys

- Not well surveyed
- Important species
 - Top predators
 - Constrain fisheries
 - Long lived (historical ecosystem information)
- Habitat associations significant

Plankton Surveys



Plankton Surveys

- Link between oceanography and biology
 - Dynamic upwelling system
 - Seasonal effects on community
- Effects of climate change on productivity
 - Changing wind and current patterns
 - Acidification and shifts in community structure

Data Dissemination

The screenshot displays a Windows desktop environment. At the top, a Microsoft Excel window is open, showing the ribbon with tabs for Home, Insert, Page Layout, Formulas, Data, Review, and View. Below the ribbon are various toolbars including Clipboard, Font, Alignment, Number, Styles, Cells, and Editing. The main area of the desktop is occupied by a web browser window titled "Habitat Viewer - Windows Internet Explorer". The browser address bar shows the URL http://www.ncddc.noaa.gov/website/NMSP_MBS_Habitat/Viewer.htm. The page content includes the title "SIMon Interactive Maps" and "Habitat Viewer". A central map displays a coastal area with various colored overlays representing different habitat types. To the left of the map are three vertical panels: "NAVIGATION" with icons for zooming and panning, "SELECTION" with an information icon, and "OUTPUT" with a print icon. To the right of the map is a legend titled "Base Data" with a list of layers and checkboxes. The scale is set to 1:2942810. At the bottom of the browser window, there is a compass, a scale bar (0 to 42045m), and coordinates: Lon: -120° 21' 7" and Lat: 37° 0' 29". The Windows taskbar at the bottom shows the Start button, system tray icons, and several open applications including "Inbox - Microsoft...", "Symposium bio ab...", "ocean Initiative v...", "R Jones", "SIMon - Monterey...", "Habitat Viewer - ...", "Marine Spatial P (E)", "My Pictures", and "Microsoft Excel". The system clock shows 2:47 PM.

Data Dissemination

- Provide data and data products
 - Managers
 - Scientific community
 - Public
- Link with other data monitoring networks
 - e.g. NANOOS, regional moorings, OOI, etc.

Summary

- UNESCO framework relates MSP and EBM
- Our Ocean Ecosystem Research and Monitoring Initiative is designed to accomplish many of the same goals
 - Better understanding of the ecosystem and current uses/impacts
 - Predictive capability
 - Capacity for maintaining healthy ecosystems
- It represents the scientific foundation necessary for MSP to be successful

