



Research & Monitoring in OCNMS: Challenges & Opportunities

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Ongoing Efforts:

- Nearshore Programs
- Seafloor Habitat Mapping
- Offshore Efforts

Future Prospects



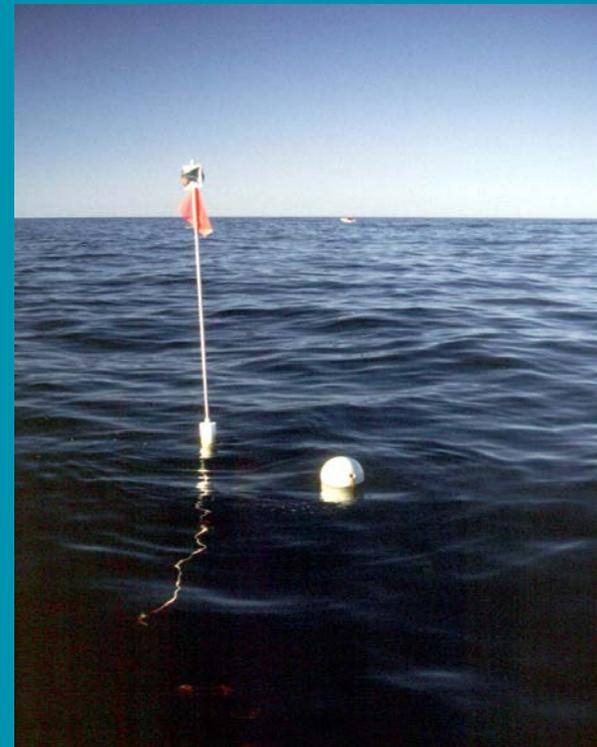
Nearshore Oceanographic Moorings

- Deployed in June
- Processed data completed thru 2010 (2011 will be completed this summer)
- Data will eventually be housed on OCNMS and NANOOS web sites
- Hypoxia
- OA proxy with algorithm developed with PMEL
- Nearshore Circulation
- HABs

- Temperature
- Salinity
- Chlorophyll
- Currents
- Oxygen levels

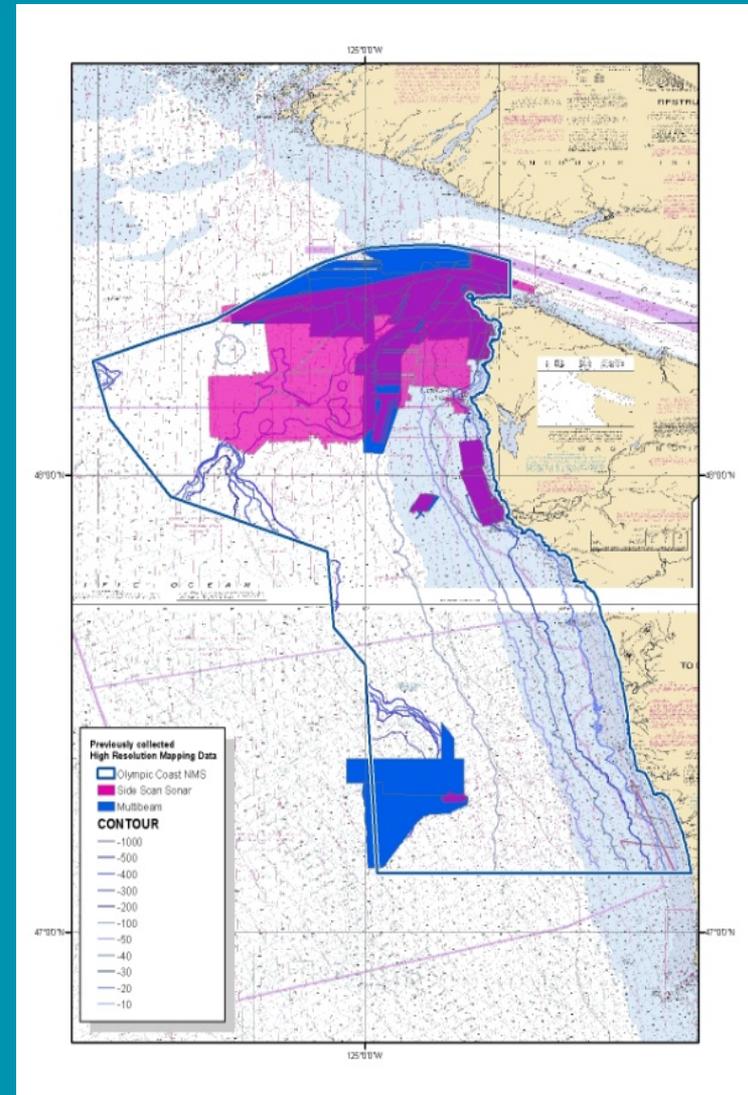
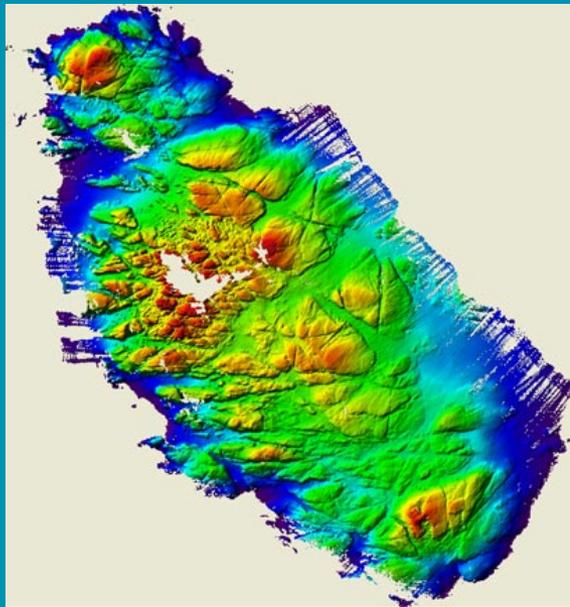


SAC mooring working group
with IPCSP reviewing for
recommendations on long-
term plans



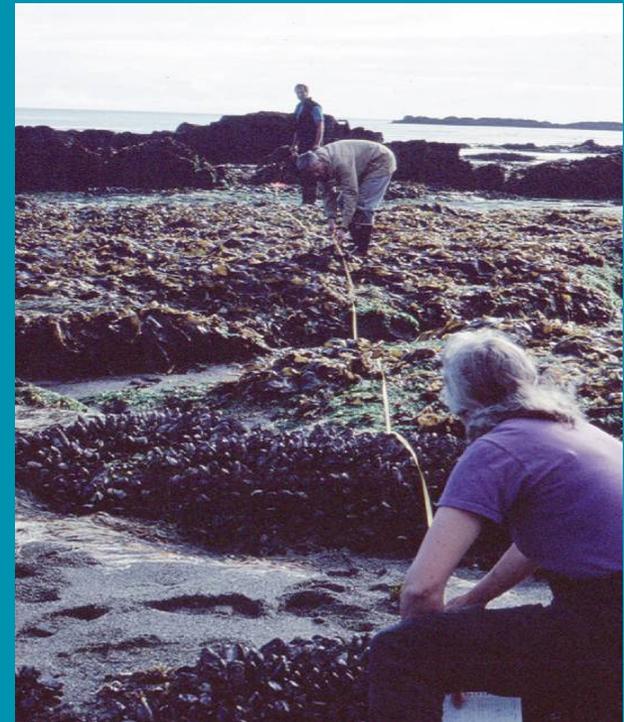
Seafloor Surveys

- Nancy Wright lead
- Ground-truth acoustic data with video bottom grabs this summer
- MB surveys off the R/V *Tatoosh*



Intertidal Monitoring

- Liam Antrim lead
- MARINe & ONP protocols
- Mussel Watch
- Marine Debris



Sea Otter Surveys

- Annual July collaborative survey (WDFW, USFWS, OCNMS, Seattle Aquarium, Pt. Defiance Zoo & Aquarium); aerial & ground counts
- Keystone Species for Nearshore Ecosystem (e.g., kelp forest)



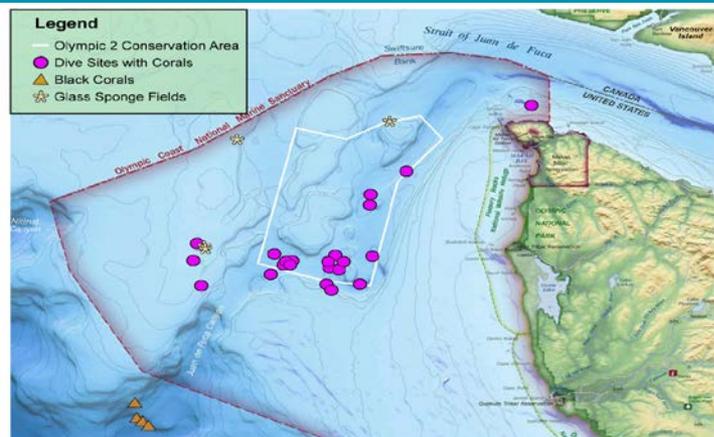
Seabird Surveys

- No June survey off R/V Tatoosh but scheduled for July
- COASST monitoring



Site Characterizations for DSC & EFH

- 2012 was 3rd and last year of funding from NOAA's DSCRTP
- Summary Reports for 2008 & 2010 surveys completed
- Summary Reports for 2011 & 2006 surveys in rough drafts; planned completion this summer
- Nancy Foster scholar Katie Wrubel (WSU) – fish & habitat associations
- PFMC's EFH process



Marine Mammal Strandings

- NW Stranding Network
- Co-teach stranding training with USFWS, NMFS, OCNMS, Cascadia, Makah Tribe

Climate Change

- Ian Miller's WSG expert team

2013 Prospects

- Funding Challenges
- Continue limited monitoring programs
- Unlikely NOAA Ship Time
- UAS proof of concept with USFWS on seabird colony monitoring
- Planning for year-round aerial surveys for nearshore seabirds
- Hollings scholars
- Private foundation funding for training tribal staff on post-processing ROV videos (OCNMS & WSU)

2013 (cont.)

- EFH process
- Seafloor mapping & ground-truthing
- Need Help with:
 - Collaboration Opportunities (e.g., piggy-backing on ship time)
 - Recommendations & collaborations on nearshore oceanographic monitoring
 - Advancing Sentinel Site Concept (hypoxia, OA, climate change, etc.)

National Marine Sanctuaries
National Oceanic and Atmospheric Administration



NATIONAL MARINE
SANCTUARIES

OLYMPIC COAST

<http://olympiccoast.noaa.gov>