

**Thursday, October 27, 2005 - 5:30 p.m.
Hilton Waterfront in Huntington Beach, Salon A**

**The Southern California Ocean Observing System
(SCCOOS)
Data Providers and User Groups (DPUG) Working Meeting**

Stakeholder Comments and Feedback

Recommendations indicated by R - #.

A. Water Quality Breakout Session

Moderator: Jeff Crooks & Burt Jones; Recorder: Melissa Carter

Group Attendees: Lisa Gilbane, Jill Murray, Irwin Haydock, Don Schulz, Gregory McMahan, Barbara Cameron, Mark Malone and Bob Grove.

R-1: to provide access to data, quickly and easily. One idea is to organize the data by station or location to enable access by selecting location from a map or photo database (similar to <http://www.californiacoastline.org/>). This map interface might more easily show all the available data for a given site/location.

R-2: to provide the download of data in either txt, xls or matlab file formats; plus, have the option to plot the parameters that users are most interested in.

R-3: to have a focused Decision Maker Workshop in order to teach users how to use the technologies/data to help make more informed decisions. Jeff Crooks at the Tijuana National Estuarine Reserve Reserve mentioned that their Coastal Training Program could be of help with this type of outreach and training. Another option would be creating a video or providing online training/tutorials.

R-4: Other types of data that users are interested in included:

- Weekly or Daily Data - Data that is collected at a standard interval.
- TMDLs
- General Data: temp, salinity,
- rainfall/precipitation, meteorological data
- chlorophyll/Harmful Algal Blooms
- Sediment/ Turbidity
- fecal indicator bacteria (FIB) & pathogen data including source identification
- real-time data
- Integrating data types and plotting user-defined parameters (esp. satellite and ocean data)
- marine mammal strandings
- watershed data including stream flow, temp, etc.
- interfacing with management systems so that data required for permits is highlighted

B. Marine Life Resources Breakout Session

Moderator: John Hunter; Recorder: Dolores Wesson

Group Attendees: Susan Zaleski, Rick Pieper, John Hunter, Rick Ambrose and Stephanie Barger.

R-5: to provide better habitat maps that are easily available and are not outdated. E.g., bottom type, relief, etc. The CA Dept of Fish and Game (CDF&G) has paid for many surveys but availability and access is uncertain. This information is a priority for users but admittedly possibly outside of SCCOOS' scope.

R-6: to identify the location and trends of plant biomass, kelp beds algal cover and trends. A question remains: How far upstream will SCCOOS cover?

R-7: to monitor nearshore transport of larvae. Programs like the Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO) & the Cooperative Assessment of Nearshore Ecosystems (CRANE) are of value but maybe lack longevity. It is recognized that nearshore processes are useful but difficult to monitor. (See <http://www.piscoweb.org/> & <http://www.piscoweb.org/outreach/pubs/sharing3.pdf> for details.)

R-8: to monitor non-indigenous aquatic species. This also is possibly outside SCCOOS' scope and might not be affordably accomplished.

R-9: to monitor wide-ranging fish stocks outside of the Channel Islands.

R-10: to monitor in wetlands and lagoons with a link to ocean boundary conditions. "To what degree is this monitoring effort integrated with SCCWRP?", was asked.

R-11: to monitor wave climate in the rocky intertidal habitats with high resolution and to describe shore bottom habitat inside of 10 m.

R-12: to make programmatic ties with statutory mandates to increase relevance and likelihood of funding / success (program examples: HABs, Mussel Watch, Dept of F&G postings and announcements, Clean Water Act, eel grass beds, Essential Fish Habitat).

R-13: to look at parameters affecting HABs; provide time series of these factors and map distribution of blooms. Feedback was very supportive of embracing the old SIO data and dovetailing with the new system and documenting the connection of the old and new systems.

R-14: to have a small meeting with PACOOS, State agencies and SCCOOS to look at geographical boundaries and parameters to be observed by the various marine life resources stakeholders.

C. Coastal Hazards Breakout Session

Moderator: Michael Bateman; Recorder: Debbie Duckworth

Group Attendees: Walter Crampton, Rick Harter, Susan Brodeur, Michael Welin, Lesley Ewing and Julie Thomas.

R-15: to adapt the online SCCOOS data products so that users do not have to do any interpretative analysis. For example, CDIP wave data provides wave heights but not a range of potentially hazardous or tsunami-like waves. Users should not have to translate a particular wave height into an inference of a dangerous wave. Another example is that surface current/CODAR data is not readily useable to laypersons to determine the transport and fate of oil leakage or of a lost vessel/person. Interpretation of surface currents should instead be made and accessible for the users.

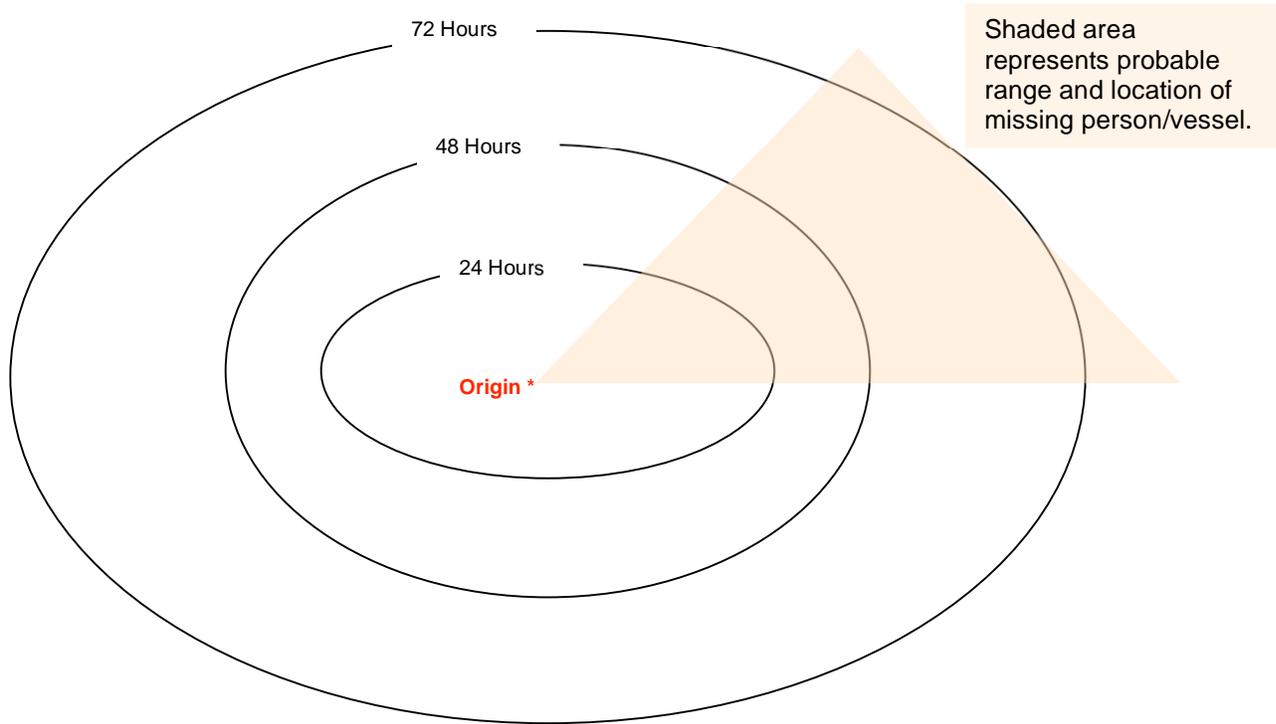
R-16: to have early warning protocols of notification for, for example, a tsunami. One possibility is that: in the event of a wave height detected greater than a threshold value, registered users receive an automated text/voice message on their phones or pager, and/or an email that serves as notification. (USGS uses a phone text messaging system like this. The one problem with this is that automated e-mails are often filtered out as spam.)

R-17: to increase the frequency and spatial coverage of water elevation meters along the coast to monitor El Niño and seismic activity. Areas along Northern California (Crescent City) are particularly at risk to tsunamis resulting from earthquakes in the Pacific. Furthermore, sensors off relatively remote areas such as the Oregon and Northern California Coast are necessary to provide sufficient warning in Southern California of an oncoming inundation wave. (The coast off Crescent City, CA provides a unique indication of the present tsunamis risk due to surrounding bathymetry and warrants more buoys there.)

R-18: to more thoroughly utilize municipal piers for the location of various sensors for monitoring.

R-19: to indicate the presence and provide 96-hour prediction of Santa Anna Winds.

R-20: to provide an interactive mapping tool to predict the location of missing persons or vessels. It should be kept in mind that this tool is for the panic-stricken with little time. The maps should have commonly known landmarks, particularly lifeguard headquarters, on the map to aid in coordination and bearing. The mapping tool should be able to receive the time and location of the object when last known and output incremental estimates of the probably transport and subsequent locations of the object. Incremental estimates should be available in 15 minute intervals. For example: on the map, original location could be centered among concentric circles showing the probably range of transport in terms of time. Probable location could be shaded to show most probable direction of transport. The following is provided as an example that was discussed; imagine the following graphic overlaying a map showing major landmarks and current directions. (This is to provide just an idea; a person trained in GIS could do much better.)



Other map-related comments that were made:

- (1) Sandy Needles at USCG uses SCCOOS data with their own data.
- (2) The interactive map for locating transport of missing objects or oil should be able to show change and predict near-future transport and direction.