

**Humboldt Bay Ecosystem-Based Management Program  
Advisory Team Meeting – January 25, 2008**

**Announcements:**

- Dorn Moore and Mark Finkbeiner, from NOAA Coastal Services Center, will make a presentation at Feb. 15 meeting on Humboldt Bay and Eel River Estuary mapping; after the regular meeting will be a presentation on Habitat Priority Planner.
- Spartina Summit on Feb. 13 at HSU Aquatic Center from 9-4.
- Harbor District Conservationist position open. Contact David Hull for more information.
- Humboldt Bay Symposium, April 24-26 at the Wharfinger Building: 24<sup>th</sup> – regional presentations; 25<sup>th</sup> – local information (EBM component); 26<sup>th</sup> – workshops and tours.
- Lower Eel River Watershed Basin Assessment is available, public comments accepted through Feb. 8.
- Coastal Services Center is assisting with contacting potential funding organizations; Packard Foundation and others will be attending HBS to learn about Humboldt Bay EBM

**Review Agenda:** Subcommittee reports; Craig Benson will facilitate discussion on decision regarding unified proposal; subcommittee meetings

**December notes:** no changes

**Subcommittee Reports:**

Biological Resources: Frank Shaughnessy described the book, “Estuarine Indicators”, that discusses targeted monitoring of biological resources which is this subcommittee’s proposal, monitoring the health of Humboldt Bay. The book emphasizes the indicators of estuarine health, which biological resources are one component along with physical processes. Indicators comprise short and long term responses in the environment; example - depth of eelgrass as smart indicator, easy to measure, indicator of water quality, test hypothesis of changing conditions. Short term response (physical parameter – light coefficient) that indicates changing conditions earlier paired with long term (biological – eelgrass depth) to monitor overall health of the system. Both short (manage physical process – sediment affecting light conditions) and long term (biological – eelgrass depth in response to light conditions) used for management decisions. Other indicator criteria include socio-economic connections, outreach to public for involvement; different trophic levels; realistic monitoring expense; reasonable link between cause and effect. Susan will purchase seven copies of the book for the Advisory Team use.

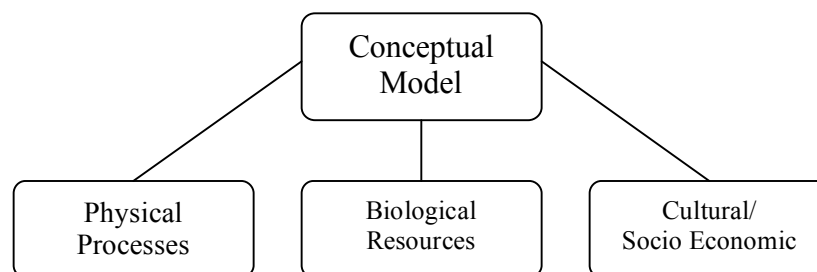
Socio-Economic: Becky Price-Hall described matrix/process model to analyze community related issues; costs/ benefits, trade-offs for management decisions. Area includes EBM primary zone, high tide mark including tidelands; decision information tool with initial focus on government agencies to highlight relationships between projects and outcome (evaluating project impacts). This tool could be incorporated into Conceptual Model to include resource uses and community input.

Discussion: Will model take a general approach or focus on key issue impact?; develop tool using specific input (impacts of restoration projects) to demonstrate its use, then expand to include different inputs. Identify key audience who will use the tool and invite them to participate in the development.

Physical Processes: Greg Crawford discussed proposal components; sediment and turbidity in the bay from the ocean and watershed. Consider management influence from two components; Army Corps models incorporate ocean influence, EPA model includes watershed/terrestrial influence; need to involve agencies in model development; include policy/management implications regarding output, utilize TMDL guidelines as model tool. WQCB has water quality sampling equipment that can be used for data collection. Example project: monitor sediment/turbidity coming from Freshwater slough; mount camera on Samoa Bridge facing north to capture plume events; qualitative analysis of turbidity.

Discussion: Pete Nelson suggested consideration of wave energy study, this would include littoral cell; response – this could be included in second round of proposals since there is a list of ideas generated at previous meeting.

Conceptual Model: Proposal to develop two deliverables: graphic/schematic representation of the bay system and; computer application/decision tool. Model would include components from all proposals.



Utilize existing research through literature search and experts through workshops to develop application. Develop a subset to demonstrate application; rapid response physical or chemical indicators to show effects; simple decision tool for managers to evaluate decisions. Performance measurement for decision tool could include: eelgrass distribution – spatial component; monitor quality of oyster feed – non-spatial; toxin levels influencing aquaculture closures; fecal coliform loading in the bay; invasive species removal. Use existing data to test model: Shellfish TAC coliform sampling data.

**Consensus on draft unified proposal:** Craig Benson summarized Advisory Team progress to date.

Vote: In favor of proposal = 17  
          Opposed = 0  
          Needs work = 0

Discussion: A portion of each proposal should address same parameter to show relationship to EBM; identify several performance measures to show trade-offs for management decisions (salt marsh restoration removing ag land use, spartina eradication, permeable surface affecting water quality). Use Discussion Group to list ideas for second round of proposals.

Timeline:      Jan. – March    Develop proposals  
                  April            Public input at Humboldt Bay Symposium  
                  May             Finalize proposals  
                  June             Submit proposals