

Subtidal and Intertidal Habitat Goals for Humboldt Bay and the Eel River Estuary

Advisory Team Meeting Notes

January 24, 2008, 1:30 to 4:30 p.m., Eureka Sea Grant Office

- I. **In Attendance:** Diane Ashton (NOAA Fisheries), Steve Cannata (DFG), Annie Eicher (California Sea Grant Extension), Vicki Frey (DFG), Joel Gerwein (Coastal Conservancy), Bill Pinnix (USFWS), Kirsten Ramey (DFG), Susan Schlosser (California Sea Grant Extension). Joining via teleconference: Christina Hoffman (NOAA Coastal Services Center—Oakland), Becky Pollock (NOAA Coastal Services Center—Oakland), Mark Finkbeiner (NOAA Coastal Services Center—Charleston), and Dorn Moore (NOAA Coastal Services Center—Charleston)

- II. **Coastal and Marine Ecological Classification Standard (CMECS)**—Coastal Services Center presentation (Mark Finkbeiner and Dorn Moore, Coastal Services Center in Charleston, via webcast) (*See also materials posted to collaborative tools 01/29/2008*)
 - A. NOAA is developing CMECS to provide a structure so that habitats can be identified, characterized, and mapped in a standard way across local, regional, and national landscapes/seascapes. (CMECS III is the current version under development).
 - B. CMECS was designed to support ecosystem-based management.
 - C. CMECS allows integration of spatial and ecological data.
 - D. CMECS is built on and inclusive of existing classifications, e.g. Cowardin et al 1979 system of classifying wetlands and deepwater systems. SCHEME (System of Classifying Habitats in Estuarine and Marine Environments) is a related classification system that has been used on the East Coast. The National Vegetation Classification Standard (NVCS) is used to define biotope in vegetated habitats.
 - F. CMECS is a hierarchical system, but it also allows incorporation of non-hierarchical descriptors.
 - G. CMECS Version III levels:
 1. System: large regions characterized by salinity, depth, and geomorphology (e.g., estuarine or marine)
 2. Subsystem: tidal divisions of systems (e.g. intertidal or subtidal)
 3. Cover: biotic presence on substrate (e.g. colonized or bare)
 4. Class: general appearance of the habitat based on dominant life form or physiography of substrate (e.g. aquatic bed or unconsolidated bottom)
 5. Subclass: finer definitions of life forms or composition of substrate (e.g. attached macroalgae or sand)
 6. Group: factors or groups of factors that are predictors of ecological function or biotic composition
 7. Biotope: dominant or characteristic taxa
 8. Beyond these levels, various descriptors (with defined ranges) can be added
 - H. Most polygons (mapping units) will be mapped at the level of subclass based on aerial imagery combined with ground-truthing. Further characterization or assigning of attributes can be performed based on local expertise or field data collection depending on what is relevant/needed at the local level. We will also likely use the subclass level as the basic unit for habitat descriptions and evaluations in our report.
 - I. Following the presentation, the Advisory Committee discussed the challenge of mapping/representing ephemeral habitats such as algal mats on the mudflat, which we know to exhibit seasonal variation. In the CMECS classification system, cover

(colonized vs. bare) is high in the hierarchical scheme. The same Estuarine Intertidal area might be classified as “Bare, Unconsolidated Bottom, Mud” in April, but classified as “Colonized, Aquatic Bed, Drift Macroalgae” in July. Initially, we hoped to schedule the aerial imagery collection for summer to capture the algal growth, but weather conditions may be more conducive for flying in the spring. Considering the seasonal variation, it seems important that the data points selected to check the accuracy of the mapping be sampled at the same time as the initial ground-truthing data collection. The transitory nature of these habitats and the challenge of how best to represent them is something we expect to continue to discuss as our project progresses.

III. Project Updates – Susan Schlosser and Annie Eicher

- A. Notes from the 12/13/2007 meeting, with minor changes, were approved and will be posted to our website.
- B. Website: <http://groups.ucanr.org/HumboldtHabitatGoals/> Be sure to check out the documents page for postings of relevant documents.
- C. Collaborative Tools Discussion Group:
 1. Advisory committee members are encouraged to use the collaborative tools discussion group to add to an existing topic or to start a new topic. When you do so, all AC members will be notified by email that a new message has been posted. The discussion group provides a way of tracking all comments contributed on a specific topic.
 2. A suggestion was made at the meeting that we initiate a subject thread on the topic of ephemeral habitats so that this subject could be easily tracked (i.e., aside from just mentioning it in the meeting notes). This could be especially important if the discussions contribute to later decision-making.
 3. The collaborative tools website also provides a tools for collective editing. We will post the draft mission statement we wrote at the meeting (see below) so that all AC members can continue to refine the statement.
- D. Project Library. Sea Grant staff is developing an EndNote library with documents pertinent to our project. To the extent possible, the library will include links to pdfs of the documents.
 1. Most AC members indicated that they will have access to EndNote for using the library. We will also be able to produce a bibliography in Word.
 2. Sources for literature search: electronic databases, local offices (Sea Grant, DFG, FWS, Harbor District, NOAA, RCD, Public Works), HSU library, HSU student reports.
 3. Document types: scientific papers, unpublished reports, theses, government documents, environmental impact reports, community profiles, local coastal plans, maps, historic photos.
 4. Topics: Humboldt Bay and Eel River Estuary: any documents containing habitat descriptions and/or lists of biotic assemblages and/or discussions of environmental impacts or potential impacts; relevant documents pertaining to habitat classification, mapping, conservation action planning, or estuarine management/restoration.

IV. Review San Francisco Bay Subtidal Habitat Goals Project

- A. Question RE: what classification system was used for the SF project. Christina said she would check and get back to us.
- B. SF used a modification of CAP for their planning process.
- C. SF plans to review/revise goals in 10-20 years.

V. Project Mission Statement – Group discussion

“Our mission is to inventory and integrate best available information about subtidal and intertidal habitats, identify research gaps, and develop ecosystem-based management recommendations using a collaborative process.” (*Advisory committee 1-24-08*)

VII. Work Assignments

A. Assignments for Sea Grant Staff

1. Write up 01/24/08 meeting notes and circulate to AC for review.
2. Post draft Mission Statement to collaborative tools discussion group.
3. Continue compiling annotated bibliography on Humboldt Bay and Eel River Estuary subtidal and intertidal habitats.
4. Prepare agenda for 02/14/08 meeting.
5. Plan field trip for 02/14/08 to visit selected intertidal habitats.

B. Assignments for Advisory Committee

1. Review these meeting notes and contact Annie with comments or corrections. After approval at our 02/14/08 meeting, the notes will be posted to the website.
2. Add comments/revisions to draft mission statement if desired.
3. Consider what pdf files, documents, reports, maps, or other data you can contribute to our pdf library (we have a document scanner). It would be especially helpful if you accompany the references with annotations, e.g. abstract or summary of the document, highlighting how it pertains to our project.
4. Come to 02/14/08 meeting prepared to discuss the mapping project with Coastal Services Center staff.

VII. Meeting Schedule. All meetings to be held at the Eureka Sea Grant office

∞ **Thursday, February 14, 2008, 1:30-4:30 p.m.** (Stay tuned for field trip plans for Thurs a.m.)

∞ **Thursday, March 13, 2008, 1:30-4:30 p.m.**

∞ Thereafter: generally the second Thursday of every month, 1:30-4:30 p.m., unless otherwise noted