

## **Fort Bragg Marine Science Institute Workshop November 2-4, 2006**

The City of Fort Bragg hosted seven visitors with a background in administering marine research centers and terrestrial field stations across the country for a three-day workshop in Fort Bragg. The workshop was intended to troubleshoot the concept of developing a marine research and education facility on the Mill Site.

Workshop participants included: Susan Lohr (workshop facilitator and former director of the Rocky Mountain Biological Laboratory); Jan Hodder (Educational Director from the Oregon Institute of Marine Biology); Ron Lawrenz (Director of the Science Museum of Minnesota); Art McKee (Director of the Flathead Lake Biological Station); Peter Connors (retired Reserve Manager for the Bodega Marine Laboratory); Claudia Luke (Reserve Manager of the Bodega Marine Laboratory); and Paul Siri (former Associate Director of the Bodega Marine Laboratory; currently Ocean Policy and Science Consultant with Commonwealth); Sheila Semans (State Coastal Conservancy).

The participants met with a broad cross-section of people from agencies, organizations, institutions and other interest groups to obtain information about the community's interests, values, resources and needs. They also spent a considerable amount of time on the Mill Site identifying site constraints and opportunities. The workshop culminated with a Community Meeting on November 4<sup>th</sup> that featured a panel discussion where the workshop participants offered some practical advice to help develop the broad concept of a Marine Science Institute into a more focused plan for facilities and programs.

The following list summarizes advice provided at the Community Meeting:

- ⇒ A big research facility needs the backing of a major university. There are no universities currently looking to site such a facility. The Fort Bragg facility should be of a smaller scale.
- ⇒ Fort Bragg is a good location for a marine facility because there is a great deal of community interest and support for the use, suitable property with a spectacular coastline, several nearby watersheds and river systems, resource industries, Native American tradition.
- ⇒ Rather than calling it a "marine science institute," the facility should be called the "Noyo Center." This name ties it to a unique place name and is broad enough to encompass a variety of activities.
- ⇒ The administrative organization and physical plant for the Noyo Center should be flexible and versatile to accommodate various uses and change over time, as needed.
- ⇒ A Mission Statement for the Noyo Center will be needed to identify the theme and values embodied by the facility. Values to be maintained include:
  - Honoring our native cultural heritage and knowledge;
  - Developing sustainable facilities and finances;
  - Restoration;
  - Potential for collaboration and partnerships.
- ⇒ Programmatic themes that are appropriate for the site and that address the bigger picture about where our oceans are going include:
  - Ocean literacy. Teaching K-12 about the marine environment and the land/ocean interface.
  - Coastal ecosystems. Opportunity to study variety of ecosystems in area.
  - Ocean science, technology, instrumentation.

- ⇒ The Noyo Center could provide educational opportunities, technical information for resource managers, and a staging area for researchers conducting projects throughout region. There is a tremendous potential for collaborative studies.
- ⇒ One potential theme would be to provide opportunities for research and education that address natural resources and environmental issues in the context of the local economic shift from resource extraction to sustainability and stewardship.
- ⇒ This region presents an opportunity for integrated watershed research with the goals of:
  - Improving our scientific understanding of timber and fisheries resources;
  - Providing information to assist with policy formation and resource management;
  - Helping to create and provide training for jobs in research, resource management and restoration
- ⇒ Science is the new literacy. There is tremendous job growth projected in the STEM disciplines (Science, Technology, Engineering, Math). The Noyo Center could help to bring the local educational community together and increase the availability and breadth of education opportunities. Successful educational programs provide engagement, capacity and continuity.
- ⇒ Providing an exciting facility that is interesting to tourists is important for achieving financial self-sufficiency. Educational exhibits are important for transferring knowledge. Touch pools are a very successful visitor amenity.
- ⇒ The focus would be less on “major” research, as development of a flow-through seawater system is not feasible due to:
  - Development costs
  - Design issues related to placing intake/outfall structures in high energy coastal environment
  - High energy costs associated with pumping
  - Water quality issues (pulses of freshwater from Noyo River, uncertainty about contamination associated with industrial past; proximity to municipal outfall)
- ⇒ The alternative to a flow-through seawater system is a closed system which only requires a temporary, periodic connection for make-up water. It is less costly and a more achievable target. A closed system is not suitable for an experimental research lab, but would support public education, displays, and wet-tables for research.
- ⇒ The sphere of influence of the Noyo Center is regional, including the coastal watersheds, State Parks and Reserves, Jackson State Demonstration Forest, the offshore marine environment, Noyo Harbor, etc. Regional research settings include the coastal estuaries, pygmy forest, Inglenook Fen, and a pristine dune complex.
- ⇒ The Center would require about 40 acres of coastal land. It should have coastal views and connections to coastal access trails. The optimal location is on the northwest side of the airstrip. The parcel would provide protected areas for classes, terrestrial research, and installation of research technology (e.g., coastal current monitoring equipment).
- ⇒ Facilities would be located on about 3-5 acres. Initially, the Center would only need about 6,000 square feet of space. It should be small-scale and be designed with flexibility in mind, so it can help to accommodate community needs.
- ⇒ The Center should include facilities to help people interact (meeting room, community spaces, informal “fire pit.”)
- ⇒ The Center should have educational facilities for public, and could provide space to address community’s interest in performing arts facilities, cultural/tribal history facilities, etc.

- ⇒ Classroom facilities should have a closed water, seawater system.
- ⇒ The Center should provide office space that could be rented to resource agencies and/or sustainable businesses.
- ⇒ The Center could provide space for business incubation- moving science to practical applications.
- ⇒ The Center could serve as a technical support location and provide space and training opportunities related to marine technologies (e.g., coastal current monitoring program). It should not facilitate offshore oil or mineral extraction.
- ⇒ Eventually, housing facilities should be developed for visiting classes, students and researchers.
- ⇒ The next step (in January 2006) is for Susan Lohr to prepare a very simple strategic plan for the facility. It will serve as a general business plan that establishes goals for the next 3-5 years. It will help define the following features of the Noyo Center: Program, Facility, Staffing, Financing, Administration, Cost Estimates.