

**Fort Bragg Marine Science Institute  
Report of the  
Community Planning Workshop  
July 27, 2005**

*Prepared by Susan Lohr, Lohr Associates, Inc., Workshop Facilitator  
(with gratitude for notes taken by Nancy Philips and Linda Ruffing, City of Fort Bragg)*

***Introduction***

The Fort Bragg community has an opportunity to develop a marine research and education facility on a coastal mill site once owned by Georgia Pacific. Over the past two years a number of community discussions have been held and surveys and planning efforts have been undertaken. A commitment to a Marine Science Institute has emerged as a high community priority.

In 2005 the City hired a consultant (Susan Lohr of Lohr Associates, Inc.) who specializes in assisting existing or new biological field stations and marine laboratories with planning needs. Her expertise is in developing practical, realistic planning recommendations for current or future programs and facilities that are maximally inclusive of collective wisdom, interests and expertise.

The first step in Ms. Lohr's process of narrowing the broad concept into a focused plan for facilities and programs for a Fort Bragg marine science Institute was a one-day community planning workshop, held on July 25, 2005 at the Eagle's Hall in Fort Bragg. About 75 people spent most of the day together, and the product of the day is an excellent and valuable compilation of ideas and, importantly, of collective priorities.

***A Prioritized Vision for the Future***

After personal introductions and a report from the Marine Facility Citizens' Working Group, the morning was spent in five circles of about 15 people each, undertaking an inclusive small group exercise to elicit a vision for the future marine facility. In addition to the inclusive brainstorming each group produced, everyone was given five votes to use on their groups' resulting list of ideas that addressed the question "What *should the Fort Bragg Marine Sciences Institute be in 10 years?*"

The following lists show attributes that rose to the top for each small group, with the number of votes indicated in parentheses. (Appendix A lists all of the ideas presented.)

***Top Choices for Group 1:***

1. Stand-alone summer programs for college kids from around the country (11)
2. Study local fishery to better understand what can and cannot be fished (9)
3. Accommodate visiting researchers from all levels of higher education with appropriate facilities and dorm space (9)
4. Cutting edge research facility with display aquarium for public access (9)
5. Green building, like California Academy of Sciences in San Francisco (8)

***Top Choices for Group 2:***

1. Coastal restoration including Brownfield and water resources (7)
2. Marine resources think tank with 2 components: education and research (6)
3. Research program that evaluates the effects of toxics and pollution on ocean life (5)

4. Strong emphasis on education about the marine environment, particularly with regard to recruiting the next generation of scientists and natural resource managers (5)
5. Program to use mill pond remediation as experiment and teaching opportunity (5)

*Top Choices for Group 3:*

1. Marine science institute to serve as coastal center specializing in resource restoration (10)
2. Teaching center including strong historical analysis of past extractive economy and benefits of restoration (8)
3. Marine science (all inclusive ) (5)
4. Financial sustainability by endowment (5)
5. Ocean remote sensing laboratory (5)
6. Multi-faceted affiliation with major university, local community college, local fisheries, state agencies and local community (5)

*Top Choices for Group 4:*

1. Marine organism disease research (5)
2. Marine heritage displays that relate to the Native American marine history and the fishing industry of Fort Bragg (4)
3. Integrated research institution with an educational component (3)
4. Staff that will help local schools develop curriculum (3)
5. An example of inspired green design (3)
6. Involves community members in restoration projects (3)
7. Interdisciplinary approach to research (3)
8. Integrate with green infrastructure on mill site (3)
9. Research into ocean pollutants (3)

*Top Choices for Group 5:*

1. Foster endless jobs for youth. High level, jobs (besides hospitality) (7)
2. Fishing pier with kids fishing program (7)
3. On-going/two-way exchange with fishing/agriculture and timber interests (6)
4. Provide information for resource management (5)
5. Residential program on interdisciplinary/coordinated projects (5)

During a working lunch everyone voted for their top five ideas. The results provide an indication of the top priorities for the first 10 years of a marine science facility.

*Final Priorities:*

1. Institution serving as coastal center specializing in marine and natural resource restoration (31)
  2. Stand-alone summer programs for students (K-college)from around the country (29)
  3. Marine organism disease research (21)
  4. An example of inspired green design (19)
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## *Ideas to Support Future Programs and Facilities*

During the afternoon the top priorities from the morning's efforts became the focus of randomly sorted small groups of about 12 people each. Six questions were asked of each group.

### **Focus Groups - Afternoon Session**

#### **A. Education Programs (K-college)**

1. What are the special features of the Noyo Headlands that will contribute to the success of the program?
  - Physical setting
  - Proximity to the city
  - Undisturbed, wild environment
  - Relatively pristine size of parcel (30 acres)
  - Summer climate
  - Variety of habitats from estuary to green grasslands
  - Potential to study restoration of industrial pollution (and proximity to public/private dump sites).
2. What are the constraints that are either insurmountable or will need to be overcome? If insurmountable, please say why. If manageable, please provide some thoughts about a strategy.
  - Location is 3 ½ hours from airport – able to coordinate schedules
  - Not a lot of local expertise so we'd have to import the teachers
  - Financing – tuition most likely needed to be supplemented by grants or other underwriter (keeping tuition affordable)
3. What facilities will be needed to support this program?
  - Classrooms – of different sizes to accommodate groups sleeping/eating facilities
  - Laboratory
  - General meeting room
  - Lecture room (multi-use)
4. What special features or underlying principles can you suggest for facility development?
  - Green design/energy efficient; recyclable materials
  - Multi use throughout year where appropriate and where it would not subordinate education to research
  - Emphasis on sustainability of marine resources
5. Any thoughts about administrative structure for the overall Institute?
  - Affiliated with university but primarily as a peer review of science
  - Independent board would be able to overcome constraints
  - Create partnership with local colleges
  - If affiliated with state agency/private non-profit create structure to prevent budget loss during state budget crisis
6. Any thoughts about funding?
  - Marketing
  - Visiting public
  - Grant funds
  - Provide scholarships – institution to underwrite some participation

## **B. Public Programs**

1. What are the special features of the Noyo Headlands that will contribute to the success of the program?
  - Proximity to harbor
  - Proximity of continental shelf allows viewing of marine birds/mammals
  - Near string of state parks, lots of public access
  - Tourist draw already (nice place to come!)
  - Access to boats
  - Southern edge of different bioregion
2. What are the constraints that are either insurmountable or will need to be overcome? If insurmountable, please say why. If manageable, please provide some thoughts about a strategy.
  - Creating safety program, insurance could go up considering age of attendee; may phase program starting with older children (young adults then expand to children)
  - Site restoration and removal of contaminants (delay in facility start up) ensure momentum is maintained
  - Ensure equipment/space for education is dedicated and not co-opted by research
3. What facilities will be needed to support this program?
  - Administrative building
  - Transportation
  - Sea water tables
  - Aquarium rooms
  - Boats for field work/or access to boats (research vessel)
  - Research equipment
4. What special features or underlying principles can you suggest for facility development?  
(no response)
5. Any thoughts about administrative structure for the overall Institute?
  - To provide credit for high school/college, create school accreditation
  - Board of trustees/directors to include local stakeholders in the mix as well as persons of potential fundraising capability
  - Science advisory committee
  - Chancellor/director appointed by the board
6. Any thoughts about funding?
  - Summer program: set up to take bequests; grants & endowments
  - Something long standing through foundation
  - Tuition
  - Corporate remediation funds (from corporations who want to fund restoration)
  - Full-time grants manager/development director

## **C. Green Building**

1. What are the special features of the Noyo Headlands that will contribute to the success of the program?
  - Need site assessment for feasibility of solar, wind, and other renewable energy resources. Examples: wave energy, ocean-thermal transfer (for building conditioning), solar access
  - Perform energy budget audit for facility and design accordingly
  - Location is “unrestrained” relative to access to wind, solar, ocean-thermal

- No on-site infrastructure – able to start with a “clean slate”
  - Site easily served by untreated fresh water from well on-site
  - City planning on facility will be incorporated into Specific Plan (timing)
  - Potential access to “recycled” lumber from GP
  - Potential for “symbiosis” between sewer plant and facility
  - Widespread support for “green” design
2. What are the constraints that are either insurmountable or will need to be overcome? If insurmountable, please say why. If manageable, please provide some thoughts about a strategy.
    - Research facilities generally have high energy costs (pumping water, conditioning/treating water, temperature control of water)
    - Decontamination costs and feasibility/sterilization of releases
    - Timing relative to site clean-up
    - Location of sewer treatment plant
  3. What facilities will be needed to support this program?
    - Install “micro climate” stations to monitor conditioning on site to better understand site and locate buildings/facilities
  4. What special features or underlying principles can you suggest for facility development?
    - Platinum design @ Cal Academy & UCSB provide precedent/model for design
  5. Any thoughts about administrative structure for the overall Institute?
    - Local input on MSI Board
    - Non-profit with adaptive vision
  6. Any thoughts about funding?
    - “Green design” could attract funding
    - Grants (both State and Federal)
    - Earmark (Congressional)
    - Foundation funding

#### **D. Marine Disease Research Programs**

1. What are the special features of the Noyo Headlands that will contribute to the success of the program?
  - Abalone, withering foot syndrome is found locally (sport industry)
  - Close drive; beautiful area
  - Regional upwelling affects phytoplankton/uniqueness of area
  - Access to clean water for raising disease-free organisms
  - Local economic interest in having healthy environment for marine animals
  - Can work to prevent diseases in local marine environment
  - Have active commercial fishery that could be utilized as research partner
  - Research might be esoteric – not readily applied to local/regional resource management
2. What are the constraints that are either insurmountable or will need to be overcome? If insurmountable, please say why. If manageable, please provide some thoughts about a strategy.
  - Dealing with effluent – would need treatment
  - RWQCB, Coastal Commission
  - Negative perception. Would we want to be known as “disease center?” Would need to frame topic (stigma)

- Disease is not locally-compelling. Is community behind this?
  - Area known for pristine marine environment
  - Potential impacts on abalone and sports
  - Potential overlap with other research institutes (Bodega)
  - Compatibility with K-12 educational mission
  - Some marine diseases are toxic to humans
  - Might need to restrict public access. Conduct research in isolation
  - Would it diminish value of other potential uses/activities on Mill Site?
  - Could have broader research focus (i.e. don't focus entirely on disease, toxins)
  - Expense associated with lab facilities
3. What facilities will be needed to support this program?
- Lab facilities: clean water – closed water system; wastewater management; contamination containment
  - Restricted access
  - Lots of public outreach needed
  - Would want to keep marine disease lab isolated
  - Would want other facilities/programs as public outreach labs
  - May need extra security (HSA\$?)
4. What special features or underlying principles can you suggest for facility development?
- Closed seawater system (sustainable)
  - Minimize energy use
  - Balance between needed (or perceived need for) security or isolation with community interest in public access
  - Create facility that allows for viewing laboratory in action.
5. Any thoughts about administrative structure for the overall Institute?
- Disease research lab would seem to need university or governmental affiliation (USDA, NMFS, NOAA)
  - Organizational structure for institute should include connections to local community
  - Structure could have “umbrella” independent, non-profit board for organization with labs that have university & government affiliations
  - Board should include representatives from various aspects of mission (research, education, public outreach)
  - Should include resource managers
  - Have extension agent(s) – fisheries, forestry, etc. To help engage dialogue between scientists and resource managers
6. Any thoughts about funding?
- Research grants
  - State coastal conservancy: \$21 million will fund bricks & mortar
  - Fat cats
  - Foundations
  - Need coordinated, explicit approach for foundation funding (i.e. Packard)
  - Find “back doors” to get introductions to foundations for funding
  - NASA, remote-sensing
  - NOAA & NMFS/not necessarily for facilities development

## **E. Restoration Programs**

1. What are the special features of the Noyo Headlands that will contribute to the success of the program?
  - Past land use, documented historical use (former dump site, sewage flow areas)
  - Location between 2 coastal/marine centers (bodega/eureka)
  - Ocean frontage – close proximity to community/infrastructure
  - “blank slate” undeveloped property – open potential; all to be renewed
  - Proximity to north harbor fishing activities
  - Located in community where (salmon) restoration originated
  - Proximity to the continental shelf
  - Proximity to logging operations to site: opportunity to research relationships between those operations and fish declines, etc.
  - Presence of wetlands, alder creek (for restoration)
  - Effects of pollution on local fish; from mill operations, community, forestry, etc.
  - Port facility available
  
2. What are the constraints that are either insurmountable or will need to be overcome? If insurmountable,
  - Fresh water, access to
  - Money
  - Perception by fishing community that facility would result in reductions/shut down of fishing industry
  - No major university or state facility to affiliate with
  - Competing interests for the property
  - “know how” in the restoration sense
  - Remediation of mill site
  - Barriers to transportation – roads; limited public transportation
  - Competition from established marine institutes for money, contracts
  
3. What facilities will be needed to support this program?
  - Lab – classrooms, meeting rooms, housing
  - Fleet of boats – resource vessels
  - Infrastructure – for fresh water, desalination plant?
  - Pier facility
  - High-speed internet connections for access/sending information
  - Exhibit space – may include aquarium
  - Remote stations for monitoring watersheds
  
4. What special features or underlying principles can you suggest for facility development?
  - “Green” and emphasis on sustainability
  - Use of existing tidepools, etc. As much as possible (as opposed to building same)
  - Public involvement leads to land stewardship
  - Energy self-sufficiency
  
5. Any thoughts about administrative structure for the overall Institute?
  - non-profit – board represented by locals
  - affiliations with universities, COR
  
6. Any thoughts about funding?
  - Grants
  - University link

## **Summary**

The community planning workshop was extremely productive. Care should be taken to keep the entire lists of ideas handy as planning proceeds and eventually as facilities are built and programs are initiated. The participants were very thoughtful and introspective, and often spoke from their hearts about the values they would like to see enshrined in a marine science facility that would both serve and reflect their community.

The next step in the planning process is a three-day workshop to be held this fall in early November. A team of experienced field station administrators will visit with the goal of making realistic recommendations concerning the scope of the facility and the appropriateness of possible programs. The planning team has worked with Ms. Lohr on many previous planning efforts over the past decade. They will meet with a number of the people who came to the community workshop, and will provide their wisdom and judgment for a report that will outline the possible programs, physical facility, administrative structure and realistic goals over a 10-year period.

In January of 2006 Ms. Lohr will return to Fort Bragg and prepare a draft strategic plan that will list prioritized goals and tasks for getting the marine science facility up and functioning, and will provide a timeline and general budget. At that point another planning firm will be needed with specific expertise in site and building design that can turn the strategic plan into preliminary construction documents, so that bids can be solicited and large-scale fundraising can begin.

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