Summary of Community College Partnerships Document
(5th draft, dated May 2010)
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INTRODUCTION

Partnerships with community college programs may offer many new opportunities to train a capable workforce, advance the mission and mandate of the NMS system and to address our diversity goals, making us better able to increase our relevance in the changing demographics of the US. We have also recently become aware of a new program at the National Science Foundation, thanks to our friends at the Sea Education Association, also focused on community college job skills development. This is one of those clear situations when we, as a national system, may be able to act in a coordinated way to maximum effect.

To better position ourselves to take advantage of these opportunities, a data-call was conducted across the NMS system to determine what we are currently doing with Community Colleges as well as what new programs and initiatives we might propose to new and current CC partners to support our stewardship activities. Specifically, the following information was requested: 1) provide a brief summary of any current partnerships with community colleges you have ongoing at your sites, 2) provide a short summary regarding any proposals for partnerships with community colleges you have on the table or in discussion, and 3) offer any creative ideas for how we might use this opportunity to our (and our community college partners') advantage. What sorts of job training could community colleges provide that will assist us in our stewardship activities? What programs could offer students a good "first step" toward additional education and training that would provide a better trained and educated workforce to support MPA management? What sort of certification programs could community colleges provide that would be useful to us?

SUMMARY OF RESPONSES

Written and oral responses were received from all but one site and region. At the regional level, only one regional office (West Coast) was considering pursuing a partnership opportunity. Seven sites had formal partnerships, but only one was reported as having a formal agreement in place (Maui Community College). Four were pursuing some sort of partnership, and a number of others thought it was a good idea but have not started any discussions with possible community college partners. Regarding the formal partnerships, most involved capacity building, internship, and project-specific partnerships. A few offered staff professional development opportunities and educational support (lectures, curriculum development). A number of sites were interested in receiving a "model" agreement which they felt would be useful if they had the opportunity to formalize their partnerships. What follows are condensed descriptions of CC-NMS partnerships from selected sites.

1. Fagatele Bay NMS (American Samoa) and American Samoa CC

    - Lectures by FBNMS staff for ASCC marine science program.
    - Internships at FBNMS for ASCC students.
    - Participation by ASCC students Governor's Coral Reef Advisory Group and Reef Environmental Education Foundation monitor training and other programs.
    - Voting seat on FBNMS Advisory Council for ASCC.
    - Interest in voyage to American Samoa as part of Sustainability in Polynesian Islands Cultures and Ecosystems proposed venture.

2. Olympic Coast NMS and Peninsula College (Washington State)

    - Use of volunteer student interns on research cruises for lab technology and literature searches.
    - Lectures by OCNMS staff at PC.
    - Adjunct faculty and fisheries advisory committee service by OCNMS researcher Dr. John Barimo at PC.

3. Olympic Coast NMS and Grays Harbor Community College (Washington State)

    - K-12 ocean literacy program funded by NOAA's Pacific Northwest Bay Watershed Education and Training Program.

4. Olympic Coast NMS and Northwest Indian College (Washington State)

    - Workshop at Neah Bay.

5. Stellwagen Banks NMS and Massasoit Community College (Massachusetts)

    - Free marine trades mini-course provided by MCC at SBNMS annex in Scituate.
    - Effort by MCC to develop Scituate annex as base for marine studies program.

6. Stellwagen Banks NMS and Cape Cod Community College (Massachusetts)

    - Lectures by SBNMS at CCCC.

7. Gray's Reef NMS and Coastal Community College (Georgia)

    - Discussion about internships, classes, workshops, and ROV competition assistance.

8. Channel Islands NMS and Santa Barbara City College (California)

    - NMS overview course taught by CINMS staff at SBCC.
    - Assistance by CINMS staff with SBCC diver tech program.

9. Florida Keys NMS and Florida Keys Community College (Florida)

    - Orientation of new dive training component of FKCC marine science program toward FKNMS buoy maintenance activities.
    - Contribution of FKNMS education department to non-credit course on science and maritime heritage.

10. Hawaiian Islands Humpback Whale NMS, Papahanaumokuakea NMS, and Maui Community College (Hawaii)

    - MCC for-credit student internship program at HIHWNMS.
    - HIHWNMS assistance with MCC marine biology program.
    - Participation by HIHWNMS on MCC environmental committee.

11. Gulf of the Farallones NMS and College of Marin (California)

    - Participation of GFNMS with California Academy Sciences and Romberg Tiburon Center of San Francisco State University in effort to renovate the Bolinas Marine Station owned by CM (now closed because in disrepair).

12. Monitor NMS (North Carolina) and Blackfeet Community College (Montana)

    - Based on Indian reservation experience of MNMS staffer, overture about distance learning instruction to BCC.

13. Thunder Bay NMS and Alpena Community College (Michigan)

    - ACC president and president emeritus on TBNMS advisory council.
    - ACC US Department of Labor grant providing equipment, bandwidth, and fiber to TBNMS for Internet 2 service allowing real-time "live dive" broadcasts and other telepresence functions with other NMS sites.
    - ACC credit program business/marketing and non-credit Association of Lifelong Learners classes at TBNMS.
    - Instruction by TBNMS staffer of credit course on maritime history and nautical archeology for Northwood University, which operates on ACC campus.
    - Development and offering of ACC underwater archeology credit course using TBNMS facilities and resources.
    - Team teaching of terrestrial archeology courses by ACC and TBNMS instructors.
    - Joint effort to acquire National Endowment for the Humanities grant for *United by Water* shipwreck program for two cohorts of community college faculty in summer of 2011.
    - Collaboration with National Science Foundation and Marine Advanced Technology Education (MATE) Center to develop ACC associate degree.

PRELIMINARY ANALYSIS AND RECOMMENDATIONS

Given that about half of our sites already have some formal relationship with community colleges in their region, it appears we have a sufficient critical mass of sites on which to build a larger, more strategically driven system-wide program. While the actual programs within which the Obama Administration will disperse the committed funds have yet to be developed and announced, the most appropriate path forward remains yet to be determined. Three potential strategies could be embraced (and they are not mutually exclusive):

1. Some system-wide approach could be proposed that establishes a framework for collaboration that pairs each site with a community college partner, and some defined suite of potential partnership activities would form the basis for the collaboration. Such things as capacity building, internships, and project-specific collaborations, which are already the primary elements of our existing partnerships, could comprise the goals for site-based collaboration. This would be centrally coordinated and facilitated by the NMS system office. Finding a national-level partner with which to collaborate (like a national organization of community colleges) would be helpful if we adopted this strategy.

2. The status-quo option would be continued support for and encouragement of individual site-based partnerships. This would involve vesting more of the discretion for and management of the collaborations at the site, and supporting these site-based initiatives with information on available funding sources and ideas for content, model agreements, and support at HQ for clearance and processing of those agreements. The HQ role would be more to facilitate and empower the sites to do more of what they are already doing.

3. A regional strategy could also be adopted where the regions would play a greater role in identifying partners and facilitating formal agreements. This could be useful more broadly in that regions could use this as an opportunity to coordinate synergistic approaches depending on the strengths of the individual sites (i.e. sites strong on science could focus that regional partnership on capacity-building in research, monitoring and characterization, while another site in that region strong in education and outreach could be a magnet for students in the region who want to focus their studies on this area of emphasis). This could be done to some degree with the other two strategies, in a kind of "center for excellence" model, but may be more appropriate as a regional approach where regions have a larger number of sites (like the West Coast). The strategy we choose to adopt will depend to a large degree on the funding mechanisms and the proposal guidelines ultimately developed for allocating the funds. We might also consider including others in the partnership (such as other NOAA offices and programs, Federal and state protected areas agencies, aquariums and maritime museums, or marine-related businesses), to expand the opportunities for students who participate in these community college partnership programs. All of these strategies would offer significant opportunities to enhance our stewardship goals, help create an informed constituency, and, as noted earlier, help the NMS System address our diversity goals.

The data-call resulted in few creative ideas for collaborations. This is something we should invest some additional time and energy in as one of the next steps. Part of the reason for the lack of creative ideas may be that we have not yet come to a complete understanding of what it is, precisely, we are trying to achieve here beyond positioning ourselves to take advantage of a potential source of new funding. One of the questions we need to answer is "what are we preparing these students to do?" We have few

positions, at this time, available for which an associate's degree would be a sufficient educational credential. Most of the positions we have require at least a four-year degree, and many a master's degree, and the vast majority of our sister agencies have similar requirements. We do have some positions and programs that could be supported by community college students during their time in the program, but what can these students look forward to when they enter the job market? We could be better preparing them to continue their educations in a four-year university, but in fairness we need to be clear with the students and community college partners from the outset that this is a enhancement program with going on in higher education as an outcome. This could link this program very seamlessly into the NMS University Partnership initiative, and we could help these students locate universities to continue their education, and assist them in pursuit of funding programs like the Hollings Scholarships. (Perhaps one of the system-wide approach alternatives might be to develop a scholarship program for community college students that work with us in our partnership programs, demonstrate some capacity for future success, and are supported in their final two years of their undergraduate education). Certification programs conducted by community colleges, focused on retraining people in new, more sought after skill sets would address some of this concern, but certifications require a market recognition of that credential, and there are few, if any, obvious examples. We could also view this as a way to generate student support for tasks that are at an appropriate academic level for early undergraduates (such as supporting the buoy maintenance program in Florida Keys NMS), but are we preparing these students for some skill that is really broadly marketable, or just using them to support one of our less technical program needs?

Building capacity should be directed toward some clear outcome, and it is not clear at this point what that might be. If this program is to be fully successful, it needs to be primarily focused on preparing students to find real jobs and improve their lives, not simply our finding external sources of funding to support our program. If this is our goal, we will not likely be fully successful. As Thunder Bay NMS Superintendent Jeff Gray opined, one of the outcomes of this could be simply to create better informed citizens, people who are knowledgeable about the environment and able to make better decisions about how they interact with the world around them, regardless of what job they might be training to do. Perhaps this is enough, but perhaps it would be more to our advantage to carefully weigh this question, and be able to answer it effectively and with certainty. More discussion with the community college partners may help us to resolve this issue. Once we have satisfied ourselves that there is a reason to build this capacity and some real need is being satisfied, the creative approaches will come more readily. Creativity is empowered by clarity of purpose.

RECOMMENDED NEXT STEPS

1. Better define our goals in establishing such partnerships. Undertake a more thorough analysis, best done in collaboration with our existing community college partners, of what job opportunities might be targeted in our partnership programs.

2. Continue to monitor, again with the help of our existing community college partners, funding programs arising from the Administration's commitment.

ALPENA COMMUNITY COLLEGE STUDENT DESIGN PROJECT:
Designing a Memorial Garden for the National Marine Sanctuary System

This document briefly describes a student design and build project. It is intended to not only provide a "complete" student experience, but also to ultimately result in the construction and dedication of a "memorial."

Introduction: The mission of NOAA's National Marine Sanctuaries is to serve as the trustee for the nation's system of marine protected areas, to conserve, protect, and enhance their biodiversity, ecological integrity and cultural legacy.

Project Goal and Description: To design a "garden" that pays special tribute to sanctuaries' personnel and/or supporters who are no longer with us. Dedicated, diverse individuals who worked to protect our nation's underwater treasures will be memorialized in this garden.

Project Elements: The design should include the following attributes:

- National Marine Sanctuary System map.
- National Marine Sanctuary System logo (Whale Tail).
- Interpretive signs explaining purpose of garden.
- Possible seating for visitation/meditation.
- Individual name plates (including appropriate information such as date of birth, date of death, service dates to program, program affiliation).
- Method of affixing nameplates to final structure.

Design Considerations:

- Memorial Garden will be located at the Dr. Nancy Foster Florida Keys Environmental Complex in Key West, Florida.
- Final product must be able to withstand tropical climate, i.e. wind, rain, extreme heat, sun, salt air and water. Potential opportunity for innovative use of reinforced concrete.
- Limited footprint not to exceed 8-10 feet in any one direction.

Proposal should include up to three design concepts. Each design concept should include a budget estimate for fabrication, shipping and installation as well as a timeline.

Initial Design Concept: Columns surrounding a center area with the Sanctuary System map as the focal point. Columns are graduated in height with a center column featuring a whale tail. Columns would feature individual name plates of memorialized friends and family of the National Marine Sanctuary System.

Products:

- "Renderings" of alternative(s).
- Preliminary construction specifications.
- Preliminary cost estimates.

The initial design concept above is simply a starting point. Feel free to create alternative concepts for consideration.