

# National Marine Sanctuary Program Research Coordinators Meeting 2005



Hosted by the Florida Keys National Marine Sanctuary

Held in the Everglades, South Florida

January 31-February 4, 2005

# Report of the National Marine Sanctuary Program, Research Coordinators Meeting 2005

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## Credits:

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Silver Spring, Maryland  
April 2005

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## Agenda

### DAY ONE: Monday, January 31 – Florida City, FL

7:00 pm Pool-side reception and introductory remarks by Dan Basta

### DAY TWO: Tuesday, February 1 – Daniel Beard Center, Everglades

8:00 Coffee and bagels  
8:30 Welcome and agenda overview  
9:00 Vessels and Aircraft – Dana Wilkes, Paul Orlando, Dave Rathbun, John McDonough

- Update on marine and aviation operations
- Regional planning and multi-site participation
- Input on small boat and aircraft ten-year requirements

12:00 *Lunch Discussion – Ocean Exploration – John McDonough*  
1:00 National Centers for Coastal Ocean Science – Jud Kenworthy

- Funding and progress
- Site Liaisons
- Planning for FY06 RFP
- Open discussion

3:00 Coral Reef Conservation Program – Roger Griffis, Steve Gittings, Barbara Moore

- Cooperation in shallow and deep water coral programs
- Joint initiatives
- NURP presentation – Barbara Moore

6:30 Adjourn

### DAY THREE: Wednesday, February 2 – Flamingo Lodge, Flamingo, FL

Morning Canoeing, birding, hiking  
2:00 System-Wide Monitoring Status Report – Steve Gittings, Jeff Rosen  
3:45 Ocean Obs (drivers, IOOS and regional associations, west coast status, work plan, information management, spending options) – Steve Gittings  
5:30 Historical assessments of sanctuary resources – Catherine Marzin  
Maritime Heritage Program – John Broadwater  
7:00 Adjourn  
8:00 Beach Watch, Beach Combers, Coast meeting

### DAY FOUR: Thursday, February 3 – Flamingo Lodge, Flamingo, FL

8:00 Linkages - strategic planning, life cycles, AOPs, performance measures, PPBES – Paul Orlando  
9:45 *Presentation – SPLASH – Dave Mattila*  
10:00 IMAST – Information management – Christine Taylor, Jaeson Abraham  
12:00 *Lunch and Bay Cruise*  
2:30 Characterization – Steve Gittings, Mitchell Tartt  
4:00 REEF – Christy Semmens (reports, CDMP, FY06 contract)  
4:45 Volunteers – Mary Enstrom (REEF proposal, invasive species workshop, RC input on potential volunteer projects)  
6:00 Adjourn

### DAY FIVE: Friday, February 4 – Daniel Beard Center, Everglades

8:00 NURP/NURC Cooperation – Brad Barr  
9:00 Park Service and other opportunities for collaboration – Gary Davis, Brad Barr, Matt Patterson  
10:30 Picking up the pieces (career ladder, modeling, observations, NMFS summit, outside funding, mini-grants, AOP summaries, strategic planning for science, website content, regionalization, reserves and research areas, SEL, future meetings – give some thought to Pt. Reyes, Gray's Reef, and Texas)  
12:00 Adjourn

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**National Marine Sanctuary Program**  
**Research Coordinators Meeting**  
**Monday, January 31 through Friday, February 4, 2005**

**INTRODUCTION**

The sixth meeting of the Research Coordinators of the National Marine Sanctuary Program (NMSP) was held January 31-February 4, 2005 in the Everglades National Park in south Florida. A number of key research partners also attended, including representatives of the National Centers for Coastal Ocean Science (NCCOS), NOAA's Ocean Exploration program (OE), the National Undersea Research Program (NURP), the Office of Response and Restoration (ORR), the Coral Reef Conservation Program (CRCP), the National Park Service (NPS), and the Reef Environmental Education Foundation (REEF). As in previous years, partners were invited in order to broaden the opportunities for cooperation. Gary Davis may have said it best when he described "science for sanctuaries" as being the goal, but using the "Tom Sawyer approach" to accomplish it – he equated partnerships to "getting others to paint the fence."

A second major theme of the meeting was the changing culture at NOAA and within the National Marine Sanctuary Program with respect to planning, budgeting, and program execution. New processes for annual budgeting and out-year planning, and the institution of matrix management within NOAA, are the primary drivers of these changes. In response, the NMSP is participating in numerous new planning efforts, developing requirements documents that relate critical activities and capabilities with the phases of development of sanctuaries, and is operating in matrix programs at increasing levels. All staff will be affected by these new procedures, including both headquarters and field staff. Most meeting sessions incorporated these concepts to exemplify how they permeate our programs and activities.

The group met in two locations in the Everglades National Park, the Daniel Beard Center and the Flamingo Lodge. Attendees had one morning free to canoe, bird, and hike in the Everglades. Below is the list of meeting participants, as well as extended descriptions of the sessions and other meeting activities. This report is also available as a pdf document on the Special Offering page of the NMSP website:

<http://sanctuaries.noaa.gov>.

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**Attendees and Contact Information:**

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## *PRESENTATION SUMMARIES*

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### *Monday, January 31*

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**Summary:** Dan Basta spoke at an evening reception about his vision for the National Marine Sanctuary Program. He highlighted the continued growth and complexity of the NMSP and the need for all our activities, either internal or with partners, to support the program's links to NOAA strategic planning and budgeting processes and other higher level planning currently evolving within NOAA. Without these links, we are at a strategic disadvantage that will translate to reduced funding and disrupt the recent growth trend in our program. Dan went through most of the meeting topics and offered his comments and expectations.

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### *Tuesday, February 1*

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<b>INTRODUCTORY REMARKS</b>
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**Presenter:** Steve Gittings

**Summary:** A presentation was made describing the complex relationships between upper level NOAA goals and day-to-day activities in the NMSP, as well as many levels of planning and execution in between. A theme termed "Connecting the Dots" was used during the Leadership Team meeting a couple weeks prior to this meeting; the theme was carried into this one as well. It captures the need to link activities and planning elements to processes such as strategic goals, baseline assessments developed in the PPBES process, performance measures, and requirements defined in life cycle documents. The point was also made that the NMSP is an ideal program to show all these linkages because of its breadth and diversity, and because concerted efforts are being made to work within the new system while using ongoing planning activities to improve internal operations.

FY04 and FY05 funding for the NMSP and for conservation activities were presented. In FY05, of the total appropriation of \$51M in base funds, approximately \$6M (12%) will be spent on conservation science activities. Of this, \$1.3M is for characterization, \$2.9M for monitoring, and \$1.8M for other research. This doesn't count external funds used to support science activities.

While not nearly a complete list of the many FY04 conservation science activities, a number of FY04 science highlights were presented. These included:

- Channel Islands reserves and fish tracking
- Shearwater activities
- Discovery of deep corals in OCNMS
- Coral Reef Conservation Program interactions and funding
- Connectivity conference in the Florida Keys
- The growth of the Sanctuary Integrated Monitoring Network (SIMoN)
- West coast observation activities and the establishment of SEA Stations
- SPLASH
- The first of the new regional vessel allocation process
- REEF surveys and their CDMP grant (Climate Database Modernization Program)
- Whale tracking at Stellwagen Bank
- First year of assessment of historical resource levels in Stellwagen Bank (HMAP)
- New species discoveries at Gray's Reef and Olympic Coast
- Gulf of Mexico bank surveys and proposed HAPC/EFH designations

- Coordination with regional associations of IOOS

Finally, a list of potential FY05 science highlights was presented. In addition to specific site activities, these included:

- The design and construction of two new vessels
- Additional West coast observation activities
- Buildout of SIMoN and enhanced efforts with regional associations of IOOS
- Three new and one continuation mini-grant projects
- Continued work by NCCOS scientists
- Second year of HMAP in Stellwagen Bank
- Preparation of the first SWiM monitoring reports
- The development of requirements for site characterization

## MARINE AND AVIATION OPERATIONS

**Presenter:** Dana Wilkes, CDR Matt Pickett, CDR David Rathbun, John McDonough and Paul Orlando

**Summary:** This session provided highlights of activities related to NMAO vessel and aircraft allocation (Wilkes, Rathbun, McDonough) as well as new efforts to define and quantify NMSP requirements for small boats and aircraft (Orlando, Wilkes, Pickett).

Wilkes reviewed the existing fleet allocation process, including the annual call for ship and aircraft time and his efforts to consolidate and reconcile NMSP needs with other NOS requests prior to its submission to NMAO's Fleet Working Group (FWG). He noted NMSP's ongoing struggle to secure ship time at approximately 20 days per site per year. Rathbun then introduced changes to the ship allocation schedule and content dictated by PPBES requirements. He cited NMAO's intent to move to a 3-year allocation schedule and a new requirement for all PPBES Goal Teams to approve allocation requests prior to submission to the NMAO FWG. Rathbun indicated that NMAO would provide training in mid-February to all ship users wanting to better understand the PPBES allocation process. All Research Coordinators were encouraged to attend. McDonough then presented results of a regional workshop in Hawaii that tested a process being considered by NMAO that allows platform users to define science, mapping and education requirements and to recommend an allocation schedule. If successful, this process would increase opportunities for cruise collaborations and piggy-backing, minimize scheduling conflicts, increase information sharing, and facilitate the commitment of staff resources to achieve shared objectives. The Hawaii workshop focused on optimizing FY06-07 cruise schedules for NOAA ships HI'IALAKAI and SETTE to address priorities associated with designation of the NW Hawaiian Islands Coral Reef Ecological Reserve as a National Marine Sanctuary and those associated with the Coral Reef Task Force. McDonough indicated the success of this workshop would likely encourage NMAO to sponsor similar user meetings in other regions. These presentations underscored the need for Research Coordinators (and other site staff) to more clearly define site and regional requirements and to actively participate in regional work sessions.

Orlando introduced the topic of strategic planning and the need to define 10-year requirements for major thematic areas within Sanctuaries. These documents would consistently define and quantify present-day capacity at all sites and provide a common approach to quantify out-year requirements based on the evolution of each sanctuary through a series of six "life cycle" phases (i.e., pre-designation to adaptive management). He pointed out that 10-year plans were being developed for small boats (an update to the 2002 small boat plan), aircraft, enforcement, conservation science, seabed mapping, information management and spatial technology, maritime heritage, and socioeconomics. The information gathered will help to define the roadmap for annual operations within each of these program areas. In addition, the data will plug directly to PPBES, enhancing our ability to quantify resource requirements for FY08-12. Following Orlando, Pickett and Wilkes described the site-based survey process that will kickoff in Spring 2005 to gather data for small boats and aircraft.

**Comments and Actions:** In preparation for site visits, Research Coordinators should identify staff members knowledgeable in program areas that require small boats and aircraft (e.g., science, education, enforcement).

Research Coordinators are strongly encouraged to attend NMAO's training session for fleet allocation.

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## OCEAN EXPLORATION AND THE USNS CAPABLE

**Presenter:** John McDonough

**Summary:** John talked about ways for the NMSP to be more successful with the OE program. He discussed the differences between exploration (“to travel in an unknown or little known region to learn about its features”) and research (“careful, systematic, patient study to establish facts and principles”) and the role of OE within NOAA. Within the proposal process that OE uses to determine funding for exploration, the science review panel and outside reviewers (subject area experts) consider aspects of projects such as the extent to which they focus on the unknown, to what extent they are multidisciplinary, their geographic scale, plans to document and disseminate information, and plans for educational activities and outputs. The review panel members are from outside academic institutions and NOAA offices.

John also discussed the conversion of the USNS Capable, a T-AGOS naval vessel that was turned over to NOAA in September 2004. This vessel will be dedicated to doing ocean exploration and research.. There is a working group that is tasked with determining mission requirements. In the meantime, there are various conversion tasks. Priority mission capabilities are: deep-water ocean mapping, science class ROV operations, broadband satellite transmission of optical data, and complementary science operations (e.g., CTD, sampling). The conversion process has multiple steps that requires obligation of funds by this year.

- Preliminary – Assess ship, develop requirements document (5 months)
- Phase 1 – Planning and solicitation (5 months)
- Phase 2 – Evaluation and acquisition (6-8 months)
- Phase 3 – Execution (12-15 months)
- Preliminary cost estimates
  - Upgrade and repair --\$7-9 million
  - Mission requirements -- \$7-9 million
  - Shore-based downlink -- \$1 million
- Want to expand the science team so it's not just the people on the ship

**Comments and Actions:** Currently, all proposals that OE sees from the NMSP are site-specific. It may be worthwhile to go through a process to outline and prioritize our exploration and research expectations as a group. Some may be site-specific while others cover a larger area. Regarding the CAPABLE, no current actions by NMSP are necessary. Ship allocation is still a question, OE isn't entirely sure what will happen. The earliest the ship would be ready is March 2007, latest August 2007. An allocation is planned for FY08. NMAO would like funding to go directly to them for maintenance issues. It is unknown where the homeport will be. The vessel will most likely move around quite a bit.

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## ANNUAL REPORT FOR THE NMSP/NCCOS LONG-TERM PARTNERSHIP: FY04

**Presenters:** Jud Kenworthy and Steve Gittings

**Summary:** Jud described the progress of the Long-Term Partnership between NCCOS and NMSP, including the distribution of funding and personnel, and emphasizing the role of intramural funds and resources leveraged with NCCOS partners. This is a significant effort and is supplementing the funds received from NMSP. Jud provided numbers related to expenditures in each sanctuary as well as totals for



outside sources of funding. NCCOS and its partners invest well over \$4M in sanctuary related activities. This type of partnership and collaboration will help sustain the agreement for the long-term.

Jud discussed the functional role of the liaisons and asked the sites whether the current system is working. It was clear in the discussion that there needs to be some improvements made in communicating the different aspects of the program. We need to link projects to NMS priorities and performance measures, ranging from site needs to strategic goals. This requires more active interactions between the NCCOS liaisons and the Research Coordinators.

Jud also discussed that a reporting mechanism with the hierarchy of requirements is needed so that we can record linkages, progress, and the effectiveness of the partnership. Although this is needed, the Research Coordinators thought the report format should be revised and include a “no activity” option because there are currently too many reporting requirements. The report also needs to allow for addenda, rather than repeating information every quarter. Requirement categories should also be added to the quarterly report; this would allow the results of the agreement to percolate up into NOS and NOAA thus showing that such agreements can positively improve the work going toward the Agency’s mission. Finally, the requirements of NCCOS and NMSP need to be cross-walked in order to add new boxes to the quarterly report.

Jud also reviewed the July 04 meeting between liaisons and Gary Matlock, Dan Basta and Steve Gittings, where they discussed the following possibilities:

1. Conduct a Symposium reporting on the progress of the agreement and other NCCOS capabilities. This generated some discussion and it was determined that there might be better ways to get the word out about the LTA (e.g., Sanctuary Watch – a dedicated issue followed by regular features, Conservation Series, and the website).
2. Increase the distribution of journal publications resulting from the work associated with the LTA. Tacking a symposium onto an RC meeting might be the most effective way to do this but it might also be possible to utilize a national or international scientific meeting where we would supervise a special session.
3. The LTA should be updated on the status of the research needs. This would allow us to have a better sense of what the problems are.
4. The NCCOS and NMSP directors should meet more regularly and also set up meetings with other programs in NOS to explore the possibility of enhancing the LTA.

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## SHALLOW AND DEEP CORAL COOPERATION OPPORTUNITIES

**Presenters:** Ruth Keltly and Steve Gittings

**Summary:** There was an executive order in 1998 designed to improve the federal government’s stewardship of the nation’s and world’s coral reef ecosystems. A National Action Plan to Conserve Coral Reefs, which includes 13 goals, was formulated to direct efforts. A coral reef research plan will direct the research done within the next few years. So there are both mandates and blueprints for what needs to happen. The NOAA Coral Reef Conservation Program (CRCP) coordinates activities relating to the executive order, but there are many drivers, including the NMSA.

Activities relating to deep corals (50 meters and beyond) are not part of the current CRCP plan. The needs and expertise are different, so those activities will need additional funding. Steve Gittings is now the official NMSP representative to the deep coral team, but Brad Barr is also actively participating. Everything is still sorting itself out, but it’s an issue that’s taking off. Currently, a report on what is known about deep corals is being assembled for each region of the U.S. EEZ. There will eventually be a research plan for deep corals that may or may not be part of the shallow water coral plan.

**Comments:**

A substantial amount of money goes through the CRCP and ends up supporting work in the NMSP. The internal grants program had some problems in FY04, but the NMSP and others are working with the CRCP to correct them and it should improve this year.

The NMSP, CRCP and NCCOS should work together to push for performance measures relating to corals that we all feel are the most appropriate and send a consistent message.

**Action items:** It is important that NMSP staff participate actively within the activities of the CRCP. It is critical that the CRCP and other NOAA coordinated programs associate the sanctuaries with projects and opportunities. NMSP staff should cc: information that is in the NOS weekly reports to the weekly coral reports. Heidi did this prior to her departure from NMSP. Someone else will have to pick up the responsibility. For deep corals, it will be important for the sites to determine how local priorities match up with national level priorities and actively participate in the identification of these priorities. We should also be working deep corals and associated communities into our management plans whenever possible.

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*Wednesday, February 2*

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**SYSTEM-WIDE MONITORING STATUS REPORT**

**Presenters:** Jeff Rosen, Steve Gittings

**Summary:** In this session, the group was shown a draft assessment prepared for Stellwagen Bank NMS by Clancy Environmental Consultants using guidance from the NMSP. In 2005, the NMSP plans to prepare the first of a set of periodic (3-5 year) site status reports. They will be for a general audience, be based on a "pressure-state-response" model, use existing data, and contribute to eventual (most likely 2006) resource status reports at regional and national scales. The Assessment reports are meant to be a summary of issues, condition and solutions being addressed or considered at each sanctuary. The assessment reports are tied tightly into the System-Wide Monitoring (SWiM) strategy that was distributed in July 2004 (A Monitoring Framework for the National Marine Sanctuary System, July 28, 2004). Ideally the individual sanctuary assessment reports would be integrated into a sanctuary wide assessment report.

The group discussed the feasibility of generating site reports after we agree on a format and on content. It is hoped that each site can convene a group of experts in different monitoring disciplines, and perhaps other scientists and advisors, in order to generate status reports over an approximate 6-week period in 2005. The experts might only meet for a short period of time, after which materials could be gathered and compiled into a short summary report.

**Actions:** A small team of people volunteered to move the activity forward by first settling format and content issues, and then providing guidance related to preparation and milestones (one objective is to limit preparation time to an acceptable level). In the near-term, the group will convene by phone to agree on actions. Prior to that, Steve and Jeff will discuss initial changes to the report recommended by the larger group of Research Coordinators in order to provide the smaller team with a revised and shorter version of the draft. The group also should identify sites that are unable to do reports right away due to conflicts, and will have to develop an appropriate timeline for those reports. Steve offered to lead an effort to expand on and clarify the questions posed in the SWiM document. These are the basis for judgments about the status and trends of sanctuary resources. The team will eventually have to address questions about whether or how to include statements about data confidence and quality; and the production of multiple reports for some sanctuaries with geography-related differences in environmental quality (particularly large sites like Florida Keys and Monterey, or those with estuarine and island settings, like Gulf of the Farallones).

**Volunteers:** Jeff Rosen, Steve Gittings, Brian Keller, Ed Bowlby and Greg McFall (all these people served on the monitoring group that developed SWiM, so they are very familiar with the program objectives).

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## OCEAN OBSERVING

**Presenter:** Steve Gittings and Jaeson Abraham

**Summary:** An update on IOOS activities was given, along with a discussion of the primary drivers for ocean observing in the NMSP. These include desired linkages to IOOS and the regional associations implementing IOOS. Most sites are involved in some way with the associations in their region. A report on the status of west coast obs was given, and Jaeson Abraham provided a report on the work plan for information management. Also, the spending options for FY05 west coast obs were discussed.

The FY05 NOAA spending plan for IOOS, which was completed just the week prior to this meeting, was summarized for the group. The total spending is over \$755M, \$700M of which covers existing programs and \$55M of which is new spending. About \$24M is for the development of the Integrated Coast Ocean Observing System. About \$8M of that may go toward new buoys through NDBC.

**Comments and Actions:** The group agreed to hold a conference call on Feb 17 to begin working toward a final west coast obs spending plan. Some people asked that we send out the status report prepared for FY04 west coast activities, as well as the work plan for information management. We also need to find out more about the FY05 IOOS spending plan for buoys and discuss how sanctuaries might play a role in helping make decisions about placement and outfitting the new buoys.

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## HMAP

**Presenter:** Catherine Marzin

**Summary:** Catherine presented the work undertaken by the University of New Hampshire (UNH), through a 3-year non-competitive grant, to estimate the historical biomass and the ecological history of the Stellwagen Bank National Marine Sanctuary. UNH's History of Marine Animal Population/Gulf of Maine History Project pioneered the use of historical records that predates modern fisheries science, to estimate historical biodiversity and biomass using modern population dynamics and statistical modeling. UNH is now applying their unique methodology to reconstructing the historical populations of fish in the Stellwagen Bank National Marine Sanctuary. It may also assist SBNMS in determining their sliding baseline.

In FY04, UNH started the first phase of the project with a survey of historical source documents relating to fishing in the sanctuary and surrounding area. The preliminary results of the source document survey include fishing logs, town records, fisheries survey undertaken in the first years of the US Fish Commission, early maps of the sanctuary, etc. For FY05, the National Centers for Coastal Ocean Science has joined the NMSP in funding the second year of this effort, when UNH will begin analyzing the records and extracting the useful information that will give the historical picture of the sanctuary.

The Principal Investigator in the grant is Andy Rosenberg, Professor Natural Resources at the Institute for the Study of Earth Oceans and Space. He was a member of the US Commission on Ocean Policy.

**Comments and Actions:** The next step for the project will be a meeting in the end of March between NMSP and UNH to discuss how to further focus the source document survey to best serve NOAA's needs.

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This effort is a proof of concept for NOAA to see how this innovative approach can provide scientists and managers with data that predates modern fisheries science and extends their understanding of what the marine system looked like before the advent of mechanized fisheries fleets. If the study's results are satisfactory, the methodology will be applied to reconstruct historical changes in other marine populations and ecosystems.

In addition, while UNH uncovers all these documents and performs the analysis as part of the NMSP grant, the benefits of the work will apply beyond what the sanctuaries had foreseen. It will surely benefit other partners, within and outside NOAA, especially as it can further our science on our natural resources, provide new material for education and outreach, and assist in our ecosystem management. NMSP-HQ will continue to look for partners interested in sharing the costs associated with funding such a pilot.

**Volunteers/Teams:** Catherine Marzin, Steve Gittings, Brad Barr, Craig MacDonald, David Wiley

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## MARITIME HERITAGE PROGRAM

**Presenter:** John Broadwater

**Summary:** John talked about the Maritime Heritage Program so the Research Coordinators could identify and become familiar with potential synergies with conservation science activities. We have been involved in maritime heritage since 1972 in the NMSP and remain active (we just passed the 30<sup>th</sup> anniversary of the Monitor, and Thunder Bay has at least 60 ship wrecks). NOAA has taken a lead role in the Preserve America Initiative.

A strategic plan is being developed for the MHP, with a defined vision and mission. This will tie back to the NOAA strategic plan. The general goals include protection and preservation, research, outreach, education, inventory, and assessment. The MHP will provide coordination and technical assistance to all of NOAA's sanctuaries. It will promote and coordinate education and outreach programs directed at heritage resources, develop new partnerships within NOAA and with outside organizations, and promote a better understanding of our maritime cultural landscape. Each region now has a MHP Coordinator. There is also an executive committee. MHP facilities include the Maritime Archaeology Center, which is ready to be moved into within the next month. Offices will also be occupied at Nauticus—the National Maritime Center in Norfolk, VA (part of a NOAA @ Nauticus Partnership initiative). An old paper mill is being renovated through an entrepreneur's funding to create the Great Lakes Maritime Heritage Center. The Thunder Bay NMS will eventually move into this facility.

Bruce Terrell is the lead on NOAA's ARCH, an archeological resource database. It will be GIS based and will include all cultural resources within marine sanctuaries. Dan Basta has a vision that we will produce an archeological database of all cultural resources within US waters. MARINER will contain information on over 100,000 items. MHR staff have already had detailed discussions with MMS, NPS, and state historic preservation offices. It will be a searchable inventory of archaeological resources in navigable U.S. waters - a derived, relational database that protects site locations while supporting complex queries. It will be both GIS and web compatible.

On-going special projects include the hunt for the USS *Alligator*, *Titanic* mapping, and the Japanese midget sub. Recent projects include the first mini-grant cycle in FY04 (\$150,000 total). Seventeen applications were received and 11 were funded in 6 sanctuaries. The FY05 mini-grant cycle is currently underway (\$100,000). At Thunder Bay, work continues with Bob Ballard and URI on telepresence. At Stellwagen, a lot of archeology has been highlighted recently. The *Palmer* and *Gary* were mapped, revealing that they are still connected following their collision. The *Portland* received considerable attention last year. It has been called the Titanic of New England, and went down during one of New England's "perfect storms". At the Monitor, the turret removal involved a 236-ton lift, and now we will be able to preserve about 1/3 of the

contents, including the remains of two crew members. Numerous documentaries and other good publicity have resulted from this work. In FY05, work is planned for the USS Macon, as well as an extensive survey in the northwestern Hawaiian Islands, combining science and archeology

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## *Thursday, February 3*

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### LINKAGES

**Presenter:** Mitchell Tartt

**Summary:** During this session, Mitchell presented a two-hour summary of the presentations and discussions from the NMSP Leadership Team meeting in San Francisco, CA on January 12, 2005. Coined “strategic planning”, the Leadership Team spent one full day on critical programmatic planning and management topics, all of which focused on improved management, reporting, and messaging for the NMSP. Key components were fiscal reporting requirements, FY05 budget allocation, the NMSP Strategic Plan, programmatic performance measures, NMSP milestones and a revised AOP development process. The summary presentation briefly covered all of these topics as well as overviews of the discussions and input from the Leadership Team. Direct connections to conservation science and specific characterization, research, and monitoring activities were presented as examples of connections between strategic planning and all things related to conservation science across the program.

**Comments and Actions:** We need to develop a “Rosetta Stone” that can be used to translate “on-the-ground” activities to higher levels of planning and execution within NOAA (see Gary Davis’ draft). Mitchell will send materials to the RCs relevant to improving our involvement in the development of AOPs and the integration of our activities into the strategic planning process (e.g. program performance measures and NMSP milestones). Mitchell will hold two follow-up conference calls to discuss the program performance measures as well as proposed recommendations to be included in the NMSP Annual AOP Development Guidance Package, which will be distributed to the Leadership Team in March.

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### PARTNERING UPDATES AND PLANS: SPLASH

**Presenter:** David Mattila

**Summary:** Structure of Populations, Levels of Abundance and Status of Humpbacks (SPLASH) is a comprehensive study of North Pacific humpback whales. The project began in 2004 and scheduled until 2007. It is an international cooperative effort to understand the population structure of humpback whales across the entire North Pacific, and to assess the status, trends, and potential human impacts to this population. The project has broad international and U.S. Government participation. Investigators look at migratory movement between areas, current abundance and trends, and identify areas of critical action. It will also leave a legacy of data and archived tissue from biopsies. Identifications are made through tail patterns. Biopsy samples are taken for sex determination, pregnancy, and genetic structure. The project officially started last winter. For more information, see the SPLASH website at: [http://hawaiihumpbackwhale.noaa.gov/special\\_offerings/sp\\_off/splash.html](http://hawaiihumpbackwhale.noaa.gov/special_offerings/sp_off/splash.html).

Overall results from the first year of work are: Summer: 4,123 fluke Ids and 1,047 biopsies; Winter: 1,453 fluke Ids and 1,067 biopsies. For FY05, HIHWNMS has contracted, and is coordinating eight research teams throughout the islands, and, although the season is not over until mid-May, is on track with sample

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collection and pre-analysis. In addition to these teams, HIIWNMS conducts fieldwork itself in various locations. They also have the funds committed and are in the process of adding them to the existing contract with Cascadia Research Collective (John Calambokidis) in order for them to carry out fieldwork this summer along the West Coast of the US (much of it in the West Coast Sanctuaries). HIIWNMS will also be sending at least one experienced personnel on a summer SPLASH cruise in offshore Alaska.

Dave Mattila is the co-chair of the Steering Committee for the project, and helps to coordinate the overall functioning of the Steering Committee and the project. The next Steering Committee meeting will be in early May. While not a part of the science of the project, they are also attempting to set up a "Summer kick off" press event in Los Angeles, and a SPLASH symposium in Tokyo. They are also working with the Education team to help develop educational materials using SPLASH.

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## INFORMATION MANAGEMENT AND SPATIAL TECHNOLOGY

**Presenters:** Christine Taylor and Jaeson Abraham

**Summary:** The Information Management and Spatial Technology (IMaST) plan will attempt to bring the various staff and hardware/software resources up to par with the individual site and regional needs. An assessment by site survey will be conducted to determine the current levels of geospatial capacity at each site, the results of which will be used to create a plan for each of the sites to meet their needs according to their current life cycle.

In addition, primary geospatial data sets will be made available via an ARCSDE/IMS server so that headquarters, regions, and other sites may help each other with mapping and data analyses requests. Bringing the geospatial resources of the entire program together is the ultimate goal of this plan and will help guide training, purchases, AOP budgeting, and better use of current resources. A meeting of many of the current geospatial professionals within the program will kick off the plan this March 7-11 at the Coastal Geotools meeting.

**Comments and Actions:** Be sure to support and answer the site assessment survey when you get it! Send your geospatial folks to the Coastal Geotools meeting March 7-11! Brian Keller will send information about an IMS that the National Caribbean Coral Reef Institute (NCORE) program that has been developed.

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## SITE CHARACTERIZATION

**Presenters:** Mitchell Tartt, Steve Gittings

**Summary:** An important and congressionally-mandated requirement of the NMSP is the development of site characterizations that can support the management of marine sanctuaries. In addition, current performance measures used to assess progress within NOAA's PPBES include one on site characterization. It requires specific levels of achievement with regard to the "cumulative percent of sanctuary system adequately characterized." Thus, in upcoming years, the NMSP will be required to report on the number of sites having in place documents, web sites, GIS capabilities, or other relevant information and tools that support site management.

Of course, most sanctuaries already have substantial characterizations in hand. Some are printed, and others are web-based. Others may not be identified as site characterizations or be limited in scope, but do constitute the building blocks for a full characterization for the sanctuary. It will be necessary to standardize to some extent the nature of characterization materials, including the breadth of content and accessibility. This will allow for not only easier reporting, but will also improve utility by the NMSP, partners interested in using the information, and the general public.

Research Coordinators were asked to fill in a matrix (below) that identified several different types of site characterizations that might be available for any site. The exercise succeeded in highlighting both the substantial differences in types of information available and the existence of information gaps for some (e.g., web-based characterizations) or all (e.g., models) sites. A more in-depth analysis will be conducted later this year to identify and clarify those areas of need.

	Thunder Bay	Stellwagen	Monitor	Gray's Reef	Florida Keys	Flower Gardens	Olympic Coast	Cordell Bank	Gulf of the Farallones	Monterey Bay	Channel Islands	Hawaiian Islands	NWHI	Fagatele Bay
Printed Reports	Data not available for meeting	1987 out of date	N, but good historical rept	Y	Y ecosys, econ, MH	not recent	N	N	N	N	N	Y	N	Data not available for meeting
Web-enabled		1987 out of date	N	Y	partial	in dev	N	N	N	Y	N	Y	N	
Programs (e.g. WQ mon)		Y	Y	Y	WQ, coral seagrass, ocong	Y	limited	Y	birds, mammals, some intertidal	Y	Y	Y	Y	
Topic reports		MPR	expedition	Y	Tortugas 2000	Y	Res rept	N	biogeo atlas, eco-link, OSPR, ESI maps	Y	Y	Y	Y	
Lists (e.g. spp)		Y	N	Y	spp lists groups	Y	not complete	Y	spp list, ecotrust, EIR/EIS in near future, USGS atlas	Y	Y	na	Y	
Maps		Y	Y	Y	benthic habitats	Y	some	Y	none in house, no in-house GIS cap.	Y	Y	Y	Y	
Raw data		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Databases		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Models		N	N	N			N	N	N	N	N	N		

**Comments and Actions:** Sites will need to allocate some time in their FY06 AOPs to allow for participation in efforts to generate site characterizations.

**Volunteers/Teams:** Mitchell and Steve will work with a small team to develop the requirements documents to support this effort. Greg McFall and Emma Hickerson expressed interest in helping, but others are invited to participate as well. Please let Mitchell and Steve know if you are interested.

## PARTNERING UPDATES AND PLANS: REEF ENVIRONMENTAL EDUCATION FOUNDATION

**Presenter:** Christy Semmens

**Summary:** In 2002, REEF was awarded a competitive contract with NMSP to support ongoing REEF activities within Sanctuaries (approx. \$50k/year for 5-years). These activities include labor, travel, supplies and data management to meet the following goals:

- Support a system-wide protocol to gather data on fish community structure
- Provide information on ecosystem condition and change
- Interpret fish survey information for public awareness and outreach
- Coordinate events related to fish survey activities and volunteerism in general

The contract also allows for additional monies (up to \$50k additional/year) to be awarded without the need for doing a sole-source justification. This funding vehicle can be used by both HQ and the sites for special projects, etc. that are above and beyond REEF's base activities.

REEF's Fish Survey Project engages the public in data collection, provides public access to the biological data produced, and works with marine educators to develop materials for public outreach and K-12 curricula. Surveys are conducted along the coastal areas of North and Central America, the Caribbean and Hawaii, including 8 NMS. REEF volunteers have submitted over 80,000 surveys since the program's inception in 1993. Approximately \_ of these surveys are from Sanctuaries. All of REEF's data are

available in summary form on the REEF website and in raw data format upon request. REEF does not charge for data. In addition to the standard summary reports, NMSP maintains a special REEF in Sanctuaries webpage ([www.reef.org/sanctuaries](http://www.reef.org/sanctuaries)) with information on our activities in each site. Beyond the surveys that are conducted by volunteers on their own, REEF coordinates special projects at each of the NMS sites where we are active. The projects include coordinated monitoring with our Advanced Assessment Team, reserve monitoring, size assessments, and eco-tourism style Field Surveys.

In addition to coordinating the Fish Survey Project, REEF staff attend several scientific conferences and public symposia each year to give presentations on REEF and Sanctuaries, coordinate the annual outreach event Great Annual Fish Count, and produce numerous outreach and educational products. Due to the large amount of data in the REEF database, resource agencies and scientists are increasingly using these data to address a variety of questions, including evaluating no-take zones, conducting fisheries-independent stock assessments, identifying biodiversity hotspots and monitoring populations of non-native fish species.

REEF plans for 2005 include continue ongoing data collection projects, expand invertebrate program to California, develop program for FBNMS, fully implement online data entry, continue data archiving project with CDMP, develop online mapping, integrate with CoRIS, enhance training materials, and begin the contract renewal process.

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## VOLUNTEER OPPORTUNITIES

**Presenter:** Mary Enstrom

**Summary:** This session focused on three areas - 1) habitat classification planning by The Nature Conservancy of the world's oceans, 2) Strange Days on Planet Earth and 3) an interactive session on how volunteers might assist the researchers at sanctuary sites.

**Comments and Actions:** The Nature Conservancy has a 2015 Goal to: "work with others to ensure the effective conservation of places that represent at least 10% of every major habitat on earth." In order to accomplish this, planners are analyzing representation/distinctiveness, condition, threat and conservation progress.

Strange Days on Planet Earth is a National Geographic program debuting in April on PBS. It is a four-part series that will cover: loss of top predators, climate change, waterborne toxins and invasive species. The invasive species program will have a toolkit available on their website [www.PBS.org/strangedays](http://www.PBS.org/strangedays) on the elements of involving volunteers in early detection and reporting on invasive species.

With facilitation from Gary Davis, the researcher coordinators discussed how volunteers can be more effective in their work. A summary of those ideas will be forwarded at a later time.



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*Friday, February 4*

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**PARTNERING UPDATES AND PLANS:  
NATIONAL PARK SERVICE**

**Presenters:** Brad Barr, Gary Davis, and Matt Patterson

**Summary:** This session focused on ongoing and planned partnerships between the NPS and NMSP. We are currently in the early stages of an 18-month planning process to identify priorities and establish an action plan for collaborations for the period FY07-FY10.

Matt Patterson, South Florida and Caribbean Inventory and Monitoring Network Coordinator, provided an overview of the I&M program and its implementation in this region, identifying benefits to this approach and challenges encountered. Ongoing coordination with NOAA and the FKNMS was also highlighted in this presentation.

The South Florida and Caribbean Inventory and Monitoring (I&M) Network (SFCN) supports natural resource inventories for seven National Park units in South Florida and the U. S. Virgin Islands encompassing over 2.5 million acres. The team is made up of regional employees, that help augment the natural resource staffs of the network parks. Their mission focuses a large proportion of their capacity towards data management (30-40% of budget) in order to develop a strong data model which can ensure longevity of the historic and current natural resource databases and ongoing activities to help determine trends in these special resources for years to come.

The I&M program relies on a bottom up approach, allowing each network to define the important constituents of the ecosystem that need to be monitored in order to help better manage park resources. This may cause more difficulty for national data roll ups, but to use a top down approach may miss key members of the local ecosystem that are in disparate need of monitoring. The SFCN currently monitors benthic communities in 4 network parks; Virgin Islands National Park, Buck Island Reef National Monument, Biscayne National Park, and Dry Tortugas National Park. The protocol developed uses for the AquaMap underwater sonar system to delineate the sample site, and to identify random start points for underwater video transects. Using the same protocols throughout the network allows for regional observations to be made about trends in these important resources. Using a regional team approach ensures the protocols are implemented the same at each site, and reduces observer bias during monitoring and analysis.

Gary Davis, NPS Visiting Chief Scientist for Ocean Programs, gave a presentation focused on opportunities for collaboration between the NPS and NMSP. Observing that ocean parks and sanctuaries are complementary programs, one example was that of the 17 NMS program milestones, 8 are the same used in the NPS for their ocean parks. NPS is ramping up their ocean park program, and has developed an "Ocean Parks Stewardship Strategy" to guide that process, and are actively working with us to expand and enhance our collaboration.

Brad Barr followed-up with a presentation on the vision of a "seamless network of ocean parks and sanctuaries". The NMSP and NPS process for developing a strategy for implementing a stronger and more effective partnership is ongoing, and such a collaboration would have great benefits to both the Park Service and NMSP. There are excellent partnerships at many of our sites, such as FK, CI, OC, CB, GF, and a growing nation program collaboration, which until now has focused on the development of an Enforcement Agreement, which we hope will be ready for signature in the next couple of months. Suggested that this is the right time to ramp-up this partnership, particularly with the inclusion of the collaboration in the Administration Response to the NOPC recommendations, this was the right thing to do, and in 18 months we should have a roadmap to make this happen. Papers have been published in the George Wright Forum on the Ocean Stewardship Strategy and "Seamless Networks", and a special session

is being held at the 2005 George Wright Biennial in Philadelphia in March. Regional coordination workshops will begin this summer.

**Comments and Actions:** There are obvious synergies between the I&M Program at NPS and our monitoring and characterization programs at NMSP, and we should think about how to link these programs more effectively. Concerns were expressed about the difficulty in using the existing General Agreement to transfer funds. Brad said that this issue has been identified as a high priority and is being addressed by both the NMSP and NPS. In addition to sites where parks and sanctuaries have shared boundaries, we should also focus on programmatic linkages as well (e.g., HIHW and Glacier Bay for Humpback whales; FGB and Caribbean sites focused on sea turtles). Copies of the Draft NMSP-NPS State-of-the-Partnership Report, the “Seamless Network” paper published in the George Wright Forum, the NPS Ocean Stewardship Strategy, and the proposal for the regional workshops was distributed to the meeting participants.

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**PARTNERING UPDATES AND PLANS:  
IMPLEMENTING THE NMSP/NURP CENTERS AGREEMENT**

**Presenter:** Brad Barr

**Summary:** An agreement to enhance coordination among NURP, the regional Undersea Research Centers, and the NMSP was signed in October 2003. This agreement contains a number of specific commitments and provisions that relate to research and monitoring, as well as to outreach related to joint projects, and should be read by all the Research Coordinator’s. An electronic copy of the MOA has been sent to all meeting participants. The NMSP has a terrific relationship with most of the Centers – even some of the ones where there is no sanctuary in that region – but we need to work a bit harder to make the connection stronger at a few centers. There is an Annual Report being prepared, and it should be completed in the next few months. One of the interesting findings of the report is that more than 40 projects are currently funded by NURP in national marine sanctuaries.

The next steps we will be pursuing this year are to meet with Center Directors at their next annual meeting to refine priorities for collaborations over the next few years. We also have allocated around \$50K from the Director’s budget for joint projects in FY05, and discussed how those funds will be allocated. It has been proposed that the funds would be offered to the West Coast and Polar Regions Center to support a project identified in the regional workshop sponsored by the WC&PR Center in November 2004, in which OCNMS participated. The funds are to be transferred to NURP and be included in the NURP Grant to the WC&PR Center, and will be expended by agreement between OCNMS and the Center for a project that is tied to the Workshop. Also, plans are underway to offer the services of Brad Barr to the WC&PR Center for a four month detail, starting in December.

**Comments and Actions:** Concerns were expressed that we need, wherever possible and appropriate, to more closely link the project being funded by the centers to research needs and management priorities of the sites. Also, a priority for coordination would be to link into AUV and technical diving expertise. More effective communication between centers and NMS sites, regions, and programs should also be a priority (there are times when proposals to Centers contain references to Sanctuary participation, when no such agreement was offered to the PI). No objections were raised to the proposed FY05 allocation to the WC&PR Center.

**Actions:** 1) Proceed with proposed \$50K allocation to WC&PR for implementing a project at OCNMS arising from the regional workshop. 2) Sites and Science Program, will provide, when solicited, site and program science and management priorities to Brad for inclusion in the Annual Report under development. 3) Center Director from region in which next RC meeting is held will be invited to participate in next year’s RC meeting (as is done at the LT meetings).

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**PARTNERING UPDATES AND PLANS:  
NURP**

**Presenter:** Barbara Moore

**Summary:** About \_ of the group assembled has already worked with NURP, so most are familiar with the program. Nevertheless, Barbara was able to provide considerable information about NURP, its relationship to Ocean Exploration, and plans for the future.

One of the strengths of NURP's advanced undersea research program is that it brings in academia to focus on NOAA's undersea information needs. Sanctuaries are a big part of this and are strongly supported by NURP science activities. NURP has only a small headquarters group (five people), but there are six regional centers around the country, totaling about 60 staff:

- North Atlantic and Great Lakes (University of Connecticut)
- Mid Atlantic region (Rutgers University)
- South Atlantic and GOM (University of North Carolina at Wilmington)
- Caribbean Center (Perry Foundation and Lee Stocking Island)
- West Coast and Polar Regions (University of Alaska)
- Hawaii and the Western Pacific (University of Hawaii)

Each center runs their programs somewhat differently, but all carry out underwater research by providing funds for science, infrastructure, access to a variety of underwater research tools, and advanced diving technologies. Research priorities are recommended by NURP in a science guidance document each year and the centers incorporate these into their own requests for proposals. Proposal reviews are run by each center.

**Comments and Actions:** NURP requests input on their annual science guidance. Regional RFPs will then be produced by the centers. There is a signed agreement between NMSP and NURP that staff should become familiar with.

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