

National Marine Sanctuary System Education Plan



MISSION

*To promote public understanding of our national marine sanctuaries
and to empower citizens with the necessary knowledge
to make informed decisions that lead to the responsible stewardship
of aquatic ecosystems.*







NATIONAL MARINE
SANCTUARIES TM

Informed Action:
The Education/Outreach Strategy of
the National Marine Sanctuary System

National Oceanic and Atmospheric Administration
National Ocean Service

adopted August 2000

Dear Friend of the Sanctuaries,

Enclosed you will find the National Education Strategic Plan for the National Marine Sanctuary System (NMSS). The plan identifies the education mission of our national program in structural, as well as thematic contexts. It translates visions and mandates into an organizational form and a plan of action for the next 10 years. Importantly, the plan is the product of expertise that already resides within the National Marine Sanctuaries. Its authors have faithfully represented a balance of needs and perspectives that reflect the diverse conditions and communities that the National Marine Sanctuaries seek to address.

As our program grows in its importance and scale, the plan identifies fundamental principles that will shape our education initiatives and waypoints that mark our progress at living up to these principles. It maps out relationships between sites and headquarters, career pathways for sanctuary professionals and processes for effectively reaching agreement among the diverse voices that comprise our program.

The plan has been developed with an overarching guiding concept: that the NMSS is comprised of individual marine sanctuaries as well as a singular organizational unit within the federal government and the National Oceanic and Atmospheric Administration (NOAA). The plan strives to exemplify the vision of "shared leadership," by identifying the respective roles of sites and headquarters. In these roles, the marine education professionals within our program, whether based in headquarters or at any of the field sites, can perform their jobs with the confidence that their work serves for the good of tangible marine resource protection and the furtherance of the NMSS as a whole.

Although its scope is "strategic," and, therefore, long-term in nature, this plan assumes the need to adapt and change as new audiences and issues emerge and as the program grows. It attempts to lay the groundwork for an organization that can respond to its growth and to shifts in demands and new resource management challenges. Educators in our program will serve as communication experts to assist leadership in identifying crucial audiences, building critical messages and using education as a bona fide natural resource management tool.

This strategic plan for education and outreach was developed through a systematic process of review that included the NMSS leadership team, site managers, education coordinators, a mixture of education specialists within NOAA and reviewers outside the federal government. A working group of education coordinators from the NMSS guided the development and review process from the initial concepts to the final document.

Implementation of this plan is a step toward realizing the National Marine Sanctuary System's potential as a leader and innovator in protection of the ocean's resources. It builds a coherent structure that aligns the practice of education programming to sound marine resources policy. It also helps to unify the vision of a strong national program dedicated to the protection of more than a dozen individual sites whose value to the American nation is profound.

National Education/Outreach Coordinator
Sarah Mitchell

National Education Working Group
Robert Steelquist
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Informed Action: The Education/Outreach Strategy of the National Marine Sanctuary System

Executive Summary

In August 1999, the National Marine Sanctuary System initiated the development of a 10-year plan for education. The process combined the expertise of professional educators at the marine sanctuary sites and headquarters, as well as guidance from senior management within the National Ocean Service. In July 2000, a draft plan was presented to the National Marine Sanctuary System Leadership Team, modified accordingly and adopted.

The plan translates visions and mandates into an outline and a plan of action for the next 10 years. As the NMSS program grows in importance and scale, the plan identifies fundamental principles that will shape education initiatives and measurable outcomes.

The NMSS recognizes that its enduring legacy as a responsible steward of the Nation's ocean resources depends on its ability to inspire and ensure Americans' understanding of healthy ocean ecosystems and the role that each citizen can have in their care.

The plan is organized into eight goals, each of which enact visions established in the National Marine Sanctuaries Act, NOAA's "Strategic Directions document and the National Ocean Service's plan," "NOS – a Vision for the Future," and the National Marine Sanctuary System vision.

Informed Action identifies over 100 specific tasks involving staff at all levels of the NMSS. Responsibility for its fulfillment rests within each individual national marine sanctuary site as well as within headquarters in Silver Spring, MD. In the spirit of shared leadership, the national education working group was formed to guide the development of this plan and ensure timely implementation. This group is composed of four field site education coordinators, who serve for two years, and the national education coordinator. The NMSS national education team is based in Silver Spring, MD, and includes members as assigned by the chief of the Communications Branch. Progress will be evaluated on an ongoing basis as part of the NMSS annual operating plan process.



Informed Action: The Education/Outreach Strategy of the National Marine Sanctuary System

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National Marine Sanctuary System

VISION

People value marine sanctuaries as treasured places protected for future generations.

National Marine Sanctuary System

MISSION

To serve as the trustee for the national system of marine protected areas to conserve, protect, and enhance their biodiversity, ecological integrity and cultural legacy.

- GOAL 1** *page 7* Provide leadership for the future of national and international marine science education.
- GOAL 2** *page 9* The NMSS education is proactive in planning and implementing educational programs at each site and at the national level.
- GOAL 3** *page 12* The NMSS will build and sustain an effective and efficient education team.
- GOAL 4** *page 15* The NMSS will develop a network of interpretive facilities that will heighten visitors' experience and convey sanctuary messages.
- GOAL 5** *page 18* NMSS will strategically build and maintain effective connections with the educational community.
- GOAL 6** *page 21* The NMSS will equip the education team with the appropriate tools and training necessary to ensure its effectiveness.
- GOAL 7** *page 26* The NMSS will recognize the significance of education in the program, and will provide and maintain a level of funding that enables the education team to carry out the tasks outlined in this plan.
- GOAL 8** *page 28* The goal of NMSS is to create communication strategies to protect the nation's marine resources and serve its geographically and culturally diverse communities.





NMSS GOALS AND OBJECTIVES

1. The Nation's marine sanctuaries are protected and conserved.

Objectives

- a. Preserve and enhance habitats and ecosystems
- b. Restore and rebuild ecosystems and resources to their natural conditions
- c. Protect and conserve historical and cultural resources

2. The "national system" increases the value of the nation's marine sanctuaries.

Objectives

- a. Build a set of national conservation capabilities and tools
- b. Establish and implement a national policy framework
- c. Expand the public constituency for the National Marine Sanctuary System
- d. Expand federal, state and local support for the National Marine Sanctuary System
- e. Increase and leverage resources for the National Marine Sanctuary System

3. People value and respect all ocean and coastal resources.

Objectives

- a. Instill a national conservation ethic for the marine environment
- b. Assist others to establish or enhance marine protected areas
- c. Demonstrate linkages between ecological and economic systems
- d. Improve the national ocean governance structure

NMSS VISION FOR EDUCATION

The NMSS education team will be the foremost trainers, facilitators and messengers to the nation about the marine sanctuaries.



CONSERVATION

National marine sanctuaries help to protect habitats that provide food, shelter, and nursery areas for over 1,500 fish species, marine mammals, birds, and other unique marine life.

NMSS EDUCATION MISSION

To promote public understanding of our national marine sanctuaries and to empower citizens with the necessary knowledge to make informed decisions that lead to the responsible stewardship of aquatic ecosystems.

NMSS Education Goals

GOAL 1

The NMSS will provide leadership for the future of national and international marine science education.

(Refers to NMSS vision/goals #3a, 3b, 3c, 3d.)

Objective: 1.1

The sanctuary program will serve as a catalyst to coordinate national marine education initiatives and identify important marine education messages.

a. Task: Establish a national marine education advisory board.

Comment: Small board (8-10 members) that may include NERR's, Coastal Services Center, Sea Grant, NSF, CORE, NMEA, NSTA

Status: New initiative

Timeline: Starting FY01

Staff required: National education coordinator

Comments: Meet quarterly, coordinate program objectives, ongoing efforts and new partnership initiatives

b. Task: Organize a national ocean education summit conference to bring together leaders in marine education to map future needs, foster partner projects and provide specialized training.

Status: New initiative

Timeline: Starting FY03

Staff required: 1/4-FT national education team member



Comments: 50-75 people, three-day conference (Shepherdstown, West Virginia), some travel costs, trainers and facilities. Biannual (tri-annual, perhaps) conference for invited participants in NMSP, NERRs, Sea Grant state coordinators, etc., which provides a forum for high-level exchange among professional marine science communicators.

Objective: 1.2

The NMSS will serve as the exemplar for NOAA's marine education initiatives.

a. Task: The NMSS will serve on a NOAA-wide committee that coordinates and implements NOAA's educational agenda.

Status: The national education coordinator is a member of the NOAA education committee

Timeline: Ongoing, initiative starting FY00

Staff required: National education coordinator

Comments: NOAA has made a commitment to define and present a comprehensive education message

b. Task: The NMSS will integrate all aspects of NOAA as appropriate in its educational programming.

Status: The national education coordinator currently represents NMSS

Timeline: Ongoing initiative starting FY00

Staff required: National education coordinator, national education team

Objective: 1.3

An annual leadership conference of the sanctuary education coordinators and the national education team.

a. Task: The national education coordinator and the rotational field site coordinator will select the site and plan the agenda of the annual education leadership conference.

Status: Annual event

Timeline: Ongoing

Staff required: National education coordinator, rotational field site coordinator and the national education team

Comments: Annual conference for the site education coordinators and the national team are a standard practice

*Dina Hill–
Education Coordinator,
Monitor NMS*

“Technology is a tool through which we can achieve wondrous things. However, too often it seems that technology itself becomes the end rather than the means. We should never lose sight of the fact that one of our primary goals is the dissemination of information and we should use whatever tools are available to achieve that goal. But it is the information that is important, rather than how it gets distributed.”

GOAL 2

The NMSS education is proactive in planning and implementing educational programs at each site and at the national level.

(Refers to NMSS vision/goals # 1a, 1b, 1c, 2c, 3a, 3b, 3c, 3d.)

Objective: 2.1

Implement and maintain a 10-year strategic plan for education that provides leadership for education for the NMSS.

a. Task: All NMSS sites will have the opportunity to review and contribute to the development of a national education plan.

Status: First draft July 2000

Timeline: Ongoing. Review and update every five years

Staff required: National education coordinator, national education working group, education coordinators and leadership team

b. Task: Establish and maintain a small working group of site education coordinators, and national education team members.

Status: Initiated October 1999

Timeline: Ongoing starting FY00

Staff required: National education coordinator and national education working group

c. Task: The 10-year strategic plan for education will be managed by dividing goals and objectives into annual accomplishments that will be aligned with program AOP.

Status: New initiative

Timeline: Ongoing starting FY01

Staff required: National education coordinator and national education working group

d. Task: The national education plan will be maintained and updated as needed by the education working group.

Status: New initiative

Timeline: Ongoing starting FY01



Staff required: National education coordinator, national education working group

e. Task: Annually, the national education coordinator will report on the status of implementation of the national education plan.

Status: New initiative

Timeline: Ongoing starting FY01

Staff required: National education coordinator, national education working group

f. Task: The Communications Branch chief will represent the education team at national AOP and budget meetings.

Status: New initiative

Timeline: First working draft to be released July 2000

Staff required: National education coordinator, national education team, and national education working group

Objective 2.2:

Each NMSS site will develop a site education plan.

a. Task: Education coordinators and managers will develop site education plans cooperatively with Sanctuary Advisory Councils and other stakeholders.

Status: To be determined by individual sites

Timeline: Established by each NMSS site

Staff required: To be determined on a site-by-site basis

b. Task: Site education plans will identify priorities for inclusion in sites AOPs.

Status: Varies from site-to-site

Timeline: Starting FY02

Staff required: Field site education coordinator, site manager

Comments: Varies from site-to-site



EDUCATION

National Marine

Sanctuaries are living

classrooms where people can

see, touch, and learn about

the nation's Great Lakes

and ocean environments.

Objective: 2.3

The national and site education plans will complement the national and site science plans.

a. Task: The national education team will coordinate on issues with the members of the science team to determine best initiative/procedure.

Status: The national science team and national education team have been working together (review and input of National Visitor Center Project) since November 1999

Timeline: Ongoing initiative starting FY00

Staff required: National education coordinator, national education team, national science coordinator, and national science team

Comments: Science and education are committed to present an accurate, current, and comprehensive education message for the NMSS program

b. Task: Field site education coordinators will interface on issues with the field site research coordinator.

Status: Current level of interaction varies from site to site

Timeline: Ongoing

Staff required: Field site education coordinators, field site research coordinators, managers, and national education team

Comments: Intra-program coordination is needed to establish the highest degree of complementary education/science initiatives

Objective: 2.4

Education serves an integral role in the management plan review process on both the national and site levels.

a. Task: The management plan review team will include an educator from the national education team.

Status: New initiative

Timeline: TBD

Staff required: National education coordinator in advisory capacity, field site liaison as full-time member of management plan team



b. Task: The national education team will assist in development of tools and messages to be used for the education/outreach aspects of site management plan reviews.

Status: New initiative

Timeline: TBD

Staff required: National education coordinator in advisory capacity, field site liaison as full-time member of management plan team

c. Task: Site education coordinators will be involved in the site management plan review process from the earliest stages.

Status: New initiative, staff has outlined an education support component of the management plan preview process

Timeline: TBD

Staff required: Field site education liaison

Comments: One person must be designated as the headquarters management plan education liaison, which will require 20-30 hours per month

GOAL 3

The NMSS will build and sustain an effective and efficient national education team.

(Refers to NMSS vision/goals # 2a, 2c, 2e, 3a.)

Objective: 3.1

The NMSS will have a national education team that supports the field sites and the implementation of the national education plan.

a. Task: Hire the following personnel: a national education coordinator, national web coordinator, field site liaison, constituent development coordinator and multi-media coordinator.

Status: National education coordinator hired August 1, 2000, web coordinator, field site liaison to be hired October 1, 2000, constituent development coordinator and multi-media coordinator to be hired in 2001

*Lisa Eschenbach—
Education Coordinator,
Specialist, Olympic Coast NMS*

*“We are protecting something
special. Something that has a real
presence on this planet.”*

Rotational field site education coordinator to be selected by
December 31, 2000

Timeline: See above

Staff required: Communications Branch chief, national education
coordinator

b. Task: Assign a field site education coordinator to the
headquarters education team on an annual rotational basis.

Status: New initiative

Timeline: Coordinate with hire of field site liaison

Objective: 3.2

***Establish and maintain a small working group of site education
coordinators and national education team members.***

a. Task: Appoint members that include the national
education coordinator, field site liaison, rotational field
site education coordinator and two field site education
coordinators that serve as members at large.

Status: To be initiated by January 1, 2001

Timeline: Ongoing starting FY01

Staff required: National education coordinator, national education
working group

Objective: 3.3

***The NMSS will develop a comprehensive staffing plan for the
education team at headquarters and field sites that supports the
national education plan.***

a. Task: Develop a sequence of professional development
and career levels, base skill levels and levels of expertise.

Status: Needs assessment begins July 2000

Timeline: Ongoing starting FY00

Staff required: National education coordinator, national education
working group



b. Task: Define roles and relationships of the field education team members. Site education coordinator; four GS levels (9-11-12-13), graphic artist, writer, web programmer, constituent development coordinator, multi-media coordinator, field site liaison, rotational field site education coordinator.

Status: Clarity of position descriptions must be updated and position descriptions created for new positions

Timeline: Complete in FY01

Staff required: National education coordinator, national education working group

Objective: 3.4

The NMSS will create an education team that is fully trained to effectively implement the national education plan.

a. Task: Offer headquarters training opportunities for all education team members.

Status: Each of the tasks for Objective 3.4 complements and supports mutual training goals

Timeline: Ongoing starting FY02. Produce a list of training opportunities as needed to inform and update headquarters and field sites

Staff required: National education coordinator, national education working group

b. Task: Offer site training opportunities for all education team members.

Status: See above

Timeline: Ongoing starting FY02. Provide updated list of course offerings

Staff required: National education coordinator, national education working group

c. Task: Develop a reference guide to “in-house skills” and experiences in education coordinators and other education team members.

Status: New initiative

Timeline: Ongoing. Produce an “in-house skills” document by June 01



EXPLORATION

*Underwater exploration
and discovery of the
marine world benefits
our economy,
our technology, and
our health.*

Staff required: National education coordinator, national education working group

d. Task: Partner with other government agencies to maximize training opportunities.

Status: Initiate partnerships July, 2000

Timeline: Ongoing starting FY00

Staff required: National education coordinator

GOAL 4

The NMSS will develop a network of interpretive facilities that will heighten visitors' experience and convey sanctuary messages. NMSS will identify priorities and allocate resources based on those priorities for interpretive and educational capital facilities.

(Refers to NMSS vision/goals # 1c, 2a, 2b, 2c, 2d, 2e, 3a, 3b, 3c, 3d.)

Objective: 4.1

The program will develop interpretive exhibits that will be used to build a constituent base and interpret ecosystems, human links and management initiatives.

a. Task: Develop a plan for visitor experience/content.

Status: Concept plan for a National Visitor Center completed February 2000; concept plans for Regional Visitor Centers completed February 2000

Timeline: Completed phase one February 2000

Staff required: National education coordinator

b. Task: Develop feasibility analysis for visitor center development.

Status: New initiative

Timeline: Feasibility study completed November 2000

Staff required: National education coordinator

c. Task: Identify most appropriate venues for NMSS exhibits, including aquaria.



Status: New initiative

Timeline: Ongoing starting FY00

Staff required: Communications Branch chief, national education coordinator, and NMSS director

d. Task: Identify potential funding sources.

Status: New initiative

Timeline: Ongoing starting FY00

Staff required: Contract professional fund-raiser

Objective: 4.2

Choose strategic partners to develop shared facilities for constituent outreach and visitor services.

a. Task: Develop a list of visitor outreach opportunities for each site based on feasibility studies and capital facility studies that can be prioritized at the national level.

Status: New initiative, work begins August 2000

Timeline: May 2001

Staff required: National education coordinator, field site education coordinator, and managers

b. Task: Incorporate the visitor outreach opportunities list into the national facilities plan.

Status: New initiative

Timeline: Starting FY01

Staff required: Communications Branch chief, national education coordinator

Objective: 4.3

The NMSS will work with partners to develop exhibits, which will be used to build constituent bases and will be used to interpret ecosystems, human links, and management initiatives.

a. Task: Develop a plan for visitor experience/content.

*Bob Steelquist—
Education Coordinator,
Olympic Coast NMS*

*“We used to teach more “classical”
oceanography—that is, the
ocean as a realm unto itself. Over
the years, the connections have
become more evident: watershed to
water column, global systems to
local patterns, personal behavior to
ecosystem impacts. Marine
education has become more holistic
—the ocean an integrative
factor more than a stand-alone
subject.”*

Status: A concept plan for regional visitors completed February 2000
This plan must be evaluated for best application in each center and with
each partnership opportunity

Timeline: Ongoing starting FY00

Staff required: National education coordinator

b. Task: Develop a feasibility analysis.

Status: New initiative

Timeline: Feasibility study completed May 2001

Staff required: National education coordinator

c. Task: Identify most appropriate venues.

Status: New initiative

Timeline: Feasibility study will be completed by May 2001

Staff required: National education coordinator, field site education
coordinators and managers

d. Task: Identify potential funding sources.

Status: New initiative

Timeline: Established by each NMSS site

Staff required: TBD, Communications Branch will coordinate with the
National Marine Sanctuary Foundation

Objective 4.4

***The sanctuary program will increase visibility by having a
coordinated look and message that will be recognized nationwide.***

a. Task: Develop a team to set national visual standards.

Status: New initiative

Timeline: Internal review June 2000

Adopted by NMSS in August 2000

Staff required: Communications Branch chief, national education
coordinator, and graphic artist.

b. Task: Develop a team to set national themes.

Status: New initiative

Timeline: Starting FY01



Staff required: Communications Branch chief, national education coordinator, and national education team

Objective: 4.5

Sanctuary visitor services are an essential component of site education plan.

a. Task: Develop an interpretive visitor services capital facilities plan in cooperation with regional stakeholders.

Status: New initiative

Timeline: Established by each NMSS site

Staff required: Field site education coordinator at each site

GOAL 5

The NMSS will strategically build and maintain effective connections with the educational community.

(Refers to NMSS vision/goals # 1a, 1b, 1c, 2a, 2b, 2c, 2d, 2e, 3a, 3b, 3c, 3d.)

Objective 5.1

(Reference 1.2)

The NMSS will increase linkages to all appropriate branches of NOAA.

a. Task: The national education team as a part of NOS will identify potential partners among other NOAA offices and programs to enhance cooperative efforts.

Status: New initiative

Timeline: Ongoing starting FY00

Staff required: National education coordinator, national education team

b. Task: National education team will establish guidelines and evaluate the potential partnerships for program benefits.

Status: New initiative

Timeline: Ongoing starting FY01

Staff required: National education coordinator, national education team



MARINE RESERVES

Marine reserves are a tool that national marine sanctuaries can use to protect habitats, enhance marine life populations, and improve scientific knowledge of ocean ecosystems.

Objective: 5.2

The NMSS will increase linkages to important national and international programs and organizations. (Examples of existing partnerships including but not limited to, REEF, National Park Service, U.S. Fish and Wildlife, NASA, Coastal America, National Geographic Society, National Marine Educators Association, National Science Teachers Association, Coral Reef Task Force, ICRI.)

a. Task: The national education team will establish guidelines for partnerships.

Status: New initiative

Timeline: Ongoing starting FY01

Staff required: National education coordinator and national education team

b. Task: The national education team and field education coordinators will evaluate and recommend the potential partners to complement the NMSS.

Status: New initiative

Timeline: Ongoing starting FY01

Staff required: National education coordinator, national education team

c. Task: The education working group will develop the appropriate institutional linkages with these selected partners.

Status: New initiative

Timeline: Ongoing starting FY01

Staff required: National education coordinator, national education team

Objective: 5.3

Sanctuary sites will increase linkages to important regional marine programs and organizations, including but not limited to regional aquaria, universities, state Sea Grant Programs, “friends” groups, and federal and state agencies.





a. Task: Education coordinators will identify potential partners.

Status: New initiative

Timeline: Ongoing starting FY02

Staff required: National education coordinator, national education team

b. Task: Education coordinators will evaluate and coordinate with the national education team potential site partnerships.

Status: New initiative

Timeline: Ongoing starting FY02

Staff required: National education coordinator, national education team

c. Task: The education coordinators will develop the appropriate institutional linkages with these selected partners.

Status: New initiative

Timeline: Ongoing FY02

Staff required: National education coordinator, national education team

Objective: 5.4

The sanctuary program will formalize working relationships with major partners working on projects that entail facilities and funds transfers.

a. Task: Branch chiefs, general counsel, national education coordinator and others, as appropriate, will develop draft MOUs and draft cooperative agreements for federal, state, and NGO partners that can be used nationally and/or modified on a site-by-site basis.

Status: New initiative

Timeline: Ongoing starting FY02

Staff required: Branch chiefs, general counsel, national education coordinator and others, as appropriate

Cathy Sakas–
Education Coordinator,
Gray's Reef NMS

*“I make what researchers discover,
observe and conclude
understandable. I help terrestrial
people take the onus for
the health of our oceans and
their creatures.”*

Liz Love–
Education Specialist,
Monterey Bay NMS

*“A most precious gift we can give our
children is the desire to
appreciate, understand and care for
our natural world.”*

GOAL 6

The NMSS will equip the education team with the appropriate tools and training necessary to ensure its effectiveness.

(Refers to NMSS vision/goals # 1a, 1b, 1c, 2a, 2b, 2c, 2d, 2e, 3a, 3b, 3c, 3d.)

Objective: 6.1

The educational working group will assess long-term needs and opportunities for technological infrastructure to ensure efficient and effective education operations.

a. Task: The education working group will assess current tools and practices in the field and at Headquarters.

Status: New initiative

Timeline: Ongoing starting FY01

Staff required: National education coordinator, national education team

b. Task: The education working group will assess and identify potential technological tools that will reach targeted audiences through the most effective delivery systems.

Status: New initiative

Timeline: Ongoing starting FY02

Staff required: National education coordinator and national education team

c. Task: The education working group will establish guidelines for adoption of new technologies including, but not limited to, GIS, distance learning, Internet, and digital products.

Status: New initiative

Timeline: Ongoing starting FY02

Staff required: National education coordinator and national education team

d. Task: The education working group will assure that educational technologies are compatible with systems in use at our partnering organizations and the nation's school systems.



Status: New initiative

Timeline: Ongoing starting FY02

Staff required: National education coordinator and national education team

e. Task: The education working group will make recommendations to management, which identify national program and site needs.

Status: New initiative

Timeline: Ongoing starting FY01

Staff required: National education coordinator and national education team

Objective 6.2

The NMSS will establish a funding plan that supports the needs identified by the education working group.

a. Task: The NMSS will establish policies and a plan for acquisition of technological tools.

Status: Ongoing

Timeline: Ongoing

Staff required: TBD by Branch chiefs

b. Task: The NMSS will support training needs associated with the adoption of new technologies.

Status: Ongoing

Timeline: Ongoing

Staff required: TBD by Branch chiefs

c. Task: The NMSS will periodically reassess the need to update technological tools.

Status: Ongoing

Timeline: Ongoing

Staff required: TBD by Branch chiefs



MARITIME CULTURE

National Marine Sanctuaries enhance the understanding of our maritime heritage by partnering with native cultures and protecting historic shipwrecks and prehistoric sites.

Objective 6.3

The NMSS will enhance our investment in informational technology by providing adequate training for the education team.

a. Task: The NMSS will develop a menu of training opportunities using NOS, other government, and outside resources.

Status: New initiative

Timeline: Training opportunities will be updated and listed for NMSS staff starting FY02

Staff required: National education coordinator and national education team

b. Task: The national education team will serve as a clearinghouse for staff training.

Status: New initiative

Timeline: Provided on an as needed basis starting FY02

Staff required: National education coordinator and national education team

Objective: 6.4

The NMSS will provide centralized support to increase Internet presence.

a. Task: Hire a web programmer

Status: New initiative (Refer to program structure 3.1)

Timeline: (Refer to program structure 3.1) starting FY01

Staff required: National education coordinator and national education team

b. Task: Provide training courses to headquarters and field staff.

Status: New initiative

Timeline: Provided on an as needed basis starting FY02

Staff required: National education coordinator and national education team



c. Task: Each site will develop an interactive web site and assign a staff person to serve as webmaster.

Status: New initiative

Timeline: Ongoing starting FY00

Staff required: Field site education coordinators

d. Task: The national web coordinator will convene the education working group to coordinate digital information resources among NOS, NMSS and field sites, including a long term plan for standardized maintenance of shared resources (e.g. charts, maps, laws and regulations, photo galleries, data bases, and GIS information).

Status: New initiative

Timeline: Starting FY01

Staff required: National education coordinator, web coordinator and national education team

Objective: 6.5

The sanctuary program will provide centralized support for increased use of GIS as an educational tool.

a. Task: Headquarters and/or field sites will provide GIS and training opportunities for educators.

Status: New initiative

Timeline: Provided on an as needed basis starting FY00

Staff required: National education coordinator, national education team and field site education coordinators

b. Task: Headquarters will coordinate development of standards for national GIS databases that are designed for educational applications.

Status: New initiative

Timeline: Starting FY02

Staff required: National education coordinator, national education team, national science coordinator, and national science team

Laura Francis–
Education Coordinator,
Channel Islands NMS

“Science offers logical explanations for why things are the way they are in nature. Art is an expression and reflection of the beauty of and magnificence of nature through poetry, song, paintings, sculpture and other media. Science gets to your brain. Art gets to your heart. Science and art complement each other like the brain complements the heart in a human body.

The more we understand about the processes of the ocean, the better stewards and caretakers we can become. Understanding is the first step. Acting on what we understand can preserve the ocean forever.”

Objective: 6.6

The sanctuary program will reach new audiences through the use of distance learning technology.

a. Task: The education working group will evaluate existing and potential distance learning.

Status: New initiative

Timeline: TBD once national education team is in place

Staff required: National education coordinator, national education team

b. Task: Site education coordinators will be trained in use of distance learning technologies.

Status: New initiative

Timeline: TBD once national education team is in place

Staff required: National education coordinator, national education team

Objective 6.7

The NMSS will coordinate education initiatives with partners such as JASON, Sustainable Seas Expeditions and the National Geographic Society.

a. Task: The NMSS themes and issues will be an integral component of collaborative marine education programs.

Status: New initiative

Timeline: Ongoing starting FY02

Staff required: National education coordinator, field site liaison, and national education team

b. Task: Collaborative marine education programs will use sanctuary sites as living laboratories.

Status: New initiative

Timeline: Ongoing starting FY02

Staff required: National education coordinator and national education team



c. Task: National education standards will be a foundation for K-12 program development.

Status: Ongoing

Timeline: Ongoing

Staff required: National education coordinator and national education team

d. Task: The field site liaison will coordinate education initiatives from the SSE with the NMSS national education plan.

Status: New initiative

Timeline: TBD

Staff required: Field site liaison, national education coordinator and national education team

GOAL 7

The NMSS will recognize the significance of education in the program, and will provide and maintain a level of funding that enables the education team to carry out the tasks outlined in this plan.

(Refers to NMSS vision/goals # 2a, 2b, 2c, 2d, 2e, 3a, 3b, 3c, 3d.)

Objective: 7.1

The NMSS will dedicate funds that support collaborative system-wide education programs according to education working group priorities.

a. Task: The education working group will evaluate and prioritize potential education initiatives for systemwide compatibility.

Status: New initiative

Timeline: Start date October 2000

Staff required: National education coordinator and national education team

RECREATION

National marine sanctuaries help to protect our cherished places where we swim, dive, view wildlife, fish, and stroll on the beach.



b. Task: The education working group will develop protocols for system wide mini-grants funding.

Status: New initiative

Timeline: Starting date of October 2000

Staff required: National education coordinator and national education team

c. Task: The education working group will develop protocols to fund systemwide projects that support innovation and design resulting in model education programs.

Status: New initiative

Timeline: Start date October 2000

Staff required: National education coordinator and national education team

Objective: 7.2

The NMSS will utilize alternative funding strategies to supplement base funding

a. Task: The NMSS will develop a national foundation to solicit and receive donations.

Status: New initiative

Timeline: Starting FY01

Staff required: Communications Branch chief

b. Task: The NMSS will develop guidelines for sites to organize local friends groups.

Status: New initiative

Timeline: Starting FY01

Staff required: Communications Branch chief

c. Task: The field site liaison will serve as a clearinghouse for funding opportunities for field sites.

Status: New initiative

Timeline: Starting FY01

Staff required: Communications Branch chief and appointed staff at headquarters



GOAL 8

The NMSS creates communications strategies to protect the nation's marine resources and serve its geographically and culturally diverse communities

(Refers to NMSS vision/goals # 1a, 1b, 1c, 2a, 2b, 2c, 2d, 2e, 3a, 3b, 3c, 3d.)

Objective: 8.1

Reduce human threats to marine resources using education, outreach and communications as a resource management tool.

a. Task: Identify threats and develops programs to reduce them by targeting highest priority audiences.

Status: New initiative

Timeline: Starting FY02

Staff required: Communications Branch chief, national education coordinator and national education team

b. Task: Evaluate programs to assess their impacts on behaviors.

Status: New initiative

Timeline: Starting FY02

Staff required: Communications Branch chief, national education coordinator and national education team

c. Task: Identify successful education programs and replicate, as appropriate, system-wide.

Status: New initiative

Timeline: Starting FY00

Staff required: Communications Branch chief, national education coordinator and national education team

Objective: 8.2

Garner public support for protection and conservation of the marine sanctuaries by infusing the best available scientific information and management strategies into NMSS education and communication products and programs.

*Shelley Du Puy–
Education Coordinator,
Flower Garden Banks NMS*

*“I saw the ocean exactly once before
I decided to major in Marine
Biology. I credit that one experience
and a 6th grade English teacher
with inspiring my career choice. We
should never underestimate the
profound influence we can have on
a young mind, even in a single
short encounter that has nothing to
do with science.”*

a. Tasks: Sanctuary education programs and products will include information based on the best available scientific knowledge about sanctuaries.

Status: New initiative

Timeline: Starting FY00

Staff required: Communications Branch chief, national education coordinator, national education team, national science coordinator, and national science team

b. Task: Communications Branch will develop and place Sanctuary program messages that emphasize scientific methods used in resource conservation.

Status: New initiative

Timeline: Starting FY00

Staff required: Communications Branch chief, national education coordinator, national education team, national science coordinator, and national science team

c. Task: Communications Branch and National Programs Branch will create a work team to develop a plan to enhance communication and interaction between NMSS scientists, educators and the public.

Status: New initiative

Timeline: Starting FY00

Staff required: Communications Branch chief, national education coordinator, national education team, national science coordinator, and national science team

Objective: 8.3

National education team will coordinate education, outreach and communications programs and products to support priority NMSS Strategic Initiatives such as marine biodiversity, marine protected areas, cultural resources, etc.

a. Task: The Communications Branch chief will create communications plans for issues identified by the leadership team in the annual operating plan process and as issues emerge.



Status: New initiative

Timeline: Starting FY00

Staff required: Communications Branch chief, national education coordinator, national education team, national science coordinator, and national science team

b. Task: Branch chief will consult with national education team and site education coordinators to form multidisciplinary team to determine role for education in addressing these priorities.

Status: New initiative

Timeline: Starting date FY00

Staff required: Communications Branch chief, national education coordinator and national education team

c. Task: The NMSS and sites will identify and allocate program resources that support program-wide campaigns that communicate priority messages.

Status: New initiative

Timeline: TBD starting FY03

Staff required: Communications Branch chief, national education coordinator and national education team

Objective 8.4

The NMSS will develop education initiatives driven by sanctuary program messages or strategic audiences.

a. Task: The education working group will analyze emerging issues to guide the process for determining strategically prioritizing audience and message.

Status: New initiative

Timeline: Starting FY03

Staff required: Communications Branch chief, national education coordinator and national education team

b. Task: The education working group will consider factors such as social justice and fundamental equity among the Nation's citizens.



SCIENCE

*Research and monitoring
provide important
information for
effectively managing
sanctuary resources.*

Status: New initiative

Timeline: Starting FY01

Staff required: Communications Branch chief, national education coordinator and national education team

Objective 8.5

The NMSS will identify and prioritize its strategic audiences.

a. Task: Annually, the education working group will develop a prioritized list of national program audiences which include, but are not limited to decision-makers, divers, education professionals, fishers (and other resource harvesters), collective constituents, students, nature observers, and other sanctuary users.

Status: New initiative

Timeline: Starting FY02

Staff required: Communications Branch chief, national education coordinator and national education team

b. Task: Education initiatives will consider the target audiences.

Status: New initiative

Timeline: Starting FY02

Staff required: Communications Branch chief, national education coordinator and national education team

Objective: 8.6

National education team will coordinate education, outreach and communications programs and products to maximize the effectiveness of reaching strategic audiences. Communications plans will identify the needs of specific audiences and the appropriate tools for communicating effectively with them.

a. Task: Each site will develop needs assessment methods and models to develop and implement the most effective programs for their target audiences.



Status: New initiative

Timeline: Starting FY02

Staff required: Communications Branch chief, national education coordinator and national education team

b. Task: The NMSS education team will periodically review its programs and products to assure that they are germane to a wide range of audiences including but not limited to sanctuary users, decision-makers, volunteers, students of all ages and minority populations.

Status: New initiative

Timeline: Starting FY02

Cost: NMSS staff time only

Staff required: Communications Branch chief, national education coordinator and national education team

c. Task: NMSS will periodically conduct polling, feasibility studies and other social science research to better understand its audiences.

Status: New initiative

Timeline: Starting FY01

Cost: NMSS staff time only

Staff required: Communications Branch chief, national education coordinator and national education team