

## **2.2.4 North American Marine Protected Areas Network**

### **Project Summary**

The ecological linkages between Marine Protected Areas (MPAs), including migratory patterns and life history stages of various species, suggest the need for improved collaboration in the establishment and management of MPAs. Although there are many marine conservation efforts throughout North America, they generally work independently of each other. A system of MPA networks—both human and ecological—will provide better protection for marine biodiversity than can be achieved by managing MPAs in isolation. The North American Marine Protected Areas Network—coordinated by the Commission for Environmental Cooperation (CEC) of North America, in collaboration with the North American Marine Working Group of IUCN/World Commission on Protected Areas—aims to enhance and strengthen the conservation of marine biodiversity in critical marine habitats throughout North America by creating functional linkages and information exchanges among existing and planned marine protected areas.

### **Goals and Objectives**

The goal of this project is to work with a trilateral, multi-sectoral group of stakeholders in establishing an effective system of North American MPA networks that enhances and strengthens the protection of marine biodiversity. Specifically, the project seeks to:

- enhance collaboration among the three countries to address common challenges inherent in the protection of marine biodiversity and jointly prioritize conservation actions;
- develop effective conservation approaches and cross-cutting conservation initiatives that help conserve critical marine and coastal habitats and North American biodiversity, and recognize ecological, economic, social and cultural issues;
- build regional, national and international capacity to manage, conserve, and monitor the status of critical marine and coastal habitats by sharing effective conservation approaches, lessons learned, new technologies and management strategies, as well as by increasing access to and synthesis of relevant information; and
- facilitate the strategic design and establishment of a global system of MPAs throughout North America and the world, as called for by IUCN.

### **Expected Results**

Recognizing that all North American marine ecosystems, species, and coastal communities are inexorably linked, and that piecemeal efforts to protect the marine environment have been largely unsuccessful, the project will help strategically design networks spanning the critically important waters of Canada, Mexico and the US, fostering collaborative efforts among various stakeholders to tackle this challenge. The project will also help raise the profile of marine conservation issues in North America and foster and enhance the ability of stakeholders to effectively deal with North American marine conservation challenges. Specifically, by 2003–2004, the project will have:

- laid the foundation for the strategic development of a network of protected areas on the Pacific coast;
- explored possible tools for MPA the light of integrated ecosystem management;
- increased policy attention to the conservation of our shared marine resources;
- built capacity of decision makers, scientists, managers and other stakeholders to conserve the marine environment by increasing accessibility to, synthesis and exchange of information vis-à-vis:
  - the status and trends of priority marine species, spaces, and ecosystem functioning, and
  - common issues and threats.
- enhanced trilateral, cross-sectoral partnerships to help conserve the North American marine environment.

It shall be noted that the CEC shall work in conjunction with existing national and international guidelines and agreements to ensure maximum enforceability of MPAs.

## Rationale

Marine protected areas are effective tools for safeguarding and conserving critical coastal habitats throughout the varied regions of North America and are increasingly being valued for their role in helping to sustain fisheries, resolving user conflicts, strengthening local and regional economies, empowering local communities, valuing cultural resources, promoting recreation, and enhancing integrated and ecoregional management.

Many individual and often isolated MPA sites and programs already exist and could be greatly enhanced with additional exchange of information, strategies, and compilations of lessons learned. Moreover, no single MPA can be large enough to protect highly migratory species and ecologically important areas on a regional scale. By focusing management and conservation action, for example, at the most ecologically critical places, such as key local spawning areas, larval retention areas, nursery grounds, feeding areas, and migration bottlenecks, a network of properly managed and coordinated MPAs, however, can effectively and efficiently help to conserve biodiversity region-wide.

While individual MPA sites provide valuable local conservation for marine biodiversity, more effective regional conservation could be achieved if the various sites, and associated sectors, institutes, agencies and organizations in North America collaborated to forge more meaningful partnerships, working together on cross-cutting initiatives and developing, implementing, and monitoring a strategic, well-designed network of MPAs.

## Progress to Date

Since 1999, over 250 people from various sectors, agencies, organizations and institutions have been working together to strategically design, effectively support, manage and monitor a North American Network of Marine Protected Areas that will help conserve critical marine and coastal areas and North American biodiversity. Catalyzed by a trinational workshop (November 1999, La Paz, Mexico) the Network produced an Action Plan Framework that sets out seven areas of recommended action for the Network, including: 1) Valuing Economic Benefits of MPAs, 2) Mapping Marine and Estuarine Ecosystems of North America, 3) Guidelines for Measuring MPA Effectiveness, 4) Integrated Management Planning, 5) Expanding Applied Research for MPAs, 6) Developing an Ocean Ethic, and 7) Protection Standards. While some have a North American-wide focus, others are centered on the sub-region of the Pacific Coast of North America, also known as the Baja California-Gulf of California to Bering Sea (B2B) region.

### *Towards the Strategic Development of a Network of MPAs in North America*

To help lay the foundation for the strategic development of a network of MPAs, the CEC fostered the development of a series of interrelated and supporting initiatives. To develop a framework and common language for the network, the CEC worked with major players involved in marine and estuarine mapping to develop a **Map of Marine and Estuarine Ecological Regions of North America** (*in support of Mapping Marine and Estuarine Ecosystems of North America and Ocean Ethic*). By the end of 2002, a three-level, hierarchically nested GIS map, accompanied by physical and biological information for each region will have been completed. Priority migratory and transboundary species at risk in North America—the **Marine Species of Common Conservation Concern**—were also identified, and **status reports** were developed for each of the species (*a project developed in support of Protection Standards and Ocean Ethic*; see project 2.2.3 for more information). The MSCCC not only helped to prioritize collaborative marine conservation action among the countries for migratory and transboundary species, they, along with the ecoregion map, aided in laying the groundwork for prioritizing areas for conservation in the B2B region—one of the first steps in developing a network of protected areas. Following up on the activities of the previous year, in 2002, data were collected and the methodology for participation in and ownership of the project was enhanced. Also in 2002, a **Conservation GIS Data Potluck** (Portland, July 2002) was held and a workshop hosted to prioritize areas for conservation along the North American Pacific coast, using the information collected, as well as expert scientific, local and traditional knowledge, from a diverse range of stakeholders from the B2B area (*in support of Integrated Management Planning and Expanding Applied Research for MPAs*). To build on the initiatives, a white paper was drafted to bring the pieces of the puzzle together for a system of MPA networks—both human and ecological—spanning the critically important coastal waters of Canada, Mexico and the US (*in support of Integrated Management Planning and a general strategic vision for the project*).

### *Towards better monitoring and a better understanding of our shared marine environment*

At the same time, the CEC worked with its partners to identify targets and indicators for assessing MPA management effectiveness and develop a comprehensive, web-based information management system, or clearinghouse, that would compile site-level effectiveness results to illustrate important trends and valuable lessons

learned about MPAs across broad geographic scales. The project is being led by NOAA and WCPA-North America/Marine, in close coordination with the NA MPA Network and CEC's NABIN. The CEC also developed a web-based information tool—**Marinet** <<http://www.orchestrabycrossdraw.com/marinet>>—and enhanced its capabilities by developing the marine section of the NABIN portal prototype: a visual, collaborative web-based tool, with geographical information system (GIS) and database query capabilities. The marine section of the portal will use and link information from existing but isolated Canadian, Mexican and US organizations, agencies and institutions, allowing marine conservation decision-makers, scientists and experts to access various North American databases and maps. It will also facilitate communications and provide a vehicle for members of the North American MPA Network to inform each other about important marine conservation-related documents, events, and issues. In its first stage of development, marine section of the portal prototype will cover basic information pertaining to the MSCCC, B2B priority areas, and Marine and Estuarine Mapping projects, as well as information contained within various MPA inventories (in support of *Guidelines for Measuring MPA Effectiveness*, *Integrated Management Planning*, *Expanding Applied Research for MPAs* and general communications).

#### ***Towards increased interaction and capacity among marine conservation stakeholders***

The CEC also fostered greater collaboration, information exchange and networking among agencies, organizations and private institutions from various sectors working on and involved with marine biodiversity conservation and MPAs, which included projects relating to:

- strengthening institutional capacity of the Baja California to Bering Sea Marine Conservation Initiative (*in support of Integrated Management Planning*), which:
  - developed a common vision and mission and key components of a strategic plan;
  - established a B2B listserv;
  - identified priority issues facing MPAs in the region and how practitioners are approaching these opportunities and challenges;
  - through a project funded by NAFEC, developed a brochure that highlights four existing or future MPAs in the region: Glacier Bay, Gwaii Haanas, Channel Islands, and Magdalena Bay;
- exchanges of MPA practitioners from throughout North America, which covered topics such as: site planning; administration and general management; scientific and technical input; surveillance and enforcement; services, communication and outreach; monitoring and evaluation; in addition to a general overview of the participating MPAs (in support of *Integrated Management Planning*, *Protection Standards*, and *Guidelines for Measuring MPA Effectiveness*);
- bringing the private sector together with conservation-minded organizations to develop “win-win” scenarios in terms of sustainable tourism, focusing on whale watching in MPAs along the B2B coast (in support of *Valuing Economic Benefits of MPAs* and *Developing an Ocean Ethic*). In particular, by working with the Environment, Economy and Trade program of the CEC and the B2B Marine Conservation Initiative, the Network has helped to:
  - develop a market study of North American sustainable tourism;
  - organize a workshop on whale watching and MPAs in the B2B region to develop a market-based strategy for conservation of shared species and critical habitats in the B2B coastal region;
  - fostered and enhanced a dialogue and partnership among regional leaders, focusing primarily on the development of a Sustainable Whale Watching Toolkit (which included best practice guidelines for sustainable whale watching in MPAs, and a Sustainable Whale Watching Fact Sheet, both for the B2B region). The project has also catalyzed an independent regional initiative built on the project's foundation. The project, led by the Oceans Blue Foundation/*La Fondation Océans Bleus* (Canada), seeks to deliver an international whale watching best practices charter with signatories from a critical mass of Canadian, Mexican and US whale watching operators committed to exceeding regulatory standards on marine mammal viewing.

#### ***Reviewing progress to date***

The CEC also organized a meeting of its marine expert advisors (Montreal, July 2002) to review the NA MPA Network's progress to date in addressing the pressures to North America's coasts and oceans. The advisors supported continued involvement of the Secretariat in its ongoing projects and initiatives, and proposed that the CEC continue its work with the countries to develop a fully functioning and integrated NA MPA Network. The advisors also defined possible future priorities for marine conservation action in North America by identifying: 1) common threats to NA marine biodiversity, and 2) conservation actions to address these threats through bi- and trilateral

cooperation. The participants noted the following four areas, to date largely unaddressed by the CEC, as threats to the North American marine and coastal environments, and suggested they be considered by the BCWG for future CEC involvement: 1) **Fisheries management and practices**, 2) **Ocean and coastal development, transportation and planning**, 3) **Human-induced global system changes**, and 4) **Developing an Ocean Ethic**.

**Actions 2003**

*Overview*

As with all Conservation of Biodiversity projects, the North American MPA Network is in a transition period awaiting finalization of the Strategic Plan for North American Cooperation in the Conservation of Biodiversity. Taking this into account, the project is following-up on commitments made, taking the NA MPA Network Framework and the draft Strategic Plan into consideration, as well as following advice of the Marine Expert Advisors, and in 2003, will work to help a) increase capacity and interaction among MPA conservation stakeholders, b) develop a network of MPAs in North America, and c) improve the monitoring and understanding of our shared marine environment. Through these actions, the project will also help share science-based information, models and theories to work towards developing a common approach to integrated management for MPAs in North America. They will also help build support for trilateral conservation priorities. It is expected that the work in 2004–2005 will be guided by the Strategic Plan, hence, no actions have been specified.

<i>2003</i>	<b>Estimated Resources Required (C\$)</b>
<b>Action 1: Increasing capacity of and interaction among MPA conservation stakeholders</b>	<b>40,000</b>
<ul style="list-style-type: none"> <li>• Activity 1: Share science-based information, models and theories to work towards developing a common approach to integrated management for MPAs in North America. Host a workshop (co-hosting/piggybacking on SAMPAA meeting on Making Ecosystem Based Management Work), prepare and disseminate support information that will explore subjects such as:               <ul style="list-style-type: none"> <li>a) clarifying the vision and reviewing the theory put forth in the white paper on integrated management (IM) for the NA MPA Network,</li> <li>b) identifying and developing task team members who will help “land” the IM vision and theory in two regions (one Pacific, one Atlantic),</li> <li>c) identifying capacity building, training and science priorities that will support the strategic vision and address common concerns for North American marine conservation, and</li> <li>d) identifying, developing and supporting task teams to partner on priorities put forth in the MSCCC project—securing the link between migratory/transboundary species and place-based conservation approaches, such as MPAs</li> </ul> </li> </ul>	40,000
<b>Action 2: Strategic development of a network of MPAs in North America</b>	<b>120,000</b>
<ul style="list-style-type: none"> <li>• Activity 1: Edit, translate, and publish results of the B2B priority areas work, covering such topics as the final methodology used, the importance of each of the areas, and potential tools for conservation in the region, setting the stage for integrated management of MPAs.</li> </ul>	50,000

<ul style="list-style-type: none"> <li>Activity 2: Organize two regional workshops (one on each coast—Pacific and Atlantic) that explore the possibilities for piloting integrated management for the NA MPA Network. This activity will: i) work with the current legislative authorities in each country, ii) help fulfill regional scientific and management needs, and iii) build on previous trilateral efforts, such as ecoregional mapping, MSCCC, and priority areas in B2B. The workshop will help identify how communities can explore and utilize the potential benefits of a North American network of MPAs to help address local concerns within the context of regional and continental efforts and priorities.</li> </ul>	70,000
<b>Action 3: Better monitoring and understanding of our shared marine environment</b>	<b>45,000</b>
<ul style="list-style-type: none"> <li>Activity 1: Enhance NABIN marine pilot by adding additional databases and compiling MPA management effectiveness results, including information from the B2B priority areas work (e.g., maps and databases gathered, results of workshop), information on management effectiveness of MPAs, and information on ongoing national and international MPA inventory work.</li> </ul>	20,000
<ul style="list-style-type: none"> <li>Activity 2: Support a North American pilot project for the WCPA-WWF management effectiveness project.</li> </ul>	25,000
<b>Total Resources Required</b>	<b>205,000</b>

## 2004

Building on previous years' work, it is envisioned that action of the NA MPA Network will be focused on the following areas: 1) increasing the capacity of and interaction among MPA conservation stakeholders; 2) strategic development of a network of MPAs in North America; and 3) better monitoring and understanding of our shared environment. In this period, the emphasis of activities will change from scoping and planning to implementation. Actions for this time period will benefit from the guidance of the Strategic Plan and the Biodiversity Conservation Working Group.

### Public Participation

Success of MPAs and associated networks depends to a large degree upon public awareness, support and participation in the planning and management of MPAs. From network design to local implementation at specific MPA sites, the public has been and will be increasingly involved in this endeavor. As well, the academic community, indigenous groups and NGOs involved in marine protected areas will be consulted for their input into establishing linkages, developing priorities and initiating integrated ecosystem management. As the process evolves, general outreach materials and tools, such as the B2B brochure and the marine section of the NABIN web site, will be developed for explaining to a broad audience the benefits that will accrue to marine biodiversity from this project's cross-cutting initiatives.

### Capacity Building

The fundamental purpose of creating an integrated, interactive network of North American MPAs is to build global capacity, sharing information on lessons learned about effective conservation strategies, emerging threats to marine biodiversity, as well as funding or outreach opportunities. It is anticipated that all members of the network will benefit equally from this exchange. Training of MPA managers and building capacity of stakeholders and decision-makers through increased accessibility to information, and its synthesis and exchange, are considered to be at the core of the MPA network.

### Expected Partners and/or Participants

The following agencies and organizations have played an important leadership role in building the North American MPA Network, and are expected to continue as partners and/or participants in the future: Canadian Council on Ecological Areas (CCEA), Canadian Parks and Wilderness Society (CPAWS), Canadian Wildlife Service (CWS) Department of Fisheries and Oceans—Canada (DFO), Marine Conservation Biology Institute (MCBI), Memorial

University of Newfoundland, NatureServe, National Oceanic and Atmospheric Administration (NOAA), Parks Canada, Point Reyes Bird Observatory (PRBO), Ramsar, Scripps Institute of Oceanography, *Secretaría de Medio Ambiente y Recursos Naturales* (Semarnat)—in particular, *Comisión Nacional de Áreas Naturales Protegidas* (Conanp), Conabio, INE, and *Subsecretaría de Gestión para la Protección Ambiental*, Sound Seas, UNEP-WCMC, United States Fish and Wildlife Service, University of Guelph, University of Moncton, Wildlife Habitat Canada, WCPA North America-Marine of IUCN and World Wildlife Fund. Although too numerous to mention here, other partners for this project have developed in part from the 1999 North American MPA Workshop, the 2000 and 2001 B2B Marine Conservation meetings, 2001 Monterey workshops, the 2002 Marine and Estuarine Mapping meeting, the MPA practitioners' exchange, the Conservation GIS Data Potluck and B2B Priority Areas workshop, the B2B Sustainable Whale Watching initiative, as well as other outreach efforts.

#### **Linkages to other CEC Projects**

This project has greatly benefited from close links with the Mapping Marine and Estuarine Ecosystems of North America project, the Environment, Economy, and Trade (EET) program area, and the North American Biodiversity Information Network web site. Links with the EET program, the NABIN web site, JPAC Conservation of Biodiversity working group and NAFEC will continue in 2003–2004, and be complemented by links with the MSCCC and NABCI projects.