



25 FEB 2013

DENR ADMINISTRATIVE ORDER
No. 2013 - 12

**SUBJECT : GUIDELINES FOR THE IMPLEMENTATION
OF THE SUSTAINABLE CORAL REEF
ECOSYSTEMS MANAGEMENT PROGRAM
(SCREMP)**

Pursuant to Republic Act No. 7586 or the National Integrated Protected Areas System (NIPAS) Law; sections 4 and 5 of Executive Order No. 192, Series of 1987 or the Reorganization Act of the Department of Environment and Natural Resources; and consistent with Executive Order No. 533, Series of 2006 or "Adopting the Integrated Coastal Management (ICM) Strategy to Ensure the Sustainable Development of the Country's Coastal and Marine Environment and Resources and Establishing Supporting Mechanisms", and Executive Order No. 797, Series of 2009 or "Adopting the Coral Triangle Initiative (CTI) National Plan of Action (NPOA) as the Primary Framework for the Development and Implementation of all related Plans and Programs on Marine and Coastal Resources Management in the country"; the following guidelines are hereby issued:

SECTION 1. Objectives. The Sustainable Coral Reef Ecosystems Management Program (SCREMP) aims to:

1. Implement sustainable management of coastal and marine resources through resource and habitat conservation, protection and rehabilitation;
2. Contribute to food security and improve human well-being of the coastal communities;
3. Promote public awareness, and instill social and environmental consciousness on the value of coral reefs and associated coastal and marine ecosystems, especially on mitigating the effects of climate change;
4. Enhance the formation of positive values among the youth and other partners through shared responsibilities in sustainable management of coastal and marine resources and habitats; and
5. Develop sustainable financing mechanisms through the establishment of system of payment for ecosystem services.

SECTION 2. Scope and Coverage. This guideline shall be implemented in Marine Protected Areas (MPAs) under the National Integrated Protected Areas System (NIPAS) nationwide, within locally-managed Marine Protected Areas (LMMPAs), and identified marine Key Biodiversity Areas (MKBAs) with potential for establishment as MPAs.

SECTION 3. Definition of Terms: For purposes of this guideline, the following definition of terms shall be used:

- a. Artificial reef structures – are man-made structures typically built to provide artificial shelter for marine organisms, as well as, to provide hard surfaces for attachment for benthic organisms such as coral polyps.
- b. Corals - are colonies of identical marine animals belonging to *Phylum Cnidaria* that includes the important reef builders that inhabit the tropical oceans.

- c. Coral reefs - are diverse underwater ecosystems built from calcium carbonate secreted by corals. Coral reefs can be categorized into the following coral cover estimate thru line intercept transect method:
1. Category 1 - Poor (coral reef with > 0 to 10% coral cover)
 2. Category 2 - Fair (coral reef with 11 – 30% coral cover)
 3. Category 3 - Good (coral reef with 31-50% coral cover)
 4. Category 4 – Very Good (coral reef with 51-75% coral cover)
 5. Category 5 – Excellent – (Coral reef with 76-100% coral reef cover)
- d. Integrated Information Management System – a comprehensive and integrated system of collecting information and analyzing the information for management planning and reporting.
- e. Marine Key Biodiversity Areas (mKBAs) – globally significant marine sites for biodiversity conservation used by government, donors, NGOs, the private sector, and other stakeholders, as a tool for expanding protected area network, and for targeting conservation action on the ground.

SECTION 4. Sustainable Coral Reef Ecosystems Management Program or SCREMP.

This is a DENR’s national program (2012-2020) that will conduct a strategic, sustainable, and ecosystem-based approach in protecting and rehabilitating coral reef ecosystems within the country through the Protected Areas and Wildlife Bureau (PAWB) – Coastal and Marine Management Office (CMMO).

SECTION 5. Program Components. The sustainable management of coral reef ecosystem shall be implemented in partnership with the Department of Agriculture – Bureau of Fisheries and Aquatic Resources (DA-BFAR), other concerned national government agencies, local government units, research and academic institutions, duly organized and registered People’s Organizations, and the private sector through the following program components.

5.1 Habitat and Vulnerability Assessments

The habitat and vulnerability assessment component shall be conducted based on acceptable scientific procedures, as used by academic institutions, such as, the University of the Philippines – Marine Science Institute (UP-MSI) and Silliman University. The assessment shall involve the following activities:

- 5.1.1 Resource assessment of all coral reef areas which include the identification of factors or threats affecting the coral reef ecosystem, whether land- or marine-based;
- 5.1.2 Mapping and delineation of boundaries of the coral reef ecosystems including rehabilitation and protection sites using GPS and map generation consistent with the geo-reference of NAMRIA.
- 5.1.3 Marking of delineated boundaries of coral reef ecosystems with appropriate buoys and markers.
- 5.1.4 Establishment and management of database on coral reef ecosystems both in healthy and degraded condition including those areas for rehabilitation, protection, and management adopting the integrated Information Management System (IIMS) in coastal and marine environment.

5.1.5 Based on the results of the resource, habitat and vulnerability assessments, a coral reef ecosystems management plan shall be prepared by concerned field offices. The plan shall be consistent with existing MPA management plan and ICM Plan and shall include coral reef protection and rehabilitation measures.

5.1.6 The abovementioned activities will require appropriate technical diving skills from the field implementers. As such, SCUBA diving training courses shall be implemented in preparation for SCREMP implementation.

5.2 Coral Reef Rehabilitation and Protection

The rehabilitation and protection of coral reefs shall include the following activities:

- a) Survey of the identified poor, fair, good, very good and excellent coral reef ecosystem.
- b) Establishment of protection measures on coral reef ecosystem such as floating monitoring sites, regular patrols, and other similar activities;
- c) Implementation of rehabilitation measures, such as, stock enhancement of marine species, deployment of appropriate artificial reef structures, etc.
- d) Regular documentation and reporting on the implementing of the management, protection and rehabilitation of coral reef ecosystems.
- e) Implementation of UNEP-initiated project called "Green Fins Code of Conduct" on Responsible Diving and other science-based information and technologies for coral reef protection and rehabilitation.
- f) Conduct of maintenance and reporting, monitoring, and evaluation of the protection and rehabilitation measures implemented.

5.3 Social Mobilization and Development

The social mobilization component shall involve the conduct of information, education and communication campaigns to increase awareness and promote appreciation on the importance of the coastal and marine environment particularly, the coral reef habitat and ecosystems.

This component shall also include technical and organizational capability-building activities for partner POs and NGOs geared towards the attainment of SCREMP's goals and objectives.

5.4 Marine Protected Area (MPAs) Establishment, Strengthening and Networking

This component shall involve the establishment, strengthening, and networking of MPAs in collaboration with concerned stakeholders. This will cover capacity building, management planning, and implementation of the sustainable management of coral reef ecosystems. The strengthening of the Protected Area Management Boards (PAMBs) will be part of the activities since the SCREMP target sites are NIPAS MPAs.

5.5 Sustainable Livelihood Interventions

This component shall involve the identification and development of community-centered, community-driven, practical, sustainable and environment-friendly livelihood projects, such as ecotourism (souvenir-making, tour guiding, tourism-related business) directed towards the improvement of the socio-economic welfare of the local communities in order to sustain public support in the conservation and protection of the coastal and marine environment.

SECTION 6. Other Possible Sites and Criteria for Selection

All NIPAS MPAs are the prioritized sites for SCREMP. Meanwhile, the possible sites for the implementation of the sustainable management of coral reef ecosystems and the criteria to be used for the selection of the sites shall be as follows:

- 6.1 Possible sites for the sustainable management of coral reef ecosystems shall include all Integrated Coastal Management areas, such as:
 - 6.1.1 Any appropriate and suitable areas within the locally managed MPAs;
 - 6.1.2 Coral reefs with high living coral cover and high diversity of reef organisms;
 - 6.1.3 Areas identified by academic and research institutions for scientific observation and related studies; and
 - 6.1.4 Other eligible areas within the identified/proposed areas for protection and conservation by LGUs, POs and other civil society groups.

6.2 The following criteria shall be used for the selection of sites:

- 6.2.1 Established MPAs or fish sanctuaries with fully adopted management plan and organizational structure;
- 6.2.2 NIPAS areas or areas within marine Key Biodiversity Areas; and
- 6.2.3 Distance from any coastal development (i.e. sewerage, on-going reclamation and other related development undertakings) and human activities, and areas set aside for docking and navigational lanes for tour boats and outrigger boats.

SECTION 7. Strategies. The SCREMP shall be implemented through the following strategies:

7.1 Information, Education and Communication (IEC) campaigns.

- 7.1.1 Provide appropriate information on the ecology of coral reefs and increase the understanding and participation of all the stakeholders in the conservation and protection of our coastal and marine environment, instill social and environmental consciousness and responsibility using science-based information and technologies for coral reef protection and rehabilitation.

- 7.1.2 Coordinate with LGUs, DepEd and CHED, state universities and colleges (SUCs) to integrate IEC campaigns consistent with the provisions of RA 9512, otherwise known as “An act to Promote Environmental Awareness through Environmental Education and for Other Purposes”, which calls for the conservation, protection and sustainable resource use of the coastal and marine environment in their extra-curricular for all levels of the educational system.

In addition, PAWB-CMMO is partnering with UP-MSI for the Masteral Course on MPA Management.

- 7.1.3 Collaborate with the private sectors and civil society groups in the conduct of IEC campaigns.

7.2 Social Mobilization and Convergence

The implementation of SCREMP shall enjoin the active involvement and participation of the LGUs, MPA management bodies and networks, private sector, civil society groups, and other partners through the following:

- 7.2.1 Urge the LGUs, MPA management bodies and networks, to allocate adequate manpower and revenues to assist in the actual conduct of coral reef protection and rehabilitation activities.
- 7.2.2 Mobilize the private sector, civil society, diving groups and maximize the participation of other national government agencies in the sustainable management of coral reef ecosystems through the convergence approach.

7.3 Harmonization of Initiatives

The DENR-PAWB and concerned DENR field offices shall undertake regular consultations with all stakeholders and partners in order to harmonize all coral reef rehabilitation and protection activities.

7.4 Capacity Building and Strengthening of Field Implementers on Sustainable Management of Coral Reef Ecosystems Implementation

- 7.4.1 DENR-PAWB in partnership with academic and research institutions, and diving groups shall provide training for DENR field offices staff relative to the implementation of sustainable management of coral reef ecosystems.
- 7.4.2 DENR field offices in coordination with concerned national government agencies, academic and research institutions shall provide technical assistance in the conduct of orientation/training workshops for the concerned LGUs and registered POs.
- 7.4.3 The DENR field offices and the concerned LGUs shall provide for incentive and disincentive systems for the law enforcers/partners in the protection and rehabilitation of coral reef ecosystems.

SECTION 8. SCREMP Operation and Implementation Arrangements

The DENR Regional Offices, through the Coastal and Marine Management Division (CMMD), shall take the lead in the implementation of SCREMP in the regions with the technical assistance and guidance from PAWB-CMMO. They may engage partnership with concerned stakeholders in the implementation of the program.

- 8.1 All coral reef rehabilitation and protection activities including conduct of research and scientific studies shall be implemented in coordination with DA-BFAR, DOST, academic and research institutions, concerned LGUs, and registered NGOs/POs.
- 8.2 DENR field offices, in coordination with DA-BFAR and LGUs, shall provide technical assistance to other stakeholders in the identification and determination of suitable areas for coral reef rehabilitation and protection, including the monitoring and assessment of the survival and development in the coral reef protection and rehabilitation areas.
- 8.3 Deployment of artificial reef structures shall be reviewed and evaluated by DENR-PAWB, in coordination with DENR-EMB, DA-BFAR, DOT, DOST, DOTC-Philippine Coast Guard (DOTC-PCG), Department of National Defense (DND), Department of the Interior and Local Government (DILG), the concerned LGUs, and partner academic institutions. In particular, the DENR-EMB's Environmental Impact Assessment (EIA) and its review results can influence issuance of permits for coastal development that can negatively impact coral reef ecosystems.

SECTION 9. Planning Parameters and Timeframe

The timeframe for the Action Plans on Sustainable Coral Reef Ecosystems Management Program (SCREMP) shall cover the following:

- 9.1 Short-term (2013-2015): Design ecological and socio-economic structure; Pilot SCREMP to identified sites.
- 9.2 Medium-term (2013-2017): Define gaps in the NIPAS MPA management implementation and report monitoring and evaluation (M&E) progress.
- 9.3 Long-term (2013-2020): Strengthen livelihood enterprises and sustainable financing mechanisms in sites.

Moreover, the implementation steps shall include these activities:

Step 1: Develop Framework (*Oct 2012 to Dec 2012*)

This involves the setting of Objectives and Strategies; Scoping of Priorities; Site Selection; Planning and Consultations; and Policies and Institutional Mechanisms

Step 2: Pilot SCREMP (*Jan 2013 to Dec 2013*)

Activities for piloting SCREMP include Habitat and Vulnerability Assessments; Social Mobilization; MPA/MPANs Strengthening; Livelihood Interventions; and Rehabilitation/Protection Plans

Step 3: Scale up Implementation (*Jan 2014 to Dec 2020*)

For scaling up of the SCREMP implementation, the activities are: Monitoring and Evaluation; Additional MPA/MPANs within target sites; Knowledge Management and Replication of Best Practices; Refinement of Processes; and Addressing of Capacity Gaps

SECTION 10. Funding and Budgetary Requirements


The Department shall allocate funds to support the implementation SCREMP on an annual basis.

For purposes of budgetary allocation and planning, SCREMP cost per hectare shall be PhP 1,310, broken down as follows:

Habitat and Vulnerability Assessment	PhP 400.00
Coral Reef Rehabilitation and Protection	650.00
Social Mobilization and Development	75.00
MPA Establishment, Strengthening, and Networking	60.00
Sustainable Livelihood Interventions	125.00
TOTAL COST PER HECTARE:	PhP 1,310.00

SECTION 11. Repealing Clause. This Order shall supersede other issuances that are inconsistent herewith.

SECTION 12. Effectivity. This Order shall take effect upon publication in a newspaper of national circulation and submission of a copy to the Office of the National Administrative Registry (ONAR).


RAMON J.P. PAJE
Secretary *ant*



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