



Republic of the Philippines

**Department of Environment and Natural Resources
BIODIVERSITY MANAGEMENT BUREAU**

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TECHNICAL BULLETIN

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SUBJECT : CLARIFYING THE PROCEDURES IN THE IDENTIFICATION, DESIGNATION AND DELINEATION OF MANAGEMENT ZONES OF PROTECTED AREAS UNDER THE NATIONAL INTEGRATED PROTECTED AREAS SYSTEM (NIPAS)

Pursuant to Section 9 of RA 7586, otherwise known as the National Integrated Protected Areas System (NIPAS) Act of 1992, Rule 10 of DENR Administrative Order No. 2008-26 or the Revised Implementing Rules and Regulations of the NIPAS Act, Section 6 of DAO 2008-17 on the Criteria and Procedures in the identification, delineation and/or demarcation of Management Zones of Protected Areas, and in line with BMB Technical Bulletin No. 2016-08 entitled Clarifying the Protected Area Management Planning Process and Providing the Annotated Outline for Protected Area Management Plans, this Technical Bulletin is hereby issued for the guidance of all concerned:

Section 1. Objectives. - This Bulletin aims to provide the standards and prescriptions necessary to improve the management of protected areas through designation and delineation of appropriate management zones. This will clarify the requirements, activities and procedures in identifying, designating and delineating the management zones of protected areas.

Section 2. Scope and Coverage. This Technical Bulletin shall apply to all terrestrial protected areas proclaimed under the NIPAS. This shall also apply to initial components of NIPAS recommended for establishment under the System based on the results of the Protected Area Suitability Assessment.

Section 3. Definition of Terms. As used in this Technical Bulletin, the following terms shall mean as defined hereunder:

- 3.1 Zoning - is the process of allocating geographical areas of the protected area based on certain criteria to prescribe standards, specific conservation measures/actions and allowable uses to serve as guide and achieve the objectives of establishing and managing a particular protected area. It may be spatial or temporal allocation of specific uses and activities to a well-defined area/s within the protected area.

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- 3.2 Strict Protection Zone – are natural areas that include those with high biodiversity values, areas highly susceptible to geo-hazard, areas set as permanent danger zone, and those closed to human activities except for scientific studies and/or ceremonial or non-extractive uses by the indigenous cultural communities/indigenous peoples. It may also include habitats of threatened species, or degraded areas that have been designated for restoration and subsequent protection, even if they are still in various stages of regeneration.
- 3.3 Multiple Use Zone – areas for settlement, traditional and/or sustainable land use including agriculture, agroforestry, and other income generating or livelihood activities that may be allowed consistent with the PAMP of the protected area. It may include among others, areas of high recreational/ecotourism, educational or environmental awareness values, and areas for the installation of facilities/structures of national significance/interest, and those allowed under existing guidelines for special uses such as renewable energy projects, telecommunication, and electric power generation, among others.
- 3.4 Geo-hazard Areas - are areas of natural phenomena or events related to the geological state and processes that may cause loss of lives as well as materials and environmental damages. They all arise from global geological processes inside the Earth, driving deformation and displacement of its crust.
- 3.5 Delineation – refers to the actual ground survey of the boundaries of protected areas and/or its management zones using Global Positioning System (GPS) or other applicable surveying instruments or technologies to come up with a map of the area.

Section 4. Significance of Zoning. Zoning shall be undertaken in all protected areas established under the System as strategy to effectively manage such areas in accordance with the objectives and principles of biodiversity conservation and sustainable development. It provides the basis for the formulation of strategies, standards and prescriptions for the management of protected area, thus, an integral part of the management planning process. Zoning aims to:

- 4.1 Facilitate the determination of carrying capacity or limits of acceptable uses by considering the various natural features and potential values/benefits of protected areas;
- 4.2 Rationalize resource allocation and prioritize implementation of appropriate management interventions based on the needs of the protected areas;

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- 4.3 Identify the location for special uses as provided under Section 6.2 hereof that may be allowed pursuant to the management plan of protected areas;
- 4.4 Improve resiliency of protected areas to the negative impacts of climate change, address disaster risk reduction concerns, and enhance ecosystem-based adaptation;
- 4.5 Facilitate monitoring and evaluation of management effectiveness of protected areas; and
- 4.6 Support the protection and enforcement activities within protected areas.

Section 5. General Considerations. In determining and delineating the management zones, the following general considerations shall apply:

- 5.1 The process must be participatory involving representatives from relevant sectors and discipline;
- 5.2 Information to be used should be anchored on the natural features, management objectives and allowable uses in accordance with the appropriate category of the protected area;
- 5.3 Must generate/source the most updated/available and science based information. Any adjustments or modifications of the management zones should be supported by new scientific and socio-economic information;
- 5.4 Must use/apply the latest innovative techniques and technologies (e.g., RS/GIS) in the determination and delineation of management zones; and
- 5.5 Should be harmonized/interfaced with the land use plans or other related development plans of local government units, national government agencies, and indigenous communities.

Section 6. Criteria in the Determination and Designation of Management Zones. The identification of management zones of protected areas must be guided by the following criteria:

- 6.1 Areas intended as Strict Protection Zone shall consist of any or combination of the following:
 - 6.1.1 Natural vegetation or representative/s of any of the ecosystem types;
 - 6.1.2 Habitats of endemic and threatened species and biologically important areas including sites for seasonal feeding, foraging, roosting, nesting, and/or breeding of wild fauna;

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- 6.1.3 Areas prone to natural and man-made hazards;
- 6.1.4 Areas set aside as permanent danger zones;
- 6.1.5 Easements of inland waters such as lakes, rivers, creeks, etc.;
- 6.1.6 Sacred grounds/areas used by indigenous communities; and
- 6.1.7 Areas needing immediate rehabilitation to recover as close as possible the original vegetative cover.

6.2 Areas intended as Multiple Use Zone shall consist of the following:

All areas that do not fall within the criteria for Strict Protection Zone shall be designated as Multiple Use Zone. Sub-zoning of the multiple use zone may be done according to the needs of the protected area taking into account the location of the following:

- 6.2.1 areas for settlement, traditional and/or sustainable land use including agriculture, agroforestry, and other biodiversity-friendly livelihood generating activities of local and indigenous communities;
- 6.2.2 areas of high recreational/ecotourism, educational or environmental awareness values; and
- 6.2.3 areas for facilities/structures of national significance such as telecommunications, rights of ways, roads, transmission lines, waterways, and energy power generation, among others.

Section 7. Allowable Activities/Uses and their Management Approaches. The management plan should be able to elaborate or provide the specific allowable activities or uses and management approaches for the Strict Protection Zone and Multiple Use Zone following the minimum prescriptions provided in **Annex A** hereof.

Section 8. Data Requirements. Data generation through actual field surveys and assessments shall be the primary source of information for the zoning. The following documents shall serve as bases or sources of information for the identification of management zones:

- 8.1 Journals and scientific researches and studies undertaken in the protected area;
- 8.2 Biodiversity and Socio-Economic Assessment and Monitoring Reports including previous resource inventories, survey and registration of PA occupants, etc.;

- 8.3 Accomplishment Reports of the protected area for the last five (5) years including previous management plans;
- 8.4 Land Use Plans, Comprehensive Development Plans, Investment Plans, Ancestral Domain Plans, and other relevant plans covering the protected area;
- 8.5 Historical accounts and uses of the protected area;
- 8.6 Maps on:
 - a. PA boundary indicating political/administrative boundaries, land classification, cover, and uses;
 - b. Biodiversity, threats, and values generated from the Biodiversity Assessment and Monitoring System (BAMS) per BMB Technical Bulletin Nos. 2016-05 and 2017-09 and Socio-Economic Assessment and Monitoring System per BMB Technical Bulletin No. 2016-06;
 - c. Geo-hazards such as areas highly susceptible to erosion, landslide, flooding, earthquake, tsunamis, sea level rise, burn ratio, volcanic eruptions and other geological events;
 - d. Physical features such as slope, elevation, soil, geology, caves and other landforms, among others;
 - e. Wetlands such as river systems, lakes, peatlands and other water bodies including their seasonal variations;
 - f. Infrastructures/development facilities such as town centers, telecommunication towers, transmission lines, relay stations, monitoring stations, road networks, runways, ports, etc.

Section 9. Identification and Designation of Management Zones. Using the above-mentioned sources of information, the following steps shall be undertaken:

- 9.1 Characterize and analyze the status of the protected area by accomplishing **Annex B**.
- 9.2 Pre-identify the potential Strict Protection Zone using the criteria stated in Section 6 hereof and the results of analysis in **Annex B**. Locate in the map the pre-identified Strict Protection Zones and Multiple Use Zones.

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- 9.3 With the assistance of GIS specialist, convert all data/information from analog, raster, and image files into vector files or shapefile format. Adjust accordingly the resulting shapefiles to facilitate the overlay of information.
- 9.4 Overlay and integrate the different map information to generate new map output. Validate suitability of the new map output following the criteria of SPZ and MUZ.
- 9.5 Randomly confirm the management zones on the ground prioritizing those areas with high biodiversity values or areas with high anthropological impacts taking into consideration areas that need further information based on the observations on the map or processed data.
- 9.6 The Regional Office shall create a Validation Team led by the Survey and Mapping Division, with the PASu and staff, technical staff of the Conservation and Development Division, and selected representatives from the PAMB and relevant units of the concerned PENRO and/CENRO, as members.
- 9.7 Once confirmed, the map of management zones shall be finalized and used to prepare the protected area-wide management standards and zone/sub-zone management prescriptions. The accomplished map is the central part of the management planning and plan preparation of protected areas.

The flow chart for the determination of management zones is provided in **Annex C**.

Section 10. Delineation of Management Zones. The following shall be considered in the delineation of the Strict Protection Zone and Multiple Use Zone:

- 10.1 Strict Protection Zones and Multiple Use Zones shall be delineated on the ground using natural markers and in case of observed points, using 15 cm x 15 cm x 60 cm fabricated markers. The location of natural markers shall be recorded using Global Positioning System (GPS) instruments or other suitable survey instruments.
- 10.2 Strip planting with indigenous forest tree species and native flowering plants shall be undertaken to augment the zone markers.
- 10.3 Additional signage using materials that would blend with the natural setting may also be installed and which must be visible for public awareness and to prevent encroachment.
- 10.4 The ground delineation should be led by the Survey and Mapping Division (SMD) of the DENR Regional Office. The Conservation and Development Division thru its relevant Section/Unit should provide technical assistance to the SMD.

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Section 11. Modification of the Management Zones. Any modification of Strict Protection Zones shall be done in accordance with the requirements and procedure herein provided. Strict Protection Zones shall be modified only for purposes of improving the management response to the conservation needs of the protected area.

Section 12. Adoption and Approval. The management zones as determined in accordance with this Technical Bulletin, should be approved by the Protected Area Management Board through a resolution and shall serve as input to the preparation and updating of the Management Plan.

Section 13. Transitory Provisions. For protected areas with existing management zones, the PAMB thru the PASU/POSu shall initiate the review of the SPZ and MUZ following the criteria provided in Section 6 of this Bulletin in consultation with affected stakeholders, after which the delineation shall proceed in accordance with Section 10 hereof.

Section 14. Effectivity. This Technical Bulletin shall take effect immediately and shall be circulated for the information and guidance of all concerned.



THERESA MUNDITA S. LIM

Director

Annex A – Management Zones, Objectives and Priorities, and Approaches

Management Zone Categories	Management Objectives and Priorities	Management Approaches
Strict Protection Zone (SPZ)	<p>Totally priority for species conservation, habitats, ecosystems, land forms and landscapes</p> <p>Normally allowing only limited, non-destructive, management oriented monitoring and research</p> <p>Restricted to scientific research activities</p>	<p>Total protection through patrol, enforcement and monitoring</p> <p>Absence of any facilities that would assist access or use; free of known impacts of human origin especially of alien species</p>
Multiple Use Zone (MUZ)	<p>Accessible and ideally less vulnerable areas enabling large numbers of visitors to use and enjoy the area within acceptable limits</p> <p>Park management facilities, visitor amenities, interpretation and education facilities are located</p> <p>Enabling continued function of established developments such as major roads, hydroelectric installations</p> <p>Encouraging sustainable and biodiversity friendly development activities</p> <p>Encouraging maintenance of landscape links; avoiding fragmentation</p>	<p>Provision of extensive on site information and interpretation, park management facilities, and visitor amenities</p> <p>Provision of facilities to assist access and use</p> <p>Use and enforcement of regulations for users</p> <p>Regular monitoring and enforcement</p> <p>Collaboration with other government agencies and resource users including local communities and other stakeholders</p> <p>Incentives and development extension assistance and advice</p>

	Encouraging maintenance of traditional practices that support PA objectives	Contributing to local and regional land use plans and benefits
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