

DENR Memorandum Circular

No. 16

May 13, 1993

SUBJECT : Guidelines on the Establishment and Management of Buffer Zones for Protected Areas

Pursuant to Republic Act. No. 7586, Department Administrative Order No. 25, S-1992, and in line with the policy of the government to protect, conserve and maintain the biological diversity, historical, cultural and aesthetic values of protected areas and to provide measures for their protection, these guidelines on the establishment and management of Buffer Zones are hereby promulgated.

Section 1. Title - This Circular shall be known as the "Guidelines on the Establishment and Management of Buffer Zones for Protected Areas".

Section 2. Policy - It is the government policy to preserve the biodiversity and sustain the use of its components within the protected areas through the establishment of Buffer Zones outside their boundaries thus giving an added layer of protection to the areas while at the same time providing regulated benefits and livelihood opportunities to the local communities.

Section 3. Objectives - The objectives of the establishment and management of Buffer Zone in protected areas shall include the following:

- 3.1 To serve as protective layer of the resources of the protected areas against encroachment, destruction and other illegal activities detrimental to their integrity.
- 3.2 To provide compatible use of areas and resources as well as development of alternative livelihood programs for communities within Buffer Zones.
- 3.3 To surround the protected area with natural habitats of some plants and animals whose activities may extend beyond its boundary, and at the same time allow the continuity of ecological processes that may influence the state of the protected area.

Section 4. Definition of Terms - As used in these guidelines, the following terms shall be taken to mean as follows:

- 4.1 **Buffer Zone** - refers to identified areas outside the boundary of a protected area pursuant to Section 8 of the NIPAS Act of 1992, that needs specific management consideration in order to prevent destruction of the said protected area.
- 4.2 **Tenured migrant communities** - refer to communities within protected areas which have actually and continuously occupied such areas for at least five (5) years before the designation of the same as protected areas and who are solely dependent therein for subsistence.

Section 5. Bases for Selection of Buffer Zones.

- 5.1 **Type of Extent** - In determining the type and extent of Buffer Zone needed for a certain protected area, the following factors shall be considered:
 - 5.1.1 The need of a threatened wildlife species for additional habitat that extends beyond the protected area boundary
 - 5.1.2 The need for additional protective functions, such as soil and water conservation and fire protection
 - 5.1.3 The need to provide sustainable use of land and resources thereat by local communities
 - 5.1.4 The need to protect marine and coastal protected areas that may be exposed to the effects of pollution and other forms of disturbances
 - 5.1.5 The presence of land and water resources such as grassland, brushland agricultural land, reforestation area, settlement site, forested land, fish pond, mangrove area and other wetlands
 - 5.1.6 The suitability of the area for production of crops preferred by the local communities and those adapted to the prevailing bio-physical conditions in the area

5.2 **Criteria on the Selection of Buffer Zone** - The following criteria shall be used in the selection of Buffer Zone;

5.2.1 **Ecological Criteria**

5.2.1.1 Importance to threatened species - The presence of habitats necessary for the survival of threatened species which inhabit the protected areas

5.2.1.2 Importance as wildlife corridors - The availability of an area which can serve as migratory route of wildlife during local or winter movement

5.2.1.3 Importance of wetlands - The selection of Buffer Zone for wetlands shall consider the following factors:

- a. Existence of adjacent watershed areas, catchment basins, tributaries, human settlements and threats
- b. Critical areas that need protection and enhancement to minimize adverse impact on the wetland and marine areas

5.2.1.4 Other ecological parameters. These shall include the ability of the site to increase the protection value of the protected area in terms of preventing flood, landslide, and pollution.

5.2.2 **Economic Criteria** - The potential capacity of the area to prevent the community from encroaching the protected area through the provision of alternative supply of resources such as forest and marine products for subsistence and livelihood. Economic opportunities shall include, among other things the production of cash crops, establishment of nurseries, orchidaria, plantation forest, wildlife farms, and aquaculture.

5.2.3 **Social Criteria** - The potential of the area to enhance local community participation for the purpose of increasing the level of support to, and acceptance of the principles of Buffer Zone management.

5.2.4 **Other Criteria**

The existence of traditional practices within the area, the keen awareness of local communities on conservation and the presence of relevant non-governmental organizations.

Section 6. Bufferzone Establishment - The following considerations shall be used in the establishment of Buffer Zone:

- 6.1 A Buffer Zone may be established either in terrestrial or aquatic areas or combination of both.
- 6.2 Buffer Zone shall be established in accordance with the provisions of Section 6 of DAO No. 25, series of 1992.
 - 6.2.1 If the proposed Buffer Zone is classified as Alienable and Disposable Land, and if there are no legal claimants on the said area, it shall be administered by the DENR.
 - 6.2.2 If the propose Buffer Zone is a Public Land under the jurisdiction of other government agencies, it shall be established after a Memorandum of Agreement has been forged between the DENR and the concerned government agency. The MOA may either stipulate the transfer of management jurisdiction to DENR, or the need for coordination in the planning and management of the Buffer Zone.
 - 6.2.3 If the propose Buffer Zone is within a legitimate private property, it shall be established by any of the following procedures:

For the DENR to explore the possibility of buying-back the property without prejudice to land exchange agreement and other mutually acceptable mechanism. Land owners occupying the proposed Buffer Zone shall be encourage to engage in conservation - friendly activities

- 6.3 Size of Buffer Zone - When necessary and practical, Buffer Zone shall cover the entire periphery of the protected area. Its size shall depend on the following considerations:
 - 6.3.1 The need of threatened wildlife species for an extended habitat
 - 6.3.2 The size of the local community that is dependent on the resources of the protected area and the degree of their dependence on these resources

- 6.3.3 The presence of potential threats due to possible encroachment, pollution, etc. from adjacent communities
- 6.3.4 The presence of ecological and geo-physical features that could enhance the conservation of the protected area

Section 7. Mapping - Depending on the size of the Buffer Zone, a map with appropriate scale shall be prepared for each proposed Buffer Zone including technical descriptions. The detailed map of each Buffer Zone including technical descriptions. The detailed map of each Buffer Zone shall reflect the existing land uses, their specific locations and extent and other relevant information.

Section 8. Land-Use Assessment - Ocular site inspection and land-use assessment shall be undertaken by an interdisciplinary team from the DENR in close coordination with the local government units, NGOs and members of the indigenous cultural communities and tenured migrant communities.

Section 9. Socio-Economic Assessment - The assessment shall include gathering of information on the resource needs and dependence, sources of livelihood, political/cultural/ social and religious beliefs, demographic data, standard of living of the local people and other relevant socio-economic data.

Section 10. Public Hearing - Upon identification and mapping of the proposed Buffer Zone area, a public hearing shall be conducted in accordance with Section 3 of DAO No. 25, S-1992.

Section 11. Proclamation - Proclamation documents including maps of the Buffer Zone area shall be prepared in accordance with Section 4 of DAO NO. 25, S-1992.

Section 12. Management of Buffer Zone - The management of Buffer Zone shall be consistent with the management objectives of the respective protected area as provided for in its management plan.

- 12.1 **Boundary Delineation** - Delineation of all proclaimed Buffer Zone areas shall be in accordance with Section 3 of DAO 25, S-1992.
- 12.2 **Management Zoning** - A Buffer Zone area may be divided into management sub-zones whenever appropriate.

If appropriate, a Buffer Zone may be divided into any of the following sub-zones;

- 12.2.1 **Built-up Buffer Sub-Zone** - This shall cover all settlements/communities and future resettlement sites for tenured migrants and/or indigenous cultural communities. Projects to be developed in this sub-zone shall be focused on community organizing and livelihood activities.
- 12.2.2 **Economic Buffer Sub-Zone** - This area shall include all unsettled/occupied grassland and brushland where cash crops may be planted as well as agricultural farm lots. Livelihood programs to be conducted in this area may include agro-livestock, silvi-pasture, crop diversification projects and wildlife farms.
- 12.2.3 **Forest Buffer Sub-Zone** - This area shall cover all forested lands. Allowable complementary activities that may be undertaken in this site shall include:
- 12.2.3.1 Regulated collection of diseased, over-mature, mature and naturally fallen trees
 - 12.2.3.2 Regulated tapping of gum/resin
 - 12.2.3.3 Regulated gathering of wildfruits and other minor forest products
 - 12.2.3.4 Regulated collection of forage, thatch and grasses
 - 12.2.3.5 Regulated hunting of non-protected species for subsistence
- 12.2.4 **Multiple-Use Buffer Sub-Zone** - This area shall cover all reforestation, Integrated Social Forestry, Agro-Forestry projects and other similar or related projects. Activities that may be conducted within this sub-zone shall include the following:
- 12.2.4.1 Establishment of fruit, rattan, bamboo or mangrove plantation projects
 - 12.2.4.2 Traditional fishing, hunting and collection of non-protected species
 - 12.2.4.3 Regulated gathering of firewood for domestic consumption
 - 12.2.4.4 Regulated timber harvesting for domestic use

12.2.4.5 Regulated recreation

12.2.4.6 Establishment of a visitor information center and commercial outlets of native goods produced by the local communities

12.2.5 **Aquatic Buffer Sub-Zone** - This shall cover portions of estuarine, marine and other wetlands. The following activities may be allowed in this sub-zone:

12.2.5.1 Regulated use of hook and line and net traps for subsistence fishing

12.2.5.2 Regulated collection of other aquatic resources

12.2.5.3 Regulated nature recreation

12.2.6 **Terrestrial Buffer Sub-Zone** - This shall cover areas designated to control erosion, reduce sedimentation and protect downstream investments. The allowable uses shall include those prescribed in the preceding sub-zones, if applicable.

12.4 **Community Participation** - The participation of local communities shall be organized during the planning and implementation of the Buffer Zone activities/programs.

12.5 **Restoration/Rehabilitation** - Open, denuded and unproductive portions of the Buffer Zone, shall be restored and rehabilitated using indigenous and endemic materials, following the guidelines set under DENR Memorandum Circular No. 20 S. of 1990.

Section 13. Prohibited Acts - The following activities shall be prohibited within buffer zones:

13.1 Expansion of appropriate areas without prior clearance by the DENR

13.2 Introduction of exotic plant and animal species which may endanger the Buffer Zone and protected area

13.3 Commercial collection and hunting of wildlife species

- 13.4 Construction of structures which are not in accordance with the approved management plan of the Buffer Zone
- 13.5 Occupying areas not assigned for occupancy
- 13.6 Hunting, destroying, disturbing and/or possessing any protected plant and animal species
- 13.7 Cutting down trees without prior permit from DENR
- 13.8 Commercial fishing and extraction of corals and other marine resources
- 13.9 Mineral prospecting and any other activity that would potentially destroy the integrity of the protected area

Section 14. Responsibilities and Coordination - The Protected Area Management Board (PAMB) and Protected Area Superintendent (PAS) shall administer the Buffer Zone as prescribed in Section 6 of DAO No. 25, S-1992.

Section 15. Penalties - Any infraction and violation or non-compliance with any of the provisions of these guidelines shall be penalized in accordance with the provision of the NIPAS Act.

Section 16. Repealing Clause - These guidelines shall revoke/amend all Circulars, Orders and/or guidelines inconsistent herewith.

Section 17. Effectivity - This Order shall take effect immediately upon approval.

ANGEL C. ALCALA
Secretary