

**Adopting the BMB Technical Bulletin on Guidelines in Safeguarding Caves Utilized for Ecotourism**

**WHEREAS**, The Philippines possesses a broad range of natural and cultural heritage tourism assets including caves which exhibit diverse biota, unique geological and hydrological features, as well as cultural significance that caters to the interests of visitors engrossed in caving and exploration;

**WHEREAS**, DENR Memorandum Circular No. 2007-04, Procedure in Cave Classification, states that Class II and Class III caves may be opened for ecotourism, provided that the caves' features and hazards, as well as the skill level of the visitors are well taken into consideration;

**WHEREAS**, Some caves in the country open to visitors are endangered due to insufficient protection and management strategies or lack thereof;

**WHEREAS**, The Philippines recognizes that ecotourism is a tool for sustainable development thus ecotourism as a concept and as strategy has provided an added value by being one of the most established revenue sources for the country, a non-extractive way of maximizing the beauty of our environment, supporting the communities by providing a source of livelihood and at the same time to protect the environment;

**WHEREAS**, Ecotourism involves various visitor use activities that have impacts on cave ecosystem and its resources, thus careful monitoring of impacts should be a primary activity of the site's overall management;

**WHEREAS**, The National Cave Committee (NCC) is the implementing body of the Cave Management, Protection and Conservation Program (CMPCP) under Section 11 of DENR Administrative Order No. 2003-29 (Implementing Rules and Regulations of RA 9072), which has components of Resource Management and Utilization, Visitor Management, Conservation, Education and Public Awareness;

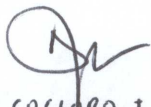
**WHEREAS**, Biodiversity Management Bureau and its partners from the National Cave Committee developed a policy entitled "Safeguards in Cave Ecotourism";


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**WHEREAS**, The policy aims to provide guidelines in terrestrial cave ecotourism through the provision of specific strategies in the management and conservation of caves to be utilized for ecotourism to ensure the sustainable use, development, management, protection and conservation of the cave and cave resources, for the enjoyment and benefit of the present and future generations;


**WHEREFORE, BE IT RESOLVED AS IT IS HEREBY RESOLVED**, The Guidelines in Safeguarding Caves Utilized for Ecotourism, as attached, is hereby adopted and recommended for dissemination to the public.

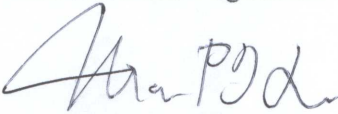
ADOPTED this 20 day of February 2017, at Quezon City, Philippines.


  
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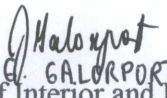
  
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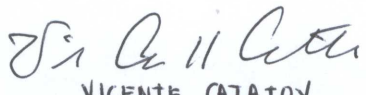
  
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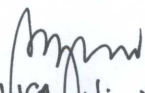
  
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**BMB Technical Bulletin**

**No. 2017 - 01**

**SUBJECT: GUIDELINES IN SAFEGUARDING CAVES UTILIZED FOR ECOTOURISM**

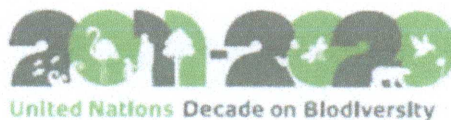
Pursuant to Republic Act No. 9072 (National Caves and Cave Resources Management and Protection Act), DAO 2013-19 (Guidelines on Ecotourism Management and Planning in Protected Areas), DMC No. 2007-04 (Procedure in Cave Classification), BMB Technical Bulletin No. 2014-03 (Prescribed Tools for Impact Monitoring of Ecotourism Activities) and other existing rules and regulations and support policies, this Technical Bulletin is issued for the guidance of all concerned in the development and implementation of ecotourism in caves.

**Section 1. Rationale.** Caves are considered unique, natural, and fragile ecosystems with important scientific, economic, educational, cultural, historical, and aesthetic values. However, many of our caves are endangered due to some inappropriate and uncontrolled use.

All entry into a cave, whether deliberate or not, can create disturbance that can lead to alterations of the cave environment. Any actions of visitors inside and outside of the cave will affect its condition as well as its resources and may deny the future generations enjoyment of this natural resource.

**Section 2. Objectives.** This Technical Bulletin aims to provide guidelines in terrestrial cave ecotourism. It will provide specific strategies in the management and conservation of caves to be utilized for ecotourism. Specifically, it aims to achieve the following objectives:

1. To identify and provide a range of environmental and social safety nets to address and minimize the impacts of ecotourism activities to sustain ecosystem services provided by caves and its resources;
2. To maintain the integrity of cave and its resources to foster economic benefits to host communities and ensure the satisfaction of visitors; and



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3. To encourage multi-stakeholder participation in the development and monitoring of ecotourism activities within and around the caves.

**Section 3. Scope and Coverage.** This Technical Bulletin shall cover the development and implementation of ecotourism activities inside and immediate vicinity of caves and cave systems, both in public and private lands, as well as protected areas, that have been classified as Class II and III caves pursuant to DENR Memorandum Circular No. 2007-04 on the Procedure in Cave Classification.

**Section 4. General considerations.** Cave is one of the most interesting natural resources which are home to specialized mineral formations with unique and diverse flora and fauna. However, despite their diversity and significance, most of the caves in the country are being exploited due to the lack of specific statutory protection, increased demand for recreational sites, treasure hunting, mining, pollution, illegal collection of cave resources, and rapid urbanization.

The development of caves for ecotourism purposes demands careful planning, including considerations for sustainability to guarantee optimal protection, conservation, sustainable use of caves and its resources while securing economic growth. Thus, it is needed to formulate guidelines that can ensure equilibrium between conservation of these fragile environments and sustainable economic development.

Caves shall be assessed and classified to determine the biological, geological, hydrological, paleontological, archaeological, historical and cultural value in accordance with the DENR Memorandum Circular 2007-04, *Procedure in Cave Classification*. Only Class III caves and specific sections of Class II caves may be opened for ecotourism. Caves should be subjected to appropriate zoning and management planning based on the assessment results.

Ecotourism and infrastructure development in and around caves shall be in accordance with the DENR Administrative Order No. 2013-19, *Guidelines in Ecotourism Planning and Management in Protected Areas* and DENR Administrative Order No. 2009-09, *Standard Design and Specification of Signs, Buildings, Facilities and Other Infrastructure that may be Installed and/ or Constructed within Protected Areas*.

Cave Guides shall be accredited in accordance with the *Rules and Regulations to Govern the Accreditation of Ecoguides, Ecotours, Ecolodges, and Ecotour Facilities* issued by the Department of Tourism in 2008 to ensure that the guides have the necessary caving and first aid skills. Only DOT – Accredited Cave Guides shall be permitted to bring guests in and out the caves.

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Detailed discussions on the management and conservation of caves utilized for ecotourism are provided in the attached Guidelines.

**Section 5. Specific considerations.** This Technical Bulletin includes safeguards pertaining to the protection of biological, archaeological, geological, hydrological, paleontological values.

- a. **Biological.** This covers general guidelines on cave biota protection, such as zoning parts of the cave with notable and/or sensitive taxa including a) vertebrates such as bats, swiftlets, herpetofauna, aquatic vertebrates, b) invertebrates such as insects and related arthropods, molluscs, aquatic invertebrates, c) microorganisms such as bacteria, fungi, and d) biota outside caves (fauna and flora in a cave's vicinity).
- b. **Archeological.** Caves have high cultural and scientific significance and since the appearance of modern man on the planet, caves have been very essential means of human's survival. Due to its economic potentials, there are some initiatives for the development of heritage or archaeological tourism. As such, studies have been done on several archaeological caves in order to measure its potentials for ecotourism. Careful planning should be done for effective and efficient management of caves to preserve cultural heritage.
- c. **Geological.** Caves offer diverse resources such as in economic, educational, scientific and recreational but they are highly vulnerable to some environmental conditions. Therefore, factors in the implementation of protective policies should include maintenance of natural hydrological system and avoidance of heavy developments in karst areas.
- d. **Hydrological.** Karst areas are characterized by hydrological features not present elsewhere such as springs, waterfalls, subterranean rivers, cave pools and dry streams that lose water underground (Kaufmann, 2007). These features define the hydrological processes within subsurface conduits such as caves which should remain undisturbed to maintain the life of the cave. Thus, careful management of flow and condition of fluids should be considered to attain successful ecotourism management of caves.
- e. **Paleontological.** Cave systems in the Philippines are dominantly karstic landscapes brought upon by dissolution of limestones. Sometimes, in cases of exceptional preservation, we may see traces of remains of these organisms, which are called **fossils**.

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Fossils are extremely valuable specimens for geologists and paleontologists because they are the only means of knowing what life forms existed in the geologic past thus they must remain intact within the cave premises to serve as learning specimen.

**Section 6. Visitor Management.** Ecotourism activity inside caves will definitely have negative impacts. The carrying capacity study shall be conducted to determine the level of visitation that a cave may sustain. Careful monitoring of visitor activity and their impacts is an important component of any ecotourism plan. This Technical Bulletin provides guidelines before, during, and after entry for cave guides, visitors, and managers such as: strict implementation of visitor registration system, wearing proper caving attire and providing informative tours to visitors

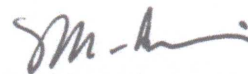
**Section 7. Sustainable Infrastructure.** Caves for ecotourism demands careful planning for compatibility of infrastructure and facilities for the protection and conservation of caves and cave resources. Basic infrastructure and facilities are constructed to meet the needs of visitors but should have minimum impact on the environment. Some considerations in the development of structures and facilities in caves are also provided in Annex A.

**Section 8. Public Awareness.** Well-designed communication strategies shall be developed to promote environmental education and public awareness to improve conservation efforts in caves.

**Section 9. Monitoring.** The DENR Regional/Field Offices shall conduct annual monitoring. However, for caves with influx of visitors, monitoring should be done at least twice a year, preferably before and after the peak season of visitor arrival.

**Section 10. Reporting.** Cave focal person shall submit an annual monitoring report that will include the analyzed data and recommended actions to the concerned Regional Director and copy furnish BMB Director.

This Technical Bulletin is hereby issued for the guidance of all concerned.



**THERESA MUNDITA S. LIM**  
Director