

**PROPOSED
GUIDELINES FOR THE SELECTION
OF BIOSPHERE RESERVES
IN THE
UNITED STATES**

**SUBMITTED TO THE U.S. NATIONAL COMMITTEE
FOR THE
MAN AND THE BIOSPHERE PROGRAM
BY THE
U.S. BIOSPHERE RESERVE DIRECTORATE**

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INTRODUCTION FOR THE BIOSPHERE RESERVE DIRECTORATE AND THE U.S. NATIONAL COMMITTEE

In December, 1993 the U.S. Man and the Biosphere Program (USMAB) convened a workshop of Biosphere Reserve managers and other interested parties at Estes Park, Colorado to develop recommendations for a Strategic Plan for the U.S. Biosphere Reserve Program. The Strategic Plan was drafted, approved by the U.S. National Committee for the Man and the Biosphere Program, and released in December, 1994.

The Strategic Plan included the establishment of a Biosphere Reserve Directorate, the membership of which comprises Biosphere Reserve managers and stakeholders, scientists, and agency Biosphere Reserve coordinators. Among the tasks assigned to the Biosphere Reserve Directorate is the implementation of a Strategic Plan objective to "Ensure that each terrestrial and coastal/marine biogeographical province has at least one Biosphere Reserve that is fully implementing the internationally defined roles of Biosphere Reserves." A component of the implementation strategy is the development of guidelines, based on UNESCO criteria, for the selection and expansion of U.S. Biosphere Reserves.

At its first meeting in August, 1994 at Gatlinburg, Tennessee, the newly formed directorate assigned one of its members to chair a committee to draft guidelines for consideration and future recommendation to the U.S. National Committee for MAB. The members of the committee included.

Terrence D. Moore, Executive Director of the New Jersey Pinelands Commission and member of the Directorate, Chair;

Dr. John G. Dennis, Acting Deputy Associate Director for Natural Resources, National Park Service;

Dr. Edward L. Towle, President, Island Resources Foundation;

Karen P. Wade, Superintendent, Great Smoky Mountains National Park;

Dr. Reed Noss, Department of Fisheries and Wildlife, Oregon State University.

The Committee met in Washington, D.C. in January, 1995 after reviewing recommendations for selection criteria that were made during the previous decade and a half by various parties. The selection guidelines contained in this proposal result from a two day workshop and the review of draft reports from that session.

Also present during the workshop were Dr. Hubert Hinote, Chairman of the Biosphere Reserve Directorate and Dr. William Gregg, a member of the National Committee. Mr. Dean Bibles,

Chairman of the National Committee and Mr. Roger Soles, Executive Director of the U.S. MAB Secretariat, visited during the session and provided valuable comments.

The committee also discussed the question of whether there should be a limit placed on the number of Biosphere Reserves in the United States. The members believe that it is premature to suggest a limit until such time as the U.S. National Committee determines that the reserve system in the U.S. is sufficient to provide an adequate representation of all biogeographical regions, and will achieve viable implementation of the U.S. Biosphere Reserve Program.

The committee recognizes that all proposals for designation of areas as Biosphere Reserves will not meet every guideline proposed herein, but areas may qualify in the future as deficiencies are addressed. Modified guidelines can be used for selecting areas for the new designation of "U.S. MAB Reserves." Such a designation may provide an incentive for organizations and agencies to continue to develop the necessary ingredients for full designation as a Biosphere Reserve.

The committee has appreciated the opportunity to assist in devising guidelines that it believes will lead to enhancing the implementation of the U.S. Man and the Biosphere Program.

BIOSPHERE RESERVES

The Man and the Biosphere Program (MAB) of the United Nations Scientific, Educational, and Cultural Organization (UNESCO) fosters the designation of Biosphere Reserves, a network of ecologically important areas throughout the world. The program promotes a sustainable balance between the conservation of biological diversity, economic development and the maintenance of local cultural values in such areas. A Biosphere Reserve is a place of recognized world importance where people, various levels of government and the scientific community work together to foster a harmonious relationship between our human needs and the environment in which we live. It is a cooperative venture involving all who have an interest in the region.

The National Committee of the U.S. Man and the Biosphere Program is responsible for nominating areas within the U.S. to UNESCO for designation as Biosphere Reserves. The Biosphere Reserve Directorate which is made up of Biosphere Reserve managers, persons with economic and other interests, scientists, and coordinators of the Biosphere Reserve Program in a variety of agencies, reviews nominations for new reserves and expansions of those already designated. The Directorate recommends whether the U.S. National Committee should consider an area's nomination.

UNESCO provides a conceptual framework which characterizes the spatial and functional relationships of a Biosphere Reserve. Normally, three types of areas, whether they be comprised of land or water, are included in a Biosphere Reserve. These are the Core, the Buffer Zone and the Transition Area. In the U.S. these relationships are respectively referred to as "Protected Areas," "Sustainable Use Areas," and "Cooperative Areas."

The Protected Area(s) are often publicly or privately owned conservation lands such as wilderness areas or nature preserves. These provide a location where ecosystems which are minimally disturbed can be monitored and maintained for the future.

Sustainable Use Areas often adjoin and may surround the Protected Area. Here, research, education, recreation, and a variety of economic activities are conducted based on agreed upon ecological principles, and within a legally based management framework.

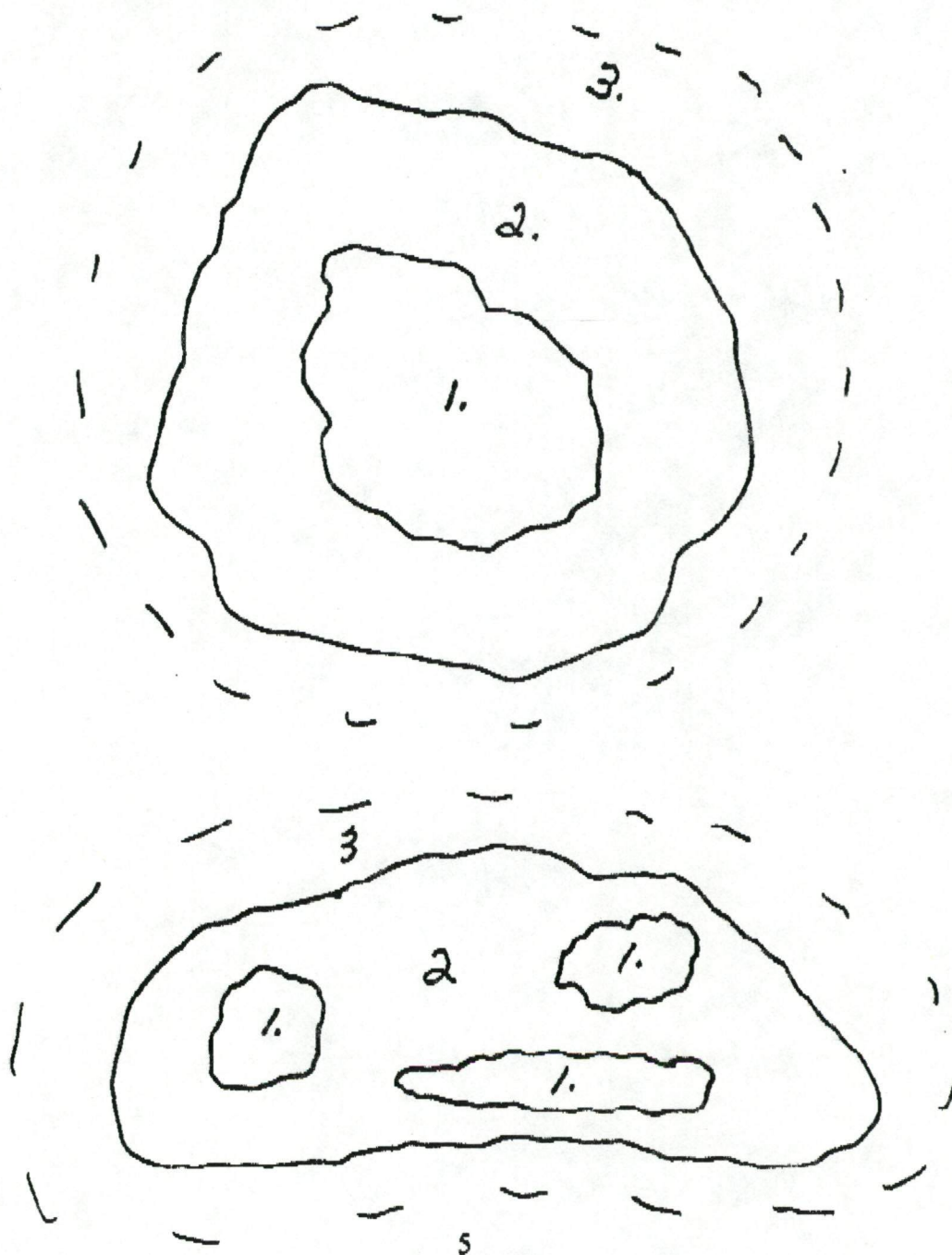
Cooperative Areas are the third component in the relationship. In these areas all who have an interest in the Biosphere Reserve seek to link conservation, economic development, and cultural values. Participants include those that manage the land and water resources, local governments, economic interests, nongovernmental and cultural groups and organizations, and most important, people who live and work in the region.

Designation of a Biosphere Reserve in the United States results from a voluntary decision of those desiring to participate in the program. It does not affect the management prerogatives of those managing the reserve, or require additional regulation of the uses of properties in cooperation areas.

The diagrams below present examples of the three areas typically found in a Biosphere Reserve.

KEYS

1. Protected Area(s) 2. Sustainable Use Area(s) 3. Cooperative Areas(s)



BIOSPHERE RESERVES IN THE UNITED STATES

In 1994, the U.S. Man and the Biosphere Program released its Strategic Plan for the U.S. Biosphere Reserve Program. It sets forth the mission of the program as follows:

"The Mission of the United States Biosphere Reserve Program (USBRP) is to establish and support a U.S. network of designated biosphere reserves that are fully representative of the biogeographical areas of the United States. The program promotes a sustainable balance among the conservation of biological diversity, compatible economic use, and cultural values, through public and private partnerships, interdisciplinary research, education and communication."

Biosphere Reserve designation is a process that involves international recognition of a network of ecosystems of world importance. Designation facilitates the development of a framework for communications among and between the public, scientists, and all levels of government. The framework promotes the identification and articulation of commonly held human values relating to an ecosystem and its protection and use. The purpose of the framework is to facilitate conservation, research, education, and compatible sustained use in the Reserve in order to maintain long-term ecosystem integrity through cooperative ventures.

Biosphere Reserves in the United States should:

- 1 Be representative of biogeographical regions of the country;
- 2 Exhibit biological diversity and significance;
- 3 Be at an ecosystem level of large enough scale to maintain ecological integrity of the reserve;
- 4 Contain and have maintained one or more permanently protected areas, and sustainable use areas, as well as cooperative areas providing for appropriate levels of human interaction reflecting commonly shared values which sustain the ecosystem in a harmonious relationship;
- 5 Contain and have maintained an adequately equipped organizational framework to ensure conservation, research, education, and ecologically compatible sustained use;
- 6 Be subject to clearly articulated achievable goals and objectives, and strategies which implement the framework and facilitate conservation, research, education, and ecologically sustainable uses;

7 Result from a process which involves the public in planning for the designation, and implementing the purposes of the Biosphere Reserve.

GUIDELINES FOR SELECTION OF BIOSPHERE RESERVES IN THE UNITED STATES

Individuals and organizations seeking assistance in preparing an application for designation of a Biosphere Reserve in the U.S. should contact the U.S. Man and the Biosphere Program Secretariat, the address and telephone number of which appears in the inside front cover of this brochure. The Secretariat will provide the necessary UNESCO application forms and instructions for filing the application. Additional information on how the application will be reviewed by the Biosphere Reserve Directorate and the U.S. National Committee for the Man and the Biosphere Program will also be shared.

In reviewing applications for designation, the Biosphere Reserve Directorate will consider the guidelines set forth below in making its recommendation for consideration to the U.S. National Committee. The U.S. National Committee will review the recommendation of the Biosphere Reserve Directorate prior to making a determination as to whether it will nominate the proposed Biosphere Reserve to UNESCO.

Proposals for the designation of a new Biosphere Reserve in the United States should specifically address each of the following guidelines for selection. Proposals for the expansion of existing designated Biosphere Reserves should also address the guidelines or, where deficient, indicate the steps that the managing entity of the reserve will take to work towards achieving the elements of the guidelines in the future.

I.

Representative Guideline

The proposal should indicate the biogeographical region and demonstrate the level of representation of the region exhibited by the proposed Biosphere Reserve. Where the proposed reserve is located in a biogeographical region where there are one or more existing Biosphere Reserves, the proposal

should demonstrate how the proposed reserve would significantly add to the level of representation of the region by filling gaps not encompassed by the existing reserve(s).

II.

Biological Diversity and Significance Guidelines

The proposal should demonstrate that the area(s) being nominated as a Biosphere Reserve is biologically diverse by providing data and literature references relating to the characteristic biological communities, ecosystem processes, and species diversity. Information relating to genetic diversity within species should be provided where available. The proposal should also set forth the reasoning why the area is significant in terms of biological diversity representative of the biogeographic region.

III.

Ecosystem Level/Scale Guidelines

The proposal should include: (a) sufficient protected area(s) that are representative of the biologically diverse and significant ecological resources of the proposed reserve; (b) sufficient delineated sustainable use areas that demonstrate local efforts to sustainably manage human uses and activities; and (c) a description of cooperative areas that contain related ecosystem components or otherwise have a relationship to the protected area(s) and sustainable use area(s) proposed for nomination. The proposal should also demonstrate that the Biosphere Reserve (including cooperation areas) includes cultural populations and economic activities related to the proposed reserve. When possible, the proposal should show the actual boundaries or precise narrative descriptions of the cooperative area(s) in which potential additions to protected or sustainable use areas may occur in the future.

Reserve boundaries to the greatest extent possible, should be delineated by using ecologically based units (hydrologic, watershed, biological communities, etc.) and take into account cultural, social, and economic similarities and interests.

IV.

Protected Area/Outer Area Guidelines

The proposal should demonstrate that there are sufficient mechanisms in place to ensure the long-term protection and integrity of the protected area(s). Protected areas secured by legal mechanisms will be viewed as the optimal demonstration. In the sustainable use area(s), the proposal should provide an assessment to demonstrate that there are adequate legal mechanisms in place, or proposed, to optimize the pursuit of ecologically compatible sustained use. In the

cooperative area(s) the proposal should describe the leadership and cooperation mechanisms that will help facilitate participation of local communities and interested parties in conservation and sustainable use of the region.

V.

Organizational Framework Guideline

The proposal should provide an assessment to demonstrate that an adequately equipped and representative organizational framework exists to implement the purposes of the proposed Biosphere Reserve. Organizations within the reserve should have diverse, but generally compatible interests, exhibit financial stability, have records of past achievement, and share common goals and objectives for the proposed reserve. The roles and responsibilities of the managing entities should be clearly defined. The organizations identified should jointly be capable of achieving the conservation, research, education, and ecologically compatible sustained use missions of the proposed reserve.

VI.

Goals and Objectives Guideline

The proposal should set forth specific goals and objectives for the proposed reserve and the strategies to achieve same. Current and future organizational assignments should be identified for carrying out necessary programs, research, and other implementation tasks.

VII.

Public Participation Guideline

The proposal should demonstrate that there have been adequate levels of public participation in the steps leading toward the submission of the nomination of the proposed Biosphere Reserve, and how the public will continue to participate in the implementation of the goals and objectives for the reserve. Such participation may include meetings, workshops, and other communications and participatory mechanisms that promote a wide range of public understanding and support for the proposed Biosphere Reserve, and its place in the world network of Biosphere Reserves.

BIOSPHERE RESERVE SELECTION PROCESS

The Biosphere Reserve Directorate reviews nominations for new Biosphere Reserves and forwards its recommendation to the National Committee of the U.S. Man and the Biosphere Program. The National Committee considers the recommendation of the Directorate and determines whether the proposed Biosphere Reserve should be nominated to UNESCO for designation. Proposed Biosphere Reserves may contain a single site or multiple sites for designation as a regional Biosphere Reserve. The proposed Biosphere Reserve must meet the guidelines for designation of U.S. Biosphere Reserves and the UNESCO criteria for selection and establishment of Biosphere Reserves. Organizations desiring to propose a new Biosphere Reserve, or expand and consolidate an existing Biosphere Reserve, should contact the U.S. Man and the Biosphere Program Secretariat for appropriate application forms and further guidance.

The review of an application for designation will include the following:

1. Submission of Feasibility Assessment

A feasibility assessment provides the basis for selecting Biosphere Reserves for nomination. The assessment is also required for the substantial expansion of an existing reserve through the addition of complementary sites, and for the consolidation of two or more reserves to form a single regional reserve. The assessment should describe the biogeographical region of the Biosphere Reserve and provide information relating to representativeness, natural features, ecosystems, biological diversity, and human cultural and economic traditions and activities. A map, describing the proposed reserve, should be submitted showing the boundaries of the protected area(s) and sustainable use area(s). The approximate location of the cooperative area should be described graphically or in narrative form. The assessment should also describe existing and future cooperation efforts within the described area and those that may exist or be undertaken outside the described area. Narrative descriptions of mechanisms for protection, managed sustainable use and cooperation must accompany the map. The assessment should provide an overview of the organizational framework that will carry out the purposes of the Biosphere Reserve, and the respective roles and responsibilities of cooperating participants.

The assessment should set forth the goals and objectives for the proposed reserve and strategies for implementation. Approved and proposed plans or inter-organizational agreements to achieve the purposes of the reserve should accompany the submission. Steps that have been taken to encourage public participation in the nomination process should be described with examples (news clippings, workshop summaries, statements of support, etc.) included. Information should also be provided regarding plans for continuing public participation in the activities of the reserve.

A letter of endorsement from the administrator of each protected area and sustainable use area proposed for nomination is required. Such endorsements must be signed by the individual

authorized to accept the Biosphere Reserve designation. Letters of support from government agencies, including local governments, nongovernmental organizations, community groups, and other interested parties should also be enclosed.

2. Biosphere Directorate review

The Directorate will conduct a meeting to review the application and supporting documentation. Applicants will be notified of the date, time and place of the meeting. Should the Directorate determine that the application is not complete enough for a determination for recommendation to the National Committee, the Chair of the Directorate will notify the applicant and request information necessary for completing the review. The Directorate may also conduct a site visit and meet with local representatives and other parties, as appropriate. Upon completion of its review, the Directorate will issue a recommendation to the National Committee and inform the applicant of its findings.

3. National Committee Review

The National Committee of the U. S. Man and the Biosphere Program will meet to review the feasibility assessment and the recommendation of the Biosphere Reserve Directorate. After completing its review, the National Committee will nominate the proposed Reserve to UNESCO, return the application to the Directorate for further review, or determine that the proposed reserve should not be forwarded as a nomination to UNESCO. Following approval by the National Committee, a notice of the availability of the feasibility assessment will be published in the U.S. MAB Bulletin. Copies of the assessment will be made available to the public upon request should the proposed reserve be nominated by the National Committee

4. UNESCO MAB Bureau Review

Once a nomination form with supporting documentation has been forwarded by the National Committee, the UNESCO MAB Secretariat will arrange for technical review and approval by the MAB Bureau. Following the Bureau's approval, the Director-General of UNESCO signs an official designation certificate for each site which is forwarded to the U.S. MAB Secretariat for transmittal to the Biosphere Reserve manager.