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Biosphere Reserves and the U.S. MAB Program

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Summary

Since 1972, the United States has participated in the Man and the Biosphere Program (MAB), coordinated by the United Nations Educational, Scientific and Cultural Organization (UNESCO). Each participating nation establishes its own domestic MAB program, which includes a wide variety of ecosystem and biological research. As part of the U.S. MAB program, 47 biosphere reserves have been established in the United States. These sites are part of a network of 356 such areas worldwide, in which scientists conduct research and communicate about their findings. Biosphere reserves are nominated by the country in which they are located. They are usually areas protected for domestic purposes, such as national parks, and no change in jurisdiction or sovereignty occurs as a result of recognition as biosphere reserves. However, controversy has arisen over the connection to the United Nations and fears by some commentators and organizations that U.S. sovereignty could be affected. The American Land Sovereignty Protection Act has been introduced in the 104th, 105th, and 106th Congresses to address these concerns by requiring congressional approval of nominations of federal lands for recognition under international programs, including the MAB program, and by placing other conditions on U.S. participation in the program. The American Land Sovereignty Protection Act passed the House in 1997 (H.R. 901) and on May 20, 1999 (H.R. 883), and the Senate held hearings on S. 510, a companion bill, on May 26, 1999. The legislation would also affect U.S. participation in the World Heritage Convention, under which World Heritage sites are recognized, and which include some of the sites recognized as biosphere reserves; for more information on that program, see CRS Report 96-395, *World Heritage Convention and U.S. National Parks*. This report will be updated periodically as legislative action or other activity requires.

Background. "Biosphere Reserve" is a term denoting an area that has been nominated by the locality and the country in which it is located for participation in the worldwide Biosphere Reserve Program under the Man and the Biosphere Program (MAB), and accepted for such recognition by the United Nations Educational, Scientific and Cultural Organization (UNESCO). Areas are nominated by a country and recognized by UNESCO on the basis of their significance for research and study of representative

biological regions of the world. The United States has 47 biosphere reserves, part of a worldwide network of 356 biosphere reserves in 90 countries.

Biosphere Reserve recognition does not convey any control or jurisdiction over such sites to the United Nations or to any other entity. The United States and/or state and local communities where biosphere reserves are located continue to exercise the same jurisdiction as that in place before designation. Areas are listed only at the request of the country in which they are located, and can be removed from the biosphere reserve list at any time by a request from that country.

However, concerns have been raised about the connection of this program to the United Nations, and the belief that the United Nations might attempt to exercise control over U.S. lands. Responding to these concerns, legislation has been repeatedly introduced over the past several years that would require congressional authorization of all nominations of biosphere reserve sites, and would assure that commercial uses of such sites would not be restricted by their inclusion in the program. This legislation, The American Land Sovereignty Protection Act, passed the House in the 105th and 106th Congresses and has been the subject of recent hearings in the Senate. Proponents of the legislation argue that the Congress has a constitutional responsibility for decisions on management of federal lands, and that the MAB program is not statutorily authorized. Administration spokespersons, in opposing this legislation, have stated that it is unnecessary in that U.S. sovereignty and/or control of U.S. lands are not affected in any way by participation in the MAB program or by recognition of biosphere reserves. In addition to this legislation, amendments were passed in the 105th Congress to the Interior Department and several other appropriations bills to prohibit obligation or expenditure of funds for the MAB Biosphere Reserve program and the World Heritage program.

The U.S. MAB Program and Biosphere Reserves. The Biosphere Reserve network was established in 1970 as one program area of the Man and the Biosphere program of UNESCO, which operates through independent national committees in each of the 128 participating countries. The U.S. MAB program operates under the U.S. National Committee, administered in the State Department, which has traditionally coordinated 6 "directorates" studying various kinds of environmental and biological regions and issues. One of these is the Biosphere Reserve Directorate. The U.S. MAB National Committee is composed of representatives from supporting U.S. government agencies. The research directorates consist of academic scientists, government researchers, and representatives of appropriate private research organizations, and meet periodically to design cooperative research projects relevant to the subject area of their directorate and to report and discuss research results.

The purpose of the Biosphere Reserve program is to promote cooperation and communication among a worldwide network of areas that would include all the major ecosystem types globally, with sites identified as areas where research on ecological concerns--especially the impacts of human activity on ecological systems--could be performed. A major goal of the network is to allow comparative work in various countries in similar areas to assess how the systems work and how they can be used productively without destroying their essential ecological properties and life-support potential.

Criteria for Biosphere Reserves. In order to facilitate research on ecosystems in various stages of protection and development, and to qualify for MAB recognition,

biosphere reserves meet these criteria: (1) they have a legally protected core area relatively free from outside or human activity--in the United States, usually an already designated park, wilderness or wildlife refuge area; and (2) there is a "buffer zone" or zones, surrounding or contiguous to the core area, where human activity is carried out, but generally at low/rural intensity and types of activity that are compatible with conservation objectives, such as recreational activity within a park. It is generally expected that there would also be transitional areas outside the buffer zone where human activity is more intensified, but presumably with some cooperative effort underway in these adjacent communities to achieve sustainable development in which conservation and economic development are jointly pursued according to the values and guidance of the local community.

In the case of most biosphere reserves within the United States, all of the land within the reserve is generally federal property within a national park, national forest or other federal land, and therefore, U.S. biosphere reserves rarely delineate the core or buffer areas. Moreover, in the United States, generally the transitional area/zone of cooperation is not geographically delineated but is conceptually defined as the area adjacent to a biosphere reserve where agencies would expect to conduct cooperative efforts with local participation toward achieving goals such as sustainable economic development.

When a local community, state, or national MAB committee begins to pursue recognition of the area as a biosphere reserve, these criteria are usually already being met. It is not expected that steps will have to be taken to create core areas or change activity patterns after recognition. However, local communities are encouraged to develop cooperative mechanisms to maximize opportunities for the research and information focus of the Biosphere Reserve program.

Designation Process for Biosphere Reserves. An area in the United States to be considered for recognition as a Biosphere Reserve is nominated--only with the support of the local community--and the nomination is considered by the U.S. National Committee. Documentation on the recommended area and how it meets the criteria of the Biosphere Reserve system is assembled locally and forwarded by the U.S. MAB program to the International Coordinating Council (ICC) of the MAB Programme in Paris, which considers the recommendation and makes a decision, which is conveyed to the U.S. MAB Program.

Policy Implications of Designation/Recognition. There are no legally binding requirements on countries or communities regarding the management of biosphere reserves. Full sovereignty and control over the area continues as it was before recognition. The main effect of recognition is to publicize the inclusion of an area in the Biosphere Reserve Network, thus making it known that research on the area's ecosystem type and impacts of adjacent human development on the area is appropriate as part of an international network of such research. It is expected that research in such areas--conducted mainly by private and/or government scientists--will be shared through the Biosphere Reserve Program in order to maximize benefits of information exchange.

Funding for the U.S. Biosphere Reserve program is provided by pooled resources from several participating federal agencies; totaling some \$225,000 in FY 1996, funding goes almost entirely to U.S. programs and local organizations, with some relatively small amounts supporting research by U.S. scientists in other countries, or assisting developing

country scientists to attend MAB meetings. Some 15 U.S. government agencies have made contributions to the U.S. MAB program, usually at the level of \$15,000 to \$75,000; these funds are used to fund research, mainly by U.S. scientists, much of it in areas that are not biosphere reserves. The program is administered by the U.S. MAB Program, housed in the State Department; funding for State Department participation has ranged from \$185,000 to \$355,000 per year, and has recently been spent primarily on U.S. participation in building a global species inventory. There are generally no funding implications when areas are recognized as biosphere reserves, since these are generally already being managed as federal or state parks or other protected areas. At present, the controversy over the Biosphere Reserve program has created considerable hesitancy to fund additional research, and there are no new proposals being made for research under the U.S. MAB program.

U.S. Legislation. Both the MAB Biosphere Reserve Program and the World Heritage Program, due to their UNESCO connection, have raised the suspicion of a number of commentators and organizations who are concerned that designation could result in impingement of U.S. sovereignty or could result in unacceptable limitations on uses of the land. (See also CRS Report 96-395 F, *World Heritage Convention and U.S. National Parks*). Responding to these concerns, H.R. 901, the American Land Sovereignty Protection Act, was introduced in the 105th Congress, and passed the House in October 1997. A nearly identical bill, H.R. 883, was introduced in March 1999, and passed the House on May 20, 1999. A companion bill, S. 510, was the subject of hearings by a Senate Energy and Natural Resources Committee subcommittee on May 26, 1999.

The current bills, much like their predecessors, provide conditions that apply to nominations of sites to the Biosphere Reserve or World Heritage programs. In particular, it would prohibit federal officials from nominating any lands in the United States for recognition as a Biosphere Reserve under the MAB program without express approval by Congress, and would require that all existing Biosphere Reserves would cease to be in effect unless they are specifically authorized by law by a certain date. It would also require that Biosphere Reserves consist solely of lands owned by the United States and subject to a management plan that "specifically ensures that the use of intermixed or adjacent non-Federal property is not limited or restricted as a result of that designation." Additional reporting requirements would be imposed, for instance to account for money expended and to describe disposition of complaints. It appears that passage of this legislation could significantly limit U.S. participation in the MAB Biosphere Reserve program.

An alternative bill, H.R. 1801, was introduced in 1997 by supporters of the U.S. MAB program, but has not been reintroduced in the current Congress. It would "authorize the United States Man and the Biosphere Program, and for other purposes." This legislation would have established statutory authority for the MAB Program, providing for its operation much as it is currently constituted, with designation by the President of a lead agency and authorizing other federal agencies to participate, and providing for congressional notification and oversight.