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“LAND USE PLANNING AND ZONING”

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INTRODUCTION

I will start by thanking the CEC for this opportunity to address such a prestigious group.

Although it may seem obvious, “Sustainable Tourism in Natural Areas in North America” requires there to be such natural areas available for tourism.

We are fortunate that there are many natural areas in North America which are blessed with special biological, ecological or cultural interests –many of these have already been specifically designated as protected areas. These are often the areas most desirable for tourism.

So far in this dialogue we have learned the basic elements of ecotourism, how it has evolved and how it functions as an economically feasible supplement to mainstream or traditional tourism. We now turn to an analysis of legislation for the special needs of ecotourists and local communities in natural areas. How do we develop plans for land usage including strict zoning that will attract and accommodate the ecotourist while conserving natural resources and benefiting local people?

It is this use designation which is the focus of this presentation. In other words, I am going to deal with one of the Policy/Regulatory Frameworks for ecotourism. However, remember that Land Use Planning and Zoning is only one of many legal tools available for the implementation of sustainable tourism in natural areas.

Planning for environmentally sustainable tourism can occur at the international, national, regional, and local levels. Specifically, Land Use Planning and Zoning for tourism development and conservation initiatives allows governments at the Federal, State or Provincial, Tribal and local levels to plan for sustainable tourism implementation as well as the monitoring and managing of ecotourism projects. We can also imagine an international and regional role as well. As examples we can look on the international level at the work of the IUCN, UNESCO’s WHC and the MAB programs. On the regional level, good examples may be the Mundo Maya program between Mexico and Central America, or US-Mexico joint cooperation on adjacent natural protected areas in the border region.

Why is this planning and zoning necessary? Just as we have discussed that a globally recognized definition of ecotourism must be adopted, it is also necessary to establish certain ground rules and objectives for ecotourism development. Tourist development of this nature should not be allowed to destroy the resource upon which it is based.

¹ These draft notes reflect a brief review of the topic and do not constitute a detailed research effort.

Development should be of a sound ecological and cultural nature, meeting the needs of the host community with regards to improving the standard of living for the majority, in both the short and long term. Furthermore, the needs and demands of the actual and potential tourist must be satisfied in order for the industry to develop.²

Definitions

Zoning = can be aesthetic, cluster, density, conditional, or by contract. It is often represented on zoning maps. It is meant to predesignate uses of land. Zoning limits or restricts an owner's use of land. Zoning originated with limits on the location of noxious uses of land such as slaughterhouses. It has now expanded to comprehensively cover all uses. Zoning is used to restrict use, height, size, bulk, population density, setbacks to allow for air and light, as well as limitations on signage. Zoning laws are usually enforced at the local level and enforcement is usually accomplished by withholding permits for uses that are not consistent with a zoning restriction.³

Land Use Planning = "is a generic term used to describe activities such as zoning, control of real estate developments and use, environmental impact studies and the like."⁴

Land use regulations entail more and different restrictions than zoning – they include the panoply of environmental statutes regulating wetlands, clean air, water pollution, filling of navigational waters, and historic preservation. The statutes all derive from the same source as zoning – government's inherent power to promote and protect the health, safety, and welfare of its citizens.⁵

Land Use Planning and Zoning is used in many jurisdictions for many reasons. Integrated land use planning would incorporate plans to address economic, sociocultural and ecological concerns.

Land use planning and regulation is used to concentrate development and use in appropriate locations and preserve high-valued or unique ecosystems such as wetlands or coastal regions. Land use planning involves establishing desired goals; evaluating the land's potential; identifying alternatives for achieving goals based on this potential; and controlling the amount, type, and timing of development based on environmental and economic characteristics of the land. Land use restrictions can be used to regulate indirectly the number of tourists by limiting facilities.⁶

Zoning for ecotourism is difficult, as it requires us to meet both environmental preservation objectives and public use recreation objectives. These are dual, sometimes contradictory components. For this reason, I would assert that Land Use Planning and Zoning related to sustainable tourism in natural areas must be comprehensive and balance six factors:

- Nature/ecology
- Sociocultural interests
- Economic interests
- Residential use
- Domestic tourism markets
- International Tourism markets

² McLaren, Deborah (1997) Rethinking Tourism and Ecotourism: The Paving of Paradise and What You Can Do to Stop It Kumarian Press, at the Prologue.

³ Elben, Ruth and William Elben (Eds.) (1994) Encyclopedia of the Environment Houghton Mifflin Company, at 828-30.

⁴ Black's Law Dictionary (1983) Fifth Edition at 455.

⁵ Elben and Elben (1994), at 830

⁶ EPA/SEDESOL et al (1995) "Tourism," at 19.

This is not a new idea. In its biosphere reserves, **Mexico has pioneered the use of a zoning system** that allows use of parks for tourism and economic productivity and yet keeps other areas off limits except for scientific study. At the First World Conference on National Parks held in Seattle in 1962, Mexican scientist Enrique Beltrán suggested that the conflict between preservation and use could be avoided through such a zoning system . . . and would serve as a way of conserving the country's natural wealth while at the same time using it in a sustainable manner. A decade later, zoning had become the dominate approach to wilderness protection in the developing world.⁷ Mexico now has almost a dozen reserves with special designation from the UNESCO Man and the Biosphere Program (MAB) network. Unlike national parks, such biosphere reserves allow people to continue to live and work in protected natural areas. In addition to biological surveys and ecological studies, research is encouraged on sustainable resource use in order to encourage the local community to participate in protection of the wildlife. Residents hope to benefit from a "sustainable development" model that includes ecotourism. These biosphere reserves have three complementary roles: conservation, logistics and development. Furthermore, **a biosphere reserve consists of three zones, just as Enrique Beltrán had suggested:** a transition zone, in which the sustainable use of resources by locals is permitted, a buffer zone, in which all activities are severely limited and a core zone which is strictly for conservation and research purposes only. It is recognized that these reserves have a large potential for tourism based on the natural environment and ecotourism.

TABLE ⁸

Zones	Conservation Purpose	Logistic Support Purpose	Development Purpose
Core Zone	Strict protection of genetic resources, species and ecosystems.	Non-destructive research, environmental observation and monitoring.	Neither development nor significant human settlements are allowed.
Buffer Zone	Surrounds and insulates the core from impacts.	Research, environmental education and training.	Integrated conservation and development projects that are compatible with protection of the core are allowed.
Transition Zone	Must contribute to conservation.	Research is to be focused on finding models of compatible sustainable development.	Supports human settlements. Sustainable development is allowed, intensive use is not. Regardless, because of the potential for impacts on the buffer or core zones, development should be monitored to encourage environmentally sound activities.

⁷ Simonian, Lane (1995) Defending the Land of the Jaguar University of Texas Press, at 134-6.

⁸ Table prepared from Furze, Brian, Terry de Lacy, and Jim Birkhead, Culture, Conservation and Biodiversity: The Social Dimension of Linking Local Level Development and Conservation through Protected Areas John Wiley & Sons (1996), at 207 - 17; and from Price and Humphrey (eds.) Application of the Biosphere Reserve Concept to Coastal Marine Areas UNESCO/IUCN (1993), at 1 - 7.

DISCUSSION

With sustainable tourism as our goal, Land Use Planning and Zoning may be used for three main purposes, which will each be discussed in turn (drawing heavily on the previous work of the IUCN):

- Setting aside parks and reserves. This includes the creation, preservation or conservation of the tourism site or attraction. It is not limited to land but can also be applied to setting aside important inland and coastal water areas
- Site planning and management This may be used to resolve conflicting use demands, limiting times of use, controlling distance between uses, etc.
- Adoption of controls to mitigate harm Such as keeping tourists from getting too close to whales, preventing the removal of artifacts, etc.

1. Setting aside parks and reserves

The World Conservation Monitoring Centre provides information on conservation and sustainable use of natural resources, and helps others to develop information systems of their own. Its definition of a protected area is:

An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.

Protected natural areas are created for many purposes and tourism is only one:

- Scientific research
- Wilderness protection
- Preservation of species and genetic diversity
- Maintenance of environmental services
- Protection of specific natural and cultural features
- Education
- Sustainable use of resources from natural ecosystems
- Maintenance of cultural and traditional attributes
- Tourism and recreation

IUCN has defined a series of protected area management categories based on management objective. Such categorization constitutes a form of zoning. Definitions of these categories, and examples of each, are provided in its Guidelines for Protected Area Management Categories. The six categories are:

- **Strict Nature Reserve:** CATEGORY Ia: protected area managed mainly for science
- **Wilderness Area:** CATEGORY Ib: protected area managed mainly for wilderness protection
- **National Park:** CATEGORY II: protected area managed mainly for ecosystem protection and recreation
- **Natural Monument:** CATEGORY III: protected area managed mainly for conservation of specific natural features
- **Habitat/Species Management Area:** CATEGORY IV: protected area managed mainly for conservation through management intervention
- **Protected Landscape/Seascape:** CATEGORY V: protected area managed mainly for landscape/seascape conservation and recreation
- **Managed Resource Protected Area:** CATEGORY VI: protected area managed mainly for the sustainable use of natural ecosystems⁹

⁹ From IUCN (1994). Guidelines for Protected Areas Management Categories. IUCN, Cambridge, UK and Gland, Switzerland, at 261.

National protected area systems

At the national level, a variety of designations is used, and will continue to be used. Because of this, it is inevitable that the same designation may mean different things in different countries; and different designations in different countries may be used to describe the same category of protected area. This is one of the key reasons for defining and using at the international level a system of categories identified by management objectives in a system that does not depend on titles. This category system is intended to operate in the same way in all countries so as to facilitate the collection and handling of comparable data, and to improve communication between countries.¹⁰

Regional Variation

The conditions for the establishment and management of protected areas vary greatly from country to country and even from region to region.¹¹

Size of Protected Areas

The size of an area should reflect the extent of land or water needed to accomplish the purposes of management. For example, for a strict nature reserve or wilderness area, the size should be that needed to ensure the integrity of the area to accomplish the management objective of strict protection, either as a baseline area or research site, or for wilderness protection. For a National Park, the boundaries should be drawn sufficiently widely that they contain one, or more, entire ecosystems which are not subject to material modification by human exploitation or occupation.¹²

2. Site planning and management

Multiple Classifications

Protected areas of different categories are often contiguous; sometimes one category 'nests' within another. This is entirely consistent with the application of the system, providing such areas are identified separately for accounting and reporting purposes. Although there are obvious benefits in having the entire area within the responsibility of one management authority, this may not always be appropriate; in such cases, close cooperation between authorities will be essential.¹³

Zoning within Protected Areas

Though the primary purposes of management will determine the category to which an area is assigned, management plans will often contain management zones for a variety of purposes that take account of local conditions. However, in order to establish the appropriate category, at least three-quarters and preferably more of the area must be managed for the primary purpose; and the management of the remaining area must not be in conflict with that primary purpose.¹⁴

Zoning within protected areas is used to address conflicts between uses:

1. Resorts versus wilderness (e.g. Mammoth Lakes where a Canadian developer is building a massive resort)
2. Hikers versus motor bikes and mountain bikes
3. Cross-country skiers versus snowmobiles
4. Off-road vehicles and jet skis versus undisturbed enjoyment and solitude of nature

¹⁰ IUCN 1994

¹¹ IUCN 1994.

¹² IUCN 1994.

¹³ IUCN 1994.

¹⁴ IUCN 1994.

5. Hunting versus non-consumptive observation of wildlife

Management Responsibility

Governments have a fundamental responsibility for the existence and well being of national systems of protected areas. They should regard such areas as important components of national strategies for conservation and sustainable development. However, the actual responsibility for management of individual protected areas may rest with central, regional or local government, non-governmental organizations, the private sector or the local community.¹⁵

Ownership of Land

As with the question of the managing authority, the key test is whether the type of ownership is compatible with the achievement of the management objectives. In many countries ownership by some form of public body (whether nationally or locally based), or an appropriately constituted non-governmental body with conservation objectives, facilitates management and is therefore to be favored in some protected area categories. However, this is not universally true, and - in the remaining categories - private ownership will be much more common, often being the predominant form of land ownership.¹⁶

In Mexico, the owners of natural protected areas are sometimes private individuals, ejidos or cities. For example, Parque Nacional Cumbres de Monterrey is part the city of Monterrey. **This contrasts with the United States, where national parks have been declared on federal property or the government has had the resources to purchase the land from private owners.**

I would like to focus on this a little more. Much has been written about how “poor allocation of property rights contributes to environmental degradation”¹⁷. Thus Land Use Planning and Zoning needs to:

- “Fully specify both rights and obligations – a fully specified system should make clear who can use, who pays, who can profit . . . and who can control”¹⁸
- “Each particular use in an area should, as far as possible, be *separated* into an individual bundle with rights and obligations specified for each resource right. For example, property use rights might be allocated to different people or groups over the one geographical area for forestry, grazing, subsistence hunting, water catchment and tourism. The actual owner of the land might be commercial, government or private individual, but each of the resource uses, together with obligations, is allocated. Hence, an easement over certain parts of the land is allocated (and perhaps subsequently sold) for tourism activities with certain controls imposed (for example maximum permitted environmental impact or a requirement that 75% of all employees be local residents).”¹⁹

Local communities

Whatever the ownership, experience shows that the success of management depends greatly on the good will and support of local communities. In such cases, the managing authority will need to have good consultative and communications

¹⁵ IUCN 1994.

¹⁶ IUCN 1994.

¹⁷ Furze, Brian, Terry de Lacy, and Jim Birckhead, (1996) Culture, Conservation and Biodiversity: The Social Dimension of Linking Local Level Development and Conservation through Protected Areas John Wiley & Sons at 155.

¹⁸ Furze at 155

¹⁹ Furze at 155

systems, and effective mechanisms which may include incentives, to secure compliance with management objectives.²⁰

Historically, much of this planning and zoning has been done from a “top down” perspective. Because we are here speaking about ecotourism, our definition calls for more community-based planning. Many communities in North America are developing some form of tourism development. Yet, tourism continues to grow haphazardly, usually to the detriment of local people, communities and the environment, with little long-term, integrated planning.

Professor Barkin has suggested that unless ecotourism actively incorporates the local society into service planning and provision, and includes programs to meet the fundamental needs for income and employment for all people in the region, the special qualities of the site and its flora and fauna may be irreparably damaged.

Areas around Protected Areas

Protected areas are not isolated units. Ecologically, economically, politically and culturally, they are linked to the areas around them. For that reason, the planning and management of protected areas must be incorporated within regional planning, and supported by the policies adopted for wider areas. For the purposes of the application of the categories system, however, where one area is used to 'buffer' or surround another, both their categories should be separately identified and recorded.²¹

3. Adoption of controls to mitigate harm

- Require careful planning to ensure appropriate use of technology, local materials and labor, low energy consumption, recycling of waste, local ownership and consumption of locally grown foodstuffs.
- Zoning and visitor tracking methods that help conserve marine and land resources with minimal impact on the local economy.
- Avoid long-term impacts.
- Reinforce protection and effective management.
- Use signs and other forms of public education to match the controls adopted to mitigate harm.

Examples

- Limits on the use of cars in Yosemite, helicopters and airplanes in the Grand Canyon
- Endangered Species Act and the Marine Mammal Protection Act prohibit harassing animals and many states and provinces track these statutory schemes

That should give us plenty to think about on this topic. Thank you.

²⁰ IUCN 1994.

²¹ IUCN 1994.