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Administration, 1980, p. 18.

CHAPTER 2

Focused, Special-Area Conservation Planning: An Approach to Reconciling Development and Environmental Protection

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EDITORS' SUMMARY

Traditional project-by-project, "command and control" approaches to ensuring environmental protection in urbanizing areas have addressed issues in a fragmented manner, promoted conflict among the interests involved, allocated costs of development and environmental protection inadequately, and resulted in questionable outcomes. Marsh and Lallas argue that environmental protection can be reconciled with development objectives better if collaborative area-wide planning processes are employed to address conflicting interests and concerns. They describe some mechanisms for this type of planning that are available through state and federal environmental rules and regulations. Although focused approaches to special-area planning are not problem-free, wider use of these and similar mechanisms promises improved, more long-lasting results than the more common project-focused review process.

Background

During the past several years, the use of focused special-area conservation plans to resolve conflicts between development and environmental conservation interests has won an increasing number of proponents.[1] Such plans seek to focus on specific needs, such as wildlife conservation, in the broader context

*The views expressed by Mr. Lallas in this chapter are his personally and do not necessarily reflect the views of his employer, the Environmental Protection Agency, or the U.S. Government.

of competing concerns, such as urbanization and timber production, in a defined subregional area. The plans generally include prescriptions and standards, as well as assurances that the plans will be implemented. Also, the plans may limit impacts on the other concerns, assuring a reconciliation between competing concerns. The plans are designed and carried out by local interests and agencies, working together in a special planning process.

The focused process and resulting plan remain subject to all existing regulatory rules and requirements and are intended to support their implementation and increase their effectiveness. Nevertheless, in its focus on specific issues, inclusion of diverse interests, and collaborative planning approach, the process differs in important ways from more traditional approaches to land use governance.

The Traditional Paradigm in Land Use Regulation

Historically, planning and development of privately owned lands generally has been delegated to the private sector and carried out on a project-by-project basis, with public review occurring primarily at the local level. The public review process, which evolved from early English judicial procedures, traditionally has been characterized by the presentation of privately initiated and prepared project proposals before judge-like panels, with the public and others cast as critics or supporters of the proposals.

Before the 1960s, the environmental impacts of proposed development activities generally received little attention in land use reviews. This approach has changed significantly in the past 20 years. As a result of growing concern with environmental impacts, the U.S. Congress and state legislatures have enacted a series of laws that broaden public review and impose stricter regional, state, and federal levels of agency review over proposed land use activities.[2] In the same period, the field of administrative law has undergone a virtual revolution with the articulation of new requirements for agencies to carry out these new legislative mandates. The courts also have assumed an active role in these developments and in ensuring that administrative agencies adequately carry out legislative and regulatory mandates.

These and other reforms have been important in limiting the environmental damage of development activities. The Endangered Species Act, for example, has been critical to the preservation of several individual species. Similarly, laws encouraging protection of wetlands have saved countless wetlands from dredging and filling activities. Nevertheless, widespread, irreversible adverse impacts on the environment continue to occur, on a local, regional/national, and—increasingly—global scale. For example, threatened or endangered plants and animals exist in every one of California's 58 counties. Nationwide, recent counts indicate that over 750 animal and plant species of the United States are listed as endangered or threatened, and 3,930 species are waiting to be listed.

At the same time, the decision-making process for protecting the environment frequently is inefficient and results in an inadequate and inequitable allocation of the costs of achieving preservation objectives. Further, the result imposed can cause very high economic costs for affected individuals or entities.

One source of these problems appears to be the degree to which the process relies on the traditional regulatory paradigm of land use governance, based on public-sector reviews of private-sector proposals, and its inability to transcend the limitations of this approach. The reforms and changes of recent years, while revolutionary in many senses, have not displaced this traditional paradigm. They have focused instead on strengthening public-sector reviews. Both the Clean Air Act and the Clean Water Act, for example, include detailed top-down types of regulations to be applied during the review stage of proposed land use activities. The protective provisions of the Endangered Species Act also focus on public agency reviews and restrictions on proposed actions or development activities.

As discussed in more detail below, this proposal/review approach tends to (1) address issues in a fragmented and incomplete manner, (2) promote conflict and discourage cooperative and trusting relationships within the constituency involved, (3) allocate the costs of development and environmental protection inadequately and inequitably, (4) fail to provide certainty to the various interests, and (5) result in unnecessary losses and costs to the broader constituency.

Fragmentation

The reconciliation of development and wildlife and habitat conservation often involves concerns that span space (geographical distances), systems (ecosystems and human-made systems), and time (impacts of past activities, effects on future generations), as well as several levels of policy (local, regional, and national). The traditional proposal/review paradigm fragments or isolates the evaluation of these concerns in a number of ways.

PROJECT-BY-PROJECT ORIENTATION

The proposal/review model generally narrows the focus of land use governance decisions to individual development projects. This traditional approach evolved as a complement to the predominant land use ethic of incoming settlers in the early years of this nation, which generally favored rapid settlement of lands and virtually unrestrained exploitation of the on[illegible]stonishingly

abundant wildlife and resources. It also may have reflected a vision that the lands, wildlife, and resources were inexhaustible, and that the impacts of human activities therefore were isolated and relatively confined. But the evidence suggests that the development activities of these earlier times took an enormous toll on habitat and wildlife.

The variety of public environmental review requirements and environmental protection laws adopted in recent years reflects a change in this earlier ethic and attitude. These laws, among other things, evince a growing recognition that any apparent dividing lines between individual land projects or uses and their impacts on wildlife and the environment which may once have existed have all but disappeared—dissolved by changes in population, expanding development, and the continuous growth in the scale and impact of human activities.

Nevertheless, many of these recently adopted laws have maintained the project-by-project orientation of the traditional system. The environmental impact statement requirements of NEPA, for example, apply to "major federal actions," often in a project-specific context, and parallel state statutes adopt a similar project-by-project focus. The protective provisions of the federal Endangered Species Act also focus in large measure on restricting individual project activities. The Clean Water Act Section 404 regulatory program pertains to project-related discharge of dredged or fill material into navigable waters. Frequently, the projects under consideration are isolated development proposals, with the timing of the review process determined by private objectives rather than concerns for wildlife and wetlands protection.

The traditional approach generally separates the review of concurrent or future activities in adjacent areas, even though such areas may be connected ecologically or in other ways to a project site. As a consequence, conservation concerns are not addressed in an integrated fashion but are considered in the more narrow context of the individual project. The protection of the California desert tortoise exemplifies the failure of the traditional approach. The tortoise's historic range extends over a large portion of southeastern California, southern Nevada, and western Arizona. It has proved virtually impossible to resolve protection issues over the specie's entire range as individual projects are proposed and reviewed in and around Clark County, Nevada, for example. How much habitat will be left when projects are completed? How secure is that habitat? Are there other projects that can be anticipated in the future which will impact the habitat? Who will take care of the remaining habitat? Where will the funding come from?

DIVIDED JURISDICTION AND SEPARATED STAGES OF REVIEW

The traditional project review process is further fragmented at the institutional le[illegible]because of the division of review responsibilities and potential

benefits and harms (of individual projects) among a variety of governmental authorities. This division occurs both horizontally (i.e., among neighboring political jurisdictions) and vertically (i.e., local, regional, state, and national authorities).

Horizontal separation of authority over individual project decisions creates discontinuities in addressing conservation concerns. Local jurisdictional/political boundaries often do not coincide with the locus of environmental effects of land use activities. At the same time, the potential economic benefits of a particular activity (e.g., the creation of a tax-revenue base) may be concentrated in the authority with primary project jurisdiction. These factors create a lack of accountability for interjurisdictional "spillover" impacts and a potentially significant imbalance among neighboring jurisdictions in the distribution of fiscal benefits versus environmental impacts of particular activities. The difficulties are compounded by the fact that little cooperation may occur among neighboring jurisdictions in project decisions.

The local/nonlocal division of jurisdictional authority (the vertical division) has led to its own set of problems, in part because responsible authorities often carry out their project reviews in separate and sequential stages—that is, local, regional, state, and national (as appropriate). Under current practice, for example, where regional, state, and/or federal regulatory approvals are required for a particular land use proposal, the responsible agencies frequently become involved only *after* local approvals have been granted. Frequently, only minimum levels of coordination exist among these stages of review.

Furthermore, where the issues involved are broader than the geographical limits of the local municipality, the local permitting agency often will simply approve a project, leaving resolution of broader issues to state and federal agencies. Although the existing regulatory framework clearly contemplates that local planning decisions must take into account the broader concerns and mandates of federal or state agencies, local authorities may be frustrated by extremely technical issues that may extend beyond project and even municipal boundaries. The desert tortoise, for example, is threatened not only by the loss of habitat due to development but also by habitat destruction from off-road vehicles and fires. How can a single project or a single municipality be expected to shoulder the burden of such an issue?

The consequence is that the current system often fails to consider environmental values in the early planning stages of potential land use activities (i.e., proactively), the point at which adjustments to these activities are most easily made. In such a situation, all sides lose. State and federal agencies may be faced with a locally approved project that does not adequately consider environmental concerns. As such concerns are factored into the desig[illegible]of the project at later stages, conservation interests or the public may believ[illegible] regulatory

requirements have been ignored or squeezed in as an afterthought. On the other hand, the project proponent may consider that project changes made after local planning approvals were won have significantly altered the project and dashed its objectives. Clearly, a mechanism is needed to coordinate land use planning between agencies and across political boundaries.

RELIANCE ON COMMAND-AND-CONTROL OR TOP-DOWN REGULATIONS

The traditional approach tends to rely in large measure on restrictive, targeted, mandatory regulations handed down from federal and state agencies, uncoordinated with other types of intervention measures such as land conservancies, acquisition and management programs, area-wide planning techniques, and creative funding mechanisms. While provisions for the latter types of measures are found in existing law, frequently they are difficult to apply within a particular agency's regulatory process. Land acquisition to address impacts arising from several individual projects governed by separate regulatory review processes, for example, requires extraordinary cross-jurisdictional efforts. In addition, under a simple regulatory approach, even if a project is denied, a subsequent proposal for the same area may soon be attempted. As a result, the regulatory action often is limited to a simple approval or disapproval of a project (or, as a variant, to imposition of project-specific conditions) as the means to carry out environmental protection policies.

This is not intended to suggest that command-and-control/top-down regulations have not played a significant role in protecting wildlife, wetlands, and other environmental resources. However, they are inadequate, by themselves, to achieve the full purposes of the laws and to promote a fair reconciliation between these purposes and the interests of development. Regulatory imperatives alone may not, for example, offer adequate opportunity to perform scientific studies at the appropriate ecological level or to address economic losses that may occur through enforcement of such regulations.

For development interests and others, the result is a limited range of options available to reconcile environmental protection interests with development plans or other economic activities in a manner that respects both sets of objectives. For conservation interests, the patchwork of protection and/or mitigation measures that results from this type of regulation conflicts philosophically with an ecosystem approach to conservation.

LIMITED SCOPE OF REGULATIONS

The traditional system also often sharply limits the scope of regulation of land use activities. For example, the permit program under Section 404(b)(1)

of the Clean Water Act covers the discharge of dredged or fill materials in navigable waters, including wetlands. The program does not extend, however, to activities in immediately adjacent uplands. As a result, the water quality, specific riparian habitat, and wildlife values of the wetlands that the regulations seek to protect may be destroyed by development in adjacent uplands (which, for example, isolates the wetlands) that lie beyond the regulatory framework.

Similar concerns arise in the protection of habitat and wildlife. The protective provisions of the federal Endangered Species Act generally do not apply to species that are rapidly approaching the status of "threatened" or "endangered" species. The act also is not focused on curbing gradual and expanding impacts that threaten biodiversity within large ecosystems.

The fragmentation of issues in a decision-making process may serve important purposes in an analytical process and is a basic concept of Western thought. At the same time, such fragmentation may inhibit the ability of a process to address basic relationships among the fragmented concerns. The historic process has tended to address isolated concerns (project by project, direct impacts), but often not the bigger picture (ecosystems, impacts over time, indirect impacts). It is reactive (separated stages of review, top-down) and not proactive (integrated decision-making process, use of horizontal non-regulatory intervention approaches).

The results are often detrimental for all interests. Long-term, coordinated measures for conservation at the ecosystem level often are not implemented and fragmentation of habitat and other environmental resources continues to occur. The consequences of fragmentation can be severe: some observers view the fragmentation of wildlife habitat as the single most important cause of species extinction today.[3] At the same time, the costs to society from increased development expenses, job losses, and land price inflation may be very significant. For individual land developers, costs increase as time is lost in the regulatory process, as substantial mitigation is required due to inefficient and perhaps inequitable project-by-project measures, and as risks associated with a more chaotic decision-making system increase.

Conflicts between Interests

The dynamics of the traditional project-by-project regulatory process tend to promote conflict and emotion-laden decisions. At the local level, participants in the process come before a relatively removed and often unsophisticated quasi-judicial panel, prepared for an intense and often brief argument with parties who may have conflicting interests. Project proponents frequently have a significant investment in the project by the time of the local review

decision. To the extent that other levels of agency review occur later, costs or investments in a project may be even higher.

In this sense, the traditional paradigm resembles a forest fire moving across the landscape. All attention is focused at the fireline as each project comes up for public review. The clash of values is at its highest flash point; cool, well-thought-out, and even-handed decisions are often the exception. From the developer's perspective, the land is likely to be at its highest value (i.e., prepared for development and intended use). The conservation interests, on the other hand, may consider that the proposal that is already formulated has failed to take into account increasingly urgent environmental protection requirements and is positioned to go forward as is or not at all. Under such conditions, flexibility and options are all too often reduced on all sides.

The resulting conflict builds neither trust nor a cooperative spirit among the interests involved. This loss transcends the individual project decision and tends to prevent the interests from working together on solutions that might solve the underlying concerns, including solutions that may require broad efforts at the state and federal levels over time. Repetition of these encounters simply reinforces hostility and aggravates the situation. The problem is that the society has difficulty seeing the effects of this continued behavior.

Allocation and Internalization of Costs

The traditional process also makes it difficult to allocate the burdens of environmental protection adequately and equitably among the responsible interests. For example, the impacts of unregulated development generally are externalized as costs to environmental quality. Under existing regulations, for instance, the costs of unregulated development in upland areas (e.g., the isolation of wetland areas) may fall on adjacent wetlands or the ecosystem as a whole. In other cases, regulations may be skewed to cover large-scale, regionally significant projects but may allow small projects to proceed unregulated. These externalities may occur intergenerationally, from past generations to the present, and from the present to the future.

Developers want a level playing field; to the extent possible, costs should be spread equitably among the development interests. Cost sharing would assure that none would enjoy a competitive advantage (though even in this case some might continue to argue that such costs will be passed along to the ultimate user and tend to inflate the price of existing development). Conservation interests and others generally concur on the importance of achieving an equitable allocation of the costs of these impacts (based on the "polluter pays" principle and other concepts), both on grounds of equity and in order to prevent undue cost-based incentives for activities that create adverse impacts.

The equitable and adequate allocation of the burdens of conservation will

continue to be the subject of significant legislative and judicial action. Who should bear the costs? The regulated developer? Those impacting the habitat (regulated and unregulated)? New development? What about previous development that has impacted the environment? Is there a state role? A federal role?

Cost issues continue to be contested in adjudications on takings, in the continuing struggle to reconcile visions of public and private interests in the rights and uses of property. In the land use area, one trend of recent cases has been to tolerate increased use by local authorities of exactions on individual developers. As pointed out in the later section on the takings issue, the courts traditionally have ruled that a taking shall be found only where a property owner is left with no viable economic use of the land. Recent decisions by the U.S. Supreme Court suggest that future courts may be increasingly willing to review the equitable allocation of environmental protection costs.

Predictability and Assurances

The traditional land use process is characterized by uncertainty and broad levels of administrative discretion, notwithstanding the significant level of detail contained in a variety of environmental protection statutes and regulations. Local agencies, as well as trustee or wildlife agencies, have a wide degree of latitude in deciding the fate of specific projects within the limits of their jurisdictional competence. The project review process contains many steps involving a variety of differently focused agencies, often with little or no coordination among them. Changes in the political landscape can be abrupt and can alter the prospects of an individual project quickly; as the approval process is protracted, this factor can become a fearful specter, one that has been characterized as "death by a thousand cuts."

For land development interests, the system has been viewed as a multiple-veto process with high transaction costs, varied and often conflicting and confusing objectives among the different agencies involved, and few mechanisms to reconcile those objectives. Developers share the fear that the rules of the game may change even after an initial approval is obtained. The attendant uncertainty is multiplied with a large-scale or phased project, particularly where major infrastructure must be constructed during an early stage.

Conservation interests, on the other hand, often find it difficult to monitor and participate effectively in a multiphase permitting process, and they also often face the prospect that if a development proposal is defeated, it may be replaced with yet another proposal or series of proposals in the future, each with the uncertain prospect of approval or denial. Developers and conservationists appear to share a common interest in increased predictability and long-term assurances.

A New Paradigm: Focused, Special-Area Conservation Plans

The current system offers a significantly stronger legal basis for environmental protection than the pre-1970 system, but environmental problems continue to grow and the inadequacies of the traditional process are increasingly apparent. Accordingly, there appears to be a common basis among conservation and development interests, as well as the public generally, for addressing the shortcomings of the system and for making it more effective in reconciling development and wildlife concerns.

At the international level, an evolving concept that reflects this element of common interest is "sustainable development," a concept that became the overarching theme and objection of the Earth Summit held in Rio de Janeiro in 1992. The idea is premised on the view that environmental protection and economic development are not separate challenges. It also reflects broad public and international support for both the objectives of environmental protection and economic development. The question, therefore, is not which policy to favor but how to effect the reconciliation.

There are indications that the traditional "command-and-control" regulatory paradigm may be changing to answer this question and other concerns within the present system. One change is the use of focused, special-area planning efforts as a supplement to existing regulatory processes. Historically, special protection and regulation for specific geographic areas within the United States has been limited largely to specially designated public lands, such as national parks, national forests, wildlife refuges, wild and scenic rivers, and wilderness areas. In recent years, however, a number of governmental authorities and private parties and organizations have further explored the establishment of new types of special areas and special-area programs, as an adjunct to the traditional land use process, for privately owned and generally nondesignated lands. The types of programs that have been established at regional, state, and interstate levels are discussed below.

Governance by a Special Regulatory Authority or Commission

One type of special-area program is based on the establishment of a commission or authority to regulate certain activities (e.g., land use development) within an area of special environmental concern. Generally, this category of special area includes

- Programs that rely in large part on command-and-control or top-down regulations (e.g., in California, the San Francisco Bay Conservation and Development Commission, the California Coastal Commission, and the California Tahoe Regional Planning Agency and its sister agency, the California-Nevada Tahoe Regional Planning Agency)

- Programs that include regulations as well as public acquisition and ownership (e.g., programs for the Hackensack Meadowlands, New Jersey Pinelands, and Adirondack Park)
- Programs that involve the establishment of a federal/state agency to plan for and regulate certain activities to address regional concerns (e.g., river-basin authorities)

Ad Hoc Resource Management Plans

A more flexible, ad hoc approach to the governance of special areas is provided under laws such as the Florida Environmental Land and Water Management Act (FL. Stat. 380.05) and the federal Coastal Zone Management Act of 1972 (16 U.S.C.A. sections 1451-1464). These statutory schemes contemplate the establishment of special area management plans (SAMPs) on an ad hoc basis to provide for the governance of areas of special significance that may be designated from time to time. The Florida act requires the preparation of state, regional, and local comprehensive plans to regulate development activities, with special plans for areas of critical concern. In addition, it provides for the development of resource management plans with respect to areas designated on an ad hoc basis.

The Coastal Zone Management Act provides for the federal government to assist the coastal states to develop a management program and SAMP for the land and water resources of coast lines. Federal assistance is conditioned on a number of factors, including findings by the federal government that the management program is in accordance with federal rules and regulations, and that the program makes provisions for procedures to designate specific areas for the purpose of preserving or restoring them for their conservation, recreational, ecological, or aesthetic values (16 U.S.C.A. section 1455).

The SAMP provides for regulations as well as other measures to attain their objectives. The prototype under the federal act was the planning process to reconcile future development and wetlands conservation in Grays Harbor, Washington. Under the Florida legislation, a number of plans have been completed, including the plans for the East Everglades described in Chapter 11.

A geographically broader variation of the SAMP approach is reflected in the estuaries program of the National Oceanic and Atmospheric Administration (NOAA) that has included, for example, the interstate efforts to conserve natural resources within the Columbia River estuary and the Chesapeake Bay, described in Chapters 6 and 9, respectively. Other, similar ad hoc efforts include the Maine Bay program, which includes interstate participation as well as participation by Nova Scotia and New Brunswick, Canada. These efforts reflect cooperation by public agencies at local, regional, state, national, and

international levels to focus upon environmental concerns within a commonly shared geographic area.

The Environmental Protection Agency also recently has emphasized the use of a place-based approach in carrying out its mission. The Summary of the new Five-Year Strategic Plan of the Agency, published by EPA in July 1994, highlights, among others, the guiding principle of "ecosystem protection," and states:

> Because EPA has concentrated on issuing permits, establishing pollutant limits, and setting national standards, as required by law, the Agency has not paid enough attention to the overall environmental health of specific ecosystems. In short, EPA has been *program-driven* rather than *place-driven.*
>
> EPA must collaborate with other federal, tribal, state and local agencies, as well as private partners, to achieve the ultimate goal of healthy, sustainable ecosystems. The Agency will act to solve integrated environmental problems through a place-driven framework of ecosystem protection in close partnership with others ...

The Summary states that EPA "...will enlist the support of a spectrum of participants in priority-setting and decisionmaking processes." It adds that EPA will, working with appropriate partners, identify stressed or threatened ecosystems, define environmental indicators and goals, develop and implement joint action plans on the basis of sound science, measure progress and adapt management approaches to new information, and identify support and tools that can be offered at the national level.

Habitat Conservation Plans

A third type of approach that evolved during the 1980s is the use of habitat conservation plans (HCPs) under the federal Endangered Species Act (16 U.S.C.A. Section 15399(a)). Habitat conservation plans are extensively described in the next chapter.

Negotiation and Study Mechanisms

At a different level, a number of efforts in recent years have focused on land use and environmental issues outside the traditional regulatory processes and the courts. These efforts have taken various forms: negotiations roundtables, study groups, task forces, and mediation efforts. They have addressed a range of concerns, including habitat and species protection, protection or allocation of water supplies, air quality impacts from offshore oil drilling, or simply the resolution of environmental concerns regarding a specific project.

In some cases, these efforts are difficult to distinguish from the focused planning processes outlined above. Generally, however, they are more project- or issue-oriented and result in reports and recommendations, whereas focused planning involves a relatively fuller plan with the kinds of assurances provided by, for example, a habitat conservation plan or special area management plan. Occasionally, the distinction may be simply that the process used is characterized as environmental mediation or negotiation rather than planning; in fact, the approach employed and the solutions posited may be very similar.

Relationships of Special-Area Programs to Existing Regulations

A common element of all special-area approaches is their focus on a specific concern, such as the reconciliation of development and wildlife and habitat conservation, within a specified geographic area. The area may be identified in the context of a more general planning/regulatory framework. Accordingly, these approaches have been characterized as focused or focal-point planning efforts, in contrast to comprehensive planning, which focuses broadly on all land use planning issues within a given area.

The focused, special-area approach may be adopted as a complement to a jurisdiction's comprehensive regulatory/planning framework. Indeed, this approach offers a potentially significant means to implement the requirements and criteria of such a larger framework, through a process of cooperative reconciliation of focal issues among the concerned interests. In addition, because fiscal planning has tended to be addressed separately from land use planning, the special-area approach may provide a bridge between general and fiscal plans and between policy and implementation.

In turn, the existence of an enforceable, comprehensive regulatory or planning framework provides an incentive for the effective use of the area-wide approach to resolve competing land use concerns. A similar concern to develop a more comprehensive policy and planning framework for the regulation and management of activities on public lands helped lead to adoption of the Federal Land Policy and Management Act of 1976 (43 U.S.C.A. Sections 1701–1784). Under these circumstances, the special-area process could provide a means to achieve both effective local community participation and implementation of broader, nonlocal requirements in land use governance decisions. Ideally, the area-wide process could be used to transcend the tension between the local community and state or federal officials.

There is a significant distinction, however, between approaches that involve the establishment of regulatory commissions for specific areas such as the coastal zone commissions and those involving ad hoc special area/habitat conservation planning processes. The ad hoc processes generally depend less on

specific regulations to address the focal concerns and rely more on informal dialogue and the formation of a package of measures which may range from regulations, to contractual assurances, to conveyances and taxes and assessments. Further, there is also a distinction between those planning processes and roundtables or study groups in that the planning processes tend to be more implementation-oriented and to result in an action plan.

The focused planning approach may also help to promote the purposes of the National Environmental Policy Act and similar environmental review processes adopted at the state level. They call for the exploration, analysis, and narrowing of reasonable alternatives to develop a plan that reconciles the various concerns. If properly prepared, this type of analysis can provide the type of road map that the courts have required increasingly in their review of land use regulatory decisions. The potential close fit between a special-area process and the requirements of NEPA is reflected in the study of special area management planning in New Jersey's Hackensack Meadowlands, described in Chapter 7.

Elements of Focused Special-Area Planning

Special-area programs may operate on a formal regulatory basis or on a more ad hoc, informal basis as already discussed. The ad hoc processes generally are conducted in coordination with other regulatory and public review processes and are designed to bring together the constituency of interests concerned with a specific bundle of issues. The objective is to reconcile the interests through development of a plan and specific implementing measures (normally extending beyond regulation), as well as through assurances that the plan will be honored.

The Plan

Focused, special-area plans represent a significant departure from the historic regulatory paradigm. These plans may include conservation, management, monitoring, and funding elements, in addition to specific regulatory guidelines. The recently developed habitat conservation plan for the Stephens' kangaroo rat in Riverside County, California, for example, provides funding for acquisition, management, maintenance, and other purposes through a per acre impact fee on all new development, and it may include the use of an assessment district under recently passed state legislation. It is anticipated that other conservation plans in Southern California may follow the same approach.

One advantage of these types of plans is that they are not constrained by in-

dividual project boundaries or defined regulatory limits. The plan can address, for example, the specific needs for protection as part of a broader ecological community, together with broader land use and development concerns relating to the focal issues. The plan could address an issue relating to the need for a road, or the impacts of activities in unregulated areas (e.g., adjacent uplands), which may traditionally be beyond the scope of existing regulations but which are determined to have sufficient indirect impacts.

For example, the region-wide process to develop a plan to protect the California gnatcatcher and coastal sage scrub habitat commenced before the gnatcatcher was listed as "threatened" under the Endangered Species Act, and before it was formally protected under Section 7 or Section 9 of the act. The basic objective of the process was to support efforts to protect the gnatcatcher and the sage scrub habitat before further irreversible actions were taken, and to reconcile other affected interests with this basic objective. The goal was to provide for immediate and long-term protection and conservation of habitat whether or not the gnatcatcher was formally listed by the U.S. Fish and Wildlife Service (USFWS).

The Process

The special-area planning process differs from the traditional project-by-project, adversarial approach. The process is convened by a lead agency, such as the principal land use authority, an association of governments, a state or federal environmental protection or wildlife agency, or a specially designated agency. Several agencies and interests also may combine to perform this function. The habitat conservation planning process involving the Stephens' kangaroo rat in Riverside County, for example, has been led jointly by the county, several cities within the county, and, for purposes of the environmental review and permit decision processes, the USFWS. Chapters 8, 10, and 11, describing experiences in the Chiwaukee wetlands, Anchorage, and the East Everglades, respectively, also illustrate the possibilities of participation by affected constituents in the special-area planning process.

The process is intended to provide a forum for the entire constituency of interests in the focal issues. The members of this constituency are essentially self-defined, on the basis of their specific interests in the issues that are focused upon. A central concern of the process, therefore, is to ensure that the entire constituency is included.

One way to address this concern is for the lead agency and/or other participants in the process to provide public notice of the existence and progress of a special-area program before the initiation of formal public review, and to organize meetings of both a smaller core group and the larger general public group as part of the overall program. The process may take on a tiered form,

with meetings of a steering committee, working group, and public review group. This tiered review process is readily compatible with the scoping or review process contemplated by the NEPA and many of its state-level counterparts. It readily accommodates refinement of plan alternatives and impacts through the use of scoping reports and, subsequently, draft environmental impact statements or reports.

Various types of incentives may be employed to achieve and sustain adequate commitment of participants to a special-area planning process. As noted above, the existence of an enforceable regulatory/planning framework offers one type of incentive. In such a context, a firm commitment by a local agency and appropriate state and federal agencies to the preparation and adoption of a plan as part of their regulatory program usually is sufficient inducement to provide the necessary level of continued participation. (Timothy Beatley, in Chapter 3, refers to these types of incentives as a kind of "balance of terror" which discourages participants from exiting a process.)

While it would appear that the various concerned interests would (or should) appreciate the value of long-term resolution of conflicts between conservation or other environmental values and development, the reality is that our culture and society/economy tends to focus on short-term objectives and tends not to support long-term planning efforts. This cultural bias, together with the historic lack of assurances available with the implementation of an adopted plan (such as those provided by a dedication of land in perpetuity or a development agreement), and problems of trust among various concerned interests, has not encouraged participation in such planning efforts. Accordingly, without a regulatory backdrop to such a broader planning program or increased assurances that a plan once adopted will be honored, there may be insufficient incentive on the part of the various interests to participate.

Timing is an important consideration. Once commenced, the process sometimes takes on a life of its own, stagnating with endless meetings and few commitments. Accordingly, it is important to establish a time schedule at the outset for the completion of the plan, with appropriate milestones that will be strictly observed.

The habitat conservation plan/special-area management plan processes often benefit from the engagement of a facilitator who is neutral, well-respected, and familiar with the issues and regulatory process. The facilitator assists in managing the meetings, overseeing the technical work, and assisting the group in resolving particularly difficult issues. The facilitator may be engaged, paid, and supervised by the lead agency but should be viewed as responsible to the working group or constituency of interests as a whole.

The development of comprehensive and reliable technical (e.g., biological) data often is of central importance to a special-area planning process. Such data forms the essential foundation for determining potential measures to reconcile competing interests in a special-area plan. Often, the charge is given to the facilitator to assemble, as part of the "facilitation team," consultants who will assist in analyzing various issues.

Whether decisions should be made by majority vote or consensus is often a question. If the majority vote approach is used, individual accountability is high; at the same time, however, the various interests become very concerned with the exact composition of the working group. Further, significant energy will be devoted to procedures for establishing the group and monitoring and controlling participation. An alternative model is to view the process as a "scoping" process, with self-selected participation. Under this approach, the composition of the group may vary from issue to issue, and decisions are made by consensus rather than by vote.

The consensus decision-making methodology assumes that the function of the group is to scope the issues involved with the formal decisionmakers who have the authority and responsibility for making final determinations. Thus, the facilitator/staff convenes the working group and scopes both the alternatives and impacts of the particular issue or proposal, normally using a draft discussion paper or report. The views of the working group are reflected in the revision of the paper/report and the alternatives are refined and normally narrowed, although sometimes additional alternatives are suggested. Often unanimous agreement on particular points and alternatives is achieved (in part because the working group normally does not wish to relinquish its power, which is based on its ability to come to consensus, to the formal decisionmaker). Of course, where the working group is unable to reach consensus, the formal decisionmaker is required to decide.

Interestingly, in contrast to the hostility and lack of trust promoted by the project-by-project review paradigm, this scoping/consensus process often increases understanding and trust among the participants, with consensus becoming the rule over time. Nevertheless, the process can break down in the face of difficult issues, as described in the chapters on the East Everglades, Bolsa Chica, and Anchorage.

Provision of Assurances

The provision of assurances to the entire constituency of interests that the plan will be honored is vital. Conservation agencies and organizations, for example, generally desire that full and adequate provision be made to protect the environmental values in question, such as water quality and wildlife habitat,

and that an effective conservation or management program be established. In cases involving wildlife habitat, the first concern may be addressed by the establishment of conserved habitat, pursuant to conveyances in fee or easement to a public agency or approved nonprofit organization. Further assurances can include the designation of a trusted habitat operator, establishment of a specific program to maintain, restore, and monitor the conserved habitat, and long-term assured funding.

Development interests generally are concerned that agreed-upon compensation for lands reserved for conservation purposes will be secured or that mitigation requirements will not be increased later. These concerns may be addressed by a multiagency agreement that accompanies and provides for the implementation of the plan. For example, the habitat conservation plan for the Stephens' kangaroo rat in Riverside County, California, plan permits a take on 4,400 acres of occupied habitat (or 20 percent of total habitat, whichever is less) in a two-year period on the basis of a specific allocation formula administered by the locally involved agencies. The timing of development is tied to the acquisition of habitat through a set of concurrency requirements.

Other examples of assurances are described in Chapter 8, which notes the importance of assuring compensation to Chiwaukee Prairie landowners for rezoned lands; Chapter 10, which describes concerns over vague assurances in Anchorage; and Chapter 11, regarding land acquisition in the East Everglades. Timothy Beatley's review of habitat conservation plans in Chapter 3 describes techniques that were used to provide assurances in a number of recent habitat conservation planning processes.

Agency and Public Reviews

The plan and related decisions remain subject to normal regulatory approval requirements, including procedural requirements (e.g., those under environmental review statutes requiring the preparation of environmental statements, reports, and studies) as well as substantive environmental protection provisions and requirements of administrative procedure.

The focused, special-area approach, nevertheless, supplements the formal regulatory review process by developing a broader array of implementation measures that extend beyond those normally applicable under a project-by-project review approach. Further, the approach permits the participants, within the strictures of the law, to assist in coordinating the multiagency review process and the required preparation of underlying reports and analyses. This is a role usually denied to the conservation organizations and not generally available to an agency concerning the regulatory process of another agency. For example,

the various studies and conclusions of a focused planning process may be used in the preparation by the USFWS of a recovery plan that may allow reclassification of a listed species to a threatened or nonlisted status, or in connection with an alternatives analysis or mitigation program prepared in compliance with the Section 404(b)(1) permit program.

If properly designed, the planning process may also be used as a scoping procedure in the preparation of required environmental documentation pursuant to environmental review requirements, during which issues are reviewed, evaluated, and narrowed. The draft plan, together with the draft environmental impact statement/report and other documents, can then be circulated for formal public comment. This predictably will strengthen compliance by the various agencies with constitutional and statutory procedures.

The preparation of scoping reports can be very helpful in the process of preparing the draft plan and impact statement. These reports can be designed and circulated to provide for appropriate input from the constituency of interests as well as the public at large, and to document the decisions made in the consideration and narrowing of issues.

Special Issues and Concerns

The recent use of focused, special-area planning processes generally has been directed at two specific types of environmental concerns: wetlands protection and endangered species. The processes have tended to focus on a specific environmental interest or value already protected by regulatory permit requirements (i.e., a listed endangered species or a wetland area). Relatively less attention has been given to adjacent and unregulated land areas, to responsibility for previously generated impacts, or to interests that are, for example, threatened but not specifically protected by law or regulation.

One of the benefits of the focused, special-area approach is that these broader concerns can be addressed. The regulatory process can be designed to focus instead on the conservation of the entire community of species living within the habitat and ecosystem of the listed species. Alternately, such an approach might be used to establish a plan for an entire drainage system or watershed, or to protect and restore wildlife corridors or landscape linkages in support of habitat or ecosystem values and, more broadly, efforts to maintain and restore biodiversity.

The ability to address such broad concerns in an ad hoc process depends to some extent on the existence of a more comprehensive, coherent, and enforceable regulatory or planning framework, or an equivalent incentive

system (e.g., a common desire for long-range planning), to ensure area-wide cooperation. It is no accident that previous and current area-wide processes are focused principally on wildlife and wetlands issues, where a strong federal regulatory hammer already is in place. In such a context, as the Columbia River estuary plan illustrates, the special-area planning approach may help to elevate efforts to protect wetlands and wildlife to the ecosystem level, and to support the implementation of regionally established priorities to reconcile environmental concerns with development.

Protecting or Co-opting the Public Interest

One potential concern with the focused, special-area process is to ensure that the public interest is not co-opted by various interested parties. The special-area approach offers a more informal decision-making process than the current system. Furthermore, the direction of the process may depend to a greater degree on input from private participants—including participants with a significant power of the purse over the proceedings—than does the traditional approach. As a result, the area-wide planning process could be used to circumvent or supplant other efforts of citizens or agencies to address land use issues, such as voter initiatives or local public hearings, or effective enforcement of existing laws. However, recent habitat conservation plan documents have suggested that a major reason for pursuing a Section 10(a) permit is the practical difficulty experienced by the USFWS in enforcing Section 9 protections in areas where diverse land ownership and high development pressures exist.

One important means to address these concerns is to ensure that the special-area process remains closely linked with, and an adjunct to, the formal regulatory review process (procedurally as well as substantively) and is not used to constrain or avoid other efforts. The use of a tiered review process, and the distribution of drafts of the plan being developed as part of a public scoping process, may be useful to allay concerns.

The responsible agencies must enforce their conservation mandates faithfully in the context of a special-area process, even in cases where the process appears to be deviating from the fulfillment of these purposes. Furthermore, the entire constituency of interests must be fully and adequately represented in the process, including those who speak for constituencies susceptible to exclusion in such an informal decision-making setting. This concern is reinforced by apparent inequalities in staff time and financial resources between volunteer organizations and well-funded business enterprises with cadres of professional consultants.

Finally, the special-area process should not be overly institutionalized; such a move might simply reproduce, in a different form, weaknesses of the present

system, such as inadequate government enforcement policy and excessive influence over decisions by the parties with the greatest resources. Where developers seek only to circumvent the existing regulatory system, the area-wide process can only fail. But, where participants seek to reconcile interests in an integrated, efficient, and equitable manner not possible through traditional means, on the basis of common interests, then the public (and the environment) as well as individual parties may have much to gain.

The Takings Issue

The issue of regulatory takings continues to be widely litigated. In the last few years, the U.S. Supreme Court issued several important decisions in this area, including its 1987 trilogy of cases,[4] *Lucas v. South Carolina Coastal Council* in 1992 (described in the accompanying box), and *Dolan v. City of Tigard* in 1994.

Because the area-wide planning process incorporates the use of program elements beyond command-and-control regulations, it provides important flexibility in considering specific concerns relating to both conservation and development. Thus, there is a greater probability that common interests among the various parties can be reasonably accommodated. If such interests are not accommodated fully, the articulation of the rationale for conservation and development provided by the plan and process may be used to identify the public interest and nexus in the measures called for by the plan, in keeping with standards for takings articulated in cases such as *Nollan* and *Lucas*.

Further, because of the complexity of the multiagency special-area plan process, the takings issue deserves full attention. The process itself may make visible and explicit the inherent tension between private and public interests in privately owned lands. It may clearly frame the question of whether or in what circumstances a landowner should be compensated when a plan provides that a tract of privately owned land must be preserved or restored as wetlands or habitat of an endangered species. The process can also provide means to lessen the impacts of a plan on a particular landowner by such methods as land exchanges or transfers of development interests. By making the effects more visible, the special-area process can allow a finer balancing and more adequate and equitable allocation of the burden of impacts.

As the issue of the allocation of the burdens of governance programs becomes more visible, it is likely that the courts and the legislatures will become more concerned about questions of adequate allocation and fair sharing of burdens. In this regard, the heightened scrutiny standard suggested by *Nollan* and *Tigard* will apply not only to the nexus between a development condition and the impacts of development but also to the relative weight of the burden imposed on the individual landowner under that condition.

When Is a Taking a Taking?

The Lucas Case

Property owners have long been concerned about regulations that sharply reduce opportunities for development and thus decrease real or potential land values. Although courts have long held that overly strict regulations may be interpreted as a taking of property that requires compensation under the Constitution's Fifth Amendment, the point at which reasonable restrictions become too restrictive has proven difficult to define. In 1992, the U.S. Supreme Court again tried to resolve the issue in deciding *Lucas v. South Carolina Coastal Council.*

David Lucas, a building contractor, paid $975,000 in 1986 for two beachfront lots in Isle of Palms, South Carolina. In 1988, Hurricane Hugo passed right across the Isle of Palms, causing substantial damage and loss of beach sand. Soon thereafter, the South Carolina legislature enacted the Beachfront Management Act, which prohibited further development on the beachfront, including Lucas's property. Lucas sued the South Carolina Coastal Council, the enforcement agency for the law, claiming that the law amounted to a regulatory taking of his property, for which he should be compensated.

The trial court agreed and awarded Lucas $1.2 million in compensation. After the South Carolina Supreme Court overturned this decision, Lucas took his complaint to the U.S. Supreme Court. The issue before the court was a classic question: How and when should public interests outweigh private property rights in making development decisions? Lucas claimed that his property had lost all value due to the coastal act; the state countered that development determined to be harmful to a public interest can be prohibited without compensation.

In 1980, in *Agins v. Tiburon,* the court ruled that a regulation can effect a taking if it "does not substantially advance legitimate state interests" or if it "denies an owner economically viable use of his land." Yet, U.S. courts usually uphold governments' use of the police power to restrain or prohibit land uses that will harm public health, safety, and general welfare. In the *Lucas* case, however, the U.S. Supreme Court decided that the South Carolina Supreme Court "was too quick to conclude" that this case involved prohibition of harmful or noxious uses of property and that the public interest demanded that Lucas sacrifice his investment and all future use of the property.

The *Lucas* case, at bottom, appears to apply to the relatively rare circumstance of property owners deprived of *all* value of their properties by regulations. But *Lucas* demonstrates the Court's increasing inclination to scrutinize public actions more carefully, as it did in the *Nollan* case (when it scolded the California Coastal Commission for inadequately linking an exaction to a stated public purpose) and in the more recent decision in 1994 in the case of *Dolan v. City of Tigard* (when it required the public agency to demonstrate that the burden of bikeway and flood control exactions on a permit applicant were "roughly proportional").

A collaborative planning process, therefore, may go far toward providing an answer to long-term debates regarding the takings issue. That is, it may provide a way to balance and reconcile—effectively, adequately, and specifically—the interests of the owner and the public in a specific area of land.

Funding

A focused, special-area planning process generally presents several critical funding needs: funding for the process; funding for acquisition of lands to be protected; funding for operation, maintenance, and monitoring activities; and (potentially) funding to support individuals or others affected by the process or existing regulations.

Typically, the sources of funding are unique to the particular planning process. In past or ongoing cases, development interests often have funded much of the process, either directly or through locally assessed impact fees. In some cases, state or federal funds have been obtained, to date through specific federal and state legislative action.

Sources for acquisition funds have included the federal Land and Water Conservation Fund and refuge acquisition funding, land exchanges among Bureau of Land Management lands, state bond financing, land exactions, and development impact fees. The operation and maintenance of conservation areas may be funded by landowner assessments (e.g., through covenants, conditions, and restrictions covering the specific development project), benefit assessments, or special taxes. In some cases, where a long-term funding mechanism has been established, affected landowners have established a trust fund to provide for start-up operations.

Historically, however, funding has been scarce for the operation and maintenance of the lands to be conserved. In turn, the lack of such funding has discouraged local agencies from agreeing to manage conserved lands. As a result, in many cases it has been difficult to find a responsible operator for the lands to be conserved and thereby to establish the conservation program. In addition, the traditional regulatory system generally has failed to make funds available for economic conversion programs and/or compensation for workers and families whose economic circumstances may be affected by regulatory programs or protective measures. As in the cases of coal miners in West Virginia and loggers in the Pacific Northwest, such programs may be a critical element in helping affected communities make the necessary short- and long-range adjustments to achieve more sustainable patterns of economic activities.

A focused conservation planning process can draw on many sources and participants to develop an effective funding strategy for these varied purposes. The combination of landowners, public agencies, and conservationists often provides a significant political force that can be effective in obtaining state and

federal funding. Funding issues are discussed in detail in the next chapter and the East Everglades case study of Chapter 11.

Interagency Cooperation

The focused planning process offers an important opportunity and forum for cooperation among various agencies that have responsibility over the environmental and land use interests at issue in a particular setting, as well as at the appropriate level geographically, ecologically, and financially. Indeed, the process itself generally is predicated on the existence of these types of cooperative efforts.

Evolving Institutional Concepts

The land use decision-making process increasingly is asked to bridge the gap between individual project proposals and broader environmental impacts. The evolving demands on this process reflect growing concern with the scale of human impacts on the environment and with the relationship of these effects to economic conditions and development. These concerns have led, in part, to the development of relatively new norms or principles to address the basic underlying problems, including concepts of sustainable development, intergenerational equity, and protection of biodiversity.

The emerging concept of sustainable development suggests the need "to meet the needs and aspirations of the present without compromising the ability of those to meet the future."[5] With reference to the related concept of intergenerational equity, Professor Edith Brown Weiss suggests that the global environmental crisis requires us to develop the "intertemporal dimension of international law to relate the present to the future." To achieve this, "... we must anticipate the legal norms that are needed to bring about justice between our generation and future generations."[6]

The renewed emphasis on the need to protect biodiversity as a guiding principle in environmental conservation calls for the increased integration of goals of biological diversity into the land use and planning framework as a fundamental component to improved conservation and the reconciliation of wildlife and habitat concerns with development.

The paradigm of focused, special-area planning can assist in addressing these broader concerns and in building the programmatic bridges that relate individual projects to these geographically and temporally broader horizons. The process could facilitate the use of coordinated and proactive measures to address the interrelated interests of development and environment. The protection of wetlands and wildlife habitat, and the reconciliation of these interests, does not have to be limited to an ability to say yes or no to an individual project proposal, as is so frequently the case in the present paradigm.

Effectiveness of Focused, Special-Area Planning

The focused, special-area planning process resolves the shortcomings in the traditional land use paradigm. In particular, the special area-wide approach may have the effects described below.

- *Reduce Fragmentation* The focused, special-area approach, combined with a broader, coherent, and enforceable regulatory or planning framework—or equivalent incentives—offers a potentially significant means to help reduce the fragmentation of the traditional process. Environmental concerns throughout an entire ecosystem can be addressed comprehensively, taking into consideration past and future, direct and indirect impacts in a manner that relies not only upon regulation but also other proactive measures such as funding, comprehensive research, conservation or management programs, and compensatory programs for individuals or families affected by conservation plans.

- *Promote Cooperation, Not Conflict* The focused, special-area approach offers a forum in which varied interests can evaluate and resolve potential conflicts early in the land use decision process, taking into account issues on the appropriate systemic, geographic, and temporal scales. By comparison with the traditional project-by-project, proposal/review process, this approach can improve flexibility in the decision process and thereby promote improved cooperation and trust among the diverse interests.

- *Achieve a More Equitable and Adequate Allocation of Costs* The process offers the potential for a more adequate and equitable allocation of the costs of development impacts on environmental qualities and features. Approaches can be fashioned to allocate costs to past activities and/or to otherwise unregulated activities that may indirectly generate adverse impacts that presently are externalized for others (or the environment) to bear.

- *Provide Improved Predictability and Assurances* Finally, the process offers the opportunity to provide early and timely assurances—in the form of agreements, conveyances, and regulations—to all interests (conservation as well as development) and the public that the plan will be honored. The nature of these assurances has, however, varied considerably and is determined by the measures established during the process.

The trend toward focused, special-area conservation planning will make it easier to discuss and resolve conflicts early in the land use process, when options still may exist for all interests to be served. More important, these processes may provide one means to help us to live up to our own ideals, to protect the environment and provide for our economic well-being—to provide for "sustainable development" now and for the future.

It is not enough simply to state that a good balance between these objectives is desirable. All of us concerned with public institutions and these varying and common interests need to explore reforms that may help to achieve such a balance. The use of collaborative approaches such as focused, special-area conservation planning, which combine regulatory and proactive implementation measures, may help realize this balance.

NOTES

1. See, for example, *Managing Land Use Conflicts: Case Studies in Special Area Management,* edited by David Brower and D. Carol, Durham, NC: Duke University Press, 1987; L. Marsh, "Focal Point Planning," Chapter 28A in *Zoning and Land Use Controls,* Vol. 5, edited by P. Rohan, New York: Mathew Bender, 1987; M. Bean, *Reconciling Conflicts Under the Endangered Species Act,* Washington, D.C.: World Wildlife Fund, 1991; R. Thornton, "Searching for Consensus and Predictability: Habitat Conservation Planning Under the Endangered Species Act of 1973," *Environmental Law,* Vol. 21, Portland, Oregon: Lewis and Clark School of Law, 1991; T. Beatley, *Habitat Conservation Planning; Endangered Species and Urban Growth,* Austin, Texas: University of Texas Press, 1994.
2. Federal legislation providing for stricter environmental review of land use activities has included the National Environmental Policy Act of 1969, 42 U.S.C.A. §§ 4321-4347(1977, Supp. 1990) (NEPA); the Endangered Species Act, 42 U.S.C.A. §§ 1531-1542; the Clean Air Act 42 U.S.C.A. §§ 7401-7642; and the Federal Water Pollution Control Act 33 U.S.C.A. §§ 1251-1265, 1281-1376 (as amended by the Clean Water Act of 1977) (1986, Supp. 1990). Individual states have adopted similar types of environmental review or protection requirements. For further discussion, see L. Marsh and P. Lallas, "Wildlife and Habitat Protection," Chapter 24 in *Environmental Law Practice Guide,* Vol. 2, edited by M. Gerrard, New York: Mathew Bender, 1993. Many local and regional authorities have also significantly strengthened project review requirements and local land use control measures.
3. T. Lietzel, "Species Protection and Management Decisions in an Uncertain World," in *The Preservation of Species,* edited by B. Norton, College Park, Maryland: Institute for Philosophy and Public Policy, 1986, p. 247.

4. *Keystone Bituminous Coal Association v. DeBenedictis,* 480 U.S. 470 (1987); *First English Evangelical Lutheran Church of Glendale v. County of Los Angeles,* 482 U.S. 304 (1987); and *Nollan v. California Coastal Commission,* 483 U.S. 825 (1987).
5. *Our Common Future, Report of the World Commission on Environment and Development,* New York: Oxford University Press, 1987. See also the Rio Declaration and Agenda 21, adopted at the United Nations Conference on Environment and Development, Rio de Janeiro, June 1992.
6. Edith Brown Weiss, *In Fairness to Future Generations: International Law, Common Patrimony, and Intergenerational Equity,* Irvington-on-Hudson, New York: Transnational Publications, 1989.