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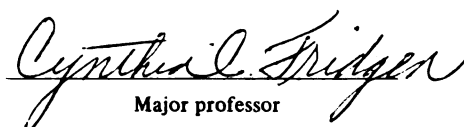
Regulatory Takings: Applied to the Endangered
Species Act and Section 404 of the Clean Water
Act as Parallel Land Use Regulations

presented by

Jody J Olsen

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**REGULATORY TAKINGS: APPLIED TO THE ENDANGERED SPECIES
ACT AND SECTION 404 OF THE CLEAN WATER ACT AS PARALLEL
LAND USE REGULATIONS**

By

Jody J Olsen

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ABSTRACT

REGULATORY TAKINGS: APPLIED TO THE ENDANGERED SPECIES ACT AND SECTION 404 OF THE CLEAN WATER ACT AS PARALLEL LAND USE REGULATIONS

By

Jody J Olsen

At the federal level, our country protects endangered species through the Endangered Species Act of 1973 (ESA), and protects wetland resources through Section 404 of the Clean Water Act. Both pieces of legislation protect natural features by restricting land use activities on land containing wetlands or listed species. Sometimes, the ESA and Section 404 can so greatly restrict the use of private property that a regulatory taking may occur.

A regulatory taking of private property results from regulations that are so onerous that they deprive landowners of all, or substantially all, reasonable use of their land. In several cases, the U.S. Claims Court has found regulatory takings resulting from Section 404 regulation of wetlands. While no regulatory takings have been found to result from the ESA, the potential seems great.

The ESA and Section 404 have many parallels in their design, implementation, enforcement, and impacts upon private property. Therefore, because the ESA and Section 404 are so similar, and because Section 404 has been found to lead to a regulatory taking, then it can be argued that the ESA could also lead to a taking.

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INTRODUCTION

REGULATORY TAKINGS: APPLIED TO THE ENDANGERED SPECIES ACT AND SECTION 404 OF THE CLEAN WATER ACT AS PARALLEL LAND USE REGULATIONS

Worldwide, concern about the loss of environmental amenities such as biodiversity and wetlands has increased greatly in the past few decades. We are beginning to recognize that human activities are greatly contributing to the loss of these natural features. Human activities such as pollution, urban development and growth, and over-exploitation of natural resources have greatly jeopardized the existence of wetlands, endangered species and endangered species habitat. These losses are of great concern because wetlands and diverse speciation provide important ecological functions, as well as provide many essential functions for human beings.

Biodiversity, or diversity of speciation, represents the world's source of all sustainable productivity. Biodiversity is important for the provision of human needs such as foods, medicines, fibers, building materials, and biomass (Raven 1994). The vast wealth of genetic resources is crucial to the health and well-being of the human race. For example, genetic variety in food crops makes them less

vulnerable to crop failure due to climate, disease, and pests. Genetic resources are also being used to cure human diseases. Some examples include the Pacific yew tree which is being used to treat ovarian and breast cancers, the Rosy periwinkle which is used to treat childhood leukemia, and Greek foxglove which is used to treat high blood pressure (Evans 1993). Wetlands also provide many valuable functions. These benefits include: flood and storm damage protection, habitat for aquatic and terrestrial species -- many of which are rare or endangered, protection of subsurface waters, erosion control, water pollution control, sources of nutrients in aquatic food systems, and sources of production of food and fiber. Wetlands are also important aesthetic and recreational amenities (Burke et al. 1988).

In response to the reduction of species diversity and wetlands resources, our country has promulgated environmental protection legislation at the federal level. Our country's response to the loss of biodiversity was the passage of the federal Endangered Species Act of 1973 (ESA). In this Act, the United States "pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife or plants facing extinction" (16 U.S.C. §1531, 1327). The United States similarly provides federal wetlands protection through Section 404 of the Federal Water Pollution Control Act (FWPCA), amended as the Clean Water Act. Section 404 attempts to protect the quality of U.S. waterbodies by prohibiting the "discharge of dredged or fill material into water of the United States and their adjacent wetlands" (Burke et al.

1988, 19).

While both of these pieces of environmental legislation have proven effective in the protection of endangered species and wetland resources, they have also been criticized for threatening private property rights. Often, the provisions of these federal statutes can greatly limit the activities landowners engage in upon their land. In fact, both pieces of legislation have the potential to lead to a regulatory taking of private property by the government.

The purpose of this inquiry is to illustrate how regulatory takings theory has been applied in the courts to Section 404 of the Clean Water Act, and to propose that regulatory takings theory could be similarly applied to the Endangered Species Act. In addition, an analysis is done of the possible effects of regulatory takings resulting from the ESA upon the continued viability of threatened and endangered species, and their habitats. Researchable questions include:

- What is a regulatory taking, and how do the courts determine whether a regulatory taking has occurred?
- What similarities exist between the Endangered Species Act, and Section 404 of the Clean Water Act, in terms of their design, implementation and enforcement?
- Can the takings criteria applied in Section 404 regulatory takings cases be similarly applied to the Endangered Species Act?
- Can the Endangered Species Act lead to a regulatory taking?

- If the Endangered Species Act can lead to regulatory taking, what are the potential impacts upon listed species and their habitat?

Chapter One provides an overview of the histories of the ESA and Section 404, and outlines the provisions of each Act. Chapter Two defines regulatory takings and enumerates the criteria used by the courts to determine a regulatory taking. Chapter Three reviews the literature available on regulatory takings theory as applied to Section 404 and the ESA. The fourth chapter describes the research methodology used, and applies the methodology to extend regulatory takings theory to the Endangered Species Act. The fifth chapter analyzes some of the potential outcomes that could result should a regulatory taking be found to result from the ESA. Finally, Chapter Six draws conclusions, suggests areas where further research is needed, and makes policy recommendations for avoiding and mitigating regulatory takings conflicts resulting from the ESA.

LIMITATIONS OF THE STUDY

This study considers only the application of regulatory takings theory at the federal level; how regulatory takings theory is applied to federal statutes such as the Endangered Species Act of 1973 and Section 404 of the Clean Water Act. This paper focuses on the interpretation of regulatory takings theory by the federal circuit courts and the Supreme Court of the United States. Regulatory takings cases are also heard at the state and local level, however an analysis of takings

theory as applied at the state and local level is beyond the scope of this paper.

This paper also limits its recommendations to policies that can be implemented at the federal level for endangered species protection by the federal Endangered Species Act, or to policies that can be implemented by state governments in cooperation with federal agencies. The author recognizes the important role local governments play in the protection of rare and endangered species, and endangered habitats. However, policy recommendations for protection at the local level is beyond the scope of this effort.

CHAPTER ONE

FEDERAL ENVIRONMENTAL LEGISLATION: THE ENDANGERED SPECIES ACT AND SECTION 404 OF THE CLEAN WATER ACT

HISTORY OF FEDERAL SPECIES PROTECTION IN THE U.S.

The United States first began to address the possibility of species extinction (or near extinction) resulting from human activity around the turn of the century. Prompted by the virtual extermination of the once prevalent passenger pigeon, Congress passed the Lacey Act of 1900 (Bean 1983). This, along with the Bass Act of 1926, prohibited interstate transportation of fish or wildlife taken in violation of national, state or foreign law (Littell 1992). In 1918, Congress passed the Migratory Bird Treaty Act of 1918 which empowered the Secretary of the Interior to adopt regulations that would protect migratory birds. The Bald Eagle Protection Act of 1940 made it a criminal offense to take or possess the national symbol (Bean 1983). Finally, in 1964 the Bureau of Sports Fisheries and Wildlife (the precursor of the modern Fish and Wildlife Service) compiled a "redbook" of 63 endangered vertebrate species hence creating the first endangered species list (Krohn 1991).

The Endangered Species Protection Act of 1966 was the first legislative action taken to institutionalize the protection of endangered and threatened species as a national policy. This first Act was very limited because it only applied to native fish and wildlife, and only authorized the purchase of land for the "conservation, protection, restoration, and propagation of selected species" (437 U.S. 175). The Endangered Species Conservation Act of 1969 continued the provisions of the 1966 Act and added a few features (Pub. L. No 89-669, 80 Stat. 926). First, the 1969 Act broadened the jurisdiction of the 1966 Act to include invertebrates (Smith 1992). Second, the 1969 Act included a provision requiring that a list of threatened and endangered species be published in the Federal Register; this listing included domestic as well as international species (Littell 1992). Finally, this Act prohibited the importation of endangered species, reducing the incentives for the killing of endangered species internationally.

Although the 1966 and 1969 Acts increased protection of endangered species, a consensus developed in the legislative and executive branches that a more powerful and comprehensive policy was needed to preserve species. Of particular concern was the lack of foresight associated with the current endangered species legislation as the protection given under these Acts was often too little and too late (Bean 1983). Hence, in 1973 President Nixon signed the Endangered Species Act into law. The Supreme Court hailed the Act as being "the most comprehensive legislation for the preservation of species ever enacted by any

nation" (437 U.S. 180).

The new Act contained many novel provisions that made it very powerful in comparison to its predecessors. First, the lists of international and domestic endangered species, formally separate entities, were now combined into one list. Second, the new Act extended protection to all wildlife - including invertebrates and plants (Mannix 1992). Third, the Act explicitly forbade the taking of an endangered species, and prohibited federal agencies from authorizing, funding, or carrying out any action that would "jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species..."(16 U.S.C. §1536). Finally, one of the most powerful provisions in the new Act created a list for threatened species, or species that are likely to become endangered, and authorized the Department of the Interior to provide threatened species with the same protection afforded endangered species (Mannix 1992).

Since its inception in 1973, the Endangered Species Act has had many amendments, three of which merit mentioning. The first set of amendments occurred in 1978 in response to the controversy surrounding the construction of the Tellico Dam. This now famous case of *TVA v. Hill* first illustrated the power and inflexibility of the ESA. Six years and \$50 million taxpayer dollars into the construction of the Tellico Dam, the three-inch, snail-eating fish known as the snail darter was discovered by environmentalists attempting to halt construction of

the dam. In the Supreme Court a battle ensued about whether the snail darter should be listed; the Court determined that the snail darter had "incalculable" value and should be protected -- effectively halting construction of the nearly completed dam (Mann and Plummer 1992). One year later the House of Representatives passed a bill that exempted the Tellico Dam from the provisions of the ESA and allowed for the completion of the dam. In the end, the Supreme Court declared that even "some of the law's most ardent congressional supporters were alarmed by its inflexibility" (Littell 1992). Congress then established the Endangered Species Committee as an amendment to the 1973 Act. This committee could be convened to reconcile conflicts between protection of endangered or threatened species and development projects involving federal funds or permits. If the benefits associated with a project greatly outweigh the benefits of saving an endangered or threatened species, this committee can override the authority of the Act. The Endangered Species Committee is often referred to as the "God Committee" due to its power to authorize actions that could possibly lead to the extinction of a species.

The 1978 amendments also contained a provision that required the Secretary of the Interior to designate critical habitat for each new species listed as endangered. Of great significance, this provision requires that an assessment of the potential economic impacts of a critical habitat designation be conducted (Mannix 1992). Finally, the 1978 amendments expanded the definition of species

to include subspecies and geographic populations for fish and wildlife, and subspecies and varieties of plants.

The 1982 amendment process produced two important changes in the Act. First, Congress eliminated all consideration of economic impacts in the listing of a species as endangered or threatened. Congress also established a strict timetable for the Fish and Wildlife Service to act on proposals to list or delist endangered or threatened species; the amount of time allocated for final decisions was decreased from two years to one year.

The final round of amendments to the ESA occurred in 1988 and mandated a process for monitoring candidate and recovered species and allowed the emergency listing of species in cases where such action was warranted. The Endangered Species Act is currently up for Congressional reauthorization.

THE ENDANGERED SPECIES ACT OF 1973

The stated purpose of the Endangered Species Act is to conserve, by the use of all methods and procedures necessary, species of flora and fauna that are facing possible extinction. The Act defines a species as any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature (16 U.S.C. §1532). The Act defines an endangered species as a species which is threatened with possible extinction throughout all or a significant portion of its range. A threatened species is any

species that is likely to become an endangered species in the near future. The creation of a separate category for threatened species, who receive the same protection as species designated as endangered, was meant to avoid emergency room tactics of resuscitating species at the brink of extinction. The use of a threatened species category represents a preventative measure.

The Listing Process

Section 4 of the ESA outlines the process by which species are determined to be endangered or threatened (see Figure 1.1). There are five factors used to assess a species potential for endangerment (16 U.S.C. §1533). These include:

- the present or threatened destruction, modification, or curtailment of its habitat or range;
- overutilization for commercial, recreational, scientific, or education purposes;
- disease or predation;
- the inadequacy of existing regulatory mechanisms; or
- other natural or manmade factors affecting its continued existence.

The Secretary of the Interior is responsible for listing species as endangered or threatened. The Secretary is to determine whether a species warrants listing "solely on the basis of the best available scientific and commercial information regarding a species' status, without reference to possible economic or other impacts of such determination" (50 C.F.R. §424.11). Therefore, the listing of

species is viewed as a scientific process based on biological information -- a process in which economic factors have no role.

Critical Habitat

Upon listing a species as endangered or threatened, Section 4 also requires the Secretary to designate critical habitat for the species (see Figure 1.1).

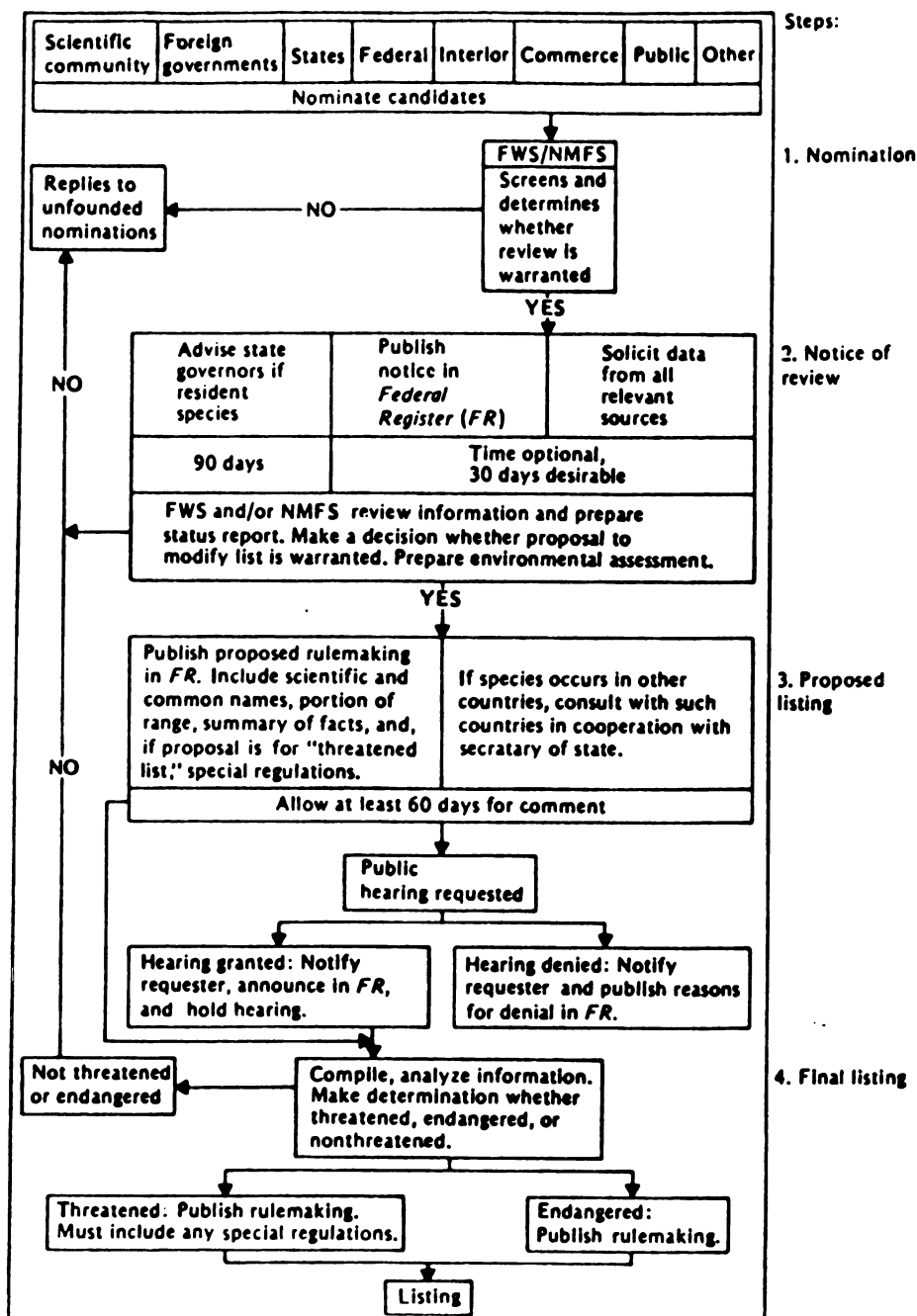
Designated critical habitat includes the following essential elements:

- space for individual and population growth, and for normal behavior;
- food, water, air, light, minerals, or other nutritional or physiological requirements;
- cover or shelter
- sites for breeding, reproduction, rearing of offspring, germination, or seed dispersal; and
- habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species.

In designating critical habitat, the Secretary must consider the best scientific data available. However, when designating critical habitat, the Secretary must also consider "probable economic and other impacts" resulting from the designation (50 C.F.R. §424.12). The Secretary may refrain from designating habitat if such a designation would further jeopardize the species by making its habitat known, if such a designation is not beneficial for the species, or if the critical habitat is not determinable.

Figure 1.1

Listing and Critical Habitat Designation Procedures



Source: Yaffee, Steven Lewis. 1982. *Prohibitive Policy: Implementing the Federal Endangered Species Act*. Cambridge: MIT Press.

Recovery Plans

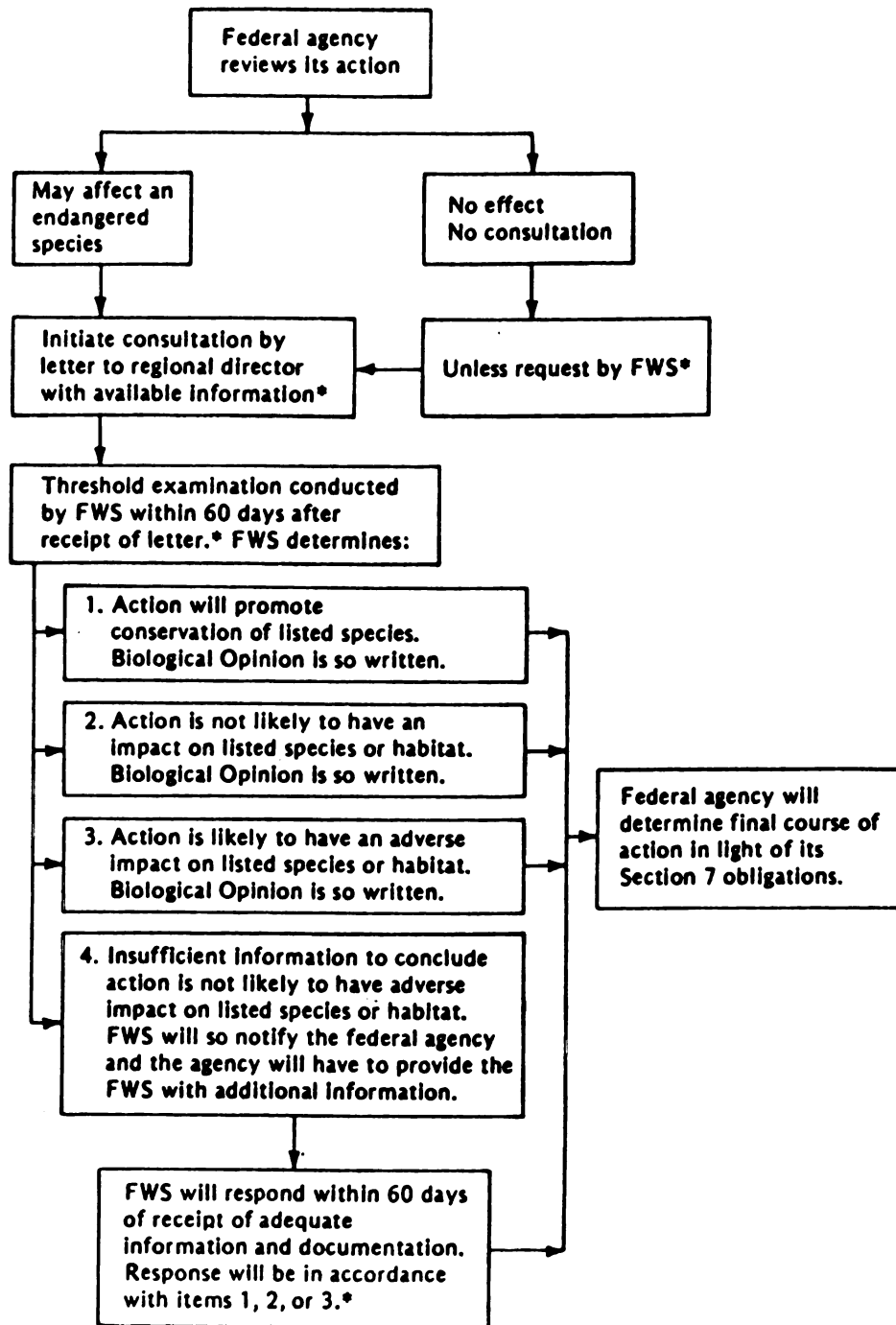
Next, Section 4 also requires the Secretary to develop recovery plans for endangered and threatened species. Recovery plans should be developed for all species listed unless such a plan fails to promote the conservation of the species. The recovery plan should include site specific management actions, measurable criteria to determine whether a species should be removed from the list, and an estimate of the amount of time and money required to implement the recovery plan (16 U.S.C. §1533).

Interagency Cooperation

Interagency Cooperation is addressed in Section 7 of the Endangered Species Act (see Figure 1.2). First, under what is commonly called the "jeopardy prohibition," the Act requires each federal agency to "insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species..." (16 U.S.C. §1536). To facilitate compliance with this provision, Section 7 requires that Federal agencies, proposing construction or development projects, consult with the Secretary to find out if any listed, or species proposed to be listed, are present in the area for the proposed project. If the U.S. Fish and Wildlife Service finds that the requesting agency's project is likely to jeopardize an endangered or threatened

Figure 1.2

Interagency Cooperation



Source. Yaffee, Steven Lewis. 1982. *Prohibitive Policy: Implementing the Federal Endangered Species Act*. Cambridge: MIT Press.

species, or degrade its habitat, a "jeopardy" biological opinion is found. If, however, the proposed action is not likely to jeopardize a listed species, or its critical habitat, a "no jeopardy" biological opinion will be reached (50 C.F.R. §402.14). If the Secretary believes that an endangered or threatened species may be present, the agency involved must perform a biological assessment to identify any species that might be affected by the proposed action.

The Endangered Species Committee

Section 7 also describes the establishment and function of the Endangered Species Committee. It is comprised of the Secretary of Agriculture, the Secretary of the Army, the Chairman of the Council of Economic Advisors, the Administrator of the Environmental Protection Agency, the Secretary of the Interior, and the Administrator of the National Oceanic and Atmospheric Administration (16 U.S.C. §1536). The Endangered Species Committee is convened to consider possible exemptions for federal agencies from the provisions of the Act, and represents another instance where economic and social factors may be considered. This committee can also be convened to consider cases involving projects with some sort of a nexus with a federal agency. The Endangered Species Committee may grant an exemption for a project with a federal nexus if it determines that:

- there are no reasonable and prudent alternatives to the agency action;

- the benefits of such action clearly outweigh the benefits of alternative courses of action consistent with conserving the species or its critical habitat, and such action is in the public interest;
- the action is of regional or national significance; and
- neither the Federal agency concerned nor the exemption applicant made any irreversible or irretrievable commitment of resources.

In addition, the federal agency or exemption applicant may be required to carry out and pay for mitigation and enhancement measures.

The Prohibition Against Taking Species

Section 9 of the Endangered Species Act outlines and enumerates the actions that are prohibited. The ESA makes the following activities unlawful:

- to import and export endangered or threatened species in and out of the United States;
- to take any endangered species or threatened species within the U.S. or on the territorial seas of the U.S.;
- to take any endangered species or threatened species upon the high seas;
- to deliver, receive, carry, transport, or ship in interstate or foreign commerce any endangered species or threatened species; and
- to sell in interstate or foreign commerce any endangered or threatened species (16 U.S.C. §1538).

According to the definitions of the Act, the term "take" means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 U.S.C. §1532). The term harass is further defined

as "an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include...breeding, feeding or sheltering" (50 C.F.R. §17.3). The term harm is further defined as "an act which actually kills or injures wildlife...such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 C.F.R. §17.3).

Incidental Take Permits

The Secretary of the Interior may permit a taking, usually prohibited by the Act, if the taking is incidental to an otherwise lawful activity. This exception is called an incidental taking permit. To be granted an incidental taking permit, an applicant must develop a conservation plan to minimize and mitigate the impacts upon listed species (16 U.S.C. §1539). The applicant must prove that they have adequate funding to carry out the conservation plan as these plans are often extremely expensive to implement. Finally, an applicant for an incidental take permit must show that the taking will not jeopardize the species ability to survive and recover in the wild.

Cooperative Agreements with the States

The Secretary of the Fish and Wildlife Service may enter into cooperative agreements with states in order to advance the goals of the ESA. Each state, that wishes to enter into such an agreement, must develop and implement its own program for the protection of endangered and threatened species. The Secretary must approve each plan. The Secretary will base his or her decision on the following parameters:

- authority resides in the State agency to conserve resident species determined by the State agency or the Secretary to be endangered or threatened;
- the State has established acceptable conservation programs, for all resident species in the State which are deemed to by the Secretary to be endangered or threatened;
- the State agency is authorized to conduct investigations to determine the status and requirements for survival of resident species;
- provision in made for public participation in designating resident species as endangered or threatened (16 U.S.C. §1535, 1337-1338).

THE ENDANGERED SPECIES ACT AT WORK

Since its passage in 1973, the ESA has been credited for the recovery of many species including the bald eagle, the American alligator, the California condor, the brown pelican, the peregrine falcon, sea whales, and the whooping crane (Defenders of Wildlife 1992/1993). Since 1970, 748 domestic species have been officially listed and protected under the ESA. Of these 748 species, only 17

species have been officially delisted (National Wilderness Institute 1992).

Unfortunately, seven of these species were delisted because they became extinct.

Five species were delisted due to errors in data used to support their listing. The remaining five species, whose recoveries can be attributed to the ESA, include the American alligator, the Rydberg milk-vetch and three bird species found on Palua island in the Philippines.

Besides officially listed species, the Fish and Wildlife Service also keeps a list of Category One and Category Two species. If a species is found to warrant listing, but resources are unavailable for actually listing the species, it is given a Category One designation. If a species still awaits status surveys, it is given a Category Two designation. There are currently more than 600 Category One species, and over 3,000 Category Two species.

HISTORY OF FEDERAL WETLANDS PROTECTION IN THE U.S.

Throughout most of U.S. history, wetlands were viewed as wastelands and nuisances. They were inhabited by snakes and mosquitos, and were unfit places for human inhabitants. In fact, during the mid-1800s the U.S. made the destruction of wetlands a national policy when it passed the Swamp Lands Acts of 1849, 1850, and 1860. These Acts granted 15 western states approximately 35 million acres for swamp reclamation (Want 1992). Congress gave away these acres with the expectation that the new owners would fill the wetlands and convert

them into productive agricultural lands (Salvesen 1990). The protection of our country's wetlands resources began with the passage of the Rivers and Harbors Act of 1899. This Act first gave the Army Corps of Engineers regulatory responsibility over discharges into U.S. navigable waters. The intent of this legislation was to keep our country's waterways clear and unobstructed to encourage interstate commerce. Section 10 of this Act makes it unlawful to "excavate, or fill, or in any manner to alter or modify the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor of refuge, or inclosure within the limits of any breakwater, or of the channel of any navigable waters of the United States" (33 U.S.C. §403 et seq.). Section 13 of the Rivers and Harbors Act made it unlawful to discharge refuse of any kind into navigable waters without the permission of the Corps. Sections 10 and 13 provided protection for some wetland areas, although the protection was quite minimal.

From the time the Rivers and Harbors Act was passed through the 1960s, the Army Corps of Engineers gave little consideration to the environmental impacts of discharges into U.S. waters. However, in the 1960s, in response to a public that was increasingly interested in environmental protection, new laws and court decisions extended the Corps' jurisdiction from just navigable waters to all waters -- including wetlands (Salvesen 1990). Finally, in 1968 the Rivers and Harbors Act's permit review process was amended to include environmental

considerations. The inclusion of environmental values is known as "public interest review". In the public interest review, the potential negative impacts of a project are weighed against the positive impacts such as economic development and tax revenue (33 C.F.R. §320.1)). The passage of the National Environmental Protection Act in 1969 (42 U.S.C. §4321 et seq.), mandated even greater consideration of environmental amenities in the Corp's decision-making processes.

With the Federal Water Pollution Control Act (FWPCA) amendments of 1977, Section 404 of the Act became the country's primary mechanism for protecting wetlands. Section 404 was carved out of Section 402 of the FWPCA. Section 402 created the National Pollutant Discharge Elimination Systems (NPDES) program to eliminate the discharge of pollutants into U.S. navigable waters. This program was administered by the U.S. Environmental Protection Agency (EPA) through a permit system (Parenteau 1991). Section 404 extends the EPA's general NPDES permit authority to the Army Corps of Engineers for the regulation of two specific water pollutants. These pollutants are dredged material and fill material (Want 1992).

One of the most significant issues, in the development of wetlands protection under Section 404, involved extending the Corp's jurisdiction to waters above the mean high water level. Historically, the Corp's jurisdiction was limited to the mean high water mark, and did not include wetlands. However, in the 1975 case of *Natural Resources Defense Council v. Callaway* (392 F. Supp. 685),

the court interpreted that the Clean Water Act did apply to wetlands. The Corps was required to extend its regulatory program to include wetlands. In 1975, the Corps created regulations that expanded its jurisdiction, and by 1977 Section 404 applied to all water of the United States (Want 1992).

Since 1977, there have been some important regulatory developments in federal wetlands protection. First, in 1980 the EPA created its final guidelines for the permit evaluation process required in Section 404(b)(1) of the Clean Water Act. Second, the issue of federal protection of wetlands reached the Supreme Court for the first time in 1985. In the case of *United States v. Riverside Bayview Homes* (474 U.S. 121), the Court extended protection to areas saturated by groundwater, in addition to areas saturated by surface waters. Third, the Corps issued its final, comprehensive regulatory provisions for the protection of wetlands in 1986. Fourth, in 1989 the EPA and the Corps jointly created the Federal Manual for Identifying and Delineating Jurisdictional Wetlands. Finally, in November of 1991 the Corps issued the provisions of a revised nationwide permit system for wetlands regulation. The Corps did not make any fundamental changes in the regulatory program. It merely changed the acreage calculation standards, increased the time for permit consideration from 20 to 30 days, and it shifted the decision-making authority from division engineers to district engineers (Want 1992). The Clean Water Act is currently up for Congressional reauthorization.

WETLANDS REGULATION UNDER SECTION 404

The stated purpose of Section 404 of the Clean Water Act is "to restore and maintain the chemical, physical, and biological integrity of waters of the United States through the control of discharges of dredged or fill material" (40 C.F.R. §230.1, 195). United States waters are defined as:

- all waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce;
- all interstate waters including interstate wetlands;
- all other waters such as intrastate lakes, rivers, streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce;
- all impoundments of waters otherwise defined as waters of the United States;
- the territorial seas;
- wetlands adjacent to waters listed above (40 C.F.R. §230.2, 197-198).

A wetland is defined as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (40 C.F.R. §230.3, 198). Wetlands are also known as swamps, marshes, and bogs.

The Issuance of Individual Fill and Discharge Permits

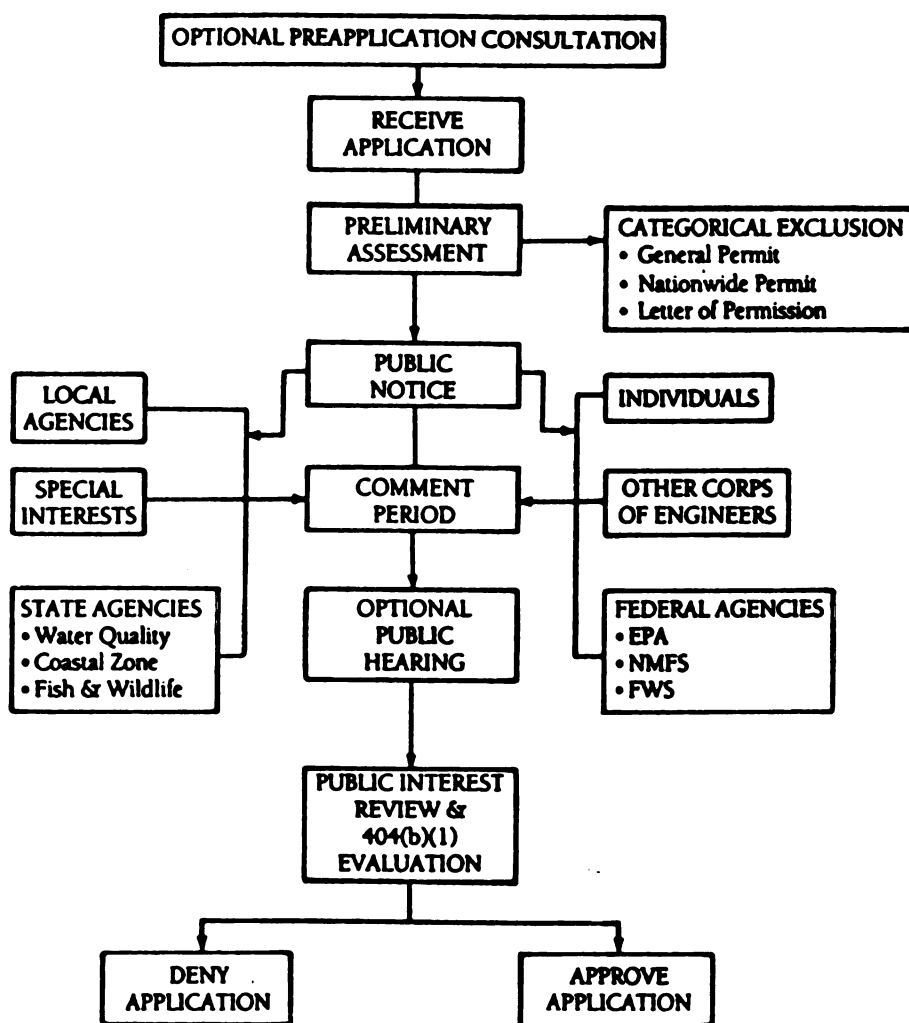
Any party interested in discharging dredge or fill materials into a wetland under the Corp's jurisdiction, must apply for a federal fill and dredge permit (see Figure 1.3). The Secretary of the Army Corps of Engineers is responsible for the issuance of wetlands fill permits. When considering whether to issue a permit, or deny a permit, the Secretary must consider public interest factors. The guidelines included in the public interest review are enumerated in Section 404 (b)(1). These requirements include:

- no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem;
- no discharge of dredged or fill material shall be permitted if it violates any State water quality standard, violates any federal toxic effluent standard, jeopardizes the continued existence of species listed as endangered or threatened, or threatens any federally designated marine sanctuary;
- no discharge of dredged or fill materials shall be permitted which will cause or contribute to significant degradation of the waters of the United States;
- no discharge of dredged or fill materials shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem (40 C.F.R. §230.10, 201-202).

Sometimes, if a project poses significant environmental impacts, an environmental impact statement (EIS) might need to be performed under NEPA. However, cases that require an EIS are rare, numbering about 15 to 20 per year (Parenteau 1991).

Figure 1.3

Section 404 Permitting Process



Source: Salvesen, David. 1990. *Wetlands: Mitigating and Regulating Development Impacts*. Washington, DC: The Urban Land Institute.

The Issuance of General Activity Permits

To hasten the processing of Section 404 permit applications, the Corps has the authority to issue general permits (see Figure 1.3). These permits can be issued on a State, regional, or nationwide basis for any category of activities involving discharges of dredged or fill materials if the Secretary determines that the "activities in such category are similar in nature, will cause only minimal adverse environmental effects when performed separately, and will have only minimal cumulative adverse effect on the environment" (33 U.S.C. §1344 (e), 1069).

If a proposed project is included under a general permit, then no dredge or fill permit application is required. The most significant of the general permits are known as nationwide permits (NWP). To date, thirty-six NWPs have been issued to cover activities in wetlands that pose minimal adverse effects (Silverberg and Dennison 1993). All but four of these permits allow property owners to engage in activities without application for a permit, if they abide by certain conditions and rules set forth in the Corps' wetlands provisions (Parenteau 1991).

Exempted Activities

Some categories of activities are exempt from Section 404 regulation.

These include:

- normal farming, silviculture, and ranching activities such as plowing,

seeding, cultivating, minor drainage, harvesting for the production of food, fiber, and forest products;

- maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, and bridge abutments or approaches, and transportation structure;
- construction or maintenance of farm or stock ponds or irrigation ditches, or the maintenance of drainage ditches;
- construction or maintenance of farm roads or forest roads, or temporary roads for moving mining equipment (33 U.S.C. §1344 (f), 1344).

Environmental Protection Agency (EPA) Authority

The EPA retains veto power over the use of some wetlands as disposal sites for dredge and fill materials. The Administrator of the EPA may prohibit the designation of any wetland area as a disposal site, or he or she may deny or restrict the use of any wetland area as a disposal site. The Administrator would take these actions if he or she determined that the use of the wetland area would have adverse environmental impacts on "municipal water supplies, shellfish beds and fishery areas, wildlife, or recreational uses" (33 U.S.C. §1344 (c), 1069).

Finally, the EPA has the authority to evaluate state wetlands protection programs, and to delegate the Section 404 permitting process to a state.

Cooperative Agreements with the States

Section 404 allows states to assume the permit program from the Corps if the state develops their own EPA approved wetlands protection program. To be approved, the state program must assure compliance with the guidelines set forth in Section 404 (b)(1). The EPA Administrator approves state plans for fixed terms that cannot exceed five years (33 U.S.C. §1344). To date, Michigan is the only state in the country that has assumed the Corps' permit program for wetlands protection.

CHAPTER TWO

REGULATORY TAKINGS THEORY

REGULATORY TAKINGS DEFINED

Generally, governmental appropriation of private land, whether directly through the power of eminent domain, or indirectly through restrictive regulations, is termed a taking of property (AICP 1989). Regulatory takings must be distinguished from the other kinds of government appropriation of land.

Eminent domain refers to the government's right to take, or condemn, private property for public purposes. When the government takes private property to meet a public need compensation must be paid to the property owners for the value of the land taken (Levy 1991). The need for compensation reflects the provisions of the Fifth Amendment's just compensation clause, that states "private property shall not be taken for public use without just compensation" (U.S. Constitution, amend. V). If the government and the property owner cannot agree upon an acceptable price for the land, the matter goes to court. The court hears testimony concerning the value of the land and determines the value of the loss incurred by the property owner (Wright and Wright 1991). The value the

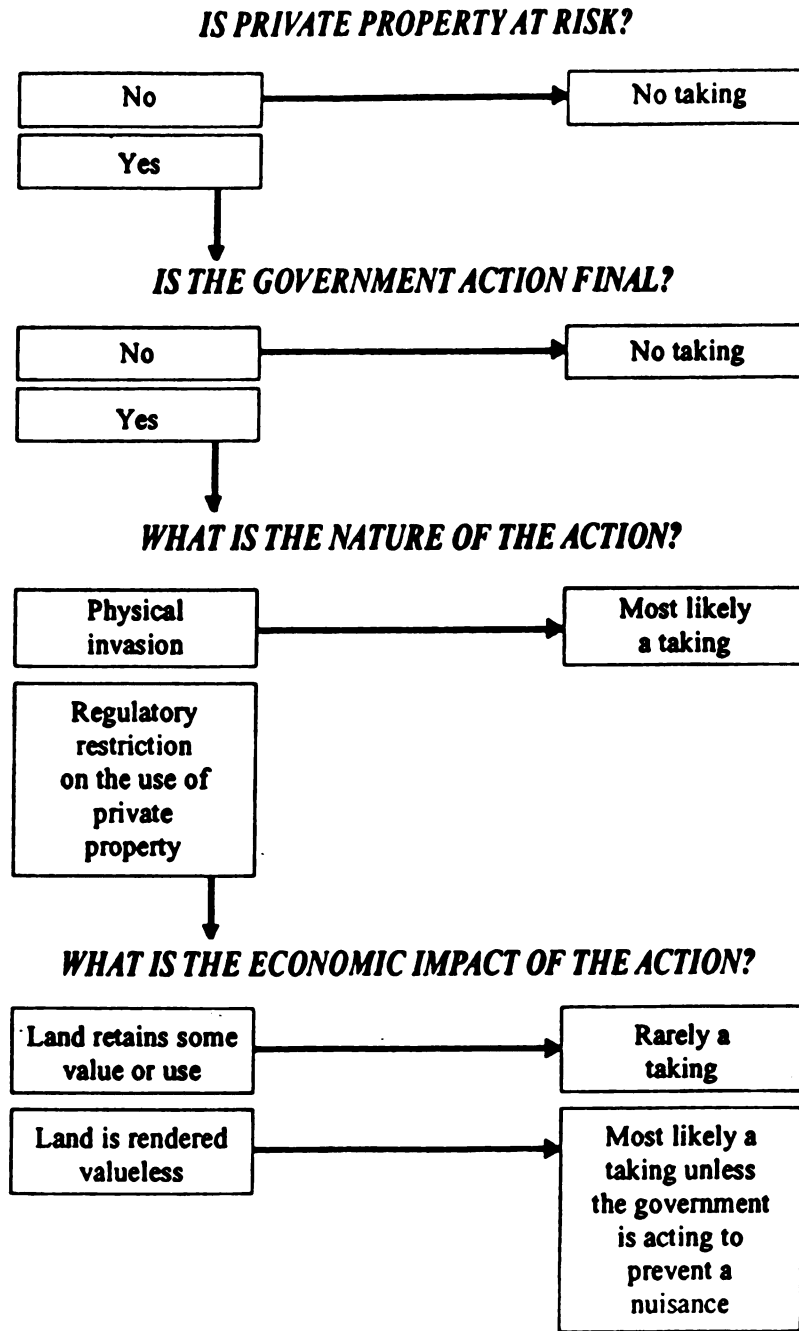
court determines must be paid to the property owner by the government.

Eminent domain is used for a variety of public activities such as redevelopment, urban renewal, development of new towns, and economic development. The eminent domain process is a valid exercise of governmental power, however it is subject to limitation by the constitutional rights assigned to individuals (Levy 1991).

The indirect taking of land may occur through the government's use of the police power. The police power is defined as the "power to legislate for the health, morals, safety, and welfare of the community, and this power can be exercised even though it imposes burdens on the use and enjoyment of private property" (Wright and Wright 1991, 80). While governmental regulation of land, through the police power, may often diminish the value of private property, property owners are generally not entitled to compensation. The use of the police power is exemplified by zoning regulations, environmental protection regulations, subdivision regulations, development permits, etc.

However, sometimes the government's use of the police power so severely restricts property owners' use of their lands that the government has essentially taken the land for public use without using the formal eminent domain process. The taking of property, by severely restricting private rights in property through regulation, is referred to as a "regulatory taking" (see Figure 2.1). This principle was first stated in the 1922 case of *Pennsylvania Coal Co. v. Mahon*, where the

Figure 2.1

Regulatory Taking Determination Process

Source: Zimmerman, Kathleen C. and David Abelson. 1993. *Takings Law: A Guide to Government, Property, and the Constitution*. Boulder: Land and Water Fund of the Rockies.

Supreme Court stated "the general rule at least is, that while property may be regulated to a certain extent, if regulation goes too far it will be recognized as a taking" (200 U.S. 415).

The courts recognize three types of regulatory takings (Freilich and Garvin, 1993). The first type is a physical taking where the taking is caused by physical invasion, or a regulatory program that produces a physical invasion. This is the oldest and most easily found type of regulatory taking. The second type is a title taking where the government places a restriction on the use of property that significantly interferes with the bundle of rights associated with private property ownership. Finally, an economic taking occurs when no value of private property remains after the property is regulated. Economic takings represents the most common type of regulatory taking.

When the government has taken property, without exercising formal eminent domain proceedings, the landowner may seek to recover the value of the taken property by initiating a legal action known as inverse condemnation (AICP 1989). Inverse condemnation actions always claim a violation of the state's constitution, and generally a violation of Section 1983 of the Fourteenth Amendment of the U.S. Constitution. Section 1983 describes the Equal Protection Clause of the Civil Rights Acts. If the taking involves the federal government, the action violates the Fifth Amendment of the U.S. Constitution (Manley 1990).

Inverse condemnation actions usually allege one of the following offenses:

1. a permanent and total taking, where the government totally obliterates property rights and values; 2. a permanent, but partial, taking where the government confiscates the rights of only a portion of a piece of property; 3. a temporary, but total, taking where the government appropriates all property rights for a temporary period; and 4. a temporary, partial taking where the government takes only a portion of the rights in property for a temporary period (Manley 1990). If a taking is found, the government must be prepared to pay compensation for the period during which the taking was in effect (AICP 1989).

There is a nuisance exception to the Fifth amendment's just compensation clause. This exception asserts that if the police power is used to prevent a public harm, and it not being used to advance a public benefit, then the regulatory action is legitimate. In the 1887 Supreme Court case of *Mugler v. Kansas* (123 U.S. 623), the Court stated:

"the exercise of the police power by the destruction of property which is itself a public nuisance, or the prohibition of its use in a particular way, whereby its value become depreciated, is very different from taking property for public use, or from depriving a person of his property without due process of law...in the one case, a nuisance only is abated; in the other, unoffending property is taken away from an innocent owner".

REGULATORY TAKINGS CRITERIA

The courts have not established any specific "recipe" for determining whether a regulatory taking has occurred. The courts have approached legal

actions for takings on a case-by-case basis, and little precedent exists for future legal actions alleging a taking. The Supreme Court itself admits that it has been unable to establish any set formula for determining when economic injuries caused by a public action require compensation by the government. In the 1978 case of *Penn Central Transportation Company v. New York City*, the Supreme Court described its deliberation of regulatory takings cases as "essentially ad hoc, factual inquiries...conducted with respect to specific property, and the particular estimates of economic impact and ultimate valuation relevant in the unique circumstances" (438 U.S. 124).

However, the Supreme Court's decisions have identified several factors that can be weighed to determine whether a regulatory taking has occurred. Rarely will a regulatory taking be found to result from just one of the following criteria. Most takings cases involve one or more of these factors. The following seven criteria have been considered by the courts in determining whether a regulatory taking has occurred.

1. A land use regulation does not relate to a legitimate state interest.

Usually, a regulation is found to advance a legitimate state interest if it promotes the health, safety or welfare of a community (123 U.S. 665). However, sometimes a land-use regulation can be found to be so completely irrational in design that it will be declared invalid on its face. Also, some land-use regulations may be facially valid but are applied in a way that does not truly advance the

public interest. If a regulation is invalid, or does not further the public interest, a regulatory taking may be found (AICP 1989).

The most famous regulatory takings case, illustrating a regulation's failure to advance a legitimate state interest, is *Pennsylvania Coal v. Mahon* (260 U.S. 393). In 1921, the Mahons purchased from the Pennsylvania Coal Company the surface rights to a parcel of mining property. The sale of these surface rights were contingent upon the Coal Company's retention of the rights to all minable coal existing underneath the parcel's surface; the Mahons received surface rights but the Coal Company retained the ownership of the subjacent minerals. The Mahons were therefore bound by contractual agreement to allow the Coal Company to mine out all subjacent coal without objection or hinderance, and without liability for damages that might result from mining operations (260 U.S. 395).

The same year the Mahons purchased these surface rights, the Pennsylvania legislature passed the Kohler Act that regulated the mining of anthracite coal in order to protect the safety and welfare of the general public. The Kohler Act made it unlawful to mine anthracite coal in a way that might cause cave-in, collapse, or the subsidence of the ground's surface. This statute allowed the Mahons to gain an injunction against the mining of coal under their property. They claimed that the removal of subjacent coal would eliminate surface support and they would experience subsidence of their surface property. The Mahons got their injunction and the Pennsylvania Coal Company brought legal action

claiming that the removal of their mining rights under the Kohler Act's provisions constituted a regulatory taking of their property.

The Supreme Court ruled in favor of the Coal Company and concurred that this case represented a taking of private property rights. The Court found that the Act did not advance a legitimate state interest because the Act was not designed to protect the interests of the general public, but instead to protect the property rights of a select few. The Court stated that "the Kohler Act is not a police regulation...it is not a valid exercise of eminent domain because, first, it is not exercised for the benefit of the public generally, and second, because it provides no compensation whatever to the party whose property is taken" (260 U.S. 404). The most important result of this case is the creation of the general rule that "while property may be regulated to a certain extent, if regulation goes too far it will be recognized as a taking" (260 U.S. 414).

2. Assuming a legitimate state interest, the regulation does not substantially advance that interest.

A regulatory taking can occur if a regulation does not substantially advance a legitimate state interest. There must be a clearly established nexus between the regulatory means and the end that is sought. The Supreme Court requires that a regulation advance a legitimate state interest -- not merely that a court could view the state as having rationally decided that the measure adopted

might achieve some state objective (AICP 1989).

An illustrative example of a takings case of this kind is the 1986 case of *Nollan v. California Coastal Commission* (483 U.S. 825). The Nollans own a beachfront lot in Ventura County, California that lies between two public beach areas. The Nollans had originally leased the property upon which was built a small bungalow. The Nollans' option to buy the property was conditioned on their promise to demolish the bungalow and replace it, as the bungalow had fallen into disrepair. The Nollans proposed to demolish the bungalow and replace it with a three-bedroom home, and were required to gain a coastal development permit from the California Coastal Commission. The California Coastal Commission agreed to grant the Nollans the permit with the condition that they allow the public an easement to pass across their property to travel from one public beach to another. The Commission argued that the easement was necessary to protect the public's ability to see the beach, to overcome a perceived psychological barrier to using the beach, and prevent beach congestion.

The Nollans brought a suit against the Commission stating that the easement requirement constituted a regulatory taking of their right to exclude others from their property. The Supreme Court found for the Nollans based partly on the conclusion that the easement did not advance the state's legitimate interests. The Court believed that reducing beach congestion and overcoming psychological barriers to beach use were legitimate state interests, but the Court

did not "understand how any requirement that people already on the public beaches be able to walk across the Nollans' property reduces any obstacles to viewing the beach...lowers any psychological barriers...or helps to remedy congestion on them" (483 U.S. 838). The Court concluded that, "unless the permit condition serves the same government purpose as the development ban, the building restriction is not a valid regulation of land use but 'an out-and-out plan of extortion'" (Tribe 1988, 598).

3. **The advancement of a legitimate state interest places the disproportionate burden of securing a benefit upon a single landowner when it is more properly borne by the general public.**

This criterion advances that a legitimate state interest is not substantially pursued if it singles out one landowner to bear a burden that should be borne by the public as a whole (AICP 1989).

Nollan v. California Coastal Commission also provides a useful example of a regulatory taking of this kind. The Supreme Court found for the Nollans partly because the easement condition placed on their building permit was essentially providing a public benefit, greater beach access, at the Nollans' expense. The California Coastal Commission believed that the public interest was being served by providing a continuous strip of publicly accessible beach along the coast. The Court stated that while "the Commission may well be right that it is a good idea, but that does not establish that the Nollans alone can be compelled to contribute

to its realization" (483 U.S. 841). The Court further argued that California is free to advance its coastal protection program, but the state should be prepared to use its power to spend to pay for the desired easement across the Nollan's property.

4. The regulation entails a permanent physical occupation.

A taking can be easily found when the interference with private property involves a physical invasion and occupation by the government. In fact, the courts have applied a per se rule to determine taking cases involving a physical occupation, while all the other takings criteria are employed in a balancing test to determine whether a taking has occurred (Freilich and Morgan 1988). Physical invasion can be by the government itself, or by those authorized by the government. The Supreme Court has found physical occupation to be particularly serious because this infringement effectively destroys all of the landowner's rights to use, exclude, or alienate to capture property value (AICP 1989).

The most well-known regulatory takings case involving physical invasion and occupation is the 1981 case *Loretto v. Teleprompter Manhattan CATV Corp* (458 U.S. 419). In New York, a law requires that landlords allow the installation of cable TV cables in exchange for a \$1 fee. Landlords were not to bear the costs of installation; they could demand that the installation conform to reasonable conditions necessary to protect the appearance and safety of the premises; and they were entitled to indemnification by the CATV company for any damages

resulting from installation, operation or removal of CATV facilities (Tribe 1988). Loretto, the plaintiff, purchased an apartment building in New York City. The previous owner of the property had granted the appellees permission to install a cable on the building and the exclusive privilege of furnishing cable television services to the tenants of the building. The appellant did not discover the existence of the cable until after she had purchased the building. She brought a class action suit against Teleprompter on behalf of all owners of real property in New York on which Teleprompter had installed CATV components. Loretto claimed that Teleprompter's installation represented a trespass and a taking of property rights without just compensation.

The Supreme Court found for Loretto, stating that, "the cable installation on [the] appellant's building constituted a taking under the traditional physical occupation test, since it involved a direct physical attachment..." (458 U.S. 420). Further, the Court stated that "to the extent that the government permanently occupies physical property, it effectively destroys the owner's rights to possess, use, and dispose of the property. Moreover, the owner suffers a special kind of injury when a *stranger* invades and occupies the owner's property. Such an invasion is qualitatively more severe than a regulation of the *use* of property, since the owner may not have control over the timing, extent, or nature of the invasion" (458 U.S. 420).

5. Reasonable investments were made prior to general notice of the regulatory program.

This criterion refers to whether the landowner was aware, or given notice, of the regulation prior to substantial and reasonable investment. However, what constitutes a reasonable investment-backed expectation is often not clear. This criterion is often most relevant where the right claimed is a governmental benefit such as a license or permit (AICP 1989).

The 1979 case of *Kaiser Aetna et al. v. United States* represents an excellent example of this type of regulatory taking (444 U.S. 164). The petitioners were the owner and lessee of an area that included Kaupa Pond, a shallow lagoon on the island of Oahu in Hawaii. This pond was contiguous to a navigable bay, and the Pacific Ocean, but was separated from the bay by a barrier beach. In 1961, Kaiser Aetna leased this property from the owners and proceeded to create a private marina by dredging and filling Kaupa Pond, and by removing the barrier beach. These improvements allowed boat passage to and from the bay from Kaupa Pond. When the petitioners notified the Army Corps of Engineers of their plans, the Corps informed them that they were not required to obtain any permits for the development of, and operations in, Kuapa Pond.

The new marina was called Hawaii Kai Marina, and was a private marina run by Kaiser Aetna, who controlled access and use of the marina for profit. However, in 1972 a dispute arose about whether Kaiser Aetna could deny public

access to the pond because, as a result of the improvements, it had become navigable water of the United States. The Government contended that Kaiser Aetna could not exclude members of the public from the Hawaii Kai Marina because the public possesses rights to navigate all navigable waters of the United States (33 C.F.R. §329.4).

Kaiser Aetna brought legal action against the United States alleging that the removal of their right to exclude the public from Kai Marina, due to regulations under the Commerce Clause, constituted a regulatory taking of their property rights. The Court found for the petitioners. The Court stated that the government's attempt to create a public good, at the expense of a private party, amounted to a taking.

This case typifies a taking under the reasonable investment-backed expectations criteria as the "improvements to Kuapa Pond caused its original character to be so altered that it became subject to an overriding federal navigational servitude, thus converting it into a public aquatic park which petitioners had invested millions of dollars in improving on the assumption that it was a privately owned pond..." (444 U.S. 169). The Court stated that, "it is a case in which the owner of what was once a private pond...has invested substantial amounts of money in making improvements. The Government contends that as a result of one of these improvements...the owner has somehow lost one of the most essential sticks in the bundle of rights that are commonly characterized as

property -- the right to exclude others" (444 U.S. 176). Because Kaiser Aetna was unable to exclude the public, they were unable to realize a return on their investment in the pond.

6. The economic effect of the regulation deprives the landowner of all, or substantially all, beneficial use of the property.

The principal concern in this criterion is that economic burdens of public actions should not be disproportionately concentrated on a few persons. This criterion is hard to satisfy. In fact, the Supreme Court has upheld regulations that have diminished the value of property by as much as 90 percent. In addition, when calculating the economic impact of a regulation, the landowner may not divide a single parcel into discrete segments and attempt to determine whether rights in a particular segment have been abrogated (AICP 1989).

The most important example illustrating the deprivation of all beneficial use of property is the 1992 case of *Lucas v. South Carolina Coastal Council* (453 U.S. 1). In 1986, petitioner Lucas paid \$975,000 to purchase two residential lots on a South Carolina barrier island and intended to eventually build single-family homes on the lots. At the time Lucas bought the lots, they were not subject to the State's coastal zone building permit requirements. However, in 1988 the state legislature enacted the Beachfront Management Act to comply with the federal Coastal Zone Management Act. The Beachfront Management Act effectively

barred Lucas from erecting any permanent habitable structures on the parcels.

Lucas filed suit against the respondent state agency claiming that the Act's provisions deprived him of all economically viable use of his land, and therefore represented a taking of private property.

The Supreme Court found that the restrictions resulting from the Beachfront Management Act did effect a taking of Lucas's property. The Court found that "Lucas's two beachfront lots to have been rendered valueless by respondent's enforcement of the coastal-zone construction ban" (453 U.S. 14). The Court further stated that "there are good reasons for our frequently expressed belief that when the owner of real property has been called upon to sacrifice all economically beneficial uses in the name of the common good, that is, to leave his property economically idle, he has suffered a taking" (453 U.S. 13).

In one important outcome of this case, Judge Scalia outlined specific factors to be considered in determining whether a taking is total. The criteria used are:

- the degree of harm to public lands and resources, or adjacent private property, posed by the claimant's proposed activity;
- the social value of the claimant's activities and their suitability to the locality in question;
- the relative ease with which the alleged harm can be avoided through measures taken by the claimant and the government; and
- the fact that a particular use has long been engaged in by similarly situated owners (Warbach 1992, 9).

7. The regulation abrogates an essential element of private property.

A regulatory taking may be found if a regulation effectively abolishes one or more of the most essential rights associated with property (AICP 1989). A particularly illustrative case of a taking of this nature is *Hodel, Secretary of the Interior v. Irving et al.* (481 U.S. 704). This case occurred in 1986 and involves the right to pass property on to one's heirs. The case resulted from a land program called the General Allotment Act of 1887, which was enacted by Congress to coerce Indians into abandoning their nomadic lifestyles. This program divided the communal reservations of Indian tribes into individual allotments and granted individual ownership of allotted lands. Over time, these allotments became increasingly fragmented as successive generations came to hold the allotted lands, because each property owner was apt to have multiple heirs. 40-, 80- and 160-acre parcels became splintered into multiple undivided interests, with some parcels having dozens of owners. This fragmentation made the land increasingly economically inviable, and the costs of managing the land prohibitive.

In response, Congress passed the Indian Reorganization Act in 1934 (25 U.S.C. 461). Section 207 of this Act eventually led to the alleged taking. This section read, "no undivided fractional interest in any tract or trust of restricted land within a tribe's reservation or otherwise subjected to a tribe's jurisdiction shall decede by intestacy or devise but shall escheat to that tribe..." (481 U.S. 709). Essentially, the Act prevented allotment holders from passing their allotments on

to their heirs upon their death. Instead, the allotment reverted back to communal possession of the tribe upon the allotment holder's death. Three appellees, represented by Mary Irving, were heirs or devisees of members of the Oglala Sioux tribe who had held individual allotments. The appellees charged that a regulatory taking of their property had occurred because Section 207 had unconstitutionally taken their decedents' right to pass on the property upon their death.

The Supreme Court found for the appellees. The Court recognized that the decedents had a right, derived from the original Sioux allotment statute, to control disposition of their property at death. Section 207 of the Indian Reorganization Act effectively violated the Fifth Amendment by taking this right without compensation to the decedents' estates. This Act abolished both the rights of descent and devise, and "virtually abrogated the right to pass on a certain type of property to one's heirs" (481 U.S. 716). Recognizing that the right to pass on property to one's heirs has been a part of the Anglo-American legal tradition since feudal times, the Court found that this case represented a regulatory taking as the regulation went "too far" (260 U.S. 415).

CHAPTER THREE

REVIEW OF LITERATURE ON REGULATORY TAKINGS AS APPLIED TO THE ESA AND SECTION 404

REVIEW OF LITERATURE ON REGULATORY TAKINGS AND THE ENDANGERED SPECIES ACT

Published literature on regulatory takings resulting from the Endangered Species Act is not extensive, since the issue has only emerged substantively in recent years. While there is a considerable literature available on regulatory takings theory in general, very few works have applied takings theory to the Endangered Species Act. However, one area where interest in takings theory, as applied to the ESA, seems to be growing is in law review articles.

In 1990, Holmes Rolston, a professor at Colorado State University, wrote a law review article that addressed the conflicts between property rights and protection of species under the ESA (Rolston 1990). In 1991, Rolston reiterated his views in an essay included in Balancing on the Brink of Extinction, a book that considers the ESA and its implications (Rolston 1991). Rolston essentially embraces the common law public trust doctrine in his analysis of this issue. This doctrine asserts the notion that some amenities, such as rivers, the sea, wildlife,

mountains, etc. are incapable of ownership. Instead, these resources are owned by everyone in common, can be used by anyone, and should be protected by everyone (Reiser 1991). Rolston argues that wildlife is truly a public good that is held in trust by the state for the benefit of all. To destroy an endangered or threatened species is to essentially commit a public harm; to decrease the stock of biological diversity that is a shared resource for all. Rolston's articles asserts that the government most definitely has the right to restrict land use to prevent the public harm of species extinction.

However, Rolston also recognizes that when an endangered or threatened species is found on private land, a single property owner may be forced to suffer economic costs to provide the diffuse benefit of species protection. He argues that "the landowner, also a citizen, shares in these benefits, but gains only a soft set of benefits against heavy costs in opportunities foregone...the nation and its people enjoy the claimed benefits without cost, but the landowner, constrained in the right to hold and enjoy property, suffers economic loss" (Rolston 1990, 297). Therefore, Rolston acknowledges one of the criteria often used to determine whether a regulatory taking has occurred, namely making a single landowner bear a disproportionate burden in securing a public benefit.

Rolston admits that there will be losers along the way as our country attempts to protect biological diversity. He believes that these losers, in all fairness, deserve compensation for the costs they endure to provide a public

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benefit. Rolston suggests a couple of different means of compensation. First, he argues that land that provides habitat for endangered and threatened species should be taxed accordingly. The land should be taxed at a reduced rate to reflect the reality that it is no longer developable. Rolston also suggests that the government buy conservation easements on private property where listed species are found. Finally, he argues that if a landowner is put to actual expense to protect a listed species, then compensation by the government is required.

Another law review article, on precisely the same topic as Rolston's, draws conclusions that are somewhat different. This 1992 article, written by James Burling of the Pacific Legal Foundation, argues that private property rights still reign supreme in U.S. courts. Burling strongly affirms the regulatory taking principle, and describes a variety of takings cases in his analysis to support his contention on the strength of property rights. He also seems dubious about the application of the public trust doctrine to resources such as wetlands and endangered species. In fact, he criticizes the public trust doctrine by describing it as an "all-encompassing ecological easement on all private property" (Burling 1992, 326). When Burling applies the takings principle to environmental regulation such as the ESA, he concludes that "there is no special wetland, habitat, or other environmental exception to the law of takings" (Burling 1992, 315). Therefore, Burling believes that the ESA is as susceptible to takings conflicts as any other type of legislation that restricts private property rights.

Burling and Rolston do agree on one point. In his article, Burling also argues that individual property owners should not be singled out to pay the costs of species protection. Burling states that if society determines that species are valuable and should be protected, then society as a whole should be prepared to pay for the property necessary to protect listed species (Burling 1992).

The next two law review articles analyze takings resulting from the ESA within the context of the same court case. The case is *Christy v. Hodel* (857 F2d 1324, 9th Cir. 1988). Christy, the plaintiff, is a sheep rancher in northern Montana near Glacier National Park. He was fined \$3,000 by the U.S. Department of the Interior after he violated the ESA by shooting a grizzly bear that was preying upon his sheep. Grizzly bears were listed as a threatened species under the ESA. Prior to this incident, Christy had lost 20 sheep to the grizzly, and had repeatedly reported the predation to the U.S. Fish and Wildlife Service (Harrison 1991). Christy appealed the Interior Department's fine in the Ninth Circuit court, claiming that the ESA deprived him of his right to protect his property in violation of the Fifth amendment's due process clause (Alsup 1991). The Circuit court found no taking, claiming that the government is not responsible for damages caused by grizzly bears because the state does not own wild animals. Christy appealed to the U.S. Supreme Court, which refused to hear his case (Sugg 1993).

In his 1991 law review article, Geoffrey Harrison argues that the

implementation of the ESA in the *Christy* case led to both a taking *per se* and a regulatory taking. First, he argues that the Christy case represents a *per se* taking because it involves direct physical invasion of private property by an endangered species. He uses the *Loretto* and *Nollan* cases to illustrate how *per se* takings occur, and to reiterate that invasion need not be by the government itself, but can be done by an actor with government authorization. Harrison points out that the government did not own the cable company in *Loretto*, or the beach-goers in *Nollan*, nor does it own the grizzly bear in Christy. However, the Endangered Species Act authorized a third party, namely the grizzly bear, to invade Christy's property. He states that "the ESA, by stifling preventative measures, works a compensable taking through the physically intrusive and destructive actions of governmentally protected species" (Harrison 1991, 1114).

Harrison next makes the case that the ESA led to a regulatory taking in *Christy v. Hodel*. He employs three of the regulatory takings criteria for the basis of his argument. First, he states that the ESA interfered with Christy's investment-backed expectations. The ESA allowed the grizzly to feed on Christy's sheep. The economic loss was "immediate and identifiable" (Harrison 1991, 1119) and it was therefore easy to assess the economic loss involved. Harrison argues that the economic loss was 100% because no viable use of the sheep remained after they were slaughtered by the grizzly. Second, Harrison states that the character of the government action deprived Christy of his right to exclude others.

The inability to exclude others would amount to an abrogation of an essential property right. The right to exclusion applies not only to people, but to animals as well. The article argues that the ESA greatly reduced Christy's ability to exclude unwanted predators from his property. Third, Harrison argues that the ESA unequally burdens some landowners more than others its protection of listed species. Christy provided the grizzly with sustenance at great personal expense, and society as a whole paid nothing. Harrison states that "the mere happenstance that protected species occasionally choose to consume private rather than public property does not justify the imposition of the public's financial burden upon random injured individuals" (Harrison 1991, 1124).

Like Rolston and Burling, Harrison writes that the ESA should provide compensation to landowners who are singled out to bear the costs of species protection. He thinks that the government should use public funds to provide wildlife preserves, or to compensate private landowners who feed listed species.

A 1991 article by Lauri Alsup also analyzes takings jurisprudence using the *Christy v. Hodel* case. In this article the author argues that the right to protect private property, in this case the right for Christy to protect his sheep from the grizzly, is a fundamental right in property (Alsup 1991). She then goes on to propose that by not allowing Christy to protect his property, the ESA took an essential right in property.

Alsup makes a case that the defense of property is an inviolable right

attached to the ownership of property. She states that forty-one states of the union make statutory provisions for the use of force in defense of property. The rest of the states, and the District of Columbia, rely upon common-law doctrines that give implicit justification for defense of property without actual codification (Alsup 1991). She also states that "the right to protect property is an ancient and abiding notion in our legal tradition...it is as deeply rooted as the adoption of the rights of Englishman to life, liberty, and property, which are protected by the due process clause of the fourteenth amendment" (Alsup 1991, 229).

Alsup argues that through implementation of the Endangered Species Act, the government interfered with Christy's Fifth amendment right to protect his property. Like the other authors, she believes that compensation may be in order. The right to protect property is attached to possession of property. Therefore, if the government agrees to buy the property to provide species protection, the rights to defend the property are transferred with the possession of the property.

Outside of law review journals, there are a few other sources of literature that apply regulatory takings theory to the Endangered Species act. A 1986 essay by Robert Carlton addresses the issues of property rights and incentives in the protection of rare and endangered species (Carlton 1986). Carlton asserts that in order to be effective, species preservation policy must incorporate the following: 1. it must respect constitutional and legislative property rights; 2. it must be fair and equitable; and 3. it must be effective. In regards to the first criterion, Carlton

argues that the ESA has great potential to threaten property rights. He states that "it seems reasonable to conclude that some of the restrictions imposed by endangered species legislation upon private property owners may involve illegitimate takings of private property...they may greatly diminish the value of property in the pursuit of a novel, nontraditional public good" (Carlton 1986, 258).

Carlton devotes a considerable part of his discussion to the inequities inherent in species protection. These inequities result when some individual property owners, whose land provides listed species habitat, may incur substantial economic costs that should more properly be distributed among the population. Carlton argues that "given the preservation of endangered species provides benefits to all citizens, a method that distributes the costs fairly among the general population is preferable to a method that imposes costs disproportionately on certain property owners, certain areas, or certain geographic or social groups" (Carlton 1986, 261).

Carlton evaluates the effectiveness of species preservation policy according to the policy's ability to equitably distribute costs across the population. He also believes that incentives, instead of prohibitions, would provide a more effective mechanism for species protection. Some different incentives he suggests include: monetary incentives such as tax credits, tax exemptions, and compensation; state and local heritage programs; purchase or exchange of property rights in land; and

removing or easing of real or perceived restrictions on land (Carlton 1986, 265).

In a 1993 article, Pershkov and Housman discuss regulatory takings in light of the *Lucas v. South Carolina Coastal Council* case (Pershkov and Houseman 1993). In their analysis, they ask whether the *Lucas* decision applies to federal laws such as the Endangered Species Act and §404 of the Clean Water Act. They discuss three separate scenarios for federal statutes. First, they acknowledge that the *Lucas* analysis will potentially be applied directly to regulatory takings cases involving federal statute. However, they believe that this approach would be unsatisfactory because the bundle of rights associated with private property is defined by state laws. They fear a "patchwork quilt of federal takings jurisprudence" across the states (Pershkov and Housman 1993, 10010). Next, they consider the potential for the *Lucas*' analytical framework to be applied to federal statutes through existing principles of the federal common law of nuisance. In order to judge whether a regulatory taking had occurred, a federal court would determine if the regulation was justified under federal common-law nuisance provisions, instead of looking to state-law nuisance provisions. If the regulation enforces federal nuisance provisions, then no taking will be found. The authors feel that this approach is dubious as well. Usually, federal common-law nuisance theory is only applied in interstate cases. Finally, Pershkov and Housman argue that the takings framework developed from *Lucas* is completely inapplicable to federal states such as the ESA and §404 of the Clean Water Act. They feel that

takings jurisprudence is based in state-laws and would not be applicable to federal statutes.

Finally, there has been some discussion of regulatory takings and the Endangered Species Act in popular literature. A 1993 article in High Country News discusses the impact environmental regulation has on private property rights (Williams 1993). Williams argues states that "the takings provision has emerged as a critical battleground in the conflict between land development and environmental protection" (Williams 1993, 1). In her analysis of takings as applied to the ESA, Williams gives an example of a case in Utah. This case involves a couple who bought some land in Utah so they could build a campground. The U.S. Fish and Wildlife Service (USFWS) found a rare colony of Kanab amersnails on their property. The couple is unable to make any economic use of their land. They are currently suing the United States, and hope to take their case all the way to the Supreme Court. In this article, Williams quotes an attorney who commented that "the problem with the Endangered Species Act is that there is no compromise written into the law...that leaves regulators with a very stark choice, and it's not hard to find a case where property value gets wiped out" (Williams 1993, 12).

In a 1992 article, Brian Mannix argues that the Endangered Species Act could leave the Department of the Interior (DOI) open to regulatory takings cases. He points out that landowners have had some recent success in winning regulatory

takings cases resulting from federal wetlands regulation. Mannix attributes the DOI's failure to designate spotted owl critical habitat on private land to fears of takings charges (Mannix 1992). Prohibiting logging on commercial tracts would have destroyed virtually all economic value of the land, and left the DOI wide-open to regulatory takings claims.

REVIEW OF LITERATURE ON REGULATORY TAKINGS AND SECTION 404 OF THE CLEAN WATER ACT

Most current literature on federal wetlands regulations and regulatory takings is also found in law review journals. An article by Merlyn W. Clark, in the 1992/1993 Idaho Law Review, provides a very thorough commentary on takings jurisprudence as applied to Section 404 of the Clean Water Act (Clark 1992/1993). Clark builds his argument around federal Claims Court cases where a taking has been found to result from federal wetlands regulations.

First Clark asserts that in order to file a successful regulatory takings claim, a property owner must ensure that the claim is ripe. A claim is ripe only if the landowner has exhausted all administrative remedies available. A landowner cannot prove that all use of the land has been taken until they first explore all the different use options available. Administrative remedies might include mitigation, modification of the development projects, or variances. Clark points out that in many wetlands cases, the Claims Court has refused to apply the ripeness doctrine

because the Court recognizes that no administrative remedies were available (Clark 1992/1993).

Clark states that the takings criterion most applicable to wetlands takings cases is economic loss. In his discussion of the economic viability test, Clark addresses the issue of whether a parcel of property should be considered as a whole or in segments when determining whether a taking has occurred. Often, landowners will attempt to claim a taking of only a segment of a parcel of property because it is easier to prove 100% loss of economic benefit. Clark states the Claims Court generally will not limit its evaluation of a takings claim to the wetlands portion of a larger parcel, but will instead consider the entire parcel (Clark 1992/1993).

Clark also discusses whether property owners must have lost 100% of the economic value of their land for the Court to find a taking. He concludes that the Claims Court does not require that the landowner prove 100% loss in value. The Courts have generally found it to be unreasonable and unrealistic to require a property owner to prove 100% loss; that requiring proof of all economic use is "a hurdle which would make an illusion out of the fifth amendment" (Clark 1992/1993, 79). Clark also points to examples where the Claims Court has found residual uses for regulated property such as recreation, birdwatching, and hunting, but that the economic viability of these uses was minimal.

Finally, Clark addresses the nuisance exception to takings claims.

According to this exception, regulation that deprives a landowner of all economic use of their land may still be upheld if the regulation eliminates a public nuisance or serious threat to public health. The position the Claims Court takes on the nuisance exception for wetland protection seems quite unclear. Clark describes the 1981 case of *Deltona Corp. v. United States* where the Claims Court upheld the regulation of wetlands under Section 404. The Court found that the destruction of the wetlands would constitute a public nuisance. Clark also describes the 1985 case of *Florida Rock I v. United States* where the Court rejected the nuisance exception stating that "it is impossible to use one's property in a society without having some impact, positive or adverse, on others" (8 Cl. Ct. 176).

In a 1993 law review article, Jan Goldman-Carter analyzes the impacts of the *Lucas v. South Carolina Coastal Council* upon wetlands takings cases. She argues that the Lucas case should have little impact upon the consideration of takings cases involving wetlands. The *Lucas* case involved a total take of all economic value of the land while wetlands often retain residual value after regulation if used for camping, fishing, birdwatching, hunting, trapping and scientific study. Goldman-Carter points out that landowners can recoup some value from regulated wetlands by selling easements or fee title interests for the uses listed above. She also argues that wetlands may be used for economically viable activities such as timber harvesting, food production, and mineral extraction as long as no depositing of fill materials is needed (Goldman-Carter 1993).

Goldman-Carter expresses concern over the segmentation of property interests because this would make it easier for a landowner to prove a total take of all economic use of their land. If the courts begin to limit their deliberations by considering only the wetlands areas of a larger parcel, it is more likely that they will find a total taking.

Next, Goldman-Carter argues that the nuisance exception applies to wetlands regulation. She argues that the destruction of wetlands constitutes a public nuisance because wetlands provide a variety of important functions that are critical to the health, safety and welfare of the general public. According to the nuisance exception, property rights are not protected if they interfere with another's property rights, and are a noxious or nuisance-like use of land. Therefore, according to this author, the regulation of wetlands can never lead to a compensable taking of private property because the regulation is used to restrict a public nuisance (Goldman-Carter 1993).

Goldman-Carter concludes by suggesting ways that regulators might avoid regulatory takings conflicts. First, she urges regulators to apply restrictions to the smallest amount of property necessary to achieve the goals of the regulatory program. The smaller the portion of land that is regulated, the harder to prove that a total take of land has occurred. Second, she encourages regulators to ensure that wetlands regulations are applied consistently and comprehensively. All landowners that have wetlands on their property should receive the same

restrictions on the use of the wetlands are on their land. Finally, the author argues that monies should be available for compensation and acquisition. She acknowledges that sometimes wetlands regulations may obliterate all reasonable investment-backed expectations in land, especially if the investment in the land was made prior to enactment of the Clean Water Act when investors were less knowledgeable about wetlands. If wetlands regulation deprives a landowner of all reasonable investment-backed expectations in the land, compensation or acquisition of the property may be necessary (Goldman-Carter 1993).

Edmund LaTour begins his 1990 law review article by acknowledging that regulatory takings have been found to result from Section 404 of the Clean Water Act. However, he then proceeds to argue six reasons why the denial of a Section 404 permit should not result in a taking under the just compensation clause (LaTour 1990).

First he states that if the denial of a wetlands permit by the Corps always results in a regulatory taking, then the Corps' ability to enforce Section 404 has been completely undermined. The issue LaTour is focusing on here is where to draw the line in determining whether enforcement of Section 404 will lead to a regulatory taking. If the enforcement of every wetlands under the jurisdiction of Section 404 might result in a regulatory takings case, then Section 404 will become too costly and complex to be implemented at all.

Second, LaTour argues that the nuisance exception applies to wetlands

regulation under Section 404. He states that the nuisance exception "applies to regulations promulgated to prevent injury to public health, morals, safety and the general welfare" (LaTour 1990). LaTour believes that wetlands regulations are designed to protect the general welfare by preventing the destruction of wetlands, and are therefore not subject to the just compensation clause.

Third, LaTour argues that investment-backed expectations in land containing wetlands are not reasonable. Most often investors buying land containing wetlands know that the wetlands are present. They buy the land with the full knowledge that they will have to secure permits to develop the wetlands areas. Investors expect to be able to gain the proper permits, yet there is no guarantee that the Corps will issue the permits. Therefore, the investor's investment-backed expectations are unreasonable.

Fourth, LaTour believes that if wetlands areas are considered as a part of a larger parcel of land, then a regulatory taking will be hard to prove. LaTour quotes the Supreme Court's statement that "taking jurisprudence does not divide a single parcel into discrete segments and attempt to determine whether rights in a particular segment have been abrogated...this Court focuses on the extent of the interference with rights in the parcel as a whole" (438 U.S. 130-131).

Fifth, LaTour argues that the regulation of wetlands under Section 404 does not burden some property owners with costs that should be borne by the public as a whole. He draws this conclusion from the fact that Section 404 is

applied equally to all landowners who have wetlands upon their property. One landowner who has wetlands on his or her property is not singled out to bear the costs of wetlands protection because these costs are shared by all landowners who have wetlands on their property.

Finally, LaTour advances that the right to transform land from its natural state is not an inherent property right. He points out the 1972 Wisconsin case of *Just v. Marinette County* where the court upheld that individuals do not have the right to alter natural features if it would harm the public. This court found that wetlands provide many functions critical to the welfare of the general public.

A 1992 law review article by Patrick Kennedy focuses on the conflicts between private property rights and the public interest in protecting wetlands (Kennedy 1992). He focuses his analysis on the case of *Loveladies Harbor, Inc. v. United States* where the U.S. Claims Court found that the implementation of Section 404 led to a regulatory taking of private property. This author asserts that the Court's decision in *Loveladies* was flawed, and that the courts must increasingly recognize the public value of wetlands.

Kennedy criticizes the Claims Court's consideration of only a segment of a larger parcel of land in the *Loveladies* case. The whole parcel in *Loveladies* included 250 acres. However, only 12.5 of these acres were wetlands and only these 12.5 were regulated by Section 404. In its analysis, the Court considered only the 12.5 acres that were regulated instead of the entire 250 acres. The author

believes that segmentation of property interests increases the likelihood that a taking will be found.

Next, Kennedy discusses whether Section 404 regulation of wetlands in the *Loveladies* case advances a legitimate state interest. He states that the Court weighed the prevention of a public harm against the advancement of a public benefit, and found that the regulation favored the advancement of a public benefit. If the regulation had been found to prevent a public harm, it would fall under the nuisance exception and would not be subject to the compensation clause. However, since the regulation was found to promote a public benefit, it would constitute a regulatory taking of private property unless the public paid for that benefit (Kennedy 1992).

Finally, Kennedy considers the valuation process the Court employs in its determination of economic viability. He argues that the Court is mistaken in only recognizing, and valuing, the right to develop land. The Court ignores other property rights such as the right to possess, dispose of and to exclude others. He argues that the Court inflates the valuation of land by only considering its development potential. In describing the economic viability analysis in the *Loveladies* case, Kennedy states that "by choosing a fair market value of a forty-lot residential development, the court is in effect stating that the government has taken the forty-lot development way from the plaintiff when in fact there is no forty-lot development present on the property" (Kennedy 1992, 748).

In a 1986 law review article, Simeon Rapoport discusses takings claims resulting from the denial of a Section 404 permit to fill wetlands. Rapoport asserts that a developer will only be successful in winning a takings case in extreme circumstances. The author begins her analysis of the taking of wetlands by arguing that all administrative remedies must be exhausted before a property owner can claim a taking. She states that "there can be no taking if a permit has never been denied" (Rapoport 1986). Next, Rapoport discusses whether wetlands protection under Section 404 constitutes a legitimate government interest. If the regulation was found to not advance a legitimate government interest, a taking could be found. She concludes that wetlands protection does advance a legitimate state interest. Wetlands greatly enhance the public interest by providing habitat, conservation, mitigating pollution, aesthetics and recreation (Rapoport 1986).

The author next considers whether wetlands regulations deprive property owners of all viable economic use. Here, she encourages the courts to consider the value of the land when the developer purchased it instead of considering the value of the land according to its "highest and best" use. This argument is similar to that of Kennedy. Land should be valued according to the amount paid for it as undeveloped land instead of the amount it would be worth once developed.

Finally, a 1990 article by Lee Epstein explores wetlands regulatory takings cases in the Claims Court. He discusses the takings criteria of the nature of a governmental action, the economic impact and the frustration of investment-

backed expectations as applied to wetlands regulations. First, when applying the government action criterion, the Claims Court must balance the prevention of a public harm against the burden placed upon private property owners. Epstein states that if "the private burden was deemed too great, the public harm was deemed too small, and the regulatory effect was deemed to constitute the actual provision of a public benefit" (Epstein 1990, 10519) the a taking will likely be found.

Epstein focuses his discussion of the economic impact criterion on the segmentation issue. He asserts that when property owners restrict their takings claim to include only those areas containing wetlands, they increase the likelihood that a taking will be found.

Finally, Epstein discusses the investment-backed expectations criterion. He argues that if investment in property was made well in advance of the promulgation of Section 404, and before developers where largely aware of wetlands issues, then investment-backed expectations might be reasonable. However, if developers knowingly invests in land that contains federally regulated wetlands, then their investment-backed expectations seem quite unreasonable.

CHAPTER FOUR

EXTENDING REGULATORY TAKINGS THEORY TO THE ENDANGERED SPECIES ACT

METHODOLOGY

While no regulatory takings resulting from the Endangered Species Act have been found in a United States court (Zimmerman and Abelson 1993), many regulatory takings have been found to result from Section 404 of the Clean Water Act. This paper will extend regulatory takings theory to the Endangered Species Act by drawing parallels between the ESA and Section 404. The ESA and Section 404 are designed, implemented and enforced in very similar manners. In addition, the impact that implementation of the ESA has on private property rights very closely approximates the impacts that the implementation of Section 404 has on rights in private property. Therefore, it can be argued that because regulatory takings have resulted from the implementation and enforcement of Section 404, regulatory takings could similarly result from implementation and enforcement of the provisions of the ESA.

REGULATORY TAKINGS CASES RESULTING FROM SECTION 404**Loveladies Harbor, Inc. v. United States**

In this 1988 case, the plaintiffs owned 250 acres of vacant land in Long Beach Township, NJ (21 Cl. Ct. 153). By 1982, 199 of these acres had been improved through landfilling, and had been used for residential developments that were sold to the general public. The development of the final 51 acres was prevented by enforcement of federal wetlands protection under Section 404. Most of the remaining 51 acres contained wetlands and could not be developed without obtaining the proper permits from the Army Corps of Engineers. The plaintiff applied for Section 404 individual fill permits for the acreage and the permits were denied by the Corps. Frustrated, the plaintiff reapplied for fill permits for only 11.5 acres, that were again denied. The plaintiff filed suit demanding compensation for the alleged taking of 11.5 acres. The plaintiff argued that a regulatory taking had occurred because enforcement of Section 404 denied them all economically viable use of the land.

The case first went to the District Court where the Corps' decision to deny the permit was upheld. The case then went to the Claims Court which engaged in an analysis to determine whether an economic use of the acreage in question remained. The Court found some possible uses for the land (hunting, conservation, recreation, bird-watching, and harvesting salt hay) but decided that these activities were not economically viable. The Court determined that the

governmental restrictions resulted in "more than a mere diminution of value" (21 Cl. Ct. 159). The Court also found that Loveladies' investment-backed expectations had been frustrated by enforcement of Section 404.

Finally, the Court had to determine whether the plaintiff's actions would constitute a nuisance, making the case subject to the nuisance exception. The Court heard testimony from the NJ Department of Environmental Protection who stated that the plaintiff's proposed development would not have violated the State's water quality standards. Therefore, the Court determined that Loveladies' proposed project would not fall under the nuisance exception.

In the end, the Court found "strongly convinced that the property [was] without any economically viable use in the absence of a fill permit" (21 Cl. Ct. 157). The Court declared that, "to fulfill the mandate of the Fifth amendment, the Court awards the plaintiff the amount of \$2,680,000 plus interest from the date of taking, as a measure of just compensation" (21 Cl. Ct. 161).

Formanek v. United States

In this 1992 case, Formanek owned a parcel of land containing 12 acres of uplands and 99 acres of wetlands in the state of Minnesota (Cl. Ct. No. 764-86L). The land was zoned as industrial, and its highest and best use would be as a multiple-lot industrial park. Such a park had an estimated value of \$1.2 million. In order to begin development, Formanek first had to obtain an individual fill

permit from the Army Corps of Engineers under Section 404. The Corps denied the permits and Formanek sued claiming a Fifth amendment taking of private property.

The Court upheld the takings claim by finding that the regulation had severe economic impacts upon the plaintiff. The Court found that the only possible use of the land remaining after the implementation of the regulation was as a nature preserve. The value of the land as a nature preserve was estimated at \$490,000, however the Court reasoned that no one would pay for the land to keep it as a preserve when Section 404 would keep the land in its undeveloped state for free. The Court found that the value of the land fell from \$933,921 to \$112,000 due to Section 404 regulation. This decrease in value exceeded the "mere diminution in value" standard set in *Loveladies v. United States*.

Florida Rock Industries, Inc. v. United States

In this case, the plaintiff was a large-scale miner of limestone (21 Cl. Ct. 161). In 1972, Florida Rock had purchased 1,560 acres in Dade County, FL for the sole purpose of mining for limestone. However, due to a slump in the Florida economy the company did not actually begin mining limestone until 1978. Shortly after the purchase of the property, but before the company commenced mining activity, Congress extended the Clean Water Act's jurisdiction to include wetlands.

The Army Corps of Engineers ordered a cease and desist order upon learning of Florida Rock's mining operations. The Corps argued that the mining activity would jeopardize or destroy a large wetland area found on the western edge of Dade County, and would therefore be subject to regulation under Section 404. The wetlands represented a critical recharge area for the Biscayne Aquifer, the sole source of drinking water for Dade County. The Corps believed that deterioration of the aquifer would increase the risk of contamination for the County's drinking water.

Florida Rock applied for a Section 404 permit for 98 acres. The Corps denied the permit application, declaring that the permit would not be in the "public interest" (21 Cl. Ct. 164). Florida Rock filed suit claiming the governmental taking of 98 acres according to the Fifth Amendment's just compensation clause. The case first went to the Claims Court (8 Cl. Ct. 160) where the court found for the landowner and the government appealed. The Court of Appeals affirmed in part, vacated in part, and remanded (791 F.2d 893). The case went back to the Claims Court.

The Claims Court again found for the plaintiff, and concluded that application of Section 404 to Florida Rock's property amounted to a regulatory taking. The Court ordered that the government compensate Florida Rock for the fair market value of the property. The Court determined that the property was worth \$10,500 per acre, so Florida Rock was entitled to \$1,029,000, plus interest

from the time of the taking.

In its analysis of this case, the Claims Court considered many different factors including whether the plaintiff had a legitimate entitlement to the proposed use of its property, whether the Corps' denial of a Section 404 permit denied the property owner of all economically viable use of the land, and if so, how much compensation was the plaintiff entitled to (21 Cl. Ct. 165). In its analysis of whether Florida Rock had the right to mine limestone, the Court considered whether such mining activity would constitute a public nuisance and therefore be subject to the nuisance exception. The Court determined that the mining activity would not result in significant degradation of the wetlands and that mining for limestone had never been considered a public nuisance. The Court concluded that "it is clear that the nuisance exception to the fifth amendment's requirement of just compensation is inappropriate" (21 Cl. Ct. 166).

In its analysis of whether Section 404 deprived Florida Rock of all economically viable use of the land, the Court found that there was no economically viable use of the land other than for mining. The Court found that the value of the land dropped from \$10,500 to \$500 per acre due to regulation under Section 404. This translates in a 95% diminution in value to the plaintiff.

In its determination of fair compensation, the Court determined the property's fair market value. The Court determined this value by calculating the property's economic value before the regulation; what the property's economic

value would be as a mining operation.

SIMILARITIES IN IMPLEMENTING THE ESA AND SECTION 404

A number of parallels can be drawn between the design, implementation, and enforcement of the Endangered Species Act and Section 404 of the Clean Water Act. First, and foremost, both pieces of legislation represent prohibitive policy. In a 1982 book, Steven Lewis Yaffee states that:

"prohibitive policy prescribes behavior by outlawing actions beyond a certain standard; it is prescriptive in an absolute, boundary-setting direction. Prohibitive policy does not let regulatees make legal choices about their behavior" (Yaffee 1982, 1).

Yaffee asserts that there are three basic types of prohibitive policy. The first type are those policies that simply prohibit or outlaw certain behaviors or actions. The second type prohibits some behavior or actions by mandating others. Finally, some prohibitive policies prohibit a type of behaviors or actions by setting standards that must be met (Yaffee 1982).

The Endangered Species Act and Section 404 of the Clean Water Act both exemplify prohibitive policy. The ESA illustrates prohibitive policy of the first kind. The ESA lists all prohibited activities and states that "it is unlawful for any person subject to the jurisdiction of the United States" to engage in those activities (16 U.S.C. §1538). Section 404 represents the third type of prohibitive policy. It outlaws certain activities in wetlands unless set standards have been met. Section

404 states that "dredged or fill materials should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact..." (40 C.F.R. §230.1).

The problem with prohibitive policies such as the ESA and Section 404 is that they are systems relying upon prescriptions to mandate certain behaviors, and not rewards or incentives to encourage positive behavior. They represent systems using sticks instead of carrots. Both acts simply tell property owners what they can or cannot do with their land, instead of allowing property owners to make choices and rewarding desirable behaviors.

While both acts are prohibitive, they both provide mechanisms for administrative relief. The ESA has a provision allowing property owners and government agencies to obtain an incidental take permit from the Secretary of the Interior. Therefore, while the taking of endangered or threatened species is normally strictly forbidden, in some cases a permit might be granted allowing an incidental take that does not jeopardize the continued existence of the species. Usually, an individual or agency desiring an incidental take permit must be prepared to minimize and mitigate the impacts of their activities to the greatest extent possible. This often requires the development of an extensive and comprehensive habitat conservation plan, and assurance that adequate funds are available to implement and maintain the plan.

Individuals and agencies wishing to deposit dredged or fill materials into

wetlands can also gain administrative relief by gaining a dredge and fill permit from the Army Corps of Engineers. These permits are issued by the Secretary of the Army, through the Army Corps of Engineers. Like an incidental take permit, the granting of a dredge and fill permit often requires that adverse impacts are minimized and mitigated to the greatest extent possible. This often means that development projects must be altered to minimize impacts, or wetlands must be replaced off-site to mitigate adverse impacts.

The ESA and Section 404 are also very similar in the enforcement of their provisions. Both regulations are strict liability statutes. This means that enforcement and penalties are not limited to willful or knowledgeable actions taken in civil violation of the statutes. Lack of knowledge or intent does not insulate individuals and agencies from the penalties attached to the statutes (Parenteau 1991). Under the ESA, civil offenders who the courts believe knowingly violated the act can be fined up to \$25,000 for each violation. Civil violators who unknowingly violate the act can be fined no more than \$500 per offense (16 U.S.C. §1540). Under Section 404, all civil infractions are subject to fines as great as \$25,000 per day, per offense (33 U.S.C. §1344).

Both statutes can also result in criminal offenses. According to both acts, knowing violations result in felony offenses and unknowing infractions result in misdemeanors. For criminal violations, the ESA can penalize violators with fine of up to \$50,000, up to one year in prison, or both for each offense (16 U.S.C.

§1540). Section 404 penalizes criminal offenders by levying large fines, and possibly jail time. The amount of fines varies depending on the offense, but they can often be very steep. For example, in the case of *United States v. Pozsgai*, the defendant was charged \$150,000 in fines, and was sentenced to three years in prison for illegally filling wetlands on his property (Parenteau 1991).

Next, the ESA and Section 404 are similar in that they are primarily administered and enforced by agencies other than the Environmental Protection Agency (EPA). Most large, federal regulatory programs are implemented primarily by the EPA. Such programs include: the Clean Air Act, the Safe Drinking Water Act, the Resource Conservation and Recovery Act, Superfund, and most of the Clean Water Act. Instead, the Endangered Species Act is administered primarily by the U.S. Fish and Wildlife Service, and Section 404 is administered primarily by the Army Corps of Engineers.

Both statutes also require interagency cooperation. The ESA specifically requires that all government agencies ensure that any project "authorized, funded or carried out" by the agency does not adversely affect endangered or threatened species (16 U.S.C. §1536). Section 404 also requires interagency cooperation under the precepts of the National Environmental Protection Act. Section 404 requires that all agencies responsible for federal projects, that would involve the discharge of fill or dredged materials into wetlands, have an environmental impact statement (EIS) prepared. This EIS must be submitted to Congress "before actual discharge

of dredged or fill materials in connection with the construction of such project and prior to either authorization of such project or an appropriation of funds for such construction" (33 U.S.C. §1344, 1072).

Finally, both the ESA and Section 404 contain provisions encouraging cooperation with the states. The ESA authorized the Secretary of the Interior to enter into agreements with a state if a state develops, and maintains, its own acceptable protection program for endangered and threatened species. Similarly, Section 404 allows the Administrator of the EPA to enter into agreements with the states for the protection of wetlands resources. A state must develop its own acceptable permit system to regulate the discharge of fill and dredge materials into wetlands.

APPLICATION OF REGULATORY TAKINGS CRITERIA

In addition to the similarities in the ways the ESA and Section 404 are designed, implemented and enforced, the statutes impact private property rights in similar ways. The same takings criteria the courts have applied to Section 404 cases, could also be applied to the ESA. According to the literature review, and the review of Circuit Court cases, the takings criteria most often applied to Section 404 include the advancement of a legitimate state interest, interference with reasonable investment-backed expectations, and deprivation of economically viable use. The same takings criteria are applicable to the Endangered Species

Act.

Advancement of a Legitimate State Interest

In regulatory takings cases resulting from Section 404, the courts determined whether a regulation advanced a legitimate state interest by weighing the prevention of a public harm against the promotion of a public benefit. Generally, if the regulation was used to prevent a public harm or public nuisance, then the regulation was legitimate and no taking was found. However, if the regulation worked to advance a public benefit, at the cost of a single landowner, then the regulation might be found to not advance a legitimate state interest. This criteria would be applied to the ESA in the same manner. The courts would have to evaluate whether the ESA was preventing a public harm or nuisance in its application to a population of endangered or threatened species, or if the ESA was instead providing the public benefit of species protection at the expense of a single property owner.

It would be difficult to find a regulatory taking resulting from the ESA based on this criterion. It is a long established tradition that wildlife is property commonly held by all; property held in trust by the state for the benefit of all people (Bean 1983). This idea was substantiated in the 1948 Supreme Court case of *Toomer v. Witsell*. Here, the Court stated that "fish and game are the common property of all citizens of the government unit and that the government, as a sort

of trustee, exercises this ownership for the benefit of its citizens" (234 U.S. 385).

The taking of wildlife is a taking of publicly and commonly owned property.

Therefore, it is not hard to show how the ESA prevents a public harm when it prohibits the taking of wildlife.

Interference with Reasonable Investment-Backed Expectations

When applying this criterion to wetlands regulation under Section 404, the courts considered a couple of different issues. First, if the property containing the wetlands was purchased prior to the initiation of the Section 404 regulatory program, and before developers were largely aware of wetlands issues, then the investment in the land would most likely be viewed as reasonable. In the absence of Section 404 regulations, an investor had no reason to believe that he or she would not be able to ultimately use the land in the way they desired so the investment was reasonable.

However, the courts usually determine that investment-backed expectations are not reasonable when investors purchase land knowing that wetlands are present on the parcel and that special permits will be needed to develop the wetland areas. Developers should not buy property containing wetlands expecting to be able to gain the necessary Section 404 permits. The granting of Section 404 permits is hardly guaranteed, and such an investment is unreasonable. This trend was illustrated in the 1991 case of *Ciampitti v. United States*. Here, the Claims

Court found that Ciampitti's investment-backed expectations were not reasonable because the developer was aware of the presence of wetlands, and the regulations attached to the wetlands, when the land was purchased. The Court stated that "to find that the Federal Government has taken a property interest in the form of a distinct, reasonable, investment-backed expectation, would, in this instance, turn the Government into an involuntary guarantor of Ciampitti's gamble" (22 Cl. Ct. 321).

Wetlands are easy to identify and delineate. It would be hard for a potential property buyer to not notice wetlands on a parcel of land. In addition, a variety of sources are available to prospective buyers for gaining information about the location and extent of wetlands. These sources include: National Wetland Inventory (NWI) maps, the *National List of Plant Species that Occur in Wetlands* series, county soil surveys, hydric soils lists, and Agricultural Stabilization and Conservation Service (ASCS) aerial photographs. These resources are available at a national level. In addition, many states perform their own wetland inventories and provide aerial photography at the state level (MDNR 1993). Finally, there are countless private firms that do wetland identification and delineation, the state of Michigan alone boasts over 100 such firms. Therefore, it is fairly reasonable to accept that people who buy land containing wetlands know, or can at least find out, what they are buying. For this reason, courts often find that post-regulatory investment-backed expectations in land containing wetlands

are unreasonable.

The criterion of reasonable investment-backed expectations can similarly be applied to the ESA. As in wetlands cases, the courts will have to determine whether the investment in property containing endangered or threatened species populations was reasonable or not. As with wetlands cases, it seems likely that if significant investment in land containing listed species populations was made prior to promulgation of the ESA then the investment would be deemed reasonable.

However, in cases where investment in land containing protected species was made following the passage of the ESA, **it would still be hard to prove that the investment was not reasonable.** Endangered and threatened species populations are difficult to identify and even harder to delineate. Unlike wetlands, which are a geographically fixed set of natural features, species populations are fuzzy sets of natural features. Listed species populations expand, contract, move about, or sometimes just disappear. The location of species populations fluctuates temporally and spatially as species migrate and hibernate. In addition, very few sources of information are available to land purchasers regarding the location of listed species populations. The National Natural Heritage Network has done much work in inventorying listed species populations, but their databases are not fully developed. Plus, this network primarily provides information for "conservation and development planning in the public and private sectors" (NHDCN 1993) and not as a public information resource. Finally, many

endangered species populations are simply difficult to find or notice, especially if they are plant, insect or amphibian populations. Therefore, it could be considered unreasonable to expect citizens to be aware of the presence of endangered or threatened species on land they are considering buying.

Because it is so hard to identify and delineate endangered and threatened species populations, it would be difficult to expect citizens to be aware of these populations when investing in land. Therefore, it would be difficult for courts to prove that investment-backed expectations in land containing endangered or threatened species were unreasonable.

Denial of All Economically Viable Use

Both Section 404 and ESA restrictions could deprive landowners of all economically viable use of their land. In takings cases resulting from Section 404, the Claims Court examined a number of factors. First, the Court determined whether any uses of the land remained after regulation, and whether these used were economically viable. In the *Loveladies* and *Formanek* cases, the Court found that some residual uses of the land such as recreation, nature preserves, birdwatching and hunting remained. However, the Court believed that these uses were not economically viable. Next, the Court addressed the issue of whether the loss of economic value has to be 100%. In *Loveladies* and *Formanek* the Court found that the loss of value was not 100%, but that the loss was severe enough to

constitute a taking. In determining the degree of the loss of value, the Courts compare the pre-regulation value of the land with the post-regulation value.

Finally, the Circuit Court has had to address the issue of land segmentation. In the literature on takings and Section 404, the segmentation issue was identified to be important because segmentation makes it more likely that a taking will be found. If the Court considers the loss of value of only the wetland part of a larger parcel, instead of considering the parcel as a whole, then a total take of value is much easier to find. The Circuit Court's stance on segmentation is fuzzy. While segmentation is discouraged in wetlands cases, the Circuit Court allowed it in the *Loveladies* case.

This criterion is also applicable to the ESA because the ESA has the potential to greatly limit the uses of land containing listed species. The ESA's considerable restrictions on land containing protected species stems from the Section 9 take prohibitions. Section 9 prohibits species from being taken, where a take is analogous to harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing or collecting any listed species. The prohibition against harassing listed species makes it unlawful to annoy a species so as to disrupt important behavioral patterns such as breeding, feeding or sheltering. The prohibition against harming listed species makes it unlawful too degrade or modify a listed species' habitat to the extent that it adversely affects important functions such as breeding, feeding and sheltering.

These prohibitions can greatly restrict activity on land containing listed species. Section 9 comprehensively prohibits a wide range of land-use activities. With Section 404 regulated wetlands, uses such as birdwatching, recreation, and hunting often remained. However, lands regulated by the ESA will often have no uses remaining at all. For example, such innocuous activities as bird-watching, hiking and photography may annoy a species enough to disrupt normal behavior patterns. If used as a nature preserve, the presence of visitors could easily annoy listed species. And, of course, hunting is explicitly prohibited. Therefore, the likelihood of a 100% loss in the value of ESA regulated land is great.

The segmentation issue does not appear to be applicable to land containing listed species. Where wetlands are easy to spatially isolate, listed species present unique problems. As stated previously, species populations move, expand and contract, and vary with the seasons. Segmentation would not be possible because it is difficult to delineate boundaries for the segment containing the species population.

TAKINGS CRITERIA APPLICABLE ONLY TO THE ESA

Along with the takings criteria that are applicable to both Section 404 and the ESA, some additional takings criteria may be applicable to the ESA alone. First, the ESA could lead to the abrogation of essential property rights. In the review of literature on takings and the ESA, some authors argued that the ESA

abrogates the right to protect private property. These authors believe that the right to protect private property is an essential stick in the bundle of rights commonly associated with property. If the ESA prevents a citizen from protecting his or her property, then the government has taken that right in property.

Some authors also argue that the ESA may entail a permanent physical occupation of private property and lead to a per se taking. A per se taking occurs when the government, or those authorized by the government, physically invades and occupies private property. Some feel that the ESA gives listed species the right to invade and occupy private property. This invasion could devastate a landowner's rights to use their land and to exclude others from their land, two important sticks included in the bundle of rights associated with property ownership.

FLOTILLA, INC. V. STATE OF FLORIDA ET AL.

While no takings cases involving endangered species protection have been brought against the United States, there has been a endangered species takings case brought against the State of Florida where a taking was found (Zimmerman and Abelson 1993). The plaintiff in this 1993 case was a developer who owned 173 acres of land in Pinellas County, FL. Flotilla was using the land to develop single-family and multi-family dwellings. The development project was proceeding in six phases with 237 units planned for phases I and II, 225 units planned for

phases III and IV, and 321 units planned for construction in phases V and VI (Flotilla, Inc. v. State of Florida 1993).

Sometime during the construction of phase VI, a pair of nesting bald eagles was found on one of the lots. Bald eagles are a federally listed endangered species. The FL Game and Fresh Water Fish Commission (GFWFC) prosecuted the plaintiff in state court for "harassing and molesting" the eagles in violation of the Endangered Species Act and the State Administrative Code. The Commission believed that the plaintiff's construction in the area of the bald eagle nest was harming the federally protected birds.

In turn, the plaintiffs brought a counter-suit charging the State with an uncompensated taking of private property under the United States and State of Florida Constitutions. The plaintiffs argued that the Commission had a series of Guidelines designed to protect endangered and threatened species in accordance with the ESA and state regulations, and that compliance with these Guidelines would deny Flotilla the use of 48+ acres. The Guidelines required that Flotilla maintain a conservation area that consisted of a 750 foot radius extending out from the tree containing the eagle nest. The application of the Guidelines effectively halted all development in phases I and III until May 1988, in V and VI until March of 1990 and in Phase IV until January 1993. The Court found that the "net effect of the imposition of the preservation areas was to halt development [in] more than one-half [of] the project (Flotilla v. State of Florida 1993, 5).

The Court found for Flotilla after determining that the Commission temporarily took all beneficial use of Flotilla's property. The Court stated that "the construction halt effectively destroyed the market value of the property taken for the time each phase was in a preservation area" (Flotilla v. State of Florida 1993, 8).

The Court also found that application of the Commission's Guidelines failed to advance a legitimate state interest. In weighing the prevention of a public harm against the promotion of a public good, the Court found that "the taking was for a public purpose, namely the benefit to the public of preserving and protecting an endangered species of bird" (Flotilla v. State of Florida 1993, 8).

Finally, the Court determined that Flotilla's investment-backed expectations were reasonable. The Court acknowledged that Flotilla had made substantial investment in the property before the pair of eagles selected the area for its nest. The Court stated that "there is no evidence that [the] plaintiff had notice that eagles were nesting in the area or were about to...there is no evidence that the nesting of eagles was a risk which was reasonably foreseeable by [the] plaintiff" (Flotilla v. State of Florida 1993, 6).

The Court ordered the Commission to compensate Flotilla for the full market value of property in question for the periods in which the land was regulated by the Commission. The Court also awarded Flotilla costs and attorney's fees for the entire proceeding. This case is currently on appeal

(Zimmerman and Abelson 1993).

SUMMARY

Section 404 of the Clean Water Act and the Endangered Species Act are federal regulatory programs that are very similar in their design, implementation and enforcement. Both statutes also have great potential for restricting private rights in property, and many of the same regulatory takings criteria are applicable both pieces of legislation. In fact, some additional takings criteria (abrogation of an essential property right, and physical invasion and occupation) that are generally not applicable to Section 404 restrictions, may be applicable to the ESA. Therefore, because regulatory takings have been found to result from Section 404, it can be argued that regulatory takings could also result from the Endangered Species Act.

CHAPTER FIVE

REGULATORY TAKINGS AND THE ESA: IMPLICATIONS FOR PROTECTED SPECIES AND THEIR HABITATS

If a regulatory taking were ever proven to result from the ESA, or if property owners perceive that a regulatory taking might result from the ESA, there could be many adverse impacts upon federally listed species and their habitat. Property owners could begin to view listed species as threats to the economic and utilitarian value of their land. Landowners might come to view the presence of a listed species as a liability, and incentives to mitigate or avoid this liability are created. Ironically, in the attempt to avoid the ESA's land-use prohibitions, landowners might engage in actions that harm the very species the ESA was designed to protect.

Intentional Destruction of Species and Their Habitat

This is also known as the shoot, shovel and shut-up syndrome (Vivoli 1992). The fear of the imposition of ESA land-use restrictions may lead property owners to intentionally destroy listed species, or their habitats, before the species

are discovered by government authorities. One author has stated that "much anecdotal evidence exists of at least local extirpation of legally protected species at the hands of landowners who fear restrictions on their activities" (Carlton 1986, 261). Another author, writing about the Northern spotted owl conflict, has stated "of course no one admits to the dirty deed, but self-interest dictates that if a tree farmer finds a spotted owl, he makes sure it doesn't live long enough for a government inspector to find it" (Miller 1993, 68).

Some anecdotal evidence does exist to support that landowners may intentionally destroy listed species and their habitat to avoid regulation under the ESA. Civil and criminal penalties were brought against a development company in Ocala, FL when the developer deliberately shot two federally endangered Red-cockaded woodpeckers and buried as many as 200 cavity trees that provide woodpecker habitat (NFPA/AFC 1989). This developer took these actions because an active colony of woodpeckers was found on property the company wanted to develop. The company realized that if the colony's presence became known, the development of the land would be greatly restricted, resulting in great economic loss. The company was ordered to pay \$300,000 in fines, plus purchase 150 acres of woodpecker habitat to be donated to the state. The total judgement in this case is estimated to exceed \$1 million in costs (NFPA/AFC 1989).

The problem of intentional destruction threatens plants species as well as wildlife species. An article in American Horticulturist states that in order to avoid

land-use restrictions associated with endangered and threatened plants, "populations or several candidate endangered plants on private land have been intentionally destroyed" (Macbryde 1980).

Along with the actual destruction of species, parties also engage in the deliberate destruction of listed species habitat to avoid ESA restrictions. Often, the destruction of species habitat is tantamount to the destruction of the species itself. One such case involves the Golden-cheeked warbler, a rare songbird that nests exclusively in Central Texas. The Hillwood Development Company of Texas owned some land upon which it wanted to build an industrial and office complex. However, the proposed construction site was prime warbler habitat. On January 29, 1990 the U.S. Fish and Wildlife Service announced that it was going to list the warbler as a federally endangered species. Knowing that the listing of the warbler would halt construction plans, the development company quickly brought in heavy equipment and transient laborers, and razed the land before any restrictions could be enacted (Sansonetti 1992).

Another case involves a plant called the San diego mesa mint. Here, a private developer in California intentionally destroyed a population of the endangered plant to ensure that the consideration of future development permits would not be delayed due to ESA restrictions (Carlton 1986).

This sentiment supporting the intentional elimination of listed species and their habitats is often displayed publicly. In the Pacific Northwest it is not

uncommon to see farmers, loggers, ranchers and small business owners wearing baseball caps bearing the slogan "Spotted Owl Hunting Club" (American Farm Bureau Federation 1992). Further, many taverns in the Northwest are adorned with signs reading "if it's a hootin, I'm a shootin" (Miller 1993).

Short-term Resource Management

Another undesirable outcome that may result from the ESA's land-use restrictions is non-sustainable resource management. Fears of future land-use restrictions under the ESA have prompted short-term oriented resource extraction rather than more sustainable long-term extraction. Nowhere is this phenomenon more evident than in the logging industry. In the Pacific Northwest, land-use restrictions resulting from the listing of the Northern spotted owl have encouraged small timber companies to accelerate their logging activities for fear of losing the use of their land and the value of their investments (Vivoli 1992). As a result, trees are being harvested before reaching optimal growth, which reduces the value of the timber and decreases the sustainability of the timber tracts. The representative of one Northwest timber company has remarked that "the ESA puts land and timber in the hands of people who have short-term outlooks -- people who want to get their money in and get out before the regulatory risk has a chance to hit them..." (Pauw 1992, 42).

Another Pacific Northwest example revolves around the Marbled murrelet,

a seabird that inhabits the same old growth forests as the Northern spotted owl. Several years ago, when the Fish and Wildlife Service announced that the murrelet was being considered for listing as threatened species, it was reported that three large logging companies in Oregon advanced their planned logging activity by as much as two years. A commentator stated that "they wanted to be sure they logged the habitat of the murrelet before it was illegal to do so" (Leal 1993, 4).

Tom Bourland, a wildlife biologist with a forestry consulting firm in Louisiana, has described an example involving the endangered Red-cockaded woodpecker and timber stands in Louisiana. One large estate in Central Louisiana began liquidating its timber stands, and the woodpecker's habitat, to avoid ESA regulations. The company had been content to provide woodpecker habitat until it became aware of the legal obligations associated with the ESA (Bourland 1993).

In another Red-cockaded woodpecker case, a small timber harvester in Greensboro, NC initiated massive clear-cutting on his land to avoid economic losses resulting from ESA restrictions. Benjamin Cone was unable to harvest trees on 2,000 of his 8,000 acres because the land provided prime woodpecker habitat. Having already lost an estimated \$2 million, Mr. Benjamin decreased his harvesting rotations from 75- and 80-year rotations to 40-year rotations in the hope of capturing as much economic benefit as possible (Sugg 1993).

Not only do these activities represent poor resource management, they are

also contributing to the destruction of endangered species and threatened species habitat. Non-sustainable logging practices is contributing to the destruction of the habitats of species such as the Northern spotted owl, the Marbled murrelet and the Red-cockaded woodpecker. The destruction of a species habitat is often tantamount to the taking of a species itself. In addition, accelerated logging activity contributes to other environmentally undesirable conditions such as increased soil erosion and the sedimentation of lakes, streams and rivers. In turn, these poor conditions can adversely affect other protected species. For example, increased sedimentation of streams and rivers in the Pacific Northwest may threaten protected populations of Chinook and Sockeye salmon.

Reduces Private Investment in Natural Resources

Finally, the provisions of the ESA provide disincentives for investment in natural resources -- including endangered and threatened species habitat. Many private individuals and companies would like to invest in the enhancement of natural resources. However, the restrictions of the ESA often make it difficult, or impossible, to realize a return on investments made in natural resources.

Therefore, investments for improving habitat do not occur.

Again, the logging industry provides an good example of this phenomenon. Many timber companies would be willing to invest in improvement of forest resources that might provide habitat for listed species, yet these companies are

increasingly viewing such investments as liabilities. Jan Pauw, senior legal counsel for Weyerhaeuser Company has stated that "by creating regulatory risks, agencies discourage socially desirable investments of capital and human resources, including those that further the very goals they are trying to achieve" (Pew 1992, 40-41). He concluded that "if timberland owners perceive significant risks of losing their investments to regulatory takings, many will not make silvicultural investments..." (Pauw 1992, 41).

Next, while many landowners would delight in bettering their land to attract listed species, landowners also realize that these species represent a threat to the use of their land. As one commentator said, "private landowners frequently want to improve their land to attract animals...but they soon find that the more wildlife they attract, the more they are subject to regulations" (Miller 1993, 67). Therefore, investment for the improvement of endangered and threatened species habitat is viewed as risky.

A good example of this problem is the story of Dayton Hyde, a rancher in Oregon. Hyde improved his property by converting twenty-five percent of his land into wetlands. Hyde made this investment simply because he loved wildlife and wanted to provide wildlife habitat on his property. His newly created wetland eventually attracted a population of endangered bald eagles. Once the Fish and Wildlife Service found out about the bald eagles, it greatly restricted the activity Hyde could conduct upon his property (Leal 1992).

SUMMARY

If a regulatory taking could result from the Endangered Species Act, or if landowners perceive that their property rights may be taken through ESA restrictions, there could be negative impacts upon listed species and their habitat. First, landowners may intentionally destroy species populations or species habitat to avoid restrictions of the use of their land. Second, landowners may also engage in short-term, non-sustainable resource management to obtain at least some value of their land before their land-uses can be restricted by ESA provisions. Finally, investments in natural resources on land containing listed species will decline because ESA restrictions may greatly reduce the returns on natural resource investments.

CHAPTER 6

CONCLUSIONS AND POLICY RECOMMENDATIONS

SUMMARY

The Endangered Species Act of 1973 and Section 404 of the Clean Water Act both represent large federal regulatory programs designed to halt, or at least reduce, the destruction of environmental amenities. Both pieces of legislation attempt to protect and conserve natural features by restricting land-use activities on land containing wetlands or listed species. While land-use restrictions may be an effective mechanisms for environmental protection, they may also threaten constitutionally granted rights in property and may lead to a regulatory taking.

A regulatory taking of private property results from regulations that are so onerous that they deprive landowners of all reasonable use of their land. Regulatory takings violate the Fifth amendment's just compensation clause by depriving landowners of use of their land, to provide a public good, without compensation from taxpayers. The U.S. Claims Court has found in several cases that a regulatory taking resulted from Section 404 regulation of wetlands. While no regulatory takings have been found in a federal court to result from the ESA, the potential for regulatory takings resulting from the ESA seems great.

Should a regulatory taking be found to result from the Endangered Species

Act, or should landowners perceive that their land may be taken through regulation, there may be many adverse impacts upon listed species and their habitats. Anecdotal evidence indicates that landowners may intentionally destroy species populations and habitat, engage in non-sustainable resource management, and decrease investment in natural resources when their land-uses are threatened with ESA restrictions.

CONCLUSIONS

While many of the takings criteria used by the courts could be applicable to the Endangered Species Act, the criteria that the ESA is most likely to evoke are: the regulation restricts all, or substantially all, beneficial use of the property, and the regulation interferes with reasonable investment backed expectations. The effects of ESA restrictions on the use of private property are most often economic. One observer has commented that the ESA does "little to encourage the Government to take into account the economic harm such protections could have on working people" (Schneider 1993, A1).

The enormous economic hardships the ESA can cause are exemplified on a large-scale by the Northern spotted owl conflict that has raged in the Pacific northwest for the past 5 years. Here, logging activity has been restricted on public and private lands which has eliminated thousands of jobs in the logging industry, and devastated logging communities throughout the region. The owners of private timber tracts have suffered severe economic impacts due to restrictions on their logging activity. There are other, less sensationalized, examples of how the ESA can have adverse economic impacts by restricting land use on private property.

ESA restrictions, imposed on land use in Southern California due to the presence of the threatened California gnatcatcher, has greatly limited the construction of new homes in areas containing gnatcatcher habitat. Property owners are experiencing economic losses, and thousands of construction jobs are also being affected (Reinhold 1993). In the Southeast, the presence of the Red-cockaded woodpecker has forced the elimination of many logging jobs, and caused serious economic losses for owners of private timber tracts. Finally, near Las Vegas, Nevada the presence of the Desert Tortoise, listed as an endangered species in 1989, effectively halted construction of new housing. One author stated that because of the tortoise "new housing developments were put on hold, tying up millions of dollars in investments" (Christensen 1992).

Clearly, the Endangered Species Act threatens people where it hurts the most -- namely, in their pocketbook. If the economic losses are great enough, a property owner may seek legal action claiming a regulatory taking of private property. In addition, the threat of economic losses may prompt property owners to intentionally destroy species and habitat, to engage in non-sustainable resource management, and halt investments in natural resources. The former outcome is undesirable because court actions are very costly in terms of monetary, temporal and human resources. The later outcome is tragic because it jeopardizes the existence of the very species the ESA was designed to protect.

As long as our country chooses to protect endangered and threatened species by restricting the use of lands containing listed species habitat, we should also be prepared to offer some sort of monetary compensation to those private property owners who suffer economic losses due to the ESA restrictions. Until

compensatory mechanisms are incorporated into the ESA, regulatory takings claims will likely become increasingly common, and incentives for intentional destruction of species, non-sustainable resource management and cessation of investment in natural resources will continue.

POLICY RECOMMENDATIONS

Policy changes in the provisions of the ESA should be made. The ESA could be restructured to reduce real, or perceived, threats to private property rights and values without compromising the Act's ability to conserve endangered and threatened species. Reducing the ESA's threat to private property rights and values has several benefits. First, the likelihood of a regulatory taking resulting from the ESA is reduced which minimizes the costs, human and financial, associated with legal actions. Second, incentives for undesirable actions towards listed species and their habitats are effectively removed. There are a variety of different mechanisms that can be incorporated into the ESA to minimize its adverse impacts on property rights and property values.

Financial Compensation to Landowners

Monetary incentives could at least partially reimburse property owners for economic losses resulting from implementation of the ESA. While land-uses would still be restricted due to the presence of a listed species, landowners would be compensated for some economic benefits foregone. In addition, by using public funds raised through taxation, government compensation programs would disperse the costs of species protection among the entire population instead of

concentrating the costs on individual landowners.

- **Direct Compensation for Economic Benefits Foregone**

Direct monetary compensation by the government may be necessary in a couple of different situations. First, the government should compensate landowners for damages to private property caused by a protected species instead of removing the species in question. Except for the Endangered Species Act, landowners would be able to protect their property from damage caused by wildlife.

This sort of program already exists in the non-profit sector. Defenders of Wildlife, a national wildlife conservation organization, has a program that compensates ranchers in the northern rockies for all verified livestock losses to wolves. This program was initiated in 1987 and has since raised \$100,000 for its compensation fund (Anderson 1992). As of 1992, DOW has paid \$12,000 to 10 different Montana ranchers (Fischer and Baden 1992). This program has been significant in reducing the ranching community's resistance to the reintroduction of wolves into Yellowstone National Park.

The government should also directly compensate landowners who must actively manage their land to provide habitat for listed species. Sometimes the ESA requires active management of land containing listed species to avoid being charged with a taking of a species. The out-of-pocket costs associated with actively managing land for species protection can often be extremely high. For example, in areas that provide habitat for the Red-cockaded woodpecker, landowners must often adhere to strict management standards to avoid being

charged with a taking of a woodpecker (Carlton 1986). The woodpeckers build nesting cavities in living pine tree that are usually greater than 60 years old. The threat to the species' existence is commercial timbering where trees are harvested by age 50. The Fish and Wildlife Service makes landowners comply with the following standards to avoid taking a woodpecker:

1. Protect the cavity trees.
2. Protect the cluster (aggregate of cavity trees) and potential cavity trees.
3. Avoid any activity within the cluster from April to June that might disrupt mating, nesting, and brooding behavior.
4. Provide foraging habitat contiguous with the cluster. This may require from 60 to 300 acres of land, depending on the characteristics of the timber stand (Bourland 1993).

- **Indirect Compensation for Economic Benefit Foregone**

Often direct monetary payments might be politically or financially unfeasible and indirect compensation mechanisms would be a more realistic approach. The most popular means of indirectly compensating landowners is through taxation policy. Tax breaks are attractive because they allow property owners to be compensated for providing habitat, while retaining ownership of the land.

First, land containing endangered species populations should receive preferential property tax assessments. Property taxes in our country are based on the "highest and best use" principle, or ad valorem taxation. However, if the value of land is reduced due to regulatory restrictions then the amount of taxation on the land should be reduced; taxation should reflect the restricted potential uses of the land and the diminution of land value. For example, if land cannot be developed due to the presence of a federally protected species, then the land's

taxation should reflect its current use as habitat and not reflect ad valorem value as developable land. Land that provides species habitat might even be given a special tax status that reflects the value of the land as habitat and the degree to which the land can still be used for economically viable uses.

Second, the government might be able to offer tax credits to landowners whose land provides habitat for federally listed species. Tax credit programs have already been used very successfully in the protection of prime agricultural lands and open space. Concerns over the conversion of prime agricultural land to urban development, and associated environmental and infrastructure problems, have prompted the creation of farmland protection programs in states around the country.

Michigan's Farmland and Open Space Preservation Act (P.A. 116 1974) provides an excellent example. This program protects prime agricultural land through the use of development rights agreements and development rights easements. Landowners enter into these contracts with the government body having jurisdiction under the act and agree to the following provisions:

1. Not to build a structure without approval of the governing body;
2. Not to make improvements in the land without approval of the governing body; and
3. Not to sell any interests in the land except for scenic, access, or utility easements (P.A. 116).

In return, landowners are entitled to claim a tax credit on their state income taxes for the amount that the property taxes on the land covered by the contract exceed 7% of their household income. The landowner also benefits by paying only pure preferential assessed property taxes, instead of ad valorem taxes.

In order for the Endangered Species Act to use taxation policy to

compensate landowners, there will have to be strong cooperation between the federal government and state government because property taxes and state income taxes are involved. The use of taxation policy would be most feasible for those states with which the Secretary of the Interior has signed cooperative agreements.

Purchase, Exchange or Transfer of Development Rights

There are numerous ways the government can offset economic losses to landowners while enhancing the protection of listed species through the purchase, exchange or transfer of development rights in property.

- **Purchase of Development Rights**

First, the government may purchase outright the fee simple title to the property in question. This would transfer all of the rights of property ownership to the government. Fee simple purchase is desirable because landowners are able to obtain economic benefit by selling their land. In addition, the government gains high levels of control over the protection of listed species and the management of species habitat.

The Endangered Species Act contains a provision allowing the Secretary of the Interior, and the Secretary of Agriculture in regards to the National Forest System, to purchase land for species and habitat conservation. The Act states that the Secretary of the Interior "is authorized to acquire by purchase, donation, or otherwise, lands, waters, or interest therein, and such authority shall be in addition to any other land acquisition authority vested in him" (16 U.S.C. §1534). The

Federal government currently has monies available for the purchase of private lands for species protection through the Land and Water Conservation Fund. This fund is financed by revenues from oil leases on the continental shelf. The Land and Water Conservation fund is often used to purchase land for environmental protection. For example, the Bureau of Land Management recently used \$2.5 million in funds from the Land and Water Conservation Fund to buy 7,928 acres of sensitive lands near Spokane, WA. The land, which contained wetlands and ponderosa-pine forests, had previously been privately held by a rancher. The rancher had been approached by several developers who wanted to purchase the land for subdivision. However, the rancher preferred to see the land preserved, and the BLM offer made this possible (High Country News 1993).

Instead of fee simple purchase, the government may also purchase only the property rights needed for species and habitat protection. This is most easily accomplished through the purchase of conservation easements and the purchase of development rights (PDRs). With easements and PDRs, the government purchases or leases a landowner's rights to develop his or her property. These arrangements have many advantages. First, the property owner can capture some economic benefit from land that is regulated by the ESA. Second, the landowner still retains ownership of the land. Third, easements and PDRs provide many of the same conservation benefits as fee simple purchase but at a much smaller price. Finally, the purchase of easements and PDRs involves a decrease in the development value of property so taxation on the property also decreases (Poole 1993).

In transactions involving the purchase of property rights, the importance of the non-profit sector cannot be ignored. The activities of non-profit organizations specializing in land conservation must be encouraged. In fact, most major land acquisitions made today involve the cooperation of private and public entities (Endicott 1993). The forging of such partnerships to purchase listed species habitat has many advantages. First, by combining financial resources cooperative efforts are able to purchase more and larger tracts of land. This ability will become increasingly important as more and more emphasis is placed on landscape-scale habitat preservation where the focus of conservation efforts is shifted from individual species to entire ecosystems (Stevens 1993). Second, non-profit organizations bring "agility" to the land acquisition process -- nimbleness that is often missing in public agencies due to their bureaucratic nature. Non-profits do not need to go through the lengthy review and budgetary process that government agencies do. In addition, non-profits are more flexible in the types of buying arrangements they can take part in, and the types of purchase mechanisms they can employ (Endicott 1993). Third, non-profits bring memberships to any partnership. Members provide financial resources as well as volunteers for conservation programs. In a time when government programs are being cut back, these human resources provided by non-profits can be very important (Endicott 1993). Finally, landowners often prefer to work with non-profit organizations rather than a government agency. Many landowners view governmental agencies with distrust, especially when a government agency is placing restrictions on the use of their land.

- **Exchange of Rights in Land**

Another tool used for compensating landowners, while still providing species protection, is the use of land swaps. Lands held by government agencies can be swapped for land containing listed species and species habitat. For example, the Bureau of Land Management (BLM) in Oregon could exchange public forest land that does not provide Northern spotted owl habitat for similar private land that does provide habitat. With land swaps, it is important that the land being swapped has equal value and similar amenities (Carlton 1986).

- **Transfer of Development Rights**

The transfer of development rights (TDRs) represents another innovative way of compensating property owners for restrictions placed on their land-uses due to the presence of a listed species. TDRs basically involve transferring future development from one site to another by divorcing development rights from land and treating them as a separate, marketable commodity (Schnidman 1978). The intent of TDRs is to concentrate development in areas where it is appropriate and limit it in areas where it is not appropriate (Levy 1991). A government agency using TDRs creates a conservation zone and a transfer zone. Transfer zones are areas that are socially, economically or environmentally more suitable for higher densities of development. Development is prohibited in the conservation zone and the development rights are severed from the land. Property owners in conservation zones can then sell their development rights to property owners in transfer zones.

The use of TDRs has many advantages. First, landowners possessing

regulated land are still able to gain significant economic benefits from their land. Second, the habitats of threatened and endangered species are effectively conserved. Finally, the use of TDRs is essentially costless to the government agency. Compensation to some property owners comes not from public coffers but from other private property owners (Levy 1991).

TDRs are usually only possible at the state and local level. The use of TDRs would require a high degree of cooperation between the U.S. Fish and Wildlife Service, and state and local government agencies. Therefore, the use of TDRs in species protection would work best in those states with which the Secretary of the Interior has entered into cooperative agreements.

Economic Incentives as Compensation

Government agencies charged with protecting threatened and endangered species may consider economic incentives programs to protect listed species. Incentives programs are attractive for a couple of reasons. First, they offer some financial compensation to property owners whose land is regulated due to the presence of a listed species. Second, they represent a system of carrots instead of sticks; landowners are rewarded for having protected species populations on their property. Michael Bean, chairman of the Environmental Defense Fund's wildlife program and one of the ESA's greatest supporters, has stated:

"Strong incentives for conservation on private land must be created. The Act relies heavily on penalties to deter harmful conduct and virtually not at all on rewards for beneficial conduct. We have incentive programs to encourage farmers to restore wetlands, to encourage forest landowners to manage their property to satisfy multiple benefits, and to reward utilities for cutting air-pollution emissions more than the law requires, but we do not have comparable programs to encourage private owners to take actions on their land to aid in the recovery of imperiled wildlife" (Bean 1993).

Some writers have advocated a system that pays landowners bounties, or rewards, for threatened or endangered species found on their land. Randal O'Toole, a resource economist with a forestry consulting firm in Oregon, argues that the government should pay bounties to landowners whose land is habitat for breeding pairs of endangered species. He believes that the financial resources for such a program should come from "biodiversity fund" financed out of a fixed percentage of public land use fees (O'Toole 1990).

A similar program already exists in the non-profit sector. Defenders of Wildlife (DOW) uses private contributions to fund its Wolf Reward Program. This program pays \$5,000 rewards to ranchers, farmers, and timber companies in Montana, Wyoming, and Idaho who allow wolves to live and breed on their land. To qualify for the program, landowners must allow wolf populations to live, den, and raise their young to adulthood on their land (High Country News 1992). Hank Fischer of DOW argues that the programs shifts the costs of wolf protection "away from the individual livestock producer and toward those people who seek wolf restoration" (Milstein 1992, 1).

The ESA should encourage non-profit programs such as DOW's Wolf Reward Program. In addition, it would be possible for the government to mimic this program as a provision of the ESA. One researcher has proposed such a plan

for protecting the Northern spotted owl in the Pacific Northwest. Under this plan, the government would pay landowners a monetary reward for every pair of spotted owls allowed to live and mate on their property (Stroup 1992). The U.S. Fish and Wildlife Service estimates that there are approximately 350 pairs of spotted owls on private lands in Washington, Oregon and California (U.S. Fish and Wildlife Service 1992). Even if the government paid landowners as much as \$10,000 per pair of owls, and payment was made for all 350 pairs, the total bill would be \$3.5 million -- a fraction of the \$9.7 million spent on owl protection in 1990 (Mann and Plummer 1992). This program would protect species and their habitat while providing some economic benefits for landowners.

Programs that pay landowners bounties for protecting listed species and their habitats have additional benefits. First, bounties would provide property owners with an incentive to support the listing of new species. Much of the conflict and controversy currently associated with the listing process could be greatly reduced. Second, property owners would have an incentive to report threatened and endangered species found on their land. The reporting of new populations of listed species is crucial for the cataloging, and subsequent protection, of the species.

SUGGESTIONS FOR FURTHER RESEARCH

The Endangered Species Act's potential for greatly restricting private property rights, and perhaps leading to a regulatory taking, has arisen as a substantive issue only in recent years. Therefore, information and data needed to examine, and develop solutions to this issue are currently inadequate. There are a

number of areas where further research is needed to address this issue.

First, field research is needed to locate and map the location of endangered and threatened species populations on private and public lands. This information should include: exact geographic coordinates, number of individuals in the population, whether it is a seasonal or permanent population, and land ownership information. The information should be digitized for greater ease in usage and ease in updating the information should species' populations expand, shrink, move, or disappear.

Determining the location of listed species populations has many benefits. First, information about listed species populations on private property can help determine the potential impacts the Endangered Species Act might have upon land use on private property. The greater the number of listed species populations on private property, the greater the magnitude of the regulatory taking issue. Second, current information about the location of listed species populations will allow property buyers to determine whether endangered or threatened species are present on a particular parcel of land. Knowledge of the presence of listed species may prevent significant investment in land subject to regulation under the ESA, and avoid a regulatory taking resulting from the reasonable investment-backed expectation criterion. Finally, knowledge about the location of endangered and threatened species populations is a crucial first step in protecting these populations.

Second, research is needed to determine what percentage of critical habitat designations fall on private lands verses public lands. Critical habitat designations signal the presence of a listed species. The more critical habitat designations that

encompass private property, the greater the potential for ESA restrictions on the use of private property. Again, land ownership information about land designated as critical habitat is needed to determine the potential magnitude of the issue of regulatory takings resulting from the ESA.

Finally, many of the compensatory provisions discussed in the above recommendations section have already been incorporated into programs for the protection of natural features such as wetlands, prime farmland and open space. Research should be done to evaluate the effectiveness of these programs, and if there is a need for improvements in the design and implementation of these programs. If these compensatory mechanisms are being implemented successfully in the protection of natural resources such as wetlands and open space, then these mechanisms will likely be effective additions to endangered species protection programs.

LIST OF REFERENCES

LIST OF REFERENCES

- 33 Code of Federal Regulations. 1993. §320: 410-423.
- 40 Code of Federal Regulations. 1993. §230: 195-217.
- 50 Code of Federal Regulations. 1992. §17: 80-179.
- 50 Code of Federal Regulations. 1992. §402: 471-502.
- 16 United States Code. §1531-1544: 1327-1361.
- 33 United States Code. §1344: 1068-1073.
- AICP. 1989. Land Use and the Constitution: Principles for Planning Practice, ed. Brian W. Blaesser and Alan C. Weinstein. Chicago: American Planning Association.
- Albrecht, Virginia S. and Anne Sprightley. 1993. Reconciling land use goals and environmental protection policy. In Land Use in Transition, 20-25. Washington, D.C.: Urban Land Institute.
- Alsop, Lauri. 1991. The right to protect property. Environmental Law 21: 209-235.
- American Farm Bureau Federation. 1992. Statement of the American Farm Bureau Federation to the Senate Environment and Public Works Subcommittee on Environmental Protection Regarding the Reauthorization of the Endangered Species Act. Proceedings before the Senate Environment and Public Works Committee on Environmental Protection, April 10, 1992. Washington, D.C: American Farm Bureau Federation, 1-15.
- Anderson, Terry L. 1992. Wolves in the Marketplace. The Wall Street Journal, 12 August.
- Bean, Micheal. 1993. Fortify the act. National Parks, May/June, 22-23.

- Bean, Micheal. 1983. The Evolution of National Wildlife Law. New York: Praeger Press.
- Bourland, Tom, Forestry and Wildlife Consultant. 1993. Letter from Bourland to the author, 30 July. Transcript in possession of the author.
- Burke, David G., Erik Meyers, Ralph Tiner and Hazel Groman. 1988. Protecting Nontidal Wetlands. Chicago, IL: American Planning Association.
- Burling, James S. 1992. Property rights, endangered species, wetlands, and other critters-is it against nature to pay for a taking? Land and Water Law Review 27: 309-362.
- Carlton, Robert L. 1986. Property rights and incentives in the preservation of species. In The Preservation of Species: The Value of Biological Diversity, ed. Bryan G. Norton, 255-267. Princeton, NJ: Princeton University Press.
- Christensen, Jon. 1992. Sin city's lucky tortoise. Nature Conservancy, July/August, 9-13.
- Clark, Merlyn. 1992/1993. Wetlands: Compensation for "taking" by denial of the section 404 permit. Idaho Law Review 29: 42-93.
- Copeland, Claudia. 1993. CRS Issue Brief: Clean Water Act Reauthorization. Washington, D.C.: Congressional Research Service, Environment and Natural Resources Policy Division.
- Defenders of Wildlife. 1992/1993. Saving Endangered Species: A Report and Plan for Action. Washington, D.C.: Defenders of Wildlife.
- Endicott, Eve. 1993. Introduction. In Land Conservation Through Public/Private Partnerships, ed. Eve Endicott, 3-11. Washington, D.C.: Island Press.
- Endicott, Eve. 1993. Preserving natural areas: the nature conservancy. In Land Conservation Through Public/Private Partnerships, ed. Eve Endicott, 17-42. Washington, D.C.: Island Press.
- Environmental Law Reporter. 1992. Litigation. Environmental Law Reporter 22: 20893.
- Epstein, Lee R. 1990. Takings and wetlands in the claims court: Florida rock and loveladies harbor. Environmental Law Reporter 20: 10517-10521.
- Evans, Brock. 1993. The endangered species act: implications for the future. Vital Speeches of the Day. New York: The City News Publishing Co., January, 339-344.

- Fischer, Hank and John Baden. 1992. Paying landowners to assist wildlife recovery uses carrot instead of stick. Spokane Chronicle, 26 July, 15(A).
- Florida Rock Industries, Inc. v. United States*. 1990. 21 Claims Court 161-176.
- Flotilla, Inc. v. State of Florida Game and Fresh Water Fish Commission, and City of Bradenton, FL*. 1993. Manatee County, FL. No. CA-90-2356.
- Freilich, Robert H. and Terry D. Morgan. 1988. Requiring exactions after nollan: Strategies and advice for municipalities. 1988 Zoning and Planning Law Handbook. New York: Clark Boardman Company, Ltd.
- Goldman-Carter, Jan. 1993. Protecting wetlands and reasonable investment-backed expectations in the wake of *Lucas v. South Carolina coastal council*. Land and Water Law Review 28: 425-466.
- Harrison, Geoffrey L. 1991. The endangered species act and ursine usurptions: A grizzly tale of two takings. University of Chicago Law Review 58 (Summer): 1101-1124.
- High Country News. 1993. Washington Rancher spurns subdividers. High Country News, 25 January.
- Hodel, Secretary of the Interior v. Irving et al.* 1986. 481 U.S. 704-734.
- Kaiser Aetna et al. v. United States*. 1979. 444 U.S. 164-192.
- Kennedy, Patrick. 1992. The United States claims court: a safe "harbor" from government regulation of privately owned wetlands. Pace Environmental Law Review 9: 723-752.
- Krohn, Kathryn A. 1991. The act's history and framework. In Balancing on the Brink of Extinction, ed. Kathryn Krohn, 10-21. Washington, DC: Island Press.
- LaTour, Edmund S. 1990. A dilemma: should the public have to buy wetlands in order to preserve them? Environmental Law Journal 4: 293-310.
- Leal, Donald. 1993. Unlocking the logjam over jobs and endangered species. The San Diego Union-Tribune, 18 April, 4(G).
- Leal, Donald. 1992. Threatening property rights is not good environmental policy. Land Rights Letter, August, 10.
- Levy, John M. 1991. Contemporary Urban Planning. Englewood Cliffs, NJ: Prentice-Hall, Inc.

- Littell, Richard. 1992. Endangered and Other Protected Species: Federal Law and Regulation. Washington, DC: The Bureau of National Affairs.
- Loretto v. Teleprompter Manhattan CATV Corp. et al.* 1981. 458 U.S. 419-456.
- Lucas v. South Carolina Coastal Commission.* 1992. U.S. No.91-453.
- Macbryde, Bruce. 1980. Why are so few endangered plants protected? American Horticulturist 59, 29-33.
- Manley, Robert E. 1990. Inverse condemnation under 42 U.S.C. section 1983. In Regulatory Taking: The Limits of Land Use Control, ed. G. Richard Hill, 28-43. Chicago: American Bar Association.
- Mann, Charles and Mark L. Plummer. 1992. The butterfly problem. The Atlantic Monthly, January, 47-69.
- Mannix, Brian. 1992. The origin of species and the descent of man. The American Enterprise, November/December, 57-63.
- Marsh, William A. 1991. Landscape Planning: Environmental Applications. New York: John Wiley & Sons, Inc.
- Michigan Department of Natural Resources. 1993. Wetland Inventory Information Sources. Lansing, MI: Michigan Department of Natural Resources, Land and Water Management Division, Wetland Management Unit.
- Michigan Society of Planning Officials. 1991. Community Planning Handbook: Tools and Techniques for Guiding Community Change. Lansing, MI: Planning and Zoning Center, Inc.
- Miller, John. 1993. Land of the free: an environmental strategy for republicans. Policy Review 63 (Winter): 66-70.
- Milstein, Michael. 1992. Wolves reward: \$5,000. Billings Gazette, 13 June.
- Mugler v. Kansas.* 1887. 123 U.S. 623 et seq.
- National Forest Products Association (NFPA) and American Forest Council (AFC) Ad-Hoc Task Force. 1989. Red-cockaded Woodpecker Management on Private Industrial Forests. National Forest Products Association and American Forestry Council (July 25).
- National Wilderness Institute. 1992. An Endangered Species Blueprint. Washington, D.C.: National Wilderness Institute.

Natural Heritage Data Center Network (NHDCN). 1993. Perspectives on Species Imperilment. Arlington, VA: The Natural Conservancy.

Nollan et ux. v. California Coastal Commission. 1986. 483 U.S. 825-867.

O'Toole, Randal. 1990. Pay land managers to protect species. The Environmental Forum: The Policy Journal of the Environmental Law Institute. (July/August): 33-34.

Pauw, Jan. 1992. Takings and environmental habitat. In Drawing the Line: Property Rights and Environmental Protection, ed. John S. Archer. Olympia, WA: Washington Research Council, Center for Competitive Strategies.

Penn Central Transportation Company v. New York City. 1978. 438 U.S. 104.

Pennsylvania Coal Company v. Mahon et al. 1922. 200 U.S. 393-422.

Parenteau, Patrick A. 1991. Wetlands regulation under section 404 of the clean water act. In Natural Resources Law Handbook, 307-363. Rockville, MD: Government Institutes, Inc.

Pershkov, Barry I. and Robert F. Housman. 1993. In the wake of *Lucas v. South Carolina Coastal Council*: A critical look at six questions practitioners should be asking. Environmental Law Reporter 23: 10008-10014.

Poole, William. 1993. Preserving urban and suburban gardens and parks: the trust for public land and its partners. In Land Conservation Through Public/Private Partnerships, ed. Eve Endicott, 61-82. Washington, D.C.: Island Press.

Raven, Peter H. 1994. Defining biodiversity. Nature Conservancy, January/February, 11-15.

Rapoport, Simeon D. 1986. The taking of wetlands under section 404 of the clean water act. Environmental Law 17: 111-124.

Reinhold, Robert. 1993. U.S. to protect a songbird but give builders leeway. New York Times, 25 March, A20.

Reiser, Alison. 1991. Ecological preservation as a public property right: An emerging doctrine in search of a theory. Harvard Environmental Law Review 15: 393-433.

Rolston, Holmes, III. 1991. Life in jeopardy on private property. In Balancing on the Brink of Extinction, ed. Kathryn A. Kohm, 43-61. Washington, D.C.: Island Press.

- Rolston, Holmes, III. 1990. Property rights and endangered species. University of Colorado Law Review 61: 283-306.
- Salvesen, David. 1990. Wetlands: Mitigating and Regulating Development Impacts. Washington, D.C: Urban Land Institute.
- Sansonetti, Thomas L., Department of the Interior. 1992. Economic Impacts of the Endangered Species Act, Paper No. 10. Institute on Public Land Law.
- Schneider, Keith. 1993. Accord is reached to aid forest bird. New York Times, 16 April, A1, A18.
- Schmidman, Frank. 1979. Transferable development rights (TDRs). In Windfalls for Wipeouts: Land Value Capture and Compensation, ed. Donald Hagman and Dean Misczynski, 532-555. Chicago: American Planning Association.
- Silverberg, Steven. and Mark Dennison. 1993. Wetlands and Coastal Zone Regulation and Compliance. New York: John Wiley & Sons, Inc.
- Smith, Robert J. 1992. The endangered species act: saving species or stopping growth? Cato Review of Business and Government (Winter): 83-87.
- Stevens, William. 1993. Interior secretary is pushing a new way to save species. The New York Times, 17 February.
- Stroup, Richard. Takings and Environmental Habitat. In Drawing the Line: Property Rights and Environmental Protection, ed. John S. Archer. Olympia, WA: Washington Research Council/Center for Competitive Strategies.
- Sugg, Ike. 1993. Ecosystem Babbitt-Babble. The Wall Street Journal, 2 April.
- Sugg, Ike. 1993. If a grizzly attacks, drop your gun. The Wall Street Journal, 23 June, 15(A).
- Tennessee Valley Authority v. Hill et al.* 1977. 437 U.S. 153-213.
- Tribe, Laurence H. 1988. American Constitutional Law. Mineola, NY: The Foundation Press.
- U.S. Fish and Wildlife Service. 1992. Critical Habitat for the Northern Spotted Owl. Portland, OR: U.S. Fish and Wildlife Service.
- Vivoli, Mike. 1992. Shoot and Shovel & Shut Up. The Washington Times, 27 November, 3.

- Want, William L. 1992. Law of Wetlands Regulation. Deerfield, IL: Clark Boardman Callaghan.
- Warbach, John. 1992. Lucas Remanded: May be a taking. Planning and Zoning News 10 (July): 6-10.
- Williams, Florence. 1993. Landowners turn the fifth into sharp-edged sword. High Country News, February, 1,12.
- Wright, Robert R. and Susan Webber Wright. 1991. Land Use in a Nutshell. St. Paul, MN: West Publishing Company.
- Yaffe, Steven Lewis. 1982. Prohibitive Policy: Implementing the Federal Endangered Species Act. Cambridge, MA: MIT Press.
- Zimmerman, Kathleen and David Abelson. 1993. Takings Law: A Guide to Government, Property and the Constitution. Boulder, CO: Land and Water Fund of the Rockies.

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