A BRIEF INTRODUCTION TO U.S. WILDLIFE LAWS

EARLY-TO-MID-20TH CENTURY

Early 1900s: First Major Federal Wildlife Protection Laws
Up until the early 1900s, the American approach to wildlife regulation continued to be virtually unchanged from what it had been since the first English settlers arrived: "profit a prendre," or, those (at least those with status privileges) who capture wildlife possess or own it. The prevailing attitude was that the land could provide unlimited natural resources, and wildlife was included in this American perception of plenty. Federal lands generally were open for public divestment and exploitation through settlement, farming, grazing, mining and other extractive activities. Wildlife also was freely hunted and trapped primarily for subsistence and commercial purposes, rather than enjoyed also for recreation purposes as it is today. [v] Protection of wildlife usually meant state management of game and commercially valuable animal populations in an attempt to ensure a sustained harvest. However, unlike England's history of strict enforcement of game laws - albeit for ends such as class discrimination - America's early game laws were mostly ignored and seldom enforced. [vi] As a result of the assumption of limitless resources, the widespread destruction of habitat and the lack or difficulty of wildlife law enforcement, wildlife populations in America had severely declined by the end of the 1800s.

March 15, 1887: MI-One of the first states to hire and pay a game and fish warden, William Alden Smith—although they'd been writing game laws for 50 years by then—county sheriffs were the enforcers of those laws.

1900 Lacey Act: Originally enacted in 1900, this is usually considered America's first wildlife protection law. One primary focus of the Lacey Act is prohibiting interstate trafficking in wildlife (including live or dead specimens or parts or products of all wildlife and fish and protected domestic plants) that have been taken, possessed, transported or sold in violation of a wildlife-related state, federal, foreign or tribal law or regulation.

The Lacey Act also prohibits making or submitting a false record, account or label for wildlife transported, or intended for transport, in interstate or foreign commerce. The Lacey Act provides misdemeanor and felony penalties and provides for forfeiture of both
the wildlife involved in an offense, as well as vessels, vehicles, aircraft and equipment used to aid in the commission of a felony violation.

At the turn of the century, President Theodore Roosevelt brought the Progressive era and the ideals of conservation of nature, along with Chief U.S. Forester Gifford Pinchot, into his Administration. Pinchot’s conservation philosophy, which was adopted by federal agencies that managed public lands and resources, included optimizing development of natural resources such as timber, and President Roosevelt’s love of the outdoors and interest in natural resources grew from his fondness for big game hunting. Nevertheless, the value of wildlife to the American public also began to encompass aesthetic and ethical considerations. The extinction of the passenger pigeon and heath hen and the near demise of the buffalo raised public concern over the future of the nation’s wild animals. The potency of this concern was reflected in the passage of wildlife habitat protection laws. The first wildlife refuge, Pelican Island National Wildlife Refuge, was set aside by Roosevelt in 1903.

1905 **The Game and Bird Preserves Act:** and since its passage numerous refuges and preserves have been set aside. National parks, monuments and reservations, which coincidentally provide habitat for wildlife, have also been established under the National Park Service Act of 1916.

Federal restrictions on taking wildlife began in earnest with the Lacey Act of 1900, which made the interstate transportation and sale of wildlife illegally taken under state law a federal offense. Although the Lacey Act supported enforcement of state wildlife laws, it also was the first major piece of federal wildlife legislation.

1907 - Michigan Wardens made responsible for forestry and fire protection too—became Game, Fish and Forestry Wardens.

1918 **The Migratory Bird Treaty Act (MBTA):** represented one of the first major federal legislative attempts to protect a particular type of wildlife. The first of four treaties for the protection of migratory birds was signed with Great Britain (for Canada) in 1916, and the MBTA was the national enabling legislation for the treaty. It prohibited the taking of migratory birds except under federal guidelines and provided strict civil and criminal penalties.
Migratory birds were viewed as useful for agricultural pest control, and it was becoming apparent that restrictions on the popular hunting of waterfowl were needed to arrest depletion of waterfowl populations. The Act sparked tensions between federal and state management authority, tensions that continue to shape federal involvement in the regulation of wildlife to this day. The constitutionality of the MBTA was first challenged in the seminal case of Missouri v. Holland. The State of Missouri argued that it had sole authority to regulate the wildlife within its borders, but the U.S. Supreme Court disagreed. The Court held that the federal enabling legislation, properly enacted as a result of the treaty power, took precedence over state law by virtue of the supremacy clause of the Constitution.

A decade later, the Migratory Bird Conservation Act established the federal authority to acquire migratory bird habitat, thus providing a second method of federal protection for this particular category of wildlife, and allowing for more wildlife refuges. In 1967, a federal court in Swan Lake Hunting Club v. United States confirmed the federal government’s authority to condemn land under the MBCA for refuges.

World War I and post-war times in the United States occupied the federal government’s attention in the late 1910s and 1920s. Other than the migratory bird acts and a few other wildlife-related laws, little wildlife legislation made it across the President’s desk during this period. The Great Depression, the Dust Bowl and widespread flooding put conservation concerns on hold until the 1930s, when conservationist goals ushered in a wave of federal wildlife legislation.

**1930 The Tariff Act:** subsequently enhanced the Lacey Act by prohibiting importation of any bird or mammal illegally taken in or exported from a foreign nation.

**The 30s and 40s: New Deal Era**

The New Deal era stands as a turning point in government and public attention to conservation issues. President Franklin D. Roosevelt made land and resource preservation a cornerstone of his national economic restoration plan. Secretary of the Interior Harold Ickes pushed for habitat acquisition for refuges, national parks, Bureau of Reclamation projects, and reform of public land law to help stabilize employment and the economy. Aldo Leopold helped form The Wilderness Society. The National Wildlife Federation was also established. Legislation during this period attempted to integrate many diverse concerns into comprehensive laws.
1934 The Migratory Bird Hunting and Conservation Stamp Act:
Duck Stamp Act, is an early example of a federal wildlife habitat protection law. Enacted in 1934, it is the first major federal legislation to provide a fund specifically for wildlife conservation purposes. Sport enthusiasts provide the monies through the purchase of duck stamps which must be affixed to waterfowl hunting licenses, and the funds raised from the sale of these stamps are used to acquire refuge habitat.

In contrast to statutes protecting wildlife, the Animal Damage Control Act was passed in 1931 in part to assist with eradication of wildlife that threatened livestock grazing and agriculture on Western federal and private lands (federal involvement in predator control actually dates back to the late 1800s and was originally authorized by Congress in 1915). Management of animal damage control was originally vested in the Department of the Interior, but was transferred to the Department of Agriculture in 1985.

With the accelerating development of the West, the national symbol, the bald eagle, was threatened with extinction. Eagles were killed for sport and because they occasionally preyed on domestic livestock. The Bald Eagle Protection Act of 1940 was the first federal statute to prohibit the taking, possession of, or commerce in a particular species of wildlife.

In 1934, the Taylor Grazing Act was enacted to control overgrazing and overproduction on unappropriated public lands by establishing grazing districts and a grazing permit system, and by further directing the Secretary of the Interior to do any and all things necessary to preserve the land and its resources from destruction or unnecessary injury. The Act contemplated the conservation of wildlife, as the Secretary was directed to cooperate with other agencies with an interest in grazing districts, including state agencies engaged in conservation or propagation of wildlife. The Act’s establishment of grazing districts marked the final closure of public unappropriated lands to private divestment. The Bureau of Land Management was established later by Congress to oversee and manage unappropriated public lands that had not been set aside for other purposes.

1934 The Fish and Wildlife Coordination Act: to promote federal research on and programs to maintain wildlife on federal lands. The Act called for state and federal cooperation in developing a nationwide program of wildlife conservation and rehabilitation. Amendments to the Act in 1946 deleted these program goals but
substituted consultation with the Fish and Wildlife Service and state wildlife agencies whenever a federal agency dammed or diverted water or permitted such action, and required that adequate provision be made for conservation, maintenance and management of wildlife when such federal projects were undertaken. This law was a precedent-setting example of legislation requiring federal agency consideration of the impact of activities on wildlife. Despite amendments strengthening the Act in 1958, however, the Fish and Wildlife Coordination Act has not had nearly the impact on wildlife protection as its progeny, the National Environmental Policy Act.

Programs to provide important federal monetary support for state management of fish and wildlife began in 1937.

**1937 The Federal Aid in Wildlife Restoration Act, or Pittman-Robertson Act:** imposed a federal excise tax on hunting equipment and firearms and apportioned the funds to the states for state management and restoration of fish and wildlife resources and habitats.

Despite congressional power under the Constitution to regulate wildlife in limited instances (see discussion in Chapter 3), states have the primary responsibility to conserve, manage and protect the wildlife resources within state borders. State fish and wildlife agencies provide "hands-on" management of wildlife, particularly game species, and agencies are primarily funded through fees from state hunting and fishing licenses. The Federal Aid in Wildlife Restoration Act and later the Federal Aid in Sport Fish Restoration Act (Dingell-Johnson Act) both constituted federal recognition of that state responsibility.

**The 1950s: Economic Growth and Pollution**

During the World War II period, there was little federal legislative action regarding wildlife or the environment, as the United States prepared for and fought the war. This changed after the war. Post-war prosperity in the 1950s caused an unprecedented explosion in highway and housing building, and demand for natural resources soared. Environmental law at the time was virtually unknown as a legal specialty, and growing pollution problems were only slowly becoming apparent to most Americans. Specific pollution problems usually were resolved through private nuisance lawsuits, if at all. By the mid-1950s, however, dense smog in Los Angeles, radioactive fallout over areas of the United States, and
other pollution presented obvious problems of national proportions. Federal environmental legislation attempted to mitigate these problems.

1972 The Federal Water Pollution Control Act: originally was passed in 1948 and was amended repeatedly until it was eventually overhauled in 1972. The 1956 version provided the original grants for sewage treatment plants. Like the Clean Air Act, federal water pollution laws help protect wildlife by cleaning up the waters on which it relies for food and habitat. Federal involvement in environmental protection had begun to take off.

Efforts to revitalize federal fish and wildlife legislation also began and a comprehensive national fish and wildlife policy was set forth in the Fish and Wildlife Act of 1956. Fish, shellfish and wildlife are "a living renewable form of national wealth that is capable of being maintained and greatly increased with proper management, but equally capable of destruction if neglected or unwisely exploited; that such resources afford outdoor recreation throughout the Nation and provide employment, directly or indirectly, to a substantial number of citizens..."  

1950 by the Federal Aid in Sport Fish Restoration Act (or Dingell-Johnson Act): This companion to the Pittman- Robertson Act provides funds to states for fish management programs through federal excise taxes on fishing equipment. The Fish and Wildlife Service now oversaw a Bureau of Sports Fisheries and Wildlife and a Bureau of Commercial Fisheries. The Secretary of the Interior was directed to investigate and report on the status and availability of fish and wildlife resources, especially commercial fisheries resources.

Much of the rest of the federal legislation and treaties of the 1950s impacting wildlife and habitat concerned fish and fisheries management, particularly commercial and international fisheries. Examples include the Fishermen's Protective Act (adopted in 1954 to protect international fisheries programs); Fish-Rice Rotation Farm Program (a 1958 law on shallow submerged fisheries); Great Lakes Fishery Act of 1956 (providing for cooperation with Canada in controlling sea lamprey and implementing the Convention on Great Lakes Fisheries); and the Tuna Conventions Act of 1950 (providing for international cooperation in the management of tropical tuna fisheries and implementing the Convention for Establishment of an Inter-American Tropical Tuna Commission).
1953, the Outer Continental Shelf Lands Act and the Submerged Lands Act, although not conservation statutes, both provided in part for protection of the marine environment through federal or state oversight of commercial oil and mineral resource extraction activities.

The Whaling Convention Act, enacted in 1950, reflected growing international cooperation in the protection of specific oceanic species. Whale populations had been decimated by commercial fishing practices, in particular by nations such as Japan and the Soviet Union. The Act implemented for the United States the International Convention for the Regulation of Whaling, which established the International Whaling Commission (IWC) to review and restrict whale harvesting. The Whaling Convention Act urged the IWC to establish a moratorium on commercial whaling of declining whale species, and urged all whaling nations to voluntarily agree to the moratorium.

The first International Conference on the Law of the Sea was held in 1958 to address widespread national and international concern for establishing sovereign boundaries for fishing on the high seas. One of the treaties resulting from the conference was the Convention on Fishing and Conservation of the Living Resources of the High Seas. This treaty acknowledges the interest of nations in maintaining the productivity of the living resources in the oceans adjacent to their coasts, and further provides a forum for negotiations between coastal and non-coastal parties in adopting conservation measures.

In 1959, the Antarctic Treaty was signed by 12 nations, including the United States, primarily as a post-war effort to ban the use of Antarctica as a military or nuclear base of operations. This treaty and its protocol committed the signatories to protection of the Antarctic environment and its ecosystems, and designated Antarctica as a natural reserve.

1955 Clean Air Act: passed as the Air Pollution Control Act, and thus began the arduous and complicated process of cleaning up America's air. Although the Clean Air Act's goal was to improve air quality for human health reasons, the current statutory definition of public "welfare" includes wildlife.
BEGINNING OF THE MODERN ENVIRONMENTAL MOVEMENT

The 1960s: Awareness of Pollution and the Environment

The 1960s mark the beginning of a 30-year transition into the modern era of wildlife and environmental regulation. In many ways, Americans today work, live and recreate in a totally different world from what existed just over three decades ago. A majority of Americans live in urban settings; recycling is sponsored by many local governments; environmental education is taught in some form in most schools; and non-consumptive enjoyment of wildlife has exploded. The term "environment" was relatively unknown before the 1960s; today it is a household word and protection of the environment is supported by a majority of Americans. The ethic of protection of the environment was becoming a national value in the 1960s; the environmental movement has since become a formidable political force. The number of pollution abatement, public land management, and wildlife protection statutes passed since then is large, and the complexity of some of the statutes, particularly the pollution control laws, verges on overwhelming. At the same time, pollution problems of the 1960s still have not been solved, new and even more complex environmental problems are evident, natural undisturbed land is disappearing at faster rates, and the diversity of life on Earth appears to be decreasing at an unprecedented rate. The activism of the 1960s, however, laid the groundwork for modern approaches to tackling these problems.

The modern environmental movement coalesced in the 1960s in part out of distrust of government resulting from the Vietnam War, the civil rights movement, and frustration with the government’s and industry’s lack of protection of the public from chemical and other contaminants.

1962 *Silent Spring* by Rachel Carson is published: classic work on pesticide contamination and its systemic environmental consequences, and the public took her message to heart. Federal legislation during this period for the first time began to reflect the new ethic of environmental protection. Private nuisance pollution lawsuits grew in number, and citizen activism increased. The Sierra Club, for example, made major efforts to protect the West from dams that would flood areas such as the Dinosaur National Monument and the Colorado River Basin.
A number of pollution abatement laws were enacted, even though some of these laws only required initial studies of a particular pollution problem.

**1963 The Clean Air Act Amendments**: began the process of establishing national standards for air pollution control. **Clean Air Act—1970, amended 1977, 1990** The CAA regulates air emissions from a number of sources in an attempt to ensure that people in the United States breathe air that is not harmful to their health. Under the CAA, the EPA has established "national ambient air quality standards," or NAAQS, for several atmospheric pollutants known to be potential health hazards. Six of these pollutants, called criteria pollutants, are in the table on the facing page. The pollutants are carbon monoxide, lead, nitrogen oxides, ozone, particulates, and sulfur dioxide. The NAAQS set the maximum amount of these pollutants that can be in the outdoor air. If areas of a state have levels of these pollutants that exceed the NAAQS, the state must come up with a State Implementation Plan (SIP) specifying air pollution control measures that will be followed to bring the air pollution levels down so that they comply with the CAA standards. The CAA also establishes emissions standards that specify the maximum amount of certain harmful pollutants that sources such as factories, cars, and buses can release into the air.

**1964 The Wilderness Act**: setting aside specific areas for preservation in their natural state. Four years later, the Wild and Scenic Rivers Act and the National Trails System Act provided a basis for setting aside additional public land for scenic and recreational uses, and simultaneously protecting wildlife habitat. The Land and Water Conservation Fund Act established a special fund for earmarked revenues to allow acquisition of outdoor recreation and wildlife natural areas. Up to 60 percent of the monies are made available to states submitting comprehensive outdoor recreation plans for the acquisition and development of land and water areas and facilities. The federal share of the fund may be applied to acquire other lands and waters, including areas for conserving threatened or endangered species.

After more than half a century of disparate goals and management techniques, the National Wildlife Refuge System was brought together under one administrative roof in 1966. Wildlife ranges and refuges had been established as early as the turn of the century by various presidents but no single body or set of administrative rules governed them. The Migratory Bird Conservation Act already had given the Secretary of the Interior authority to acquire lands for migratory bird habitat. The Fish and Wildlife Act of 1956 allowed the Secretary of Interior to acquire refuge lands for all wildlife. The Duck
Stamp Act \[lxx\] was providing funds from sale of duck stamps to purchase refuges, and the Wetlands Loan Act of 1961 \[lxxi\] allowed the Fish and Wildlife Service to use advances from duck stamp receipts to purchase habitat for waterfowl.

The series of three refuge acts consolidated the refuge system. The Refuge Recreation Act of 1962 \[lxxii\] allowed use of refuges for public recreation when it was not inconsistent or interfering with the primary purposes of the refuge. \[lxxiii\] The Refuge Revenue Sharing Act of 1964 \[lxxiv\] provided that receipts from other activities on wildlife refuges were to be used for public schools and roads in the counties in which the refuges were located. Finally and most importantly, the National Wildlife Refuge System Administration Act of 1966 \[lxxv\] sought to consolidate all of the different refuge areas into a single refuge "system." All units of the system are now administered by the Fish and Wildlife Service and restrictions are placed on the transfer, exchange or other disposal of lands within the system. The Act allows the use of refuge areas for uses compatible with the main purpose for which the refuge was established. It also codifies the Secretary of the Interior's authority to accept money donations for land acquisition for the refuge system.

Other noteworthy initiatives that became law in the 1960s concerned endangered species.

**1966 The Endangered Species Preservation Act:** represented the first federal attempt to preserve endangered species. Weak provisions in the first Act, however, led to the passage of the Endangered Species Conservation Act of 1969. \[lxxvii\] This law strengthened protection of endangered species by authorizing development of a worldwide list of species and outlawing commerce in these species.


The goal of the Clean Water Act was to improve the quality of the nation's rivers, streams, lakes, and bays, making them suitable for swimming and fishing. Two main targets of the CWA were sewage and industrial pollutants. Under the law, billions of dollars were given to state and local governments to build sewage treatment plants (also called wastewater treatment plants) all over the country. These plants greatly decreased the amount of untreated waste pouring into surface waters from sewer systems. The CWA also required each facility releasing substances into U.S. waters to get a permit that would set limits for specific pollutants, depending on the
industry involved. The facilities were required for the first time to keep strict records of all releases of pollution into surface waters. The law specified that these records would be open to the public and that citizens could sue facilities that violated their permits. The CWA’s citizen suit provision has often been used to stop the release of pollution into surface waters and to punish violators responsible for such releases.

Meanwhile, Congress developed a legislative mandate for agency administrative procedures that would have an enormous impact on federal actions affecting wildlife. The Administrative Procedure Act (APA) was amended into its modern form in 1966, based upon the earlier Act of 1946. The APA sets forth procedures for federal agency action, which includes formal and informal rulemaking, informal agency action and adjudicatory proceedings. The APA requires that federal agencies seek out public participation during almost all phases of agency activity, and allows judicial review of actions adversely affecting individuals. Most agency impacts on the environment are caused by informal agency actions such as timber sales and permitted dam construction projects. Informal agency actions came within the purview of judicial review in *Citizens to Preserve Overton Park v. Volpe*, thus opening up environmental law to an enormous new arena in which citizens could challenge agency action. The agency rulemaking process and formal and informal actions of agencies have been challenged in hundreds of environmental lawsuits under the APA.

The mid-1960s saw President Lyndon Johnson cooperating with Congress to pass a series of federal public land and wildlife habitat protection laws. Much of this legislation was based upon the January 1962 recommendations of the Outdoor Resources Recreation Review Commission chaired by Laurance Rockefeller.

Legislative activity in the 1960s also continued to reflect concern for aquatic resources. The Estuarine Areas Act of 1968 required a study of the wildlife, ecology, recreational and fisheries potential and aesthetic value of estuarine areas, including the Great Lakes. The Fur Seal Act banned pelagic (open ocean) sealing except for aboriginal subsistence purposes. The Anadromous Fish Conservation Act directed the Secretary of the Interior to study and make recommendations for the conservation and enhancement of anadromous (salt-to-freshwater migratory) fishery resources. In an attempt to protect coastal fisheries, the Jellyfish Control Act of 1966 authorized a federal program to control jellyfish, floating seaweed and other pests. The first comprehensive law acknowledging the rights of certain animals to humane treatment, the Animal Welfare Act, was passed in 1966. The Act requires humane treatment, care...
and transport of all warm-blooded animals, including wildlife, used for research, teaching, exhibition or as pets. Humane treatment also was provided for in the Surplus Grain for Wildlife Act, lxxxiv which allowed surplus grain to be requisitioned by the federal government as feed for starving wildlife, especially game birds, waterfowl and other migratory birds.

1969 The National Environmental Policy Act: (NEPA) requires that all Federal agencies prepare detailed environmental impact statements for "every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment."

The 1969 statute stipulated the factors to be considered in environmental impact statements, and required that Federal agencies employ an interdisciplinary approach in related decision-making and develop means to ensure that unquantified environmental values are given appropriate consideration, along with economic and technical considerations.

Title II of this statute requires annual reports on environmental quality from the President to the Congress, and established a Council on Environmental Quality in the Executive Office of the President with specific duties and functions.

Amendments enacted in 1975 authorized additional appropriations for the Council on Environmental Quality (P.L. 94-52) and contained various administrative

The 1970s: Earth Day Generation

The 1970s brought the strongest surge of environmentalism ever witnessed in the United States.

1970 First Earth Day: in April galvanized an already environmentally aware public. Widely publicized pollution nightmares such as the burning of the Cuyahoga River in Cleveland, Ohio and the River Rouge in Dearborn, Michigan caused public uproar. Thick urban smog and the stench of landfills made pollution problems painfully obvious. lxxxvi. Aldo Leopold’s A Sand County Almanac fired the public’s imagination, and Joseph L. Sax's book Defending the Environment: A Strategy for Citizen Action inspired activism for the environmental movement. The growth of national environmental organizations lent a new urgency to environmental issues and environmental law began developing as a specialty in the legal profession. Republican presidents and Democratic
Congresses raced to outdo each other in protecting the environment with stronger pollution prevention laws.

The period during which Richard Nixon was President witnessed passage of some of the most comprehensive environmental laws in American history. The "Earth Day Generation" of the 1970s was ushered in legislatively through the passage in late 1969 of the National Environmental Policy Act (NEPA), which President Nixon signed on January 1, 1970. NEPA was the broadest piece of Congressional legislation yet passed for protection of the environment. The Act actually began as an amendment to the previously discussed Fish and Wildlife Coordination Act, but became a stand-alone bill during the Congressional process. It requires federal agency consideration of impacts on the whole environment before major federal action is undertaken. Environmental assessments or environmental impact statements are required as part of that consideration. NEPA's procedural requirements are the strongest legislative example of mandating governmental agency consideration of the environmental and wildlife impacts of agency action. Its provisions also declare as federal policy the use of all practicable means to administer federal programs in the most environmentally sound fashion. Citizen and group lawsuits against federal agencies that violate the Act may be brought under the APA, and it launched a new era in public scrutiny of government activity and enforcement of federal laws.

As directed by NEPA, President Nixon also created the Council on Environmental Quality (CEQ) to oversee environmental decisions by federal agencies. The Office of Environmental Quality was created by the Environmental Quality Improvement Act of 1970 to support the work of the CEQ. In addition, President Nixon established the Environmental Protection Agency (EPA) to oversee water, air, radiation, pesticide, solid waste and other programs. From 1969 to 1972, there were 34 major environmental laws passed. In fact, some have termed the 1970s the "environmental overreach period" because of the detailed and expensive pollution abatement requirements of some of the new environmental laws, and because of the enormous impact of private groups which gained standing to sue.

The toughest federal wildlife protection laws to date were put on the books early in the decade. The Marine Mammal Protection Act (MMPA) became law in 1972, prohibiting the taking or importation of marine mammals without a permit. The Act was groundbreaking in that it specifically stated as a goal the protection of marine ecology in order to save marine mammal species. A Marine Mammal Commission was created to
provide scientific advice and recommendations to the Secretaries of Commerce and the Interior, who share responsibilities under the Act. The moratorium on taking species allowed exceptions such as the incidental taking of marine mammals in the course of commercial fishing. This exception has been the subject of amendments and much controversy, especially because of the tuna industry practice of setting its nets on dolphins swimming with tuna.

The Wild Free-Roaming Horses and Burros Act was enacted in 1971, declaring wild horses and burros as living symbols of the historic and pioneer spirit of the West. Under the Act, wild horses and burros must be treated as an integral part of the natural system of the public lands. In Kleppe v. New Mexico, the State of New Mexico lost a challenge to the federal government’s authority to protect these animals on federal land within state borders.

1973 Endangered Species Act of 1973 (ESA) replaced previous weaker acts (1969 Endangered Species Conservation Act and 1966 Endangered Species Preservation Act). The ESA has been considered "the most comprehensive legislation for the preservation of endangered species ever enacted by any nation." In passing the most powerful wildlife legislation in this country, Congress declared that "species of fish, wildlife and plants are of esthetic, ecological, educational, historical, recreational, and scientific value ...." The Act contains all three types of federal legislative action in support of wildlife conservation. The ESA not only requires federal consultation before major federal action impacting threatened or endangered species is undertaken, but it outlaws the taking of such species and provides for acquisition of habitat to protect threatened and endangered species. Federal support also is provided to states that enter into cooperative agreements for conservation of listed species.

The seminal case in support of the language and goals of the ESA is Tennessee Valley Authority v. Hill. Completion of the Tellico Dam would have jeopardized the existence of the endangered snail darter. The U.S. Supreme Court held that the prohibition in Section 7 of the ESA against federal agency action jeopardizing a species required termination of the project. The TVA case demonstrated the power of the ESA, as the Supreme Court found that "the plain intent of Congress in enacting this statute was to halt and reverse the trend toward species extinction, whatever the cost." In response to the Supreme Court’s
ruling, Congress in 1978 created the Endangered Species Committee, a committee of members of the President’s cabinet who could vote to grant exemptions from the ESA. The Committee did not, however, grant an exemption to Tellico Dam, although other Congressional action allowed the project to proceed.

Even the animal damage control practices of the federal government were revisited during this period. By Executive Order in 1972, President Nixon banned the use of poisons to kill predators on federal lands except in emergency situations. President Reagan revoked the Order in 1982, though EPA registration requirements are now the limiting factor with respect to use of poisons in predator control.

Two other acts passed in 1972 afford protection to marine wildlife through habitat protection and through requiring consideration of the environment by federal agencies: the Coastal Zone Management Act (CZMA) and the Marine Protection, Research and Sanctuaries Act (MPRSA). The CZMA provides grants to states to develop coastal management plans, which may be approved once the views of affected federal agencies have been considered. The MPRSA gives the Secretary of Commerce authority to designate marine sanctuaries in consultation with state and federal agencies, and requires consultation with the Secretary if federal agency actions will impact a sanctuary.

Congress also enacted comprehensive legislation for fishery conservation and management in the 1970s. The Magnuson Fishery Conservation and Management Act of 1976 establishes a federal fishery conservation zone within 200 miles of the three mile seaward coastal boundary of the states, and declares exclusive management authority for the United States over all fish and other forms of marine animal and plant life, other than marine mammals, birds, and highly migratory species in the zone. The Act also claims exclusive U.S. management authority over anadromous fish that spawn in fresh or estuarine waters of the United States, and over certain sedentary species where the continental shelf extends beyond the 200-mile conservation zone. Comprehensive management plans must be developed for each fishery by the eight Regional Fishery Management Councils, composed of state, private and federal officials.

Public land management statutes also were overhauled in the seventies. The National Forest Management Act of 1976 (NFMA) is the current organic act for the Forest Service. The Forest Service manages habitat while the states manage fish and resident wildlife on the national forests. NFMA requires the Secretary of Agriculture to develop and implement resource management plans, with public participation, for National Forest
System units using principles of sustained yield and multiple use. Wildlife and plant
diversity also are to be protected under these plans. The Public Rangelands Improvement
Act of 1978 \[cvii\] requires the Secretaries of the Interior and Agriculture to maintain an
inventory of public rangeland conditions, and to manage rangelands to improve their
conditions to become as productive as feasible.

The Federal Land Policy Management Act of 1976 (FLPMA) \[cviii\] is similar to NFMA, and is
currently the organic act for the Bureau of Land Management. FLPMA requires the
Secretary of the Interior to maintain an inventory of public lands and to develop land
management plans. FLPMA formalized the federal policy of retaining public lands in
federal ownership, while providing for public land sales, exchanges and withdrawals. The
Act requires management of public lands for multiple use and sustained yield, but it also
requires management to protect certain values, including environmental and ecological
values, and protection of certain lands for fish and wildlife habitat and other uses. FLPMA
confirms state authority and responsibility for management of fish and resident wildlife on
lands and waters controlled by BLM and by the National Forest System. Consultation,
coordination and communication are the themes for BLM public land management.

The "Sagebrush Rebellion" was born during this upsurge in federal environmental and
public land protection. Its proponents argued that federal government agencies "lacked
the constitutional authority to support long-term, extensive land ownership, and second
that, legalities aside, state ownership was superior to federal ownership as a matter of
policy, because it would vest decision making authority in the hands of government
officials who were closer to the people." \[cix\] This Western grassroots movement opposing
federal regulation foreshadowed the "county movement" of the 1990s.

In addition to the specific wildlife and wildlife-related federal laws of the early to
mid1970s, a panoply of environmental protection laws was enacted to reduce or eliminate
pollution and treat waste. Examples include the Clean Air Act of 1970 and Clean Air Act
Amendments of 1977; \[cxl\] Clean Water Act \[cxi\] (for restoration and maintenance of the
"chemical, physical and biological integrity of the Nation's waters"); Resource Conservation
and Recovery Act; \[cxi\] Surface Mining Reclamation and Control Act; \[cxii\] and Toxic
Substances Control Act. \[cxiv\]

The decade saw a burgeoning of Congressional mandates to the agencies to adopt new
regulations and standards, pursuant to increasingly complicated pollution statutes
addressing increasingly complicated pollution problems. The Environmental Protection
Agency developed into a significant regulatory and oversight mechanism for pollution control. During this time, other agencies were evolving under different influences: the Fish and Wildlife Service was being scrutinized by the public through litigation, the BLM was seen to mature into a full-blown professional agency; and the Forest Service was given new direction by the National Forest Management Act. 

The growth in environmental litigation was unprecedented and coincidental with the growth in legislation and agency responsibility to execute the statutes. Public faith in legal solutions to environmental issues increased, and citizen suits became the order of the day. Many federal environmental laws contained citizen suit provisions that gave standing to individuals and groups to sue agencies and others for violation of environmental laws. Laws with citizen suit provisions include the Clean Water Act; Endangered Species Act; Marine Protection, Research, and Sanctuaries Act; Outer Continental Shelf Lands Act; Surface Mining Control and Reclamation Act; Toxic Substances Control Act; and Resource Conservation and Recovery Act. Citizen suits usually were organized by national membership organizations such as Defenders of Wildlife, The Wilderness Society, the National Wildlife Federation, and the Sierra Club.

Case decisions by the federal judiciary in the 1970s often supported environmental protection. The courts typically upheld environmental plaintiffs based on abuse of administrative discretion, statutory construction, and even on constitutional grounds. In Parker v. United States, for example, a Forest Service timber contract was enjoined because of violation of the Wilderness Act; in West Virginia Isaac Walton League v. Butz, clearcutting in a national forest was stopped because of strict construction of the language of the Forest Service Organic Administration Act. In Scenic Hudson Preservation Conference v. Federal Power Commission, a citizens' group gained standing to sue the FPC for failure to consider aesthetic and fishery impacts of a plant on the Hudson River.

1973 Convention on International Trade in Endangered Species (CITES): is an international treaty to prevent species from becoming endangered or extinct because of international trade. Under this treaty, countries work together to regulate the international trade of animal and plant species and ensure that this trade is not detrimental to the survival of wild populations. Any trade in protected plant and animal species should be sustainable, based on sound biological understanding and principles. The United States is a signatory, along with 181 other countries around the world.
Commercial wildlife trade is a substantial international business, totalling [sic] at least $5 billion per year. Illegal wildlife trade is growing steadily, and the black market has been more lucrative than crack cocaine or heroin. Even legal trade can have dire consequences for wildlife. For example, it is estimated that at least 50 percent of birds transported from foreign countries to the U.S. die en route.

In addition, between 1945 and 1974, the United States signed 20 international agreements regarding fisheries. Examples include the U.S.-Canada Convention for Preservation of Northern Pacific Ocean and Bering Sea Halibut Fishery; Convention for the Conservation of Anadromous Stocks in the North Pacific Ocean; Convention on Fishing and Conservation of the Living Resources of the High Seas; International Convention for the High Seas Fisheries of the North Pacific Ocean; and the International Convention for the Northwest Atlantic Fisheries. Most of these agreements establish some form of intergovernmental management authority which is supposed to work to protect and preserve fisheries and maintain a maximum sustained catch.

In response to growing concerns over the exploitation of Antarctica, and consistent with previous treaties regarding Antarctica to which the United States was a signatory, the Antarctic Conservation Act of 1978 was enacted to prohibit the taking of any native mammal, bird or plant, or the introduction of non-native species. Dumping of pollutants in Antarctica is also forbidden under the Act.

THE LAST TWO DECADES

The 1980s: Polarization of the Environmental Movement

The 1980s was the "mature" decade for the environmental movement. Laws were further developed, amended and complicated by legislative detailing. Also, politics in the 1980s managed to polarize the country on environmental issues. Meanwhile, Congress began micromanaging environmental protection schemes with detailed legislation. Critics saw environmental protection laws as a "weak legal regime," arguing that such laws do not really protect the environment. "Too much of current environmental law is only good for lawyers and those of us who make our living teaching it, not for the planet"

During 1980, President Carter's last year in office, important new environmental and wildlife laws were passed.
1980 The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, or Superfund): was enacted in response to concerns about large environmental hazardous waste pollution sites. One aspect of the Act was to allow assessment of damages to natural resources (including fish, wildlife and biota) and to identify and apportion liability to the responsible parties. "Superfund sites" were identified, prioritized and targeted for major clean-up of hazardous substances.

Other legislation either pertaining to management of federal lands or directly impacting wildlife passed in 1980 included the Alaska National Interest Lands Conservation Act (ANILCA), Fish and Wildlife Conservation Act, National Aquaculture Act, and the Pacific Northwest Electric Power Planning and Conservation Act. ANILCA added enormous landholdings to the United States’ national forests, wildlife refuges, wild and scenic rivers, and wilderness areas. It doubled the amount of acreage in the National Wildlife Refuge System, and added a detailed management scheme setting forth priorities and purposes for each refuge within the Alaskan refuge system. A controversial aspect of the ANILCA has been its attempt to address subsistence uses of fish and wildlife within the refuges.

The Fish and Wildlife Conservation Act was supposed to be the nongame wildlife conservation answer to the Pittman-Robertson and Dingell-Johnson state programs. It attempted to inject comprehensive planning for both game and nongame wildlife into state conservation management. The "Nongame Act" was to provide substantial funds to state agencies meeting the Act’s requirements for comprehensive wildlife management plans. Unlike the Federal Aid in Wildlife and Sport Fish Restoration Acts, however, the Nongame Act has suffered from a lack of funding for state programs.

The National Aquaculture Act established a national plan to encourage aquaculture, or commercial fish farming, in part because of declining fisheries resources. The Pacific Northwest Electric Power Planning and Conservation Act’s specific purpose was to protect and enhance fish and wildlife on the Columbia River in the Pacific Northwest.

In 1981, the Lacey Act Amendments combined the provisions of the 1900 Lacey Act and the Black Bass Act of 1926. Fish, wildlife and plants are now covered under the original federal prohibition on interstate transport and sale of wildlife killed in violation of state laws or regulations. The modern Lacey Act also prohibits commerce in fish and
wildlife taken in violation of tribal, foreign and federal wildlife laws.  Improper or false labeling, marking or recordkeeping also is outlawed. The Act punishes trafficking in illegally taken wildlife; however, it does not punish violation of the underlying state, federal, tribal or foreign law. The Lacey Act’s constitutionality has been upheld in the courts. For example, in *United States v. Guthrie*, it was argued that state agencies do not have the power to create a federal felony out of a state misdemeanor. The Eleventh Circuit Court of Appeals held that the Act does not unconstitutionally delegate federal authority to the states.

Beginning with the election of President Reagan in 1980 and for the following 12 years, Republican Administrations lined up against a Democrat majority in Congress and environmental protection became, with some exceptions, a highly politicized issue. The appointment of James Watt as Secretary of the Interior was especially controversial given his interest in land and resource privatization and user deregulation. Watt’s presence at the helm of the Department of the Interior prompted a dramatic increase in membership in environmental groups.

From 1982 to the end of the decade, Congress passed a number of amendments to existing laws, and a number of important bills supporting wetlands conservation and fisheries were passed. The Food Security Act of 1985, North American Wetlands Conservation Act, and the Emergency Wetlands Resources Act all support acquisition and conservation of wetland ecosystems.

**1985 The Food Security Act (Farm Bill):** contains "swampbuster" provisions to render farmers growing crops on wetlands ineligible for federal farm programs. The Conservation Reserve Program (CRP) in that Act provides annual rent payments to farmers who remove wetlands and other sensitive lands from production.

The North American Wetlands Conservation Act sought to assist with acquisition of waterfowl habitat by implementing the North American Waterfowl Management Plan, a 1986 agreement between the United States and Canada which provides a framework for maintaining and restoring habitat for migratory birds. The Act provides for the acquisition of wetland ecosystems and their inclusion in the National Wildlife Refuge System. The Emergency Wetlands Resources Act called for the development of a national wetlands priority conservation plan and provides further authority for the Secretary of the Interior to purchase wetlands. In addition, the U.S. in 1986 ratified the Convention on Wetlands of
International Importance (Ramsar Convention), under which signatory nations agreed to cooperate in the conservation and management of wetlands and waterfowl.

Federal legislation in the 1980s manifested a recognition that fresh, saltwater and anadromous fisheries were in dire need of management because of commercial overharvesting. Congress passed a host of enabling legislation for fisheries treaties and other federal laws. Examples include the Atlantic Salmon Convention Act (enacted in 1982 to implement the Atlantic Salmon Convention); Atlantic Striped Bass Conservation Act (enacted in 1984 for the conservation and management of striped bass); Coastal Barrier Resources Act (enacted in 1982 for the protection of undeveloped coastal habitats); Interjurisdictional Fisheries Act (a 1986 law addressing state management of interjurisdictional fisheries); Klamath River Basin Fishery Resources Restoration Act (enacted in 1986 for the restoration of the Basin’s anadromous fish); Northern Pacific Halibut Act (a 1982 law implementing the Halibut Convention); Pacific Salmon Treaty Act (a 1985 act implementing that treaty); Salmon and Steelhead Conservation and Enhancement Act (passed in 1980 to prevent further decline of salmon and steelhead); and South Pacific Tuna Act (a 1988 act implementing the 1987 South Pacific States Treaty on Fisheries).

Outside the legislative arena, federal agencies with regulatory authority drafted more regulations in the 1980s than at any other time in history. In addition, the requirements imposed by the National Environmental Policy Act on federal agencies were being enforced by courts as a result of citizen suits brought under the Administrative Procedure Act. Indeed, courts were forced to review more and more administrative violations, as the APA and provisions of statutes like NEPA and the Endangered Species Act opened the door to examination of federal agency action on many levels.

In Trustees for Alaska v. Hodel, for example, full public participation was required in the Department of the Interior’s preparation of an environmental impact statement (EIS) regarding the Arctic National Wildlife Refuge, to be submitted to Congress. In Conner v. Buiford, the sale of oil and gas leases in national forests required an EIS (as opposed to just an environmental assessment), as well as an Endangered Species Act biological opinion from federal agencies. And "federal action" within the meaning of NEPA was held to include not only federal agency action, but action permitted or approved by agencies.

Even federal agencies such as the Environmental Protection Agency were found to have violated the Endangered Species Act. In Defenders of Wildlife v. EPA, the EPA was
found to have committed a taking of endangered wildlife by allowing the registration of strychnine to kill predators. Strychnine was killing not just predators, but endangered species as well. In *Sierra Club v. Lyng*, the Forest Service was found to have detrimentally impacted the habitat of the endangered red cockaded woodpecker by its timber cutting practices in the national forests in Texas, and thus to have committed an illegal taking of an endangered species. The Fish and Wildlife Service was told that under the ESA it must "do far more than merely avoid elimination of protected species. It must bring species back from the brink so that they may be removed from the protected class, and it must use all methods necessary to do so." [clxx]

The 1980s also brought extensive litigation pertaining to American Indian treaty and other rights to hunting, fishing and gathering, both on-reservation and off-reservation. (See the discussion of Indian tribes in Chapter 3, Part IV.) In another case, subsistence hunting and fishing rights of natives of Alaska were found to extend off-reservation even to international waters, in *People of Village of Gambell v. Hodel*. Indian title was held to include rights to hunt, fish and gather over 175 species of animals, plants and shells. [clxxi] Indian title was held to include rights to hunt, fish and gather over 175 species of animals, plants and shells. [clxxii] And in *United States v. Adair*, an Indian nation was held to be entitled to as much water as it needed on its reservation to protect its hunting and fishing rights. [clxxiii] Tribal rights to manage wildlife on their own reservation, as opposed to state management, were confirmed in *New Mexico v. Mescalero Apache Tribe* in 1983, based upon the doctrine of federal preemption. [clxxiv] The parameters of the First Amendment rights of Indians to take endangered and otherwise protected species also were delineated in the decisions of *U.S. v. Abeyta* [clxxv] and *U.S. v. Billie*. [clxxvi] In short, the First Amendment provides the right to religious taking of federally protected wildlife, but only where use of the parts is critical or essential to the practice of religion, and where the government can reach its goals using less burdensome methods than those chosen for restriction (specifically, the eagle parts repository).

**The 1990s: Complexity, Complacency and Confusion**

The first half of the 1990s has been dramatic and multi-faceted in terms of new federal wildlife and environmental legislation, litigation and ideas. Sustainable development, ecosystem management and biodiversity have become important concepts, but with little agreement on their actual meaning. Old themes, such as private property takings and regulatory reform, have taken on new urgency. Public complacency about environmental issues set the stage for a vocal combination of anti-environment legislators, lobbyists and
organizations to call for a roll back of years of federal environmental legislation, through Congress and the courts. Environmental litigation has become more technical, more procedural and more complex, and requirements for citizen standing to sue have become tougher. Internationally, the dismantling of trade barriers has raised new concerns for wildlife protection and for enforcement of international, national and even state environmental standards. It remains to be seen what the rollercoaster-1990s will bring for wildlife and public lands management as the new millennium approaches.

Nonetheless, over 40 federal laws have been enacted since 1990 dealing with the environment, fisheries, wildlife, or federal land management. Many of the new laws address single or specialized issues of protection, such as the Pacific Yew Act, Symms National Recreational Trails Fund Act, and the California Desert Protection Act. Many others set up programs to involve the public and organizations in conservation, reflecting President Bush’s "thousand points of light" theme of service to the nation. Examples include the National Environmental Education Act; Junior Duck Stamp Conservation and Design Program Act; Morris K. Udall Scholarship Act; National and Community Service Act; National Forest Foundation Act; Partnerships for Wildlife Act; Public Lands Corps Act; and Take Pride in America Act.

Although not yet reflected in federal legislation, policymakers and agencies appear to be moving away from the environmental protection concepts of the 1970s that targeted specific polluting actions, toward the idea that integrated natural resources management, protection and planning is needed to address the systemic nature of pollution and land degradation. All of the components of a watershed, for example, work together to impact the quality and quantity of water available for both humans and wildlife, and ultimately for the economic and physical health of our nation. Similarly, "sustainable development" is becoming more accepted as a matter of public policy. The term is used to articulate the idea that economic development should be able to proceed using renewable resources at a rate within their capacity for renewal, so that future generations will be able to meet their resource needs. This is a more long-term approach to environmental protection.

Federal "top-down" management of the environment is being increasingly replaced by state, federal, regional, and inter-agency coordinated efforts. Further, planning by management agencies in general is more widespread. For example, Bioregional
Councils have been established in California through a memorandum of understanding called "The Agreement on Biological Diversity," signed by ten state and federal agencies. The maintenance and enhancement of biological diversity is the preeminent goal in designing a state-wide strategy of protection and management for California. As the biodiversity crisis is becoming more apparent to scientists and the public, interdisciplinary work on biodiversity issues also is growing.

The Earth Summit held in 1992 in Rio De Janeiro, Brazil, formally acknowledged the global interrelatedness of environmental problems such as deforestation and loss of biodiversity, and also reflected international acceptance of the sustainable development concept. The Convention on Biological Diversity and the Rio Declaration are results of that worldwide conference. Although no federal biodiversity legislation has been enacted yet in the United States, several federal acts of international import for wildlife and biodiversity were passed in the early 1990s. Examples are the Antarctic Protection Act, Global Climate Change Prevention Act, and the series of three high seas driftnet fishing acts. Each commits the United States to take steps to protect international ecosystems or living resources, or to study potential international environmental problems such as climate change. Legislation was also passed to assist with protection of some international species: the Rhinoceros and Tiger Conservation Act of 1994 and the Wild Bird Conservation Act of 1992 are examples. (The African Elephant Conservation Act was passed in 1988.)

The 1990s brought a growing awareness of the extensive economic and ecological damage being caused by exotic species. The proliferation of harmful non-native species is occurring worldwide, especially because of the ease of modern transportation, and there are no easy solutions to this complex problem. Species with negative impacts in the United States and its territories include the brown tree snake in Guam; the zebra mussel in the Great Lakes, which has spread as far as California; the melaleuca plant in the watershed systems of Florida; and the salt cedar in the riparian zones of the Southwest. The Non-Indigenous Aquatic Nuisance Prevention and Control Act of 1990 and the Alien Species Prevention and Enforcement Act of 1992 attempt to prevent introduction of exotic species into the United States.

A growing environmental and political issue in the 1990s involves claims of rights against governmental taking of private property. Environmental regulation impacting activities on private land has increasingly come under fire for alleged violation of the Fifth
Amendment of the Constitution, which guarantees that private property will not be taken without just compensation. State and federal bills were introduced in the early and mid-1990s to require compensation to landowners for different levels of taking that occur through governmental regulation, or so-called "regulatory taking." With less than one third of the United States in public ownership, the ultimate outcome of the takings issue could have an enormous impact on wildlife populations.

Judicial decisions on takings are neither clear nor consistent, but recent court holdings tend to favor the landowner. The U.S. Supreme Court considered a takings claim in 1992 in *Lucas v. South Carolina Coastal Council.* The Court found that if a government action deprives a landowner of all economically beneficial use of private property (in this instance, development of a coastal area), then there is a taking unless the use would constitute a nuisance under state law. Compensation is due under the Fifth Amendment for a "regulatory taking." Then, in 1994, the Supreme Court in *Dolan v. City of Tigard* found that a taking occurred when governmental conditions placed on development of private property, namely the dedication of portions of the property for storm drainage and a pedestrian/bicycle pathway, were not "roughly proportional" to the legitimate state interest underlying the condition. Finally, the court of appeals for the Federal Circuit held that even a partial taking of the economic uses of the land constituted a taking when the government limited mining development because of wetlands. Thus the amount of the taking, the type of economic use of the land, the expectation of the owner, and even the size of the property may be elements of takings law that will need to be clarified by the courts.

The "county movement" of the 1990s is a rejuvenated Western Sagebrush Rebellion entailing sophisticated litigation and some unusual local lawmaking, with financial backing from groups such as People for the West. The movement has included challenges to the federal government’s authority to manage federal lands under the "equal footing" doctrine, and thus far courts have thrown out the challenges. In addition, counties such as Catron County, New Mexico, have passed ordinances requiring that the "custom and culture" of the area be considered in any federal environmental action, imposing liability for federal agency action that adversely affects private property, defining federal grazing permits as private property rights, and making any violation of property rights a civil rights violation. These positions are controversial because they tend to be taken in areas where federal land subsidies for ranching amount to approximately $10.0 million per year for the eleven Western states.
Local hostility toward federal protection of endangered species has been especially intense in the West. The northern spotted owl in the Pacific Northwest has generated more litigation and controversy than any other species protected under the Endangered Species Act. After the owl was listed as threatened in 1990 (and after litigation forced the listing), cases were filed and won for violation of environmental laws against several agencies, including the Fish and Wildlife Service, Forest Service, and BLM. Many in the logging community, however, argued that the issue had become "owls versus jobs."

The debate over logging in the Pacific Northwest spurred another Western plaintiff's lawsuit, Babbitt v. Sweet Home Chapter of Communities for a Great Oregon. In Sweet Home, the Secretary of Interior's regulatory definition of "harm " for taking a species protected under the ESA was challenged. The Supreme Court held that the definition, which includes modification or degradation of habitat that actually kills or injures wildlife, is reasonable. Sweet Home has further motivated Congressional attempts to reform or repeal the ESA.

The Future of Federal Wildlife and Environmental Law

Federal environmental law has become an important, permanent and complex area of legal protection in the United States. Individual wildlife and other environmental laws, however, always will be affected by the politics of the time. The future of these laws and the protection they afford will depend upon the popular, financial, legal and political support that can be mustered in the three branches of the federal government. It seems clear that all three of the types of federal legislative protection afforded wildlife and habitat and described in this Chapter will need to be applied, expanded and integrated.

For some time, scholars and scientists have called for "a more holistic view of environmental problems" in our law and policy. Greater interdisciplinary knowledge about nature and the environment will be essential, as will consensus on the goals that our nation wants to achieve in the protection of our environment. Legislative requirements for agency consideration of alternatives with the least impact on the environment may be a powerful tool in maintaining environmental protection.

Private industry's willingness to respond positively to public support for environmental protection, and to embrace environmental management, may be key to the success of present and future legislation. Market-based incentives and tools may be particularly useful. New, proactive legislation in the form of pollution prevention directives may be
increasingly important in the future. The states’ already preeminent role in wildlife management and protection will increase in importance and in responsibilities.

Human population growth, rapid development of sensitive lands such as coastal and riparian areas, and other complex factors such as dismantled international trade barriers all may have an impact on the effectiveness of any existing or proposed federal wildlife and wildlife-related legislation. Restriction of wildlife to "islands" of available habitat may cause unanticipated problems for wildlife protection and management, as species struggle to survive in smaller areas. As habitat loss is the leading cause of decline in plant and animal diversity and populations, land development of all kinds win have to involve careful consideration of the impact on flora and fauna. It appears that land use planning, with multiple parties at the table, may provide more satisfactory results for all.

Creative incentives to private landowners to protect habitat and wildlife may need to be expanded at the national level, through programs such as the Conservation Reserve Program of the 1985 Farm Bill. The economic value of wildlife and biodiversity must be recognized in some form, as wildlife and nature-related recreation becomes increasingly important and more money is spent on these pastimes by Americans. Indeed, all environmental resources such as air and water will have to take on some kind of more direct value in the marketplace for these resources to remain healthy.

Other new and troubling environmental problems will need to be dealt with in federal legislation. Scientists warn that global warming, ozone depletion and climate-induced changes in habitat likely will cause problems for wildlife that are not yet even contemplated, much less understood, accepted as valid, or legislatively solved. In sum, new, creative and proactive solutions to enormous and difficult issues for wildlife management must be tackled in the next century. Federal wildlife and related laws will continue to play an important role in dealing with those issues.

**2005 Last Child in the Woods:** Written/Published by Richard Louv spurring the No Child Left Inside Movement

**2007 Bald Eagle de-listed:** first listed as Threatened/Endangered in March 1967

**2016 MAEOE EE Certification Program is introduced**