

New Mexico's

Natural Heritage

A Handbook
of Law and Policy

February 1999



Center for Wildlife Law



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I. INTRODUCTION

Why This Report

Chronicled in ancient petroglyphs and Native American tradition, celebrated in the work of Theodore Roosevelt and Aldo Leopold, revered by numerous conservation organizations, and enjoyed by citizens, New Mexico's natural heritage has long been honored and distinguished for its diversity. The Sangre de Cristo and San Juan ranges in the north, the Rio Grande valley in the central part of the state, and the Gila Wilderness, White Sands, and Sierra Blanca regions in the south provide just some examples of New Mexico's different terrain and topography. This geographic variety sustains such wildlife as reptiles and cacti in the deserts, migratory birds and cottonwoods near rivers and lakes, and pines, elk, and bears in mountainous regions, creating a wealth of biological diversity.¹

Our natural heritage, or biodiversity, includes the sum total of all ecosystems, plant and animal species, and their genetic variations, and is integral to human life. Clean air, clean water, food, and medicine all come from the biochemical processes of plant and animal communities, and the ecosystems on which those communities depend. Roughly half of all prescription medicines are derived from natural sources. Trees, shrubs, and plant communities prevent soil erosion, reduce runoff and, over time, actually help create tillable soils. Additionally, biodiversity maintains the genetic variability necessary to keep species viable.² Here in New Mexico, the state's wealth of biodiversity has

supported everything from fragile desert ecosystems to local agriculture to international computer industries.

Yet, the threats to our state's delicate diversity are numerous. A 1995 report found that the overall risk to our ecosystems was high, despite our low population density.³ This high rating is the result of the many impacts from human activities. Rapid expansion of urban areas, for example, increasingly threatens the future of New Mexico's biodiversity. Each new residential or industrial development brings road systems, power lines, and water and sewer connections that may cut through wildlife habitat and fragment ecosystems. In rural areas, grazing, timber harvesting, mining, and oil and gas extraction activities also threaten the survival of New Mexico's wildlife and wildlife habitat. Without proper planning, growing municipalities, industry, and agricultural interests will threaten the health of New Mexico's biodiversity.

This report is intended as a handbook for all those working to conserve and protect New Mexico's wealth of biodiversity and rich natural heritage. The goal of the report is to describe the state's current laws and policies, identify gaps and opportunities for change, and encourage a dialogue about what the laws that affect our natural heritage should look like. To accomplish this goal, the report highlights examples of New Mexico's laws and programs that contain provisions for wildlife and habitat conservation.⁴ Where wildlife and habitat conservation provisions are absent from New Mexico's laws, this report highlights opportunities for creating laws and programs that protect the state's natural heritage.

¹Except where the context suggests otherwise, this report uses the term "wildlife" to include both plants and animals.

²"Saving Biodiversity: A Status Report on State Laws, Policies and Programs," Center for Wildlife Law and Defenders of Wildlife, July 1996, pp. 2-4.

³"Endangered Ecosystems: A Status Report on America's Vanishing Habitat and Wildlife," Defenders of Wildlife, December 1995.

⁴Given funding limitations, this report does not purport to cover all laws indirectly affecting biodiversity. The pollution control laws, the laws governing water quality, air quality, and hazardous waste, are examples of laws not covered.

Notably, this report is only the first step in developing a biodiversity conservation strategy. Funding, implementation, and enforcement are necessary to ensure that the statutes and programs described or suggested in the report effectively realize their goals. At the same time, efforts are needed to develop a statewide strategy to provide comprehensive protection for our state's natural heritage.

II. NEW MEXICO LAW HIGHLIGHTS

Wildlife

Nongame Management

New Mexico's state government plays a vital role in protecting the plants and animals within its borders. While the federal government has assumed the lead role in managing some natural resources, such as migratory birds and endangered species, the states still retain the primary responsibility for protecting their wildlife.⁵ By conserving plants and animals before they reach the brink of extinction, each state has an opportunity to protect its own natural heritage.

One agency in New Mexico that focuses directly on management of animal wildlife is the Conservation Services Division (CSD), which was created within the New Mexico Department of Game and Fish by legislation passed in 1994.⁶ The CSD is responsible for maintaining and enhancing wildlife habitat, developing and applying technical expertise regarding wildlife and its habitat through research, management and coordination, and

increasing public awareness of, and consideration for, wildlife through conservation educational programs. The statute creating the CSD also makes the division responsible for communicating and consulting with other agencies, communities and organizations "to ensure comprehensive conservation services for hunters, anglers and nonconsumptive wildlife users." The CSD is currently organized into sections on technical guidance, endangered species and non-game animals, wildlife habitat, conservation education, and realty.

The best known of the programs administered by the CSD is the endangered species program authorized by the Wildlife Conservation Act, described later in this report. Another program is Share with Wildlife, also discussed in this report. Other programs include two that were highlighted in the Game and Fish Department's list of priorities for 1998, activities associated with wildlife management areas and statewide habitat improvement efforts.

The wildlife management area program is designed to protect animal wildlife throughout the state's designated wildlife areas, while providing opportunities for the public to enjoy these places. The program guides improvements to be made to trails, campgrounds, and viewing areas in order to enhance public appreciation for wildlife while maintaining the trail system and infrastructure necessary to discourage the public from haphazardly entering and degrading wildlife habitat. The goal of the statewide habitat improvement program is to provide public and private land managers with scientifically and socially sound techniques that maintain or improve habitat for wildlife.

Government support for the CSD has been notably lacking recently. In 1998, Governor Johnson line-item vetoed the general fund portion of CSD's budget, which conservationists and sports people's councils were unable to reinstate. Funds for a landowner-habitat consultant and for one endangered species biologist were eliminated as a result of the veto. Later that same year, the

⁵See, *Hughes v. Oklahoma*, 441 U.S. 322 (1979) (recognizing the states' responsibility to protect wildlife within their borders for the benefit of their citizens).

⁶NMSA 1978 § 17-1-5.1.

Director of Game and Fish proposed to eliminate the division entirely. Eventually, this proposal was withdrawn.

The CSD program represents important opportunities to manage non-game wildlife, an important aspect of a comprehensive biodiversity conservation program. Except for endangered species, however, most nongame species have no legal protection, even against taking, under current law. Reptiles and amphibians, for example, can be captured and then sold out-of-state for high prices. Most mammals and many birds have no protection whatsoever.⁷ Yet it is critical that these species be protected while populations remain healthy. Otherwise, little is done until they decline so significantly as to require the costly and controversial measures of the state and federal endangered species laws.

Moreover, funding and staffing for nongame programs are overriding concerns. Along with a small general fund appropriation and a portion of hunting and fishing license fees, only a few other sources of revenue exist. Share with Wildlife (SWW), a program within the Department of Game and Fish that seeks private donations to support conservation of nongame wildlife, was initiated by the legislature in 1981. The Conservation Services Division administers the SWW program "to provide additional wildlife funds to perpetuate the renewable wildlife resource of New Mexico that gives so much pleasure and recreation to all New Mexicans."⁸ The statute allows for a voluntary checkoff designation of tax refunds on the state income tax form. The program receives about one-third of its funding through this tax checkoff, with the remaining two-thirds coming from return on investment of the SWW principal, as well as private donations and the proceeds from sales of its promotional materials. According to state agency

staff, revenues have been flat for several years.⁹

The SWW program presents an excellent but modest opportunity to fund wildlife protection projects, scientific studies, and wildlife education programs. Other potential opportunities, based on examples from other states, could include a wildlife license plate program, state lottery proceeds, real estate transfer taxes, or a designated portion of a state sales tax. In Florida, for example, sales of panther and manatee license plates each have generated \$18 million in only seven years. The Great Outdoors Colorado program is funded by portions of funds collected in the state's lottery. In Tennessee, a recordation tax on all transfers of realty has generated \$35 million since 1986. A portion of Missouri's sales tax supports nongame conservation. Without such creative and innovative sources of funding, New Mexico's nongame programs will not garner the resources needed to conserve and restore biodiversity on a substantial scale.

Endangered Species

Endangered species laws are important for biodiversity conservation because they focus directly on protecting and improving declining wildlife populations. The federal Endangered Species Act encourages states to adopt laws and regulations governing threatened and endangered species. Yet, while states are the chief stewards of wildlife within their borders, little attention has been focused on their role in protecting endangered species.

A strong state endangered species act can serve as a complement to the federal act, and also can provide real protection to species not listed as threatened or endangered under the federal law. For

⁷Several songbird species, however, are protected under NMSA 1978 § 17-2-13.

⁸NMSA 1978 §§ 7-2-23 and 7-2-24.

⁹In December 1998, SWW invested the bulk of its principal with the State Investment Council in pooled equity and fixed asset funds for a stronger return on its investment.

example, a species may not require protection on a national basis, but populations of that species within a state may be in decline and in need of protection. With effective research, funding, and enforcement, a state endangered species act can be a vital link in national protection efforts.¹⁰

New Mexico has two laws that address endangered species: the Wildlife Conservation Act which protects animal species, and the Endangered Plant Species Act which protects endangered plant species.¹¹

Animals

The New Mexico Department of Game and Fish, through its Conservation Services Division, administers the Wildlife Conservation Act.¹² The Act requires the listing of any species or subspecies of "wildlife indigenous to the state" as endangered or threatened on the basis of investigations and other scientific and commercial data, and after consultation with wildlife agencies in other states, federal agencies, local and tribal governments, and other interested persons and organizations.¹³ It is unlawful for any person to take, harass, possess, transport, export, process, sell or offer for sale any endangered species, and penalties include fines of up to \$1,000 and up to 120 days in jail.¹⁴

The statute was amended in 1996 to require recovery plans to improve populations of state-listed endangered or threatened species, a requirement that

only four other states have. New Mexico is also among the first to embrace multiple species recovery, requiring that the department develop plans which include multiple threatened or endangered species that utilize similar habitats or share a common threat or both, to the extent practicable. Recovery planning by the department has, however, been limited by insufficient staffing.

The statute does not require an assessment or designation of a species' critical habitat, nor must other agencies consult with the department before taking actions that may affect listed species. While recent amendments to the Act have gone a long way toward improving its mandate, provisions addressing the following three issues are worthy of consideration: critical habitat designation, consultation, and citizen suits.¹⁵

Critical habitat is the geographic region or zone which contains the water, soils, and ecosystem crucial to a species' survival. Designating critical habitat gives wildlife managers a way to focus on preserving the specific area necessary for a species' survival. An interagency consultation requirement is necessary to make other state agencies meaningfully consider how their activities affect endangered species. Without consultation, agencies may take actions that undermine the endangered species program and, potentially, two state agencies could conduct activities that directly conflict with protection efforts. If an agency consults with the department managing the endangered species program, the department can make recommendations as to how to ameliorate proposed actions that may jeopardize species populations, critical habitats, and recovery plans. Finally, to fully improve the Act, a citizen suit provision is essential. Citizens provide a check on state

¹⁰See, "State Endangered Species Acts: Past, Present and Future," Defenders of Wildlife and the Center for Wildlife Law, February 1998.

¹¹Wildlife Conservation Act, NMSA 1978 § 17-2-37 *et seq.*; Endangered Plant Species Act, NMSA 1978 § 75-6-1.

¹²NMSA 1978 § 17-2-37 *et seq.*

¹³This list of species can be found in 19 NMAC 33.1.

¹⁴Currently, the statute contains no prohibitions for taking threatened, as opposed to endangered, species. A bill has been introduced in the 1999 legislative session to correct this.

¹⁵Six states have provisions requiring critical habitat designation; eight states require agency consultation; and no state currently has a citizen suit provision within its endangered species law. See, "State Endangered Species Acts," *supra* note 10.

government, and may have the resources and the proximity to discover violations of the law. By giving citizens access to the courts, they can serve a vital function in efforts to protect plant and animal species.

Plants

The Forestry Division of the Energy, Minerals and Natural Resources Department (EMNRD) administers the Endangered Plant Species Act, passed in 1985.¹⁶ Under the Act, an endangered plant species is defined as one whose prospect for survival within the state is in jeopardy or is likely, within the foreseeable future, to become jeopardized. The department is required by the statute to conduct investigations of all plant species in the state, to collect biological and ecological data, and to determine conservation measures necessary for their survival. On the basis of these investigations, the department must establish a list of endangered plant species and develop a program for conservation of the species listed. The statute prohibits the taking, possession, transportation, exportation or sale of listed species. Although unauthorized takings may result in fines of up to \$1,000 and/or 120 days in jail, the Act does not contain any consultation, critical habitat protection, recovery planning, or habitat acquisition provisions.

As in many states, plants are not given the more comprehensive protection provided to animal species. The difference in protection afforded to plants and animals stems from legal rather than scientific distinctions. To better protect plants and more efficiently streamline the endangered species program, the protection of plants should be consistent with that given to other wildlife under the Wildlife Conservation Act. Ultimately, we are as dependent on our plant species as we are on animal species, and oftentimes the imperiled status

of animals is directly linked to diminished populations of the plant species on which they rely.

While New Mexico's endangered species laws offer direct methods for maintaining wildlife populations and studying ecosystems, habitat needs, and other biological data, one gap in these laws is the lack of proactive management. By the time a species is listed as endangered, its chances of survival and recovery already are slim. The two laws have provisions for conducting inventories of wildlife which could provide information to assist in protecting and managing populations and habitat which are declining but not yet endangered.¹⁷ These laws could be used to actively manage the wildlife being studied and inventoried, and prevent New Mexico's plants and animals from ever reaching a critically impaired state.

Exotic Species

Exotic species are non-native species that do not naturally inhabit a given region. Scientists are becoming increasingly concerned about the threats posed to native plants and animals by the spread of certain invasive exotic species.¹⁸ Invasive exotic species can out-compete native species for resources because they lack the natural predators to keep them in check. They also can alter (physically, chemically, biologically) the habitat on which native plants and animals depend.

As invasive exotic species intrude upon native populations genetically unequipped to adapt to their

¹⁷A separate statute dating back to 1933, NMSA 1978 § 76-8-1 *et seq.*, is intended to protect specific species of native New Mexico plants, which include, for example, a number of members of the cactus family as well as the century plant, the wild iris and the primrose. The law makes it unlawful to destroy, mutilate or remove a protected plant from state or private land without a written permit from the owner. However, nothing in the statute prevents the act of clearing or the granting of permission to clear ditches and rights of way which may damage protected plants.

¹⁸"Saving Biodiversity," *supra* note 2, at pp. 43-44.

¹⁶NMSA 1978 § 75-6-1.

presence, indigenous wildlife communities may become permanently altered, and native species may disappear. Nationwide, non-native species have been implicated in the decline of 42 percent of the species listed under the Endangered Species Act.¹⁹ The economic dangers of invasive exotic species also are great. For example, the U.S. Department of Agriculture estimated losses and costs of control during a 1981 outbreak in this country of the gypsy moth at \$764 million.²⁰ Several programs exist in New Mexico to control the introduction and spread of exotic species, although most are aimed at protecting agriculture rather than wildlife.

The Regents of New Mexico State University (Regents) and the state Department of Agriculture administer New Mexico's programs to control exotic plants and plant pests. Under the Harmful Plant Act, the Regents may designate plants as harmful if they are determined to directly or indirectly injure crops or other "useful" plants, are poisonous or detrimental to domestic or wild animals, birds or fish, cause adverse effects on other interests of agriculture, or cause adverse effects to streams, ponds, lakes or aquatic fauna.²¹ A permit is required before a harmful plant or an article capable of harboring a harmful plant is moved into or within New Mexico; permits may be refused if the movement poses a danger of disseminating the harmful plant. The Department of Agriculture has the authority to inspect premises, with the consent of the owner or by court order, and to seize, eradicate or prevent the spread of the plant. The Regents may also quarantine the state or a portion of the state to prevent introduction of a harmful plant into the state or retard its movement within the state.

Under other statutory authority, the Regents

may identify noxious weeds, defined as species of plant liable to be detrimental or destructive and difficult to control or eradicate, and may inspect premises where noxious weed seeds are sold, stored or planted.²² Weeds identified as noxious may not be sold, given away or planted; violations are subject to fines of \$25 to \$300. A law passed in 1998, the Noxious Weed Management Act, targets for management and control those plant species that are not indigenous to New Mexico and that have a negative impact on the economy or the environment.²³ While requiring the Department of Agriculture to notify private landowners of noxious weeds on their land and methods of controlling them, the Act does not empower the agency to enter the land without permission.

Two other state laws are designed to control the spread of invasive exotic species. The Plant Protection Act is intended to protect plants (any living thing not classified as an animal) from plant pests, defined as organisms injurious to plants and plant products.²⁴ The Pest Control Act was passed to control insects, disease and other organisms that cause or are capable of causing injury or damage to plants or plant parts.²⁵ The Regents have authority to adopt regulations, require permitting, make inspections, seize and dispose of pests, and impose quarantines.

New Mexico's law on exotic animal species is administered by the Department of Game and Fish. In order to protect game animals, birds, and fish against importation of undesirable species and introduction of infectious or contagious diseases, it is a misdemeanor to import any live animal, bird, or fish into the state without first obtaining a permit from the department. Domesticated animals or fowl and government hatchery fish are exempt from the

¹⁹Flack and Benton, "Invasive Species and Wetland Biodiversity," National Wetlands Newsletter, Vol. 20, No. 30:7, Environmental Law Institute, 1998.

²⁰"Saving Biodiversity," at p. 43.

²¹NMSA 1978 § 76-7A-1 *et seq.*

²²NMSA 1978 § 76-7-23 *et seq.*

²³NMSA 1978 § 76-7D-1 *et seq.*

²⁴NMSA 1978 § 76-5-11 *et seq.*

²⁵NMSA 1978 § 76-6-1 *et seq.*

permit requirements.²⁶

Integral to an effective exotic species program is the close monitoring of the introduction and spread of exotics within state borders. New Mexico's exotic species statutes have permitting requirements. However, they do not mandate programs that actively monitor and seek to eradicate exotic species, which are notoriously difficult to control. An effective program would institute methods for monitoring and, as appropriate, eradicate exotic populations that, for whatever reason, establish themselves within New Mexico's borders. Our laws also could be strengthened to require proof that parties desiring to import an exotic species first prove that the species will not act aggressively in the state.

Habitat

Public Lands

State Parks and Refuges

Since habitat loss is the single greatest threat to biodiversity, land acquisition and maintenance programs can be a significant means of protecting New Mexico's natural heritage. In New Mexico, 90 percent of the state's presettlement riparian ecosystems have been lost. Thirty-three percent of the state's wetlands have been lost since 1780. Compounding the problem, population density has increased 16 percent since 1982.²⁷ New Mexico does not have a coordinated habitat acquisition program or adequate funding for such a program, although certain agencies have the authority to purchase and maintain wildlife habitat.

The State Game Commission and the Department of Game and Fish have authority to acquire and manage lands for game refuges to provide safe sanctuaries in which game may breed

and to replenish adjacent hunting ranges, to operate fish hatcheries to stock public waters of the state, and to designate certain areas as rest grounds for migratory birds, although the purpose is not to interfere unduly with hunting but to provide havens in which the birds can rest and feed without harm.²⁸

The State Game Commission is authorized and empowered to acquire by purchase, gift, bequest or lease and to hold, develop and improve lands for fish hatcheries, game farms, game refuges, bird refuges, dams, lakes, ditches, rights of ways, trails, roads and for all purposes incidental to the propagation, preservation, protection and management of the "game, birds, fish and wildlife of the state."²⁹ Any property or right of way required for use by the Commission may be obtained through eminent domain, with the approval of the local county commission.³⁰

The Game and Fish Bond Act provides for the use of a portion of the fees from hunting and fishing licenses to support the issuance of bonds for fish hatcheries, game and fish habitat acquisition, development and improvement projects and similar capital outlays.³¹ The Act requires that one dollar from the sale of each hunting and fishing license be deposited in a "game and fish bond retirement fund." The State Game Commission may issue bonds for the types of projects described and repay principal and interest from the fund. Principal and income of bonds issued under the Act are exempt from state and local taxation, except for inheritance tax. Under certain circumstances, money in the fund that is not needed to repay bonds may be used to support capital outlay projects directly.

The Habitat Protection Act authorizes the State Game Commission to prohibit the use of vehicles in certain areas, with the concurrence of the private landowner or land management agency, if the

²⁶NMSA 1978 § 17-3-32.

²⁷"Saving Biodiversity," at p. 146.

²⁸NMSA 1978 § 17-1-14.

²⁹NMSA 1978 § 17-4-1.

³⁰NMSA 1978 § 17-4-2.

³¹NMSA 1978 § 17-1-16 *et seq.*

operation of vehicles becomes damaging to wildlife reproduction, management or habitat.³² When the Commission proposes to protect an area, it must provide public notice of the proposed prohibition and hold public meetings to determine the “necessity and desirability” of closing such lands.

The Wildlife Conservation Act authorizes the Director of Game and Fish to acquire land or aquatic habitat interests for the conservation, management, restoration, propagation and protection of threatened or endangered species.³³ However, inadequate funding limits the ability of the department to make such acquisitions.

The state park program is designed to provide recreation and open space to New Mexico residents. The statutes authorizing the creation of state parks emphasize aesthetic, scientific, geologic, natural, and historic values; outdoor recreation is the dominant or primary resource management objective.³⁴ The statutes also provide that, within economical limits, state parks are to be landscaped and developed to be ecologically functional and complementary to the native environment. The State Trails System Act serves similar objectives.³⁵ These laws focus on specific objectives, recreation and public access to the outdoors. Yet, given the management systems these statutes already provide, they could be amended to include native plant and non-game animal conservation strategies.

State Trust Lands

The federal government granted the State of New Mexico millions of acres of land under various legislative acts.³⁶ These acts create a system

of trust lands for the benefit of state institutions, including schools, universities, and hospitals. The New Mexico Constitution gives responsibility for the control, care and disposition of these lands to the Commissioner of Public Lands who, as trustee, has the fiduciary responsibility to administer the sale and lease of state lands in the best interests of the trust.³⁷ Under the Commissioner’s direction, the State Land Office (SLO) currently administers nine million acres of surface and 13 million acres of subsurface rights for the beneficiaries.³⁸

While the SLO has mainly leased surface acreage to agricultural or ranching interests, the office has the authority to lease lands to the highest bidder so long as the use of the land maintains the land’s value. Notably, New Mexico may be the first western state to have awarded such leases to an environmental organization.³⁹

The SLO also has instituted a number of conservation projects. These projects include conducting inventories of wildlife on state lands in conjunction with the biology departments at the University of New Mexico, New Mexico State University, and Western New Mexico University. The SLO has launched a riparian improvement program which includes efforts to improve Bluewater Creek near Grants and restore the Santa Fe River west of Santa Fe, and its Range Stewardship Incentive Program provides incentives

³⁷Constitution of New Mexico, Art. XIII, §§ 1-3. See also, NMSA 1978 § 19-1-1 *et seq.*

³⁸New Mexico State Land Office Annual Report - Fiscal Year 1997-1998, p. 4.

³⁹In the fall of 1996, Forest Guardians acquired a lease of 550 acres along the Rio Puerco, near Cuba, New Mexico. The parcel contains nearly one mile of riparian lands. Forest Guardians has actively managed the land, planting willows, cottonwoods and other vegetation, has no grazing, and has established an ongoing environmental monitoring plan. More recently, it has acquired a lease of 2,078 acres on the Rio Embudo half way between Santa Fe and Taos. On this parcel, members hope to preserve the Rio Grande cutthroat trout and peregrine falcon found in the river stretch and adjacent lands. See, <http://www.fguardians.org/consleas.html>.

³²NMSA 1978 § 17-6-1 *et seq.*

³³NMSA 1978 §§ 17-1-5.1 and 17-2-44.

³⁴NMSA 1978 § 16-2-11.

³⁵NMSA 1978 § 16-3-1 *et seq.*

³⁶The two most important are the Enabling Act for New Mexico, Act of June 20, 1910, 36 Statutes at Large 557, Chapter 310, and the Fergusson Act, Act of June 21, 1898, 30 Statutes at Large 484, Chapter 489.

to ranchers to improve leased land. The SLO also has initiated efforts to serve on wildlife and environmental conservation committees in other agencies such as the Department of Game and Fish.⁴⁰

The SLO is faced with the challenge of preserving the value of the trust and maximizing revenue for the benefit of public institutions. While the SLO's conservation policies and wildlife enhancement projects are important, no statutory mechanism exists for their enforcement. Furthermore, the law has been interpreted as prohibiting the office from spending trust income to improve the land, limiting the office's ability to enhance habitat.

The SLO also has a policy of not partitioning lands under agricultural lease,⁴¹ yet some parcels or ranch units exceed 100,000 acres, which places conservation bidders interested in smaller areas at a disadvantage. The office may be concerned that leasing subsections could make the remaining lease area difficult to lease and leave it unattended. On the other hand, conservation bidders like Forest Guardians may be willing to pay several times the going rate for the smaller area.⁴²

Conservationists submitting the highest bids achieve what the SLO mandate requires: maximizing profit while preserving the value of the

trust. A statute which permits bids for subsections of parcels and spells out the possibilities for awarding leases for conservation would improve the chances for conservation groups to obtain leases. The SLO also could impose conditions on non-conservation leases that are conducive to biodiversity, and a statute authorizing expenditures of trust income to make improvements would increase the office's own ability to improve or restore land. To give the SLO's conservation policy initiatives, like the range stewardship incentive and riparian improvement programs, permanence, the state could incorporate them into a statute which assures that the SLO fully implements the programs and works to preserve the biological productivity of state trust lands.

Joint Acquisition

The Natural Lands Protection Act establishes a program whereby conservation organizations can acquire lands jointly with the state government.⁴³ The purpose of the program is the joint acquisition and protection of unique and ecologically significant lands in New Mexico. Under the Act, only non-for-profit corporations whose purpose is the preservation and conservation of land qualify for acquisition of lands.⁴⁴ The corporation must participate in acquiring a minimum of 10 percent undivided interest in the land, and title to such land is held jointly in the name of the organization and the state of New Mexico. Responsibility for managing the land may be assigned to the corporation.⁴⁵

⁴⁰State Land Office Annual Report, *supra* note 38, pp. 8, 19. Telephone conversation with Robert Jenks, Assistant Commissioner for Surface Resources, October 27, 1998.

⁴¹SLO regulations require that new agricultural lessee applications for lands that are currently being leased to someone else be made for the entire acreage under lease. See, 19 NMAC 3.SLO 8.9.6.

⁴²*In Re the Matter of Forest Guardians and Southwest Environmental Law Center v. Roswell Livestock Auction Sales, Inc. (SLO Lease No. GO-1629)*, before the Commissioner of Public Lands, 1996; discussing Forest Guardians' inability to obtain a lease on a parcel near Roswell. Forest Guardians outbid a ranching company, but was denied the lease because the SLO concluded that leasing the section to the organization would fragment the ranch's existing, consolidated pasture.

⁴³NMSA 1978 § 75-5-1 *et seq.*

⁴⁴NMSA 1978 § 75-5-3 (C).

⁴⁵Currently, The Nature Conservancy is the only organization that has acquired lands under the Act. It has secured lands along the Gila River, the Mimbres River, and the Rio Nutria. The Gila preserve, which contains 7,308 acres near Cliff, New Mexico, protects Gila River riparian habitat and the Mogollon Creek, an intermittent

The Secretary of Energy, Minerals and Natural Resources administers the program in consultation with a committee made up of the Secretary, the Director of Game and Fish, the Commissioner of Public Lands, the Director of the Department of Agriculture, and three public members appointed by the Governor, one of whom must represent the ranching or farming industry. Priority among projects is determined in descending order as follows: the degree to which the lands in question are subject to the threat of immediate alteration or destruction; the degree to which ecosystems in question are duplicated elsewhere; and usefulness of the property for teaching and research.

No dedicated funding mechanism exists, however, and purchases under the Act rely solely on legislative appropriations. Only \$275,000 was appropriated in 1994 and no funding was provided in 1995. A ballot measure designed to add funding to this act failed in the November 1998 election. The measure would have authorized the issuance and sale of up to \$620,000 of land acquisition bonds to acquire unique and ecologically significant lands for rare, threatened and endangered species. While the measure did not pass, it garnered 48 percent of the vote.

Private Lands

P rivate land owners are becoming increasingly interested in wildlife issues. With more than 40 percent of the state in private ownership, it is important to encourage and assist private

tributary. The preserve also supports a large diversity of birds, including the endangered black hawk. The Mimbres River preserve consists of 160 acres and preserves the last remaining population in the United States for the Chihuahua chub. It also protects a population of the threatened Chiricahua leopard frog. The Rio Nutria preserve is 1,200 acres, and is home to the Zuni bluehead sucker.
See, <http://www.fourcorners.com/tnc/nmlist/htm>.

landowners in their conservation efforts.⁴⁶ The state offers few private land conservation programs, however. One example is the Land Use Easement Act, which authorizes the creation of easements for the purpose of retaining or protecting the natural or open space values of real property.⁴⁷ With this statute, a private landowner can designate lands to be managed under a conservation easement, and let the land be used to recover soils, vegetation, and wildlife populations. The easement need not benefit another piece of adjacent land or meet other traditional requirements for easements, and the party creating the easement may specify in the easement recorded with the county clerk that a nonprofit third party has the right to enforce the easement in the future.

New Mexico needs to do more to encourage private land conservation. One option for the state in trying to achieve this goal is to provide private landowners with tax incentives for maintaining wildlife habitat on their lands. Indiana, for example, provides real estate tax breaks to landowners who manage their lands as "classified wildlife habitat" or as riparian buffers. Washington has a law exempting habitat improvements from taxation. Technical assistance and education are also essential to promote effective stewardship. Unfortunately, due to lack of funding, the New Mexico Department of Game and Fish no longer has a landowner-habitat consultant on staff to provide landowners with assistance.

Natural Resources

Water Resources

T he Office of the State Engineer (OSE) administers the permitting and allocation of

⁴⁶State Land Office, Records Management Division.

⁴⁷NMSA 1978 § 47-12-1 *et seq.*

water use in New Mexico. Neither the State Constitution nor the statutes, the two sources from which the OSE derives its authority, contain any direct reference to wildlife protection. Yet aquatic and riparian species depend on adequate streamflow.

New Mexico follows the “use it or lose it” doctrine of water law. The State Constitution declares that the State Engineer may only permit water usage if an applicant shows that the water it desires will be put to “beneficial use.”⁴⁸ “Beneficial use” is not defined by statute. In the past, it had been interpreted that, in order to make “beneficial use” of water, an applicant would construct some type of diversion works, such as a ditch or dam, to harness water for agriculture, grazing, industry, or municipalities.

A recent Attorney General opinion concluded that, under existing law, instream use—the act of leaving water in a streambed for recreational, fish or wildlife, or ecological purposes—can be considered a “beneficial use” of water.⁴⁹ The opinion explained that, because there is no constitutional or statutory requirement for a diversion or impoundment, a water right for an instream use is permissible. However, the State Engineer may condition approval on the installation of gauging devices to measure the instream flow that is beneficially used.

The opinion opens the door to a significant change in New Mexico water policy. For decades, former State Engineer Reynolds took the position that an instream use was not a beneficial use. While the opinion, and the legal analysis of the Office of the State Engineer that preceded it,⁵⁰ suggests a reversal of that policy, a statutory mandate recognizing instream uses as beneficial uses may

provide clearer direction to the OSE.⁵¹ Conservation and enforcement of existing water rights also are issues OSE should address.

Mineral Resources

Hard Rock Mining

Enacted in 1993, the New Mexico Mining Act regulates the extraction of metals and a number of industrial minerals.⁵² The Act contains certain provisions related to wildlife protection. Site assessments required for new and existing operations must include a description of wildlife and wildlife habitat at and surrounding the mining operation and an analysis of the operation’s impact.⁵³ The Mining Commission must also establish permit and reclamation requirements for new mining operations that “assure protection of human health and safety, the environment, wildlife and domestic animals.” The Act further states that the Director of the Mining and Minerals Division of EMNRD can only approve a permit if “the permit area will achieve a self-sustaining ecosystem appropriate for the life zone of the surrounding areas following closure unless conflicting with the approved post-mining land use.” Moreover, mining operators must make efforts to preserve topsoil from “erosion or contamination and assure that it is in a usable condition for sustaining vegetation when needed.” Financial assurance that applicants are able to fully complete reclamation activities is required, and an environmental evaluation must be made

⁵¹The Game and Fish Act also suggests a limited instream use concept. NMSA 1978 § 17-4-14 prohibits anyone who owns or controls a reservoir, lake, or body of water into which public waters flow and which furnishes water to a stream containing game fish, from diverting or lessening the water in flow or supply to an extent detrimental to fish.

⁵²NMSA 1978 § 69-36-1 *et seq.* Substances excluded from the Act include potash, sand, gravel, and coal (the latter of which is governed by the Surface Coal Mining Act).

⁵³NMSA 1978 § 69-36-5.

⁴⁸New Mexico Constitution, Article XVI, §§ 1-5.

⁴⁹Attorney General Opinion No. 98-01, March 27, 1998.

⁵⁰Memorandum from General Counsel Ted Apodaca to State Engineer Tom Turney, January 8, 1998.

before a permit for new operations is approved or denied.⁵⁴ The Act also commands the Director to “create an advisory committee, the membership of which shall balance the interests of . . . the mining industry [and] environmental groups . . .”⁵⁵

While the Mining Act articulates wildlife conservation values to some extent, the statute does not define terms like “self-sustaining ecosystem” or require any specific considerations in the environmental evaluation. These details have been left to the regulations, which provide many of the definitions missing from the Act and which impose a number of requirements on new and existing mining operations to carry out the statutory mandate.⁵⁶

The regulations under the Mining Act are one of the few instances in New Mexico where consultation with the Department of Game and Fish is mandated explicitly, at least for some purposes. The Mining Act requires the Commission to adopt regulations to provide for permits for mining operations that have minimal impact on the environment. The regulations adopted under this provision exclude from minimal impact status those mining operations which, among other things, are located in habitat areas under the authority of the federal ESA or in areas determined by the Department of Game and Fish to be likely to result in an adverse impact to a state endangered species under the Wildlife Conservation Act or the Endangered Plants Act.⁵⁷

Coal Mining

The Surface Mining Act regulates coal mining separately from the Mining Act.⁵⁸ The statute

directs the Coal Surface Mining Commission to adopt performance standards which, among other things, “to the extent possible using the best technology currently available, minimize disturbances and adverse impacts of the operation on fish, wildlife and related environmental values, and achieve enhancement of such resources where practicable.”⁵⁹

Regulations under the Act require coal mining applicants to develop fish and wildlife conservation plans.⁶⁰ Plans must include a statement showing how the applicant will minimize adverse impacts on wildlife and related environmental resources during mining and reclamation operations. The regulations also provide that if the mining operator cannot “achieve a condition which clearly shows a trend toward enhancement of fish and wildlife resources” once revegetation is completed, it can submit a statement explaining why it is not practicable to achieve that condition, and exceptions can be granted.⁶¹

The regulations also require that the mining operator submit a statement describing how it will protect and support threatened or endangered species listed under the federal Endangered Species Act, New Mexico's Wildlife Conservation Act, and laws regarding protection of native New Mexico plants and their critical habitats. The regulation explains that mining interests must also protect “habitats of unusually high value for fish and wildlife, including wetlands, riparian areas, cliffs supporting raptors, areas offering special shelter or protection, reproduction and nursery areas, and wintering areas.”⁶²

Furthermore, the regulations describe standards for reforestation activity.⁶³ After mining operations cease, reclamation efforts must ensure that a cover

⁵⁴NMSA 1978 § 69-36-7.

⁵⁵NMSA 1978 § 69-36-11.

⁵⁶See, 19 NMAC 10.2, entitled New Mexico Mining Act Implementation.

⁵⁷19 NMAC 10.2.1.107.W.

⁵⁸NMSA 1978 § 69-25A-1 *et seq.*

⁵⁹NMSA 1978 § 69-25A-19(B)(24).

⁶⁰19 NMAC 8.2.9.905.A.

⁶¹*Id.*

⁶²19 NMAC 8.2.9.905.B.

⁶³19 NMAC 8.2.20.2066.

of trees or shrubs is established for wildlife habitat, recreation, or forestry. The regulations also require that underground openings, equipment, and miscellaneous structures be removed or sealed, and mandate continued environmental monitoring. Similar activity is necessary for temporary cessations in mining activity. Finally, coal mining operators must describe to the Energy, Minerals and Natural Resources Department the number of acres involved, the horizontal and vertical extent of subsurface strata which have been affected in the permit area, and the kind of vegetation planting, environmental monitoring, and water treatment activity that will be adopted in post-mining land use or temporary cessation of mining activity.⁶⁴

While the fish and wildlife plan requirements are extensive, the provision that gives a mining operator the opportunity to submit a statement to EMNRD explaining why administering the plan is not "practicable" is a potential loophole. The regulation does not require mandatory action, and the possibility for exceptions may impede wildlife habitat reclamation on lands scarred by mining.⁶⁵ Therefore, one option to guarantee wildlife protection in coal mining would be to limit the opportunities for exceptions from the plan requirements.

One other provision of the Act is of particular interest. It requires a planning process to determine whether any land areas are unsuitable for surface coal mining, based upon competent and scientifically sound information.⁶⁶ The statute also provides that any person "having an interest which is or may be adversely affected" may petition the Director of EMNRD's Mining and Minerals Division to have an area designated as unsuitable. The Director may approve the petition if it is determined, for example, that the operations would "affect fragile or historic lands in which such

operations could result in significant damage to important historic, cultural, scientific and esthetic values and natural systems."

Oil and Gas

The Oil Conservation Division (OCD) within EMNRD, together with the Oil Conservation Commission, regulate oil exploration and extraction under the Oil and Gas Act.⁶⁷ The Act requires that the OCD "regulate the disposition of . . . wastes resulting from the oil field service industry . . . to protect public health and the environment."⁶⁸ One highlight of OCD regulatory activity regarding wildlife conservation under the Oil and Gas Act has been an order issued by the Commission adopting rules to protect migratory waterfowl populations from oil extraction waste stored in ponds and pits.⁶⁹

Under the order issued in 1989, all tanks, pits, and ponds exceeding 16 feet in diameter must now be screened, netted, or covered. An operator can apply for an exemption from the requirement if it can show that it has an alternative method for

⁶⁷NMSA 1978 § 70-2-1 *et seq.*

⁶⁸NMSA 1978 § 70-2-12B (21) and (22).

⁶⁹*In the matter of the hearing called by the Oil Conservation Commission of New Mexico for the purpose of considering: Case No. 9672, Order No. R-8952, September 1, 1989; See also, <http://www.emnrd.state.nm.us/ocd/Orders/Hearing/8952.htm>.*

Oil well operators store their wastes in pools, tanks, and ponds. In 1988, the U.S. Fish and Wildlife Service (FWS) informed the OCD that migratory waterfowl populations had been lost due to contact with oil extraction waste. The OCD subsequently formed a committee to review the matter and proposed a rule to remedy the problem.

At the hearings on the proposed rule, an FWS Special Agent testified that he had collected 694 dead birds during field trips he made to southeastern New Mexico between May 1988 and April 1989. Other witnesses testified that the waste ponds used in oil field operations presented direct hazards to migratory waterfowl, and that waste pits would not be hazardous to the waterfowl if netted immediately.

⁶⁴19 NMAC 8.2.20.2071 and 2072.

⁶⁵19 NMAC 8.2.9.905(A)(2).

⁶⁶NMSA 1978 § 69-25A-26.

protecting migratory birds. Similar rules apply to pits for clay, shale, drill fluids, and drill cuttings, waste treating plants, emulsion and basic sediments, and commercial surface waste disposal facilities.⁷⁰

New Mexico does not have a statute, regulation, or program that directs the OCD generally to review how oil production or extraction affects wildlife populations and habitats. Rather than simply reacting to crises such as the migratory bird kills that prompted the 1989 order, the state could enact statutes to guide the OCD in such regulatory efforts and take the initiative on wildlife issues. One option may be to direct the OCD to consult with biologists from the New Mexico Department of Game and Fish when reviewing proposed oil extraction activity and incorporate such biologists' recommendations for protecting wildlife into oil extraction permits. A proactive general conservation strategy at the state level also may prevent problems like the bird kills from happening in the first instance.⁷¹

Timber and Grazing

In 1985, the state legislature found that vast rangeland areas were producing less than their potential for the grazing of livestock, wildlife habitat, forage and water and soil conservation benefits. The legislature considered it essential to enhance multiple-use management, and the development and conservation of rangeland to restore the land's capacity to carry livestock and wildlife, conserve valuable soil and water resources

⁷⁰ Case No. 9672, Order No. R-8952, pp. 3-5.

⁷¹ The major catalyst in the issuance of R-8952 was the federal Migratory Bird Treaty Act, a law that prohibits unauthorized bird kills and permits criminal penalties of up to \$10,000 per bird. Federal agencies and statutes frequently play a role in driving the evolution of state law and regulations. However, with proper funding and research at the state level, problems like the loss of migratory birds could be alleviated before federal involvement becomes necessary.

and restore environmental quality.⁷² Yet the law passed to address this need is limited in nature.

The Rangeland Protection Act charges the New Mexico Department of Agriculture with coordinating rangeland protection projects developed under the Act.⁷³ The Act defines "protection" to mean the control or management of undesirable brush or other weed species and any associated management program or activity necessary to enhance successful restoration of the treated rangeland. The department's activities include contacting ranches and agencies about their interest in brush and weed management, coordinating field inspections to evaluate the extent of the problem, and preparing and implementing a plan for each project to receive brush and weed control. The projects themselves are funded by the entity or entities owning the land. This Act provides some opportunity to prevent degradation and protect and restore native plants and animals but the program authorized is strictly a technical and educational assistance program of limited scope.

New Mexico has adopted a Forest Land Policy by statute. It declares that it is the policy of the State of New Mexico to adopt forest practices that maintain and enhance resources such as wildlife habitat.⁷⁴ The policy has never been implemented, however, and no mechanism exists to ensure that the policy is properly carried out.

Natural Resource Damages

The Natural Resources Trustee Act creates a "natural resources trustee," appointed by the Governor pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), the

⁷² NMSA 1978 § 76-7B-2.

⁷³ NMSA 1978 § 76-7B-1 *et seq.*

⁷⁴ NMSA 1978 § 68-2-24.

federal Clean Water Act and other federal laws.⁷⁵ The Trustee is charged with taking all actions necessary to act on behalf of the public to protect New Mexico's natural resources by recovering from responsible parties monetary damages for injury to, destruction of, or loss of those resources.

Awards for damages to natural resources consist of amounts calculated in accordance with federal law, including the cost of restoration, replacement or acquisition of equivalent resources, and compensation for the loss of use or enjoyment of the resources. Any damages recovered are deposited in the natural resources trustee fund, together with gifts and grants, penalties and appropriations. Money in the fund is to be appropriated by the legislature annually to restore, replace or acquire natural resources that have been injured, destroyed or lost and to pay the administrative costs of the Office of the Natural Resources Trustee (ONRT) and the Attorney General, including the cost of investigation, assessment, collection or enforcement. Interest and earnings from the fund are to be used to pay back the initial appropriation of \$332,250 and to pay expenses of the Trustee, the ONRT, and the Attorney General. Any remaining income is supposed to go into the game protection fund to preserve or improve non-game wildlife and their habitat.

According to the Office of the Natural Resources Trustee, no funds have been available to date for payment into the game protection fund for non-game wildlife and wildlife habitat. Damage awards overall have been limited, at least in part because of lack of state funding for natural resource damage assessments. However, restoration efforts that should benefit species and their habitat are underway at two of the state's big cleanup sites. At the Terrero Mine site in San Miguel County, efforts will be made to expand the population of the Holy

Ghost ipomopsis, an endangered plant. Several riparian restoration projects are taking place at the Cleveland Mill Superfund site in Grant County. At other contaminated sites throughout New Mexico, the ONRT will continue to seek damages that could be used, depending on circumstances, to benefit wildlife.

Other Impacts

Transportation

New Mexico's statutory framework for state road construction and maintenance does not mandate environmental or wildlife conservation.⁷⁶ Instead, federal oversight of the construction of transportation infrastructure and federal laws such as the National Environmental Policy Act (NEPA)⁷⁷ and the Endangered Species Act (ESA)⁷⁸ have prompted the State Highway and Transportation Department to incorporate environmental conservation and wildlife protection strategies into its procedures and processes.⁷⁹ Highway construction projects must also comply with state environmental laws, ranging from the Wildlife Conservation Act to the state's pollution control laws.

To advance cooperation between state and federal highway departments, the Federal Highway Administration directed the state to construct an "action plan" that contains strategies for the

⁷⁶NMSA 1978 § 67-3-16 *et seq.*

⁷⁷42 U.S.C. § 4321 *et seq.*

⁷⁸16 U.S.C. § 1531 *et seq.*

⁷⁹The San Juan Pueblo bridge project near Espanola is an example of a highway project involving environmental considerations. The project threatened the Southwestern willow flycatcher, a bird species listed as endangered under the federal ESA. To avoid harming the habitat, the state and federal highway departments devised a plan to preserve the flycatcher's foraging and nesting areas. Telephone conversation with environmental program manager Craig Conley (October 1998).

⁷⁵NMSA 1978 § 75-7-1 *et seq.* An example of a federal natural resource damages statute can be found in CERCLA, at 42 U.S.C. § 9607.

economic, social, and environmental analysis involved in developing highway projects. New Mexico's latest action plan was approved in 1984 and is being updated now. It defines the procedures to be used within the state to assure compliance with NEPA and pertinent Federal Highway Administration policy when federal funds are used. To avoid difficulties with NEPA compliance, New Mexico also applies the federal environmental protection process to all projects regardless of the initial source of funds.

New Mexico does not have an environmental impact assessment statute like NEPA. While the State Highway and Transportation Department does work with the Federal Highway Administration and uses federal environmental law as a guideline, a state-mandated assessment process would clarify the state's goals regarding environmental protection. Revegetation and mitigation emphasizing native species and restoration of habitat also are measures the state could adopt to minimize the impacts of road construction projects.

Utilities

At least one opportunity for conservation can be found in New Mexico's utility law. The Public Utility Commission (Commission), which was succeeded by the new Public Regulation Commission (PRC) in January 1999, has regulated utility rates in New Mexico.⁸⁰ Accordingly, much of the Commission's work has revolved around the economics of energy costs and rate regulation. However, its regulatory authority has been extensive and one of its responsibilities has been to approve the location of transmission lines. The Commission must approve the location unless it will "unduly impair important environmental

values."⁸¹ This responsibility as well as most of the Commission's other duties have been inherited by the PRC.

Location approval was a critical issue in connection with the Public Service Company of New Mexico's (PNM) application to construct, operate and maintain the Ojo Line Extension (OLE).⁸² In the OLE case, PNM proposed to build a switching station and 50 miles of transmission line on a right of way 150 feet wide, connecting a new station in Coyote, New Mexico to the existing PNM Norton station northwest of Santa Fe. The proposed route went through relatively unspoiled lands in the Valle Grande and Jemez Mountains.⁸³

In determining whether the location of OLE would unduly impair important environmental values, the Hearing Examiner stated that the subject areas to be considered could include those addressed during the NEPA process conducted for the project, such as air quality, water resources, soil quality, flora and fauna, including game species and threatened and endangered species, and visual resources.⁸⁴ There was evidence that the proposed line could impact flora and fauna, including game species and threatened or endangered species, so as to cause permanent vegetative damage and permanent displacement of animals from their nests, feeding areas and migratory paths.⁸⁵ Considering these and other impacts from the OLE project, even with implementation of mitigation measures, the Hearing Examiner recommended that the location be denied approval, a recommendation that the Commission followed.

⁸⁰NMSA 1978 § 62-9-3.

⁸²Public Utility Commission Case No. 2382, *Final Order Approving Recommended Decision*, November 20, 1995, pp. 33, 34, 66, 75-81.

⁸³*Id.*, at pp. 75-81. The Jemez Mountains and Valle Caldera region have received national attention for their unique natural history. Recent Congressional initiatives, such as S.1210, have proposed to purchase portions of the region.

⁸⁴Recommended Decision, at p. 64.

⁸⁵*Id.*, at p. 76.

⁸⁰New Mexico Constitution, Article XI, §§ 1 and 2, effective January 1, 1999.

While this case offers insight into how wildlife viability can affect Commission decisions, it also reveals an opportunity to use the standards described in the case as a framework for legislation that would direct the PRC to weigh wildlife conservation values in its decision-making process generally. A clearer statutory mandate could guarantee that the PRC take wildlife conservation values into consideration. Another option may be to direct the PRC to consult with wildlife biologists at the New Mexico Department of Game and Fish when considering permits for power line and facility construction.

Tools

Impact Assessment

Many states have a legal requirement for agencies to assess in advance the impacts of significant state actions on biological resources. At the federal level, the National Environmental Policy Act makes environmental assessment of federal agency actions mandatory.⁸⁶ New Mexico does not have a NEPA-type statute, although at least 14 other states have such a provision.⁸⁷ A law enacted in New Mexico several years ago was repealed; attempts to reinstate a similar law have been unsuccessful. Yet, critical impact assessment of state activities on biological resources is an indispensable tool in conserving biodiversity. Also, with taxpayer dollars supporting these state actions, the public has a right to know about and participate in evaluation of the environmental impacts of state agency decision-making.

⁸⁶42 U.S.C. § 4321 *et seq.*

⁸⁷"Saving Biodiversity," at p. 33.

Land and Water Use Planning

New Mexico's population is growing rapidly.⁸⁸ Counties and cities are grappling with competing desires for open space, subdivisions, and roads and with issues of local autonomy and regionalism. State land and water use plans can provide guidance to help alleviate such conflicts and offer a long-term vision for the state. New Mexico has no statewide land use plan, but has begun regional water planning.

States with statewide land use programs include Delaware, Georgia, Maine, Maryland, Minnesota, New Jersey, Oregon, Rhode Island, Tennessee, and Vermont. The Tennessee plan, for example, directs city and county governments to agree on urban growth boundaries to guide development for the next 20 years. The plan requires a unified design for how communities will develop, and must show that they are encouraging a path of compact and contiguous growth areas, while also protecting forest, recreation, and wildlife management areas. The Tennessee law also establishes an arbitration process to resolve differences that may arise between cities and counties. The law provides that if governments fail to agree on growth plans, they will face terminations of state subsidies for highways, community development, and tourism.⁸⁹

Using tax and funding inducements, New Mexico could adopt a state level land use plan to prevent disparities between city and county governments and foster planning strategies that include environmental and wildlife conservation values.

Regional water planning is underway in New Mexico. In 1994, the Interstate Stream Commission published a *Regional Water Planning Handbook* to provide guidance for planning.⁹⁰ Using these

⁸⁸<http://www.unm.edu/~bber/demo/popproj.htm>.

⁸⁹TCA § 6-58-107 (1998).

⁹⁰For legislative requirements for regional water planning, *see* NMSA 1978 § 72-14-44.

guidelines, several entities have obtained funding to implement the planning process in their region. The Commission expects to use the plans to ensure an adequate supply of water for each region of the state. The planning process is strictly voluntary, however, and does not mandate conservation.

Citizen Suits

Since the 1970s, some state legislatures have enacted broad citizen suit laws to mirror the public enforcement mechanisms in federal environmental law. These state laws solidify the standing of citizens to sue for environmental violations, provide a variety of remedies, and even provide for the award of attorneys' fees for the citizen in certain instances. New Mexico currently does not have a citizen suit statute of this nature.⁹¹

Fifteen states have environmental citizen suit statutes on the books which New Mexico could use as a model in developing its own citizen suit statute.⁹² In general, these statutes give citizens, or "any person," the right to sue the state, a private party, or both, in order to protect the state's environment. Some citizen suit statutes provide only for injunctive relief to stop harmful activity or to force the state to act. One statute authorizes the award of money damages as well. Whether the citizen filing the lawsuit can recover attorneys' fees and litigation costs also varies among the statutes. Ultimately, citizen suits are a useful tool to help prevent environmental degradation.

⁹¹A citizen suit provision narrowly drawn to address Mining Act compliance can be found in NMSA 1978 § 69-36-14.

⁹²"The Public in Action: Using State Citizen Suit Statutes to Protect Biodiversity," *Defenders of Wildlife and the Center for Wildlife Law*, December 1996.

Information Resources

Good information about a state's natural heritage is essential in planning for the future. Accurate species counts, knowledge about sensitive habitats, and development trends provide valuable planning tools. New Mexico has a number of programs that provide this type of information. The following are examples of some of the major efforts within the state.

The New Mexico Natural Heritage Program compiles and maintains data on the rare plants, animals, and sensitive ecological communities native to New Mexico. A joint venture of the Department of Biology at the University of New Mexico (UNM) and The Nature Conservancy since 1990, the program is located in Albuquerque at UNM. Data are gathered, both from the field and from existing sources, on the status and location of rare and declining species and vegetation communities of special interest. Records can be searched by a number of attributes, including the name of the species or community type, county, rarity status, watershed and public land status.⁹³

The BIOTA Information System of New Mexico (BISON-M) is a large and complex computer database of information about wildlife vertebrates and invertebrates in New Mexico. It is being developed by the state Department of Game and Fish as a tool to provide basic biological information in a computerized database format to biologists and others interested in New Mexico's wildlife.⁹⁴

The Gap Analysis Program (GAP) is a national

⁹³See, <http://nmnhp.unm.edu>.

⁹⁴BISON-M is an attempt to assimilate information from many different sources. Sources include hard data such as peer reviewed journals and museum collection records; "gray literature" such as non-peer reviewed publications, agency reports, other data sets; and expert opinion. Future updates of BISON-M will be performed by the New Mexico Natural Heritage Program in cooperation with the Department of Game and Fish. See, <http://www.fw.vt.edu/fishex/states/nm.htm>.

program designed to organize digital information about vegetation communities (land cover), animal distributions, and land management for analysis among ecological regions. Land cover mapping is derived from satellite imagery. Animal distributions are predicted from associations of regularly occurring vertebrates (and some invertebrates) with such factors as land cover, watershed distribution, elevation, mountain ranges, slope, soils, and surface water. Land management is rated in a 4-class system involving the relative degree of provisions that promote long-term conservation of biological diversity. New Mexico datasets are available from the New Mexico Resource Geographic Information System (RGIS).⁹⁵

The Museum of Southwestern Biology (MSB) is a research and teaching facility in the Department of Biology at UNM, housing historically important collections of vertebrates, arthropods, and plants from the American southwest, and Central and South America. The MSB also houses the U.S. Geological Survey's Biological Survey Collection, formerly at Fort Collins, Colorado.⁹⁶

While each program operates independently, efforts are directed toward cooperation between the agencies. These linkages are evident in the

⁹⁵RGIS is a cooperative program between UNM and the state General Services Department. The Program is dedicated to advancing applications of GIS technology within New Mexico's state agencies, local government, and private industry. It provides access to data, training, and technical support for users desiring to incorporate geographic information into their decision-making process. RGIS also maintains a National Spatial Data Infrastructure (NSDI) clearinghouse node for metadata which describes the content of geospatial information available for New Mexico. See, <http://rgis.unm.edu>.

⁹⁶See, <http://biology.unm.edu/~herb/msb.htm>. In addition, UNM's Institute of Public Law, Center for Wildlife Law (CWL) and MSB, Division of Mammals have established a National Biological Information Infrastructure (NBII) clearinghouse node of state biodiversity laws and policies and the systematics, ecology, and life history of the Southwest. See, <http://www.nbi.gov/>.

collaboration that has been outlined above.⁹⁷

However, there are many agencies that maintain natural resource information for their own internal use of which potential users may not be aware. The more these agencies collaborate and the more their information is made accessible, the better will be decision-making that takes place under the state's natural resource laws.

III. CONCLUSION

Gaps in the Law, Opportunities for Change

New Mexico has a wide variety of laws designed to protect our natural heritage. These laws reflect a growing concern among New Mexico's citizens about protecting this heritage. Whether these laws are enough to accomplish the goal of species and habitat conservation is questionable, however. According to a 1996 analysis, New Mexico ranked twentieth among the states in the strength of its wildlife protection laws.⁹⁸ Even existing mandates in current law are underfunded and understaffed. It is clear that New Mexico must do more.

This report has highlighted several opportunities in New Mexico's state laws for conserving biodiversity. A provision in the Wildlife

⁹⁷In 1998, under a grant from Federal Aid, CWL established the Southwest Region Internet Road Map of Natural Resource Data and Information (the Road Map). The Road Map is a centralized source for Southwest Region fish, wildlife, and natural resource data and information available on the Internet. The Road Map provides indices, search tools, and hypertext links to the web sites developed by the many natural resource management and research agencies in the Southwest for the purpose of disseminating their data and information. See, <http://roadmap.unm.edu>.

⁹⁸"Are States Protecting the Future?", *Defenders of Wildlife*, July 1996.

Conservation Act, for example, mandates that recovery plans address multiple species, rather than the traditional single species approach. The State Land Office has begun leasing state trust lands to conservation organizations. Even New Mexico's public utility law requires the consideration of environmental values in siting transmission lines.

Yet, many gaps in New Mexico's law continue to prevent the state from effectively conserving its natural heritage. Most notably, the lack of an impact assessment law or NEPA-type statute prevents better, more comprehensive analysis of the impacts of state agency actions. A citizen suit statute could also provide a long-needed tool to ensure better enforcement of New Mexico's laws. More direct protections are needed as well, such as a mandate to protect nongame wildlife on all state-owned lands and significant increases in funding for nongame programs.

Ultimately, conservation of our natural resources can be accomplished only through widespread public support. An understanding of the importance of plants and animals and the habitat on which they depend is critical to fostering an appreciation and a desire to save them. It is our hope that this report will contribute to this public understanding and provide a base of knowledge and information from which meaningful change can be made.

Where Does New Mexico Go From Here?

This report is merely the starting point in identifying the needs of New Mexico's natural heritage conservation laws and programs. It is intended to stimulate a larger dialogue about the need for improving New Mexico's laws and creating a comprehensive conservation strategy. Ecological research, environmental monitoring, and public involvement must all be included in a well-drawn, comprehensive

biodiversity strategy.

A comprehensive biodiversity strategy can provide the basis for coordinating conservation efforts to maximize their effectiveness. A strategy can encourage private organizations and public agencies to share data, identify impacts of proposed actions and provide planning, allowing the groups to identify the greatest threats and the best tools to address them. To date, 14 states have developed statewide biodiversity plans or have established biodiversity councils.⁹⁹

Bringing New Mexico's different programs together into a comprehensive strategy will serve two important objectives. First, it will foster efficiency in state government. Agencies like the State Highway and Transportation Department and the New Mexico Department of Game and Fish can work together to ensure that the mandates of both agencies are met. Secondly, a comprehensive strategy will allow New Mexico to develop its own goals and tend to its own, unique conservation needs. While federal laws are important, New Mexico's rich natural heritage is unique, and state government and its constituents can develop biodiversity conservation efforts that specifically address issues close to home. With a biodiversity conservation strategy that accomplishes these two goals, New Mexico will truly be able to protect and restore its natural heritage.

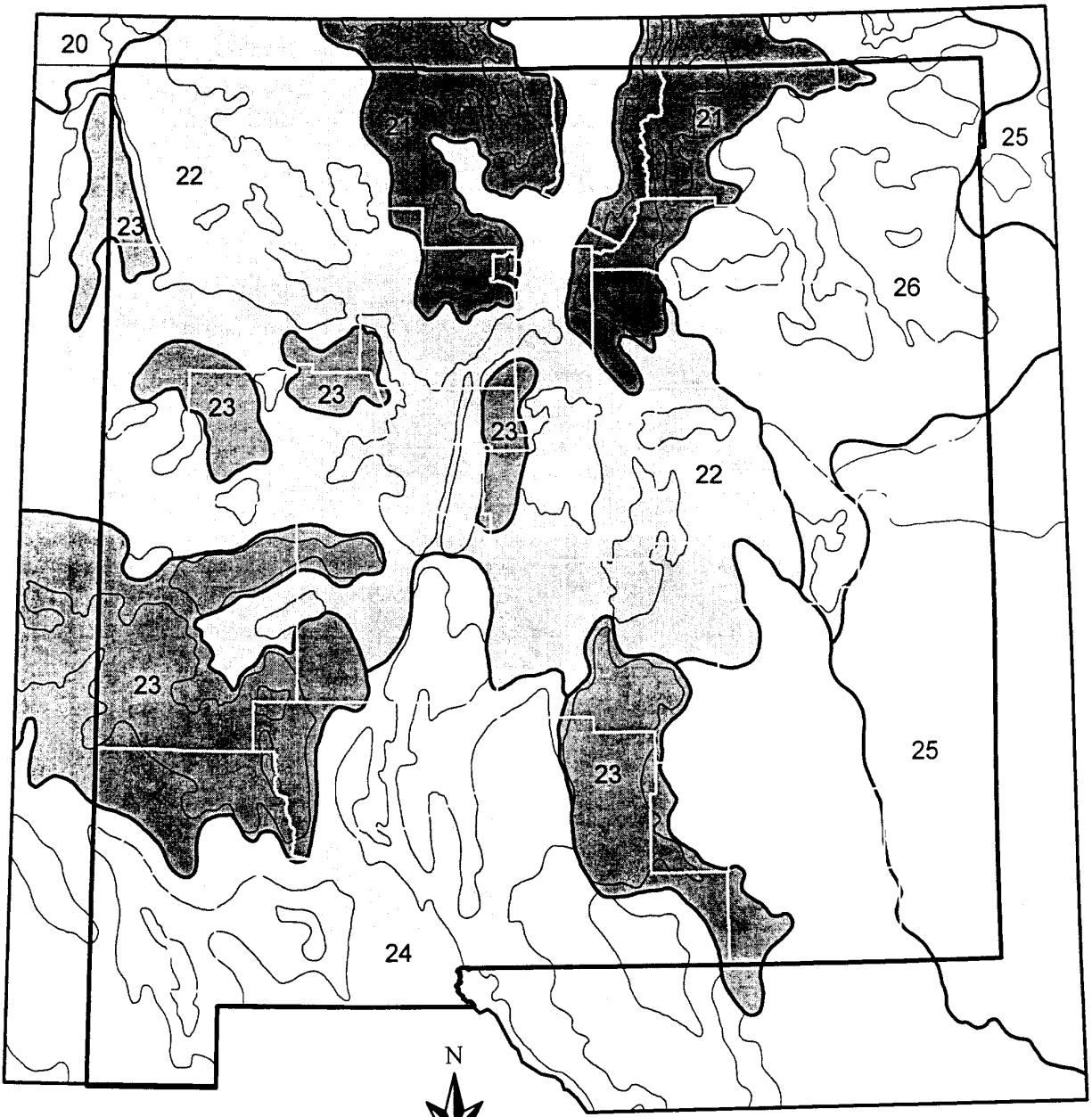
⁹⁹J. Bennett, "State Biodiversity Planning," *Environmental Forum*, Vol. 15, no. 4, pp. 19-27, Environmental Law Institute, 1998.

Appendices

Appendix A: Maps

Appendix B: State Agency Contacts

Ecoregions of New Mexico (Omernik, 1987)

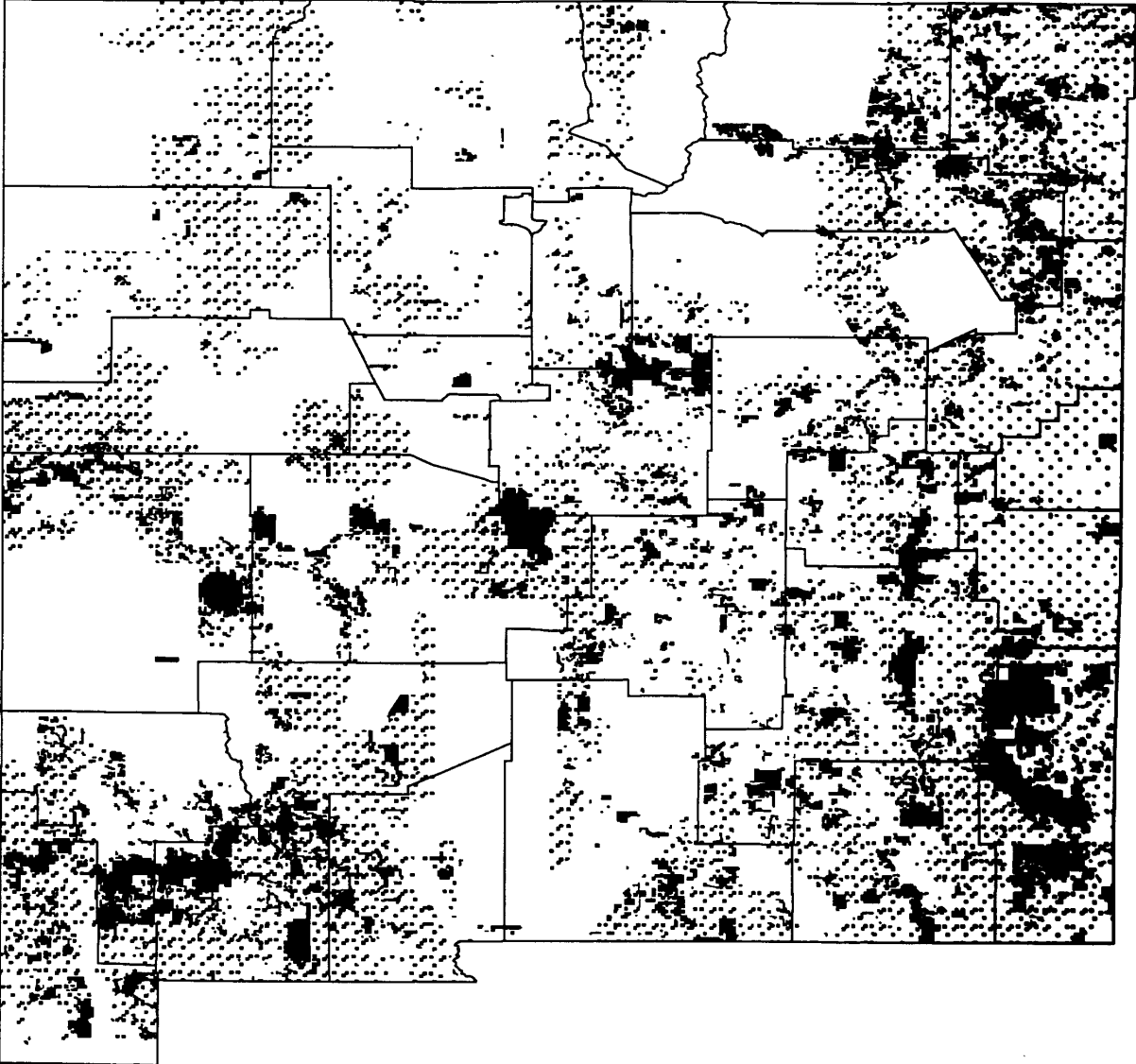


- Ecoregions (Omernik, 1987)
- 20, Colorado Plateaus
 - 21, Southern Rockies
 - 22, Arizona/New Mexico Mountains
 - 23, Arizona/New Mexico Plateaus
 - 24, Southern Deserts
 - 25, Western High Plains
 - 26, Southwestern Tablelands



Map produced by New Mexico Natural Heritage Program, November 1998.

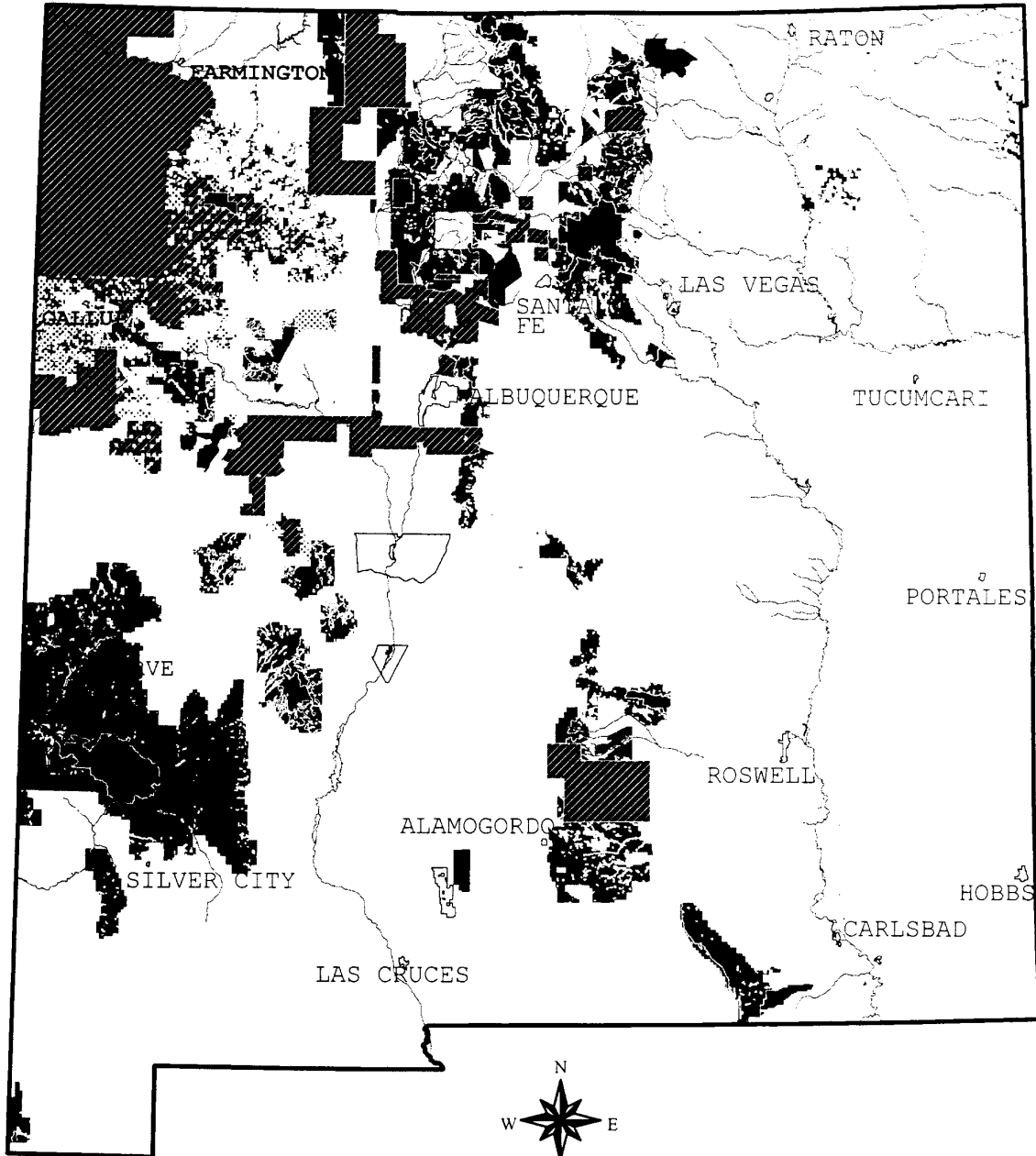
STATE TRUST LAND MAP



Map provided by the New Mexico State Land Office, February 1999.



Selected Ownership of New Mexico Lands



- Ownership
- NPS
 - Native American
 - USFS
 - USFWS and Other Federal Lands

USBLM and USDOD lands not included

Map produced by New Mexico Natural Heritage Program, November 1998.

Data taken from RGIS Clearinghouse.

Appendix B: State Agency Contacts

New Mexico Department of Agriculture
P.O. Box 30005
Dept. 3189
Las Cruces, NM 88003-8005
505-646-3007

New Mexico Department of Energy, Minerals,
and Natural Resources
2040 Pacheco Street
Santa Fe, NM 87505
505-827-5950

New Mexico Department of Game and
Fish
Villagra Building
P.O. Box 25112
Santa Fe, NM 87504
505-827-7911

New Mexico Environment Department
1190 Saint Francis Drive
P.O. Box 26110
Santa Fe, NM 87502
505-827-2855

New Mexico Natural Heritage Program
University of New Mexico
851 University Blvd., SE
Suite 101
Albuquerque, NM 87131
505-272-3545

State Engineer Office/Interstate Stream
Commission
Bataan Memorial Bldg.
P.O. Box 25102
Santa Fe, NM 87504
505-827-6175

State Land Office
310 Old Santa Fe Trail
P.O. Box 1148
Santa Fe, NM 87504
505-827-5760

State Highway and Transportation Department
1120 Cerrillos Road
P.O. Box 1149
Santa Fe, NM 87504
505-827-5100



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