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Legal Research Digests are issued to provide early awareness and encourage application of research results emanating from NCHRP Project 20-6, "Legal Problems Arising Out of Highway Programs." These Digests contain supplements and new papers that are periodically compiled as addenda to the treatise, *Selected Studies in Highway Law*, published by the Transportation Research Board.

**Areas of Interest: 17 energy and environment, 23 environmental design,
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Authority of State Departments of Transportation to Mitigate the Environmental Impact of Transportation Projects

A report prepared under NCHRP Project 20-6, "Legal Problems Arising Out of Highway Programs," for which the Transportation Research Board is the agency conducting the research. The report was prepared by Richard A. Christopher. James B. McDaniel, TRB Counsel for Legal Research, was the principal investigator.

THE PROBLEM AND ITS SOLUTION

State highway departments and transportation agencies have a continuing need to keep abreast of operating practices and legal elements of specific problems in highway law. This report is a new paper, which continues NCHRP's policy of keeping departments up to date on laws that will affect their operations.

This paper will be published in a future addendum to *Selected Studies in Highway Law*. Volumes 1 and 2 of SSSL deal primarily with the law of eminent domain and the planning and regulation of land use. Volume 3 covers government contracts. Volume 4 covers environmental and tort law, intergovernmental relations and motor carrier law. An expandable format permits the incorporation of both new topics as well as supplements to published topics. Updates to the bound volumes are issued by addenda. The 5th Addendum was published in November 1991. Addenda are published on an average of every three years. Between addenda, legal research digests are issued to report completed research. Presently the text of SSSL totals over 4,000 pages comprising 75 papers.

Copies of SSSL have been sent, without charge, to NCHRP sponsors, certain other agencies, and selected university and state law libraries. The officials receiving complimentary copies in each state are: the Attorney General and the Chief Counsel and Right-of-Way Director of the highway agency. Beyond this initial distribution, the 4-volume set is for sale through the Transportation Research Board (\$185.00).

APPLICATIONS

The foregoing research should prove helpful to state transportation planners, right-of-way officers, highway design engineers, state environmental officials, and state highway attorneys. Familiarity with the various methods used by state officials to mitigate the environmental impact of transportation projects will be extremely useful to highway design engineers as they construct new or expand existing highways. Likewise, attorneys who assist them will better understand legal methods that have been successful in mitigating the environmental impact of transportation projects.

CONTENTS

AUTHORITY OF STATE DEPARTMENTS OF TRANSPORTATION TO MITIGATE THE ENVIRONMENTAL IMPACT OF TRANSPORTATION PROJECTS

	<u>Page</u>
Introduction	3
The Evolution of Project Mitigation	3
Statutory of Mitigation Programs	4
Floodplains	4
Wetlands	4
Farmlands	4
Threatened and Endangered Species	5
Parklands and Refuges	5
Historic and Archaeological Sites	5
Noise	6
Scenic Preservation and Enhancement	6
Nature Preserves	6
Recurring Mitigation Issues	7
Funding Constraints	7
Use of Eminent Domain	7
Transfer of Mitigation Properties	8
Summary	8
Appendix	9

AUTHORITY OF STATE DEPARTMENTS OF TRANSPORTATION TO MITIGATE THE ENVIRONMENTAL IMPACT OF TRANSPORTATION PROJECTS

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INTRODUCTION

Every agency of State government charged with the duty to plan, design, construct, operate, and maintain transportation improvements is faced with a series of great challenges. These agencies are usually faced with a limited budget, a shortage of manpower, and an impatient constituency. They are expected to produce an annual capital program that reaches into all of the corners of the State and gets the most out of limited resources. These limited financial resources must also be made available for the special needs of environmentally significant resources which will be adversely impacted by projects. Since state transportation departments are public works agencies, they do not always have the necessary statutory authority to address these concerns. This lack of authority is quite often due to the perception that these agencies were not created, funded with a dedicated tax (usually from the sale of motor fuel), and given eminent domain power to ensure ecological balance. When they step outside of their expected role and set about completing environmental mitigation tasks, there are questions about how far they can go. This paper will explore the limits of their authority.

This paper assumes a significant Federal role in its analysis. Federal laws for protection of ecological and cultural resources have created the framework for most of the State authority that exists. A brief historical summary is provided to show how project mitigation policy has evolved. In particular, this paper is concerned with current Federal and State statutory mitigation programs. A portion of the discussion, therefore, deals with some common issues related to funding and land acquisition. It is not the intent here to analyze, in detail, each Federal and State program. This would require research far beyond the scope of this paper.

THE EVOLUTION OF PROJECT MITIGATION

Although many individual water resource projects in the twentieth century had features incorporated in them to reduce or compensate for impacts on fish and wildlife, generic authority to modify these projects in this way was not provided until 1958.¹ At that time, the Fish and Wildlife Coordination Act² was amended to expand the project purpose for federal water projects so that mitigation planning could be performed in a timely fashion. The mitigation contemplated was to consist of measures to prevent loss of, and damage to, wildlife resources and provide for their development and improvement.³

A slightly different form of mitigation was initiated for federally assisted highway projects 8 years later. In an attempt to protect Brack-

enridge Park in San Antonio, Texas, Senator Yarborough introduced an amendment to the proposed Federal-Aid Highway Act of 1966 with a bold new policy to govern the protection of parklands.⁴ His amendment declared a Federal transportation policy to preserve parks and historic sites in cooperation with the States who, for the most part, plan, design and construct federally assisted transportation projects.⁵ He went on to require that the land in these parks and historic sites not be used unless there was no feasible alternative to such use, that all possible planning was shown to minimize harm due to the project, that substitute land was provided, and that additional project costs for the substitute land were to be included in the federally defined "costs of rights-of-way."⁶ This language was changed in the final version of Sec. 15(a) of the Federal-Aid Highway Act of 1966 and made less specific; however, the concepts of avoidance and compensation as essential elements of transportation project mitigation survived.⁷ Section 15(a) required two findings. First, no project was to use a protected site, including wildlife refuges, if there was a feasible alternative. Second, if such use could not be avoided, all possible provisions to minimize harm needed to be included in the project. At this point mitigation policy started to be based on priorities. First, a protected resource should be avoided if possible. After this analysis, attempts to minimize harm should be explored. Senator Yarborough's additional language on substitute land to compensate for the loss was rejected "because of the indeterminate costs involved."⁸ Slightly modified language was adopted later that year to cover all transportation projects in Sec. 4(f) of the original DOT Act.⁹

Another extremely significant event in the development of mitigation policy occurred in 1981 with the publication of the U.S. Department of the Interior, Fish & Wildlife Service Mitigation Policy.¹⁰ Fish & Wildlife stated its priorities in reviewing projects under the Fish & Wildlife Coordination Act¹¹ and all other Federal laws which require their comments and recommendations. The policy was also intended as advice to other Federal agencies on how to shape their own decision-making priorities. Fish & Wildlife defined mitigation by accepting the definition previously adopted by the Council on Environmental Quality. That definition reads as follows:

Mitigation includes:

- (a) Avoiding the impact altogether by not taking a certain action or parts of an action.
- (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- (c) Rectifying the impact by repairing, rehabilitating or restoring the affected environment.
- (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- (e) Compensating for the impact by replacing or providing substitute resources or improvements.¹²

In accepting this definition Fish & Wildlife said it "considers the specific elements to represent the desirable sequence of steps in the mitigation planning process."¹³ At this point, mitigation was expanded to cover

all of the previously recognized uses of the term with additional proviso that some forms of mitigation were clearly superior to others. Fish & Wildlife then went on to list the types of habitat to be protected in descending priorities.¹⁴ Some were to be avoided at all costs, others were to receive the other forms of mitigation in varying degrees, and the least valuable were to be assessed for habitat value improvements or enhancements. In order to implement or follow this policy, agencies with projects were going to have to commence mitigation planning early and evaluate affected resources in a rather elaborately detailed fashion.

STATUTORY MITIGATION PROGRAMS

Floodplains

Many transportation projects, particularly highways, cannot totally avoid the areas adjacent to streams which convey and store flows during and immediately following storm events. These areas, commonly known as floodplains, are protected to a certain degree by the National Flood Insurance Program (NFIP), a composite of several federal laws,¹⁵ which requires identification of areas subject to flood hazards. A Federal executive order issued in 1977¹⁶ requires all Federal agencies to refrain from approving any action in a floodplain until alternatives that avoid adverse effects are assessed, location in the floodplain is justified, and the design is shown to minimize harm to upstream and downstream properties. Regulations adopted pursuant to NFIP, also require transportation projects to be designed to keep upstream backwater increases under 1 ft in certain storm events.¹⁷ A number of states have responded to these programs by adopting their own protection programs. Ten states have permit programs to insure that transportation projects, like all other construction, do not unduly encroach on floodplains, restrict their capacities, or create hazards to safety during floods.¹⁸ Seven states, with similar permit programs, also require compliance by State agencies with local floodplain ordinances.¹⁹ In three states, the transportation agency complies with floodplain protection standards by interagency agreement²⁰ or submission of a plan for approval.²¹ Three states specifically exempt transportation projects from their floodplain protection laws.²² Conditions of these permits can require increased costs because of the need to minimize, rectify, or eliminate floodplain impacts over time. These increases can be due to design changes, or increased right-of-way needs, or increased maintenance.

Wetlands

The Federal Government exercises a much stronger hand in requiring anyone, including State transportation agencies, to receive a permit before any construction requiring dredging or filling is done in a wetland.²³ Permits are processed by the U.S. Army Corps of Engineers pursuant to its regulations²⁴ with strong involvement by the U.S. Environmental Protection Agency (USEPA).²⁵ The relationship between these two agencies has been embodied in a Memorandum of Agreement (MOA) which

sets the policies and priorities for project mitigation involving wetlands.²⁶ The MOA follows the logic of the Fish & Wildlife Policy,²⁷ with the additional goal of "no net loss" of wetlands because of the issuance of permits. The need to avoid wetlands is drawn from the EPA's regulations which require that before a project can take wetlands, it must be following the least environmentally damaging practicable alternative.²⁸ Once this is shown, steps to minimize harm must be exhausted. At this point, the least favored mitigation option, compensation for lost wetlands, can be examined. The use of mitigation "banks" is mentioned in the MOA as a possible way for project sponsors to overcompensate at one location and possibly get credit at another. In addition the MOA recites the preference for compensatory mitigation to be completed as close to the site as possible and for long-term monitoring to determine whether compensatory mitigation is successful. An additional layer of control requiring avoidance of wetlands, if a practicable alternative exists, can be found in a Federal executive order.²⁹ The Federal Highway Administration (FHWA) has established policies on the appropriate amount of Federal participation in wetland mitigation.³⁰ FHWA sets top priority on enhancement of wetlands inside the right-of-way, then improvement of existing publicly owned wetlands, and finally the purchase and creation of compensatory wetlands.³¹

A number of states have responded in the area of wetland protection with widely varying programs. Four states require permits with no stated legislative policy on mitigation.³² North Dakota and Wyoming require a permit to drain a wetland with specific standards for replacement.³³ Two states, Mississippi³⁴ and Rhode Island,³⁵ limit protection programs to coastal wetlands. California,³⁶ Oregon,³⁷ and Maine³⁸ prevent unreasonable harm or adverse effect to wetlands. An additional requirement of a finding of no feasible and prudent alternative to wetland use and minimization of harm is imposed by Massachusetts³⁹ and Pennsylvania,⁴⁰ which implies favoring avoidance over minimization and compensation. Project benefits are balanced against the harm to wetland values in Florida⁴¹ and Virginia,⁴² with a positive benefit required. This balance test is augmented with specific preferences for water-dependent projects in wetlands in South Carolina⁴³ and in addition, the need to show no practicable alternative to wetlands use, the stated preference for avoidance, in Maryland,⁴⁴ Michigan,⁴⁵ New Jersey,⁴⁶ and Vermont.⁴⁷ The preference for avoidance and allowance for banking without a specific required balance of public benefit is required in Illinois for State projects.⁴⁸

Farmlands

In response to the growing trend of irrevocable conversion of agricultural lands to nonagricultural uses, Congress passed the Farmland Protection Policy Act (FPPA) in 1981.⁴⁹ The FPPA requires Federal agencies to identify the adverse impacts their projects have on the preservation of farmland and then consider alternatives which would lessen those impacts.⁵⁰ In addition, Federal agencies need to assure that, to the extent practicable, their projects are compatible with State and local government

programs and policies to protect farmland.⁵¹ The U.S. Department of Agriculture Soil Conservation Service was required to adopt criteria to identify and quantify those adverse effects⁵² and has promulgated rules to guide the Federal agencies.⁵³ The rules created a rating system that combines productivity, proximity to other urban or rural land uses, impacts on remaining farmland after the conversion, and indirect or secondary effects of the project on agricultural and other local factors to arrive at a score.⁵⁴ If the rating exceeds a score of 160, the project agency must consider alternatives, which avoid or minimize farmland, so that the score can be reduced.⁵⁵ Although the FPPA explicitly states that it does not create a cause of action to challenge a Federal project,⁵⁶ the FPPA has been cited as creating valid considerations for FHWA when it decides whether a project can avoid lands protected under Sec. 4(f) of the DOT Act.⁵⁷

The least structured State legislation in this area requires cooperation with the State agricultural agency in projects affecting land under protective agreements or in areas with exclusive local agricultural zoning,⁵⁸ documentation of any failure to follow local soil and water conservation district recommendations,⁵⁹ or consideration of agricultural impacts and preparation of a worksheet if more than a minimum number of acres of farmland are needed.⁶⁰ An intermediate level of control applies in states which prohibit eminent domain in agricultural areas before a study is prepared⁶¹ or require careful consideration of alternatives which avoid local agricultural preserves and the public cost associated with losing those preserves.⁶² Pennsylvania's program focuses on new highways and requires a finding of no feasible and prudent alternative (avoidance) by a special board before agricultural lands are condemned.⁶³ In Vermont, an environmental board can withhold permits for transportation projects unless there is an analysis of alternatives which avoid agricultural land and there is no significant interference with adjoining farmlands.⁶⁴ Two states, New Jersey⁶⁵ and Virginia,⁶⁶ protect locally created agricultural and forestry districts by prohibiting condemnation unless the Governor makes specific findings of necessity and the lack of alternatives which avoid the areas.

Threatened and Endangered Species

The Congressional policy requiring Federal agencies to seek to conserve endangered species of plants and animals is expressed in the Endangered Species Act of 1973 (ESA).⁶⁷ Section 7(a)(2) of ESA⁶⁸ requires Federal agencies to consult with the Fish and Wildlife Service (F&WS) or the National Marine Fisheries Service (NMFS) and "insure that any action authorized, funded or carried out . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destructive or adverse modification of habitat . . . determined . . . critical, unless such agency has been granted an exemption." After consultation,⁶⁹ an opinion is issued concluding whether or not a species is jeopardized or critical habitat will be adversely modified.⁷⁰ If jeopardy or adverse modification is found, reasonable and prudent alternatives are

offered to avoid these effects.⁷¹ Federal agencies whose projects have been found to jeopardize a listed species or its habitat cannot show compliance with ESA without receiving an exemption from the Endangered Species Committee.⁷² If the Committee finds no feasible and prudent alternative to the proposed action (impacts cannot be avoided) and the project has paramount importance, it can establish mitigation and enhancement measures to minimize adverse effects.⁷³ The States have adopted a range of responses to the Federal model. Some require State agencies to cooperate in endangered species protection, but have no mandatory consultation or mitigation.⁷⁴ Others limit their protective programs to endangered or threatened plants⁷⁵ or specifically prohibit any project delay due to a rare plant.⁷⁶ New Jersey requires a finding of no jeopardy before a wetland permit is issued.⁷⁷ South Carolina requires consideration of the extent a project affects endangered wildlife habitat in its coastal zone.⁷⁸ Statewide prohibitions on jeopardy to listed species or their habitat are provided in Nebraska,⁷⁹ Illinois,⁸⁰ California,⁸¹ and Maine,⁸² with all of the protections called for in ESA provided in Oregon⁸³ and Vermont.⁸⁴

Parklands and Refuges

All transportation projects which receive any form of Federal approval or funding must comply with Sec. 4(f) of the DOT Act.⁸⁵ Section 4(f) requires specific mitigation findings before publicly owned parks or wildlife refuges⁸⁶ can be used. "Use" is defined in the rules of FHWA and UMTA⁸⁷ as occurring when a project physically takes land from a protected site or passes close enough to substantially impair "the protected activities, features or attributes that qualify a resource for protection."⁸⁸ No use can occur unless there is no feasible and prudent alternative to such use. Design alternatives which avoid Sec. 4(f) properties should be identified and evaluated. The project must also include all possible planning to minimize harm resulting from such use.⁸⁹ Pennsylvania⁹⁰ and Texas⁹¹ have protective statutes that copy Sec. 4(f) practically verbatim. California,⁹² Minnesota,⁹³ and New Hampshire⁹⁴ condition acquisition of parkland for transportation projects on the acquisition and transfer of functionally equivalent substitute land.

Historic and Archaeological Sites

The Federal process of identifying historic and archaeological sites and considering the effects of projects on those prehistoric properties is embodied in the National Historic Preservation Act (NHPA).⁹⁵ Whenever a federally approved transportation project "uses" one of these properties, the mitigation requirements of Sec. 4(f) of the USDOT Act are triggered.⁹⁶ Section 106 of NHPA⁹⁷ requires Federal agencies to consider the effects of their projects on properties included in or eligible for the National Register of Historic Places (NRHP).⁹⁸ The criteria for eligibility for NRHP require that a district, site, building, or object possess integrity of location, setting, design, materials, workmanship, feeling and association, and be associated with significant historical events or persons, or contain valuable historical data.⁹⁹ If an adverse

effect is found from a project¹⁰⁰ which cannot be rendered not adverse,¹⁰¹ the Federal agency must consult with the SHPO to seek ways to avoid or reduce the adverse effect.¹⁰² If a memorandum of agreement can be negotiated, it is signed by the SHPO and in some cases by the Advisory Council on Historic Preservation.¹⁰³ If such an agreement cannot be reached, consultation can be terminated.¹⁰⁴ If a project requires property from an eligible or listed site or causes impacts that rise to the level of causing a substantial adverse effect that cannot be rendered not adverse, the mitigation requirements of Sec. 4(f) apply.¹⁰⁵ When professional archaeological salvage is the appropriate mitigation, the procedures of NHPA and Sec. 4(f) can be truncated with findings of no "use" or "adverse effect."¹⁰⁶

The states of Florida,¹⁰⁷ Hawaii,¹⁰⁸ Illinois,¹⁰⁹ Kansas,¹¹⁰ Massachusetts,¹¹¹ New Mexico,¹¹² Pennsylvania,¹¹³ Texas,¹¹⁴ and Montana¹¹⁵ protect historic sites from the effects of transportation projects with programs that combine the features of NHPA and Sec. 4(f). A permit to alter a protected site is required in Indiana,¹¹⁶ Kentucky,¹¹⁷ Minnesota,¹¹⁸ North Dakota,¹¹⁹ Vermont,¹²⁰ and West Virginia.¹²¹ Notice to the SHPO and an opportunity to comment with a chance to investigate and salvage is required in Alaska,¹²² Arizona,¹²³ California,¹²⁴ Missouri,¹²⁵ Mississippi,¹²⁶ Rhode Island,¹²⁷ Tennessee,¹²⁸ Utah,¹²⁹ and Wisconsin.¹³⁰ Archaeological salvage is specifically authorized in Arkansas¹³¹ and Nebraska.¹³² A direction to minimize damage to historic sites is provided in Colorado.¹³³ On the other side, transportation projects are exempt from historic preservation in Georgia,¹³⁴ and no bridge or highway structure in Louisiana can be listed in the NRHP.¹³⁵

Noise

The principal Federal program governing transportation project noise abatement by State transportation agencies is the FHWA Procedures for Abatement to Highway Traffic Noise and Construction Noise.¹³⁶ The FHWA procedures require certain analyses and demonstrations before a project is eligible for federal funding. Noise abatement measures that are reasonable and feasible must be incorporated into the project.¹³⁷ Reasons must be given when no prudent solutions for noise impacts are reasonably available. Federal participation is limited to those measures which are cost-effective and include traffic management, alignment alterations, right-of-way for barriers and buffer zones, construction of barriers, and insulation of public use or nonprofit institutional structures.¹³⁸ California has adopted a very specific priority system for construction of noise barriers along freeways and specific decibel levels for noise abatement (installation of acoustical materials, eliminating windows, air conditioning, sound baffle structures, conversion to different uses) in public and private schools.¹³⁹ Florida has specifically adopted the FHWA program.¹⁴⁰ Minnesota follows the rules of its Pollution Control Agency which exempt Interstate highways.¹⁴¹ New York DOT has specific authority to provide for the insulation of publicly owned school buildings.¹⁴² Noise is one of the impacts Pennsylvania DOT must assess in projects requiring right-of-way acquisition.¹⁴³ If a project has an adverse effect

on residences, parks, religious institutions, or schools, there must be a finding of no feasible and prudent alternative to such adverse effect and of all reasonable steps to reduce the adverse effect.¹⁴⁴

Scenic Preservation and Enhancement

Although there is no specific Federal program mandating the preservation or enhancement of scenic beauty to reduce or prevent unsightly land uses adjacent to transportation projects, other than the outdoor advertising and junkyard control programs,¹⁴⁵ many States have adopted programs for acquisition of scenic easements¹⁴⁶ or establishment of buffer areas adjacent to highways. The type of property interest acquired has been described as follows:

Negative easements involve the payment to the landowner for a termination or extinguishment of a portion of his property rights. Scenic easements are an example: the landowner is paid by the State to terminate his right to erect structures or buildings or otherwise use his land so as to destroy the view from the highway. The State obtains no rights to enter upon the land, either for its departments or the public at large. The State obtains only the right to enforce the negative easement through court action.¹⁴⁷

The power to protect the areas adjacent to highways can help to reduce adverse effects on cultural and natural resources and can serve to minimize secondary impacts from induced development. Colorado,¹⁴⁸ Maine,¹⁴⁹ and Michigan¹⁵⁰ have simply included scenic beauty in their list of appropriate public uses of eminent domain power. Georgia¹⁵¹ has similar broad authority including acquisitions for planting trees and shrubs. Alabama,¹⁵² Nebraska,¹⁵³ Rhode Island,¹⁵⁴ and Washington¹⁵⁵ limit these acquisitions to land adjacent to or in close proximity to the right-of-way. Acquisitions must be in the vicinity in North Carolina,¹⁵⁶ within 660 ft in Alaska,¹⁵⁷ and within 1,000 ft in Idaho.¹⁵⁸ This program may include enhancement of scenic beauty in California,¹⁵⁹ Florida,¹⁶⁰ Illinois,¹⁶¹ Maryland,¹⁶² Mississippi,¹⁶³ Nevada,¹⁶⁴ and New Jersey.¹⁶⁵ Any shade trees removed for a highway must be replaced in Delaware,¹⁶⁶ and Indiana's program is limited to Federal requirements.¹⁶⁷ Virginia limits its scenic program to scenic highways or byways¹⁶⁸ and will implement reasonable and practicable recommendations of landscape studies for urban highways with local financial participation.¹⁶⁹ Pennsylvania prohibits adverse effects on aesthetics from projects requiring additional right-of-way unless there is no feasible and prudent alternative and the project includes all possible planning to minimize harm.¹⁷⁰ Vermont prohibits any undue adverse effect on scenic or natural beauty or aesthetics.¹⁷¹

Nature Preserves

Four states¹⁷² have adopted systems to preserve unique natural areas by accepting formal dedications from public and private owners. These areas cannot be taken for inconsistent public uses without the approval of a board, commission, or wildlife agency and a finding of imperative and unavoidable public necessity. This level of protection raises the im-

portance of avoidance as the primary means of mitigation to its highest level under State law.

RECURRING MITIGATION ISSUES

Funding Constraints

Since State transportation agencies usually construct, operate, and maintain projects with earmarked funds, a rather conservative approach is frequently taken to use of these funds. Project sponsors will often not undertake mitigation unless they are confident some portion of their costs will be reimbursed.¹⁷³ Conversely project sponsors usually do not wish to participate in any cost that is not essential for completion of the project.

This issue is addressed by FHWA in its Rules on Mitigation of Environmental Impacts to Privately Owned Wetlands.¹⁷⁴ While the FHWA policy allows the use of Federal-aid highway funds for the acquisition of replacement lands,¹⁷⁵ the priority in the use of these funds is to use land within the highway right-of-way.¹⁷⁶ When it is necessary to acquire replacement lands, the lands can be used for creation of new wetlands or enhancement of existing wetlands.¹⁷⁷ The FHWA decisions are made on a case by case basis for replacement acquisitions outside project right-of-way¹⁷⁸ and must be reasonable and equivalent.¹⁷⁹ Another related area where this issue has arisen is under construction of sewage treatment facilities under Title II of the Clean Water Act.¹⁸⁰ Under this Act, EPA can make grants available for the "construction of publicly owned treatment works."¹⁸¹ In one case involving the acquisition of replacement wetlands required by construction of sewage treatment facilities in regulatory wetlands, EPA ruled that it could not participate in this cost and was affirmed.¹⁸² EPA focused on the statutory definition of "treatment works" and concluded that mitigation lands did not contribute to the treatment of waste. The Court agreed with this conclusion and with EPA's position on the meaning of "construction" which is defined in the Clean Water Act as including the normal incidents of construction and "... other necessary actions. . . ."¹⁸³ The Court construed this language as including only those activities which constitute an integral part of the treatment process and concluded that mitigation wetlands did not meet this test.¹⁸⁴ Most states have no statute or case on point, but have simply concluded that project costs can be allocated to mitigation when they are required.¹⁸⁵ Five states have adopted specific authority for use of transportation funds on historic, including archaeological, mitigation.¹⁸⁶ In California, the constitution explicitly allows the use of motor vehicle tax revenues for the mitigation of environmental effects of transportation projects.¹⁸⁷ The California Attorney General has concluded that this authority allows the appropriation of highway funds for loans and loan guarantees for small businesses affected by the Century Freeway Project.¹⁸⁸

Use of Eminent Domain

The use of eminent domain has been addressed in only three reported decisions. One, involving the acquisition of land for deposit of dredged

spoil and for environmental mitigation, was associated with the construction of a ferry terminal.¹⁸⁹ The property owner claimed that environmental mitigation was not an authorized public purpose and could not support the use of condemnation. The Court placed great emphasis on the number of government permits and approvals the project had to get. Included in the list was an Army Corps of Engineers permit, presumably under Sec. 404 of the Clean Water Act.¹⁹⁰ The Court noted:

Several of these agencies required as a condition of their approval that environmental mitigation measures be taken. Although such mitigation measures could in some cases involve actions other than the condemnation of property, the ability to mitigate the adverse environmental effects in this manner gives respondent a power and flexibility which do much to effectuate the specific powers referred to in Streets & Highways Code Section 27166.¹⁹¹

This rather broad view of the permitting agencies' powers and the condemnor's authority may have been justified by the general language of the Army Corps of Engineers permit regulations. The Corps General Regulation Policies at that time under the discussion of fish and wildlife impacts simply stated:

The applicant will be urged to modify his proposal to eliminate or mitigate any damage to such resources, and in appropriate cases the permit may be conditioned to accomplish this purpose.¹⁹²

The second case involved acquisition of a permanent servitude of right-of-way for the excavation of an access canal to provide flotation for heavy equipment and material used in the construction of Interstate 10.¹⁹³ The servitude was to be permanent and the canal was to stay open to the public to satisfy the Louisiana Wildlife and Fisheries Commission which wanted to promote hunting and fishing. It was clear that this access canal would be used for highway repair only in case of major damage¹⁹⁴ and its real purpose was public recreation. The Court commented:

Because its business is building, maintaining and repairing highways and bridges, there is no reason why the Department should expropriate property for other purposes.¹⁹⁵

The Court held that since the primary purpose was access for public recreation and not for highway purposes, the taking of a permanent servitude was unauthorized. There was no mention of any statutory power given to the Wildlife & Fisheries Commission requiring their permission or signoff on highway projects. On rehearing, the Court found there was no showing of bad faith on the part of the highway department and that its role as a reviewing court was limited in assessing the "necessity" of a taking, but it still found that a permanent servitude for recreation was unauthorized.¹⁹⁶ In a concurring opinion on rehearing, one Justice stated:

In today's society, highway purposes of course may include reasonable adjuncts for public convenience and pleasure in the use of highways, such as roadside parks and rest stations. If, in addition, the legislature finds that a valid public purpose is served by permitting the highway agency to

expropriate off-highway property for both present highway construction and also future non-highway public purposes (such as the present recreational canal), it seems to me that it may do so. However, the present statute does not authorize the highway department to expropriate for other than highway purposes.¹⁹⁷

The third case involved a taking of lands by the Pennsylvania DOT "... to replace wetlands adversely affected."¹⁹⁸ The Court reviewed the argument challenging Pennsylvania DOT's authority because other State agencies had exclusive authority to take wetlands for environmental or agricultural purposes and rejected it.¹⁹⁹ The Court construed Pennsylvania's DOT statutory authority to acquire property "... required for the purpose of mitigating adverse effects on other land adversely affected by its proximity to such highway or other transportation facility ..."²⁰⁰ as allowing for replacement of wetlands.²⁰¹ The Court adopted a dictionary definition of mitigation as "abatement, alleviation or moderation" and concluded that wetland replacement fit the definition.²⁰² The Court then went on to hold that Pennsylvania DOT could acquire the property under its general authority to condemn property for "all transportation purposes" and concluded as follows:

We hold that because the Department must mitigate wetlands damaged in order to receive federal funds necessary for the construction of the Blue Route, a nexus exists between the Department's condemnation of the Gasters' property and the Blue Route sufficient to bring that condemnation within the "all transportation purposes" requirement of Section 2003(e)(1).²⁰³

New Hampshire has cited the *Gaster* decision as good authority for the use of eminent domain to acquire wetland replacement areas "... adjacent to or near the right-of-way ...,"²⁰⁴ but that other mitigation acquisitions can only be made on the open market.²⁰⁵ The Oklahoma Attorney General has concluded that although Oklahoma DOT is authorized to cooperate with the Federal Government, it lacks the authority to acquire property outside the right-of-way to mitigate adverse social, economic, or environmental impacts caused by a highway project.²⁰⁶ North Dakota specifically forbids the use of eminent domain for wetland protection purposes.²⁰⁷ Alabama,²⁰⁸ Indiana,²⁰⁹ and Wisconsin²¹⁰ have general authority to take action required by Federal law. The Mississippi State Highway Department can acquire wetlands through eminent domain only to the extent required by FHWA.²¹¹ Illinois DOT can condemn lands necessary to compensate for public lands needed for highway projects.²¹² New York DOT can condemn replacement land whenever a publicly owned park, recreation area, wildlife and waterfowl refuge, wetland, or historic site is acquired for State highway or transportation purposes.²¹³

Transfer of Mitigation Properties

The last issue common to the dilemma of acquisition of mitigation lands, and occasionally the most perplexing to State transportation agencies, pertains to management and long-term care of the acquired property. These agencies are not usually equipped to protect a natural or historic

area; and, where possible, they transfer it to the appropriate natural or cultural resource agency. Where wetlands are concerned, FHWA allows such a transfer to "an appropriate public agency"²¹⁴ and Mississippi cannot acquire these sites unless a government agency agrees to accept title without compensation.²¹⁵ Six states have addressed this problem by enabling transfers to the appropriate State resource agency.²¹⁶ New York can transfer replacement lands to the owners of the public lands taken.²¹⁷ New Hampshire²¹⁸ and California²¹⁹ can transfer substitute park lands to the appropriate State or local agency. Colorado can sell scenic areas to local governments if they agree to preserve their beauty.²²⁰ Iowa DOT can transfer mitigation lands to county conservation boards if the land is in an unincorporated area.²²¹ Michigan DOT can only transfer mitigation lands when it is required to do so as a condition of a required construction permit.²²²

SUMMARY

Because of the format selected for this analysis, some improperly segmented conclusions may be drawn. For example, even though the protection of threatened and endangered species and avoidance of harm to nature preserves are analyzed separately here, they are often assessed for project mitigation simultaneously. The presence of endangered species of plants is frequently a primary indicator leading to the dedication of a nature preserve. In a similar vein, wetlands often occur in floodplains, they have been shown to play an important role in flood control, they preserve habitat for endangered species, and they can be the predominant land use in wildlife refuges. There are some states which have recognized this and have combined all project mitigation requirements in one statute. Maine has one permit program which addresses protection of all aquatic systems and their adjacent terrestrial systems.²²³ Pennsylvania requires transportation project mitigation of adverse environmental effects on 23 listed factors including noise, wildlife, parks, aesthetics, and historic landmarks.²²⁴ Vermont has a similarly expansive list of protected resources in its permitting statute²²⁵ and requires State agencies to adopt plans that are consistent with local regional plans and specific, listed environmental goals.²²⁶ A similar coordinated and comprehensive planning process for all State agencies is required in Oregon.²²⁷

Another misconception which could arise from the method of analysis employed here is the conclusion that without statutory mitigation programs, protection will not occur. Even though many States have no statutory mitigation schemes, they all must follow Federal programs for funding eligibility and they may also have negotiated uncodified interagency agreements, thereby avoiding the need for statutory requirements. In short, 50 different frameworks have not produced 50 different results. The analysis presented here is not intended to highlight the differences. The purpose instead has been to point out those instances where the State transportation agencies' authorities have been delineated.

While the proliferation of statutory protections over the past 20 years would indicate growing sensitivity and a need to protect, the specificity

in these programs and the attempts to standardize them are evidence of the urge to limit them and make them predictable. The need to revise and refocus transportation planning and projects has intensified. At the same time, the mandate to protect natural and cultural resources from unnecessary adverse effects has grown. The tension between these two societal forces will continue as will the tendency for transportation agencies to be protective of their mission and conservative in their approach to mitigation. As this paper has indicated, the tension can be significantly defined and even relaxed by the adoption of State-specific rules of law.

APPENDIX

Much of the research leading to the discovery of the statutes was done by volunteer contributors. Grateful acknowledgment is extended to these individuals for their invaluable assistance, by responding to a questionnaire with citations to relevant authorities and, in some cases, copies of statutes, regulations, memos, and other correspondence:

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¹ Krulitz, "Federal Legal Background in *Losses of Fish and Wildlife Habitat, for Mitigation*," *The Mitigation Symposium: A National Workshop on Mitigat-*

ing Losses of Fish and Wildlife Habitat, U.S. Forest Service, USDA (1979) pp. 19, 23.

- ² 16 U.S.C. § 661-666c.
- ³ 16 U.S.C. § 662, as amended Pub.L. No. 85-624, 72 Stat. 564.
- ⁴ 112 Cong. Rec. 14074 (1966).
- ⁵ *Id.*
- ⁶ *Id.*
- ⁷ Pub.L. No. 89-574, 80 Stat. 771.
- ⁸ S. REP. No. 1410, 89th Cong., 2d Sess., at 38.
- ⁹ Now codified at 49 U.S.C. 303. For an excellent history of the legislative process described here, see Gray, "Section 4(f) of the Department of Transportation Act," 32 Mo. L. Rev. 327 (1973).
- ¹⁰ 46 Fed. Reg. 7644 (Jan. 23, 1981).
- ¹¹ See notes 2 and 3 and discussion, *supra*.
- ¹² 40 C.F.R. 1508.20.
- ¹³ Note 10, *supra*, at 7657. When the mitigation policy was first proposed, the definition was adopted, but not the sequencing; 45 Fed. Reg. 59486, 89 (Sept. 9, 1980).
- ¹⁴ Note 10, *supra*, at 7657-58.
- ¹⁵ See Kussy, "Wetland and Floodplain Protection and the Federal-Aid Highway Program," 13 ENVTL. L. 160,218 (1982).
- ¹⁶ Exec. Order No. 11,988, 42 Fed. Reg. 26,951 (1977).
- ¹⁷ 44 C.F.R. 60.
- ¹⁸ KAN. STAT. ANN. § 12-735(c),(d); ILL. REV. STAT. ch. 19, para. 65g, 70; IOWA CODE ANN. § 455B.276; MONT. CODE ANN. § 76-5-405, 406; N.J. STAT. ANN. § 58:16 A-55, 55.2; N.C. GEN. STAT. § 143-215.54; 82 OKLA. STAT. § 1612; R.I. GEN. LAWS § 2-1-20; 10 VT. STAT. ANN. § 6086(a)(1)(D); WASH. REV. CODE ANN. § 86.16.025.
- ¹⁹ CAL. WATER CODE § 8410,8410.5; COLO. REV. STAT. § 24-65.1-202(2)(a)(I); MINN. STAT. § 104.03; N.H. REV. STAT. ANN. § 483.12 for certain protected river stretches, application of municipal ordinances in other areas based on opinion of Worthen Muzzey, N.H. DOT; N.D. GEN. CODE § 61-16.2-06, 08, 12; OHIO REV. CODE § 1521.01.13; 32 PA. STAT. 679.302 (a)(3),(e) requires compliance with municipal standards to the maximum extent feasible.
- ²⁰ ME. REV. STAT. ANN. § 480-C,D(6),T.
- ²¹ MD. ENVTL. CODE ANN. § 4-205(b); VA. CODE § 10.1-603,603.5, 564.
- ²² ARIZ. REV. STAT. § 48-3613B.1; GA. CODE ANN. § 43-4212(5); KY. REV. STAT. § 151.250(1).
- ²³ 33 U.S.C. § 1344.
- ²⁴ The Corps defines wetlands at 33 C.F.R. 323.2 as "those areas that are inundated or saturated by surface or ground-

water at a frequency and duration sufficient to support a prevalence of vegetation adapted for life in saturated soil conditions." The definition of wetland is now undergoing a joint rulemaking process by three Federal agencies (see 56 Fed. Reg. 40446 (Aug. 14, 1991)).

²⁵ EPA's regulations state guidelines under 33 U.S.C. § 1344(b)(1) for the Corps to follow at 40 C.F.R. Part 230.

²⁶ 55 Fed. Reg. 5510 (Feb. 15, 1990).

²⁷ See notes 10-14 and discussion, *supra*.

²⁸ 40 C.F.R. 230.10(a)(1). Before this can be shown, an applicant must show, essentially, that there never was an opportunity to locate the project outside of a wetland *Bersani v. USEPA*, 850 F.2d 36 (2d Cir. 1988).

²⁹ Exec. Order No. 11,990; 42 Fed. Reg. 26,961 (1977).

³⁰ 23 C.F.R. 777, as amended 56 Fed. Reg. 14195 (April 8, 1991).

³¹ 23 C.F.R. 777.9.

³² CONN. GEN. STAT. ANN. § 22a-28 *et seq.* (includes list of appropriate uses); DEL. CODE ANN. § 7-6601 *et seq.*; MINN. STAT. § 105.42; N.H. REV. STAT. ANN. § 482-A:3.

³³ N.D. GEN. CODE § 61-32-03; WYO STAT. § 35-11-308, *et seq.*

³⁴ MISS. CODE § 49-27-1 *et seq.* favoring preservation in natural state unless higher public interest shown.

³⁵ R.I. GEN. LAWS § 2-1-15, *et seq.* requiring use consistent with public policy.

³⁶ CAL. FISH & GAME CODE § 1601-1606.

³⁷ ORE. REV. STAT. § § 196.682, 196.825.

³⁸ 38 ME. REV. STAT. ANN. § 480-D.

³⁹ MASS. GEN. LAWS ANN. ch. 130, § 105; ch. 131, § 40-40A.

⁴⁰ 71 PA. STAT. § 512(b)(2).

⁴¹ FLA. STAT. § 403.918.

⁴² VA. CODE § 62.1-13.5.

⁴³ S.C. CODE LAWS § 48-39-150.

⁴⁴ MD. NAT. RES. CODE ANN. § 8-1201 *et seq.* includes buffer zone up to 100 ft from edge of wetland and banking.

⁴⁵ MICH. COMP. LAWS ANN. § 281.709.

⁴⁶ N.J. STAT. ANN. § 13:9B-1 *et seq.* includes banking with transitional zones protected.

⁴⁷ 10 VT. STAT. ANN. § 905(7-9) including permanent protection.

⁴⁸ ILL. REV. STAT. ch. 96 ½, par. 9701-1 *et seq.*

⁴⁹ Pub.L. No. 97-98; 7 U.S.C. 4201-4209.

⁵⁰ 7 U.S.C. 4202(b).

⁵¹ *Id.*

⁵² 7 U.S.C. 4202(a).

⁵³ 7 C.F.R. Part 658.

- ³⁴ 7 C.F.R. 658.5.
³⁵ 7 C.F.R. 658.4(c)(4).
³⁶ 7 U.S.C. 4209.
³⁷ *Eagle Foundation v. Dole*, 813 F. 2d 798 (7th Cir. 1987). For further discussion of Sec. 4(f), see notes 4-9 and discussion, *supra*, and notes.
³⁸ WIS. STAT. ANN. § 91.03.
³⁹ IOWA CODE ANN. § 306.50-306.54.
⁴⁰ MINN. STAT. § 17.80 (80 acres); KY. REV. STAT. § 262.875 (50 acres).
⁴¹ ILL. REV. STAT. ch. 5, par. 1301-1308. State agencies in Illinois are not barred from condemning lands in legally created agricultural conservation areas; Dept. of Transportation v. Keller, 127 Ill. App. 3d 976, 469 N.E. 2d 262 (5th Dist. 1984).
⁴² CAL. GOV'T CODE § 51290, *et seq.*
⁴³ 71 PA. STAT. § 106. This statute excludes forestry lands.
⁴⁴ 10 VT. STAT. ANN. § 6086(a)(9)(B) and (C). This statute includes forestry lands.
⁴⁵ N.J. STAT. ANN. § 4:10-25.
⁴⁶ VA. CODE § 15.1-1512.
⁴⁷ 16 U.S.C. 1531 *et seq.*
⁴⁸ 16 U.S.C. 1536(a)(2).
⁴⁹ Consultation procedures are described at 50 C.F.R. Part 402.
⁵⁰ 16 U.S.C. 1536(b)(3)(A).
⁵¹ *Id.* The NMFS or F&WS makes recommendations on how to avoid or minimize adverse effects during consultation (50 C.F.R. 402.10(c)) and puts these recommendations in its biological opinion if the Federal agency persists in following an action that jeopardizes a listed species or its critical habitat (50 C.F.R. 402.14(h)(3)). Additional recommendations on measures the Federal agency can take to reduce or eliminate impacts may be inserted in a biological opinion, but they "are not intended to carry any binding legal effect." (50 CFR 402.14(j)).
⁵² 16 U.S.C. 1536(e)(1).
⁵³ 16 U.S.C. 1536(h)(1). The mitigation measures may include, but are not limited to, live propagation, transplantation, and habitat acquisition and improvement. The procedures for obtaining an exemption are detailed at 50 C.F.R. Part 450-453.
⁵⁴ *E.g.*, KAN. STAT. ANN. § 32-962(c); VA. CODE § 29.1-570 applies to animals.
⁵⁵ N.H. REV. STAT. ANN. § 217-A:7—recommended mitigation measures if local impacts found; VA. CODE § 3.1-1022 permit required to take endangered plants for progressive development.
⁵⁶ TENN. CODE ANN. § 70-8-308.
⁵⁷ N.J. STAT. ANN. § 13:9B-9(b)(4).
⁵⁸ S.C. CODE LAWS § 48-39-150(A)(6).
⁵⁹ NEB. REV. STAT. § 37-435.
⁶⁰ ILL. REV. STAT. ch. 8, par. 341(b)—once consultation completed, no enforceable duty to mitigate.
⁶¹ CAL. FISH & GAME CODE § 2051 *et seq.*—projects can jeopardize if there are no feasible and prudent alternatives and mitigation and enhancement measures are provided.
⁶² 38 ME. REV. STAT. ANN. § 480-D(3)—no unreasonable harm to significant mapped wildlife habitat allowing for mitigation.
⁶³ ORE. REV. STAT. § 564.155 (plants only).
⁶⁴ 10 VT. STAT. ANN. § 6086(a)(8)(A).
⁶⁵ 49 U.S.C. 303.
⁶⁶ Section 4(f) also protects historic sites whether publicly or privately owned. These protections are discussed in the following section of this paper.
⁶⁷ The pertinent rule will be codified at 23 C.F.R. 771.135(p). It was published at 56 Fed. Reg. 13269, 13279 (April 1, 1991).
⁶⁸ *Id.* These proximity impacts are referred to as "constructive use" and can arise from noise, obstructing views, restricted access, vibration, and habitat degradation. A finding of "constructive use" is based on site-specific considerations.
⁶⁹ 23 C.F.R. 771.135(a)(1). In 1987 FHWA circulated a comprehensive document titled "Section 4(f) Policy Paper" which describes all of the policies and procedures governing compliance with Sec. 4(f).
⁷⁰ 71 PA. STAT. § 512(a)(15) includes historic sites.
⁷¹ TEX. [Parks & Wildlife] CODE ANN. § 26.001 (Vernon)—includes historic sites.
⁷² CAL. PUB. RES. CODE § 5400 *et seq.*
⁷³ MINN. STAT. § 161.202.
⁷⁴ N.H. REV. STAT. ANN. 4:30-A,B.
⁷⁵ 16 U.S.C. § 470, *et seq.*
⁷⁶ See preceding section on the general principles applicable to Sec. 4(f).
⁷⁷ 16 U.S.C. § 470f.
⁷⁸ The regulations which implement Sec. 106 can be found at 36 C.F.R. Part 800. These regulations establish a step-by-step coordination process with each State Historic Preservation Office (SHPO).
⁷⁹ 36 C.F.R. 60.4.
⁸⁰ Adverse effects are defined at 36 C.F.R. 800.9(b)(1)-(5) as those actions which damage, isolate, and violate the historical setting or result in neglect of a listed or eligible site.
⁸¹ If a site is valuable only for the data

- it contains and that data can be and is retrieved by professional researchers, an otherwise adverse effect is avoided, 36 C.F.R. 800.9.
⁸² 36 C.F.R. 800.5(e).
⁸³ 36 C.F.R. § 800.5(e)(4).
⁸⁴ 36 C.F.R. § 800.5(e)(6).
⁸⁵ Note 87, *supra*, defines "use"; 23 C.F.R. 771.135 prescribes the standards for implementing Sec. 4(f).
⁸⁶ 23 C.F.R. 771.135(g)(2). This apparently special treatment of archaeological sites was approved in *Town of Belmont v. Dole*, 766 F. 2d 28 (1st Cir. 1985), *cert. den.* 474 U.S. 1055, 106 S. Ct. 792, 88 L. Ed. 2d 770 (1986).
⁸⁷ FLA. STAT. § 267.061(2).
⁸⁸ HAW. REV. STAT. ch. 6E-8, 6E-43.
⁸⁹ ILL. REV. STAT. ch. 127, par. 133c 21-25.
⁹⁰ KAN. STAT. ANN. § 75-2724 mitigation approved by Governor.
⁹¹ MASS. GEN. LAWS ANN. ch. 9, § 27C.
⁹² N.M. STAT. ANN. § 18-18-7.
⁹³ See note 90, *supra*.
⁹⁴ See note 91, *supra*.
⁹⁵ MONT. CODE ANN. § 22-3-424, 433.
⁹⁶ IND. CODE § 14-3-3.4-9.
⁹⁷ KY. REV. STAT. § 164.720 limited to archaeological sites.
⁹⁸ MINN. STAT. § 138.40 archaeological salvage, § 138.60 historic sites.
⁹⁹ N.D. GEN. CODE § 55-10-8 identify and implement reasonable alternatives to demolition before permission granted.
¹⁰⁰ 10 VT. STAT. ANN. § 6086(a)(8)—no undue adverse effect on historic sites.
¹⁰¹ W. VA. CODE § 29-1-66.
¹⁰² ALASKA STAT. § 41.35.070.
¹⁰³ ARIZ. REV. STAT. § 41-863, 864.
¹⁰⁴ CAL. PUB. RES. CODE § 5024.6(j).
¹⁰⁵ MO. REV. STAT. § 194.406-410 limited to unmarked human burial sites.
¹⁰⁶ MISS. CODE § 39-7-22—no taking if resource unique and avoidance required if reasonable, if salvage not possible.
¹⁰⁷ R.I. GEN. LAWS § 42-45.1-7.
¹⁰⁸ TENN. CODE ANN. § 4-11-111(f)—agencies other than DOT must seek advice on avoidance alternatives; § 11-6-107(b) provides cooperation to prevent destruction of archaeological sites or professional salvage.
¹⁰⁹ UTAH CODE ANN. § 63-18-37.
¹¹⁰ WIS. STAT. ANN. § 44-40 tracks NHPA procedures.
¹¹¹ ARK. CODE ANN. § 13-6-210 (1987).
¹¹² NEB. REV. STAT. § 39-1363 authority limited to road projects.

- ¹¹³ COLO. REV. STAT. § 24-65.1-202(3).
¹¹⁴ GA. CODE ANN. § 23-2607a.
¹¹⁵ LA. REV. STAT. § 48:275.
¹¹⁶ This program is described in an August 1990 FHWA publication entitled *Highway Traffic Noise in the United States Problem and Response*. The authority for this program is 23 U.S.C. 109(h)(i). The rules are codified at 23 C.F.R. Part 772 and explained in Vol. 7, ch. 7, Sec. 3 of the Federal-Aid Highway Program Manual (FHPM).
¹¹⁷ Par. 7(g) of FHPM 7-7-3.
¹¹⁸ Par. 8(c) of FHPM 7-7-3.
¹¹⁹ CAL. STS. & HIGH. CODE § 215.5.216.
¹²⁰ FLA. STAT. § 335.17.
¹²¹ Letter from Lawrence Foote, Director of Environmental Services, Minn. DOT, dated May 22, 1990.
¹²² N.Y. HIGH LAW, § 10, par. 41. This provision was added after the New York Attorney General concluded the authority was lacking in 1979 *Op. Atty. Gen.* 72, 6/25/79.
¹²³ 71 PA. STAT. § 512(b).
¹²⁴ *Id.*
¹²⁵ Discussion of these programs is beyond the scope of this paper.
¹²⁶ This property interest has been justified as follows:
 The concept of the scenic easement springs from the idea that there is enjoyment and recreation for the travelling public in viewing a relatively unspoiled natural landscape, and involves the judgement that in preserving existing scenic beauty as inexpensively as possible a line can reasonably be drawn between existing, or agricultural ... uses, and uses which have not yet commenced but involve more jarring human interference with a state of nature. . . . *Kamrowski v. State*, 31 Wis. 2d 256, 253; 142 N.W.2d 793, 796 (1966).
¹²⁷ Olson, *Progress and Problems in Wisconsin's Scenic and Conservation Easement Program*, WIS. L. REV. 352, 360 (1965). For additional discussion of related property rights and remedies to protect them see Netherton, "Environmental Conservation and Historic Preservation Through Recorded Land Use Agreements," 14 *Real Property, Probate and Trust Journal* 540 (1979); White, "Scenic Easements," 8 IDAHO L. REV. 131 (1971); and Williams, "Legal Techniques to Protect and Promote Aesthetics Along Transportation Corridors," 17 BUFFALO L. REV. 701 (1968).
¹²⁸ COLO. REV. STAT. § 43-1-210(2).
¹²⁹ 23 ME. REV. STAT. ANN. § 651. Acquisitions must be within 1,000 ft of the right-of-way *Finks v. Maine State Highway Commission*, 328 A. 2d 791 (Me. 1974).

¹⁵⁰ MICH. CODE LAWS ANN. § 213.361.
¹⁵¹ GA. CODE ANN. § 95A601.
¹⁵² ALA. CODE § 23-1-222.
¹⁵³ NEB. REV. STAT. § 39-1320(f).
¹⁵⁴ R.I. GEN. LAWS § 37-6.2-2.
¹⁵⁵ WASH. REV. CODE ANN. § 47.12.250.
¹⁵⁶ N.C. GEN. STAT. § 136-123—no use of eminent domain allowed.
¹⁵⁷ ALASKA STAT. § § 19.05.040(7), 19.22.020.
¹⁵⁸ IDAHO CODE § 40-313(3).
¹⁵⁹ CAL. STS. & HIGH. CODE § 104 includes acquisition for parks and trees.
¹⁶⁰ FLA. STAT. § § 334.044(24), 339.24—includes natural roadside growth.
¹⁶¹ ILL. REV. STAT. ch. 121, par. 4-201.15 scenic easements and 2-220 for tree planting. Enhancement approved in Dept. of Public Works & Buildings v. Keller, 61 Ill. 2d 320; 335 NE 2d 443 (1975).
¹⁶² ANN. CODE MD. TRANSP. CODE ANN. § § 8-313(a)(2)(d) and 8-314.
¹⁶³ MISS. CODE ANN. § 65-1-51 limited to adjacent strips.
¹⁶⁴ NEV. REV. STAT. § 408.487(f).
¹⁶⁵ N.J. STAT. ANN. § 27-7-22.4 limited to adjacent land.
¹⁶⁶ DEL. CODE ANN. ch. 7, § 132(h).
¹⁶⁷ IND. CODE § 8-23-7-2.
¹⁶⁸ VA. CODE § 33.1-66—no use of eminent domain allowed.
¹⁶⁹ VA. CODE § 33.1-47.1.
¹⁷⁰ 71 PA. STAT. § 512(b).
¹⁷¹ 10 VT. STAT. ANN. § 6086(a)(8).
¹⁷² ILL. REV. STAT. ch. 105, par. 701 *et seq.*; KAN. STAT. ANN. § 74-6601 *et seq.*; KY. REV. STAT. § 146.410, *et seq.*; and N.D. GEN. CODE § 55-11-11.
¹⁷³ "The question of who pays for mitigation has had a strong effect in determining whether there will be mitigation" (emphasis in original). See Krulitz, note 1, *supra*.
¹⁷⁴ 23 C.F.R. Part 777. See notes 30 and 31 and discussion, *supra*.
¹⁷⁵ 23 C.F.R. 777.5(b).
¹⁷⁶ 23 C.F.R. 777.9(a).
¹⁷⁷ 23 C.F.R. 777.9(b)(2).
¹⁷⁸ 23 C.F.R. 777.9(b).
¹⁷⁹ 23 C.F.R. 777.11(f), 56 Fed. Reg., 14195, 14196 (April 8, 1991).
¹⁸⁰ 33 U.S.C. § § 1281-1299.
¹⁸¹ 33 U.S.C. § 1281(g)(1).
¹⁸² Sacramento Regional County Sanitation District v. Reilly, 905 F. 2d 1262, 31 ERC 1473 (9th Cir. 1990).
¹⁸³ 33 U.S.C. § 1292(1).
¹⁸⁴ The Court concluded that wetlands "... are intended to provide a haven for wildlife free from any residue of wastewa-

ter treatment" and as such their function "... is directly at odds with the purposes for which the lands falling within Section 1292 must be used." (31 ERC at 1480).

¹⁸⁵ In a letter dated May 22, 1990 Lawrence Foote, Director of Environmental Services for Minnesota DOT concluded as follows: "Funding from the sources of revenue available to Mn/DOT is available to mitigate environmental impacts. The funds available to Mn/DOT are to be expended for 'highway purposes'. Mitigation of impacts to obtain a permit, to obtain legally required municipal approvals, or for other good reasons, is an appropriate highway purpose. This has included extensive noise wall construction, large and small wetland mitigation projects, water access ramps, scenic overlooks, etc."

¹⁸⁶ ARK. CODE ANN. § 13-6-210(c) (1987)—limited to archaeology; NEB. REV. STAT. § 39-1363—to remove and preserve remains; N.H. REV. STAT. ANN. § 227-C:9 (II)—for field investigations; N.C. GEN. STAT. § 136-42.1—for archaeological and paleontological objects; R.I. GEN. LAWS § 42-45.1-7—for investigations.

¹⁸⁷ Cal. Const. art. XIX, § 1(b). All California State agencies are directed to request funds in their annual budgets for protection of the environment CAL. PUB. RES. CODE § 21104.

¹⁸⁸ 64 Op. Att'y. Gen. Cal. 218 (1981). The opinion limits the concept of mitigation to "... a deficiency caused by the project ... and ... not ... to assist businesses in the Freeway corridor in order to remedy pre-existing conditions or to produce a commercial level of activity greater than existed prior to the Freeway's development."

¹⁸⁹ Golden Gate Bridge and Highway Transportation District v. Muzzi, 83 Cal. App. 3d 707, 148 Cal. Rptr. 197 (1st Dist. 1978).

¹⁹⁰ 33 U.S.C. 1344.

¹⁹¹ 148 Cal. Rptr. at 199-200.

¹⁹² 33 C.F.R. 320.4(c), 42 Fed. Reg., 37122, 37137 (July 19, 1977).

¹⁹³ State Dept. of Highways v. Jeanerette Lumber & Shingle Co. Ltd., 350 So. 2d 847 (1977).

¹⁹⁴ "[T]he Department argues that repairs would be necessary in the event of damages to the highway trestles or bridge by an atomic attack in time of war." 350 So. 2d at 853.

¹⁹⁵ 350 So. 2d at 855.

¹⁹⁶ 350 So. 2d at 863-864.

¹⁹⁷ 350 So. 2d at 865.

¹⁹⁸ *Appeal of Gaster*, 124 Pa. Commw., 314, 556 A. 2d 473 (1989); *alloc. den.* 524 Pa. 633, 574A. 2d 73 (1989).

¹⁹⁹ 556 A. 2d at 475.

²⁰⁰ 71 PA. STAT. § 513(e)(2)(ii).

²⁰¹ 556 A. 2d at 476.

²⁰² *Id.*

²⁰³ 556 A. 2d at 477.

²⁰⁴ Letter dated January 3, 1990, from Attorney General's office to New Hampshire DOT citing authority in N.H. REV. STAT. ANN. § § 230:14 and 230:45.

²⁰⁵ *Id.* Citing N.H. REV. STAT. ANN. § 228:31.

²⁰⁶ 13 Op. Att'y. Gen. Okla. 265 (1981).

²⁰⁷ N.D. GEN. CODE § 61-32-01(3).

²⁰⁸ ALA. CODE § 18-1A-5.

²⁰⁹ IND. CODE § 8-23-7-2.

²¹⁰ WIS. STAT. ANN. § 85.04.

²¹¹ MISS. CODE § 65-1-51—coastal wetland replacement is limited by State law.

²¹² ILL. REV. STAT. ch. 121, par. 4-509.

²¹³ N.Y. HIGH. LAWS § 10, par. 43.

²¹⁴ 23 C.F.R. 777.11(e)—FHWA does not allow its funds to be used to maintain or manage wetlands 23 C.F.R. 777.11(g).

²¹⁵ MISS. CODE § 65-1-51.

²¹⁶ ALASKA STAT. § 19.05.070(b)(1); ILL. REV. STAT. ch. 127, par. 49.12; MINN. STAT.

§ 15.16; 71 PA. STAT. § 181; R.I. GEN. LAWS § § 37-7-6, 37-7-8; 10 VT. STAT. ANN. § 6302.

²¹⁷ N.Y. HIGH. LAWS § 10, par. 43.

²¹⁸ N.H. REV. STAT. ANN. § 4:30-A for towns, and § 4:30-B for State parks.

²¹⁹ Cal. Const. Art. XIX, § 8, § 9; CAL. PUB. RES. CODE § 5400 *et seq.* Caltrans can offer to sell excess lands of notable environmental value to State or local park or recreation agencies before disposal in the normal manner. CAL. STS. & HIGH. CODE § 118.6.

²²⁰ COLO. REV. STAT. § 43-1-210.

²²¹ IOWA CODE ANN. § 306.42(2).

²²² Letter from Patrick Isom, Assistant Attorney General, dated September 4, 1990.

²²³ 23 ME. REV. STAT. ANN. § 480-A *et seq.* includes rivers, streams, great ponds, fragile mountain areas, fresh water and coastal wetlands, significant wildlife habitat, and coastal sand dunes.

²²⁴ 71 PA. STAT. § 512(b).

²²⁵ 10 VT. STAT. ANN. § 6086.

²²⁶ 3 VT. STAT. ANN. § 4020; 24 VT. STAT. ANN. § 4302.

²²⁷ OR. REV. STAT. § § 197.180, 197.230—State agency plans must be certified by the Land Conservation and Development Commission.

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