

State Wildlife Action Plans and Utilities: New Conservation Opportunities for America's Wildlife



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Powerlines along a right-of-way.

Courtesy of Edison Electric Institute's Vegetation Management Task Force

The state threatened American lotus flower (*Nelumbo lutea*) at DTE Energy's Monroe Power Plant in Michigan.

Courtesy of DTE Energy

Osprey

Courtesy of Tim Daniel, Ohio Department of Natural Resources

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Wildlife Habitat Council

TABLE OF ACRONYMS AND ABBREVIATIONS

General / Federal	Michigan
BMP - Best Management Practices	LBWL - Lansing Board of Water and Light
FERC - Federal Energy Regulatory Commission	MDEQ - Michigan Department of Environmental Quality
GIS - Geographic Information System	MDNR - Michigan Department of Natural Resources
HCP - Habitat Conservation Plan	MNFI - Michigan Natural Features Inventory
ROW - Right-of-way	MPSC - Michigan Public Service Commission
SWG - State Wildlife Grants	NREPA - Natural Resources and Environmental Protection Act
TNC - The Nature Conservancy	
U.S. EPA - United States Environmental Protection Agency	
U.S. FWS - U.S. Fish and Wildlife Service	
WHC - Wildlife Habitat Council	
New Jersey	Washington
BPU - New Jersey Board of Public Utilities	CTED - Washington Department of Community, Trade, and Economic Development
CAFRA - Coastal Area Facility Review Act	DNR - Washington Department of Natural Resources
CUA - County Utility Authority	Ecology - Washington Department of Ecology
DEP - New Jersey Department of Environmental Conservation	EFSEC - Energy Facility Site Evaluation Council
DFW - Division of Fish and Wildlife	GMA - Growth Management Act
HAD - Highlands Applicability Determination	PUD - Public Utility District
HPAA - Highlands Preservation Area Approval	SEPA - State Environmental Protection Act
JCPL - Jersey Central Power and Light	SMP - Shoreline Master Program
MUA - Municipal Utility Authority	UTC - Utility and Transportation Commission
NRI - Natural Resource Inventory	WDFW - Washington Department Fish and Wildlife
OSG - Office of Smart Growth	WRIA - Watershed Resources Inventory Areas
PA - Planning Area	
PSE&G - Public Services Enterprise Group	

PREFACE

All states and territories have completed state wildlife action plans and are implementing them. These plans provide a strategic blueprint to guide wildlife conservation efforts. Specifically, the plans are designed to protect each state's wildlife species before they become threatened or endangered. In developing these plans, all states evaluated existing management efforts and scientific data to determine needed priorities for conservation. State wildlife agencies worked closely with stakeholders and the public to develop these priorities and establish conservation goals. As a result, state wildlife action plans include actions that can and should be implemented by various sectors, not only state agencies.

Utilities are one sector that can play a significant role in wildlife conservation. They have a remarkable ability to take advantage of these plans. This publication examines how utilities in several states with different regulatory mechanisms and differing wildlife issues can use these wildlife action plans. By choosing diverse states, the report highlights how utilities in other states across the nation can use the plans to improve their management and operations. The report includes ways in which regulatory agencies can use these plans to enhance their policies and management guidelines for utilities.

In the spring of 2007, a group of water, sewer, and electric utility associations met in Washington, D.C. at the Environmental Law Institute to discuss ways in which wildlife action plans may be useful to their members. Several key opportunities for utilities to use wildlife action plans were identified at this meeting. The selected opportunities demonstrate the range of potential uses for state wildlife action plans:

1. *Use species and habitat information in the state wildlife action plans to guide infrastructure decisions, such as siting facilities or expanding operations.* By using wildlife action plans, utilities may be able to better facilitate the permit and approval processes. Conservation actions listed in plans also could help guide any required mitigation and restoration activities and plans.
2. *Develop standard practices for operations and maintenance activities and for land and water management, using information on species of greatest conservation need, habitat designations,*

and conservation actions from wildlife action plans. Utilities can use wildlife action plans to develop standard land management practices such as mowing schedules and techniques, controlling invasive species, and identifying management of important corridors to maintain habitat connectivity.

3. *Incorporate wildlife action plan information into existing utility conservation and stewardship programs to improve or expand these programs.* Utilities also can use these plans to develop new programs and projects that engage employees, the public, state and local conservation agencies, and non-profit groups.

State and local regulatory agencies that have authority over utilities also may find the wildlife action plans valuable in implementing their programs.

1. *Consult wildlife action plans when setting mitigation, permitting, siting, or other requirements for utilities.* Incorporating wildlife action plan conservation actions into regulatory requirements, either by referencing them or by using the information they include, will provide certainty in the regulatory environment.
2. *Post wildlife action plans on websites so that the plans are accessible to utilities, including relevant provisions that may affect planning, construction, or operations and maintenance.* Wildlife action plans may be useful to utilities in completing permit applications and complying with regulations; thus, providing a link to the plan on the agency websites will help increase visibility of the plan as a tool for utilities.
3. *Local governments should use wildlife action plans in revising or developing local land use plans, ordinances, and management policies.* Local ordinances can incorporate wildlife conservation provisions, and these plans and ordinances often influence at least some aspects of utility construction and operations, particularly for municipally-operated utilities.

By taking advantage of these and other opportunities to use state wildlife action plans, utilities and the agencies with which they interact will be enabled to make more effective management choices. This will, in turn, support more strategic voluntary conservation efforts that will benefit wildlife.

INTRODUCTION

The nation's providers of electricity, water, and sewer service can advance the conservation of wildlife habitat thanks to a new conservation tool – state wildlife action plans.

UTILITIES AND WILDLIFE

Wildlife species across the country are under constant pressure from habitat loss and fragmentation, invasive species, and pollution. Successful conservation mechanisms to protect wildlife need to enlist a broad spectrum of interests. Among these are the electric, water, and wastewater utilities – some of which have already taken substantial steps to conserve and restore wildlife.

The decisions of utility companies have a profound effect on the economy, communities, employment, environmental health, and quality of life. Electric utilities generate, transmit, and distribute electricity to millions of public and private customers. Of the over 3,170 electric utilities in the U.S., 239 are investor-owned,¹ 2,009 are publicly-owned, 912 are consumer-owned rural electric cooperatives, and 10 are federally-owned.² Water utilities, which include both private water companies and publicly-owned water systems, manage, treat, and distribute water. The 52,800 water systems across the nation provide approximately 100 gallons of treated potable water per person per day, from rivers, lakes, and wells throughout the country, with about 3,900 systems serving two-thirds of the population.³ Sewage utilities, nearly all publicly-owned and managed, collect, treat, and dispose of waste water from homes and industries; many also manage stormwater.

Utility companies construct, operate, and maintain plants, treatment facilities, generating facilities, waterworks, pipes, conduits, and wires. In addition, utilities own thousands of acres of land in rights-of-way (ROW) corridors across the country⁴ and comparable acreage in water supply lands, facility lands, reservoirs, and other lands. This substantial land base and the extensive nature of these facilities mean that both positive and negative interactions with wildlife habitats can occur. This creates both a challenge and an opportunity.

STATE WILDLIFE ACTION PLANS

In the United States, wildlife conservation historically has been carried out through hunting and fishing regulations focused on game species, through establishment of public wildlife refuges and conservation lands, and through endangered species protection laws. These approaches have left a large portion of wildlife and habitat unaddressed by laws and policies – including many important nongame species and habitat types on public and private lands and waters. To fill this gap, in 2000 Congress created the State Wildlife Grants (SWG) program and a related Wildlife Conservation and Restoration Program.⁵ The SWG program provides funding to each state and territory for projects and initiatives designed to protect wildlife species before they become imperiled, recognizing that it is difficult and expensive to conserve species only after they become endangered.⁶ Equally significant was Congress's new requirement that in order to continue to be eligible for SWG funding, each state and territory fish and wildlife agency would need to develop a comprehensive **state wildlife action plan** by October 2005.⁷

Plans are strategic blueprints that will guide wildlife and habitat conservation.

Fifty-six state and territory fish and wildlife agencies developed these plans (formerly known as Comprehensive Wildlife Conservation Strategies)⁸ in coordination with numerous stakeholders such as state and federal government agencies, businesses, conservation organizations, local governments, scientists, private landowners, and the public. States were required to identify species of greatest conservation need, their associated habitats, threats to these species, and actions needed to ensure their conservation. During development of the plans, state agencies and their partners analyzed scientific information and existing conservation management plans and programs. In addition to identifying species of conservation need, many states also adopted an ecosystem or landscape-level approach. All of the states also were required to address monitoring, education, and research needs.⁹

The plans are strategic blueprints that will guide wildlife and habitat conservation in each state on public and private lands. Conservation strategies and actions are designed to be implemented by state agencies, as well as their partner agencies, organizations, and other stakeholders.

Utilities are identified in many plans as conservation partners because of the significant impact their decisions can have on wildlife habitat. Utilities also own a considerable amount of lands, waters, and infrastructure throughout the country; thus, they have unique opportunities to conserve wildlife habitat at a scale that could benefit many species.

On the other hand, utility impacts vary. For example, electric utilities own extensive ROW corridors that cut through grasslands, forests, wetlands, and many other important habitats. Depending upon their location and management and maintenance practices, ROW can contribute to habitat destruction and fragmentation, two of the primary threats to biodiversity.¹⁰ For example, vegetation management regimes for ROW corridors (as well as for stream corridors used by water supply facilities) often include herbicide applications and mowing of vegetation, which can affect nesting and breeding birds, amphibians, and other wildlife. ROW management activities may also make wildlife habitat more vulnerable to invasion by invasive species.¹¹ The timing and management of water withdrawals by water utilities can result in decreased instream flows that can impact fish spawning and dispersal. Water system infrastructure (channels, dams, and reservoirs) can alter the hydrology and chemistry of aquatic habitat and can block migration corridors, while outflow from sewer and stormwater facilities can affect water quality.

Eight Required Elements of Wildlife Action Plans

1. Information on the distribution and abundance of species of wildlife;
2. Descriptions of extent and condition of habitats and community types essential to conservation of species;
3. Descriptions of problems which may adversely affect species or their habitats, and priority research and survey efforts to assist in conservation and research;
4. Descriptions of conservation actions proposed to conserve the identified species and habitats and priorities for implementation;
5. Proposed plans for monitoring species identified in (1) and their habitats, for monitoring the effectiveness of the conservation actions proposed in (4), and for adapting conservation actions to respond to new information or changing conditions;
6. Descriptions of procedures to review the plan at intervals not to exceed ten years;
7. Plans for coordinating the development, implementation, review, and revision of the plan with federal, state, and local agencies and Indian tribes; and
8. Broad public participation in developing and implementing these plans.¹

1. The list of the eight elements required by Congress is adapted from Association of Fish and Wildlife Agencies, *State Wildlife Action Plans: Eight Required Elements*, available at http://www.wildlifeactionplan.org/pdfs/eight_elements_handout.pdf [last accessed Jun. 22, 2007].

HOW CAN PLANS BE USED?

The state wildlife action plans provide a means of informing and improving voluntary stewardship activities, and improving regulatory and management requirements.

State wildlife action plans provide a new opportunity for utilities to take advantage of the best available wildlife information in every state and territory. Utilities can use this information to design better management practices, to develop effective conservation programs, to minimize adverse impacts, and to enhance benefits to wildlife habitat. Many plans include specific strategies and actions for utilities. The plans also may provide utilities with species and habitat information that can support wildlife-sensitive development and planning decisions.

State, county, and municipal boards and agencies can incorporate information and priorities from the wildlife action plans when developing or revising requirements and planning elements that relate to utilities. States impose various regulatory requirements to address environmental aspects of utility infrastructure. These include environmental laws and regulations related to permitting, as well as public utility regulatory requirements, which differ substantially among states. In many states, public utility boards or commissions have regulatory authority over investor-owned utilities with respect to rates, distribution, and service, but their powers vary and they may not have environment-related rules.

Other utilities are owned by municipalities, counties, public utility districts, municipal authorities, irrigation districts, or other governmental organizations. Because these are typically self-governed, they operate under different sets of standards both within and among states. Wildlife action plans may provide useful information to these governmental entities as they consider potential impacts of utility activities.

Many utilities voluntarily go beyond regulatory compliance and encourage environmental stewardship.¹² A major area of concern for electric utilities is ROW management, because, in the past, most ROW management consisted primarily of low maintenance, inexpensive practices, which could be harmful to wildlife and their habitats.¹³ However, many utilities

now recognize the importance of managing these ROW corridors in a way that benefits native plants and animals. Specific wildlife protection measures that have been adopted by some utilities include installing riparian buffers along ROW corridors;¹⁴ timing maintenance activities to avoid breeding seasons; building wildlife crossings; and minimizing herbicide applications. Operators of hydropower facilities may construct fish passages or fishways to allow movement across dams and establish and maintain minimum flow requirements for habitat purposes.

Utilities also are starting to develop and implement best management practices for species on their lands. They may also have specific conservation projects unrelated to maintenance or operations, such as acquiring land to protect water recharge areas, putting land into conservation easements, initiating stream clean-ups, carrying out environmental education, and conducting biological research. The Wildlife Habitat Council (WHC), a national non-profit organization, recognizes businesses that voluntarily undertake conservation activities on their own lands and ROW, and a number of utilities across the nation have been recognized for their wildlife activities.¹⁵ Wildlife action plans can substantially improve and support these voluntary activities.

In order to examine the potential across the United States for utilities to use wildlife action plans and for states to engage with utilities, this report looks at three states that represent a diverse range of utility types and regulatory frameworks. These case studies are intended to benefit not only New Jersey, Michigan, and Washington, but also to serve as models to other states on how to link wildlife action plans with utility decision-making. Additionally, these case studies may help facilitate adoption of revised policies and management practices in New Jersey, Michigan, and Washington.

Each case study is divided into four sections. Section One provides background on each state's wildlife action plan, its overall focus, and its structure. Section Two outlines the state's regulatory framework that governs utilities and highlights laws and regulations with specific conservation-related provisions. Section Three describes the regulatory and voluntary wildlife conservation activities that utilities are

State wildlife action plans provide a new opportunity for utilities to take advantage of the best available wildlife information.

implementing. Section Four identifies opportunities for state and local agencies and utilities to use the wildlife action plans to inform policy, planning, programmatic, and management decisions.

Notes

1. Investor-owned electric utilities represent a majority of the generation capacity. US Department of Labor, Bureau of Labor Statistics, *Utilities*, at <http://www.bls.gov/oco/cg/cgs018.htm> [last modified Oct. 25, 2006].
2. Department of Energy, Energy Information Administration, *Electric Power Overview*, at <http://www.eia.doe.gov/cneak/electricity/page/prin2/toc2.html> [last accessed Jun. 22, 2007].
3. U.S. Department of Labor, Bureau of Labor Statistics, *supra* note 1.
4. Beth Baker, *The Greening of Utilities*, 49 BIOSCIENCE 612-616 (1999).
5. Pub. L. 106-553. Federal funding continued only for the State Wildlife Grants program after the first year the programs were established.
6. Association of Fish and Wildlife Agencies and Teaming with Wildlife, *State Wildlife Grants: The Nation's Core Program for Preventing Wildlife from Becoming Endangered*, [on file with ELI].
7. Fiscal Year 2001 Commerce, Justice, State and Related Agencies Appropriations Act, Pub. L. 106-553, codified at 16 U.S.C. §669c.
8. Information on wildlife action plans as well as all 56 plans are available online. See Association of Fish and Wildlife Agencies, *State Wildlife Action Plans*, at <http://www.wildlifeactionplans.org> [last accessed Jun. 22, 2007].
9. Association of Fish and Wildlife Agencies, Teaming with Wildlife, *State Wildlife Action Plans: Defining a Vision for Conservation Success*, [on file with author]; Association of Fish and Wildlife Agencies, *State Wildlife Action Plans: Eight Required Elements*, available at http://www.wildlifeactionplan.org/pdfs/eight_elements_handout.pdf [last accessed Jun. 22, 2007].
10. California Energy Commission, *A Road Map for PIER [Public Interest Energy Research] Research on Biological Issues of Siting and Managing Transmission Line Rights-of-way*, Staff Report # 500-04-031 (2004), [on file with author].
11. *Id.*
12. Baker, *supra* note 4.
13. California Energy Commission, *supra* note 11.
14. Wildlife Habitat Council, *Registry of Certified Program, Pepco Holdings, Inc.*, at http://www.wildlifehc.org/registry_certifiedsites/cert_sites_detail2.cfm?LinkAdvID=68796 [last accessed Jun. 22, 2007].
15. Wildlife Habitat Council, *Registry of Certified Programs, Tennessee Valley Authority Reservoir Releases Improvements Program*, at http://www.wildlifehc.org/registry_certifiedsites/cert_sites_detail2.cfm?LinkAdvID=78010 [last accessed Jun. 22, 2007].

LINKING UTILITY MANAGEMENT AND NEW JERSEY'S WILDLIFE ACTION PLAN

BACKGROUND

New Jersey, a suburban state known for its population density and development, is home to 289 species of conservation need including 73 state endangered and threatened species. The state also boasts some of the largest unfragmented forests on the mid-Atlantic coast and unique coastal habitats. These biologically diverse ecosystems are threatened by population pressures and sprawling development, resulting in habitat destruction and fragmentation.

The Department of Environmental Protection's (DEP) Division of Fish and Wildlife (DFW) prepared New Jersey's wildlife action plan. The DFW currently is working with conservation partners to prioritize the numerous goals and actions outlined within the document.

I. New Jersey's Wildlife Action Plan

PLAN PHILOSOPHY

The New Jersey Wildlife Action Plan is a "dynamic tool" and a comprehensive blueprint designed to direct public and private wildlife habitat conservation and management.¹ DFW submitted its wildlife action plan to the United States Fish and Wildlife Service (U.S. FWS) in October 2005, and in 2007 released its final revised version. The wildlife action plan's main premise is that additional species protection and increased management will be needed. The plan was developed in collaboration with numerous partners and provides a basis for coordination among stakeholders. While the plan focuses on species of greatest conservation need, it is intended to benefit all wildlife species in New Jersey. The plan outlines seven focus areas:

1. Preventing habitat destruction
2. Stewardship and restoration
3. Wildlife management
4. Government-wide invasive species policy
5. Recovery plans for all imperiled species
6. Data and scientific updates
7. Challenges in urban and suburban environments²

Using this plan, New Jersey will be better able to prioritize conservation actions for habitat and species of greatest conservation need. The wildlife action plan was designed as a tool for all landowners, including utilities, to "create a more robust system of rare wildlife and habitat protection that utilizes all appropriate agencies and groups."³

PLAN STRUCTURE

The DFW, in consultation with technical experts, identified New Jersey's wildlife of greatest conservation need. These consist of state and federal endangered and threatened species, species of concern, regional priority species, and species of unknown status, as well as game species of regional priority or for which limited population information is available. The wildlife action plan identifies threats to these species and their habitats and details conservation goals at three levels: state level, landscape level (ecoregion), and the conservation zone level (sub-region). The cornerstone of the plan is the DFW's Landscape Project,⁴ a Geographic Information Systems (GIS)-based mapping tool that maps imperiled species and their critical habitat.

At the state level, the plan identifies threats to wildlife and state-level conservation objectives, conservation goals, and conservation strategies.

The plan then divides the state into five landscape regions, which were determined by the Landscape Project, based on characteristics that include watershed boundaries and geographical features. The five landscape regions are: Atlantic Coastal (which includes the ocean), Delaware Bay, Piedmont Plains, Pinelands, and Skylands. Each landscape section includes a description of its ecological units, geology and climate, a description of the habitat types, a list of the wildlife of greatest conservation need, and threats to the wildlife in the particular landscape.

The third and final level, the conservation zone, provides detailed descriptions of the habitats in the zone, wildlife of greatest conservation need, threats to wildlife and habitats, potential partnerships, monitoring actions to be taken, and detailed conservation goals and conservation actions.⁵

Specific actions address a range of activities related to utilities, such as minimizing impacts of water draw-downs.

Throughout the wildlife action plan, there are conservation goals and actions that relate to the construction, management, and operations of water, sewer, and electric utilities. The specific actions address a range of activities related to utilities, such as minimizing impacts of water draw-downs and power plant water intake systems on aquatic species.⁶ Many general strategies articulated in the plan for private landowners also relate to utilities. For example, one of the goals in the statewide section is to ensure habitat connectivity throughout landscapes by working with private land owners to create and enhance habitat.⁷ Utilities are not only substantial landowners, but they often maintain extensive linear ROW across private and public lands that can affect wildlife habitat.

II. Regulatory Framework for Utilities

New Jersey's regulatory structure for utilities is complex. The state's Board of Public Utilities (BPU) oversees public utilities, including investor-owned electric, gas, water, and sewer companies as well as telecommunications companies and cable television providers. County and municipal utility authorities are self-governed and not subject to BPU regulations. Municipalities also may own utilities and are subject to BPU regulations under a set of specific circumstances. The DEP regulates water usage, construction, and operation of wastewater collection facilities, and environmental management for all public utilities, utility authorities, and municipal utilities. The state has 566 individual municipalities with their own authority to adopt master plans and zoning ordinances. State and local land use planning and zoning boards can influence public utility decisions and development decisions.

BOARD OF PUBLIC UTILITIES

New Jersey's BPU is authorized to develop rules to regulate the economic activities of all public utilities and their property, equipment, and facilities. A public utility in New Jersey is any investor-owned, joint stock company, corporation, individual, or association that owns, operates, administers, or controls any gas, electricity distribution system, water, oil, sewer, telecommunications or their related infrastructure

for public use.⁸ The BPU also has the authority to regulate all services relating to distribution and transmission of electricity and gas.⁹ The BPU does not regulate public-private contracts for water supply or a contract between a governing body of a city of the first class and a non-profit for water or wastewater treatment unless the contract is for provision of water supply outside the local area.¹⁰ The BPU also does not have jurisdiction over rural electric cooperatives and non-public, non-profit water companies owned by the customers that they serve.¹¹ Municipalities that supply gas, electricity, steam, or any other utility outside their jurisdictions are considered public utilities by law and are subject to BPU regulations.¹²

The BPU's Division of Energy is authorized to perform energy-related audits, approve rates and institute fees, and mitigate problems with monopolies. The BPU's Bureau of Conservation and Renewable Energy administers its Clean Energy Program.¹³ The Division of Water and Wastewater may evaluate the cost and need for water and wastewater infrastructure, the effect of smart growth on these needs and costs, management of water and wastewater services, and conservation initiatives.¹⁴

The BPU has authority to require public utilities to comply with all state laws and municipal ordinances.¹⁵ It also has some interaction with municipal regulations. Public utilities must obtain consent from a municipality before placing or replacing any pole or underground facility for electricity or water on a public ROW.¹⁶ A municipality also has the authority to grant approval to sewage public utilities to lay pipe and conduits under public streets.¹⁷ However, if any public utility or electric power generator is aggrieved by a municipal governing body's exercise of power with regard to land in which the utility has an interest, then that utility has the right to petition the BPU for a hearing. The BPU will grant the public utility approval if it determines that the proposed or current use of land in question is necessary for providing service or for the public's welfare or if there are no other alternative sites.¹⁸ A municipality, municipalities, or a governing body of a county, individually or jointly, may intervene in a hearing or investigation held by the BPU over a public utility's rates, charges, service, or facilities that affect the municipality or the people within its jurisdiction.¹⁹

Service Requirements

The BPU is authorized to require public utilities to “furnish safe, adequate and proper service,” which includes providing “service in a manner that tends to *conserve and preserve the quality of the environment and prevent the pollution of the waters, land and air.*”²⁰ This provision may provide some basis for requiring the consideration of wildlife information and protecting habitat values. The BPU also may require public utilities to maintain their property and equipment to ensure adequate service.²¹ In addition, the BPU’s strategic plan makes reference to protecting the environment and conservation. One of its goals is: “[e]nhance the quality of life for the citizens of New Jersey by providing assistance programs, promoting smart growth development, protecting and enhancing environmental quality and conserving natural resources.”²²

Smart Growth Main Extension Rules

One way the BPU is carrying out its statutory service mandate and addressing its strategic plan goal is through its Smart Growth Main Extension Rules.²³ These rules require that public utilities cease financially supporting any proposed extension²⁴ requested to serve development in “areas not designated for growth.”²⁵ Therefore, in these areas applicants for extensions of utility service must pay the full cost of these extensions. This rule will end the traditional system whereby ratepayers helped fund sprawl development by subsidizing the cost of extending utility service. “Areas not designated for growth” are defined based on planning areas in the State Development and Redevelopment Plan²⁶ that are rural or environmentally sensitive. Environmentally sensitive areas include “natural attributes or characteristics that function as part of a natural system or landscape” that are considered essential, such as coastal dunes or critical habitats.²⁷ Maintenance, operation, or upgrades of existing extensions are not governed by this provision.²⁸ Municipalities may not impose any ordinance or requirements that inhibit a public utility’s ability to comply with these provisions.²⁹

Property Transactions

The BPU has the authority to approve all leases, transfers, and sales of public utility property and rights and all mergers, unless the land is transferred to the federal government, the state, a municipality or county, or an agency for public use.³⁰ The BPU routinely considers the smart growth impact of a proposed transfer of property by a regulated entity.³¹ When a public utility wants to convey lands used to protect a public water supply to a corporation or other entity that is not under the jurisdiction of the BPU, the DEP also reviews the case. The public utility must submit a detailed document to the BPU describing how the land will be used once conveyed.³² The DEP will make recommendations based on assessments of the impacts this conveyance will have on the public water supply as well as the state’s open space and conservation requirements.³³

COUNTY AND MUNICIPAL UTILITY AUTHORITIES

State law authorizes counties and municipalities to form utility authorities to ensure an adequate supply of water for public and private use.³⁴ Authorities are created to incur and manage the debt associated with local water, wastewater, and solid waste facilities rather than the municipality or county itself.³⁵ Utility authorities are quasi-governmental entities and have the authority to sell bonds and set rates.³⁶ Municipal Utility Authorities (MUA) may distribute water; help prevent pollution; provide sewage collection and disposal; supply, generate, distribute, and sell hydroelectric power at wholesale; and operate and maintain other government’s utility systems located within their district through contracts.³⁷ Each MUA has the authority to obtain, construct, maintain, operate, and use all related infrastructure such as reservoirs, canals, and pipelines and waterworks necessary to provide water and sewage services within or outside its district notwithstanding any municipal or county ordinance or resolution to the contrary.³⁸ However, if an MUA would like to sell water outside its district at retail, then it must seek approval from the BPU.³⁹

All MUAs also have the right of eminent domain.⁴⁰ When constructing or operating any of their facilities, MUAs may require any public utility to relocate or remove any of its facilities from real property such as public lands, water, or parks provided that the MUA

The BPU routinely considers the smart growth impact of a proposed transfer of property by a regulated entity.

DFW may establish regulations to protect the state's fish and wildlife resources.

pays for all costs associated with the relocation or removal.⁴¹ An MUA also may spend funds to jointly acquire lands with another municipality for the purpose of conservation.⁴² Conservation purposes include, but are not limited to, the use of land for “beaches, biological or ecological study... [f]orests, greenways... [n]atural areas, parks... [w]ater reserves, watershed protection, wildlife preserves.”⁴³

MUNICIPAL UTILITIES

Municipalities are authorized to purchase, take, and condemn property within their districts or outside their districts for producing, generating, and transmitting electricity, gas, steam, and other products to provide light, heat, and power.⁴⁴ Municipalities that operate light, heat, or power plants or facilities must file an annual report with the BPU⁴⁵ and comply with BPU's regulations regarding standards and service.⁴⁶ Municipal utilities also have the authority to establish ordinances and regulations regarding transmission, distribution, provision, and use of light, heat, and power.⁴⁷ To provide electricity service outside its district, a municipal utility must seek approval from the BPU. Additionally, once the municipal utility begins serving customers outside its jurisdiction it is considered a public utility and becomes subject to BPU regulations and rates.⁴⁸

NEW JERSEY WATER SUPPLY AUTHORITY

The New Jersey Water Supply Authority (Authority) was established in 1981 to exercise public and government functions related to state-owned water supplies.⁴⁹ The Authority consists of the Commissioner of the DEP and six other public members that represent agriculture, industrial, and private water user interests and watershed associations.⁵⁰ All state-owned water supply facilities were transferred to the Authority, and the Authority may plan, build, and operate any future state water supply facility.⁵¹ The Authority has powers similar to those of MUAs; it may build, purchase, or lease property;⁵² establish rules to govern its business; establish rates; and collect fees.⁵³ It also has the right of eminent domain and may require a public utility to relocate or remove its facilities from real property provided that the Authority pays all associated costs.⁵⁴ The DEP must consult with

the Authority when updating or revising the New Jersey Statewide Water Supply Plan.⁵⁵

The Authority provides water to two million customers in central New Jersey and works to protect and conserve water quality and quantity by conserving and restoring critical watersheds.⁵⁶ It established the Watershed Protection Unit in 1999 to better protect the waters under its authority including the Raritan River Basin, Manasquan River Watershed, and the Raritan and Delaware canal. Through this program, the Authority carries out various activities such as developing management plans, writing technical reports, and identifying methods to improve stream quality.⁵⁷ For example, in the Raritan Highlands, the Authority is working with municipalities and utility authorities to improve their Wastewater Management Plans. The Authority also provides guidance on master plans and ordinances for municipalities in this region.⁵⁸ Although most of this guidance relates to water quality issues, there are model ordinances for wetland and stream buffer protection.⁵⁹

The Authority also has an Open Space Acquisition Program to protect critical habitat and functions in its Spruce Run Watershed. It initiated a Source Water Protection Fund to preserve these lands. Monies to support the program are generated through water rates in the Raritan Basin. The Authority developed criteria to rank and prioritize watershed parcels for acquisition, which include measures of groundwater, vegetation, riparian areas, and wellhead protection. It also has worked with various partners to support the program, including DEP's Green Acres Program⁶⁰ and various counties and conservation organizations.⁶¹ The Authority has preserved approximately 2,000 acres through the Fund.⁶² The Authority also established the Raritan Highlands Farmland Preservation Program in 2004. The goal of this program is to preserve farmland in a way that supports and enhances agriculture while also protecting and improving water quality. Through this program, the Authority works with the Natural Resources Conservation Service, the State Agriculture Development Committee, local governments, and farmers to implement farm conservation plans, agriculture best management practices, and riparian buffer areas.⁶³

DEPARTMENT OF ENVIRONMENTAL PROTECTION

New Jersey's DEP has statutory authority to manage wildlife throughout the state. DFW⁶⁴ may establish regulations to protect the state's fish and wildlife resources.⁶⁵ State law authorizes the DEP to develop a list of state endangered species, and the law prohibits all possession, transport, sale, and taking of endangered species except where otherwise provided in the statutes or regulations.⁶⁶ The DEP has the authority to promulgate rules to control and prohibit the taking, possession, transport, and sale of these species.⁶⁷ To protect these species, the DEP also may establish conservation programs such as a land acquisition program.⁶⁸

DEP's coastal zone management rules prohibit development in coastal areas that contain endangered and threatened species identified in DFW's Landscape Project maps, unless a developer can demonstrate through an Endangered or Threatened Wildlife Species Impact Assessment or an Endangered and Threatened Wildlife Species Habitat Assessment that the species will not be affected by direct or secondary impacts.⁶⁹ Another important tool for protecting wildlife is the state's Natural Heritage Program, which was formally recognized by the legislature in 1988.⁷⁰

The DEP also has the authority to oversee New Jersey's water supply and is required to ensure an adequate supply for citizens and for protecting "the natural environment" of state waters.⁷¹ Anyone diverting more than 100,000 gallons of water per day must apply for a water diversion permit from the DEP.⁷² When applying for a water diversion permit, one must wait for approval before condemning lands, water, or water rights for supplying that water.⁷³ Applicants must obtain permits from the DEP Treatment Works Approval Program before constructing and operating domestic wastewater collection, transportation, and management facilities.⁷⁴ The DEP requires all municipal utility authorities and municipal utilities that provide sewer service to have Wastewater Management Plans.⁷⁵ The DEP also is authorized to help municipalities plan and design wastewater treatment facilities.⁷⁶

Habitat- and Wildlife-related Permits

The DEP employs a permit system to regulate construction and development in aquatic habitats such as freshwater wetlands, flood plains, tidelands, waterfront areas, and coastal areas. Under the Freshwater Wetlands Act, all construction in a freshwater transition area⁷⁷ (i.e., the land surrounding a freshwater wetland) requires a permit; however, the DEP may grant a waiver to reduce the size of the transition area for construction of sewerage and storm water management pipes, linear development such as electric and other transmission lines, and ROW for which there are no other feasible locations.⁷⁸ To build utility lines (minor development) or low dams (major development) in a flood plain, a utility is required to obtain a stream encroachment permit; however, construction of utility poles and towers is exempt.⁷⁹ Permits for activity in flood plains will be issued if threatened or endangered plants or animals and their habitats (both present and historic) will not be negatively affected.⁸⁰ DEP rules also state that a person interested in obtaining information on threatened and endangered species located in or near a project in flood plains may contact the state's Natural Heritage Program.⁸¹ Since these regulations were written, threatened and endangered species data has been transferred to the DFW Endangered and Nongame Species Program's Biotics Database; however, the Natural Heritage Program still may be contacted for historic and rare plant data. If a proposed project will disturb an area with threatened or endangered species, the DEP may require a survey to be conducted by qualified biologists.⁸² To develop in tidelands (i.e., riparian lands), utilities must have a license, lease, or grant from the state.⁸³ The DEP also oversees plans and construction for dams, and it can require fish passages where necessary.⁸⁴

The state's Coastal Areas Facility Review Act (CAFRA) requires utilities to obtain a Coastal Areas Permit to build an electrical power production facility, wastewater treatment plant, or sewage pipe development in a coastal area. All applications for this permit must include an environmental impact statement.⁸⁵ DEP rules require utilities to apply for a permit for all proposed "landfall" of utility infrastructure in tidal waters in coastal areas. As part of the CAFRA permit process, utilities must submit a variety

Utilities must submit a variety of information such as the location of specific habitats and threatened and endangered species.

of information such as the location of specific habitats and threatened and endangered species within 150 feet of the area it will disturb and a restoration plan.⁸⁶ Construction of dams also is prohibited except in medium-sized⁸⁷ rivers, creeks, and streams.⁸⁸

All major construction in the Highlands Preservation Area⁸⁹ requires a Highlands Preservation Area Approval (HPAA) permit from the DEP.⁹⁰ Before applying for an HPAA, however, all applicants must submit information on their proposed projects to the DEP so that it can make a Highlands Applicability Determination (HAD).⁹¹ The DEP uses the HAD process to determine if a project is subject to Highlands regulations and requires an HPAA.⁹² Although public utilities are not required to obtain an HPAA before conducting regular maintenance, operations, and improvements on utility lines, ROW, or other infrastructure,⁹³ they are required to submit information for a HAD. Specifically, they must demonstrate how the purpose of their planned activities complies with the goals and purpose of the Highlands Act.⁹⁴ Additionally, most construction within 300 feet of open waters in the Highlands is prohibited except for linear development (e.g., utility transmission and distribution lines) for which there is no feasible alternative location.⁹⁵ The Pinelands National Reserve⁹⁶ has several similar regulatory requirements. All linear development in the Pinelands requires a permit from the Pinelands Commission.⁹⁷ No water may be diverted out of this area,⁹⁸ and all utility lines must be placed underground.⁹⁹ State and local governments grant approval for capital projects and any activity that disturbs land in the Reserve.¹⁰⁰

STATE AND LOCAL LAND USE REGULATIONS

State Planning Act

Although land use planning is primarily a duty of local governments, the state plays a role in helping to develop land use strategies and plans. The State Planning Act establishes a State Planning Commission that assists local governments with their plan procedures and development.¹⁰¹ The Commission also is responsible for developing the State Development and Redevelopment Plan (State Plan). The Office of Smart Growth (OSG),¹⁰² formerly the Office of State Planning, assists the Commission.¹⁰³

State Plan development also is coordinated with state, county, and local governments¹⁰⁴ and incorporates information from their local programs, policies, and plans.¹⁰⁵ The State Plan is reviewed and developed by all levels of government and the public through a process called “cross-acceptance.”¹⁰⁶ The State Plan itself does not contain legally binding requirements. State agencies and local governments are largely responsible for implementing the State Plan through their regulations and programs.

The State Planning Act provides that the State Plan must encourage sustainable development, promote protection of the State’s natural resources,¹⁰⁷ and aim to prevent sprawl.¹⁰⁸ It also sets out planning objectives for land use, open space, recreation, conservation, and public facilities and services.¹⁰⁹ With regard to habitat protection, the State Plan must provide for protection of “fresh and saltwater wetlands, flood plains, stream corridors, aquifer recharge areas, steep slopes, areas of unique flora and fauna...”¹¹⁰ To address public facilities and services, it is required to incorporate an Infrastructure Needs Assessment.¹¹¹ The Plan also sets out statewide policy objectives that address 19 substantive areas ranging from infrastructure, economic development, and transportation to water, air, coastal, and open lands and natural systems. These policy objectives guide planning at a local, county, and state level.¹¹²

The Policy Map is another important component of the State Plan that spatially depicts two main components of the State Plan: (1) Planning Areas (PAs) and (2) Centers and Environs. The Map displays where growth has occurred and establishes areas where growth should be directed as well as areas for agriculture, open space, and conservation. The five PAs (Metropolitan; Suburban; Fringe; Rural and Rural/Environmentally Sensitive; and Environmentally Sensitive and Environmentally Sensitive/Barrier Islands) are delineated based on planning criteria.¹¹³ The State Policy Map does not delineate critical habitats or landscapes; however, the PAs are based on habitat and species information provided by the DEP. On July 19, 2006, the State Planning Commission acted on the advice of the OSG and incorporated environmentally sensitive data into the Preliminary Policy Map for the proposed revision to the State Plan.

The features that led to identification of Environmentally Sensitive PAs were: (1) Category 1 streams and their stormwater buffers; (2) Natural Heritage Priority Sites; (3) Threatened and Endangered Species Habitat (Landscape Project rank 3, 4 or 5);¹¹⁴ and (4) Wetlands within PA 1, PA 2, PA 3, and Designated Centers.¹¹⁵

Centers and Environs are found in all PAs. Centers are areas of compact development that are efficient in their use of land and natural resources and at providing public services. The State Plan states that growth should be directed to Centers and dictates that all Centers have defined boundaries that designate the limit for future expansion.¹¹⁶ Outside Centers are Environs, which are areas that should be protected from development and maintained as farmland, open space, or environmentally important lands.¹¹⁷ The State Plan also recommends designating certain resources as Critical Environmental Sites through the cross-acceptance and master planning processes. Critical Environmental Sites are those found outside of Environmentally Sensitive Planning Areas that contain important natural and environmental resources.¹¹⁸

Through its Plan Endorsement Program, the OSG reviews municipal, county, or regional plans to determine if they are consistent with the State Plan. If they are consistent, then the State Planning Commission, acting on a report furnished by the OSG, endorses the local governments' Plan. Plan Endorsement includes a Planning Implementation Agreement (PIA) to ensure that the applicant follows through with the actions to achieve the goals and objectives of the endorsed plan.¹¹⁹ Endorsed Plans are eligible for state regulatory and financial benefits. This Plan Endorsement Program increases consistency among municipal, county, regional, and state plans.¹²⁰ It also is designed to help local governments develop their plans and identify areas in need of protection.¹²¹

Municipal Land Use Law

New Jersey's Municipal Land Use Law encourages municipalities to use lands in ways that will promote conservation and preservation of the environment and valuable natural resources.¹²² The law authorizes local governing boards to establish municipal planning boards.¹²³ Once established, the mayor has the authority to appoint an environmental commission to advise the planning board and to create and submit a natural resource inventory (NRI) to the board for consideration when developing the master plan.¹²⁴ State Planning Commission and OSG guidelines for NRIs state that inventories should identify threatened, endangered, and priority species as well as critical habitat.¹²⁵ Once an NRI has been submitted, the planning board or board of adjustment must provide a copy of all applications for development to the environmental commission.¹²⁶

An established planning board is authorized to develop a master plan.¹²⁷ Municipal master plans serve to guide development within a municipality. The Municipal Land Use Law requires that master plans include land use and development proposals and official maps.¹²⁸ Specifically, they must contain a land use element¹²⁹ that relates to all additional plan elements.¹³⁰ Utility service plans are optional elements,¹³¹ but many municipal master plans include them.¹³² Municipal master plans also may have a conservation element with provisions for preserving, conserving, and using natural resources that include as considerations "energy, open space, water supply, forests, soil, marshes, wetlands, harbors, rivers and other waters, fisheries, endangered or threatened species, wildlife, and other resources."¹³³ This element must incorporate an analysis of other plan components and the impacts of these components on the conservation and use of these natural resources.¹³⁴

Municipal governing boards use master plans to guide development of land use zoning ordinances.¹³⁵ Governing boards are required by law to refer all zoning ordinances to the planning board prior to adoption.¹³⁶ A planning board also may provide a governing board with revisions and recommendations for a proposed development regulation to ensure consistency with the master plan.¹³⁷

Utility service plans are optional elements, but many municipal master plans include them.

Public utilities also carry out voluntary conservation actions in addition to those required under state law.

County Planning Act

Many counties in New Jersey also have planning boards and master plans to guide development. A county's board of chosen freeholders may choose to create a county planning board, and if designated the board is required to develop and adopt a master plan and associated maps that will guide the development of the county's lands.¹³⁸ County master plans must include the planning board's recommendations for development and may include the location and coverage of forests, parks, and "open- development" areas that may be designated for a variety of purposes including for conservation or protecting urban development.¹³⁹ County planning boards also are required to encourage cooperation with municipal planning boards, and municipalities must notify their counties when approving and adopting master plans and associated official maps.¹⁴⁰ Thus, both county and municipal master plans are key tools for guiding development within the state.

Utilities and Local Land-Use Regulations

Public utilities are required by statute to petition a local zoning board before constructing any facility, substation, water storage tank, electric transmission line, or other utility structure within that board's jurisdiction.¹⁴¹ If the zoning board denies the application, then the public utility may petition the BPU to hold a hearing to determine if the facility is necessary to provide adequate service or for public welfare.¹⁴² The municipality may take part in the hearings. If the BPU deems the facility necessary, it will grant the public utility approval for construction notwithstanding any local laws.¹⁴³ A public utility wishing to build in more than one municipality may either ask for approval from each municipal zoning board or take its case to the BPU with the consent of all zoning boards. If the case is taken to the BPU, a fully litigated hearing will take place.¹⁴⁴ Local planning boards can influence utility authorities' decisions such as determining where power lines could be located.¹⁴⁵

III. Utility Wildlife Conservation in Practice

PUBLIC UTILITY ACTIVITIES

Electric public utilities have been required, as a condition of wetland permits, to identify wetland species on their lands using tools such as the Landscape Project and to develop and implement best management practices (BMPs) for these species. The DFW is currently working with utilities to establish one set of BMPs that will cover all five public electric utilities operating in New Jersey.¹⁴⁶ As a requirement of its New Jersey Pollutant Discharge Elimination System (NJPDES) permit, PSE&G has carried out estuary enhancement and restoration work.

Utilities providing sewer service must also apply for DEP permits to build and operate their facilities and must conform to applicable environmental standards, such as those for water quality.

Public utilities also carry out voluntary conservation actions in addition to those required under state law. The five main power companies in New Jersey are Public Service Enterprise Group (PSE&G), Jersey Central Power and Light (JCPL), Orange and Rockland Utilities, Inc., Atlantic City Electric, and Delmarva Power. There are also numerous third party suppliers. Although PSE&G's Estuary Enhancement Program was initiated in response to its NJPDES permit, the program has grown beyond its initial obligations to restore over 20,000 acres of salt hay wetlands, adjacent uplands, and rehabilitation of *Phragmites*-dominated wetlands.¹⁴⁷ PSE&G also has preserved an area that is over 4,000 acres of wetland and upland habitat.¹⁴⁸ PSE&G's Estuary Enhancement Program was certified by the Wildlife Habitat Council in 2005 and has received various awards.¹⁴⁹ JCPL has worked voluntarily with DFW to enhance bog turtle habitat on its lands by allowing goats to graze on its rights-of-way.¹⁵⁰ Rockland and Orange Utilities, Inc., a smaller electric utility, is voluntarily collaborating with the DFW Endangered and Nongame Species Program to identify threatened and endangered species on its lands where it clears vegetation.¹⁵¹

There are over 75 investor-owned water and wastewater companies in New Jersey, including four major companies that serve much of the state. The primary conservation-related concerns for these companies relate to minimizing water usage and maintaining water quality. These companies own a significant amount of forested lands around their reservoirs and many companies have foresters on staff;¹⁵² however, no specific voluntary conservation programs were mentioned by three of the four main private water companies contacted.

MUNICIPAL AND COUNTY AUTHORITIES AND UTILITIES

Utility authorities carry out many voluntary conservation and stewardship projects in addition to meeting regulatory requirements. For example, both Morris County Utility Authority (CUA) and Mount Laurel MUA have stream restoration projects and environmental outreach programs. Morris CUA purchases open space to protect its water supply and has been planting native species and working to control invasive plants, such as Russian olive.¹⁵³ Sussex County MUA provides in-kind administrative assistance such as office space, computers, and phones for the Wallkill Watershed Program.¹⁵⁴ Brick Township MUA is certified by Audubon International as an Audubon Society Cooperative Sanctuary. It gained this certification through its effort to reduce pesticide use, to develop an Integrated Pest Management Program, and to establish an Environmental Management Program.¹⁵⁵ Brick Township MUA also has a monitoring program and partners with the Barnegat Watershed Program.¹⁵⁶ Various other utility authorities such as the Atlantic County Utility Authority and Jersey City MUA also perform conservation work.

IV. Opportunities to Use the Wildlife Action Plan to Guide Utility Infrastructure and Management Decisions

New Jersey's regulatory framework for utilities includes numerous provisions that could require utilities to consider wildlife and environmental protections either directly or indirectly when making construction and management decisions. Utilities also implement voluntary conservation actions. The New Jersey wildlife action plan offers a new opportunity to guide such activities and improve wildlife conservation in the state.

This section identifies opportunities for New Jersey institutions to assure that utility activities support the objectives of the state wildlife action plan and maximize the influence of this important multi-stakeholder, science-based document.

BOARD OF PUBLIC UTILITIES

Opportunity 1.1: *Amend the Smart Growth Extensions Rules' definition for "areas not designated for growth" to include priority habitats identified in the wildlife action plan.* The BPU could amend the definition of "areas not designated for growth" in the Smart Growth Extensions Rules to incorporate the OSG planning criteria changes for "Environmentally Sensitive Planning Areas." The OSG recently revised the planning criteria for Rural Environmentally Sensitive and Environmentally Sensitive Planning Areas to incorporate data including threatened and endangered species habitat (Landscape Project rankings three, four, and five).¹⁵⁷ The BPU has plans to open the Smart Growth Extension Rules for revisions, which will provide an opportunity to incorporate this recommended change. By expanding the "areas not designated for growth" definition, the BPU would be preserving more ecologically sensitive areas than before and working to advance the wildlife action plan's statewide goal of protecting critical habitat from development.¹⁵⁸

Opportunity 1.2: *Refer to and utilize the wildlife action plan when making decisions on public utility land transactions and revise guidelines to require that the wildlife action plan (in conjunction with the Landscape Project Map) be used as a primary reference by BPU when making and evaluating decisions on land transactions.*

Opportunity 1.3: *Revise requirements for environmental disclosure statements that are on all public utility bills¹⁵⁹ to require public utilities to include information on utility's impacts to wildlife and how customers can help conserve wildlife based on the wildlife action plan.*

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Opportunity 2.1: *Solicit the help of utilities to implement the wildlife action plan's statewide conservation strategy. The strategy recommends "work[ing] with federal, state, county, municipal, and private (NGOs) land managers to incorporate the goals and strategies of the NJ Wildlife Action Plan into current management plans by the first formal review [of the wildlife action plan] in 2011."¹⁶⁰*

Opportunity 2.2: *Adopt terms and conditions in DEP permits, such as stream encroachment or coastal area permits, to require implementation of conservation actions from the wildlife action plan where such actions are consistent with regulatory requirements. This opportunity addresses two statewide strategies of the Plan: (1) encourage creation and enhancement of wildlife habitats on private lands and (2) work with private landowners to decrease negative effects on waterways.¹⁶¹ The DEP implemented a similar provision when it required that the four main electric companies in New Jersey adopt BMPs for wetland species on their lands as a condition of their permit renewals.¹⁶² The DFW is writing BMPs for both wetland and upland species. Currently, the conditions of the permits only require that these utilities carry out the guidelines for wetland species. Incorporating conservation actions from the plan could protect a broad range of species.*

Opportunity 2.3: *Amend coastal area management and flood plain rules to require that endangered and threatened species surveys, impact assessments, or evaluations required for development approval from the DEP include a description of how the assessment or evaluation relates to or incorporates the information and goals of the wildlife action plan. This opportunity would work towards implementing a recommended action (listed in various sections of the wildlife action plan, such as the Northern and Southern Piedmont Plains sections) stating that the DFW should work with the DEP's Land Use Regulation Program to make recommendations on flood plain stream encroachment permits for areas that have listed species or species of concern.¹⁶³*

Opportunity 2.4: *Revise the BMPs that are being developed by the DFW with electric companies to incorporate conservation actions from the wildlife action plan. The current BMPs focus primarily on management actions for specific species. The DFW should improve the existing BMPs by adding practices that address habitat level issues and focus on how to enhance and create habitat.¹⁶⁴*

Opportunity 2.5: *Work with utility authorities to develop BMPs that implement specific actions from the wildlife action plan. Utility authorities could further protect species of greatest conservation need from utilities' activities such as maintenance work along ROW construction, water withdrawals, etc.¹⁶⁵ The BMPs currently being developed for electric public utilities will be available online. Utility authorities may be able to use these BMPs if they identify similar species on their lands. Many utility authorities provide water and sewer service; thus, they have a different suite of habitats and species on their lands than those on electric utility ROW. Working with utility authorities is an action included in the wildlife action plan.*

Opportunity 2.6: *Provide information on the wildlife action plan to develop targeted education sessions for specific sectors such as the utilities sector. The DEP can build on the open-houses the DFW is holding in 2007¹⁶⁶ to develop sessions tailored to how utilities can use the wildlife action plan to improve their land, water, and wildlife management.¹⁶⁷*

OFFICE OF SMART GROWTH

Opportunity 3.1: *Revise Plan Endorsement Program guideline requirements for natural resource inventories to include a provision that all local governments incorporate priority habitats from the wildlife action plan into their natural resource inventories.*

Opportunity 3.2: *Amend the Plan Endorsement Program petition guidelines to require that all counties, regions, and municipalities submit information on how they are integrating the wildlife action plan into their master plans.*

Opportunity 3.3: *Include a link to the wildlife action plan from the OSG Website.*

Opportunity 3.4: *Revise the State Plan's Statewide Policies to integrate applicable goals and priorities from the wildlife action plan for the following substantive areas: Infrastructure, Open Lands and Natural Systems, Water Resources, Coastal Resources, and Special Resource Areas.¹⁶⁸ All substantive areas have Statewide Policies that address natural resource protection or habitat protection. For example, the Open Lands and Natural Systems substantive area has a Policy on biological diversity stating: "Identify critical habitats during the preparation of municipal plans to ensure coordination of planning efforts and to support state and local resource-protection efforts."¹⁶⁹ This Policy could be modified to incorporate a recommendation to use the wildlife action plan to identify these habitats.*

Opportunity 3.5: *Revise the policies for all Planning Areas (PAs) to include a policy to use the wildlife action plan (in conjunction with the Landscape Project Map) to guide decisions on which lands to protect within an area and what actions should be taken to protect these lands. Each PA has a Natural Resource Conservation Policy that relates to protecting open space and/ or forests and other areas to ensure ecosystems and sensitive natural resources are protected.*

Opportunity 3.6: *Revise planning criteria for Environmentally Sensitive PAs to incorporate all priority habitats from the wildlife action plan. The OSG has already proposed revisions that will incorporate much of the Landscape Project's critical habitats and species, which encompass many of the habitats highlighted in the wildlife action plan. However, the wildlife action plan contains additional unique habitats not included in the Landscape Project (these habitats are not included in the Landscape Project, because no endangered or threatened species are found in these areas). Thus, Environmentally Sensitive PA criteria should include all priority habitats of the wildlife action plan to capture these important habitats.*

Opportunity 3.7: *Encourage municipalities and counties to incorporate revised PA designation criteria, if adopted, into official land use maps. If this opportunity is realized, then it will advance a goal of the wildlife action plan to encourage use of the Landscape Project in state and local land use planning and zoning decisions.¹⁷⁰*

MUNICIPAL PLANNING BOARDS AND GOVERNING BOARDS

Opportunity 4.1: *Revise master plans to update or develop conservation elements using provisions from the wildlife action plan. New Jersey and the New Jersey Planning Officials are encouraging municipalities to update their master plans and create ordinances to implement these plans.¹⁷¹ This presents an opportunity for municipalities to revise their existing conservation elements or to create conservation elements that will integrate information from the wildlife action plan.*

Opportunity 4.2: *Use the wildlife action plan when reviewing and revising proposed land use zoning ordinances. Municipalities can use the wildlife action plan to determine the appropriate land use ordinances to guide development that relies on utility infrastructure, such as residential development, so that it protects wildlife and critical habitats.*

Opportunity 4.3: *New Jersey Environmental Commissions should assist local governments in incorporating applicable provisions of the wildlife action plan into master plans and local land use regulations.* New Jersey Environmental Commissions serve as advisors to planning boards as well as other municipal government agencies. Their role is to advise boards on potential impacts from proposed development, support open space initiatives, develop and propose environment-related ordinances, and educate local officials and the public on environmental regulations and issues.¹⁷²

NEW JERSEY WATER SUPPLY AUTHORITY

Opportunity 5.1: *Revise criteria for assessing eligibility of watershed parcels for acquisition under Open Space Acquisition Program to include species of greatest conservation need and priority habitats using the wildlife action plan.* Currently four criteria are used to prioritize watershed parcels for acquisition and preservation: vegetation, riparian areas, wellhead protection, and groundwater. The vegetation criterion is based on the Landscape Project Map's critical habitats ranked three, four, and five; however, it is based on 1995 to 1996 Landscape Project data. This criterion should be revised to include updated Landscape Project Map habitats as well as additional priority species and habitats identified in the wildlife action plan.

ALL UTILITIES

Opportunity 6.1: *Develop standard land management practices for maintenance and operational activities on lands and waters based on the wildlife action plan.* Utility authorities, municipal utilities, and water companies also can use the set of BMPs created by the DFW for electric companies. For example, utilities in the Kittatinny Valley Conservation Zone could develop standard land management practices based on recommended actions such as altering mowing schedules and techniques and identifying important corridors for maintaining habitat connectivity to better protect grassland and scrub-shrub habitat and early successional wildlife.¹⁷³ Gloucester CUA specifically noted that it could use the wildlife action plan to improve its ROW management practices along streams.¹⁷⁴ Sussex County MUA believes

the wildlife action plan could help it classify habitats on its lands.¹⁷⁵ JCPL believes that any reference that it can use to determine what species are on their lands will be useful.¹⁷⁶ This information will be useful to all utilities in designing appropriate practices.

Opportunity 6.2: *Use wildlife action plan species and habitat information to guide infrastructure decisions such as facility siting or applying to expand operations.* Orange and Rockland Utilities, Inc. noted that the plan would be useful to them especially when trying to site substations or when applying for permits to expand operations.¹⁷⁷ In conjunction with this opportunity, utilities also could use the wildlife action plan as a source for information for conducting threatened and endangered species impact assessments when siting a facility.

Opportunity 6.3: *Public utilities and utility authorities with wind power facilities should implement specific conservation actions from the wildlife action plan, such as working with agencies and organizations to research the impacts of offshore projects on birds, bats, and marine mammals.*¹⁷⁸

Opportunity 6.4: *Water companies should work to protect species of conservation concern by using the wildlife action plan to guide land management practices for surrounding forested lands.* Water companies in New Jersey own a significant amount of forested land around their reservoirs to protect recharge areas and many companies have foresters on staff. The plan can be used to focus their management efforts.¹⁷⁹ For example, utilities operating in the Central Piedmont Plains can refer to the wildlife action plan to determine how to manage and protect certain sections of forests (e.g., mature woodlands, coniferous forests, and old growth forests) and specific species.¹⁸⁰

Opportunity 6.5: *Enhance existing or develop new conservation programs based on needed actions or recommended projects from the wildlife action plan.* Utility authorities in the Delaware Bay Shoreline conservation zone should work with DFW to develop BMPs for marsh habitats to protect migratory shorebirds, high and low marsh birds, and passerines.¹⁸¹ Specific opportunities were noted by two utility authorities. Morris CUA purchases open space to protect its water supply, and it will be able to use the

wildlife action plan to identify priority habitats for future land acquisitions.¹⁸² Brick Township Utilities Authority also noted that the wildlife action plan could be useful, because its activities to protect its water source overlap with wildlife conservation.¹⁸³

Opportunity 6.6: *MUAs should use the wildlife action plan to prioritize lands for acquisition or when purchasing lands for conservation purposes.*

Opportunity 6.7: *Public utilities could improve public relations with communities and local governments by voluntarily implementing actions in the wildlife action plan.*¹⁸⁴

Opportunity 6.8: *Utilities could use the wildlife action plan to educate local customers on the importance of protecting species affected by electricity, water, and sewer customers and the services that they use.* Mount Laurel Township MUA believes the information in the wildlife action plan will be helpful to its customers and that it could incorporate it into its education programs.

Opportunity 6.9: *Conservation organizations should work with utilities to help them develop management plans that take wildlife into account or best management practices for priority species on their lands.* The wildlife action plan notes in numerous conservation zone sections that conservation organizations should work with utilities to carry out these actions. For example, in the Southern Piedmont section, the plan recommends that conservation organizations assist in developing best management practices and conservation plans for utility ROW.¹⁸⁵

Notes

1. New Jersey Department of Environmental Protection, *New Jersey Wildlife Action Plan (2007)*, 2, New Jersey Department of Environmental Protection, at http://www.state.nj.us/dep/fgw/ensp/wap/pdf/wap_draft.pdf. [Hereinafter New Jersey Wildlife Action Plan (2007).]
2. *Id.* at 2-3.
3. *Id.* at 2.
4. *Id.* at 8. The Landscape Project was initiated by the Division of Fish and Wildlife's Endangered and Nongame Species Program in 1994. This GIS mapping tool is used by land-use regulation, state and private land acquisition, and county and municipal planning.
5. *Id.* at 13.
6. *Id.* at 33-34.
7. *Id.* at 27.
8. N.J. STAT. ANN. § 48:2-13(a).
9. N.J. STAT. ANN. § 48:2-13(d).
10. N.J. STAT. ANN. § 48:2-13(g).
11. N.J. STAT. ANN. §§ 48:2-13(c), (g), -13.1, -13.2.
12. N.J. STAT. ANN. §§ 40:62-23, -24.
13. New Jersey Board of Public Utilities, *Office of Clean Energy*, at <http://www.bpu.state.nj.us/cleanEnergy/cleanEnergyProg.shtml> [last modified Apr. 15, 2003].
14. New Jersey Board of Public Utilities, *Division of Water and Wastewater*, at <http://www.state.nj.us/bpu/home/water.shtml> [last modified Jan. 2, 2004].
15. N.J. STAT. ANN. § 48:2-16(1)(a).
16. N.J. STAT. ANN. § 48:3-17(a).
17. N.J. STAT. ANN. § 48:13-11.
18. N.J. STAT. ANN. § 40:55D-19.
19. N.J. STAT. ANN. § 48:2-32.2(a).
20. N.J. STAT. ANN. § 48:2-23. Emphasis added.
21. *Id.*
22. New Jersey Board of Public Utilities, *Strategic Plan December – Revision 1*, available at <http://www.state.nj.us/bpu/tmp/NJBPUStrategicPlan.pdf> [last accessed Jun. 22, 2007].
23. Board of Public Utilities, *Draft Frequently Asked Questions About the BPU's Smart Growth Main Extension Rules (2005)*, [on file with author].
24. An extension "includes...the wire, poles or supports, cable, pipe, conduit or other means of conveying service from existing plant and/or facilities to each unit or structure to be served..." Board of Public Utilities, New Jersey. *Draft Frequently Asked Questions About the BPU's Smart Growth Main Extension Rules (2005)*, [on file with author].
25. N.J. ADMIN. CODE § 14:3-8.6 (a), (f).
26. The State Development Redevelopment Plan is developed by the State Planning Commission and the Department of Community Affairs' Office of Smart Growth's (OSG) and includes a Policy Map with designated planning areas. For more information on this Plan, please see the State Planning Act section, below.

27. N.J. ADMIN. CODE § 5:85-1.4; New Jersey Department of Community Affairs, *State Development Redevelopment Plan, (2001), 215*, at <http://www.nj.gov/dca/osg/plan/index.shtml> [last accessed Jun. 22, 2007]. (Hereinafter State Plan [2001]).
28. N.J. ADMIN. CODE § 14:3-8.1 b.
29. N.J. ADMIN. CODE § 14:3-8.5 d.
30. N.J. STAT. ANN. § 48:3-7(a).
31. Board of Public Utilities. Personal Communication (Oct. 31, 2006).
32. N.J. STAT. ANN. § 48:2-23.1(b).
33. N.J. STAT. ANN. § 48:2-23.1(a).
34. N.J. STAT. ANN. § 40: 14B-2, -2(1).
35. N.J. STAT. ANN. § 40: 14B-2(4); Gulbinsky, Ellen, *Environmental Authorities and Their Association*, available at <http://www.aeanj.org/about/Environmental%20Authorities.doc> [last accessed Jun. 22, 2007].
36. N.J. STAT. ANN. § 40:14B-20.
37. N.J. STAT. ANN. § 40:14B-19 et. seq.
38. N.J. STAT. ANN. § 40:14B-4, -19(b).
39. N.J. STAT. ANN. § 40:14B-20.6.
40. N.J. STAT. ANN. § 40:14B-34.
41. N.J. STAT. ANN. § 40:14B-40.
42. N.J. STAT. ANN. § 40:14B-20.3(1)(a).
43. N.J. STAT. ANN. § 40:14B-20.3(1)(c).
44. N.J. STAT. ANN. § 40:62-12.
45. N.J. STAT. ANN. § 40:62-2(a).
46. N.J. STAT. ANN. § 40:62-2(c).
47. N.J. STAT. ANN. § 40:62-13.
48. N.J. STAT. ANN. § 40:62-24.
49. N.J. STAT. ANN. § 58:1B-4(a).
50. N.J. STAT. ANN. § 58:1B-4(b).
51. N.J. STAT. ANN. § 58:1B-5(a).
52. N.J. STAT. ANN. § 58:1B-6(a), -7(e).
53. N.J. STAT. ANN. § 58:1B-7(c), (g), (o).
54. N.J. STAT. ANN. § 58:1B-8(b).
55. N.J. STAT. ANN. § 58:1A-13.3(b).
56. New Jersey Water Supply Authority, *About Us*, at http://www.njwsa.org/html/about_us.html [last accessed Jun. 22, 2007].
57. New Jersey Water Supply Authority, *Watershed Protection Programs Unit*, at <http://www.njwsa.org/wpu/> [last accessed Jun. 22, 2007].
58. New Jersey Water Supply Authority, *Watershed Protection Programs Unit, Raritan Highlands Wastewater Management Plan*, at <http://www.njwsa.org/WPU/highlands.htm> [last accessed Jun. 22, 2007].
59. Peifer, D., Einhorn, D., and Van Abs, D.J., *Municipal Master Plan Guidance and Model Municipal Environmental Ordinances: Abstracts (2005)*, available at <http://www.njwsa.org/WPU/RaritanHighlands/Documents/MunicipalGuidanceAbstract.pdf>.
60. See New Jersey Department of Environmental Protection, *Green Acres Program*, at <http://www.state.nj.us/dep/greenacres/> [last updated Nov. 21, 2006].
61. New Jersey Water Supply Authority, *Raritan Highlands Preservation Program Summary (2006)*, [on file with author].
62. New Jersey Water Supply Authority. Personal Communication (Nov. 15, 2006).
63. New Jersey Water Supply Authority, *supra* note 61.
64. N. J. ADMIN. CODE § 7:25-1.2.
65. N.J. STAT. ANN. § 23:2A-5(a); Department of Environmental Protection, *New Jersey's Endangered and Nongame Species Act of 1973*, at <http://www.nj.gov/dep/fgw/about.htm> [last modified Jan. 13, 2005].
66. N.J. STAT. ANN. § 23:2A-6.
67. N.J. STAT. ANN. § 23:2A-5(a).
68. N.J. STAT. ANN. § 23:2A-7(a).
69. N.J. ADMIN. CODE § 7:7E-3.38(c)(1), (c)(2).
70. N.J. STAT. ANN. § 13:1B-15.146.
71. N.J. STAT. ANN. § 58:1A-2.
72. N.J. STAT. ANN. § 58:1A-6(a)(3).
73. N.J. STAT. ANN. § 58:1A-12.
74. *Id.*
75. N.J. ADMIN. CODE §§ 7:15-5.6(a), -5.8(a).
76. Department of Environmental Protection – Division of Water Quality, *Bureau of Financing and Construction Permits*, at http://www.state.nj.us/dep/dwq/becpn_s.htm [last modified Jan. 10, 2005].
77. N.J. STAT. ANN. § 13:9B-3.
78. N.J. STAT. ANN. § 13:9B-18(a).
79. N.J. ADMIN. CODE §§ 7:1C-1.5(a)(iii) Table 1; 7:13-1.3(e)(2)(vii).
80. N.J. ADMIN. CODE § 7:13-3.9(a).
81. N.J. ADMIN. CODE § 7:13-3.9(a).
82. N.J. ADMIN. CODE § 7:13-3.9(b).
83. N.J. STAT. ANN. § 12:3-12.1.
84. N.J. STAT. ANN. § 48:14-11.
85. N.J. STAT. ANN. § 13:19-5(b)(4), -6.
86. N.J. ADMIN. CODE § 7:7-7.16 *et seq.*
87. Medium-sized refers to a watershed that is less than 1,000 square miles. N.J. ADMIN. CODE § 7:7E-4.1.
88. N.J. ADMIN. CODE § 7:7E-4.16(b).
89. The Highlands Protection and Planning Act was passed to protect the water resources in the Highlands Preservation Area that feed much of the state.
90. N.J. ADMIN. CODE § 7:38-2.2(a).
91. N.J. ADMIN. CODE § 7:38-9.2(a).
92. N.J. ADMIN. CODE § 7:38-9.2(b).
93. N.J. ADMIN. CODE § 7:38-2.3(a)(11).
94. N.J. ADMIN. CODE § 7:38-9.2(a)(11).
95. N.J. ADMIN. CODE § 7:38-3.6(b).

96. The Pinelands National Reserve was the first National Reserve and was established to protect natural and cultural resources and to ensure that economic and human development were compatible with protecting these resources. N.J. STAT. ANN. § 13:18A-2.
97. N.J. ADMIN. CODE § 7:50-1.6(c)(4). The Pinelands Commission sits within the DEP, but the DEP exercises no supervision over the Commission. N.J. STAT. ANN. § 13:18A-4(a).
98. N.J. STAT. ANN. § 58:1A-7.1.
99. New Jersey Pinelands Commission, *The Comprehensive Management Plan*, at <http://www.state.nj.us/pinelands/cmp/summary/> [last accessed Jun. 22, 2007].
100. N.J. STAT. ANN. § 13:18A-13.
101. N.J. STAT. ANN. § 52:18A-196(f).
102. The Office of Smart Growth is within the Department of Community Affairs.
103. Office of Smart Growth, *Laws and Regulations*, at <http://www.nj.gov/dca/osg/resources/rules/index.shtml> [last accessed Jun. 22, 2007].
104. N.J. STAT. ANN. § 52:18A-201(6)(b)(2).
105. N.J. STAT. ANN. § 52:18A-200(f).
106. N.J. ADMIN. CODE § 5:85-1.2(a)(1).
107. N.J. STAT. ANN. § 52:18A-200(a).
108. N.J. STAT. ANN. § 52:18A-200(h).
109. N.J. STAT. ANN. § 52:18A-200(f).
110. N.J. STAT. ANN. § 52:18A-200(a).
111. N.J. STAT. ANN. § 52:18A-199(b).
112. State Plan (2001), 110.
113. Examples of planning criteria include: (1) Metropolitan Planning Area delineation criteria include but are not limited to areas with a density of more than 1,000 people per square mile, existing public water and sewer systems, and a population of no less than 25,000. State Plan (2001), 190. (2) Environmentally Sensitive Planning Areas delineation criteria include population and size criteria as well as one or more habitat-related criteria, such as the presence of threatened and endangered species habitat or coastal wetlands. State Plan (2001), 216.
114. The Landscape Project rankings for critical habitat are the following: *Rank 5*: "patches containing one or more occurrences of at least one wildlife species listed as endangered or threatened on the federal list of endangered and threatened species." *Rank 4*: "patches with one or more occurrences of at least one state endangered species." *Rank 3*: "patches containing one or more occurrences of at least one state threatened species." *Rank 2*: "patches containing one or more occurrences of at least one non-listed state priority species." *Rank 1*: "patches that meet habitat-specific suitability requirements such as minimum size criteria for endangered, threatened or priority wildlife species, but that do not intersect with any confirmed occurrences of such species." Niles, L.J., M. Valent, P. Winkler and P. Woerner, *New Jersey's Landscape Project, Version 2.0. (2004)*, 13, New Jersey Department of Environmental Protection, available at http://www.state.nj.us/dep/fgw/ensp/landscape/lp_report.pdf.
115. Department of Community Affairs – Office of Smart Growth. Personal Communication (Oct. 27, 2006).
116. State Plan (2001), 10.
117. *Id.*
118. *Id.* at 187.
119. Department of Community Affairs – Office of Smart Growth, *supra* note 115.
120. New Jersey State Planning Commission, New Jersey Department of Community Affairs – Office of Smart Growth, *Cross Acceptance Manual (Apr. 19, 2004)*, available at <http://www.nj.gov/dca/osg/docs/crossacceptancemanual041904.pdf>; Department of Community Affairs – Office of Smart Growth. Personal Communication (Jul. 24, 2006).
121. Department of Community Affairs – Office of Smart Growth. Personal Communication (Jul. 24, 2006).
122. N.J. STAT. ANN. § 40:55D-2(e), (j).
123. N.J. STAT. ANN. § 40:55D-23(a).
124. N.J. STAT. ANN. § 40:55D-27(a).
125. New Jersey State Planning Commission, New Jersey Department of Community Affairs – Office of Smart Growth, *Plan Endorsement Guidelines (Apr. 28, 2004)*, 15, available at <http://www.nj.gov/dca/osg/docs/2004peguidelines.pdf>.
126. N.J. STAT. ANN. § 40:55D-27(b).
127. N.J. STAT. ANN. § 40:55D-25(16)(a)(1).
128. N.J. STAT. ANN. § 40:55D-28(19)(a), (b).
129. N.J. STAT. ANN. § 40:55D-28(19)(b).
130. N.J. STAT. ANN. § 40:55D-28(19)(b)(2).
131. N.J. STAT. ANN. § 40:55D-28(19)(b)(5).
132. New Jersey Planning Officials. Personal Communication (Jul. 21, 2006).
133. N.J. STAT. ANN. § 40:55D-28(19)(b)(8).
134. *Id.*
135. N.J. STAT. ANN. § 40:55D-62(49)(a).
136. N.J. STAT. ANN. § 40:55D-64.
137. N.J. STAT. ANN. § 40:55D-26(a).
138. N.J. STAT. ANN. § 40:27-1, -2.
139. N.J. STAT. ANN. § 40:27-2.
140. N.J. STAT. ANN. §§ 40:27-2, -4(b).
141. Board of Public Utilities. Personal Communication (Oct. 10, 2006). A variance may be granted for projects that do not meet local land use regulations. N.J. STAT. ANN. § 40:55D-7.
142. N.J. STAT. ANN. § 40:55D-19.
143. *Id.*
144. *Id.*
145. New Jersey Association of Environmental Authorities. Personal Communication (Aug. 8, 2006).
146. Department of Environmental Protection – Division of Fish and Wildlife. Personal Communication (Jul. 21, 2006).
147. PSE&G. Personal Communication (Aug. 10, 2006); PSE&G, *Estuary Enhancement Program*, available at http://www.PSE&G.com/environment/estuary/pdf/program_overview.pdf [last accessed Jun. 22, 2007].
148. PSE&G. Personal Communication (Aug. 10, 2006); Wildlife Habitat Council, *Registry of Certified Programs*, at http://www.wildlifehc.org/registry_certifiedsites/cert_sites_detail2.cfm?LinkAdvID=68806 [last accessed Jun. 22, 2007].

149. Wildlife Habitat Council, *Registry of Certified Programs*, at http://www.wildlifehc.org/registry_certifiedsites/cert_sites_detail2.cfm?LinkAdvID=68806 [last accessed Jun. 22, 2007].
150. Jersey Central Power and Light. Personal Communication (Jul. 28, 2006).
151. Orange and Rockland Utilities, Inc. Personal Communication (Jul. 28, 2006).
152. Department of Environmental Protection – Division of Fish and Wildlife. Personal Communication (Jul. 18, 2006).
153. Morris County Municipal Utilities Authority, *Water Conservation*, at <http://www.mcmua.com/water/conservation.htm> [last accessed Jun. 22, 2007].
154. Sussex County MUA. Personal Communication (Aug. 9, 2006).
155. The Brick Township Utilities Authority, *Audubon Cooperative Sanctuary*, at http://www.brickmua.com/About_us/Audubon/audubon.asp [last accessed Jun. 22, 2007].
156. Brick Township Utilities Authority. Personal Communication (Aug. 8, 2006).
157. Niles, L.J., M. Valent, P. Winkler and P. Woerner, *New Jersey's Landscape Project, Version 2.0. (2004)*, New Jersey Department of Environmental Protection, available at http://www.state.nj.us/dep/tgw/ensp/landscape/lp_report.pdf.
158. New Jersey Wildlife Action Plan (2007), 35.
159. N.J. STAT. ANN. § 48:3-87(a)(1), (a)(2). Current regulations require public utilities to include information on emissions and fuel mix on a customer's bill.
160. New Jersey Wildlife Action Plan (2007), 52.
161. *Id.* at 27 and 40.
162. Department of Environmental Protection – Division of Fish and Wildlife, *supra* note 146.
163. New Jersey Wildlife Action Plan (2007), 282 and 357.
164. Department of Environmental Protection – Division of Fish and Wildlife, *supra* note 152.
165. Working with utility authorities as a partner to develop BMPs is included in all Conservation Zone sections except those within the Atlantic Coastal Zone Landscape section.
166. New Jersey Wildlife Action Plan (2007), 7.
167. New Jersey Wildlife Action Plan (2007), 7.
168. Department of Environmental Protection – Division of Fish and Wildlife, *supra* note 152.
169. State Plan (2001), 154.
170. Noted in a variety of wildlife action plans sections, including the Northern Piedmont Plains Conservation Zone Section on page 283.
171. New Jersey Planning Officials, *supra* note 132.
172. Association of New Jersey Environmental Commissions, *Resource Paper: Municipal Environmental Commissions in New Jersey*, available at <http://www.anjec.org/pdfs/MunicipalEnvCommRes.pdf> [last accessed Jun. 25, 2007].
173. New Jersey Wildlife Action Plan (2007), 482 and 484.
174. Gloucester County Utility Authority. Personal Communication (Jul. 20, 2006).
175. Sussex County Municipal Utility Authority, *supra* note 154.
176. Jersey Central Power and Light, *supra* note 150.
177. Orange and Rockland Utilities, Inc, *supra* note 151.
178. New Jersey Wildlife Action Plan (2007). Specifically in the Atlantic Coastal Cape May, Atlantic Ocean, Northern Atlantic Coastal, Brigantine, and Barnegat Bay Conservation Zones.
179. Department of Environmental Protection – Division of Fish and Wildlife, *supra* note 152.
180. New Jersey Wildlife Action Plan (2007), 316-317.
181. New Jersey Wildlife Action Plan (2007), 228.
182. Morris County MUA. Personal Communication (Jul. 20, 2006).
183. Brick Township Utilities Authority, *supra* note 156.
184. Department of Environmental Protection – Division of Fish and Wildlife, *supra* note 146.
185. New Jersey Wildlife Action Plan (2007), 356.

LINKING UTILITY MANAGEMENT AND MICHIGAN'S WILDLIFE ACTION PLAN

BACKGROUND

Michigan has diverse terrestrial and aquatic habitats and species: forests cover 50 percent of the state,¹ the coastline of the Great Lakes spans over 3,000 miles,² and 81 wildlife species are state-listed as threatened or endangered.³ The state also has 10 million people, many of which are concentrated in a handful of counties in the Lower Peninsula. Development and resulting habitat fragmentation are significant threats to Michigan's biodiversity. The Michigan Department of Natural Resources (MDNR) developed its wildlife action plan to address these and other important threats.

I. Michigan's Wildlife Action Plan

PLAN PHILOSOPHY

The MDNR developed the state's wildlife action plan to "provide a common strategic framework that will enable Michigan's conservation partners to jointly implement a long-term holistic approach for the conservation of all wildlife species."⁴ The MDNR worked with numerous stakeholders and partners, reviewing and assessing information from existing plans. The strategic goals and information in the plan will inform decisions regarding land and water management and serve as the foundation for more specific operational plans.⁵ The Michigan wildlife action plan incorporates ecosystem management principles.⁶ With a focus on comprehensive and cooperative conservation, Michigan's plan provides a strategic conservation framework to protect the full range of aquatic and terrestrial wildlife and habitat diversity in the state.

PLAN STRUCTURE

The wildlife action plan's statewide overview includes a description of terrestrial ecoregions and lake basins. It identifies and prioritizes statewide threats and outlines conservation actions to address these threats. This section also outlines research, survey, and monitoring needs.

The *Landscape Features and Conservation Needs* section of the plan divides Michigan into four ecoregions (Southern, Northern, Eastern, and Western Peninsulas) and four Great Lake basins (Lakes Erie, Huron, Michigan, and Superior).⁷ Subsections include summaries on the landscape features of the ecoregion or lake basin. Landscape features are "components of the overall landscape used by wildlife, differentiated by vegetative, geologic, hydrologic, and structural elements, which may occur at various scales."⁸ These features may be ecosystems or may encompass multiple ecosystems or ecosystem components.⁹ Each landscape feature summary includes information on its distribution, location, and condition as well as associated species of greatest conservation need. Distribution maps of landscape features are included, where data are available.

The *Species of Greatest Conservation Need and Species Specific Issues* section includes half-page summaries for each species of greatest conservation need. Species of greatest conservation need were determined based on criteria such as endemism, vulnerability, or population status. These species include state and federal threatened and endangered species, 'species of concern' as identified by the Michigan Natural Features Inventory (MNFI),¹⁰ and additional species identified by experts that may have declining populations or other characteristics that make them vulnerable. Summaries include species location, distribution, and threat information.

Michigan's wildlife action plan makes repeated references to conservation actions that utilities such as electric power companies or hydropower producers could implement to protect wildlife. For example, each *Landscape Feature and Conservation Needs* terrestrial subsection includes a Grassland Rights-of-Way (ROW) summary that outlines specific measures to protect and enhance wildlife and habitats located in ROW.

Michigan's wildlife action plan makes repeated references to conservation actions that utilities could implement.

II. Regulatory Framework for Utilities

Michigan has a diverse regulatory framework for utilities. The Michigan Public Service Commission (MPSC) regulates all investor-owned electric power and water companies and oversees the rates of private wastewater collection facilities. The Michigan Department of Environmental Quality (MDEQ) oversees and approves construction of all public water supply and sewer facilities. Municipalities may own electric, water, and sewer utilities, and may join with other municipalities to form water supply or sewer authorities or districts. The MDNR has regulations governing utility activities on state lands and rivers. The state has over 1,800 municipalities and counties,¹¹ whose plans and zoning ordinances may influence at least some utility actions within their jurisdictions.

MICHIGAN PUBLIC SERVICE COMMISSION

The MPSC, which is within the Department of Labor and Economic Growth, regulates investor-owned utilities including investor-owned and member-owned cooperative electricity companies,¹² gas companies, water companies, motor carriers, telecommunications companies, and public transportation agencies except for railroads.¹³ In addition, investor-owned, private wastewater companies must apply to the MPSC for rate regulation.¹⁴ The MPSC does not have authority over municipally-owned electric and water utilities or renewable resource power production facilities.¹⁵ The MPSC regulates rates, fares, services and conditions of service, rules, and all matters that relate to forming, operating, or managing public utilities. The MPSC also has the authority to hear and judge any matter relating to these utilities.¹⁶ Most water supply utilities in Michigan are municipally-owned; thus, the MPSC has limited activities relating to water companies.¹⁷

The MPSC also has authority over any attachment¹⁸ to a regulated public utility that is used to transmit light, heat, or power. The Commission regulates the rates, terms, and conditions of these attachments, but no hearing is required unless requested by the utility or attaching party.¹⁹ All attaching parties must get appropriate authorization before placing attachments in public or private ROW.²⁰

Investor-owned utilities have franchise rights from municipalities for use of highways, streets, and other public places to carry out activities such as setting poles and laying pipes, but the activities will be subject to “reasonable” regulations that the municipality may stipulate.²¹ Franchises to private sewer service corporations may last for no longer than 30 years, and rates and fees are determined by the MPSC.²²

Investor-owned utility franchises must be approved by municipal voters.²³ Rates and charges will be agreed upon between the municipality and the public utility; however, if they do not agree, then the MPSC may fix rates after a hearing.²⁴ Additionally, no public utility may construct or operate public utility infrastructure in a municipality where the same service already is being provided by another utility or agency unless it receives a certificate of public convenience and necessity for the system from the MPSC.²⁵

*Electric Transmission Line Certification Act*²⁶

The 1995 Electric Transmission Line Certification Act requires electric utilities with over 50,000 customers, affiliated transmission companies,²⁷ and independent transmission companies²⁸ to submit a construction plan and application for a certificate to the MPSC before building any major transmission lines (electric utilities with less than 50,000 customers also may submit a construction plan for approval).^{29, 30} The construction plan must include the location and size of all major transmission lines,³¹ the location of the proposed line, a description of why the route was selected, alternate possible routes, and information regarding any zoning ordinance that may regulate or prohibit construction or the location of the proposed route.³² Applications for transmission line projects that are not considered major must be submitted to the MPSC as well.³³ All certificates granted by the MPSC supersede any conflicting local ordinance, law, regulation, or policy that prohibits the placement or construction of a transmission wire. Furthermore, the issued certificate is “conclusive and binding... [in] its compatibility with the public health and safety or any zoning or land use requirement in effect when the application was filed.”³⁴ The MPSC also may inspect all installed and proposed electric transmission structures to ensure “good service” and public safety.³⁵

MUNICIPAL

Water Supply Companies

The legislative authority of any city or incorporated village or the municipal authority of any town may authorize the formation of a company³⁶ to build water-works infrastructure to supply that town, city, or village with water.³⁷ These companies have the authority to own property;³⁸ build any necessary buildings, machinery, or other infrastructure; and place water pipes in the streets, lands, and alleys (with the permission of the municipal authority and in accordance with any ordinances or by-laws it may determine).³⁹ Water supply companies also may withdraw water from any springs, ponds, rivers, etc. and divert this water to the city. They may enter into most lands necessary to build and construct infrastructure; however, these areas must be left in the "same condition" as before the company entered.⁴⁰ Before using any of these lands, the company must survey and map them.⁴¹ When granting authority to these companies to use its streets, alleys, and public areas, a local legislative authority may "prescribe such just and reasonable terms, restrictions and limitations upon such company, in reference to the manner of using" these areas.⁴² Townships have similar capacities to authorize development of a water supply company to supply the township and its population with water.⁴³

Municipal-owned Electric Utilities and Joint Agencies

State law authorizes the legislative authorities of cities or incorporated villages to pass a resolution (or through a petition and vote by qualified electors) to authorize that city or village to own, operate, and construct infrastructure to provide electricity to light streets, other public places within its jurisdiction, and its inhabitants.⁴⁴ Municipal-owned electric utilities may buy, obtain, build, improve, expand, or repair sources⁴⁵ of electricity within and outside the state to distribute, transmit, and sell electricity,⁴⁶ and to ensure source facilities provide for "control, abatement, or prevention of pollution or damage to the environment."⁴⁷ They also may enter into contracts with another power utility for the sale, purchase, pooling, and transmission of electrical energy.⁴⁸ Two or more governing bodies of municipalities with

municipal-owned utilities may form a joint agency to develop, acquire, build, improve, expand, operate, or maintain project(s) to supply electric power and energy to meet present or future demands.⁴⁹ Municipalities also may form authorities, which can include authorities for the production of energy that comes primarily from biomass or wood fuel.⁵⁰

Municipal Water and Sewer Utilities

The 1994 Natural Resource and Environmental Protection Act (NREPA) authorized local governments to own, obtain, construct, operate, and maintain (either individually or jointly, within or outside jurisdictional boundaries) intercepting sewers, sanitary and storm sewers; pumping stations; facilities to treat, process, and dispose of sewage; and water works infrastructure. Local governments also may acquire necessary lands within or outside their jurisdiction, except for townships, which may not condemn lands outside their boundaries.⁵¹ These entities are considered public corporations, and they are not regulated by the MPSC.⁵² Local governments that have agreed to jointly operate water works or sewer systems may create a board or designate officials to oversee these systems.⁵³

A separate act authorizes two or more cities to take water from the Great Lakes and its connecting waters. The governing bodies of these cities are authorized to form agreements to manage, control, operate, and improve the water supply source. These agreements also may outline powers and duties of a joint board.⁵⁴ Finally, a township may contract with another township, city, village, or authority to supply water to a water supply district (see below) for domestic uses and fire protection.⁵⁵

Municipal Water and Sewer Authorities

Municipalities are authorized under three different acts⁵⁶ to form an authority to own and operate water supply and sewer systems.⁵⁷ Although the language in the acts varies to some degree, they are similar in content. Authorities under each of these statutes may acquire, own, manage, operate, sell, or lease a water supply and/ or sewage disposal system within or outside its jurisdictional boundaries.⁵⁸ An authority may contract to sell or purchase water to others including non-member municipalities.⁵⁹ In addition, authorities

Electric utilities may ... ensure source facilities provide for "control, abatement, or prevention of pollution or damage to the environment."

also have the power to adopt regulations to govern their business, to determine how and where a project will be constructed, and to acquire needed property.⁶⁰

Water Supply and Sewer Disposal Districts

Municipalities also have authority under NREPA to form water supply and/ or sewer disposal districts.⁶¹ To form a district, two or more municipalities may petition the MDEQ to hold a hearing to determine the “desirability and necessity” of the district.⁶² Within their jurisdictions, districts are authorized by state law to acquire, build, improve, and operate sewer systems and water supply systems. They also may conduct surveys to determine the feasibility of developing new water sources and/ or determine the need for sewer systems⁶³ and enter into contracts with any municipality within its jurisdiction to acquire, build, improve, operate, or finance a water or sewer system.⁶⁴

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

In Michigan, all “navigable” waters,⁶⁵ including both streams and lakes are considered public. The lands beneath and adjacent to inland state waters are generally titled to riparian owners;⁶⁶ however, the state of Michigan holds all lands under the Great Lakes (38,000 square miles) in public trust.⁶⁷ The MDEQ is responsible for “protecting and conserving” the state’s water resources, and is authorized to regulate all water withdrawals for common distribution systems pursuant to NREPA.^{68, 69} The Department issues lease agreements or conveyances for any activity that may alter these lands, in addition to any required permits.⁷⁰ In addition, any person who proposes to withdraw five million or more gallons per day from the Great Lakes or two million or more gallons per day from any other state waters must apply to the MDEQ for a water withdrawal permit.⁷¹ In evaluating proposed water withdrawals, the MDEQ will issue a permit if it determines that the withdrawal will not have direct or cumulative impacts to the state’s resources.⁷² All water also must be returned naturally and to the same watershed from which it was taken.⁷³

Public Water Supply Systems

The Michigan Safe Drinking Water Act gives the MDEQ authority to regulate public water supplies and water suppliers.⁷⁴ All water suppliers (both publicly- and privately-owned) must submit plans and specifications for any existing water system infrastructure that it owns and operates.⁷⁵ They also must submit construction improvement plans to the MDEQ so that the department may complete a capacity assessment⁷⁶ for the proposed waterworks⁷⁷ and issue a construction permit. No work may commence prior to receiving this permit.⁷⁸ The MDEQ may reject construction plans that may result in individual or cumulative adverse impacts to resources as defined in NREPA,⁷⁹ unless there is no alternative location.⁸⁰ The department may apply any design and operational standards to these permits. Water suppliers already permitted under the Safe Water Drinking Act are not required to obtain a water withdrawal permit from the MDEQ under NREPA.⁸¹

Sewerage System Oversight

Any person, city, village, or township that owns a sewerage system must submit plans and specifications to the MDEQ.⁸² No wastewater system may be constructed prior to receiving a permit from the MDEQ.⁸³ The agency also works to ensure that construction, operation, and maintenance of these facilities do not pollute streams, lakes, or other waters of the state. Private, investor-owned wastewater utilities must comply with these regulations as well as local zoning ordinances and regulations.⁸⁴ MDEQ’s regulations for sewer treatment facilities outline guidelines and procedures for maintenance and operations to ensure *protection of public health and water resources as well as fish and wildlife*.⁸⁵

Habitat- and Wildlife-related Permits

The MDEQ issues permits for constructing, altering, or moving permanent structures⁸⁶ within shorelands that will result in impacts to high-risk erosion areas, flood risk areas (when there are no local ordinances that require these activities to be permitted), and environmental areas.^{87, 88} The MDEQ also designates setback standards for structures such as commercial or industry structures, septic systems, and other waste facilities in shoreland areas to protect wetlands

and coastal areas from erosion.⁸⁹ Structures may be granted an exception from this setback if construction of the structure is in the public interest, which can include the “preservation of fish and wildlife.”⁹⁰

Inland lake and stream permits are issued by the department for activities proposing to affect areas below the ordinary high-water mark, such as dredge and fill of bottomlands.⁹¹ These permits also are required for all minor projects that affect state waters including “[w]atercourse crossings by utilities, pipelines, cables, and sewer lines”⁹² that meet particular design criteria.⁹³ In evaluating minor permits, the MDEQ will consider potential effects on streams and lakes including uses of the lake for fish and wildlife.⁹⁴

Michigan protects its wetlands and recognizes that they provide numerous benefits including wildlife habitat.⁹⁵ To protect these resources, the MDEQ prohibits many activities including dredge, fill, or draining of wetlands,⁹⁶ unless specifically permitted.⁹⁷ However, maintenance, repair, and operation of electric transmission and distribution lines conducted “in a manner to assure that any adverse effect to the wetland will be otherwise minimized” do not require a wetland permit.⁹⁸ MDEQ also permits dams and reviews applications to ensure that the dam will have no adverse effects on various factors including natural resources.⁹⁹

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

The MDNR is responsible for protecting all of the state’s wildlife¹⁰⁰ through development and enforcement of state regulations that pertain to propagation and conservation of wildlife (animals, birds, and fish).¹⁰¹ The MDNR also has statutory authority to designate state threatened and endangered species and to promulgate rules to list them.¹⁰² It is illegal to take, transport, sell, and possess threatened and endangered species unless permitted by the MDNR.¹⁰³ Landowners, government agencies, and individuals are responsible for ensuring that their activities and projects will have no effect on threatened and endangered species. An environmental review process, which can include biological surveys where necessary, is available to these entities to assist them in ensuring that they will have no impact. The MDNR highly recommends this process but it is not required.¹⁰⁴ The

department also is responsible for developing rules and regulations to ensure that fish can pass over and through existing and future dams.¹⁰⁵

Natural Rivers Program and Wilderness Areas on State Lands

The state legislature established the Natural Rivers Program, granting authority to the MDNR to administer the program. The MDNR may designate a river or a part of a river as a natural river to protect and enhance its water conservation value and its “fish, wildlife... [and] *ecologic*” values and uses.¹⁰⁶ The natural river designation encompasses the river’s adjacent lands as well, and together, they are referred to as a natural river district. State law requires that the MDNR develop comprehensive plans for each designated natural river district to protect its values and uses over the long-term. Each plan must outline land and water uses for the area as well management actions to address these uses. The state also cooperates with federal agencies on their National Wild and Scenic Rivers Program;¹⁰⁷ Michigan’s natural rivers may become a part of this national system.¹⁰⁸

Once the districts are established and plans are developed, the MDNR may designate allowed uses along that river except for parts that flow through an incorporated municipality. State law requires that township and counties develop zoning ordinances to regulate these designated uses within one year of receiving notification from the MDNR. If they do not enact these ordinances or the MDNR finds them inadequate, then the MDNR will establish zoning rules.¹⁰⁹ These rules must regulate activities within 400 feet of the natural river, and they may limit and dictate the placement of structures of any type.¹¹⁰ They also must provide for “... *conservation of soil, water, stream bed and banks, floodplains, and adjoining uplands.*”¹¹¹ If there are conflicts with the variances allowed in any zoning laws, the resolution will be in favor of the established zoning ordinances.¹¹² The MDNR also has the authority to enforce all zoning ordinances and rules promulgated under this statute.¹¹³

In regard to utilities, the natural river zoning ordinances may “control the location and design of... public utility transmission and distribution lines, except on lands or other interests in real property owned by

The MDEQ will consider potential effects on streams and lakes including uses of the lake for fish and wildlife.

MDNR must weigh various factors including environmental and ecological factors and impacts to wildlife, fisheries, and lands.

the utility on January 1, 1971.”¹¹⁴ The MDNR also must review and approve all initial and final plans for “site or route location, construction, or enlargement of utility transmission lines...and for publicly developed water management projects”¹¹⁵ within a designated natural river area (except within a city or incorporated village).¹¹⁶ Plans must show the proposed project or ROW as it relates to the natural river area as well as other land uses and utilities within 500 feet of the proposed project.¹¹⁷ In reviewing plans, the MDNR must weigh various factors including environmental and ecological factors and impacts to wildlife, fisheries, and lands. Specific considerations are given for ROW and public water management projects.¹¹⁸ For example, MDNR regulations state that after ROW and underground utility lines are constructed, special provisions may be needed to protect and enhance wildlife habitat.¹¹⁹

The MDNR also has the authority to designate and administer wilderness, wild, or natural areas on state-owned lands.¹²⁰ State law prohibits commercial enterprises, utilities, and permanent roads in these areas.¹²¹ However, if a ROW or easement was granted prior to the designation of a wilderness, wild, or natural area, then upon request, the MDNR may grant an easement to an electric, gas, telephone, or cable utility to install and maintain structures along existing ROW or easements, subject to conditions the MDNR prescribes to protect the area.¹²²

Easements to Utilities

The MDNR has the authority to grant easements to utilities to use state lands and county roads as well as overflowed lands, made lands, or lake bottomlands that the state holds in trust, for building, laying, maintaining, and operating infrastructure such as electric lines, pipelines, and water intake and transportation facilities. The MDNR also may establish terms and conditions for these easements.¹²³

LOCAL LAND USE REGULATIONS

Land Use Planning

All municipalities (cities, villages, and townships)¹²⁴ and counties have statutory authority to create planning commissions. If created, planning commissions are required to develop, amend, and adopt municipal or county plans.¹²⁵ Both municipal and county plans must address land use issues and include a land use plan and program that consist of an “allocation and classification” of lands for various uses including but not limited to “soil conservation, forests, woodlots, open space, wildlife refuges...”¹²⁶ The location and character of infrastructure including public utilities and water supply systems also must be included in municipal and county plans as well as any recommendations to remove or change utilities.¹²⁷

All municipal planning commissions submit plans to their local legislative body for approval to distribute the plan. Once approved, the municipal planning commission sends the plan to the appropriate county planning commission or county board of commissioners, or if neither of these is established, to the regional planning board.¹²⁸ County planning commissions must submit their plans for review to municipal planning commissions or local legislative authorities, regional planning commissions where they exist, and surrounding counties’ planning commissions.¹²⁹ Municipal and county plans also must be submitted to any registered public utility and government agency. Planning commissions, boards, local agencies, and utilities may review and submit comments on the plans.¹³⁰

Municipal planning commissions also are required by state law to review and approve plans for any new street, public way, open space, utilities, facilities or public structures that fall within the area of an approved and adopted municipal plan. If a project is not approved, appeals may be made to the local legislative authority,¹³¹ who may overrule the planning commission’s decision.¹³²

Two or more local government agencies also may form a regional planning commission.¹³³ The jurisdictional boundaries of the regional planning commission are determined by the commission and may not correspond to the political subdivision of the local agen-

cies.¹³⁴ A regional planning commission may conduct and review studies, data, and maps to prepare plans for the physical, economic, and social development of the region. A commission may adopt the plan as its formal recommendations to local government agencies for regional development. It also may publicize and disseminate information on the plans and provide services related to the plan and its objectives to participating local governments, the state, and citizens (provided that these services are not available from a private company.)¹³⁵

Zoning Regulations

In 2006, Michigan's legislature repealed the City and Village Zoning Act (Public Act 207 of 1921), the Township Zoning Act (Public Act 184 of 1943), and the County Zoning Act (Public Act 183 of 1943) and replaced them with the Michigan Zoning Enabling Act.¹³⁶ This Act authorizes local governments to develop zoning ordinances to regulate land development to meet the needs of the state's population, including water and energy.¹³⁷ Ordinances adopted under this Act will supersede ordinances developed under any other law.¹³⁸ This Act also gives local governments the authority to establish zoning commissions.¹³⁹ If a zoning ordinance allows for consideration and approval of special land uses or planned development units, then the zoning ordinance also must specify the terms and standards to use in making the land use decisions. Standards must be consistent with the purpose of the zoning ordinance and include provisions "to protect the natural environment and conserve natural resources and energy."¹⁴⁰

Local land use plans, regulations, and ordinances can influence utility activities and operations. Investor-owned public utilities obtain franchise rights from municipalities as well as approvals to use public areas for their infrastructure. Specifically, public utility companies must receive approval from a municipality before placing power lines, pipelines, sewers, or other utility structures on roads, bridges, streets, or public places.¹⁴¹ However, public utilities are not required to seek approval prior to building or maintaining lines and infrastructure "longitudinally" in limited access highway ROW or any road that runs underneath this type of highway.¹⁴² Although rates and charges are agreed upon by the municipality and utility, if there is

a disagreement, then the MPSC may fix the rates.¹⁴³ Water supply companies also must seek the approval of a municipality before placing water pipes on public lands.¹⁴⁴ Utility construction in municipalities must be approved by a municipal planning commission if the activities will be carried out in areas covered in a municipal plan.¹⁴⁵ Local zoning laws also can influence utility activities.

III. Utility Wildlife Conservation in Practice

INVESTOR-OWNED UTILITIES

The MPSC regulates nine investor-owned electric companies and ten rural electric distribution cooperatives. Of these, two investor-owned companies, DTE Energy and Consumers Energy, provide approximately 90 percent of the state's consumers with electricity.¹⁴⁶ Both DTE Energy¹⁴⁷ and Consumers Energy took part in the meetings to develop Michigan's wildlife action plan, and both companies have sites that are certified by a private conservation organization, the Wildlife Habitat Council (WHC). Consumers Energy also has registered sites with The Nature Conservancy (TNC) and has worked with local and national Audubon groups on various volunteer projects. The company also is working to protect trumpeter swans and sold 6,000 acres of land to the Grand Traverse Land Conservancy including pristine shoreline.¹⁴⁸ It also has various federal endangered species that is it required to protect on its lands.¹⁴⁹ DTE Energy, one of the largest landowners in Michigan, carries out voluntary activities on its lands as well. In addition to its 11 WHC certified sites, all power plants have environmental policies.¹⁵⁰ The company also implements a shoreline naturalization project, supports the MDNR peregrine falcon return program, conducts invasive species control activities and a Lake Sturgeon Habitat and Education project, and administers the DTE Energy Foundation that gives grants in various areas including the environment.¹⁵¹ In addition, Detroit Edison's (a subsidiary of DTE Energy) Monroe Power Plant's lands are part of the Detroit River International Wildlife Refuge, and DTE Energy recently partnered with the U.S. Fish and Wildlife Service (U.S. FWS) to restore wetlands on the power plant's lands.¹⁵²

Both DTE Energy and Consumers Energy took part in the meetings to develop Michigan's wildlife action plan.

MUNICIPAL UTILITIES

In Michigan, 41 municipal electric utilities are responsible for providing electricity to eight percent of the state's customers,¹⁵³ and 1,500 community water supplies and 11,000 non-community water supplies provide water to the public including residents, industry, schools, commercial enterprises.¹⁵⁴ Many municipal utilities provide both electricity and water and/or sewer service.

The Lansing Board of Water and Light (LBWL) is the third largest electric utility in the state.¹⁵⁵ Although its facilities are located in a primarily urban area, it also has held onto land in the town of Eagle to protect it from development, thereby providing habitat and wildlife protection. LBWL also has financed and provided restoration along the Grand River, has sponsored community-wide river clean-up (Adopt-A-River program) for both the Grand River and Red Cedar River, and has constructed a peregrine falcon nesting platform.¹⁵⁶ Other municipal electric utilities also carry out wildlife-related activities. For example, Grand Haven Board of Light and Power has voluntarily installed peregrine falcon nesting platforms.¹⁵⁷ The City of Gladstone has placed orange balls on its power lines over a marsh to prevent duck collisions.¹⁵⁸ Traverse City Light and Power provides monetary support to the Boardman River Guardians, supports the local conservation district, publicizes conservation district activities in its bills such as beach clean-ups, and has consulted local land trusts when siting new transmission lines.¹⁵⁹ Municipal utilities that have hydropower plants, such as Marquette Board of Power and Light and the City of Crystal Falls, must meet certain wildlife-related requirements outlined in their Federal Energy Regulatory Commission.¹⁶⁰ Coldwater Board of Public Utilities has no wildlife-related projects; however, it noted that the Michigan wildlife action plan could be useful for potential future activities.¹⁶¹

IV. Opportunities to Use the Wildlife Action Plan to Guide Utility Infrastructure and Management Decisions

Michigan's utility regulatory framework includes various requirements for utility planning, construction, management, and operations that relate specifically and generally to wildlife protection. Utilities also carry out voluntary wildlife-specific conservation actions. However, both state and local regulations and policies, and utility activities could be strengthened and enhanced using the state's wildlife action plan.

MICHIGAN PUBLIC SERVICE COMMISSION

Opportunity 1.1: *Refer to the wildlife action plan when reviewing transmission line siting applications from electric utility companies to identify applicable conservation actions that could be taken to protect habitats and species potentially located along ROW as a part of ROW maintenance.*

Opportunity 1.2: *Encourage electric utility companies to use and incorporate wildlife action plan provisions, especially those relating to ROW when developing plans for siting transmission and distribution lines.*

Opportunity 1.3: *Approve a measure to allow revenues spent on wildlife actions to be incorporated into utility revenue requirements for ratemaking purposes.¹⁶² This opportunity would allow utilities to use ratepayer money for such purposes.*

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

Opportunity 2.1: *Incorporate applicable provisions of the wildlife action plan's Landscape Feature and Conservation Needs subsections into inland lake and stream permit terms and conditions for minor projects especially to ensure minimal impacts to fish and wildlife.* The MDEQ has some leeway in the language it uses in permits, and General Permit categories are updated every five years, providing an opportunity to incorporate applicable provisions of the wildlife action plan into permit terms and conditions. The MDNR could provide the MDEQ with spe-

cific habitat protection-related provisions from the wildlife action plans that would be especially useful in this regulatory context.

Opportunity 2.2: *Encourage utilities seeking permits to carry out construction activities along shorelands to use the wildlife action plan when developing applications and designing projects.* The MDEQ reviews all permits for impacts to natural resources; thus, the state plan may be especially useful to utilities and consultants in determining potential impacts to natural resources including wildlife prior to submitting applications to the MDEQ for review.

Opportunity 2.3: *Post the wildlife action plan on the MDEQ Water Bureau Division and Wetland Restoration websites.* The wildlife action plan may be useful to water and sewer utilities in completing MDEQ permit applications and complying with regulations; thus, providing a link to the plan on the relevant MDEQ websites will help increase visibility of the plan as a tool for utilities.

Opportunity 2.4: *Amend guidelines for sewer system maintenance and operations that pertain to fish and wildlife protection requirements to incorporate applicable conservation actions of the wildlife action plan to ensure adequate protection of these resources.*

Opportunity 2.5: *Inform watershed planners about the existence of Michigan's wildlife action plan and encourage the incorporation of habitat protection and conservation provisions from Landscape Features and Conservation Needs subsections that include their watersheds.* Watershed plans required by the U.S. Environmental Protection Agency (EPA) in connection with grants under section 319 of the Clean Water Act pertain primarily to water quality protection. However, some watershed plans in Michigan include issues important to local stakeholders in addition to section 319 plan requirements.¹⁶³ Watershed plans can be used to guide local land use decisions, conservation investments, and zoning ordinances.¹⁶⁴

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

Opportunity 3.1: *Use wildlife action plan habitat and threat information to identify metrics to measure changes to habitat quality and status on easement lands granted to utilities.* Once species have been identified as occurring on easement lands, the wildlife action plan could assist in identifying potential key habitats that should be monitored.

Opportunity 3.2: *Build on the existing relationships with various investor-owned electric utilities in the state to encourage them to use and implement Michigan's wildlife action plan.* Reach out to additional utilities to provide them information on the plan as well. This opportunity is in line with MDNR's goal to begin considering ROWs as important ecosystems to protect due to the endangered species and habitats of concern such as prairies.¹⁶⁵

Opportunity 3.3: *Work with municipalities to promote use of the wildlife action plan as a part of their local land use planning processes to ensure protection of species and habitats of concern located within their jurisdictions.* Identifying these lands could affect where utilities may be located within a municipality.

Opportunity 3.4: *The Natural Rivers Program should work to implement the wildlife action plan by incorporating wildlife conservation actions into the program's guidelines.* More specifically, the program could use the plan when developing model zoning rules that relate to utilities for natural river districts.

Opportunity 3.5: *Fund the Michigan Natural Features Inventory (MNFI) to include species of greatest conservation need within its scope for mapping and surveying species.* Because utilities are required by law to identify endangered and threatened species on their lands prior to initiating various activities such as building a pipeline, utilities often request species information from the MNFI.¹⁶⁶ Expanding the MNFI to include all species from the wildlife action plan may provide an opportunity for utilities to identify and protect not only endangered and threatened species but all species of greatest conservation need located on their lands. The MNFI's Biotics database primarily contains state endangered

Watershed plans can be used to guide local land use decisions, conservation investments, and zoning ordinances.

and threatened species as well as species that are likely extirpated. Species of special concern also are incorporated.¹⁶⁷ Almost all animals included in the MNFI (237 of 238)¹⁶⁸ are included in the wildlife action plan as species of greatest conservation need; however, the wildlife action plan identifies an additional 167 species of greatest conservation need that are not included in the MNFI's database.¹⁶⁹

MUNICIPALITIES AND COUNTIES

Opportunity 4.1: *Use the wildlife action plan when updating local plans to help identify lands for wildlife refuges, forests, and open space.*

Opportunity 4.2: *When reviewing and approving plans for public ways, utilities, and open space, municipal planning commissions should incorporate a process to review the plans for consistency with applicable wildlife action plan sections to ensure protection of species and habitats of concern.*

Opportunity 4.3: *Consider wildlife action plan habitats and species when making decisions on land use ordinances and zoning.*

Opportunity 4.4: *The Michigan Township Association should include a link to the Michigan wildlife action plan on its website and its monthly magazine to encourage plan use among its members.*

Opportunity 4.5: *Use information in the Landscape Features and Conservation Needs subsections as a basis for taking a more landscape approach to planning at municipal and county levels. The Michigan Township Association and Michigan Municipal League should encourage use of the plan in this way.*

UTILITIES

Opportunity 5.1: *Investor-owned and municipal utilities should refer to the wildlife action plan when proposing new transmission line routes to the MPSC. The plan will enable them to identify habitat benefits of alternative alignments and possible conservation actions that they could take once the transmission line is established to protect habitat and associated species of greatest conservation need located along the route.*

Opportunity 5.2: *Electric utilities should use the wildlife action plan's ROW landscape feature sections to identify wildlife protection actions that can be incorporated into management practices in their ROW.*

Opportunity 5.3: *Water supply companies should utilize the wildlife action plan's recommended conservation actions for species and habitats when working to minimize negative impacts to aquatic and terrestrial wildlife species located on their lands.*

Opportunity 5.4: *Utilities that provide sewer service should use the wildlife action plan to identify habitats that could be affected by their maintenance and operational activities and to determine how to avoid negative impacts to fish and wildlife.*

Opportunity 5.5: *Utilities requesting permits from the MDEQ to construct facilities within shorelands of the Great Lakes or inland waters should integrate conservation actions from related sections of the wildlife action plan into their permit applications to ensure that they minimize all negative impacts to natural resources as required by the department.*

Opportunity 5.6: *Utilities should include information on and the link to the wildlife action plan in their customer's bills and on their websites.*

Opportunity 5.7: *Incorporate conservation actions from the wildlife action plan into existing voluntary conservation efforts such as wildlife habitat plans developed in conjunction with Wildlife Habitat Council certification. Utilities can also use wildlife action plan-recommended conservation actions as a foundation for developing and initiating new conservation and stewardship projects.*

Notes

1. Eagle, A.C., E.M. Hay-Chmielewski, K.T. Cleveland, A.L. Derosier, M.E. Herbert, and R.A. Rustem, eds, *Michigan's Wildlife Action Plan (2005)*, Michigan Department of Natural Resources, at http://www.michigan.gov/dnr/0,1607,7-153-10370_30909-120235—,00.html. [Hereinafter Michigan Wildlife Action Plan (2005)].
2. Great Lakes Information Network, *Great Lakes Facts and Figures*, at <http://www.great-lakes.net/lakes/ref/lakefact.html> [last modified Nov. 1, 2006].
3. Michigan Wildlife Action Plan (2005), 11.
4. *Id.* at 4.
5. *Id.* at 6 and 7.
6. *Id.* at 8.
7. Each Great Lake Basin subsection includes associated lakes, rivers, and streams.
8. Michigan Wildlife Action Plan (2005), 9.
9. No existing classification system for landscape features was adequate for the purpose of developing this plan; therefore, the MDNR developed a way to organize these features. Forty-eight aquatic landscape features were determined using a variety of landscape components including a Michigan stream classification system, wetland types, and lake characteristics. Information used to determine landscape features included natural communities (as determined by Michigan Natural Features Inventory), the MDNR multi-scale vegetation inventory, and wetland types.
10. The Michigan State University Extension Program administers the Michigan Natural Features Inventory. Scientists collect information on the state's native plants, terrestrial and aquatic animals, and ecosystems and use this information for a variety of purposes such as tracking population trends and setting conservation priorities. Information is disseminated through workshops, training, or directly to natural resource managers. Michigan State University Extension Program, *Michigan Natural Features Inventory*, at <http://web4.msue.msu.edu/mnfi/home.cfm> [last accessed Jun. 22, 2007].
11. Michigan Wildlife Action Plan (2006), 34.
12. The 2000 Customer Choice and Electricity Reliability Act requires that the MPSC allow investor-owned electric utility customers and large rural cooperative customers to select alternative electricity providers, which the MPSC licenses. Michigan Public Service Commission, Labor & Economic Growth, *Inside MPSC*, at <http://www.mi.gov/mpsc/0,1607,7-159-16400-40512—,00.html> [last accessed Jun. 22, 2007]. Thus, supply and generation of electricity in Michigan has been opened to competitive suppliers while transmission and distribution businesses still operate under a regulated monopoly structure. Michigan Public Services Commission, Labor & Economic Growth, *Inside MPSC*, at <http://www.mi.gov/mpsc/0,1607,7-159-16400-40512—,00.html> [last accessed Jun. 22, 2007].
13. MICH. COMP. LAWS § 460.6(2).
14. MICH. COMP. LAWS § 460.6(2).
15. MICH. COMP. LAWS § 460.6(1).
16. MICH. COMP. LAWS § 460.6(1).
17. Michigan Public Service Commission. Personal communication, Apr. 19, 2007.
18. An attachment is "any wire, cable, facility, or apparatus for the transmission of writing, signs, signals, pictures, sounds, or other forms of intelligence or for the transmission of electricity for light, heat, or power, installed by an attaching party upon any pole or in any duct or conduit owned or controlled, in whole or in part, by 1 or more utilities." MICH. COMP. LAWS § 460.6(g)(2)(b).
19. An attaching party is "any person, firm, corporation, partnership, or cooperatively organized association, other than a utility or a municipality, which seeks to construct attachments upon, along, under, or across public ways or private rights of way." MICH. COMP. LAWS § 460.6(g)(2)(a).
20. MICH. COMP. LAWS § 460.6(g)(3).
21. MICH. COMP. LAWS § 460.601(1).
22. MICH. COMP. LAWS § 324.4305.
23. Franchises awarded prior to the date of the Act (1909) are not subject to voter approval. MICH. COMP. LAWS § 460.603a).
24. MICH. COMP. LAWS § 123.131.
25. MICH. COMP. LAWS § 460.502(2).
26. MICH. COMP. LAWS §§ 460.561 - 460.575.
27. An affiliated transmission company is any "person, partnership, corporation, association, or other legal entity, or its successors or assigns, which has fully satisfied the requirements to join a regional transmission organization as determined by the federal energy regulatory commission [FERC], is engaged in this state in the transmission of electricity using facilities it owns that were transferred to the entity by an electric utility that was engaged in the generation, transmission, and distribution of electricity in this state on December 31, 2000, and is not independent of an electric utility or an affiliated of the utility, generating or distributing electricity to retail customers in this state." MICH. COMP. LAWS § 460.562(a).
28. An independent transmission company is any "person, partnership, corporation, association, or other legal entity, or its successors or assigns, engaged in this state in the transmission of electricity using facilities it owns that have been divested to the entity by an electric utility that was engaged in the generation, transmission, and distribution of electricity in this state on December 31, 2000, and is not independent of an electric utility or an affiliated of the utility, generating or distributing electricity to retail customers in this state." MICH. COMP. LAWS § 460.562(f).
29. Major transmission lines must be 5 or more miles in length and transfer 345 kilovolts of voltage or more. MICH. COMP. LAWS § 460.562(g). The Michigan Public Service Commission also has jurisdiction over any transmission of electricity within and between counties and sets rates. MICH. COMP. LAWS § 460.551.
30. MICH. COMP. LAWS §§ 460.564(1), .567(1).
31. MICH. COMP. LAWS § 460.564(1)(a).
32. MICH. COMP. LAWS § 460.567(2) *et seq.*
33. MICH. COMP. LAWS § 460.569(1).
34. MICH. COMP. LAWS § 460.570(3).
35. MICH. COMP. LAWS § 460.555(5).
36. The MDEQ will not approve private water suppliers supplying water to living units unless the local government where the water will be supplied will not accept ownership of the public water supply system. MICH. COMP. LAWS § 325.1010(1).
37. A city, town, or village may purchase the water supply company 25 years after the establishment of the company; thus, taking over all infrastructure, property, and rights. MICH. COMP. LAWS § 486.316s.

38. MICH. COMP. LAWS § 486.303.
39. MICH. COMP. LAWS § 486.306.
40. MICH. COMP. LAWS § 486.306.
41. MICH. COMP. LAWS § 486.307.
42. MICH. COMP. LAWS § 486.315. Water supply companies supplying a city, town, or village with a population of 25,000 or less have the right to produce and supply electricity for the municipality. MICH. COMP. LAWS § 486.351.
43. MICH. COMP. LAWS §§ 486.501 to 486.508.
44. MICH. COMP. LAWS §§ 123.91, 123.92, 123.93.
45. "A source may include, but not be limited to, facilities utilizing fossil fuels, garbage, trash, and other waste materials, nuclear fuels, water power (including pumped storage), solar energy, wind power, geothermal energy, energy derived from municipal waste of any kind, or other energy or fuel sources of whatever nature." MICH. COMP. LAWS § 460.807(7).
46. MICH. COMP. LAWS § 460.809.
47. MICH. COMP. LAWS § 460.807(7).
48. MICH. COMP. LAWS § 460.809.
49. MICH. COMP. LAWS § 460.831.
50. MICH. COMP. LAWS § 125.2152(p)(iv).
51. MICH. COMP. LAWS § 324.4301.
52. MICH. COMP. LAWS § 324.4302(1).
53. MICH. COMP. LAWS § 324.4303.
54. MICH. COMP. LAWS § 123.151.
55. MICH. COMP. LAWS § 41.331.
56. Act 196 of 1952 Municipal Water Supply Systems (*see* MICH. COMP. LAWS §§ 124.251 to 124.262), Act 233 of 1955 Municipal Water and Sewer Systems (*see* MICH. COMP. LAWS §§ 124.281 to 124.294), and Act 4 of 1957 Charter Water Authority (*see* MICH. COMP. LAWS §§ 121.1 to 121.29).
57. Municipalities under Act 233 of 1955 may also form solid waste management systems. MICH. COMP. LAWS § 124.282.
58. MICH. COMP. LAWS §§ 124.252, 124.256, 124.282(1); 121.22.
59. MICH. COMP. LAWS §§ 124.256, 121.25.
60. MICH. COMP. LAWS § 124.284(2)(a), (e), (g), (h).
61. MICH. COMP. LAWS § 324.4703.
62. MICH. COMP. LAWS § 324.4704.
63. MICH. COMP. LAWS § 324.4708(a), (b), (c).
64. MICH. COMP. LAWS § 324.4709.
65. Navigable waters are synonymous with public waters. The definition of navigable waters has been a contested issue over many years and is often decided in Michigan's courts. The courts have held that in navigable waters, the public has rights. The test for "navigability" has often been based on the log flotation test. Michigan Department of Natural Resources – Law Enforcement Division, *Public Rights on Michigan Waters* available at http://michigan.gov/documents/Water97e_142928_7.pdf [last accessed Jun. 22, 2007].
66. Riparian owners adjacent to public waters have a property right and may reasonably use water. The state's courts usually have held that extracting water for any use that is non-riparian is "wrongful" because it could hinder the riparian owners' use of the water. An appropriation of water from a stream or lake is considered trespassing on a riparian owner's rights until a title to the water is given through a "prescription." A prescription is the right to use someone's property and is obtained through "open and continuous" use. Michigan Department of Natural Resources, Law Enforcement Division, *Public Rights on Michigan's Waters*, available at http://michigan.gov/documents/Water97e_142928_7.pdf [last accessed Jun. 22, 2007].
67. Michigan Department of Natural Resources, Law Enforcement Division, *Public Rights on Michigan's Waters*, available at http://michigan.gov/documents/Water97e_142928_7.pdf [last accessed Jun. 22, 2007].
68. MICH. COMP. LAWS § 324.3103(1).
69. MICH. COMP. LAWS § 324.32723(1).
70. MICH. COMP. LAWS § 324.32503, 32504; Michigan Department of Environmental Quality. Personal Communication (May 29, 2007).
71. The Natural Resources and Environmental Protection Act (NREPA) (*see* MICH. COMP. LAWS §§ 324.32723(1)) gives the MDEQ the authority to regulate all withdrawals from waters of the state except for withdrawals by a community water supply owned by a political subdivision such as a city, which are still regulated by the MDEQ but authority is granted under the Safe Drinking Water Act. MICH. COMP. LAWS § 325.1004(3).
72. MICH. COMP. LAWS § 324.32723(5), (6)(b).
73. MICH. COMP. LAWS § 324.32723(6)(a).
74. MICH. COMP. LAWS § 325.1003. A privately-owned public water supplier is only approved by MDEQ if the governing council of the city, village, or township by resolution will not own or operate the public water supply. MICH. COMP. LAWS § 325.1010(1), (2).
75. MICH. COMP. LAWS § 325.1004(1).
76. A capacity assessment is an "evaluation of the technical, financial, and managerial capability of a community supply or nontransient noncommunity water supply [water supply that serves no fewer than 25 of the same people daily such as a school or place of employment] to comply and maintain compliance with all requirements of this act [Safe Drinking Water Act]" and DEQ regulations. MICH. COMP. LAWS § 325.1002(b), (1).
77. MICH. COMP. LAWS § 325.1004(2).
78. MICH. COMP. LAWS § 325.1004(5).
79. Adverse resource impact is defined in NREPA as an impact that is "(i) [d]ecreasing the flow of a stream by part of the index flow such that the stream's ability to support characteristic fish populations is functionally impaired... [or] (ii) Decreasing the level of a body of surface water such that the body of surface water's ability to support characteristic fish populations is functionally impaired." MICH. COMP. LAWS § 324.32701(a).
80. MICH. COMP. LAWS §§ 324.32723(5), (6); MICH. COMP. LAWS § 325.1004(4).
81. MICH. COMP. LAWS § 324.32723(10)(a).
82. MICH. COMP. LAWS § 324.4105(1).
83. MICH. COMP. LAWS § 324.4105(2).
84. MICH. COMP. LAWS § 324.4108(1), (2).
85. MICH. ADMIN. RULES § 299.2951. Emphasis added.
86. Permanent structures include septic systems and other waste handling facilities as well as residential, commercial, and industrial buildings. MICH. ADMIN. RULES § 281.21(1)(i).

87. Shorelands are defined in Michigan's statutes as "land, water, and land beneath the water that is in close proximity to the shoreline of a Great Lake or a connecting waterway." MICH. COMP. LAWS § 324.32301(e). State law requires that environmental area determinations be made based on the results of studies and surveys that identify areas necessary for the "preservation and maintenance of fish and wildlife." MICH. COMP. LAWS § 324.32301(b). Environmental areas have already been designated. This is not an on-going process. Michigan Department of Environmental Quality. Personal communication (Feb. 21, 2007).
88. MICH. ADMIN. RULES §§ 281.22(7); 281.24(6); 281.23(6).
89. MICH. ADMIN. RULES § 328.21 *et seq.*
90. MICH. ADMIN. RULES § 328.21(11)(c)(i).
91. MICH. COMP. LAWS § 324.30102, 324.30104(2)(a).
92. MICH. ADMIN. RULES § 281.816(1)(g).
93. Design criteria include "(i) [a] minimum of 30 inches of cover will be maintained between the top of the cable or pipe and the bed of the stream or other watercourse on buried crossings. (ii) The method of construction proposed is the least disturbing to the environment employable at the given site. (iii) Any necessary back-filling will be of washed gravel. (iv) The diameter of pipe, cable, or encasement does not exceed 20 inches." MICH. ADMIN. RULES § 281.816(1)(g).
94. MICH. COMP. LAWS § 324.30106.
95. MICH. COMP. LAWS § 324.30302(1)(b)(ii).
96. Regulations apply to wetlands as defined in NREPA "land characterized by the presence of water at a frequency and duration sufficient to support, and that under normal circumstances does support, wetland vegetation or aquatic life, and is commonly referred to as a bog, swamp, or marsh and which is any of the following:
 - (i) Contiguous to the Great Lakes or Lake St. Clair, an inland lake or pond, or a river or stream.
 - (ii) Not contiguous to the Great Lakes, an inland lake or pond, or a river or stream; and more than 5 acres in size; except this subparagraph shall not be of effect, except for the purpose of inventorying, in counties of less than 100,000 population until the department certifies to the commission it has substantially completed its inventory of wetlands in that county.
 - (iii) Not contiguous to the Great Lakes, an inland lake or pond, or a river or stream; and 5 acres or less in size if the department determines that protection of the area is essential to the preservation of the natural resources of the state from pollution, impairment, or destruction and the department has so notified the owner; except this subparagraph may be utilized regardless of wetland size in a county in which subparagraph (ii) is of no effect; except for the purpose of inventorying, at the time." MICH. COMP. LAWS § 324.30301(p).
97. MICH. COMP. LAWS § 324.30304(c).
98. MICH. COMP. LAWS § 324.30305(2)(m).
99. MICH. COMP. LAWS § 324.31509 *et seq.*
100. MICH. COMP. LAWS § 324.503(1).
101. MICH. COMP. LAWS § 324.1601.
102. MICH. COMP. LAWS § 324.36503(1).
103. MICH. COMP. LAWS § 324.36505(1).
104. Michigan Department of Natural Resources, *Environmental Review*, at http://www.michigan.gov/dnr/0,1607,7-153-10370_12141_12168-30516--,00.html [last accessed Jun. 22, 2007]; Michigan Department of Natural Resources. Personal communication (May 23, 2007).
105. MICH. COMP. LAWS § 324.48301. Emphasis added.
106. MICH. COMP. LAWS § 324.30502.
107. MICH. COMP. LAWS § 324.30502.
108. MICH. COMP. LAWS § 324.30513.
109. MICH. COMP. LAWS § 324.30507.
110. MICH. COMP. LAWS § 324.30509.
111. MICH. COMP. LAWS § 324.30508. Emphasis added.
112. MICH. COMP. LAWS § 324.30510.
113. MICH. COMP. LAWS § 324.30512.
114. MICH. COMP. LAWS § 324.30509.
115. MICH. COMP. LAWS § 324.30514.
116. MICH. ADMIN. CODE § 281.302.
117. MICH. ADMIN. CODE § 281.303(a), (b).
118. MICH. ADMIN. CODE § 281.305(2).
119. MICH. ADMIN. CODE § 281.306(1)(a), (c).
120. MICH. COMP. LAWS § 324.35103(1).
121. MICH. COMP. LAWS § 324.35105(1)(d).
122. MICH. COMP. LAWS § 324.35105(2).
123. MICH. COMP. LAWS § 324.2129.
124. Definition of municipalities is provided in MICH. COMP. LAWS § 225.31(e).
125. MICH. COMP. LAWS §§ 125.32, 125.323, 125.101.
126. MICH. COMP. LAWS §§ 125.36, 125.327, 125.104.
127. MICH. COMP. LAWS §§ 125.36, 125.104.
128. MICH. COMP. LAWS §§ 125.37b(2), 125.327b(3). Any municipality may submit plans to a regional planning commission in addition to a county planning commission.
129. MICH. COMP. LAWS § 125.104b(2).
130. MICH. COMP. LAWS §§ 125.37b(3), (4); 125.327b(2); 125.104c(3).
131. If the area in question is outside the authority of a municipal council, then the appropriate board or commission can overrule the commission's decision. MICH. COMP. LAWS § 125.39.
132. MICH. COMP. LAWS § 125.39.
133. MICH. COMP. LAWS § 125.12.
134. MICH. COMP. LAWS § 125.13.
135. MICH. COMP. LAWS § 125.19(1).
136. Northeast Michigan Council of Governments, *New Michigan Zoning Enabling Act Goes Into Effect July 1, 2006 – Applies to All Communities With Zoning Ordinances*, at <http://www.nemcog.org/News%20-%20Zoning%20Law%20Changes.htm> [last accessed Jun. 22, 2007].
137. MICH. COMP. LAWS § 125.3201(1).
138. MICH. COMP. LAWS § 125.3201.
139. MICH. COMP. LAWS § 125.3211(2).
140. MICH. COMP. LAWS § 125.3504(1), 125.3504(2).
141. MICH. COMP. LAWS § 460.601(1).
142. *City of Lansing v. State*, Docket No. 272927 (Mich. App., May 8, 2007) (slip op.).

143. MICH. COMP. LAWS § 123.131.
144. MICH. COMP. LAWS § 486.315.
145. MICH. COMP. LAWS § 125.39.
146. Michigan Public Service Commissions. Personal Communication (Feb. 21, 2007).
147. The largest subsidiaries of DTE Energy are Detroit Edison, an electric utility, and MichCon, a natural gas utility. DTE Energy, *Utility Businesses*, at <http://www.dteenergy.com/businesses/utility.html> [last accessed Jun. 25, 2005].
148. Consumers Energy, *Environment Stewardship*, at <http://www.consumersenergy.com/welcome.htm> [last accessed Jun. 26, 2007].
149. Consumers Energy. Personal Communication (Feb. 21, 2007).
150. DTE Energy, *Power Plant Environmental Policies*, at <http://www.dteenergy.com/environment/edisonPowerPlants.html> [last accessed Jun. 22, 2007].
151. DTE Energy. Personal Communication (Feb. 22, 2007).
152. Wildlife Habitat Council, *Member News*, at <http://www.wildlife-hc.org/news/membernews/index.cfm?Page=1&NewsID=35092> [last accessed Jun. 22, 2007].
153. Traverse City Light and Power, *Customer Choice*, at http://www.tclp.org/customer_choice.php [last accessed Jun. 22, 2007].
154. Michigan Department of Environmental Quality, *Drinking Water*, at http://www.michigan.gov/deq/0,1607,7-135-3313_3675___,00.html [last accessed Jun. 22, 2007].
155. Lansing Board of Water and Light, *About the BWL: History*, at http://www.lbw.com/aboutbwl_history.asp [last accessed Jun. 22, 2007].
156. Lansing Board of Water and Light. Personal Communication, 22 February 2007; Michigan Department of Natural Resources. Personal Communication (May 23, 2007).
157. Grand Haven Board of Light and Power. Personal Communication (Feb. 22, 2007).
158. City of Gladstone. Personal Communication (Feb. 27, 2007).
159. Traverse City Power and Light. Personal Communication (Mar. 5, 2007).
160. Marquette Board of Power and Light. Personal Communication (Feb. 27, 2007); City of Crystal Falls. Personal Communication (Feb. 27, 2007).
161. Coldwater Board of Public Utilities. Personal Communication (Feb. 22, 2007).
162. Michigan Public Service Commission, *supra* note 144.
163. Michigan Department of Environmental Quality. Personal Communication (Mar. 1, 2007).
164. *Id.*
165. Michigan Department of Natural Resources. Personal Communication (Feb. 7, 2007).
166. Michigan Natural Features Inventory. Personal Communication (May, 14, 2007).
167. Michigan Natural Features Inventory, *Michigan's Special Animals*, at <http://web4.msue.msu.edu/mnfi/data/specialanimals.cfm> [last accessed Jun. 22, 2007].
168. The MNFI tracks two subspecies that are now considered to be one species; therefore, although the MNFI includes 238 species in its database, the Michigan wildlife action plan includes 237 species (the subspecies in question were land snails, with very little known about them). Michigan Department of Natural Resources. Personal Communication (May 23, 2007).
169. Michigan Wildlife Action Plan (2005), 17.

LINKING UTILITY MANAGEMENT AND WASHINGTON'S WILDLIFE ACTION PLAN

BACKGROUND

Washington is known for its forests, mountains, rivers, and diverse ecosystems. Washington's population density and numeric growth rates rank just behind California.¹ Most growth is in the Puget Sound region, but growth is also occurring in other areas of the state. The wildlife action plan completed in September 2005 addresses threats from this development and conservation issues at a landscape level.

I. Washington's Wildlife Action Plan

PLAN PHILOSOPHY

Washington's wildlife action plan is a "plan of plans,"² a strategic blueprint that is intended to guide conservation throughout the state.³ It was developed in conjunction with ecoregional assessments, and it uses coarse and fine filter approaches to species and habitat conservation. Development of the wildlife action plan by the Washington Department of Fish and Wildlife (WDFW) was coordinated with numerous government agencies and stakeholders in recognition that preservation of biological diversity is the responsibility of many.

The Plan was developed to be a "living document" that will be revised biennially to incorporate new information, data, strategies, and priorities.⁴ Six principles guided development of the plan:

1. Leave no species behind: Support and expand current efforts to protect federal and state endangered species, while also working to keep common species common.
2. Build a plan of plans: Develop the wildlife action plan from existing work.
3. Strengthen conservation partnerships: Strengthen existing and build new partnerships to better protect species of greatest conservation need and their habitats.
4. Emphasize biodiversity conservation: Coordinate with Washington's Biodiversity Council and encourage long-term conservation of the state's biodiversity.
5. Inform the public: Develop a document that can be read by a wide audience, is easy to read, and is readily available to all stakeholders and the public.
6. Inform decision makers: Utilize the wildlife action plan to make others aware of important conservation issues in Washington.⁵

A primary goal of WDFW is to use the wildlife action plan along with other conservation tools such as the ecoregional assessments to raise public awareness, garner support for needed conservation measures, inform landowners, and assist local land use planning agencies that administer Washington's Growth Management Act (GMA) and carry out local conservation initiatives.

PLAN STRUCTURE

The wildlife action plan's statewide overview outlines major threats, problems, and conservation strategies for species and habitats, and identifies existing conservation efforts, planning initiatives, and databases. The section dedicated to species of greatest conservation need follows. It provides information on species populations, distributions, threats, and conservation strategies and actions. Species of greatest conservation need were determined using criteria such as threats and vulnerability; they include species from the WDFW's Priority Habitat and Species List and the Department of Natural Resources' (DNR) Natural Heritage database.

The wildlife action plan is organized based on ecoregions. Washington's nine ecoregions include Northwest Coast, Puget Trough, North Cascades, West Cascades, East Cascades, Okanogan, Blue Mountains, Columbia Plateau, and Canadian Rocky Mountains. Each ecoregion section of the plan contains a regional subset of species of greatest conservation need; background information on the ecoregion's geology, habitats, and species diversity; related species and habitat management plans; description of priority habitats; and ecoregion-level conservation problems and actions to address these problems. The wildlife action plan also includes several local habitat assessments, which are based on a finer-scale analysis than the ecoregional assessments. The associated "utility conservation maps" depict the importance of species biodiversity and habitats across an ecoregion.⁶

Throughout the species of greatest conservation need and ecoregion sections, the wildlife action plan makes specific reference to potential fish and wildlife

The wildlife action plan makes specific reference to potential fish and wildlife impacts associated with utilities and related conservation strategies and actions.

impacts associated with utilities and related conservation strategies and actions. For example, major statewide strategies focus on hydropower and salmon recovery⁷ and how state and local agencies should work with private landowners to help them implement land and water management activities to benefit wildlife.⁸ Conservation actions on the ecoregional level address minimizing negative effects from hydropower and wind power projects and electrocutions of raptors from power lines, among other concerns.

II. Regulatory Framework for Utilities

In Washington, federal, state, and local laws govern utilities and their actions. Although federal legislation is largely outside the scope of this case study,⁹ several federal laws significantly affect the state's regulatory capacity over federally managed electric utilities. The Utilities and Transportation Commission (UTC) regulates all private utility companies including those that provide electricity and water. There also are Public Utility Districts (PUD) that supply electricity, water, and/or sewer service to the customers within the district; water-sewer districts; operating agencies that provide electricity; county and municipally owned utilities that offer electricity, water, and sewer service; and electric cooperatives that offer electric service. PUDs, water-sewer districts, and operating agencies are self-governed. The Department of Ecology (Ecology) regulates the use of water and wastewater and handles environmental permitting. State and local laws and regulations, land use planning policies, local Shoreline Master Programs (SMPs), and zoning ordinances are the primary tools that Washington uses to ensure utilities minimize their impacts on wildlife. Washington's regulatory mechanisms for utilities incorporate various environmental and wildlife protections.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

The UTC regulates private, investor-owned utility companies. The UTC regulates service, facilities, practices, and rates and is mandated to regulate in the "public interest".¹⁰ It establishes regulations that govern service responsibilities for electric, gas, and water companies.¹¹ UTC regulations state that utility companies must abide by all state laws; however, the UTC may impose additional or different requirements that are consistent with these state laws.¹² The UTC does not regulate PUDs, municipal utilities, cooperatives,¹³ or thermal energy companies.¹⁴ The UTC may enter into agreements with counties to regulate water companies within their jurisdictions.¹⁵ A utility company must receive permission from the legislative authority of a city or a county to construct, maintain, and operate electricity transmission lines, poles, wires, and associated items on, beside, or across its roads and streets, and the legislative authority may set standards for how these actions will be carried out.¹⁶

Among conservation provisions under state law, the UTC-regulated electric and gas companies are authorized to provide their customers with information regarding landscaping and planting trees to conserve energy.¹⁷ These utilities also may include a request in customers' bills to donate to urban forestry programs.¹⁸ The UTC also is authorized to encourage energy and water conservation.¹⁹

ENERGY FACILITY SITE EVALUATION COUNCIL

The Washington State Energy Facility Site Evaluation Council (EFSEC) coordinates the evaluation of electrical transmission facilities and energy facilities.²⁰ Plants of any size that use only renewable resources may elect to go through this certification process as well.²¹ Hydropower facilities are not licensed by the EFSEC, because they are regulated by the Federal Energy Regulatory Commission (FERC). In addition, the EFSEC recently acquired authority from the Washington legislature to oversee siting of transmission facilities located within Transmission Corridors²² as identified by the Department of Energy pursuant to the Energy Policy Act of 2005.²³ The EFSEC makes recommendations to the Governor based on its evalu-

ation of an application, and if a project receives approval from the Governor, the EFSEC determines the specifications for construction and operation.²⁴

The EFSEC is required by law to develop procedures to determine the site of energy facilities while also considering that facility site selection will affect natural resources.²⁵ In carrying out its actions, the EFSEC must work “to preserve and protect the quality of the environment.”²⁶ Regulations also state that facility locations and operations must result in “minimal adverse effects on the environment, ecology of the land and its wildlife, and the ecology of state waters and their aquatic life.”²⁷ Furthermore, the EFSEC has the authority to “develop and apply environmental and ecological guidelines in relation to the type, design, location, construction, and operational conditions of certification of energy facilities.”²⁸ Several guidelines relate to fish and wildlife; a utility must demonstrate that there is no net loss of fish and wildlife habitat function,²⁹ carry out restoration and mitigation procedures,³⁰ and conduct fish and wildlife surveys throughout the year.³¹ The EFSEC also is responsible for preparing and writing the environmental impact statement for all proposed energy facilities.³²

Counties and municipalities may work with the EFSEC when a proposed energy facility will be located within their jurisdictions,³³ but only if they have comprehensive plans and land use and zoning policies in place at the time the application is submitted to the EFSEC.³⁴ Local governments also may sit on the EFSEC when a proposed facility will be within their jurisdiction. If an energy facility is not in compliance with local land use laws and the two parties can find no resolution, then the state can preempt these local policies through an arbitration process.³⁵

PUBLIC UTILITY DISTRICTS

PUDs are municipal corporations;³⁶ they also are not-for-profit and community-owned and governed.³⁷ PUDs have statutory authority to supply water, energy, sewage, and wholesale telecommunications service to the public and to ensure water and energy conservation.³⁸ Each PUD has a board of commissioners that sets policy for and administers the PUD. The board has powers similar to a county board.³⁹ PUDs do not

include any municipal corporation that already owns or operates all the utilities in an area that a PUD could provide.⁴⁰

PUDs have the right of eminent domain and may build, purchase, lease, maintain, and operate sewage systems⁴¹ and all lands, water, property, and infrastructure for producing and supplying electric energy⁴² and water.⁴³ They also regulate use, distribution, and rates for water and electricity.⁴⁴ They may purchase electric current to sell and distribute.⁴⁵ Washington's regulations also allow a PUD to acquire the water rights necessary to take and use water from public or private water bodies.⁴⁶ Municipalities grant PUDs approval for constructing infrastructure in their streets and public spaces when it will be used to generate, transmit, or distribute energy for sale.⁴⁷ The town or city also may prescribe regulations for the maintenance and operations of these facilities.⁴⁸

Because PUDs are municipal corporations and thus considered a government agency, they are required to adopt rules to implement the State Environmental Policy Act (SEPA) and to integrate the policies and procedures of SEPA into their programs.⁴⁹ Under SEPA, municipal corporations also must incorporate ecological information in planning for any natural resource-related projects.⁵⁰

OPERATING AGENCY

PUDs, two or more cities, or a combination of these may form an operating agency (also referred to as a joint-operating agency) to supply electric energy and power.⁵¹ Each operating agency is considered a municipal corporation⁵² and has similar authorities to a PUD in regards to electricity. They may produce, purchase, distribute, and sell electricity and build, operate, and regulate associated infrastructure. However, they may not condemn facilities owned by a city, district, or private utility.⁵³ Operating agencies also have authority to enter into contracts to purchase, sell, trade, or distribute electricity or falling water and may determine rates for energy that is sold or transmitted.⁵⁴

Operating agencies that own dams or any other obstructions are required by law to build and maintain “fishways, fish protective facilities and hatcheries” to allow anadromous fish to pass through these

Facility locations and operations must result in “minimal adverse effects on the environment, ecology of the land and its wildlife, and the ecology of state waters and their aquatic life.”

dams.⁵⁵ Regulations also mandate that they replace all damaged fisheries. Any operating agency may ask the WDFW to build and operate fishways or protective facilities structures for them.⁵⁶ As with any municipal corporation, an operating agency also must integrate SEPA into its rules and policies, where applicable.⁵⁷

WATER-SEWER DISTRICTS

One or more counties, cities, or other jurisdiction may form a water-sewer district.⁵⁸ Water-sewer districts have similar authorities to PUDs with regard to water. They are authorized to purchase or condemn lands, property, and water needed for their projects.⁵⁹ They may build, buy, maintain, operate, and supply waterworks,⁶⁰ sewer systems,⁶¹ and drainage systems⁶² for the district. The district has the authority to regulate water and sewer usage, distribution, and rates as well as drainage service rates.⁶³ Districts may use or sell electricity when produced as a by-product of waterworks, sewer systems, and drainage facilities.⁶⁴ They may also establish street lighting systems.⁶⁵

Water-sewer districts also are authorized to take part in and spend revenue on watershed management actions for “purposes of water supply, water quality, and water resource and habitat protection and management.”⁶⁶ The district may “acquire by purchase or condemnation such property or property rights or privileges as may be necessary to protect its water supply from pollution.”⁶⁷

COUNTY AND MUNICIPAL UTILITIES

The state grants counties the authority to construct, operate, and maintain sewer and water systems within their jurisdictions. Counties also may establish, condemn, and buy water supply systems, sanitary and storm sewer systems, and all related infrastructure.⁶⁸ They may not condemn sewage or water systems of a municipal corporation or private utility.⁶⁹ Counties also have the authority to regulate, control, and manage these facilities and services. When it is deemed in the public interest to build, purchase, or improve a sewage or water system, the county legislative authority is required to develop a general plan for this system.⁷⁰ All municipal corporations and private utilities within the plan's coverage area must follow the provisions of this plan when planning for future development.⁷¹

Cities or towns may build, obtain, maintain, and operate waterworks to ensure adequate water for public and private uses for their citizens. The city or town regulates usage, distribution, and rates.⁷² These municipal utilities are authorized to carry out the same actions as counties with regard to water; they also may provide gas and electricity for lighting, heating, power, and fuel⁷³ and may purchase or condemn electricity from a PUD.⁷⁴ They may accept property and assets from a water-sewer district that has the same boundaries and operate them as a municipal waterworks; they may also acquire out-of-state water works.

Washington's regulations for municipal utilities state that:

The quality of the natural environment shall be protected and, where possible, enhanced as follows: Perennial rivers and streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish...and other environmental values...Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that overriding considerations of the public interest will be served.⁷⁵

Municipal utilities also are encouraged to inform their customers about landscaping practices that include planting trees for energy conservation purposes.⁷⁶

DEPARTMENT OF ECOLOGY

Water Resources

The Water Code gives Ecology the authority to oversee public waters including “their appropriation, diversion, and use”⁷⁷ and states that water should be used in a way that ensures there is “sufficient quantity and quality to protect instream and natural values and rights.”⁷⁸ Ecology may inspect any system, facilities, or works related to water use and require construction or maintenance where needed.⁷⁹ Ecology administers water rights for new uses through permits.⁸⁰ No one may use water or construct any associated infrastructure for which they have the right before the permit is granted.⁸¹ Once Ecology determines that all terms of an issued water permit have been met, it will issue a certificate.⁸² Anyone who wants to transfer a water right, change the point of diversion, or alter the type

of use is required to file an application with Ecology.⁸³ Ecology also administers reservoir permits.⁸⁴ In regards to electric utilities, Ecology may conduct surveys and studies, and it collects and distributes data to facilitate the development of electric power by PUDs, municipalities, and electric cooperatives. It may also request studies on steam generative plants and their construction.⁸⁵

The Water Code also requires all water use permits be issued only for designated uses that are for a beneficial use. Beneficial use is defined by how water is used (e.g., domestic, power generation, or irrigation purposes) and the amount used.⁸⁶ In evaluating permits for water rights, transfers, or changes that include new resource management methods such as impoundments, Ecology must assess possible environmental impacts.⁸⁷ All public water supply facilities applying for water permits also must certify that the water supply will be “used in a manner consistent with applicable land use, watershed and water system plans.”⁸⁸

The Water Resources Act was passed in 1971 to ensure that water resources are used properly to promote public health and economic stability as well as preserve natural resources.⁸⁹ This Act declares that beneficial uses include uses for “[f]ish and wildlife maintenance and enhancement.”⁹⁰ The legislation states that strategies should be developed to allow for water supply in adequate amounts to meet three water resource objectives, one of which is “providing sufficient water for productive fish populations.”⁹¹ This law also sets forth provisions for water efficiency and conservation as well as instream flows.

Washington’s regulations also give local agencies authority to develop watershed plans to manage and protect water resources.⁹² Ecology provides funding for plan development through grants.⁹³ Watershed planning units may be established within watershed resources inventory areas (WRIA)⁹⁴ if there is agreement between all counties in the WRIA, the largest city or town, and the water supply utility (e.g., PUD or operating agency) that draws the most water in the WRIA.⁹⁵ Plans must include water quantity provisions, and they may include water quality provisions, a habitat component, and instream flow elements.⁹⁶

Shoreline Resources

Ecology also administers the Shoreline Management Act, which the legislature passed in 1971 to emphasize that Washington’s shorelines are “among its most valuable and fragile of its natural resources.”⁹⁷ The statute declares that state policy includes minimizing negative impacts to lands, vegetation, state waters, and aquatic life.⁹⁸ Regulations require that local governments plan and administer Shoreline Master Programs (SMP) to regulate shoreline development and use along rivers, lakes, and coastal waterfront areas.⁹⁹ Ecology develops guidelines for creating and implementing SMPs, provides support to SMPs, and ensures compliance with the guidelines.¹⁰⁰

Currently, local SMPs are being updated statewide according to a schedule set forth in statutes¹⁰¹ that is consistent with minimum standards established in the new 2003 SMP guidelines.¹⁰² All SMPs are required to focus on a shoreline’s ecological functions, demonstrate that no net loss of these functions is achieved,¹⁰³ and plan for restoration of shoreline ecology.¹⁰⁴ Each county and city abutting shorelines of the state also must classify shorelines into six environment designations: high-intensity, shoreline residential, urban conservancy, rural conservancy, natural, and aquatic.¹⁰⁵ Counties are required to outline management policies and environmental specific regulations for each designation that should be consistent with local comprehensive plans and use policies and infrastructure plans.¹⁰⁶

All utility facilities must be “designed and located to assure no net loss of shoreline ecological functions, preserve the natural landscape,” and reduce conflict with planned and future land and shoreline uses.¹⁰⁷ All utility production, processing facilities such as power plants, transmission facilities, pipelines and cables in tidelands, and facilities requiring periodic maintenance that will impact shoreline ecological function, will not be located in shoreline areas unless there is no other feasible location. If permitted, then provisions will be made to ensure these facilities do not negatively impact shoreline function or any other shoreline resources. Where possible, all utilities also should be in existing corridors and rights-of-way (ROW).¹⁰⁸

All utility facilities must be “designed and located to assure no net loss of shoreline ecological functions, preserve the natural landscape,”

“incorporate mitigation measures as necessary to achieve no-net-loss of productive capacity of fish and shellfish habitat”

State Environmental Protection Act

Washington legislation states that all government agencies, including PUDs, operating agencies, and municipal utilities, must comply with the SEPA.¹⁰⁹ For all major actions, all government agencies must develop an environmental impact statement, consult with agencies that have jurisdiction or expertise in regards to the potential impacts, and study all potential alternative actions.¹¹⁰ Ecology is authorized to promulgate rules to implement the SEPA including categorizing government agency actions that fall under SEPA and establishing criteria and guidelines for environmental impact statements.¹¹¹ The Environmental Checklist developed by Ecology to guide proposal submittal includes a provision that all threatened or endangered species on or near a project site must be included in any proposal.¹¹² If an environmental impact statement is required based on a review of the proposal, then the environmental impact statement must include alternative actions including the proposed action, mitigation alternatives, and the endangered and threatened species that will be impacted by the alternative actions.¹¹³

DEPARTMENT OF FISH AND WILDLIFE

The WDFW has statutory authority to determine what wildlife species it will manage,¹¹⁴ to designate species that may not be fished or hunted,¹¹⁵ and to classify any wildlife species as endangered.¹¹⁶ The WDFW's rules for classifying and listing endangered and threatened wildlife also include a requirement that the Department develop recovery plans for all species listed as endangered and threatened and management plans for all species listed as sensitive.¹¹⁷ These recovery plans must include an implementation plan that specifies what resources will be needed from other government agencies and landowners as well as the impacts the recovery plan will have on these agencies and landowners.¹¹⁸ The WDFW also is required by law to work with other state and federal agencies to protect bald eagles and establish habitat buffer zones for them.¹¹⁹ State law also requires that all diversions be equipped with fish guards and all dams and obstructions be equipped with fishways.¹²⁰ The WDFW also works with local governments and planning agencies to adopt policies and regulations that will support the agency's mandate to protect fish and wildlife

resources.¹²¹ One tool the WDFW uses to assist these agencies is its Priority Habitat and Species List and database. This database provides in-depth information on species and habitats that are priorities for protection and addresses how to preserve these resources as a part of land use and development decisions.¹²²

Hydraulic Code Rules

The WDFW Hydraulic Code Rules require that utility line projects such as cables or sewer lines “incorporate mitigation measures as necessary to achieve no-net-loss of productive capacity of fish and shellfish habitat” when the project involves using, diverting, or obstructing any fresh or salt waters or beds of the State.¹²³ The rules also outline specific mitigation measures to ensure no-net-loss of fish, such as planning project timing, equipment, and techniques to minimize impact to fish and shellfish habitat; placing of utility lines to avoid specific fish spawning areas; and replacing wetland plants that are impacted during construction.¹²⁴

Wind Power Guidelines

The WDFW also established wind power project guidelines in 2003. These guidelines were the first of their kind.¹²⁵ The first section provides guidelines for baseline and monitoring studies for wind projects including pre-project assessments, recommendations for reducing impacts to wildlife and operational monitoring, and needed studies. The second section outlines requirements for habitat mitigation, and the last section describes a pilot program that presents an alternative to traditional mitigation measures.¹²⁶

Federal Laws Related to State Authority over Utilities

Although federal laws are beyond the scope of this case study, two federal laws are worth noting, because they provide important regulatory opportunities for the WDFW. Both the Fish and Wildlife Coordination Act¹²⁷ and the Federal Power Act¹²⁸ give the WDFW a level of authority to protect fish and wildlife. The Fish and Wildlife Coordination Act provides authority to state and federal agencies to make recommendations on how to protect and mitigate impacts for fish and wildlife for any federally funded or permitted water project. This broad statute includes permits issued by the U.S. Army Corps of

Engineers to the development of the Columbia Basin Federal Reclamation Project. The Federal Power Act gives similar authority to states over hydroelectric project licenses issued by FERC. Both statutes also require that WDFW recommendations for the protection and mitigation of fish, wildlife, and their habitat become part of the federal approval unless those recommendations are found to be inconsistent with other federal laws. If inconsistent, the federal regulatory agency must explain, in writing, why WDFW recommendations were not followed and provide the opportunity to resolve the disagreement. For hydroelectric projects that are below the size threshold to require a license (called license exemptions), the Federal Power Act grants the WDFW prescriptive authority to mandate measures to protect fish and wildlife on those small projects.¹²⁹

DEPARTMENT OF NATURAL RESOURCES

The DNR protects and manages over five million acres of state-owned farmlands, forests, and aquatic areas for commercial, recreational, and conservation purposes and works to ensure sustainable use of resources on these lands.¹³⁰ The Natural Heritage Program was established within the DNR in 1982 to prevent the loss of threatened biodiversity in the state.¹³¹ This program collects and disseminates information on rare plants and endangered animals and develops strategies for protecting the state's ecosystems and species. Government agencies, landowners, consultants, and the public can use this information when making conservation, planning, and land management decisions.¹³² Utilities can use this information early in their planning, such as for pipeline placement, to avoid later project conflicts and approval delays.¹³³ The DNR also is responsible for approving all easements for utility transmission line ROW on state-owned lands, and all municipal or private corporations apply to the DNR to receive these easements.¹³⁴ In cooperation with the U.S. Fish and Wildlife Service (U.S. FWS) and the National Marine Fisheries Service, the DNR has developed a Habitat Conservation Plan (HCP) for endangered species on 2.4 million acres of state aquatic lands, and it will cover birds, fish, amphibians, reptiles, and the resident orca population. Once the HCP is adopted, its conservation measures could impact utility activities on these lands.¹³⁵

STATE AND LOCAL LAND USE REGULATIONS

Growth Management Act

The state legislature enacted the Growth Management Act (GMA) in 1990 based on the findings that *"uncoordinated and unplanned growth, together with a lack of common goals expressing the public's interest in the conservation and the wise use of our lands, pose a threat to the environment, sustainable economic development..."*¹³⁶ One of the goals of the GMA states that open space should be preserved and fish and wildlife habitat should be conserved.¹³⁷ The GMA requires that certain counties and cities, based on population size and growth rates, develop and implement comprehensive land use plans. The Department of Community, Trade, and Economic Development (CTED) Growth Management Services Division (GMS) assists and guides local governments through technical assistance and grants.¹³⁸ In addition to comprehensive plans, counties and cities also must adopt ordinances to ensure implementation of the comprehensive plan.¹³⁹ Counties and cities must notify CTED of their intent to adopt comprehensive plans and development regulations and submit copies of both.¹⁴⁰ Counties and cities not required to plan under the GMA may voluntarily choose to develop these comprehensive plans in accordance with the GMA.¹⁴¹ Twenty-nine of Washington's 39 counties currently have these comprehensive plans.¹⁴²

Each comprehensive plan must include a variety of elements including but not limited to a land use element, utilities element, transportation element, and capital facilities element. CTED establishes guidelines for these elements. For example, land use elements must contain the proposed location, distribution, and degree of land use such as for housing or open space,¹⁴³ and utilities elements must contain the location and capacity for existing and proposed utilities.¹⁴⁴ A conservation element is optional, but may be included.¹⁴⁵ The guidelines require that all elements be consistent and implemented together.¹⁴⁶ Plans also must include delineated urban growth areas where development should be encouraged.¹⁴⁷

All counties and cities, even those not required to develop comprehensive plans, are required by GMA to

All counties and cities are required by GMA to designate critical and natural resource areas.

designate critical and natural resource areas and adopt development regulations to protect them.¹⁴⁸ In designating critical areas and writing critical area ordinances, the GMA mandates that “best available science” be used.¹⁴⁹ CTED’s guidelines for critical areas specifically require that these areas include important wildlife and fish habitats and wetlands.¹⁵⁰ It is important to note that 2003 amendments to the GMA shift protection of critical areas within shorelines exclusively to the local governments with Ecology-approved SMPs that are being updated pursuant to Ecology’s SMP guidelines.¹⁵¹

Local authorities are required to incorporate into the development regulations developed under the GMA procedures for approving project permits.¹⁵² Project permits that local authorities approve include but are not limited to building permits, site plans, subdivisions, and permits required by critical area ordinances.¹⁵³ Because there are numerous layers to the environmental review process,¹⁵⁴ Washington’s legislature passed a law that requires environmental review to start with local authorities and comprehensive plans and development regulations.¹⁵⁵ Furthermore, environmental review carried out for the same project by other agencies under SEPA should not duplicate the efforts of local authorities.¹⁵⁶ A city or county is authorized to determine first if its development regulations and comprehensive plan provide adequate environmental analysis, protection, and mitigation measures for a project’s adverse environmental impacts.¹⁵⁷ The local government must base its approval of the project permit on compliance with these measures.¹⁵⁸

Planning Enabling Act

The Planning Enabling Act authorizes any county board of commissioners to establish a planning commission or a planning department.¹⁵⁹ If a planning commission is established, then it will be required to develop a comprehensive plan. A county or city may join with other cities and counties or other entities such as PUDs to create a regional planning commission that will be required to fulfill the same planning mandate as a county planning commission.¹⁶⁰ All required plan elements must correlate with each other, such as a land use element and a circulation element (includes location and extent of trunk utility

lines).¹⁶¹ Optional elements include a conservation element “for the conservation, development and utilization of natural resources, including water and its hydraulic force, forests, watersheds, soils, rivers and other waters, harbors, fisheries, wild life, minerals and other natural resources” and a public services and facilities element that includes local utilities and ROW.¹⁶² County development regulations must be consistent with the comprehensive plan.¹⁶³ A county with a comprehensive plan that contains a land use element and a circulation element may develop zoning ordinances to regulate land use for agriculture, industry, business, residential, and other uses.¹⁶⁴

Local land use regulation in Washington can affect utilities’ activities. Privately-owned utilities are required to obtain approval from a county or city legislative authority before constructing and maintaining electric power lines and associated infrastructure within their jurisdictions. Additionally, local authorities can establish standards for this work.¹⁶⁵ PUDs also must seek approval from a city or town legislative authority before constructing any electricity-related infrastructure used for operating facilities on streets or public property. Maintenance and operation of these facilities will be subject to regulations that a legislative authority may prescribe.¹⁶⁶

Under the GMA, counties and cities must evaluate the need for capital facilities that will support land use choices in their comprehensive plans. Counties and cities that provide utility services within their jurisdictions can adjust their services based on how growth is planned. However, many utility services within a county or city are provided by privately-owned utilities, PUDs, operating agencies, or water-sewer districts. Counties and cities can work closely with these utilities to ensure that the utilities’ plans are consistent with local comprehensive plans.¹⁶⁷

III. Utility Wildlife Conservation in Practice

PUBLIC UTILITY DISTRICTS

Twenty-eight PUDs are operating in Washington. Of these 28 PUDs, nine provide only electricity; 14 provide electricity, water, and/ or sewer service; and five provide only water and/ or sewer service.¹⁶⁸ These PUDs have a large responsibility and the opportunity to conserve wildlife on their lands and in their waters. PUDs carry out regulatory requirements such as protecting endangered species on their lands, fulfilling SEPA requirements, and carrying out terms and conditions of applicable permits such as a FERC license. For example, Douglas, Chelan, and Grant PUDs, collectively known as the Mid-Columbia PUDs, have HCPs approved and in place;¹⁶⁹ Okanogan PUD works to prevent osprey electrocutions and has created nests for them;¹⁷⁰ Franklin PUD works to protect eagles;¹⁷¹ and Asotin PUD carries out measures to protect fish species.¹⁷² Lewis, Grant, Douglas, and Chelan PUDs also are responsible for significant contributions to wildlife habitat protection and enhancement as a result of their licenses to operate hydroelectric projects.¹⁷³ Additionally, various PUDs contacted for this study noted that they are familiar with and some have used the WDFW's Priority Habitat and Species List to identify species on their lands. Numerous PUDs also implement voluntary conservation efforts. For example, Chelan PUD collects species baseline data, bands raptors, controls noxious weeds, and manages water fowl.¹⁷⁴ Clark PUD funds a voluntary watershed restoration program, developed and implements a watershed restoration plan, and fences off livestock, stabilizes streams, and removes invasive plants.¹⁷⁵ The largest PUD, Snohomish, has a Wildlife Management Plan as a part of its FERC license but has established more nest boxes than required and exceeded the snag requirements for cavity-nesting birds.¹⁷⁶

MUNICIPAL UTILITIES

The three primary municipal utilities in Washington are Seattle Public Utilities, Seattle City Lights, and Tacoma Public Utilities (consists of three operating divisions: Tacoma Power, Tacoma Water, and Tacoma Rail.) Nineteen municipal utilities provide electricity

to 21 percent of Washington's population.¹⁷⁷ Seattle Public Utilities owns 100,000 acres of land and provides water, sewer, and solid waste service to 1.3 million people or 20 percent of Washington's population. Of these 100,000 acres, 90,000 are in the Cedar River Watershed, and Seattle Public Utilities has numerous conservation measures in place including an HCP. Although the HCP is required as a regulatory document to protect seven endangered species, the HCP also includes 76 additional species that Seattle Public Utilities voluntarily protects.¹⁷⁸ Seattle City Lights provides electricity to over 300,000 customers and is making significant contributions to wildlife habitat protection and enhancement as a result of its hydropower operating license terms.¹⁷⁹ Tacoma Water also conserves wildlife on its lands through its HCP. Like Seattle Public Utilities, its HCP is required for two endangered species, but it also covers an additional 30 species. Tacoma Water also works to protect loons (listed as a state sensitive species) on its property by building nest platforms.¹⁸⁰ Tacoma Power owns and manages over 10,000 acres for wildlife as specified in its hydroelectric project operating licenses.¹⁸¹

PRIVATE UTILITY COMPANIES

Private utility companies provide electricity to approximately 45 percent of Washington's population.¹⁸² There are three main investor-owned electric companies in Washington (Avista Corporation, Puget Sound Energy, and PacifiCorp) and 65 private water companies. All are required to carry out regulatory conservation requirements. For example, PacifiCorp owns and manages over 10,000 acres for wildlife as a part of its hydroelectric project operating permit.¹⁸³ Several private utilities also implement voluntary conservation actions. Avista worked with the state and the Peregrine Fund, a private conservation organization, to establish a hack site (release site for peregrine falcons); however, the effort was unsuccessful. It also has a raptor protection plan for its distribution and transmission lines, which is a program that potentially could work to implement actions in the wildlife action plan.¹⁸⁴ Puget Sound Energy also protects bird species through its Avian Department.¹⁸⁵ Several private water companies contacted for this study noted that they do not carry out any wildlife conservation measures.

PUDs have the opportunity to conserve wildlife on their lands and in their waters.

IV. Opportunities to Use the Wildlife Action Plan to Guide Utility Infrastructure and Management Decisions

Washington's regulatory framework for utilities incorporates numerous provisions that may be invoked to require utilities to consider wildlife and environmental protections either directly or indirectly when making infrastructure, construction, and management decisions (e.g., operational, maintenance, and land management decisions). Utilities also implement voluntary wildlife-specific conservation actions. Utilities and state and local agencies could enhance and expand management and policy initiatives using the wildlife action plan.

UTILITIES AND TRANSPORTATION COMMISSION

Opportunity 1.1: *Adopt requirements for utility companies to use the wildlife action plan to identify opportunities to protect wildlife on their lands.* UTC regulations that state that the UTC may "impose additional or different requirements on any public service company in appropriate circumstances, consistent with the requirements of law" give the UTC the power to develop requirements for utility companies.¹⁸⁶ By adopting a wildlife conservation-related requirement that integrates provisions from the wildlife action plan, the UTC could improve the likelihood that utility companies will consider wildlife conservation as a part of carrying out their service.

ENERGY FACILITY SITE EVALUATION COUNCIL

Opportunity 2.1: *Amend construction and operation site certification conditions and guidelines for fish and wildlife to include a standard that requires an energy facility to use the wildlife action plan to guide its site selection and mitigation and restoration activities.*¹⁸⁷ The EFSEC does not conduct environmental analyses and studies directly but requests assistance and guidance from Ecology and the WDFW when making determinations on environmental impacts and mitigation alternatives. The WDFW also has a voting member on the Council to help ensure that wildlife resources are considered when energy projects are recommended for approval. The EFSEC

and the WDFW also work closely to implement measures to benefit wildlife, and the wildlife action plan will, at a minimum, be useful to these Departments in making recommendations on impacts of a proposed facility.¹⁸⁸

DEPARTMENT OF ECOLOGY

Opportunity 3.1: *Amend Ecology regulations that require water supply facilities to certify that water will be used in a "manner consistent with applicable land use, watershed and water system plans" to include a provision that recommends that these facilities use the wildlife action plan to inform decisions regarding water use.*

Opportunity 3.2: *Revise watershed planning guidelines for instream flow and habitat elements to integrate species and habitat information from the wildlife action plan.*

Opportunity 3.3: *Require that counties and cities with shorelines use the wildlife action plan as a guide when updating their Shoreline Master Programs (SMPs), specifically to revise SMPs, regulations as they relate to utilities, management policies, and restoration plans.* Counties and cities with shorelines are required by Ecology rules to consult all available scientific and technical information relating to fish and wildlife and any new sources of published information when updating these SMPs.¹⁸⁹ The wildlife action plan should be recognized as an important new source of information for these local governments. This opportunity advances one of the plan's objective that the WDFW should work with local governments to update their SMPs.

Opportunity 3.4: *Post the wildlife action plan on the Shoreline Management "Inventory and Analysis" webpage.* Ecology's Shorelands and Environmental Assistance Program has a website that lists existing technical and scientific references that counties and cities can use when updating their SMPs.

DEPARTMENT OF FISH AND WILDLIFE

Opportunity 4.1: *Revise wind project guidelines to incorporate applicable conservation actions from the wildlife action plan, such as monitoring and reducing wildlife mortalities from wind turbines.* The WDFW has plans to revise these guidelines in

2007, providing the opportunity to integrate species and habitat information and applicable actions from wildlife action plan.

Opportunity 4.2: *Use information from the wildlife action plan, such as areas of high biodiversity and conservation actions, when providing impact analysis and mitigation alternatives¹⁹⁰ for utility projects to agencies such as the EFSEC or local governments.*

Opportunity 4.3: *Work with interested utilities to protect species of concern and priority habitats by helping them develop appropriate management actions and conservation projects.* This opportunity will advance a goal found throughout the ecoregion sections of the wildlife action plan that state that the WDFW should help utilities develop habitat conservation plans, decide on land acquisition of critical habitats, and manage their lands to better protect wildlife.¹⁹¹

Opportunity 4.4: *Encourage utilities to consult conservation utility maps (once completed), which display priority habitats for conservation based on biodiversity values, when determining appropriate areas to build infrastructure so as to avoid priority areas.* Utility maps were developed as a part of the Ecoregional Assessments. They display relative conservation and biodiversity values of different landscapes and watersheds across an area.¹⁹²

Opportunity 4.5: *When advising FERC, recommend that it incorporate conservation actions and mitigation measures from the wildlife action plan into the terms and conditions of hydropower facility licenses.* All hydropower facilities require a FERC license to operate and federal law requires that all hydropower projects provide for “the adequate protection, mitigation, and enhancement of fish and wildlife.”¹⁹³ All licenses must include terms and conditions for these activities.¹⁹⁴ FERC is in the process of renewing hydropower facilities’ licenses in Washington, and the WDFW is authorized by federal law to advise the FERC in regards to conditions and terms of the licenses.¹⁹⁵ Using the wildlife action plan during this process will advance one of the plan’s goals for the WDFW, which is to participate in the permitting process for hydropower development on private lands.¹⁹⁶

DEPARTMENT OF COMMUNITY, TRADE, AND ECONOMIC DEVELOPMENT

Opportunity 5.1: *Link to the wildlife action plan from the GMA website as a source of information for local governments in developing comprehensive plans and critical areas ordinances.* CTED recognizes the importance of the wildlife action plan as a useful source of information and linking to it from its website is a feasible opportunity.¹⁹⁷

Opportunity 5.2: *Revise GMA guidelines for writing comprehensive plan land use elements and conservation elements, and for designating and protecting critical areas, to include use of the wildlife action plan as a guide.* When cities and counties are developing comprehensive plans under the GMA, they must consider CTED’s guidance for developing plan elements and for designating and writing ordinances for critical areas. The advisory guidelines outline recommendations for meeting GMA requirements. Although CTED has no current plans to update these guidelines, incorporating the wildlife action plan into these guidelines would help inform the critical areas designation and comprehensive planning processes.

COUNTY AND MUNICIPAL PLANNING BOARDS

Opportunity 6.1: *Counties should incorporate information from the wildlife action plan on priority species, habitats, and conservation actions into comprehensive plans developed under the Planning Enabling Act.* Plans can include a conservation element and a public services and facilities element. The wildlife action plan provides important information to counties in regards to these two elements and associated development of policies and regulations.

Opportunity 6.2: *Counties and municipalities required to plan under the GMA should use the wildlife action plan to delineate new or revised critical areas and to develop ordinances for these areas.* Counties and cities are in the process of revising their comprehensive plans, giving those that have not yet completed this task an opportunity to integrate provisions of the wildlife action plan.¹⁹⁸ This measure would also help meet the GMA requirement of using the “best available science” for designating critical areas.

Opportunity 6.3: *Incorporate information from the wildlife action plan into conservation elements of comprehensive plans.*

Opportunity 6.4: *Use the wildlife action plan to guide decisions on land use and zoning ordinances.*

Opportunity 6.5: *Use the wildlife action plan when making determinations and recommendations to the EFSEC in regards to siting energy facilities.*

ALL UTILITIES

Opportunity 7.1: *Develop standard practices for operational and maintenance activities and land and water management using priority species, habitat, and conservation actions from the wildlife action plan as a guide.*¹⁹⁹ Utilities can use the wildlife action plan to identify areas of high biodiversity and necessary management actions they should consider when planning work in these areas. Various PUDs noted the wildlife action plan could be useful to them.

Opportunity 7.2: *Use the wildlife action plan to inform and guide the planning process for infrastructure projects (e.g., siting, construction, mitigation).* For example, in all ecoregions, the wildlife action plan recommends that power lines near raptor breeding and foraging areas be built or modified to reduce impacts.²⁰⁰ Chelan PUD suggests it could use the wildlife action plan when it prepares biological assessments for proposed projects.²⁰¹ Okanogan PUD suggests that the wildlife action plan will be useful document for planning projects generally and for meeting SEPA and NEPA requirements.

Opportunity 7.3: *Utilities with hydropower facilities should work to protect priority species by implementing relevant conservation actions from the wildlife action plan.* Such actions include installing mechanisms to ensure fish passage for species like the sea lamprey, green sturgeon, bull trout, and salmon species and protecting migration corridors for bull trout.²⁰² While many of these obligations are under existing regulatory programs, linking them to the wildlife action plan will provide opportunities for cost-effective, multi-species, conservation not just limited to threatened or endangered species.

Opportunity 7.4: *All power producing facilities should work to protect priority species by implementing the action from the wildlife action plan: to modify or construct power lines to decrease raptor electrocutions.*

Opportunity 7.5: *Wind power facilities should implement conservation goals such as minimizing potential impacts to birds, bats, and other resident wildlife in the East Cascades, Okanogan, Columbia Plateau, Blue Mountains, and Columbia Plateau Ecoregions.*²⁰³

Opportunity 7.6: *Hydropower facilities should incorporate the wildlife action plan into their mitigation plans for applying to renew FERC licenses.* Snohomish PUD plans to use the wildlife action plan while working on its application for license renewal, specifically when reviewing literature to update its Wildlife Management Plan.²⁰⁴

Opportunity 7.7: *Use the wildlife action plan to build on existing conservation and stewardship programs or to develop new projects.* Tacoma Water noted that it will be able to incorporate conservation actions from the Puget Sound Ecoregion section that it can feasibly implement as a part of its existing stewardship program.²⁰⁵

Opportunity 7.8: *The Washington PUD Association should make the wildlife action plan available on its website and distribute it to all PUDs.* Only three out of nine PUDs that responded to calls had heard of the plan and none were familiar with it; however, all were interested in reviewing it to see how it might be useful to them. This interest demonstrates that PUDs could be open to using the wildlife action plan in making infrastructure and conservation-related decisions, and it should be made readily available to them. Additionally, the Washington PUD Association has expressed interest in posting a link to the website.

Notes

1. U.S. Census Bureau, *Ranking Tables for States: Population in 2000 and Population Change from 1990 to 2000 (PHC-T-2)*, at <http://www.census.gov/main/www/cen2000.html> [last modified Jun. 19, 2007].
2. Washington Department of Fish and Wildlife, *Washington's Wildlife Action Plan (2005)*, 3 and 2, at <http://wdfw.wa.gov/wlm/cwcs/cwcs.htm>. [Hereinafter Washington Wildlife Action Plan (2005).]
3. Another important conservation plan being developed is the Washington Biodiversity Council's 30-year conservation strategy. It aims to help the state protect its biodiversity heritage. The Council's guiding principles include: "(1) refocus state conservation efforts from the species level to the ecosystem level; (2) build on science, recognize existing efforts, and maximize coordination; (3) support active stewardship by private landowners; and (4) support local decision-making." Washington Biodiversity Council, *About the Council*, at <http://www.biodiversity.wa.gov/council/index.html> [last accessed Jun. 22, 2007].
4. Washington Wildlife Action Plan (2005), 7.
5. *Id.* at 3-4.
6. *Id.* at 258-259.
7. *Id.* at 35.
8. *Id.* at 9.
9. The Federal Endangered Species Act (ESA) (10 USC §§1531-1544) affects many utility decisions and activities that impact federally listed species. Utilities must prepare and implement a federally-approved Habitat Conservation Plans (HCPs) in connection with activities that may produce an "incidental take" of protected species.
10. WAS. REV. CODE § 80.1.040(3).
11. WAS. ADMIN. CODE §§ 480-100-148, -148, -365.
12. WAS. ADMIN. CODE § 480-80-020(1), (2).
13. Utilities and Transportation Commission, *About Us*, at <http://www.wutc.wa.gov/aboutus> [last updated Aug. 8, 2005]; WAS. REV. CODE § 80.04.500.
14. WAS. REV. CODE § 80.04.550(1). Thermal energy is "heat or cold in the form of steam, heated or chilled water, or any other heated or chilled fluid or gaseous medium." WAS. REV. CODE § 80.04.550[2][c].
15. WAS. REV. CODE § 80.28.185.
16. WAS. REV. CODE § 80.32.010.
17. WAS. REV. CODE § 80.28.300(a).
18. WAS. REV. CODE § 80.28.300(b).
19. WAS. REV. CODE § 80.28.025(1), (2).
20. WAS. REV. CODE § 80.50.020(7), (8), (10), (11), (15) (as revised by 1037 S.S.L.(2007)); WAS. REV. CODE § 80.50.060(1), (3) (as revised by 1037 S.S.L.(2007)).
21. WAS. REV. CODE § 80.50.060(2).
22. WAS. REV. CODE §§ 80.50.020(7)(c); § 80.50.060(3).
23. Section 368 and 1221 of the Energy Policy Act of 2005 Pub. L. No. 109-58 (119 Stat. 594); Washington Public Utility District Association. Personal Communication (Nov. 6, 2006).
24. WAS. REV. CODE § 80.50.040(8).
25. WAS. REV. CODE § 80.50.010.
26. WAS. REV. CODE § 80.50.010(2).
27. WAS. REV. CODE § 80.50.010; WAS. ADMIN. CODE § 463-14-020(1).
28. WAS. REV. CODE § 80.50.040(2).
29. WAS. ADMIN. CODE § 463-62-040(2)(a).
30. WAS. ADMIN. CODE § 463-62-040(b),(e).
31. WAS. ADMIN. CODE § 463-62-040(2)(f).
32. WAS. ADMIN. CODE § 463-47-090.
33. WAS. REV. CODE § 80.50.175(3).
34. *Id.*
35. Municipal Research and Services Center of Washington (MRSC), *Siting Major Energy Facilities*, at <http://www.mrsc.org/Subjects/Planning/energy/E-siting.aspx> [last updated Feb. 2006].
36. "Municipal corporation means any city, town, county, water-sewer district, school district, port district, public utility district, metropolitan municipal corporation, public transportation benefit area, park and recreation district, irrigation district, fire protection district or any other municipal or quasi municipal corporation described as such by statute..." WAS. REV. CODE § 39.50.010.
37. WAS. REV. CODE § 54.04.020; Washington Public Utility Districts Association, *PUD General Information*, at <http://www.wpuda.org/pudinfo.htm> [last accessed Jun. 22, 2007].
38. WAS. REV. CODE § 54.04.020; WAS. REV. CODE § 54.16.330.
39. WAS. REV. CODE § 54.04.120.
40. WAS. REV. CODE § 54.04.030.
41. WAS. REV. CODE § 54.16.230.
42. WAS. REV. CODE § 54.16.040.
43. WAS. REV. CODE § 54.16.030.
44. WAS. REV. CODE §§ 54.16.030, -040.
45. WAS. REV. CODE § 54.16.040.
46. WAS. REV. CODE § 54.16.050.
47. WAS. REV. CODE § 54.04.040.
48. *Id.*
49. WAS. REV. CODE § 43.21C.120(3). More information on the State Environmental Protection Act is available in the *Department of Ecology* section of this document.
50. WAS. REV. CODE § 43.21C.030(h).
51. WAS. REV. CODE § 43.52.360.
52. *Id.*
53. WAS. REV. CODE § 43.52.300 et seq.
54. *Id.*
55. WAS. REV. CODE § 43.52.350.
56. *Id.*
57. WAS. REV. CODE § 43.21C.120(3).
58. WAS. REV. CODE § 57.04.020.
59. WAS. REV. CODE § 57.08.005(1).
60. WAS. REV. CODE § 57.08.005(3).
61. WAS. REV. CODE § 57.08.005(5).
62. WAS. REV. CODE § 57.08.005(6)(a).
63. WAS. REV. CODE § 57.08.005(3), (5), (6)(a).

64. *Id.*
65. WAS. REV. CODE § 57.08.060.
66. WAS. REV. CODE § 57.08.190.
67. WAS. REV. CODE § 57.08.005(3).
68. WAS. REV. CODE § 36.94.020.
69. *Id.*
70. If the county already has a comprehensive plan under the Planning Enabling Act, then this general plan will become an element of the comprehensive plan. WAS. REV. CODE § 36.94.030.
71. WAS. REV. CODE § 36.94.110.
72. WAS. REV. CODE § 35.92.010.
73. WAS. REV. CODE § 35.92.050.
74. WAS. REV. CODE § 35.92.054.
75. WAS. REV. CODE § 35.92.010.
76. WAS. REV. CODE § 35.92.390(1).
77. WAS. REV. CODE § 43.21A.064(1).
78. WAS. REV. CODE § 90.03.005.
79. WAS. REV. CODE § 43.21A.064(2).
80. WAS. REV. CODE § 90.03.250.
81. *Id.*
82. WAS. REV. CODE § 90.03.330(1).
83. WAS. REV. CODE § 90.03.380 et seq.
84. WAS. REV. CODE § 90.03.370.
85. WAS. REV. CODE § 43.21A.600.
86. WAS. REV. CODE § 90.14.031(2); Department of Ecology, Water Resources, *Water Right Information*, at <http://www.ecy.wa.gov/PROGRAMS/wr/rights/water-right-home.html> [last accessed Jun. 22, 2007].
87. WAS. REV. CODE § 90.03.255.
88. WAS. REV. CODE § 43.21A.064(5).
89. WAS. REV. CODE § 90.54.010(1)(a).
90. WAS. REV. CODE § 90.54.020(1).
91. WAS. REV. CODE § 90.54.005(2).
92. WAS. REV. CODE § 90.82.010.
93. WAS. REV. CODE § 90.82.040(1).
94. Water resource inventory areas (WRIA) were established by the Department of Ecology to carry out policies of the Water Resources Act in regards to water resource management. WAS. ADMIN. CODE § 173-500-010 (2). Planning and management for water resources takes place within in each WRIA. WAS. ADMIN. CODE § 173-500-050. WRIs are specified in WAS. ADMIN. CODE § 173-500-040.
95. WAS. REV. CODE § 90.82.060(2).
96. WAS. REV. CODE § 90.82.060(6).
97. WAS. REV. CODE § 90.58.020.
98. *Id.*
99. WAS. REV. CODE § 90.58.060(1)(a); Department of Ecology Shoreline Management, *Shoreline Master Program (SMP) Development*, at http://www.ecy.wa.gov/programs/sea/SMA/st_guide/SMP/index.html [last accessed Jun. 22, 2007].
100. WAS. REV. CODE §§ 90.58.050, .060(1).
101. WAS. REV. CODE § 90.58.080.
102. WAS. ADMIN. CODE § 173-26, Part III.
103. WAS. ADMIN. CODE § 173-26-201(2)(c).
104. WAS. ADMIN. CODE § 173-26-201(2)(f).
105. WAS. ADMIN. CODE § 173-26-211(5).
106. WAS. ADMIN. CODE § 173-26-211(3).
107. WAS. ADMIN. CODE § 173-26-241(2)(l).
108. *Id.*
109. WAS. REV. CODE § 43.21C.030.
110. WAS. REV. CODE §§ 43.21C.030(c), (d), (e).
111. WAS. REV. CODE §§ 43.21C.110(1)(a), (1)(b), (1)(c).
112. WAS. ADMIN. CODE § 197-11-960(B)(5)(b).
113. WAS. ADMIN. CODE §§ 197-11-440(5)(c)(i), (6)(c)(i).
114. WAS. REV. CODE § 77.12.020(1).
115. WAS. REV. CODE § 77.12.020(5).
116. WAS. REV. CODE § 77.12.020(6).
117. WAS. ADMIN. CODE § 232-12-297(11.1).
118. WAS. ADMIN. CODE § 232-12-297(11.1.3).
119. WAS. REV. CODE §§ 77.12.650, .655.
120. WAS. REV. CODE §§ 77.57.010(a), .030(1).
121. Washington Department of Fish and Wildlife, *Fish and Wildlife and the Growth Management Act*, available at <http://wdfw.wa.gov/hab/gma-phs.pdf> [last accessed Jun. 22, 2007].
122. Washington Department of Fish and Wildlife, *Priority Habitat and Species*, at <http://wdfw.wa.gov/hab/phspage.htm> [last accessed Jun. 22, 2007].
123. WAS. ADMIN. CODE §§ 220-110-310, -010.
124. WAS. ADMIN. CODE § 220-110-310.
125. Washington Department of Fish and Wildlife. Personal Communication (Jul. 11, 2006).
126. Washington Department of Fish and Wildlife, *Wind Power Guidelines (2003)*, available at <http://wdfw.wa.gov/hab/engineer/windpower/index.htm> [last accessed Jun. 22, 2007].
127. Fish and Wildlife Coordination Act §§ 661-667e.
128. Federal Power Act §§ 791a-797, 798-824a, 824b-825r.
129. Washington Department of Fish and Wildlife. Personal Communication (Nov. 13, 2006).
130. Washington Department of Natural Resources, *Welcome to Washington DNR*, at <http://www.dnr.wa.gov/base/aboutdnr.html> [last accessed Jun. 22, 2007].
131. WAS. REV. CODE § 79.70.030(6).
132. Washington Department of Natural Resources, *About Washington Natural Heritage Program*, at <http://www.dnr.wa.gov/nhp/about.html> [last accessed Jun. 22, 2007].
133. *Id.*
134. WAS. REV. CODE § 79.36.510.
135. Linda Larson, *Washington State Habitat Conservation Plan Could Impact Development on 2.4 Million Acres of State-owned Aquatic Lands (Nov. 29, 2006)*, available at <http://www.marten-law.com/news/?20061129-development-impacted>.

136. WAS. REV. CODE § 36.70A.010. Emphasis added.
137. WAS. REV. CODE § 36.70A.020(9), (10).
138. Washington Department of Community, Trade, and Economic Development, Growth Management Services Division, *Growth Management Service (GMS) Mission and Goals*, at <http://www.cted.wa.gov/site/375/default.aspx> [last accessed Jun. 22, 2007].
139. WAS. REV. CODE § 36.70A.040(3), (4).
140. WAS. REV. CODE § 36.70A.106(1).
141. WAS. REV. CODE § 36.70A.040(2).
142. Municipal Research Services Center of Washington, *Comprehensive Planning and Growth Management*, at <http://www.mrsc.org/Subjects/Planning/compplan.aspx> [last updated Apr. 2007].
143. WAS. ADMIN. CODE § 365-195-305(1)(a).
144. WAS. REV. CODE § 36.70A.070(4); WAS. ADMIN. CODE § 365-195-320((1).
145. WAS. REV. CODE § 36.70A.080(1)(a).
146. WAS. ADMIN. CODE § 365-195-500.
147. WAS. REV. CODE § 36.70A.110(1).
148. WAS. REV. CODE §§ 36.70A.170; .060(2).
149. WAS. REV. CODE § 36.70A.172(1).
150. WAS. ADMIN. CODE § 365-195-410(1)(a), (1)(c).
151. WAS. REV. CODE § 36.70A.480(3)(a).
152. WAS. REV. CODE § 36.70B.080(1).
153. WAS. REV. CODE § 36.70B.020(4).
154. WAS. REV. CODE § 36.70B.010(2).
155. WAS. REV. CODE § 36.70B.030(1).
156. WAS. REV. CODE § 36.70B.030. Findings (1).
157. WAS. REV. CODE § 43.21C.240(1).
158. WAS. REV. CODE § 43.21C.240(2)(b).
159. WAS. REV. CODE § 36.70.010.
160. WAS. REV. CODE § 36.70.060.
161. WAS. REV. CODE § 36.70.330(1), (2).
162. WAS. REV. CODE § 36.70.350(1), (6). Emphasis added.
163. WAS. REV. CODE § 36.70.545.
164. WAS. REV. CODE §§ 36.70.720, .750(1).
165. WAS. REV. CODE § 80.32.010.
166. WAS. REV. CODE § 54.04.040.
167. Washington Department of Community, Trade and Economic Development, *GMA & Capital Facilities*, available at <http://www.cted.wa.gov/DesktopModules/CTEDPublications/CTEDPublicationsView.aspx?tabID=0&ItemID=3951&Mid=944&wversion=Staging> [last accessed Jun. 22, 2007].
168. Washington Public Utility Districts Association, *PUD General Information*, at <http://www.wpuda.org/pudinfo.htm> [last accessed Jun. 22, 2007]; Washington Public Utility District Association. Personal Communication (Aug. 10, 2006).
169. Washington Public Utility District Association. Personal Communication (Nov. 6, 2006).
170. Okanogan PUD. Personal Communication (Aug. 17, 2006).
171. Franklin PUD. Personal Communication (Jul. 28, 2006).
172. Asotin PUD. Personal Communication (Jul. 18, 2006).
173. Washington Department of Fish and Wildlife, *supra* note 129.
174. Douglas County PUD. Personal Communication (Jul. 19, 2006).
175. Chelan PUD. Personal Communication (Jul. 18, 2006).
176. Snohomish PUD. Personal Communication (Sept. 5, 2006).
177. Washington Public Utility District Association, *supra* note 168.
178. Seattle Public Utilities. Personal Communication (Aug. 9, 2006).
179. Washington Department of Fish and Wildlife, *supra* note 129.
180. Tacoma Public Utilities. Personal Communication (Jul. 27, 2006).
181. Washington Department of Fish and Wildlife, *supra* note 129.
182. *Id.*
183. *Id.*
184. Washington Department of Ecology. Personal Communication (Nov. 30, 2006).
185. Puget Sound Energy. Personal Communication (Jul. 28, 2006).
186. WAS. ADMIN. CODE § 480-80-020(2).
187. WAS. ADMIN. CODE § 463-62-040.
188. Energy Facility Site Evaluation Council. Personal Communication (Jul. 24, 2006).
189. WAS. REV. CODE § 90.58.100 (1).
190. Washington Department of Fish and Wildlife, *supra* note 125.
191. Washington Wildlife Action Plan (2005), 301 and 347.
192. *Id.* at 9 and 45.
193. Federal Power Act § 1; 16 U.S.C. § 797.
194. Federal Power Act § 10 (j)(1); U.S.C. § 803.
195. Fish and Wildlife Coordination Act § 662 (b).
196. Washington Wildlife Action Plan (2005), 300.
197. Department of Community, Trade, and Economic Development. Personal Communication (Jul. 19, 2006).
198. *Id.*
199. For example, utilities in the Puget Trough Ecoregion could implement the following specific actions where applicable: “protect oak habitats for western gray squirrel, western bluebird, slender-billed white-breasted nuthatch, Propertius’ duskywing, hoary elfin, etc.; manage grassland habitats to maintain *Lupinus albuscaulis* in southern Puget Sound for Puget (Blackmore’s) blue; or protect sites where blue-gray tailed dropper or Oregon megomphix occur.” Washington Wildlife Action Plan (2006), 337.
200. Washington Wildlife Action Plan (2005), 298, 342, 369, 400, 431, 463, 491, 518, and 551.
201. Chelan County PUD, *supra* note 175.
202. Washington Wildlife Action Plan (2005), 342, 369, and 400.
203. *Id.* at 463, 551, 423, 518, and 551.
204. Snohomish PUD, *supra* note 176.
205. Tacoma Water. Personal Communication (Aug. 17, 2006).

CONCLUSION

Utilities across the United States will be able to use the state wildlife action plans for a variety of purposes – from siting facilities, to mitigating impacts from projects, to managing rights-of-way, to stewardship projects. The plans can be used not only for their species and habitat information, but also for their information on areas of high biodiversity and opportunities for restoration.

State agencies may be able to revise utility permit terms and conditions to integrate applicable wildlife provisions from the plan, where consistent with other regulatory mandates.

Local governments will be able to use the wildlife and habitat information from wildlife action plans to develop and revise local land use ordinances and

comprehensive plans, which can affect utility activities at the local level.

State wildlife action planning presents a huge opportunity for the utility sector to increase its effectiveness in management, operations, and infrastructure decisions that affect the nation's lands, waters, and wildlife. The Environmental Law Institute, among other organizations – including the Association of Fish & Wildlife Agencies – is working with various entities and associations to provide an opportunity for utilities to become more directly involved in plan implementation.

For more information, contact ELI at law@eli.org, or visit our website at www.eli.org.

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