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PLANNING WITH NATURE

Biodiversity Information in Action

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EXISTING LAWS AND POLICIES AS BIODIVERSITY CONSERVATION TOOLS

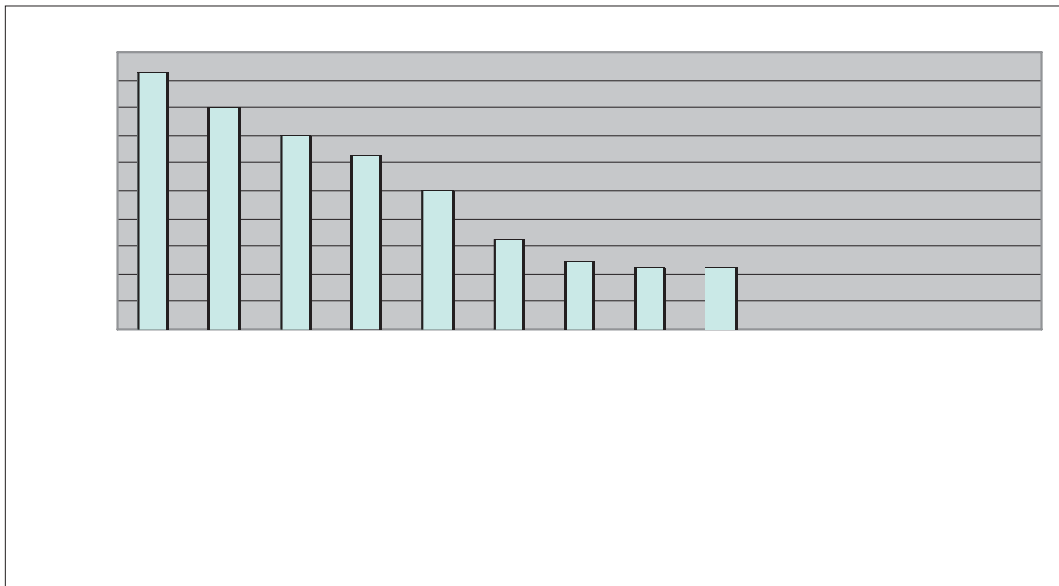


Table 1.

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The loss of our nation's natural heritage is caused, in part,

Natural Heritage Program in the U.S. asking for information about the types of requests received and the underlying drivers for these requests. These surveys were complemented by phone interviews with state Natural Heritage Program directors, administrators of the programs that are making data requests, and independent legal research on the laws and policies that serve as examples.

This report is intended to reach two audiences: 1) the community of Natural Heritage program administrators, biologists, and staff; and 2) the state agencies, local governments, and advocacy groups that have influence over those decisions that impact biodiversity. We hope that this infor-

mation will provide Natural Heritage Programs with inspiration on how the data can be used more creatively in their states under existing laws and policies. In addition, armed with model examples of how existing laws and policies can be interpreted more broadly to require the use of Natural Heritage information, we hope that policy-makers will seek opportunities to require or encourage the use of biodiversity information when decisions are made that affect the status of their state's natural resources. A copy of the original survey and a summary of survey results can be found in Appendix A and Appendix B, respectively.

Biodiversity is the variety of life and its processes, which includes the abundance of living organisms, their genetic diversity, and the communities and ecosystems in which they occur.

biodiversity information and land use impacts. Several states also have non-regulatory programs that seek to proactively identify and protect important biological areas before they are slated for development or other impacts. State agencies should seek out and take advantage of opportunities in existing laws and policies to require an analysis of impacts to biological resources from proposed projects. However, it is important to keep in mind that even if this is done—and done well—numerous, small projects that in themselves may not contribute to significant habitat loss, degradation, or fragmentation, may cumulatively have devastating consequences. Ideally, these individual decisions should be made in the context of a landscape or statewide analysis or biodiversity conservation plan.

States can play a strong role in encouraging their agencies, local governments, and others to move beyond the site-based focus of analysis to the landscape scale. Several states,

including Florida, Massachusetts, New Jersey, and Oregon, have completed statewide biodiversity conservation strategies and a fledgling effort is underway in Delaware. In all of these states, Natural Heritage data and other sources of biodiversity information have been analyzed using a map-based approach to develop a statewide blueprint for conserving this public resource. These maps can then be used to help guide a variety of decisions to ensure that future land use activities seek to minimize the loss of essential habitat and connect areas already under protection (see “Moving Beyond the Site-Specific to the Landscape Scale”). Below we provide a variety of examples of how biodiversity information is currently being used under the auspices of existing state laws and policies to analyze the impacts of state decisions on biological resources. In almost every example, taking a landscape-scale approach would further enhance conservation efforts.

*EXISTING LAWS AND POLICIES
AS BIODIVERSITY CONSERVATION TOOLS*

Proportion of the 40 responding states that indicated

habitat of at-risk species. Before making a listing decision, states should consult with the full array of biodiversity information available through their Natural Heritage Program and other credible sources. Such biological data should be the

explicitly asks if the project site contains “any species of plant or animal life that is identified as threatened or endangered.”⁴⁷ In practice, New York’s Department of Environmental Conservation’s Division of Environmental Permits (which administers SEQR) directs all applicants to the Natural Heritage Program to answer this question.⁴⁸ The Heritage Program provides applicants not only with data on endangered and threatened plants and animals, but also on natural communities.

If the action meets the threshold definition of having a significant adverse impact, the agency must then prepare an EIS that analyzes environmental impacts of the proposed action and its alternatives.⁴⁹ Under the act, “environment” is defined as “the physical conditions which will be affected by a proposed action, including land, air, water...flora, fauna ...”⁵⁰ SEQR requires the governmental sponsor to identify alternatives to the proposed project, ways to reduce the impacts of the project, or measures to mitigate the impacts of the proposed activity.⁵¹ Actions that are likely to trigger the development of an EIS include the adoption of a municipal land use plan;⁵² municipal zoning regulations;⁵³ changes in allowable uses of a zoning district or granting variances to a zone’s restrictions affecting a certain amount of acreage;⁵⁴ the acquisition or sale of over 100 or more contiguous acres of land by a state or local agency;⁵⁵ and new residential or other developments exceeding a specified size.⁵⁶

SEQR also includes a provision that allows local agencies to designate “a specific geographic area within its boundaries as a critical environmental area (CEA).”⁵⁷ This provision is discussed further in the Special Resource Area Laws section below.

As New York’s SEQR process demonstrates, state NEPAs provide an excellent mechanism to require an evaluation of the impacts of land use activities on biodiversity. Perhaps most importantly, they can provide a direct link between land use planning and zoning decisions and biodiversity. Many of these laws are designed to assess not only the individual proposed activity’s impact, but also the cumulative impacts caused by numerous small projects. Although ideally these provisions would allow decision-makers to assess biological impacts on a landscape scale, (e.g., the project’s contribution to habitat fragmentation), cumulative impact assessments are rarely utilized to their fullest extent.

SPECIAL RESOURCE AREA LAWS

Federal and state agencies have adopted a number of different statutes designed to protect specific resources deemed to be of significance for biological, ecological, human health and safety, or economic reasons. These include wetlands, floodplains, the coastal zone, and sites determined to be “critical areas.”

WETLAND LAWS

Land development activities that adversely impact wetlands may require a federal or state governmental permit. The primary source of federal regulatory jurisdiction over wetlands is the Federal Water Pollution Control Act, also known as the Clean Water Act (CWA).⁵⁸ The CWA was established to restore and maintain the chemical, physical, and biological integrity of the nation’s waters. The CWA section that established the wetlands regulatory program, § 404, was enacted in 1972. Since that time, § 404 has evolved into the major federal program regulating activities to the nation’s aquatic resources, including wetlands.

Under § 401 of the Clean Water Act, states have the

requests⁶³ and 10 states indicated that they are the secondary drivers.⁶⁴

Michigan's wetlands laws drive more requests for Heritage data than do any other laws or regulations in that state. Under a provision of the Clean Water Act, Michigan has "assumed" administration of § 404. As a requirement for assuming the program, Michigan was responsible for developing a wetlands permitting program of an "equivalent scope of jurisdiction" as the federal program. Once such a program has been adopted, the state takes over responsibility for processing § 404 permits.⁶⁵

In order to be eligible to assume the § 404 program, Michigan passed a wetlands permitting program. Under the Michigan Natural Resources and Environmental Protection Act,⁶⁶ the legislature stated that wetlands are a "matter of state concern" since they provide multiple benefits, including, "[w]ildlife habitat by providing breeding, nesting, and feeding grounds and cover for many forms of wildlife, waterfowl, including migratory waterfowl, and rare, threatened, or endangered wildlife species."⁶⁷ The statute states that permits may not be approved unless the Department of Environmental Quality determines that it is "in the public interest, that the permit is necessary to realize the benefits derived from the activity, and that the activity is otherwise lawful."⁶⁸ In determining whether or not the proposed activity is in the public interest, several criteria must be considered, including "[t]he probable impact on recognized ... ecological, or recreational values and on the public health or fish or wildlife."⁶⁹ This provision is the source of many of the wetland-related requests received by the state's Michigan Natural Features Inventory.

Also under the Michigan Natural Resources and Environmental Protection Act, local governments may regulate wetlands of less than two acres through the adoption of an ordinance.⁷⁰ Local governments must approve permits unless they can prove that the wetland is "essential to the preservation of the natural resources of the local unit of government."⁷¹ To prove the essential nature of the wetland, the local government must demonstrate that the site meets at least one of 10 criteria, including the following: "supports state or federal endangered or threatened plants, fish, or wildlife," "represents what is identified as a locally rare or unique ecosystem," "supports plants or animals of an identified local importance," or "provides wildlife habitat by providing breeding, nesting, or feeding grounds or cover for forms of wildlife,

waterfowl, including migratory waterfowl, and rare, threatened, or endangered wildlife species."⁷² This provision provides local governments in Michigan ample opportunity to protect wetlands that provide habitat for wildlife. The state's wetland program and Michigan Natural Features Inventory may, however, need to provide leadership and technical expertise to the localities to enable them to utilize their authority to the fullest potential.

Federal § 401 authority and state wetland laws provide excellent opportunities to evaluate the impacts of proposed wetland-related projects on a state's biological resources. Biodiversity information can play a vital role during several stages in the decision-making process. First, biodiversity information can help inform whether or not a permit should be issued for the proposed activity. If regulators decide that a permit will be issued, but would like to place special conditions on the permit, they should consult all available biodiversity data to ensure that impacts to biodiversity are minimized. Finally, if a permit is issued, but mitigation is required, regulators should utilize biodiversity data to determine what wetland functions or values are being lost through the proposed activity and therefore, the type and level of mitigation required.

FLOODPLAIN LAWS

The National Flood Insurance Program (NFIP) is the basis for much of the management of floodplains in the United States.⁷³ Although managed by the Federal Emergency Management Agency at the national level, NFIP is carried out by almost 20,000 communities across the country. Participating localities may adopt and enforce floodplain management ordinances to reduce future flood damage. In exchange, the NFIP makes federally backed flood insurance available to homeowners and businesses in flood prone communities.⁷⁴

In addition to the federal program, many states have adopted their own floodplain laws and regulations that go beyond the federal minimum requirements.⁷⁵ These programs are carried out at the state and local levels. The Association of State Floodplain Managers has identified 24 states that have riverine standards that are more stringent than those of the NFIP.⁷⁶ Of these, 12 states directly regulate development in the floodway, 18 have local regulations that must meet state requirements, and six allow the state or another agency to carry out regulation or enforcement if the locality fails to do so.⁷⁷ In addition, 36 states have a permit

⁶³ Arizona, Michigan, and Pennsylvania.

⁶⁴ Colorado, Delaware, Illinois, Indiana, Maryland, Tennessee, Utah, Virginia, Washington, and West Virginia.

⁶⁵ 40 C.F.R. §§ 232 et seq., 233 et seq. (2002).

⁶⁶ Mich. Comp. Law §§ 324.101 through 324.90106.

⁶⁷ Mich. Comp. Law § 324.30302(1)(b)(ii).

⁶⁸ Mich. Comp. Law § 324.30311(1).

⁶⁹ Mich. Comp. Law § 324.30311(2)(e).

⁷⁰ Mich. Comp. Law § 324.30309.

⁷¹ Mich. Comp. Law § 324.30309.

⁷² *Id.*

⁷³ Association of State Floodplain Managers, Inc. 1996. Floodplain Management 1995: State and Local Programs. Association of State Floodplain Managers, Inc.: Madison, WI. 20.

⁷⁴ National Flood Insurance Program website, at <http://www.fema.gov/nfip/whonfip.htm> (last visited Nov. 15, 2002).

⁷⁵ Association of State Floodplain Managers, Inc. 1996. Floodplain Management 1995: State and Local Programs. Association of State Floodplain Managers, Inc.: Madison, WI. 24.

⁷⁶ *Id.* at 25.

⁷⁷ *Id.* at 26, Table 6.

review process to regulate the natural resources and functions of floodplains.⁷⁸

critical area laws drive requests for Heritage data.⁹⁷ Five states indicated that state or local laws drive the requests.⁹⁸

Maryland's Chesapeake Bay Critical Areas Law, for example, was designed to control future land use development along the Chesapeake Bay shoreline to minimize damage to "water quality and natural habitats."⁹⁹ Under the 1984 law, land within 1,000 feet of the tidal influence of the Bay is considered part of the "critical area."¹⁰⁰ In developing their Critical Areas program, the local jurisdiction must provide protection for "those species in need of conservation and threatened and endangered species and their habitats" which occur in the Critical Area.¹⁰¹ The law also requires local jurisdictions to identify and develop a plant and wildlife habitat protection program as an element of their Critical Area program.¹⁰² These protected plant and wildlife habitats include: colonial water bird nesting areas; aquatic areas of historic waterfowl concentration; riparian forests; relatively undisturbed, large tracts of forest that support breeding populations of forest interior-dwelling birds; certain plant and animal communities which are the best examples of their kind in Maryland; and other areas determined to be of local significance.¹⁰³

The Maryland Wildlife and Heritage Service indicates that the third largest driver of requests for heritage data stems from the Chesapeake Bay Critical Areas Law. County planning offices contact the Heritage Program to satisfy their requirement to identify Habitat Protection Areas. Maryland's critical area law affords the state ample authority to regulate sensitive areas in the coastal zone for the purposes of conserving biodiversity.

State critical area laws provide an excellent opportunity for states to proactively protect areas that have been determined to be particularly sensitive or biologically valuable. In states where the authority for designating critical areas is delegated to the local level, it provides local governments with a unique opportunity to protect areas of particular local significance.

TRANSPORTATION PLANNING LAWS AND POLICIES

The federal Intermodal Surface Transportation Efficiency Act (ISTEA), enacted in 1991, was reauthorized in 1998 as the Transportation Equity Act (TEA-21). TEA-21 authorized \$217 billion of funding for state transportation agencies. The law outlines how federal highway funds are distributed and can be used by states. Approved uses include "natural habitat

and wetlands mitigation efforts[(fr)5.8(ofsn24 Tw;aAncies.)44.9(

transportation planning provisions are driving the requests.¹¹² Many of these provisions are likely policies, such as cooperative agreements between the state natural resource agency and the state department of transportation, which direct how federally funded transportation projects are identified and executed.

For example, the Illinois Department of Natural Resources (IDNR) and the Illinois Department of Transportation (IDOT) have signed an agreement to guide natural resource review and coordination for transportation projects.¹¹³ The agreement, which applies to all federally funded local projects in the state, requires endangered and threatened species pre-screening before a project is approved. Under this first level of coordination, the IDOT must consult with the Natural Heritage Program to ensure that listed species or Illinois Natural Area Inventory sites do not occur in the vicinity of the proposed project.

Under the next level of coordination, IDOT must review all relevant data, including that from the Natural Heritage database, to determine if proposed projects impact wetlands, streams, forests/trees (including whether or not the project would bisect a forest), prairie/savannas, natural preserves/Natural Area Inventory sites, or threatened and endangered species. If these resources would be impacted by a proposed project, IDOT must demonstrate how it plans to avoid or minimize adverse impacts. The natural resource agency has the ability to accept the conclusions/proposals offered by IDOT, or make recommendations on how to avoid or further minimize impacts.

Illinois' Natural Resource and Coordination Agreement is an excellent example of how a state can help direct and influence federally financed projects to ensure that they minimize impacts to biological resources. The agreement not only requires that the Natural Heritage database be consulted for impacts to at-risk species, but requires an analysis of whether or not an intact forest would be bisected by a proposed project.

From the perspective of biological diversity, transportation planning and funding under federal law provides many important opportunities to analyze the impacts of proposed projects on biological resources. Planning under Long Range Plans and Transportation Improvement Programs and the associated requirements for public involvement may provide one of the best opportunities to proactively address impacts to biodiversity. In addition, state departments of transportation can take advantage of the funding provided under the Surface Transportation Program to minimize impacts from transportation projects and the habitat fragmentation caused by such projects. However, biodiversity information is likely

used more frequently during the NEPA process triggered by federally funded transportation projects.

OPEN SPACE AND LAND ACQUISITION LAWS AND PROGRAMS

Land acquisition—both publicly and privately financed—is viewed as the most effective tool in the conservation toolbox. The most pervasive threats to biodiversity in the United States are habitat destruction and degradation.¹¹⁴ As a result, purchasing land is viewed as the surest way to ensure that biologically important lands are not developed.

Recent trends in public support for open space acquisition demonstrate the importance voters place on stemming the tide of sprawl and protecting biodiversity. This support has manifested itself in a number of successful ballot initiatives to finance public open space programs. In the 2000 elections, 533 measures dealing with open space preservation, transportation investments, and growth management were put to the voters. Nearly half dealt with the preservation of open space in some form and more than 78 percent passed.¹¹⁵ A study by the Land Trust Alliance found that the approved open space protection measures of 2000 would provide \$7.5 billion for land conservation.¹¹⁶ In 1999, voters authorized more than \$1.8 billion in local taxing authority and bonds for open space preservation and in 1998, voters approved approximately \$8.3 billion for open space protection.¹¹⁷

Twenty states indicated that public land acquisition or open space programs drive requests for Natural Heritage data, an indication that biodiversity is a consideration of some programs, even if indirectly.¹¹⁸ Two states, Florida and Indiana, indicated that open space acquisition programs are primary drivers of Natural Heritage data requests.

Florida's land acquisition programs—Preservation 2000 and Florida Foreoersity exampl of spo-

drivesves7 in 2000rrograms—[(t17.6(lorida 3t pub.8056rioncqr)-1pev.il.us/b5(uals/cl.3 6-1pepdf (ndctivis-o-)]TJT*0.0y

Delaware requires an analysis of conservation lands in the development of county comprehensive plans. Each county's planning agency is required to prepare a comprehensive development plan that is updated every five years.¹³⁸

impacts on the environment.”¹⁴⁸ To be designated a CEA an area “must have an exceptional or unique character”¹⁴⁹ including “fish and wildlife habitat, forest and vegetation, open

being used voluntarily in innovative ways to guide local land use planning laws or policies (see “Survey Question 7” in Appendix B).¹⁵⁹ In these states it may be used as part of a statewide or regional biodiversity assessment or local land use planning outreach program. For example, the Connecticut Natural Diversity Data Base indicated that all 169 of the state’s towns are provided with maps of generalized locations of state listed species for use in municipal planning and permits. Although municipalities are not required to use this data, having it readily available can be enough encouragement for local governments to consider their potential impacts on biological resources.

Virginia’s Division of Natural Heritage, for example, has established a “Locality Liaison Program” to provide local governments in the state’s coastal zone with biodiversity information to aid in land use decisions that protect biodiversity and preserve open space. Staffed by a full-time employee funded through a National Oceanic and Atmospheric Administration Coastal Program Grant, the program develops and distributes maps depicting the location of Natural Heritage resources to each coastal resource management area in the state. The program also assists local governments with land use planning

and decision-making, the development of open space protection plans, and habitat restoration and protection initiatives.

Maine’s State Planning Office initiated a slightly different approach in 2000 with a program called “Beginning with Habitat.” A collaboration between the State Planning Office and the Maine Heritage Program, this program provides habitat maps, species descriptions, and guidance to local communities in southern Maine to help integrate biodiversity into local “smart growth” planning. This partnership acknowledges the planning office’s strength in working directly with

1. What agencies and organizations most routinely request heritage data? Please specify the name of the agency or organization. If possible, indicate the number of requests you receive from each group annually. Alternatively, rank the frequency with which you receive requests from these entities by placing a number (i.e., 1, 2, 3...with 1 being the most frequent) in the space provided.

Check All
That Apply

Name of agency/number of requests per year
or ranked frequency

- State pollution control agency _____
- State natural resource agency _____
- State department of transportation _____
- State planning office _____
- Local government planning office _____
- State GAP Analysis program _____
- Research institution(s) _____
- Consultants _____
- Private sector, other _____
- Private landowner(s) _____
- Conservation organizations or land trusts _____

3. To the best of your knowledge, what laws and policies are driving the bulk of heritage data requests in your state? Please give citations, the popular name of the law or policy, and URLs to statutes or regulations where possible and indicate whether these are state or federal laws. Please rank the frequency with which a law or policy is driving heritage requests by placing a number (i.e., 1, 2, 3...with 1 being the most frequent) in the space provided.

Check All	Name of law/citation or link/ranked frequency
That Apply	

- Endangered species act _____
- Wetland law or regulation _____
- Environmental impact assessment law _____
- Floodplain law or regulation _____
- Critical areas law _____
- Historic preservation law _____
- Transportation planning _____
- Land use planning law _____
- Public land acquisition/open space program _____
- Fisheries law _____
- Coastal law _____
- Forestry law _____
- Other: _____

4. Are there laws or policies that could more effectively require the use of heritage data? For example, there may be a floodplain law that prohibits construction in floodplains if such projects will have “unreasonably detrimental effects upon the fish, wildlife, or botanical resources,” but that has not been interpreted to require consultation with heritage data.

Yes (see below)
 No

a. If yes, please describe (and give citations where possible).

5. Does your state have a publicly funded open space acquisition program?

Yes (see below)
 No

a. If so, is heritage information being systematically used to guide acquisition decision-making? Please describe how. For example, are the state or localities required to use heritage data to develop land acquisition priorities?

b. If heritage data is not used systematically in the open space acquisition program, is it used sporadically or on a case-by-case basis? If so, please describe.

Yes (see below)

No

c. If the acquisition program does not rely upon heritage data, how could heritage data be more effectively used to guide your state's publicly funded open space acquisition program(s)?

6. Does state law or policy require the use of heritage information in state or local land use planning?

Yes (see below)

No

a. If yes, please describe and cite to the extent possible the laws or authorities.

7. Is heritage information voluntarily being used in any innovative ways to help guide state or local land use planning laws or policies? For example, are local governments requesting data to help guide comprehensive plans or craft ordinances protecting environmentally sensitive lands?

Yes (see below)

No

a. If yes, please describe.

Survey Question 2: Has your program experienced peri-

Table 3. Proportion of the 40 responding states that indicate the types of laws and policies driving the bulk of Heritage data requests. The laws considered are: endangered species laws (ESA); wetland laws/regulations (Wetlands); transportation planning laws/policies (Transport); environmental impact assessment laws (EIS); open space/land acquisition laws/programs (Land acquisition); land use planning laws/programs (Land use planning); coastal laws (Coastal); forestry laws (Forestry); floodplain laws/regulations (Floodplain); critical areas laws (Critical areas); fisheries laws (Fisheries); historic preservation laws (Historic preservation); and other.

Law/Policy Type	Number of States	Percentage of States
Endangered Species Laws (ESA)	15	37.5%
Wetland Laws/Regulations (Wetlands)	11	27.5%
Transportation Planning Laws/Policies (Transport)	20	50%
Environmental Impact Assessment Laws (EIS)	16	40%
Open Space/Land Acquisition Laws/Programs (Land acquisition)	5	12.5%
Land Use Planning Laws/Programs (Land use planning)	22	55%
Coastal Laws (Coastal)	3	7.5%
Forestry Laws (Forestry)	3	7.5%
Floodplain Laws/Regulations (Floodplain)	3	7.5%
Critical Areas Laws (Critical areas)	3	7.5%
Fisheries Laws (Fisheries)	3	7.5%
Historic Preservation Laws (Historic preservation)	3	7.5%
Other	29	72.5%

tation. Three states indicated that state natural resource laws (i.e., wetland laws, coastal development laws) should better incorporate data review, particularly for state water resources like rivers, lakes, and streams. Colorado suggested that all projects involving state funding (e.g., land acquisition, conservation easements, steward trust) be subject to Heritage consultation.

According to three states, state planning or smart growth acts should require Heritage consultation, while one state recommended that consultation be required under a private sewage disposal licensing act. In Kansas, existing authorities were perceived as too weak to provide for conservation of biodiversity on private lands, where most of the state's natural resources reside. Additionally, development of upland sites was suggested as being under-regulated as compared to resources like wetlands.

One common overarching issue expressed by respondents was that even if there are requirements that impacts to listed threatened and endangered species be evaluated, non-listed species—such as rare, declining, or unique species—are not factored into reviews. Heritage Programs often provide data

indicated that Heritage data are being used to identify sensitive areas within state/local comprehensive plans or town plans, as well as when developing habitat conservation plans. Heritage information is being used to guide open space planning, watershed management, zoning, or natural resource inventories in many states. Indiana reported that Heritage data are being used to score farm incentive programs and outdoor recreation grants in the state. Two states—Washington and New York—indicated that county wetland ordinances authorize increased protection, through set back or buffer requirements, for wetland and/or riparian areas with known Natural Heritage occurrences. In Tennessee, rapidly growing counties have incorporated Natural Heritage data in Geographic Information System models that examines various scenarios for growth. Similarly, a county department of transportation in Arizona is using Heritage data in transportation suitability models.

Survey Question 8: Is Heritage information in your state being applied in innovative ways outside of a specific legal requirement?

Response:

Twenty-nine of the 40 responding states (72.5 percent) indicated that Natural Heritage information is being applied in innovative ways outside of a specific legal requirement. The most frequent response (13 states) was that Heritage data are being used to help guide comprehensive state biodiversity strategies, biodiversity identification and mapping projects, and acquisition programs. For example, Heritage data are being used to identify biodiversity resource areas as part of the Vermont Biodiversity Project and in Florida to identify statewide conservation needs in order to prioritize lands for acquisition under the Florida Forever program. In addition, 11 states indicated that Natural Heritage data are being used to guide ecoregional planning conducted by The Nature Conservancy, a national conservation organization.

Survey Question 9: Are there other state or local laws or policies that require the consideration of impacts to non-threatened biotic elements or habitats (i.e., laws or policies that do not attempt to assess impacts to plants, animals or natural communities that are rare, at-risk, or of concern, and therefore, may not require consultation with Natural Heritage Programs, but rather another source of biodiversity information)?

Response:

Fourteen states indicated that their state has state or local laws or policies that require the consideration of impacts to non-threatened biotic elements or habitats.¹⁶³ The most common response (cited by five states) was that wildlife laws or policies may be used to consider impacts on more common species or habitats. Three states—Connecticut, Montana, and New York—indicated that state environmental impact assessment laws may provide this authority. The remainder of the Heritage Programs indicated that river and riparian resources, pollution control, storm water discharge, mining, and forestry provisions may require consultation. In Colorado, cooperative efforts like the Natural Areas Partnerships Initiative (developing a statewide strategy to protect natural areas) and the System for Conservation Planning (a project of the Division of Wildlife to set priorities for habitat protection) may be other sources for biodiversity information. In addition, the state has some scattered impact assessment requirements; for example, by statute the Division of Wildlife requires applicants proposing to construct a water project to prepare a mitigation plan.¹⁶⁴

Survey Question 10: Are there any laws or policies you would like to see in place that would encourage the use of biodiversity information in land use decision-making? Please include any additional information about how you think the use of biodiversity information could more effectively be integrated into land use decision-making.

Response:

Several Heritage Programs provided novel responses related to the need in states to have stronger authorities in place to protect plant communities and also significant or declining habitats that were not covered under other questions. Two states suggested that natural areas legislation should be passed and funded to improve the role of the state parks/preserves system. To improve Natural Heritage data accessibility to decision-makers, several states indicated the need to provide Natural Heritage information over the Internet. Developing the capacity to submit updated information for Heritage databases electronically was cited to likely improve efficiency. In addition, states recommended that local governments be provided with integrated decision support systems that employ readily accessible Geographic Information Systems data, including Heritage information, which would inform land use planning locally.

¹⁶³ AK, AZ, CO, CT, GA, MN, MT, NC, NV, NY, TN, VT, WI, and WV.

¹⁶⁴ Colo. Rev. Stat. Ann. 37-60-122.2; 2 Colo. Code Reg. 1660 e . (ee h p//ipl. nm.ed /c /l/ a bio/colo ado.h ml)

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1616 P Street, N.W., Suite 200
Washington, D.C. 20036
Telephone: (202) 939-3800
Fax: (202) 939-3868
www.eli.org