

Vermont Dept. of Fish & Wildlife	Y
Virginia Dept. of Game & Inland Fisheries	Y
West Virginia Division of Natural Resources	Y
Washington DC Fisheries and Wildlife Division	Y
US Fish & Wildlife Service–Region 5	Y
National Park Service	Y
United States Geological Survey	Y
The Nature Conservancy	Y
Natural Heritage Programs	Y

III. GRANT REQUEST

NFWF FUNDS REQUESTED: \$71,700

MATCHING CONTRIBUTIONS

Amount to be contributed to match NFWF Funds (if any – please include any in-kind match provided by applicant, cooperating state or federal agencies, or partner non-governmental organizations): **\$125,998**

Source	Type	Amount
All State and Partner Staff	Time + Fringe + Indirect 95 staff @ 32 hours conference time (Assume \$23/hr/35.94%/32.56%)	\$125,998

TOTAL PROJECT BUDGET (NFWF + MATCH): \$197,698

IV. PROPOSAL NARRATIVE

I. Project Abstract

A) Project description

This one year project will create a more effective and cost-efficient mechanism for successful Wildlife Action Plan implementation and for responsive, real-time reporting to stakeholders and the decision makers who fund the State Wildlife Grants program (SWG) through the development of a framework for regional wildlife and habitat monitoring in the Northeast. The first phase will convene a core group of state biologists, planners, and managers and key federal, non-governmental organizations (NGOs), and academic partners to identify potential indicators and measures for Species of Greatest Conservation Need (SGCN), habitat, threats and strategy effectiveness. The second phase will convene a larger group of state personnel, key partners, and invited experts for a two-day facilitated follow up conference to review draft indicators and measures and develop a framework for regional wildlife and habitat monitoring. This monitoring project is one of the top priorities for the Northeast region identified at a recent forum funded by Year 1 of the National Fish and Wildlife Foundation's State Comprehensive Wildlife Conservation Support Program.

B) Final product(s), outcomes, and/or deliverables expected of the project

There will be two sets of deliverables from this project. The first will be a draft report from the initial core group meeting identifying what we want to monitor, indicators and measures for SGCN, habitats, threats, and actions most compatible with each state's Action Plan implementation goals, and specific questions to be addressed at the follow up conference.

The second will be a framework for regional monitoring, including final indicators and measures, standards for data collection and management, and collaborative monitoring efforts that NE states can use individually and collectively. The framework will enable states to measure and report the status of wildlife, wildlife habitats, and action plan effectiveness to the public, stakeholders, and local and national decision makers in a language that is clear and unambiguous.

II. Proposal

A) Project need: the specific needs identified by at least two State Comprehensive Wildlife Conservation Strategies that the project will address and its likely impact.

Virtually every state Wildlife Action Plan in the northeast (and the nation) identifies the need for a systematic, integrated set of monitoring protocols to meet Congressional Action Plan requirements for tracking a huge array of SGCN, habitats, and strategy effectiveness and to inform ongoing adaptive management and Action Plan revision. A regional monitoring program was regarded as foundational to Wildlife Action Plan implementation success at a recent forum for the 14 northeastern states. At this forum, funded by Year 1 of the National Fish and Wildlife

Foundation's State Comprehensive Wildlife Conservation Support Program, the development of a regional monitoring framework was selected as one of the top six needs. With funding from NFWF, this project can help address the monitoring needs of northeastern states individually *and* collectively in a much more cost-effective and scientifically rigorous manner than if states were to develop protocols individually.

Until now there has been little time to standardize Action Plan development. But with pressure mounting for state programs to meet expectations, the benefits of regional Action Plan monitoring are many. Integrating and standardizing at least some aspects of state programs now, while Action Plan implementation is still in its infancy, will be much easier than doing so later. Working together to ensure compatibility and coordination regionally (and nationally) in monitoring efforts, will allow states to make the most of their Wildlife Action Plans and State Wildlife Grant funds. While other sources of funding will assist states individually, additional funding is needed for one of this most pressing of operational needs. Note that Foundation funds for this project will leverage a large amount of match (64% of total costs) in in-kind staff time.

B) Specific Project Objectives

- Identify indicators and measures for monitoring health/condition of SGCN and their habitats for future coordinated action
- Identify indicators and measures for monitoring threats and the effectiveness of conservation actions
- Develop a framework for monitoring species and habitats at the landscape scale in partnership with federal agencies, NGOs, and academia in the Northeast region.

C) Overall context: describe how the anticipated project results/outcomes of your project address the priorities of this specific grant program as identified in the RFP

This effort will result in a framework for coordinated monitoring of SGCN, habitats, threats, and the effectiveness of conservation actions within the Northeast United States. Data collection and management will be standardized to efficiently aggregate and analyze data from fourteen different states. Collaboration among state and federal government, non-governmental organizations, and academia will be attained via multi-state and region-wide monitoring projects, standardized resource monitoring and measurement of conservation outcomes, shared best practices across political boundaries, and adaptive management.

Overall context; describe why and how the State Comprehensive Wildlife Conservation Strategy needs that this project will address were identified as urgent collaborative conservation priorities, and to what extent the project will address/meet these needs;

This project will enhance the ability of fish and wildlife agencies to turn the Wildlife Action Plans into on-the-ground conservation success in every state. For rare, wide-ranging species and others that do not recognize political boundaries, multi-state and regional monitoring efforts may be vital to ensuring conservation success. Compiling region-wide data will increase sample sizes and thereby increase the statistical power to detect changes in population sizes or

condition over time. Roll-up and reporting by state and region will be vastly simplified, making report generation easier and improving response time to Congress. Chances for rapid detection of status change for species and habitats may be improved. Standardizing protocols and measures and improving data sharing among states will increase abilities to compare the effectiveness of strategies and programs. Economies of scale will make some data collection and analyses more affordable to all participating states. Further, a multi-state approach will often allow for an experimental approach to the management and monitoring of critical habitats by providing replicate units that could not be attained within the boundaries of any single state.

Overall context: describe the geographic scope of the project;

This project will include the entire area encompassed by the Northeast Association of Fish and Wildlife Resource Agencies including: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, Washington (D.C.) and West Virginia. Resource monitoring will take place in every state and at various regional scales. Monitoring for marine SGCN will also occur.

Overall context; quantitatively indicate the number of species and/or amount of habitat area likely to be affected by the project;

The number of species and amount of habitat to be monitored will vary by year at the state and regional levels. No specific numbers are available at this time, but benefits to multiple species over a substantial land area will be realized over time. As an example of the scale of species potentially benefiting from this project, Vermont has identified more than 400 SGCN, New York more than 500, and Virginia more than 900.

Overall context; discuss how this project will improve and foster communication, coordination, and cooperation among state and federal agencies and other stakeholders for the conservation of species of greatest conservation need.

This project will bring all of the Northeast states together with the primary purpose of developing a monitoring framework that will benefit states and the region, identifying standardized indicators and measures, and developing standards for data collection and management. This process will build upon the excellent individual state efforts of Action Plan development and proceed to the next level of regional collaboration. Representatives from state, federal, and local government, non-governmental agencies, and academia will participate in both the core group meeting and the follow up workshop, and participation will be encouraged in future coordinated monitoring efforts.

D) Methodology: describe in detail the project's methodology, including provisions for long-term strategies, management, and conservation actions;

This project consists of two phases. Phase I will consist of a facilitated two-day meeting of a core group of state biologists, planners, and managers and key federal, NGO, and academic partners to develop a list of potential indicators and measures for SGCN, habitat, and threat monitoring. Each state and partner entity will designate two people to attend the meeting.

These personnel need to have in-depth understanding of the state Action Plan, broad familiarity with the full spectrum of fish, wildlife, and habitats in the region, knowledge of resource monitoring indicators and protocols, and basic understanding of database management. Each state representative will work with Action Plan stakeholders to identify potential indicators and measures prior to the facilitated meeting. The core group will create an agreed upon list of indicators and measures, a list of needs for regional monitoring, and specific questions for follow up work.

Phase II will convene state personnel, key partners, and invited experts for a two-day facilitated follow up conference with breakout workshops to review and finalize indicators and measures, address the monitoring needs and questions identified in Phase I, and develop a framework for regional monitoring. Each state and partner will designate up to three people to represent them at the conference. Topics of discussion will include the purpose of monitoring and how progress will be measured, the suitability, practicality, and cost-effectiveness of indicators and measures, identification of data gaps, and the relevance and priority of threats to be addressed by monitoring. Coordinated monitoring efforts will be identified for future implementation. Development of a regional framework to help states assess the status of fish, wildlife, and habitat and the effectiveness of conservation actions is a critical first step toward successful implementation of Action Plans and to the ongoing success of the State Wildlife Grants program.

Methodology: describe how this project will address conservation priority needs identified in Section II.A;

States' Action Plans describe a range of monitoring activities at multiple levels including: individual species, guilds, habitats, natural communities, and landscapes; threat monitoring; and implementation and effectiveness monitoring. Working individually, states will struggle as they work to meet both their monitoring goals and their ultimate goals for conserving all species of greatest conservation need. Many of the SGCN, critical habitats, and threats to both species and habitats that were identified in the individual state Action Plans were common to several or all states in our Region. Given this, a regional approach to monitoring will reduce the duplication of effort that an individual state-based approach would inevitably lead to, and allow individual states to best use their in-state expertise. This project will enhance the ability of fish and wildlife agencies to turn their Plans into on-the-ground conservation success in every state.

Methodology; describe how proposed actions will incrementally advance or contribute to coordinated, cross-border implementation and link to objectives stated in the respective State Comprehensive Wildlife Conservation Strategies;

Development of regional indicators and measures and a monitoring framework will help states develop programs and management systems to measure conservation outcomes, share information and best practices across states, and identify opportunities for collaborative regional/multi-state projects and resources. This project will provide a proactive, cost-effective process to bring the states of the Northeast together to accomplish the above while allowing states to direct more of their funds to conservation activities.

Methodology: indicate the anticipated timetable for implementation;

- Contract with a facilitator/project coordinator: within two months of grant issuance
- Convene a core group to identify indicators and measures and monitoring needs and questions: within three months of hiring the facilitator
- Hold a two-day conference to finalize indicators and measures and develop a monitoring framework: within four months of core group meeting
- Compile, prepare, and distribute framework: within three months of the conference

Methodology; describe the partnership’s experience in conducting similar types of projects;

State Fish & Wildlife Departments, federal wildlife and conservation agencies, conservation NGOs, and academic institutions have a long history developing, implementing, and coordinating science-based monitoring and adaptive management programs for use at the state, regional, national and international levels. These programs and the resulting data provide the foundation of the science-based wildlife management that has made state Fish & Wildlife Departments and their partners such successful stewards of public resources.

The Northeast Association of Fish and Wildlife Agencies (NEAFWA) was created to facilitate inter-state coordination and multi-state wildlife management efforts. Additionally, NEAFWA has several standing committees and regularly convenes ad hoc committees to address regional issues. NEAFWA has long term, effective experience with organizing and implementing coordinated regional meetings, field research projects, and approaches to landscape level conservation.

E) Evaluation: use the framework below to describe the strategy for monitoring and evaluating project results, including how success will be defined and measured.

Objectives

1. Identify indicators and measures for monitoring health/condition of SGCN and their habitats for future coordinated action
2. Identify indicators and measures for monitoring threats and the effectiveness of conservation actions
3. Develop a framework for monitoring species and habitats at the landscape scale in partnership with federal agencies, NGOs, and academia in the Northeast region

Activities	Project Outputs	Post-Project Outcomes
Identify and contract with a facilitation/project coordinator.		
Convene a core group of state biologists and key partners		
Develop a list of regional monitoring needs and questions for discussion at the 2 nd conference		
Identify a draft list of indicators and measures of species and habitat health		

Activities	Project Outputs	Post-Project Outcomes
Identify a draft list of indicators and measures of threat status		
Identify a draft list of indicators and measures of conservation action effectiveness		
Convene states, key partners, and invited experts for a two-day conference		
Address monitoring needs and questions		
Finalize indicators and measures		
Develop standards for data collection and management		
Develop overarching regional monitoring framework	Dissemination of knowledge (Regional Monitoring Framework)	Adopt and implement monitoring protocols
		Focus resources to priority regional monitoring needs
		Ensure conservation of wide-ranging SGCN
		Increase ability to compare effectiveness of multiple programs across state borders
		Improve detection of status change for SGCN and habitats
		Coordinate efforts

Indicators

- a) Using the listed outputs and outcomes in the logic framework, describe their proposed indicators. To the best extent possible, justify the scientific credibility of each one.
 - b) For each indicator, state whether there is a **baseline value** (value of the indicator prior to the initiation of the project). For those with a baseline value, please provide this value.
 - c) For each indicator, hypothesize the **predicted value**.
 - d) Summarize the method and/or data utilized to measure each indicator. If data are to be collected for a sample, please provide information about the sampling strategies.
1. Dissemination of knowledge (Regional Monitoring Framework) – The first indicator is the total number of states participating in the workshops and receiving the final framework. The baseline value is 0. The predicted measure of success value is defined as having at least 2/3 of the states participate. The second indicator is providing 8-10 indicators and measures of ecosystem health, threats, and effectiveness of conservation actions. The baseline value is 0. The predicted measure of success is defined as having at least 2/3 of the states participate.

2. Adopt and implement monitoring protocols – The indicator is the total number of states participating in the regional monitoring program. The baseline value is 0. The predicted measure of success is defined as having at least 2/3 of the states participate.
3. Focus resources to priority regional monitoring needs – The indicator is the number of multi-state monitoring projects and programs that incorporate or adopt the protocols. The baseline value is 0. The predicted measure of success is defined as 1 multi-state project implemented per year.
4. Ensure conservation of wide-ranging SGCN – The indicator is the total percentage of wide-ranging SGCN in the region addressed by one or more monitoring programs. The baseline value is 0. The predicted measure of success is defined as 10% of identified species monitored per year.
5. Increase ability to compare effectiveness of multiple programs across state borders – The first indicator is the total number of states participating in the regional monitoring program. The baseline value is 0. The predicted measure of success is having at least 2/3 of the states participate. The second indicator is the total number of shared programs compared per year. The baseline value is 0. The predicted measure of success is defined as 20% of programs compared per year.
6. Improve detection of status change for SGCN and habitats – The indicator is the number of landscape level monitoring strategies in place to assess species and habitat changes. The baseline value is 0. The predicted measure of success is defined as developing at least 1 new monitoring protocol per year. These protocols may provide information for >1 species or habitat.
7. Coordinate efforts - The indicators are the total number of coordinated monitoring efforts ongoing at the regional scale and the number of states participating. The baseline value for both is 0. The predicted measure of success is defined as having at least 1 new coordinated effort per year and having at least 2/3 of the states participate, respectively.

F.) Dissemination: describe how the results of the project will be communicated.

The proposed monitoring framework will be distributed to all states and stakeholders involved. The framework can also be placed on agency Action Plan websites; thereby made available to the general public and other interested parties. It will also be shared with other regions of the country and can be used as a model in developing their regional monitoring programs.

G.) Partner Justification and Involvement

The Northeast Association of Fish and Wildlife Resource Agencies will be the agent for this project. Member organizations of NEAFWA include:

Connecticut Dept. of Environmental Protection
Delaware Division of Fish & Wildlife
Maine Dept. of Inland Fisheries & Wildlife
Maryland Dept. of Natural Resources
Massachusetts Division of Fisheries & Wildlife
New Hampshire Fish & Game Dept.
New Jersey Division of Fish & Wildlife
New York Dept. of Environmental Conservation

Pennsylvania Game Commission
Pennsylvania Fish & Boat Commission
Rhode Island Division of Fish & Wildlife
Vermont Dept. of Fish & Wildlife
Virginia Dept. of Game & Inland Fisheries
West Virginia Division of Natural Resources
Washington DC Fisheries and Wildlife Division

All of these states will be included in this effort. Other entities to be included in this project are:

US Fish & Wildlife Service–Region 5
United States Geological Survey
Natural Heritage Programs

National Park Service
The Nature Conservancy

Describe the strengths and qualifications of your organization and other collaborating organizations in regards to implementation of the project;

All of the participating state agencies have jurisdiction over fish and wildlife within their state and have a long, proven track record of conservation planning and implementation. In particular, these agencies have the congressional mandate to develop and then lead the implementation of the Action Plan in partnership with the key stakeholders in their state. The USFWS is responsible for oversight of state SWG programs. The NPS has experience with monitoring park resources via environmental indicators and manages its Vital Signs Database. The USGS is responsible for the National Biological Information Infrastructure, a searchable database and communication tool. The Nature Conservancy has long time experience with large-scale ecoregional monitoring, while Natural Heritage Programs monitor resources and maintain very detailed databases.

Indicate whether the proposed project has been reviewed by all potentially affected state wildlife agencies and the appropriate federal agencies;

This project has been reviewed by all participating agencies and supported by the executive committee of the Northeast Association of Fish and Wildlife Resource Agencies.

V. PROJECT BUDGET AND PHASING

Budget Category	Justification	Funds Requested from NFWF	Anticipated In Kind Contributions	Total
Contractual Services	\$10,000 running 2-day workshops (1 facilitator, 1 recorder) including travel costs); approx. \$1000/day/facilitator \$3,000 gathering data/information \$4500 preparing the workshops (planning, agenda, handouts) \$5000 workshop summaries (compiling information, evaluations) \$3500 local logistical planning	\$26,000		\$26,000
Travel – Workshop 1 (2 days)	2 people from each state/partner organization (38 total) \$300/person	\$11,400		\$11,400
Travel – Workshop 2 (2 days)	3 people from each state/partner organization (57 total) \$300/person	\$17,100		\$17,100
Travel – Extra expense for flying to workshops	Assume 1/3 of participants fly to workshops 13 staff + 30 staff = 43 total staff \$400 roundtrip airfare	\$17,200		\$17,200
			TOTAL	\$71,700

C) Project Phasing

Project Phase 1: <i>(Write a brief Scope of Work for the phase)</i>	Workshop 1 – Facilitated meeting of a core group of state personnel and key partners to develop a list of potential indicators and measures for regional SGCN and habitat monitoring.	Budget Category	NFWF Funds
		Contractual:	\$13,000
		Travel:	\$16,600
		Other:	
Anticipated Partner Contributions for Phase 1:		\$51,659	TOTAL \$29,600

Project Phase 2: <i>(Write a brief Scope of Work for the phase)</i>	Workshop 2 - Facilitated conference of state personnel and key partners to finalize indicators and measures, address regional monitoring needs, and develop a framework for regional monitoring.	Budget Category	NFWF Funds
		Contractual:	\$13,000
		Travel:	\$29,100
		Other:	
Anticipated Partner Contributions for Phase 2		\$74,339	TOTAL \$42,100
		NFWF PROJECT TOTAL	\$71,700