United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington, D.C. 20240

In Reply Refer To
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MAY 20 2015

Memorandum

To: Director

From: Assistant Director – Wildlife and Sport Fish Restoration Programs Hannibal Bolton

Subject: State Wildlife Grants Competitive Program – Fiscal Year 2015

This memorandum seeks your review and approval of awards for the Fiscal Year (FY) 2015 State Wildlife Grants (SWG) Competitive Program. The Wildlife and Sport Fish Restoration Program (WSFR) recommends fully funding 15 projects and partially funding two additional projects with remaining available funds (Attachments 1 and 2).

WSFR received 32 eligible applications from 18 States and two regional associations of fish and wildlife agencies in response to the published notice of funding opportunity. A national panel consisting of Service Regional SWG Coordinators scored and ranked the applications.

The total FY 2015 funds available for the State Wildlife Grants Competitive Program are $5,786,301. The awarded Federal funds for these proposals will be matched by at least $2.9 million in non-Federal funds. This will result in over $8.7 million to be expended for projects that address species of greatest conservation need and their habitats, as described and included in these States' Wildlife Action Plans.

If you have questions, please contact Tom Busiahn, Chief, Division of Policy and Programs, Wildlife and Sport Fish Restoration Program, at (703) 358-2231.

Approved: _____ Date: 5/22/15

Attachments Deputy

Attachment 1 FY 2015 Competitive State Wildlife Grants Program Recommended Projects

Region	Lead State	Project Title	SWG Federal Share	Non-Federal Match	Total Project Costs
1	Hawaii	Kohala Mountain Biodiversity Protection and Management	$250,000	$250,000	$500,000
1	Hawaii	Establishing and Enhancing Rare Native Invertebrate Populations	$248,949	$172,998	$421,947
1	Hawaii	Restoring a Degraded High-Elevation Dry Forest on Mauna Kea	$249,496	$90,000	$339,496
1	Idaho	Integrating Strategic Conservation Approaches for the Monarch Butterfly	$170,833	$60,571	$231,404
3	Iowa	Habitat Improvement Projects for Stream and Oxbow Fish	$469,614	$240,902	$710,516
3	Michigan	Assessing Native Bee Diversity, Distribution, and Status	$100,000	$53,500	$153,500
3	Michigan	Oak Savanna Restoration and Monitoring Assessment in Michigan and Ohio	$500,000	$175,676	$675,676
3	Minnesota	A Collaborative Conservation Strategy for the Driftless Area	$500,000	$350,034	$850,034
3	Wisconsin	Barrens Restoration for the Karner Blue Butterfly	$500,000	$166,653	$666,653
3	Wisconsin	Mapping Freshwater Mussel Distribution and Habitat Needs	$100,000	$33,333	$133,333
4	Florida	Using an Ecosystem Engineer to Restore Functionality of Natural Pinelands	$491,668	$217,015	$708,683
4	Georgia	Multi-State Sandhill/Upland Longleaf Pine Restoration Project	$500,000	$246,748	$746,748
5	New Jersey	Bee Pollinator Conservation Research	$100,000	$58,781	$158,781
5	Pennsylvanie	Multi-State Recovery Actions for the Bog Turtle and Associated Species	$499,970	$224,655	$724,625
6	Nebraska	Prairie Conservation for Migratory Birds, Reptiles, and Invertebrates	$500,000	$226,624	$726,624
6	WAFWA	Sylvatic Plague Management in Prairie Dogs and Black-Footed Ferrets*	$406,251	$201,913	$608,164
6	WAFWA	Wolverine Metapopulation Monitoring and Connectivity*	$199,520	$156,765	$356,285
Totals			**$5,786,301**	**$2,926,168**	**$8,712,469**

* Partial funding recommended.

Summaries of Proposed Projects

Competitive State Wildlife Grant (SWG) Program, Fiscal Year 2015
Total Amount Available: $5,786,301

Recommended for Funding (17 projects):

Region 1

Hawai'i Department of Land and Natural Resources

Title: Kohala Mountain Biodiversity Protection and Management
State(s): Hawai'i

Goals and Objectives: The Hawai'i Department of Land and Natural Resources proposes to implement critical conservation actions for the Kohala Watershed Partnership as identified in the State's Wildlife Action Plan. Proposed management actions will protect and restore habitats for 21 species of greatest conservation need. Fencing of the management unit on State lands to exclude ungulates has been identified by numerous partners as the first step for protection of this area. The 1,060-acre management unit is part of a larger protected forested landscape jointly managed by the public-private watershed conservation organization. Other essential actions following habitat protection will then be implemented, such as restoring native forest habitat and rare species.

Federal Funds requested: $250,000; **Non-Federal Match**: $250,000

Hawai'i Department of Land and Natural Resources

Title: Establishing and Enhancing Rare Native Invertebrate Populations
State(s): Hawai'i

Project Goals: Utilizing its new Insectary Facility, the Department of Land and Natural Resources will establish a captive propagation program for Federally Threatened, Endangered, and other rare native invertebrate species of greatest conservation need. The project will initiate pilot projects targeting the Kamehameha butterfly and the orange-black damselfly, with a goal of producing large numbers of healthy individuals for field releases. The agency will identify habitats suitable for releases of these species based on historical data as well as habitat suitability analyses, and enhance existing habitats through native host plant restoration. Effectiveness will be measured in release areas through pre- and post-release monitoring at field sites.

Federal Funds Requested: $248,949; **Non-Fed Match:** $172,998

Hawai'i Department of Land and Natural Resources

Title: Restoring a Degraded High-Elevation Dry Forest on Mauna Kea
State(s): Hawai'i

Goals and Objectives: The Hawai'i Department of Land and Natural Resources proposes to work collaboratively with a variety of partner organizations and volunteers to restore native high-elevation dry forest on Mauna Kea on the Island of Hawai'i. The focus of the restoration work is to expand useable forest habitat within Service-designated Critical Habitat for the Palila, a native Hawaiian honeycreeper that is Federally listed as Endangered. The agency and its partners propose to plant 30,000 seedlings of the native mamane tree, which provides a key food source for the rare bird. The partners will also control invasive fountain grass and cape ivy, and continue to conduct annual monitoring to measure population response to restoration activities.

Federal Funds requested: $249,496; **Non-Federal Match**: $90,000

Idaho Department of Fish and Game

Title: Integrating Strategic Conservation Approaches for the Monarch Butterfly in the State Wildlife Action Plans
State(s): Idaho, Washington

Goals and Objectives: The partnering States along with the Xerces Society, an NGO dedicated to conservation of pollinators, will collaborate to compile and synthesize historical and contemporary monarch butterfly and milkweed occurrence data to help spatially define the distribution and relative abundance of these species. In doing so, the partners will identify key habitats essential to monarch conservation and identify threats that may adversely affect them. Information, data, and tools developed by the partners will be shared with decision-makers, land managers, researchers and other stakeholders to facilitate on-the-ground action to support the conservation of monarch butterflies and other pollinator species.

Federal Funds requested: $170,833; **Non-Federal Match**: $60,571

Region 3

Iowa Department of Natural Resources

Title: Habitat Improvement Projects for Stream and Oxbow Fishes
State(s): Iowa, Minnesota

Goals and Objectives: Iowa and Minnesota Departments of Natural Resources propose habitat restoration for a number of stream fishes of greatest conservation need, including Topeka shiners and plains topminnows, along with ten other species of concern. Partnering States will first inventory and analyze known locations of the target species to prioritize conservation actions spatially. Habitat connectivity will be restored through dam removal and modification to allow upstream movement. A minimum of seven off-channel habitats will be restored, as well as at least

25 acres of degraded upland areas causing water quality degradation through erosion. At least 50 acres of habitat will be acquired and permanently protected. Effectiveness of restoration activities will be monitored through survey on at least 20 sites, using genetic analysis, so that future conservation actions to benefit the species build upon this adaptive management approach.

Federal Funds requested: $469,614; **Non-Federal Match**: $240,902

Michigan Department of Natural Resources

Title: Assessing Native Bee Diversity, Distribution, and Status
State(s): Michigan

Goals and Objectives: Pollinators are an ecologically important group of organisms that were not adequately addressed in Michigan's original Wildlife Action Plan, which was approved in 2006. Recent efforts to develop a preliminary focal area network for Michigan's species of greatest conservation need identified bumble bees in particular as a group of species needing more data for accurate conservation status assessment. Michigan DNR proposes to examine changes in the historical and current distributions of bumble bees in the State, utilizing a combination of museum research and field surveys. Using this data, the agency will identify natural community associations for targeted native bumble bees which will inform and enhance the next revision of Michigan's Wildlife Action Plan.

Federal Funds Requested: $100,000; **Non-Fed Match**: $53,500

Michigan Department of Natural Resources

Title: Oak Savanna Restoration and Monitoring for Karner Blue Butterfly Population Recovery
State(s): Michigan, Ohio

Goals and Objectives: State fish and wildlife agencies will partner with the Ohio Chapter of The Nature Conservancy and the Michigan Natural Features Inventory to restore and enhance at least 800 acres of oak savanna to benefit the Federally-Endangered Karner Blue Butterfly. Partners will control invasive species, implement prescribed fire, and perform mechanical treatments on public lands. The partners will also assist private landowners in the development of habitat management plans for the butterfly and a suite of associated species of greatest conservation need. An occupancy-based Karner Blue Butterfly survey will be implemented within an adaptive management framework to evaluate impacts of conservation actions on butterfly populations within the project areas.

Federal Funds Requested: $500,000; **Non-Fed Match**: $175,676

Minnesota Department of Natural Resources

Title: A Collaborative Conservation Strategy for the Driftless Area
State(s): Minnesota, Wisconsin

Goals and Objectives: The partnering State fish and wildlife agencies will focus a variety of conservation actions on critical geographical areas identified in their Wildlife Action Plans, with special emphasis on butterflies, moths, and other invertebrates. Partnering regional and national conservation organizations such as the Upper Mississippi River and Great Lakes Region Joint Venture have also identified the mixed open woodlands, grasslands, and waterways of the Driftless Area as key lands for conservation. The goals of this multi-faceted project include more than 1500 acres of habitat restoration on public and private lands, development of 50 management plans for private landowners, and monitoring of the impacts of management actions on select species. This long-standing conservation initiative exemplifies the use of an adaptive management framework for protection of this unique landscape and the sensitive species that inhabit it.

Federal Funds Requested: $500,000; **Non-Fed Match**: $350,034

Wisconsin Department of Natural Resources

Title: Barrens Restoration for the Karner Blue Butterfly
State(s): Wisconsin, Minnesota

Goals and Objectives: In 1992 the Karner blue butterfly was listed as an endangered species by the U.S. Fish and Wildlife Service. Populations of this pollinator are believed to have declined by as much as 80 percent in the upper Midwest and are considered extirpated in Minnesota. As described in the Minnesota and Wisconsin Wildlife Action Plans, the partnering States propose to enhance and expand existing Karner recovery sites, restore previously occupied barrens habitat, and use modeling techniques to map sites for future management which may help improve resilience of this species to climate change. The partners will also conduct post-management monitoring for three to five years after restoration to assess the butterfly's response to restoration activities.

Federal Funds requested: $500,000; **Non-Federal Match**: $166,653

Wisconsin Department of Natural Resources

Title: Mapping Freshwater Mussel Distribution and Habitat Needs
State(s): Wisconsin

Goals and Objectives: Little or no distribution data exists for most invertebrate species of greatest conservation need; therefore, many Wildlife Action Plans lack relevance for many of these species, which often have specific microhabitat requirements. The proposed project seeks to enhance the Wisconsin Wildlife Action Plan by addressing this data deficiency. The agency will identify at least one priority mussel location with high biodiversity for each ecological landscape within the State. Quantitative data will be collected and analyzed in order to develop mussel distribution maps so that these water quality indicator species and their habitats can be adequately represented in the Plan.

Federal Funds requested: $100,000; **Non-Federal Match**: $33,333

Region 4

Florida Fish and Wildlife Conservation Commission

Title: Using an Ecosystem Engineer to Restore Functionality of Natural Pinelands in the Southeastern United States
State(s): Florida, Alabama, Georgia

Goals and Objectives: Pocket gophers are known ecosystem engineers that promote diversity and resilience of the natural pinelands ecosystems where they are known to occur. Their tunneling activity aerates soil and provides bare ground for colonization by herbaceous plants, increasing plant diversity and productivity while providing shelter for numerous insects and vertebrates. This project will examine the historic range of pocket gophers to determine what conditions and management practices will create favorable conditions for restoring them to southeastern natural pinelands ecosystems. The partners will identify areas for translocations, develop a standardized method for restoration, and monitor population abundance in restored areas.

Federal Funds requested: $491,668; **Non-Federal Match**: $217,015

Georgia Department of Natural Resources

Title: Multi-State Sandhill/Upland Longleaf Pine Ecological Restoration
State(s): Georgia, Alabama, Florida, Louisiana, Mississippi, South Carolina

Goals and Objectives: Conservation of the longleaf pine ecosystem is a high priority identified in the Wildlife Action Plans of the partnering State fish and wildlife agencies. Within this endangered ecosystem, the gopher tortoise is considered a “keystone” species in that its burrows provide refuge for over 300 species of invertebrates and a number of rare vertebrates. The persistence of gopher tortoise is critical to the maintenance of wildlife diversity, the species is Federally listed as threatened in the western portion of its range, and it has been petitioned for listing in the eastern part of its range. The U.S. Fish and Wildlife Service has determined that listing the gopher tortoise as threatened in its eastern range is “warranted but precluded.” Partnering agencies will demonstrate strategic habitat conservation by focusing restoration actions on priority sites identified in the Wildlife Action Plans, and using standardized monitoring to assess effectiveness.

Federal Funds requested: $500,000; **Non-Federal Match**: $246,748

Region 5

New Jersey Division of Fish and Wildlife

Title: Bee Pollinator Conservation Research
State(s): New Jersey

Goals and Objectives: The New Jersey Division of Fish and Wildlife proposes to evaluate species of rare bee pollinators for potential inclusion in the State's Wildlife Action Plan as species of greatest conservation need. The agency will utilize a large existing database of bee specimens managed by a university partner, along with additional field data collection, to identify rare bee species and their habitat needs. By evaluating overlap in habitat use between bumble bees and 26 other bee genera, the partners will develop a roadmap for efficient and effective bee management for many rare and poorly-known pollinator species.

Federal Funds requested: $100,000; **Non-Federal Match**: $58,781

Pennsylvania Fish and Boat Commission

Title: Multi-State Recovery Actions for the Bog Turtle and Associated Headwater Wetland Species of Greatest Conservation Need
State(s): PA, MD, NJ, CT, MA

Goals and Objectives: Partnering States propose to protect and maintain the northern population of the bog turtle through a strategic habitat conservation initiative with a goal of species recovery. By prioritizing geographic areas following the U.S. Fish and Wildlife Service's Recovery Plan Criteria, the partners will protect and enhance key wetland habitats for the bog turtle and other wetland species of greatest conservation need. With help from university specialists, the team will develop a conservation plan focused at the Recovery Unit level for the suite of targeted species. Partnering States will also monitor bog turtle populations and their habitat using standardized regional protocols, and establish a common database to assist with a range-wide population status assessment of this imperiled turtle.

Federal Funds requested: $499,970; **Non-Federal Match**: $224,655

Region 6

Nebraska Game and Parks Commission

Title: Prairie Conservation for Migratory Birds, Reptiles, and Invertebrates
State(s): Nebraska, Kansas

Goals and Objectives: Kansas Department of Wildlife, Parks and Tourism and the Nebraska Game and Parks Commission seek support to expand an existing private lands program to improve habitat quality and connectivity for species of greatest conservation need. Requested funds are dedicated to direct enhancement of more than 10,000 acres within the Mixed Grass Prairie Ecosystem, through

replication of historic disturbance regimes to include prescribed fire, invasive plant control and other conservation practices. Additional lands will be enhanced through conservation technical assistance provided to landowners. Actions are designed to protect and augment populations such as greater prairie chicken, Henslow's sparrow, and other bird species inhabiting remaining prairie lands in these two States, including a special focus on reptiles and invertebrates.

Federal Funds requested: $500,000; **Non-Federal Match**: $226,624

Western Association of Fish and Wildlife Agencies

Title: Sylvatic Plague Management in Prairie Dogs and Black-Footed Ferrets
State(s): Utah, Arizona

Goals and Objectives: Four prairie dog species—the white-tailed, Gunnison's, Utah, and black-tailed prairie dog—are considered "keystone" species because they support the conservation needs of more than 12 other western grassland species. Management for these essential species exemplifies a cooperative and adaptive management approach through which the partners seek to preclude future endangerment of targeted species. This multi-State landscape-level conservation project is coordinated by the Western Association of Fish and Wildlife Agencies, which refers to this on-going program as the Grassland Initiative. In this project, partners will conduct coordinated strategic planning, along with genetic analysis to help characterize the potential effects of prairie-dog plague and climate change on populations. The partners will also field test an oral vaccine for the immunization of select species against sylvatic plague. As with other broad-scale conservation initiatives supported by competitive State Wildlife Grants, this project requires resources for coordination, joint planning, and data management.

Federal Funds recommended: $406,251 (*partial funding*); **Non-Federal Match**: $201,913

Western Association of Fish and Wildlife Agencies

Title: Wolverine Metapopulation Monitoring and Connectivity in the U.S. Rocky Mountains and North Cascades
State(s): Montana, Wyoming, Idaho, Washington

Goals and Objectives: Wolverines in North America occur in small, semi-isolated subpopulations in the Rocky Mountains, the north Cascade Range of Washington, and the Wallowa Mountains of Oregon. Maintaining wolverine distribution in suitable habitat and connectivity at a multi-State scale is critical for ensuring wolverine persistence over the long term. Montana, Wyoming, Idaho, and Washington fish and wildlife agencies and partners propose a collaborative multi-State monitoring effort that is intended to advance wolverine conservation across the species' range. The project includes modeling landscape connectivity among occupied wolverine habitats, assessing the feasibility of wolverine translocation, and developing and implementing a collaborative multi-State monitoring plan to provide baseline information on factors influencing the presence of wolverines. The cooperating States propose to engage key partners at multiple levels to prioritize management activities. This proposal addresses needs identified as priority actions in State Wildlife Action Plans of all four States.

Federal Funds recommended: $199,520 (*partial funding*); **Non-Federal Match**: $156,765

Not Recommended for Funding (15 projects):

Region 1

American Samoa Department of Marine and Wildlife Resources

Title: American Samoa Pollinator Conservation Planning
State(s): American Samoa

Goals and Objectives: Pollinators and plant associations are poorly understood in American Samoa. Aside from observations of honey bees visiting plants, data associating other bees, flies, butterflies, moths, and beetles with Samoan plants are few. This lack of understanding represents a knowledge gap in the territory's Wildlife Action Plan. Consideration of pollinators in the Plan through a combination of field assessment and entomology collections research will allow the agency to develop strategies for conserving this essential group of organisms across the landscape in the face of continuing habitat modification, increasing presence of alien plant and animal species, and climate change.

Federal Funds requested: $89,165; **Non-Federal Match**: $3,547

Region 3

Iowa Department of Natural Resources

Title: Determining Pollinator Species and Status in Iowa to Plan for the Future
State(s): Iowa

Goals and Objectives: Currently, the Iowa Wildlife Action Plan considers only a subset of the taxonomic groups that include pollinator species, including butterflies, birds, and bats. For a complete consideration of pollinators, Iowa Department of Natural Resources needs more information about the conservation status of other pollinator groups, such as bees, flies, and moths. Following the methodology used to evaluate other taxonomic groups for listing as species of greatest conservation need, the agency will compile and review information on these other pollinator species, such known ranges, threats, monitoring methodologies, and conservation actions that could benefit them. This information will inform a conservation planning document that will be incorporated in Iowa's next Plan revision.

Federal Funds requested: $100,000; **Non-Federal Match**: $34,638

Michigan Department of Natural Resources

Title: Scenario Planning to Conserve Michigan's Most Climate-Vulnerable Wildlife in an Uncertain Future
State(s): Michigan

Goals and Objectives: The *National Fish, Wildlife, and Plants Climate Adaptation Strategy* recommends scenario planning as a tool for developing climate change adaptation strategies. Michigan proposes to develop a set of scenarios exploring potential fish and wildlife responses to climate change. The scenarios will be used in workshops with partners in Michigan, increasing the agency's capacity to design climate-smart conservation actions for use in future Wildlife Action Plan revisions. Workshop outputs will be shared through regional networks such as the Midwest Association of Fish and Wildlife Agencies' Climate Change Subcommittee and the Upper Midwest and Great Lakes Landscape Conservation Cooperative.

Federal Funds Requested: $100,000; **Non-Fed Match**: $33,334

Wisconsin Department of Natural Resources

Title: Mapping Known Locations of Prairies and Prairie-Dependent Species for the Natural Heritage Inventory Information System
State(s): Wisconsin

Goals and Objectives: Prairies have historically dominated the Midwestern landscape, with over two million acres covering much of the southwest half of the State prior to European settlement. Prairies also support a large number of sensitive species and so receive more conservation attention than any other in Wisconsin. The proposed project will geographically identify locations of species of greatest conservation need, then share this information with land managers through a series of web-based tools. Sharing information on these ecologically important areas will allow managers to effectively carry out the conservation actions outlined in the Wisconsin Wildlife Action Plan.

Federal Funds requested: $34,375; **Non-Federal Match**: $11,950

Region 4

Alabama Department of Conservation and Natural Resources

Title: Defining Conservation Priorities for Freshwater Mollusks in the Mobile River Basin
State(s): Alabama, Tennessee, Georgia, Mississippi

Goals and Objectives: The Alabama Department of Conservation and Natural Resources proposes to work with surrounding States to update the 2010 Plan for the Population Restoration and Conservation of Imperiled Freshwater Mollusks of the Mobile Basin, which was originally written in 2010. This plan was created with input from the U.S. Fish and Wildlife Service, along with a broad partnership of other State, academic and NGO partners. Currently this basin contains 28 Federally-protected mollusk species, and others considered by the partnering States to be "species

of greatest conservation need." The partners seek to emphasize specific captive propagation methodology and identify streams most appropriate for reintroductions into historical ranges.

Federal Funds Requested: $82,410 **Non-Fed Match**: $27,599

Florida Fish and Wildlife Conservation Commission

Title: Assessing the Resilience of Oyster Reefs in Shallow Marine Ecosystems
State(s): Florida, North Carolina, South Carolina, Georgia

Goals and Objectives: Florida Fish and Wildlife Conservation Commission proposed to lead a multi-State response to the regime shifts associated with oyster reef ecosystems throughout the southern Atlantic coast. Requested funds are needed to document targeted spatial and temporal status of these ecosystems in each State and assess the factors that generate these shifts. Ultimately the project will use this information to refine management plans and actions for the conservation of oyster reefs in the four southeastern States.

Federal Funds requested: $492,559; **Non-Federal Match**: $191,032

Florida Fish and Wildlife Conservation Commission

Title: A Regional Approach to Florida's State Wildlife Action Plan
State(s): Florida

Goals and Objectives: Florida Fish and Wildlife Conservation Commission completed a comprehensive revision of its Wildlife Action Plan in 2011. As the agency prepares for its second revision, it is taking a more regional approach in that it will make data more accessible and relevant to towns, counties, and other organizations that utilize Plan data. In doing so, the agency will also highlight and identify wildlife connectivity needs. These efforts will lead to the development of region-based conservation priorities and associated actions.

Federal Funds requested: $40,000; **Non-Federal Match**: $13,333

South Carolina Department of Natural Resources

Title: Environmental Requirements for Optimal Survival and Growth of Hatchlings and Juvenile Diamondback Terrapins in the Southeastern United States
State(s): South Carolina, North Carolina, Georgia

Goals and Objectives: In North and South Carolina and Georgia, diamondback terrapins are identified as species of special concern and a high conservation priority. Terrapin declines are linked historically to overfishing and bycatch, loss of nesting habitats due to agricultural and recreational development near marshes, high mortality on coastal roads, and intense nest predation from mammals. The partnering agencies seek to expand scientific knowledge about hatchling and juvenile terrapins in order to inform population models and estimate the impacts of habitat

degradation due to climate change. The model will be used to guide management practices for populations in decline and help to proactively protect healthy populations.

Federal Funds requested: $499,062; **Non-Federal Match**: $232,329

South Carolina Department of Natural Resources

Title: Reducing Northern Diamondback Terrapin Mortality in Recreational and Commercial Crab Traps
State(s): South Carolina, Virginia

Goals and Objectives: Diamondback terrapins occur from Massachusetts through Texas and are the only exclusively estuarine turtle in North America. They are considered imperiled by the International Union for the Conservation of Nature and named as species of greatest conservation need in the South Carolina and Virginia Wildlife Action Plans. As significant threat to this species is their susceptibility to drowning in crab traps. This unique conservation partnership seeks to engineer and evaluate a trap design that effectively retains legal-sized crabs while minimizing entrapment of diamondback terrapins.

Federal Funds requested: $495,973; **Non-Federal Match**: $192,029

Southeastern Association of Fish and Wildlife Agencies

Title: Cooperative Assessment for At-Risk Species
State(s): Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Missouri, Mississippi, North Carolina, South Carolina, Oklahoma, Tennessee, Texas, Virginia, West Virginia

Goals and Objectives: The U.S. Fish and Wildlife Service has struggled in recent years to adequately assess the status of many candidate and petitioned species as required under the Endangered Species Act due to a lack of personnel resources and limited data on these species. In particular, regional data coordination across State jurisdictions has been insufficient, limiting the ability of partnering States to evaluate the effects of species and habitat management activities at a regional or landscape scale. By implementing an integrated research, inventory, monitoring and status assessment effort throughout the southeastern States, the partners will enable development of modeling, and designation of common biological objectives for targeted species which are both Service and State priorities for conservation.

Federal Funds requested: $500,000; **Non-Federal Match**: $335,076

Tennessee Wildlife Resources Agency

Title: Southeast Lake Sturgeon Recovery
State(s): Tennessee, Alabama, Georgia, Kentucky, North Carolina

Goals and Objectives: This project will support efforts of States and multiple university and aquarium partners to restore and manage extirpated Lake Sturgeon populations throughout a significant portion of its historic native range in the Southeast. Restoration will focus on the Cumberland, Tennessee and Coosa Rivers. Partners will continue and expand propagation for reintroduction, monitor the species throughout the drainages, track temporal movements, identify critical habitat and expand conservation outreach efforts. A key task includes defining life history parameters for the species in the Southeast and identifying habitat restoration and fish passage issues within these drainages. Data collected as a result of this project will be shared regionally and nationally to further advance the conservation and restoration of Lake Sturgeon.

Federal Funds requested: $499,987; **Non-Federal Match**: $172,895

Region 5

New Hampshire Department of Fish and Game

Title: Comprehensive Wildlife Conservation in the Northeast Region
State(s): New Hampshire, Connecticut, Delaware, New Jersey, New York, Maryland, Pennsylvania, Vermont, Virginia, Rhode Island

Goals and Objectives: Since the first State Wildlife Action Plans were developed prior to 2006, the northeastern States have partnered with the North Atlantic Landscape Conservation Cooperative (NALCC) to develop a database of regional species of greatest conservation need. Partnering States developed a common administrative and governance structure, regional habitat classification system and lexicon, maps, and condition analyses. The proposed project builds upon these strategic investments by developing a regional conservation plan with a timeline for implementation. The plan, designed to enhance the Wildlife Action Plans of participating States, will identify spatially-explicit actions and objectives to address threats on a regional basis, providing a foundation for more strategic conservation investments.

Federal Funds requested: $199,520; **Non-Federal Match**: $94,056

Vermont Fish and Wildlife Department

Title: Mapping Conservation Opportunity Areas for Vermont's Species of Greatest Conservation Need
State(s): Vermont

Goals and Objectives: To incorporate the protection of a broad diversity of species, each with its own life history and habitat requirements, in a single coherent plan, scientists and planners have adopted the "coarse-filter" conservation strategy. This approach helps avoid the overwhelming task

of identifying and managing for each species' needs individually by treating larger-scale components of the landscape as proxies for the species they contain. Vermont Fish and Wildlife Department proposes to apply the coarse filter methodology to map key conservation opportunity areas, significantly improving the utility of Vermont's Wildlife Action Plan and the agency's statewide efforts to protect Vermont's species of greatest conservation need.

Federal Funds requested: $98,693; **Non-Federal Match**: $35,553

Region 6

Nebraska Game and Parks Commission

Title: Incorporating Strategies into the Nebraska Natural Legacy Project for Species Adaptation to Climate Change
State(s): Nebraska

Goals and Objectives: Nebraska Game and Parks Commission proposes to identify adaptation measures for a set of at-risk species that are expected to be most vulnerable to the effects of climate change. The agency will accomplish this by evaluating climate-related risk factors in order to develop models, maps, and decision support tools leading to the design of adaptation measures for targeted species. This information will be incorporated in the next version of the Nebraska Wildlife Action Plan, and shared broadly with partners and contributors.

Federal Funds requested: $100,000; **Non-Federal Match**: $34,000

Region 8

Nevada Department of Wildlife

Title: Development of a Comprehensive Conservation Agreement and Strategy for Springsnails in the Great Basin and Adjacent Areas
State(s): Nevada, Utah

Goals and Objectives: The partnering State fish and wildlife agencies propose to develop a comprehensive Conservation Agreement and Strategy for species of springsnails in the Great Basin of Nevada, Utah and surrounding areas. The partners will compile available springsnail information, including species descriptions, life history and habitat requirements, status, known locations of occurrence, and known threats, and create a multi-State database to facilitate future management. The completed Strategy is expected to lead to more effective management and conservation of these unique species, and contribute to achievement of specific conservation targets for gastropods identified in both States' Wildlife Action Plans. Other regional species, such as Colorado River Cutthroat Trout, have been petitioned to list under the Endangered Species Act and were found "not warranted" due to planned conservation actions and threat abatement identified and implemented through the same Strategy development process proposed for springsnails.

Federal Funds requested: $195,964; **Non-Federal Match**: $80,134