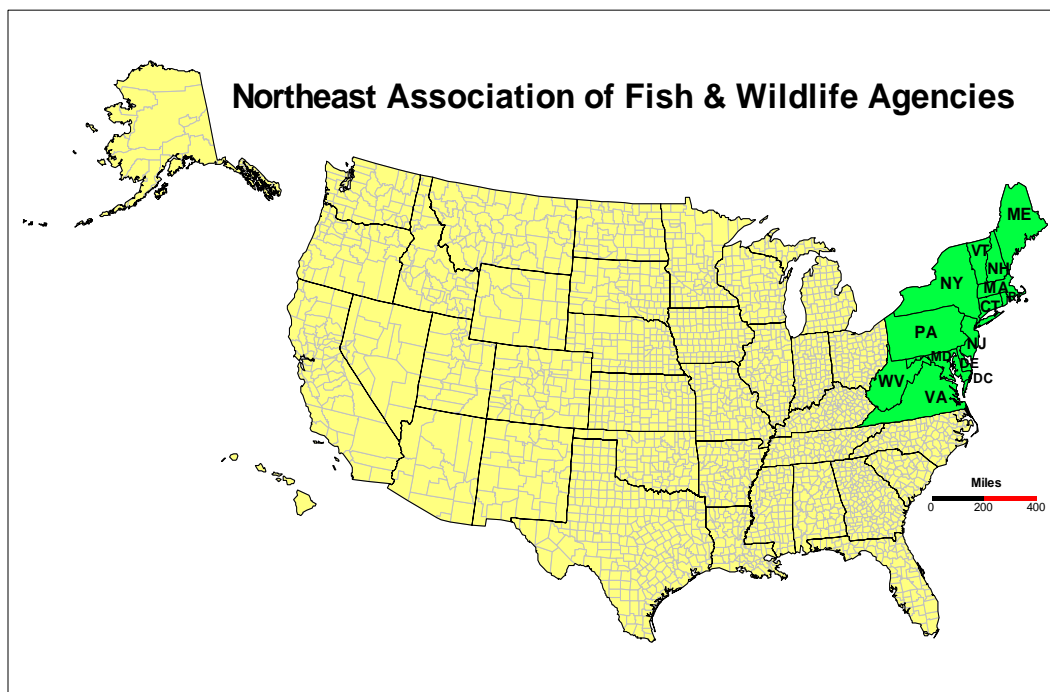




The Northeast Association of Fish and Wildlife Resource Agencies

## State Wildlife Action Plans Meeting March 28-30, 2006



A Final Summary Report to the Northeast Association of Fish and Wildlife Agencies  
April 28, 2006

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### **Executive Summary**

State Wildlife Action Plan development was an unprecedented effort between states and partners. Through a grant from the National Fish and Wildlife Foundation and Doris Duke Charitable Foundation, the Northeast Association of Fish and Wildlife Agencies set about to leverage that effort.

The culmination of the grant was a 2-day meeting held in Albany, New York during March 28-30, 2006. A total of 45 people attended the meeting, representing the Northeast Association of Fish and Wildlife Agencies, the Association of Fish and Wildlife Agencies, the U.S. Fish and Wildlife Service, and all states in the region except Rhode Island.

The meeting focused on identifying specific actions that, based on the collective priorities identified in the states Action Plans, would further fish and wildlife conservation in the region.

Through interactive voting and breakout group discussions during the meeting region-wide priority conservation actions were identified, using a list of 41 priority conservation actions developed by the Northeast Endangered Species and Wildlife Diversity Committee List and 31 priority actions added by states at the March 28, 2006 group session.

A lead person and next steps were identified for the 6 priority projects selected. The number in parentheses below indicated the original conservation action number assigned in the complete list for purposes of voting and easy identification:

1. (71) Select regional landcover, stream, and habitat classification system from existing suite of options and create regional GIS platform, then identify quality and critically imperiled habitat types and locations
2. (31) Identify top 20 invasive species and related issues that negatively impact GCN species and develop implementation actions and monitoring protocols to gauge effectiveness of management actions.
3. (40) Identify a system of Northeast conservation focus areas to support sustainable populations of GCN species.
4. (45) Develop regional in-stream flow standards, guidelines, and policy standards that allow for management of the quantity and temperature of flows that mimic natural conditions and protect aquatic life from thermal stress and other flow-related threats.
5. (21) Develop model guidelines for training local planning boards on how to incorporate GCN species and their key habitats into local planning.
6. (73) Develop Regional Indicators and Measures (of SGCN, Habitats, Threats and Strategy Effectiveness) to Ensure Successful Conservation

The lead person identified for the priority project will coordinate future work towards the development of blueprints for these regional conservation projects.

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### **Project Overview**

The Northeast Association of Fish and Wildlife Agencies (NEAFWA) received funding from the National Fish and Wildlife Foundation (NFWF) and Doris Duke Charitable Fund to identify and rank priority regional projects for future coordinated action, to foster partnerships among state fish and wildlife agencies in the Northeast, and to develop draft action plans for selected actions.

Towards that end NEAFWA sponsored a meeting to identify and prioritize multi-state conservation actions that were identified in State Wildlife Action Plans within member states of the Northeast Region. D.J. Case & Associates (DJ Case) was hired to conduct the meeting planning and provide facilitation and recording at the meeting, including moderating the introductory presentations and facilitating full group discussions and overseeing breakout groups.

The NEAFWA states include: New York, Delaware, West Virginia, Maine, Connecticut, Massachusetts, New Hampshire, New Jersey, Vermont, Pennsylvania, Virginia, Maryland, Rhode Island, and District of Columbia. Please note that this project only addresses collaborative efforts *within* the United States.

The meeting held on March 28-30, 2006 sought to bring together agency personnel from each state within the region and the U.S. Fish and Wildlife Service to identify and rank priority conservation actions that require multi-state coordination. A total of 45 people attended the meeting, representing, the NEAFWA, the Association of Fish and Wildlife Agencies, the U.S. Fish and Wildlife Service and all states in the region except Rhode Island (Appendix A).

The meeting's objectives were to:

1. Identify and rank high-priority regional actions for coordinated implementation.
2. Foster partnerships among state fish and wildlife agencies in the Northeast.
3. Develop draft implementation plans for selected actions for review and comment by state, federal, local government, nonprofit organizations and local community partners.

The states in the Northeast region used a diversity of approaches in development of their Wildlife Action Plans. The one component common to all plans in the region was the foundational eight elements required by Congress. Three of these elements, "research and survey efforts", "conservation actions" and "monitoring needs" have been commonly funded under State wildlife Grant funds, and are likely candidates for NFWF year 2 and 3 grants, or other grant programs. All Wildlife Action Plans identified actions and efforts needed for conservation of both habitat and specific species of greatest conservation need. All of the states focused their state Action Plans conservation issues within their state borders although many recognized the need for regional or multi-state actions.

### **Development of Priority Conservation Actions List**

Prior to the meeting, participants received a “Pre-Meeting Resources document” to review prior to the meeting (Appendix B). This document included:

- A list of the top ten regional conservation actions developed at the October 2005 Northeast Endangered Species and Wildlife Diversity Technical Committee (ESWDTC) meeting and brief descriptions of eight of these conservation actions.
- The complete list of 41 actions developed by the ESWDTC

In addition to reviewing this document, participants were asked to bring a one-page document that included their state Wildlife Action Plan’s top five conservation actions and top five issues/threats. Participants were also asked to include a “top ten” list of SGCN species and habitats if they were ranked in their state’s wildlife action plan. This information was used to help participants at the end of day one, when “state caucuses” were convened to further review the list of 41 conservation actions developed by the ESWDTC committee and brainstorm up to five additional priority conservation actions from each state’s Wildlife Action Plan that need a coordinated regional/multi-state response.

### **Priority Ranking Methodology**

In order to expedite information and allow full participation, the group used TurningPoint® software and remote voting devices to rank priorities. The TurningPoint® software utilizes a PowerPoint presentation to conduct voting, with a to-be-determined number of items listed per slide. Meeting participants were given the opportunity to vote three times for their preference. Attendees were allowed to vote for either three different actions at once or they could vote three times for their preferred priority action.

### **Criteria for Prioritization**

Before ranking priority conservation actions, participants were asked to consider possible criteria for prioritization of conservation actions. The group brainstormed and came up with a list of criteria, which included:

1. Common to all plans (8%)
2. Represents the greatest number of states in region (7%)
3. High profile (1%)
4. **Can be accomplished in a short period of time (11%)**
5. Truly regional, not just state expansion (10%)
6. Long-term gains (9%)
7. **Applied regionally, will help all states implement plans successfully (15%)**
8. **Breadth of GCN species effected (11%)**
9. Facilitate communications data sharing (8%)
10. **Things that can’t be accomplished by a single state (11%)**

The 10 criteria listed were voted on using TurningPoint®. Bolded items represent the top criteria that participants indicated were a priority. The group agreed to use this to guide their thinking as priorities for conservation actions were identified.

### **Ranking Priority Conservation Actions**

DJ Case reviewed and combined the state additions to ESWDTC List at the end of day 1. A complete list of 54 conservation actions identified by the states can be found in Appendix C. For organizational purposes state responses were condensed to avoid repetition. Responses that appeared to be similar to the list of 41 developed by the ESWDTC were deleted to avoid duplication. The intent was not to rigidly interpret the responses but to help organize and structure them. Minor edits/additions were made to the list of 41 as suggested. A list of 31 conservation actions developed by the states was added to the 41 developed by the ESWDTC to determine priorities (Appendix D).

Two handouts, a complete list of “state add-on’s” and the combined list of the ESWDTC, and condensed state priorities, were distributed to participants on the morning of day 2. The latter numbered list (ESWDTC and condensed state priorities) of 72 conservation actions does not indicate prioritized ranking. The responses were sequentially numbered to help meeting participants refer to specific conservation actions during the meeting and for prioritization purposes.

To begin priority ranking, a PowerPoint presentation was developed with nine conservation actions listed per slide. The conservation actions developed by the states were mixed up so that all of a state’s actions were not included in one single vote. After a vote was taken on each slide, the top 5 conservation actions were carried to the next round of voting. This voting process was repeated until the group came up with a ranked “Top Ten” Priority Conservation Actions List (Appendix E). Complete voting results can be found in Appendix F.

### **Priority Projects**

Through the above methodology and resulting information the following Top 5 region-wide priorities were identified. The number in parentheses below indicated the original conservation action number assigned in the complete list for purposes of voting and easy identification.

1. (71) Select regional landcover, stream, and habitat classification system from existing suite of options and create regional GIS platform, then identify quality and critically imperiled habitat types and locations
2. (31) Identify top 20 invasive species and related issues that negatively impact GCN species and develop implementation actions and monitoring protocols to gauge effectiveness of management actions.
3. (40) Identify a system of Northeast conservation focus areas to support sustainable populations of GCN species.
4. (45) Develop regional in-stream flow standards, guidelines, and policy standards that allow for management of the quantity and temperature of flows

that mimic natural conditions and protect aquatic life from thermal stress and other flow-related threats.

5. (21) Develop model guidelines for training local planning boards on how to incorporate GCN species and their key habitats into local planning.

On day 3, the group collectively discussed if there were any major omissions not captured in the list of 72 conservation actions that the group thought were important. At that time, the possibility of adding an additional priority project titled "Develop Regional Indicators and Measures (of SGCN Habitats, Threats and Strategy Effectiveness) to Ensure Successful Conservation" was discussed. Considerable discussion ensued regarding whether or not another priority project should be added. Several members of the group were concerned that the process to determine priority projects would be violated if another project was added, while others felt it was an essential component of the package as it provided a major component of a regional approach to species conservation and should be added. It was determined that the project had not been included on the list of projects to be voted on because elements of the project were included in other projects which were on the list. As such, it had not been represented in the list for full group consideration. The meeting convener made the decision that this was an essential element of a regional approach, that this aspect of Wildlife Action Plan implementation needed up-front attention, and therefore decided that the project would be added to the list.

6. (73) Develop Regional Indicators and Measures (of SGCN, Habitats, Threats and Strategy Effectiveness) to Ensure Successful Conservation.

### **Break out Groups**

The Top 5 Priority Projects were developed for additional focused, coordinated action in the Northeast region in two breakout sessions held during the meeting. Draft implementation plans were developed for the Top 5 Priority Actions identified on Day 2. Notes from breakout sessions and a description of Priority Project #6 are available in Appendix G.

During the first breakout session, participants were self-assigned into five groups and were asked to discuss the Top 5 Priority Projects identified above.

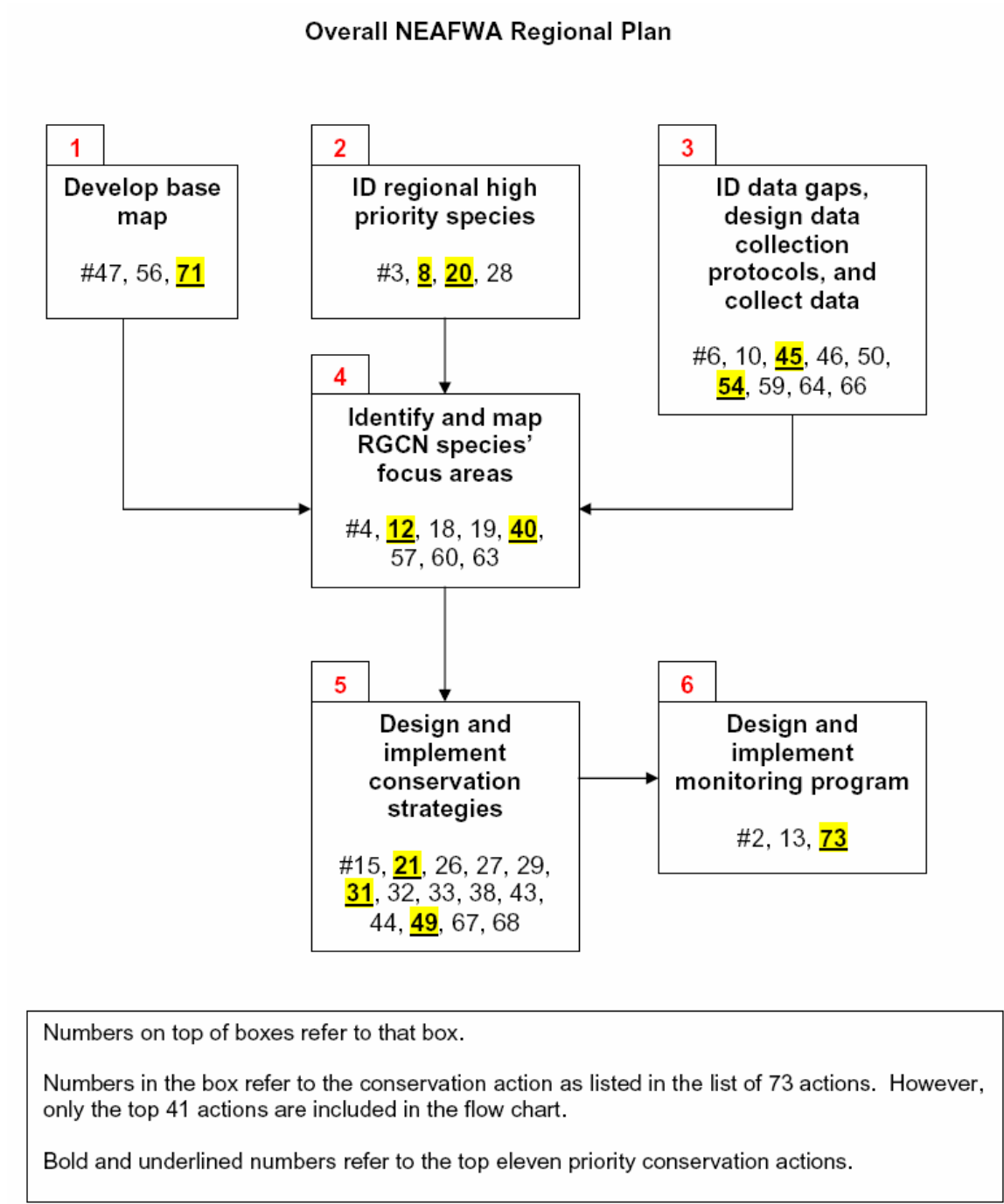
The second breakout session charged participants with taking the same Top 5 priority actions and developing further details including: Assignments, Process, Costs and Schedule for implementation.

### **Development of Overall Plan to address Priority Conservation Actions**

When looking at the complete list of conservation actions, it appeared that there was overlap and considerable interdependence among many of the conservation actions. Some actions seemed to depend on the prior completion of other actions, while others appeared to be key actions, but could be developed concurrently with other actions. To

help visualize these relationships, and understand how they all fit together, George Matula (Maine) developed a flow chart for participants to review and use.

Figure 1: Project 1 Overall Plan





**Barriers, Threats and Solutions**

The group also discussed “Barriers/threats to achieving regional work—and solutions” and came up with the following lists:

Barriers, Threats:

Funding  
Staffing Constraints  
Maintaining Focus  
Moving money through Bureaucracy  
Commitment of 14 jurisdictions  
Simple data gaps  
Political priority differences  
State vs. regional interests

Solutions:

Commitment from directors on process  
Establish Administrative Structure  
State Wildlife Action Plan Regional Coordinator  
Existing Models for Cost accounting (use FWS help)  
Atlantic Coast Joint Venture Model  
FWS intern will help with tasks included in 6 projects  
Think bigger  
Capitalize on technical committees (and other groups) already in place

**Next Steps on Top 6 Priority Projects**

Project leaders were identified for the Top 6 priority projects. The project leaders will work with the project team to complete and send Steve Weber an Executive Summary of actions/steps outlined in group breakout session 1 (1-2 pages) by April 14. Steve Weber will then present the Priority Projects to the Directors at the NEAFWA Meeting the week of April 23. The project leaders will coordinate future work towards the development of blueprints for these regional conservation projects. By May 15, proposals are due to NFWF and should include more detail. The following NFWF Grant Proposal Requirements were noted: a budget cap of \$100,000, maximum 18 month duration timeline, and in-kind match is not required, but encouraged.

The group recommended establishing a steering committee to oversee the development and implementation of the projects. The group recommended representatives from at least the following:

- a. NEAFWA Directors Level
- b. NEWAA
- c. NEFAA
- d. NCIEA
- e. NEAFWA Coordinator
- f. Tech committees (?)

**Meeting Evaluation**

At the conclusion of the meeting attendees were asked to evaluate the meeting and process. The complete results of the evaluation are located in Appendix H. Ninety-four percent of respondents indicated that they had the opportunity to identify conservation actions with their neighboring states or colleagues in the region. Almost 90% indicated that the prioritized action items will allow them to collaborate with other states in the Northeast Region.

**Draft Report Comments and Edits**

A draft of this document was distributed to all meeting participants for review and comment. The draft was edited based on feedback from 4 participants who submitted comments.

Appendix A: Meeting participants

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Appendix A: Meeting participants

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Appendix A: Meeting participants

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## Appendix B

**State Wildlife Action Plans  
Regional/Interstate Action Meeting  
March 28-30, 2006  
Albany, New York**

### Pre-Meeting Resources Document

In October 2005, the Endangered Species and Wildlife Diversity Technical Committee (ESWDTC) developed a list of 41 conservation actions (Appendix A). These were then prioritized and next steps were identified for the top 10 projects. Following are the results of that prioritization and the initial descriptions developed for 8 of these actions.

During the meeting next week, we will be completing a similar activity with broader regional representation to prioritize actions specifically identified in your state's Wildlife Action Plan.

This document is designed to jumpstart the discussions at next week's meeting. During the first day of the meeting, we will modify or add actions to the ESWDTC list.

#### Highest Ranking Regional Conservation Projects developed by Northeast Endangered Species and Wildlife Diversity Committee

15 October 2005

##### Top rank (Each received seven votes)

- **Project 1A.** Compile population status and location data for Tier 1 species on the NE list and map their locations.
- **Project 1B.** ID species by taxa for which we have little information on status and distribution and develop standardized methodologies for data collection.
- **Project 1C.** Synthesize habitat classifications in WAP(S) to develop a regional habitat classification system.

##### Second highest rank (6 votes)

- **Project 2.** ID impacts of wind energy on bat and bird migration and develop pre- and post- construction monitoring guidelines.

## Appendix B: Pre-Meeting Resources Document

### Third highest (5 votes)

- **Project 3A.** ID species for which the NE holds the greatest responsibility for their survival.
- **Project 3B.** Develop a mechanism to communicate to local land-use planners about conservation of GCN species and key habitats at the landscape scale.
- **Project 3C.** Develop a relational database for all GCN species in the NE and their threats to facilitate conservation efforts including, identifying a host and develop an online NE data warehouse for GCN species for all taxa (16 and 28 combined).
- **Project 3D.** Develop model guidelines for landowner incentives to protect GCN species and their key habitats.

### Fourth Highest (4 votes)

- **Project 4A.** ID a system of NE conservation focus areas to support sustainable populations of GCN species.
- **Project 4B.** ID regional high priority invertebrate species, map their potential habitats, and develop conservation actions to ensure population viability.
- **Project 4C.** ID important migratory songbird stopover points/habitat in the NE.

### **Project 1A. Compile population status and location data for Tier 1 species on the Northeast list of Species in Need of Conservation and map their locations. (Lead: John Kanter)**

**Need:** In 1999, the Northeast Endangered Species and Wildlife Diversity Technical Committee of the Northeastern Association of Fish and Wildlife Agencies declared 106 species of mammals, birds, reptiles, amphibians, fish, and freshwater mussels of regional concern in the northeastern United States. This list of species was published in *Northeast Wildlife* (Volume 54). These species have been included on individual state lists of species of greatest conservation need and incorporated into all 13 northeastern state's Comprehensive Wildlife Conservation Strategies. The NE Endangered Species and Wildlife Diversity Technical Committee and other species experts identified management and research needs for all 106 species.

Twenty-six species were identified as warranting federal listing. If states collaborate to address the conservation needs of these species prior to a federal listing process, the need to list them could be avoided. Secondly, for species that warrant federal listing, states would be in a position to lead protection and recovery efforts.

**Approach:** Twenty-six of the species of regional conservation need were identified as warranting federal endangered species listing considerations. In order to facilitate the development of regional conservation strategies for these species, data needs to be compiled and mapped at the regional scale. This project will develop regional maps of

## Appendix B: Pre-Meeting Resources Document

key areas for each of these species based on location and habitat information compiled in individual State Comprehensive Wildlife Strategies. The process of consolidating species data at a regional scale will identify data-gaps and research needs necessary for completing regional conservation strategies.

### **Expected Products:**

- A regional database for 26 at risk species (Appendix B)
- Conservation focus area maps for species that are highly at risk and that the Northeast region has high responsibility for their conservation.

Project 1B. Identify species for which we have little information on status and distribution and develop standardized methodology to collect this data. (Lead: Kathy Obrien)

Approach:

- 1) Chose 13 species listed as At Risk in at least 3 states whose life history, distribution, status, and/or habitat requirements are poorly known. Each state will take the lead on one species. The 13 species should include 1 bird, 1 mammal, 1 reptile, 1 amphibian, 1 fish, 1 bivalve, 1 gastropod, 1 lepidopteran, 1 odonate, 1 beetle, 1 dipteran, 1 ephemeropteran, 1 crustacean.
- 2) Develop a template to gather information.
- 3) Contract experts to gather the data – with emphasis on standardizing methodology
- 4) Contract experts to fill in gaps in information- research, surveys, etc
- 5) Disseminate the data to regional databases, education and outreach materials, local protection groups
- 6) Use method to continue to eliminate data gaps on all species at risk

Project 2 Part A. Develop Standardized Guidelines and Techniques for Pre and Post Monitoring at Proposed Wind Farms (Lead: Rick Reynolds)

**Need:** With the rising cost of fossil fuels, current tax incentives for “green power,” and the Department of Energy’s goal of producing 5% of electricity through wind turbines by the year 2020, the number of proposed wind farms is growing exponentially. While there are many positive aspects to wind energy, there are environmental issues that need to be addressed. Specifically there is direct loss of birds and bats to collision with turbines. While minimal loss may be acceptable, long-term cumulative affects pose a concern.

The techniques and sampling protocols used to conduct pre and post monitoring at proposed wind farms are fairly new and have not been tested through scientific study. Consultants currently conduct surveys using a variety of techniques and sampling protocols making it difficult for permitting agencies to make comparisons between sites and assess risks.



**Objectives:**

1. Determine the type and detail of radar data needed to adequately describe passage rates, direction, and altitude of vertebrates in terrestrial and marine habitats.
2. Compare visual (night vision) vs. auditory sampling (bird acoustical monitoring and bat detectors) techniques for determining the relative percentage of birds vs. bats in conjunction with radar data.
3. Determine the seasonal sampling periods needed to address passage rates for birds and bats in the spring and fall. Describe climatic conditions that affect passage rates.
4. Determine the sampling technique/protocol needed to quantify fatalities at existing radar sites. Currently sampling methods for quantifying mortality of birds and bats at existing turbine sites are highly varied. The area to be sampled, sampling period (start and end dates), sampling rates (hourly, daily, weekly, etc.), and dog vs. human searches need to be studied in order to adequately address bird and bat loss a given site.

**Project 2 Part B. Bird and Bat Migration over Appalachian Ridges in the Mid-Atlantic Region (Lead: John Ozard/Rick Reynolds)**

This project is just like #4 except it focuses on the Mid-Atlantic Region. This can be expanded to include all NE states.

**Need:** Interest in developing wind power as an alternative renewable energy source has increased in recent years. In the eastern U.S., the focus of onshore wind power development is the Appalachian Mountains, where exposed summits or ridge crests have high wind power potential. Concerns have arisen about the potential impacts of wind power development on migrating birds and bats, creating a critical need for information on their distribution and flight characteristics as they pass through the region.

**Approach:** This project designs and implements a multi-year, collaborative regional study of the spatial and temporal distribution patterns and flight characteristics of birds and bats that migrate nocturnally. Analyses of weather radar data will provide a broad view of spring and fall migration through the Appalachians, and field- monitoring of migrating birds and bats will provide site-specific information for multiple locations in the Appalachian region of the Mid-Atlantic states (MD, PA, VA, WV). The data collected will be used to model the effects of weather, topography, land cover, or other variables on migrant abundance and flight in order to identify locations and weather conditions where and when migrants might be at risk from wind power development.

**Objectives:** The overall objective of the project is to increase our understanding of the characteristics and dynamics of nocturnal bird and bat migration through the Appalachians, so that informed and scientifically sound recommendations can be made to reduce the risk to migrants of proposed and operational wind power projects.

Specific objectives include:

- 1) Document broad-scale patterns of nocturnal migration through the Appalachians.
- 2) Develop the design and protocols to field-sample nocturnally migrating birds and bats at multiple locations in the Appalachian Mountain region of the Mid-Atlantic states.

## Appendix B: Pre-Meeting Resources Document

- 3) Document density/passage rates, flight direction, and flight altitudes of migrating birds and bats during fall and spring at each location.
- 4) Obtain information on the identity and relative abundance at each location of bird species that call while migrating.
- 5) Model the effects of weather, topography, land cover, or other variables on migrant density/abundance and flight characteristics.
- 6) Map observed and predicted migrant densities for the region to identify locations and weather conditions where/when migrants might be at risk from wind power development.

**Expected Products:** Products will include regional maps/GIS coverages of seasonal migrant densities, identified concentration points for migrants (both occasional and across seasons/years), and risk levels (low, moderate, high) of wind power development to migrants. Project results will be presented at technical workshops or scientific meetings, and two or more manuscripts will be prepared for submission to scientific journals. Protocols for the sampling design and data collection will be available upon request, or via the Internet (e.g., through the National Wind Coordinating Committee), so that they can be adopted for use in other studies of migrating birds or bats. Data on migrant passage rates and flight characteristics from across the region will be available to put into context similar data from individual development sites.

### **Project 3A. ID species for which the NE Region holds greatest responsibility (Lead: Dan Brauning)**

**Objective:** Determine a matrix of threats and conservation sites for species that are determined to be high 'responsibility' in the Northeast Region.

**Approach:** This initiative implements the assessment already completed for passerine birds and available at the PIF web site, and then build on this priority species list with specific threats and conservation opportunities.

1. The first step is to complete the analysis of each species' range to determine those for which the NE region holds a 'high' percentage. Precise cut-offs must be determined in which a taxa is considered 'high responsibility.'

2. For each high responsibility species, an assessment of conservation threats must be identified and prioritized, as well as population centers.

3. Both threats and important sites will be ranked by importance for each species

4. The resulting list of species will be ranked by responsibility weighted (in some manner to be determined) by the relative threats.

5. The state contribution to conservation of each species would be identified.

**Expected Benefit:** The outcome will be better planning and regional coordination for conservation of priority species.

## Appendix B: Pre-Meeting Resources Document

Project 3B. Develop a Mechanism to Communicate to Local Land-use Planners How to Conserve GCN Species and Key Habitats at the Landscape Scale (Lead: Jenny Dickson and Glenn Therres).

(formerly titled: Develop a Mechanism to Enhance Landscape-level Conservation at the Local Level for Regional Issues)

### Objectives:

1. Identify network of local land-use planning organizations within the region
2. Identify network of state or regional programs that may affect land-use decisions (e.g., Coastal Zone Mgt, NRCS, state offices of planning)
3. Identify appropriate mediums for delivering information on how to conserve GCN species to these networks (i.e., tool kit of options)
4. Develop appropriate mediums (e.g., newsletter, web-based information, etc.)

**Expected Products:** Appropriate mediums to disseminate information to network of land-use planning communities (e.g., newsletter, web-based information, etc.).

Project 3D. Develop Model Guidelines for Landowner Incentives to Conserve GCN Species and Their Key Habitats (Lead: Jenny Dickson and Glenn Therres)

### Objectives:

1. Evaluate existing landowner incentive programs (via committee or consultant)
2. Determine how each incentive can be used to conserve GCN species (via working group of NEES&WD TC)
3. Identify where incentives are needed but not available
4. Suggest modifications or new incentives to address missing elements (e.g., changes in focus of Farm Bill funds to consider GCN species and not just traditional species)

**Expected Product:** NEPARC-like brochure that outlines landowner options and explains how to use them to conserve GCN species and serves as a model for states to enhance or expand their existing landowner incentive programs.

**Project 4A.** ID a system of NE conservation focus areas to support sustainable populations of GCN species. Prepared by Eric Sorenson & Jon Kart, Vermont Fish & Wildlife Department.

**Need:** Many wildlife species on large blocks of unfragmented habitat and secure connections to other large habitat blocks for all or part of their habitat needs. Although total forest cover in this Northeastern U.S. region has increased over the past few decades, unfragmented blocks of habitat have decreased in size as a result of residential development and roads. In general, we know little about the habitat types and the condition of these habitats in these existing unfragmented blocks. We currently have

## Appendix B: Pre-Meeting Resources Document

limited ability to prioritize conservation of existing habitat blocks. Moreover, as habitat block size decreases and fragmentation increases, functional connectivity becomes ever more critical. Wildlife Action Plans and Comprehensive Wildlife Conservation Strategies in all recognize the critical importance of unfragmented habitat blocks and connections between these habitat blocks for many Species of Greatest Conservation Need. Each state has made distinct progress toward identifying and ranking the relative conservation significance of these unfragmented habitat blocks and linkages. However, as wildlife ignore political boundaries, a consistent approach should be applied across the region so as to identify critical habitat blocks and linkages between states and Canada to the north.

### **Objectives:**

1. Identify, map, and rank the larger and most significant blocks of contiguous habitat in the region that are critical for maintaining the SGCN and other wildlife species that require extensive interior habitat. This will require establishing separate standards by biophysical region because of the great differences in the sizes and numbers of habitat blocks remaining.
2. Identify, map, and rank the most significant riparian, wetland, and upland habitats that provide habitat connectivity between large habitat blocks for SGCN and other wildlife species that are wide ranging across the landscape.

### **Project Phases**

1. A regional GIS project to map and rank contiguous habitat blocks and wildlife corridors and connections between blocks will provide the framework for more field-based assessments to follow. This analysis can be accomplished with existing statewide data layers and can assess both the relative habitat value of blocks and the relative threat to blocks.
2. The field-based survey of highest priority habitat blocks and linkages across the region will be a labor-intensive project over many years, but will provide a strong basis for prioritizing conservation efforts for habitat blocks and the associated SGCN. Proposal should be developed based on results of GIS analysis. At a minimum, the best of examples of all matrix habitat types and linkages between these habitat blocks should be identified and evaluated for each biophysical region.
3. Reporting and dissemination of information to conservation partners, including conservation organizations, state and federal agencies, and regional and local governments.

Project 4B. Identify high priority invertebrate species of regional conservation concern, map their known and potential habitats, and develop conservation actions to ensure long-term viability. (Lead: Mark Ferguson)

**Approach:** Hold a regional workshop of invertebrate specialists from all northeastern states. Goals of this working group will be to:

- \* Identify 10 high priority species of regional greatest conservation need.
- \* Map known and potential distribution of each species.
- \* Compile conservation actions and information needs for each species.

## Appendix B: Pre-Meeting Resources Document

### Project 4C. Issue: Identification and Analysis of Important Migratory Songbird Stopover

#### Habitat in the Northeast (Lead: John Ozard)

Analyze five consecutive years of NOAA weather radar data from NEXRAD sites covering the thirteen northeastern states for both spring and fall songbird migration events. Using current year NEXRAD data and data from the preceding four years, identify important stopover/resting areas used by migrating songbirds and determine averaged dates for the spring and fall migration windows. Analyze the vegetative cover and important habitat features at these areas and deliver a turnkey GIS mapping/database application to document and display these important habitats and large scale migration events. Where feasible, supplement the current year radar analysis with acoustical monitoring and point counts to document species composition of the migration events.

#### Appendix A: Complete Action List developed by ESWDTC (Oct. 2005)

Select one species from each taxonomic group to consolidate data for the purpose of regional conservation planning (eBird was presented as a model approach).

1. ID indicators to monitor at the regional level.
2. ID regional high priority invertebrate species, map their potential habitats, and develop conservation actions to ensure population viability.
3. ID important migratory songbird stopover points/habitat in the NE.
4. ID 5 invertebrates from each state whose life history/habitat requirements is poorly known and direct research toward them.
5. Establish Regional Working Groups by taxa to develop common data collection protocols and databases for regional analysis and action.
6. ID key bat migration areas in potential wind development sites in the NE.
7. ID species for which the NE holds the greatest responsibility for their survival.
8. ID species by taxa for which we have little information on status and distribution and develop standardized methodologies for data collection.
9. Compile population status and location data for Tier 1 species on the NE list and map their locations.
10. Develop a plan for organizational structure for regional conservation planning and organization.
11. ID important regional wildlife corridors or patches that are important for GCN species (GIS map/product).
12. Develop metrics to track changes in the landscape at a regional and sub-regional scale.
13. Select regional species and habitats most vulnerable to impacts of climate change and develop a monitoring scheme.
14. Develop a mechanism to enhance landscape level conservation at the local level for regional issues.
15. ID a host and develop an online NE data warehouse for GCN species for all taxa.
16. Develop guidelines for habitat protection through legislation/regulation and promote adoption in NE states.

## Appendix B: Pre-Meeting Resources Document

17. ID habitat connectivity issues for GCN species.
18. ID focal areas for management for all taxa.
19. ID species with conservation issues that require regional actions.
20. Develop model guidelines for training local planning boards on how to incorporate GCN species and their key habitats into local planning.
21. Take the top 50 species that appear or will go extinct in the next 50-100 years and put them in a zoo. Develop educational and outreach programs to explain why they are in the zoo.
22. Develop workshops for educational outreach to relay importance of issues identified in the state CWCPs.
23. Regional analysis of roadless areas.
24. Define/evaluate organizational capacity and increase where needed to meet current conservation needs.
25. ID impacts of wind energy on bat and bird migration and develop pre- and post-construction monitoring guidelines.
26. Find ways to reduce wildlife transportation conflicts and identify ways to improve connectivity.
27. Develop a relational database for all GCN species in the NE and their threats to facilitate conservation efforts.
28. Develop model guidelines for landowner incentives to protect GCN species and their key habitats.
29. Review efforts to establish legislation to cash in on non-consumptive wildlife use.
30. ID top 20 invasive species and related issues that negatively impact GCN species.
31. Develop management guidelines for freshwater wetlands supporting GCN species.
32. Analyze potential regional impacts of loss of federal protection of vernal pools and isolated wetlands on GCN species.
33. Restore 100,000 acres of degraded wetland in the NE.
34. Develop educational outreach pamphlet /material describing climate change and potential impacts on GCN species in the NE.
35. Education and outreach for air and water quality impacts on GCN species.
36. Convene symposium of wildlife and public health experts to ID common issues and solutions.
37. Assess impacts of nuisance species to GCN species and their habitats in the NE.
38. Educate public on effects of acid rain on NE GCN species.
39. ID a system of NE conservation focus areas to support sustainable populations of GCN species.
40. Synthesize habitat classifications in CWCS to develop a regional habitat classification system.

## Appendix B: 26 at risk species

Priority\* Wildlife Species of Regional Conservation Concern in the Northeastern United States derived from Northeast Wildlife Volume 54, 1999

### Mammals

Allegheny woodrat  
Eastern small-footed bat  
Harbor porpoise  
New England Cottontail  
Northern bog lemming  
Southeastern myotis  
Southern rock vole

### Birds

Appalachian Bewick's wren  
Bicknell thrush  
Harlequin duck  
Loggerhead shrike

### Reptiles

Blanding's turtle  
Eastern massasauga rattlesnake  
Northern diamondback terrapin  
Timber rattlesnake  
Wood turtle

### Amphibians

hellbender

### Fish

Bluebreast darter  
Eastern sand darter  
Gilt darter  
Gravel chub  
Lake sturgeon  
Spotted darter  
Tippecanoe darter

### Freshwater Mussels

Green floater  
snuffbox

\*Species that warrant federal endangered or threatened species listing considerations, including prelisting status review

### Priority Actions

## Appendix C

### State Additions to Northeast Endangered Species and Wildlife Diversity Committee List March 28, 2006

#### New York:

1. Include acid, nitrogen, mercury in recommendation #14
2. Add communications towers to #2 & 26
3. Develop land protection strategies for large blocks of unfragmented habitats, including tax incentives and disincentives, easements, and cooperative management and funding mechanisms.
4. Modify #31 to include implementation actions and monitoring protocols to gauge effectiveness of management actions
5. Identify bird species not adequately sampled by the Breeding Bird Survey and develop protocol to monitor and develop system to implement protocol. Find a way to share data collected. This recommendation could be repeated for many species of regional concern.
6. Develop regional in-stream flow policy recommendations that allows for management of the quantity and temperature of flows that mimic natural conditions and protect aquatic life from thermal stress and other flow-related threats

#### Delaware:

1. Develop surveying and monitoring protocols for wide-ranging estuarine and marine species.
2. Develop classification for freshwater, estuarine and marine habitats.
3. Develop habitat classification for early successional habitat.
4. Develop management goals for extent and distribution of early successional habitat.

#### West Virginia:

1. Develop silvicultural guidelines and establish demonstration areas designed to maximize habitat for neotropical migrants
2. Ensuring habitat patch continuity across range of migratory species
3. Regional initiative to mediate/restoring native brook trout and associated GCN streams
4. Develop a listing of habitat sizes to prevent habitat from being a species sink rather than a source.
5. Multistate recreational/educational trails website and map



## Appendix C: State Additions to Northeast ESWDC List

### Maine

1. Concern for quality, quantity, degradation, and conservation of estuarine and marine environments and associated species groups.

### Connecticut:

1. Develop and implement coordinated monitoring and mapping of nightjars and marsh birds in the northeast (strongly supported by NE-PIF; featured in many WAPs)
2. Promote public awareness about urban SGCN and their habitats (informational programs; bioblitz events and more gather data and inform public—builds informed constituent base)
3. Enhance conservation of GCN terrestrial invertebrates by developing an online database that provides information to the public and facilitates the submission of data by the scientific community (ideally pick two focal groups like Lepidoptera and odonata that have high public profile and interest as a model for others)
4. Develop model in-stream flow goals for 3 inter-jurisdictional watersheds (e.g. Delaware, New, Connecticut Rivers) to sustain the diversity, structure, and abundance of GCN species and their key habitats
5. Map historical and current distributions of diadromous GCN species and identify migratory barriers throughout the northeast region and establish habitat restoration goals.

### Massachusetts:

1. Regional habitat mapping that addresses regional SGCN and their threats
2. Conservation Planning for habitats and SGCN
3. Habitat restoration and management

### New Hampshire:

1. Develop Northeast standards for revising state endangered and threatened species listing.
2. Create an online forum for sharing data, survey methods, research results, and other information about GCN species in the northeast.
3. Provide on-going technical assistance to existing and future landowners and decision-makers on the importance of species and habitat conservation.
4. Develop regional instream flow guidelines.
5. Develop regional riparian buffer protection guidelines that include headwater streams.

## Appendix C: State Additions to Northeast ESWDC List

### New Jersey:

1. Create coordinated regional surveys of migratory passerines, shorebirds and other migratory birds (woodcock) and identify regionally important sites
2. Identify critical spawning habitat for rare anadromous species (Short-nosed Sturgeon)
3. Create NE land use land cover map layer from satellite imagery and make available to all states for regional analysis
4. Develop Regional Status of rare fish and identify associated habitats using common classification system
5. Develop regional plan for control of invasive and over abundant predators to reduce impact on Species of conservation concern
6. Create methods to includes the protection of sensitive habitats that can be incorporated into deer mgt. formulas

### Vermont:

1. Regional Unfragmented Landscape Block & Connectivity Identification, Evaluation and Conservation (combines aspects of Action items 12, 13, 15, 18, 24, 27, 40)
2. Develop Regional Indicators & Measures (of SGCN, Habitats, Threats & Strategy Effectiveness) to Ensure Successful Conservation (combines aspects of Action items 2, 6, 13, 15, 16, 28, 41)
3. Improve Transportation Infrastructure to Accommodate Passage for Fish & Wildlife (e.g. road crossings as barriers to movement) (combines aspects of Action items 18, 27)
4. Coordinate Mapping and Monitoring of Nightjars and Marsh Birds in the Northeast
5. Address Regional Threats to Diadromous Fish Species
6. Eastern Brook Trout Initiative
7. Identify and Implement Strategies to Address Regional Air Quality/Pollution Issues Affecting SGCN (Mercury & Acid Rain)
8. Develop Regional Instream Flow Standards
9. Develop Regional Plans to Prevent the Introduction and Reduce the Spread of Nuisance Species
10. Coordinate Regional Sturgeon Conservation & Genetic Testing

### Pennsylvania:

1. Identify acid deposition priority areas (waterways and terrestrial habitats) and test mitigation strategies
2. Select regional landcover, stream, and habitat classification system from existing suite of options and create regional GIS platform (note differences from #41), then identify quality and critically imperiled habitat types and locations

## Appendix C: State Additions to Northeast ESWDC List

### Virginia/Washington DC:

1. Establish a standard ecological reporting framework (e.g., ecoregion, watershed)
2. Develop early detection and response system related to invasive and exotic species
3. Quantify spatial and trend data for early successional habitat
4. Develop educational outreach material describing impacts of “pet collecting” on GCN in the NE.
5. Add “monitoring” to #6, #9, #13, #16, #28.
6. Develop central repository for reporting, monitoring and publishing actions, status, and accomplishments (including new data collected).

### Maryland

1. To integrate wildlife diversity conservation programs with watershed-based conservation programs

### Rhode Island (Not in attendance)

## **Appendix D**

### **Priority Conservation Actions NEAFWA**

#### **Combined List Based of NE Endangered Species and Wildlife Diversity Committee and State “Add-ons” from March 28, 2006 Session**

1. Select one species from each taxonomic group to consolidate data for the purpose of regional conservation planning (eBird was presented as a model approach).
2. ID indicators to monitor at the regional level.
3. ID regional high priority invertebrate species, map their potential habitats, and develop conservation actions to ensure population viability.
4. ID important migratory songbird stopover points/habitat in the NE.
5. ID 5 invertebrates from each state whose life history/habitat requirements is poorly known and direct research toward them.
6. Establish Regional Working Groups by taxa to develop common data collection protocols and databases for regional analysis, action and monitoring.
7. ID key bat migration areas in potential wind development sites in the NE.
8. ID species for which the NE holds the greatest responsibility for their survival.
9. ID species by taxa for which we have little information on status and distribution and develop standardized methodologies for data collection.
  
10. Compile population status and location data for Tier 1 species on the NE list and map their locations.
11. Develop a plan for organizational structure for regional conservation planning and organization.
12. ID important regional wildlife corridors or patches that are important for GCN species (GIS map/product).
13. Develop metrics to track changes in the landscape at a regional and sub-regional scale.
14. Select regional species and habitats most vulnerable to impacts of climate change and develop a monitoring scheme.
15. Develop a mechanism to enhance landscape level conservation at the local level for regional issues.
16. ID a host and develop an online NE data/monitoring warehouse/forum for GCN species for all taxa.
17. Develop guidelines for habitat protection through legislation/regulation and promote adoption in NE states.
18. ID habitat connectivity issues for GCN species.
  
19. ID focal areas for management for all taxa.
20. ID species with conservation issues that require regional actions.
21. Develop model guidelines for training local planning boards on how to incorporate GCN species and their key habitats into local planning.
22. Take the top 50 species that appear or will go extinct in the next 50-100 years and put them in a zoo. Develop educational and outreach programs to explain why they are in the zoo.
23. Develop workshops for educational outreach to relay importance of issues identified in the state CWCPs.
24. Regional analysis of roadless areas.

## Appendix D: Combined list of Priority Conservation Actions

25. Define/evaluate organizational capacity and increase where needed to meet current conservation needs.
26. ID impacts of wind energy and communications towers on bat and bird migration and develop pre- and post- construction monitoring guidelines.
27. Find ways to reduce wildlife transportation conflicts and identify ways to improve connectivity.
28. Develop a relational database for all GCN species in the NE and their threats to facilitate conservation efforts.
29. Develop model guidelines for landowner incentives to protect GCN species and their key habitats.
30. Review efforts to establish legislation to cash in on non-consumptive wildlife use.
31. ID top 20 invasive species and related issues that negatively impact GCN species and develop **implementation actions and monitoring protocols to gauge effectiveness of management actions.**
32. Develop management guidelines for freshwater wetlands supporting GCN species.
33. Analyze potential regional impacts of loss of federal protection of vernal pools and isolated wetlands on GCN species.
34. Restore 100,000 acres of degraded wetland in the NE.
35. Develop educational outreach pamphlet /material describing climate change and potential impacts on GCN species in the NE.
36. Education and outreach for air and water quality impacts on GCN species.
37. Convene symposium of wildlife and public health experts to ID common issues and solutions.
38. Assess impacts of nuisance species to GCN species and their habitats in the NE.
39. Educate public on effects of acid rain on NE GCN species.
40. ID a system of NE conservation focus areas to support sustainable populations of GCN species.
41. X
42. Create methods to includes the protection of sensitive habitats that can be incorporated into deer mgt. formulas
43. Identify and develop land protection strategies for large blocks of unfragmented habitats, including tax incentives and disincentives, easements, and cooperative management and funding mechanisms.
44. Coordinate Regional Sturgeon Conservation & Genetic Testing
45. Develop regional in-stream flow standards, guidelines and policy recommendations that allow for management of the quantity and temperature of flows that mimic natural conditions and protect aquatic life from thermal stress and other flow-related threats
46. Develop surveying and monitoring protocols for wide-ranging estuarine and marine species.
47. Develop classification for freshwater, estuarine and marine habitats.
48. Develop silvicultural guidelines and establish demonstration areas designed to maximize habitat for neotropical migrant
49. Regional initiative to mediate/restoring native brook trout and associated GCN streams (Eastern Brook Trout Initiative)
50. Develop model in-stream flow goals for 3 inter-jurisdictional watersheds (e.g. Delaware, New, Connecticut Rivers) to sustain the diversity, structure, and abundance of GCN species and their key habitats

## Appendix D: Combined list of Priority Conservation Actions

51. Develop a listing of habitat sizes to prevent habitat from being a species sink rather than a source.
52. Multistate recreational/educational trails website and map
53. Concern for quality, quantity, degradation, and conservation of estuarine and marine environments and associated species groups.
54. Develop and implement coordinated monitoring and mapping of nightjars and marsh birds in the northeast (strongly supported by NE-PIF; featured in many WAPs)
55. Promote public awareness about urban SGCN and their habitats (informational programs; bioblitz events and more gather data and inform public—builds informed constituent base)
56. Develop habitat classification and quantify spatial and trend data for early successional habitat.
57. Develop management goals for extent and distribution of early successional habitat.
58. ID bird species not adequately sampled by the Breeding Bird Survey and develop protocol to monitor and develop system to implement protocol. Find a way to share data collected. This recommendation could be repeated for many species of regional concern.
59. Enhance conservation of GCN terrestrial invertebrates by developing an online database that provides information to the public and facilitates the submission of data by the scientific community (ideally pick two focal groups like Lepidoptera and odonata that have high public profile and interest as a model for others)
60. Map historical and current distributions of diadromous GCN species and identify migratory barriers throughout the northeast region and establish habitat restoration goals.
61. Develop Northeast standards for revising state endangered and threatened species listing.
62. Provide on-going technical assistance to existing and future landowners and decision-makers on the importance of species and habitat conservation.
63. Develop regional riparian buffer protection guidelines that include headwater streams.
64. Create coordinated regional surveys of migratory passerines, shorebirds and other migratory birds (woodcock) and identify regionally important sites
65. Identify critical spawning habitat for rare anadromous species (Short-nosed Sturgeon)
66. Develop Regional Status of rare fish and identify associated habitats using common classification system
67. Develop regional plan for early detection, response and control of invasive/exotic species and over abundant predators to reduce impact on Species of conservation concern
68. Improve Transportation Infrastructure to Accommodate Passage for Fish & Wildlife (e.g. road crossings as barriers to movement)
69. Identify and Implement Strategies to Address Regional Air Quality/Pollution Issues Affecting SGCN (mercury, nitrogen, and acid rain)
70. Identify acid deposition priority areas (waterways and terrestrial habitats) and test mitigation strategies
71. Select regional landcover, stream, and habitat classification system from existing suite of options and create regional GIS platform (note differences from #41), then identify quality and critically imperiled habitat types and locations
72. Develop educational outreach material describing impacts of “pet collecting” on GCN in the NE.

## **Appendix E**

### **NEAFWA Top 10 Priority Conservation Actions from March 29, 2006 Session**

#1 (71) Select regional landcover, stream, and habitat classification system from existing suite of options and create regional GIS platform (note differences from #41), then identify quality and critically imperiled habitat types and locations

#2 (31) ID top 20 invasive species and related issues that negatively impact GCN species and develop implementation actions and monitoring protocols to gauge effectiveness of management actions.

#3 (40) ID a system of NE conservation focus areas to support sustainable populations of GCN species.

#4 (45) Develop regional in-stream flow standards, guidelines and policy recommendations that allow for management of the quantity and temperature of flows that mimic natural conditions and protect aquatic life from thermal stress and other flow-related threats

#5 (21) Develop model guidelines for training local planning boards on how to incorporate GCN species and their key habitats into local planning.

#6 (49) Regional initiative to mediate/restoring native brook trout and associated GCN streams (Eastern Brook Trout Initiative)

#7 (54) Develop and implement coordinated monitoring and mapping of nightjars and marsh birds in the northeast (strongly supported by NE-PIF; featured in many WAPs)

#8 (12) ID important regional wildlife corridors or patches that are important for GCN species (GIS map/product).

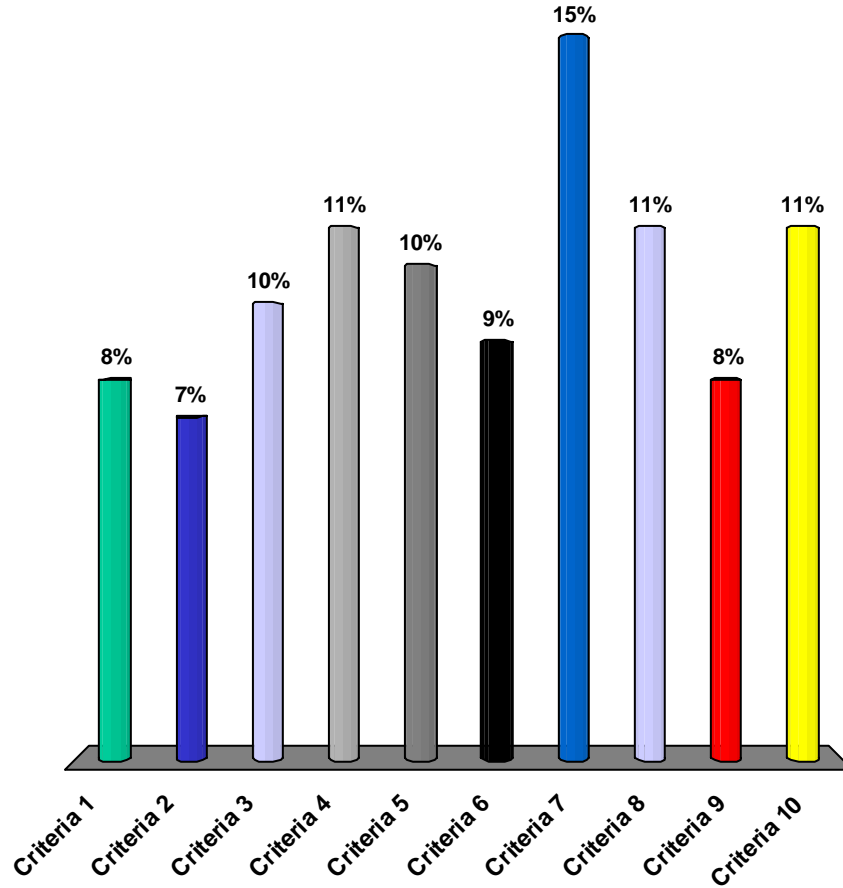
#9 (8) ID species for which the NE holds the greatest responsibility for their survival.

#10 (20) ID species with conservation issues that require regional actions.

## Appendix F

### NEAFWA Meeting priority voting results

Slide 1)

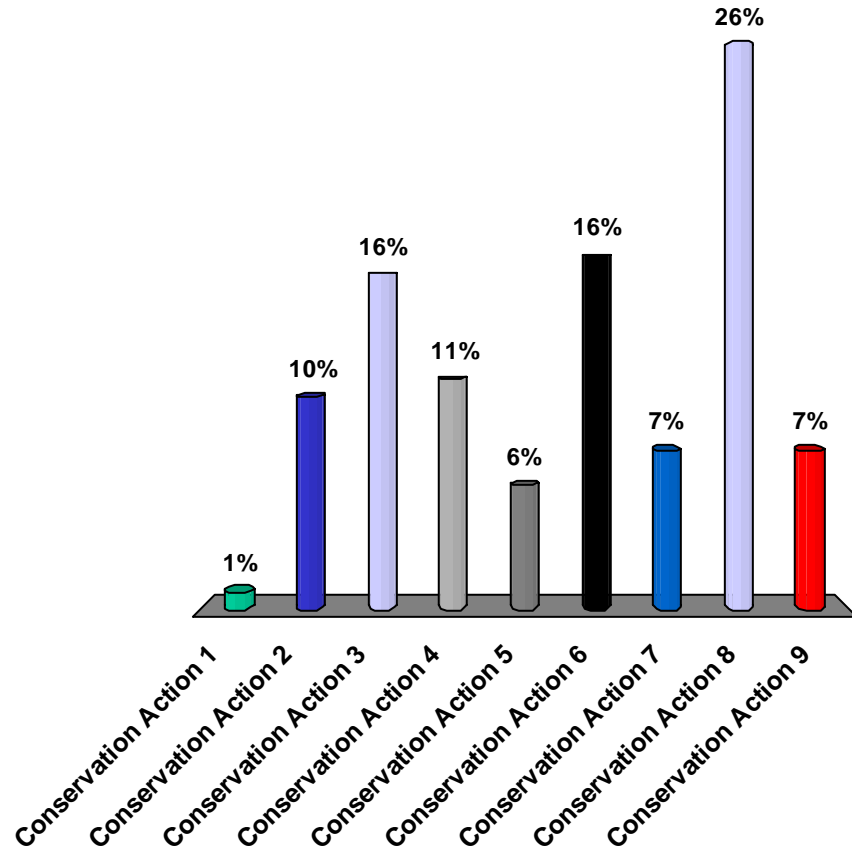


1. Common to all plans
2. Represents the greatest number of states in region
3. High profile
4. Can be accomplished in a short period of time
5. Truly regional, not just state expansion
6. Long-term gains
7. Applied regionally, will help all states implement plans successfully
8. Breadth of GCN species effected
9. Facilitate communications data sharing
10. Things that can't be accomplished by a single state



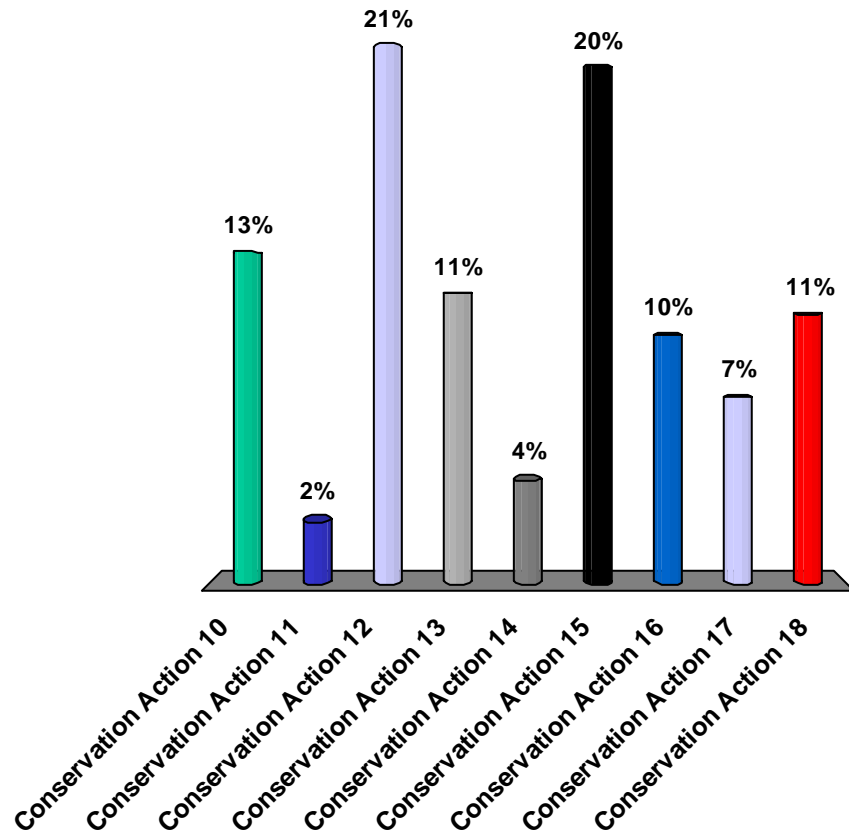
Appendix F: NEAFWA Meeting priority voting results

Slide 2)



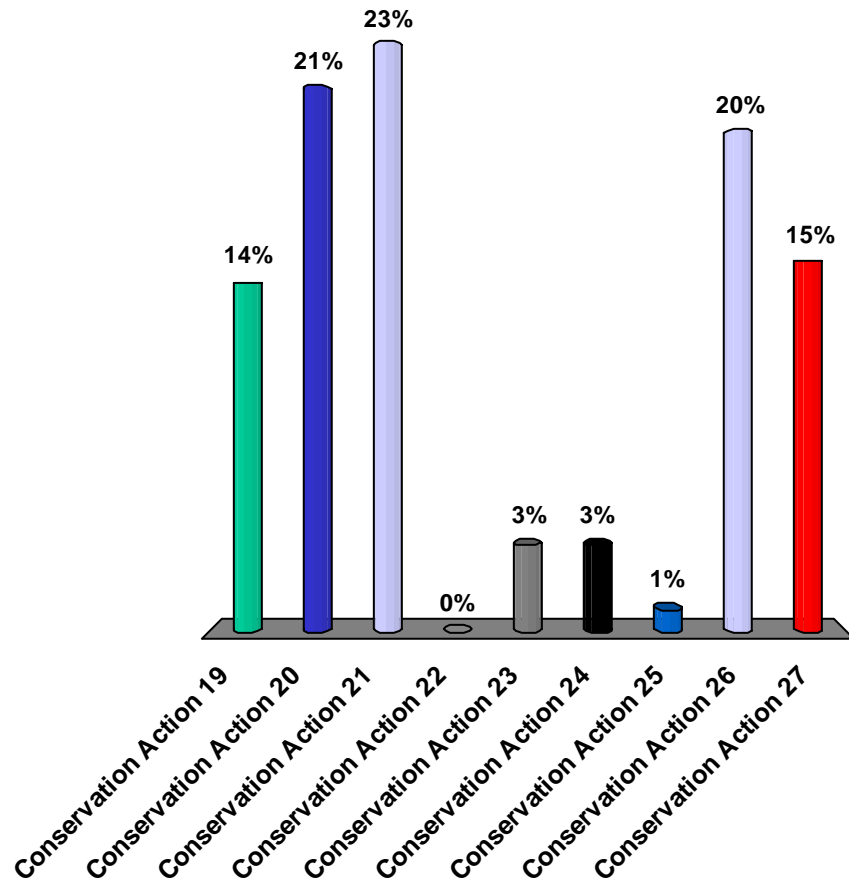
1. Select one species from each taxonomic group to consolidate data for the purpose of regional conservation planning (eBird was presented as a model approach).
2. Identify indicators to monitor at the regional level.
3. Identify regional high priority invertebrate species, map their potential habitats, and develop conservation actions to ensure population viability.
4. Identify important migratory songbird stopover points/habitat in the Northeast.
5. Identify 5 invertebrates from each state whose life history/habitat requirements is poorly known and direct research toward them.
6. Establish Regional Working Groups by taxa to develop common data collection protocols and databases for regional analysis, action and monitoring.
7. Identify key bat migration areas in potential wind development sites in the Northeast.
8. Identify species for which the Northeast holds the greatest responsibility for their survival.
9. Identify species by taxa for which we have little information on status and distribution and develop standardized methodologies for data collection

Slide 3)



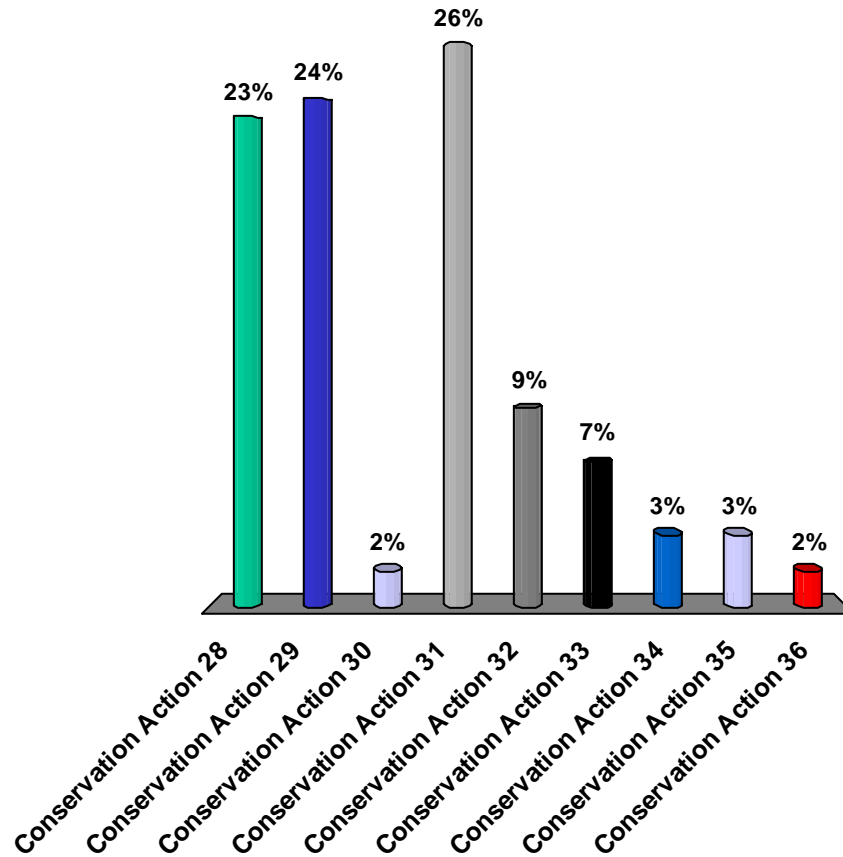
10. Compile population status and location data for Tier 1 species on the Northeast list and map their locations.
11. Develop a plan for organizational structure for regional conservation planning and organization.
12. Identify important regional wildlife corridors or patches that are important for GCN species (GIS map/product).
13. Develop metrics to track changes in the landscape at a regional and sub-regional scale.
14. Select regional species and habitats most vulnerable to impacts of climate change and develop a monitoring scheme.
15. Develop a mechanism to enhance landscape level conservation at the local level for regional issues.
16. Identify a host and develop an online Northeast data/monitoring warehouse/forum for GCN species for all taxa.
17. Develop guidelines for habitat protection through legislation/regulation and promote adoption in Northeast states.
18. Identify habitat connectivity issues for GCN species.

Slide 4)



19. Identify focal areas for management for all taxa.
20. Identify species with conservation issues that require regional actions.
21. Develop model guidelines for training local planning boards on how to incorporate GCN species and their key habitats into local planning.
22. Take the top 50 species that appear or will go extinct in the next 50-100 years and put them in a zoo. Develop educational and outreach programs to explain why they are in the zoo.
23. Develop workshops for educational outreach to relay importance of issues identified in the state CWCPs.
24. Regional analysis of roadless areas.
25. Define/evaluate organizational capacity and increase where needed to meet current conservation needs.
26. Identify impacts of wind energy and communications towers on bat and bird migration and develop pre- and post- construction monitoring guidelines.
27. Find ways to reduce wildlife transportation conflicts and identify ways to improve connectivity.

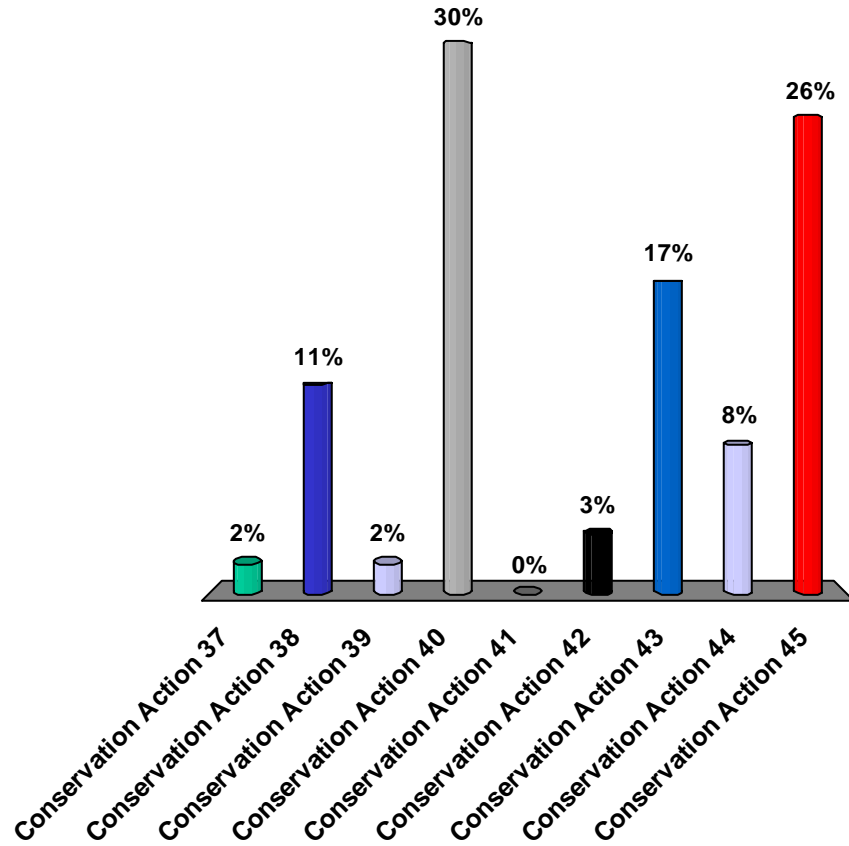
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28. Develop a relational database for all GCN species in the Northeast and their threats to facilitate conservation efforts.
29. Develop model guidelines for landowner incentives to protect GCN species and their key habitats.
30. Review efforts to establish legislation to cash in on non-consumptive wildlife use.
31. Identify top 20 invasive species and related issues that negatively impact GCN species and develop implementation actions and monitoring protocols to gauge effectiveness of management actions.
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34. Restore 100,000 acres of degraded wetland in the Northeast.
35. Develop educational outreach pamphlet /material describing climate change and potential impacts on GCN species in the Northeast.
36. Education and outreach for air and water quality impacts on GCN species.

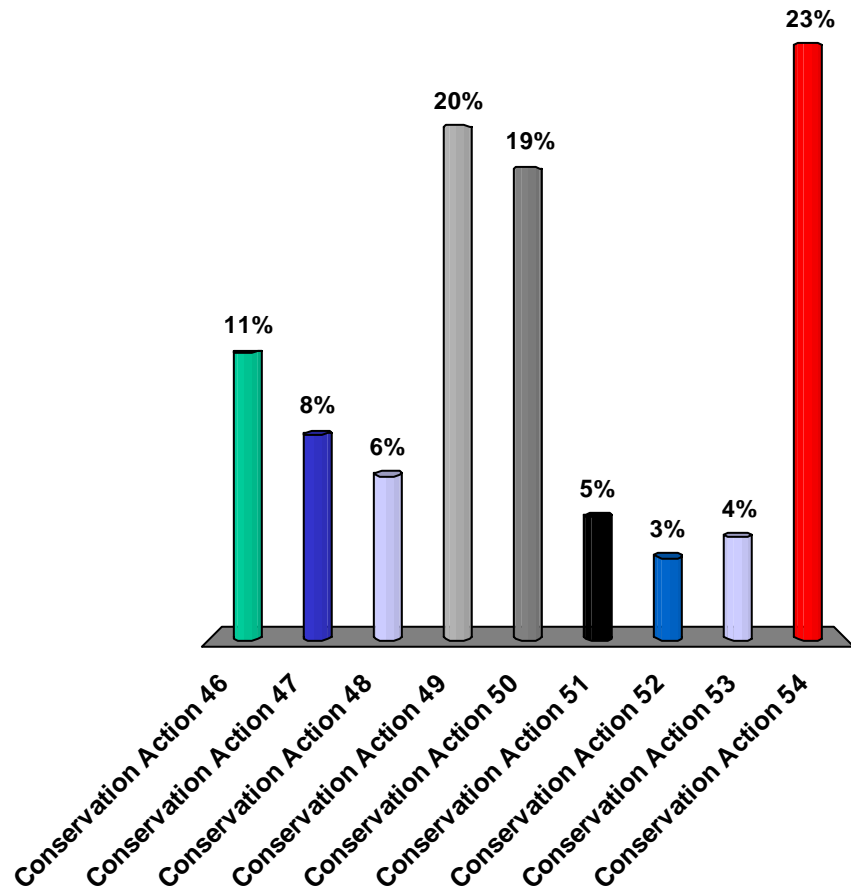
Appendix F: NEAFWA Meeting priority voting results

Slide 6)



- 37. Convene symposium of wildlife and public health experts to Identify common issues and solutions.
- 38. Assess impacts of nuisance species to GCN species and their habitats in the Northeast.
- 39. Educate public on effects of acid rain on Northeast GCN species.
- 40. Identify a system of Northeast conservation focus areas to support sustainable populations of GCN species.
- 41. X
- 42. Create methods to includes the protection of sensitive habitats that can be incorporated into deer mgt. formulas
- 43. Identify and develop land protection strategies for large blocks of unfragmented habitats, including tax incentives and disincentives, easements, and cooperative management and funding mechanisms.
- 44. Coordinate Regional Sturgeon Conservation & Genetic Testing
- 45. Develop regional in-stream flow standards, guidelines and policy recommendations that allow for management of the quantity and temperature of flows that mimic natural conditions and protect aquatic life from thermal stress and other flow-related threats

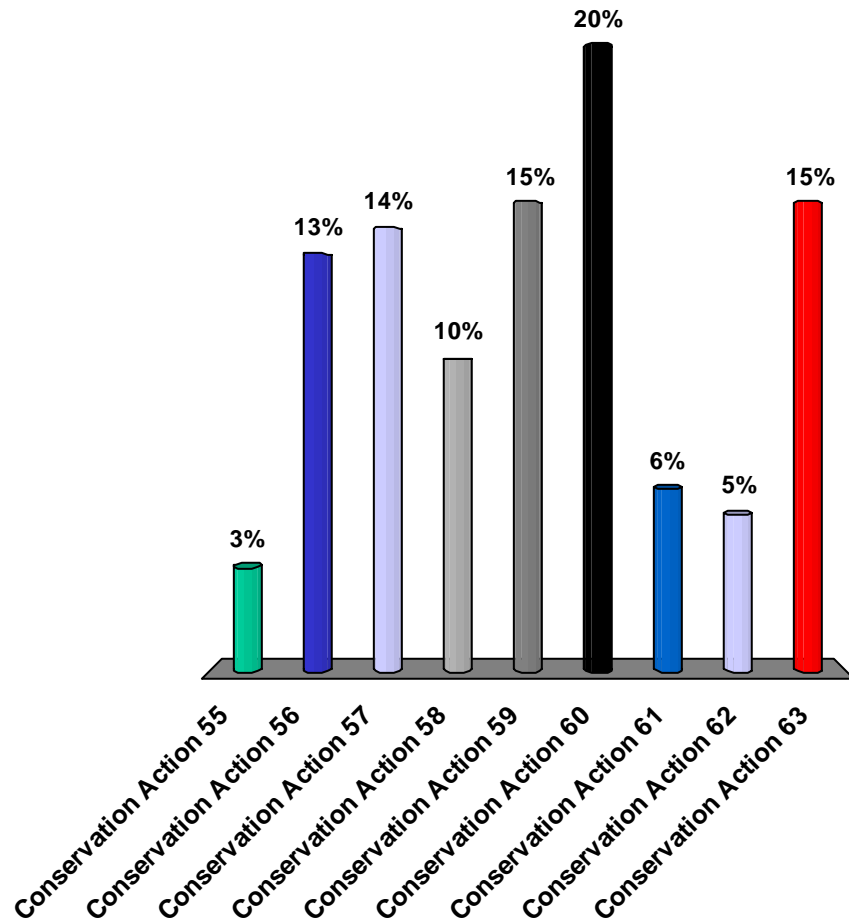
Slide 7)



- 46. Develop surveying and monitoring protocols for wide-ranging estuarine and marine species.
- 47. Develop classification for freshwater, estuarine and marine habitats.
- 48. Develop silvicultural guidelines and establish demonstration areas designed to maximize habitat for neotropical migrant
- 49. Regional initiative to mediate/restoring native brook trout and associated GCN streams (Eastern Brook Trout Initiative)
- 50. Develop model in-stream flow goals for 3 inter-jurisdictional watersheds (e.g. Delaware, New, Connecticut Rivers) to sustain the diversity, structure, and abundance of GCN species and their key habitats
- 51. Develop a listing of habitat sizes to prevent habitat from being a species sink rather than a source.
- 52. Multistate recreational/educational trails website and map
- 53. Concern for quality, quantity, degradation, and conservation of estuarine and marine environments and associated species groups.
- 54. Develop and implement coordinated monitoring and mapping of nightjars and marsh birds in the northeast (strongly supported by Northeast-PIF; featured in many WAPs)

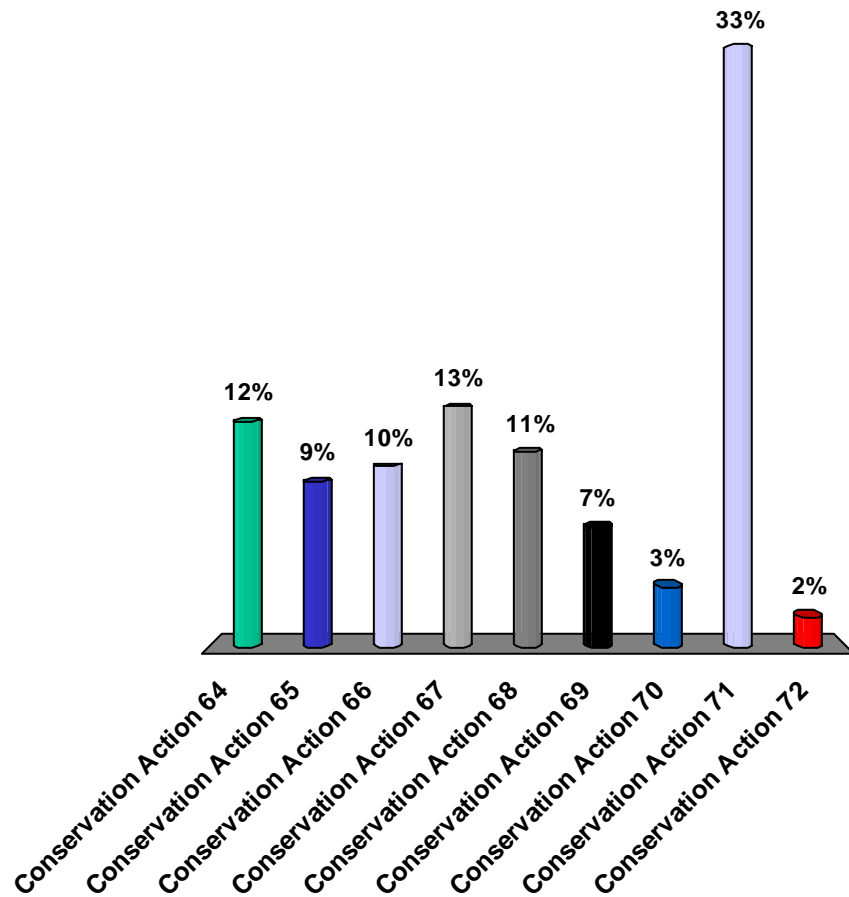
Appendix F: NEAFWA Meeting priority voting results

Slide 8)



55. Promote public awareness about urban SGCN and their habitats (informational programs; bioblitz events and more gather data and inform public—builds informed constituent base)
56. Develop habitat classification and quantify spatial and trend data for early successional habitat.
57. Develop management goals for extent and distribution of early successional habitat.
58. Identify bird species not adequately sampled by the Breeding Bird Survey and develop protocol to monitor and develop system to implement protocol. Find a way to share data collected. This recommendation could be repeated for many species of regional concern.
59. Enhance conservation of GCN terrestrial invertebrates by developing an online database that provides information to the public and facilitates the submission of data by the scientific community (ideally pick two focal groups like Lepidoptera and odonata that have high public profile and interest as a model for others)
60. Map historical and current distributions of diadromous GCN species and identify migratory barriers throughout the northeast region and establish habitat restoration goals.
61. Develop Northeast standards for revising state endangered and threatened species listing.
62. Provide on-going technical assistance to existing and future landowners and decision-makers on the importance of species and habitat conservation.
63. Develop regional riparian buffer protection guidelines that include headwater streams.

Slide 9)

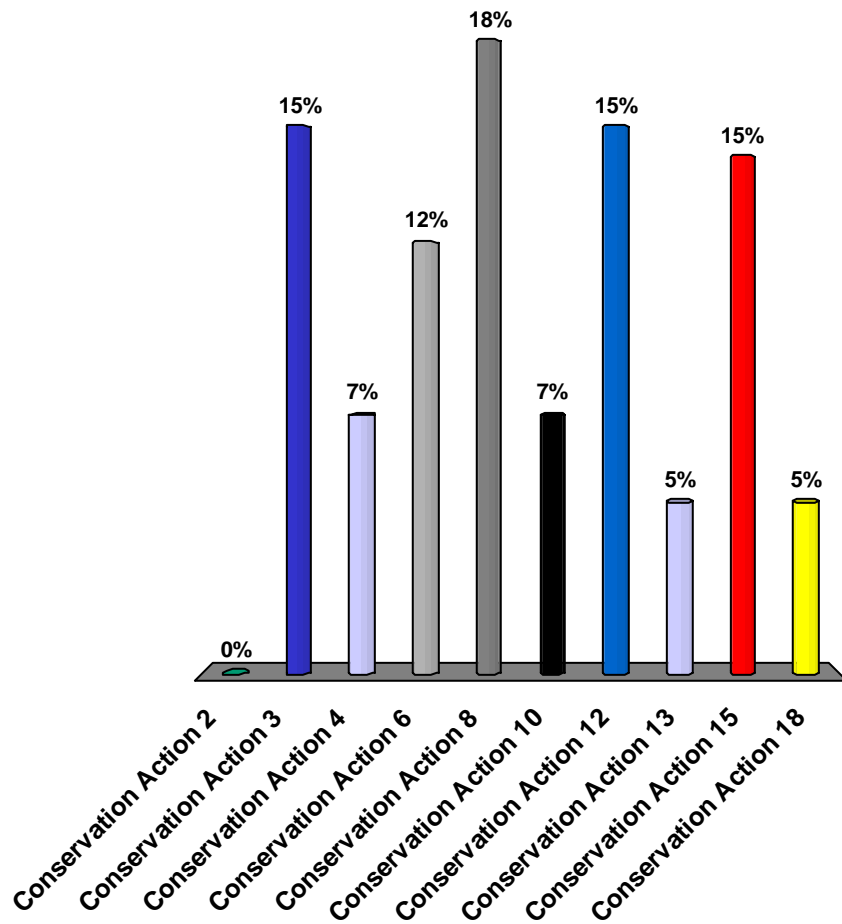


- 64. Create coordinated regional surveys of migratory passerines, shorebirds and other migratory birds (woodcock) and identify regionally important sites
- 65. Identify critical spawning habitat for rare anadromous species (Short-nosed Sturgeon)
- 66. Develop Regional Status of rare fish and identify associated habitats using common classification system
- 67. Develop regional plan for early detection, response and control of invasive/exotic species and over abundant predators to reduce impact on Species of conservation concern
- 68. Improve Transportation Infrastructure to Accommodate Passage for Fish & Wildlife (e.g. road crossings as barriers to movement)
- 69. Identify and Implement Strategies to Address Regional Air Quality/Pollution Issues Affecting SGCN (mercury, nitrogen, and acid rain)
- 70. Identify acid deposition priority areas (waterways and terrestrial habitats) and test mitigation strategies
- 71. Select regional landcover, stream, and habitat classification system from existing suite of options and create regional GIS platform (note differences from #41), then identify quality and critically imperiled habitat types and locations
- 72. Develop educational outreach material describing impacts of “pet collecting” on GCN in the Northeast.



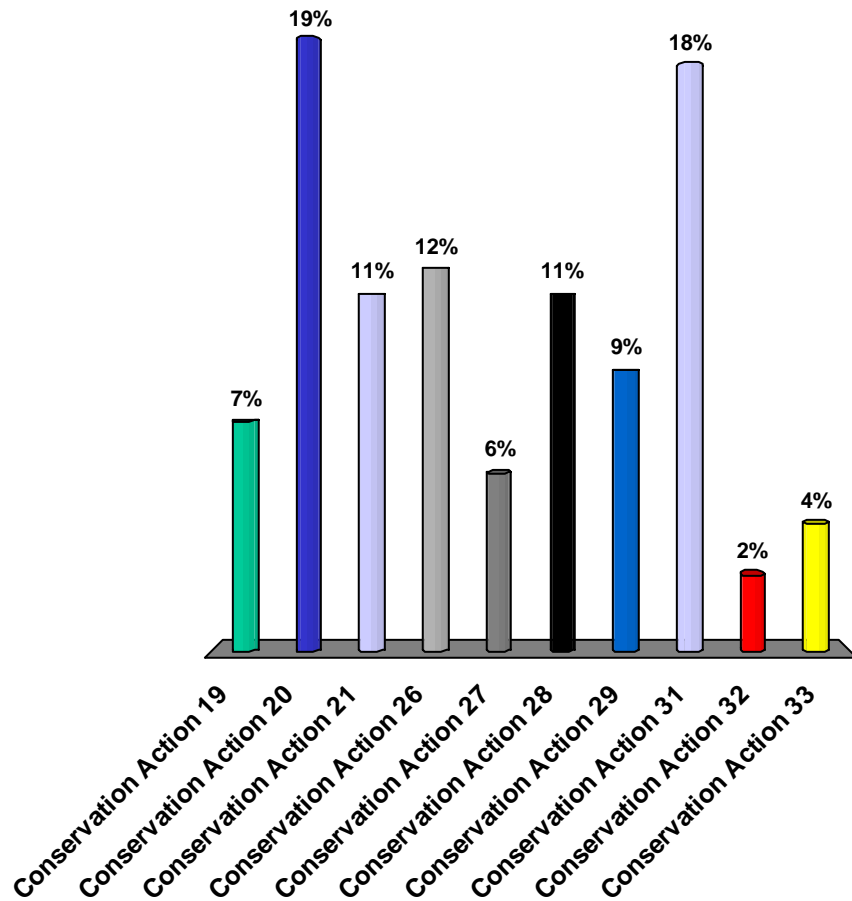
## Appendix F: NEAFWA Meeting priority voting results

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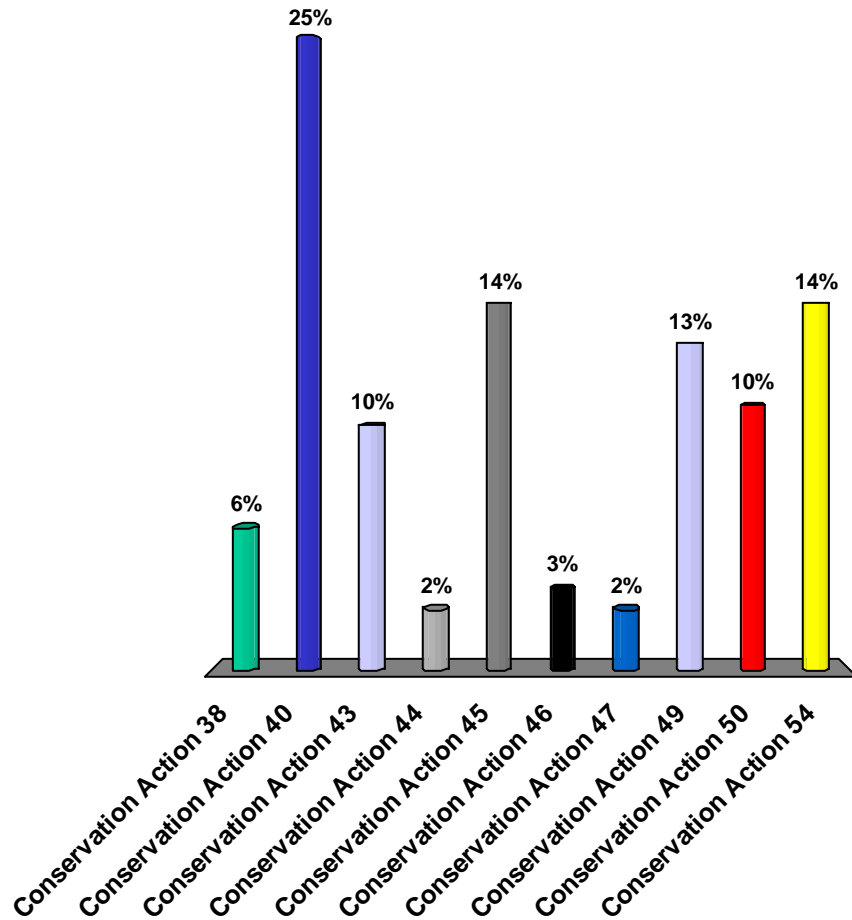
2. Identify indicators to monitor at the regional level.
3. Identify regional high priority invertebrate species, map their potential habitats, and develop conservation actions to ensure population viability.
4. Identify important migratory songbird stopover points/habitat in the Northeast.
6. Establish Regional Working Groups by taxa to develop common data collection protocols and databases for regional analysis, action and monitoring.
8. Identify species for which the Northeast holds the greatest responsibility for their survival.
10. Compile population status and location data for Tier 1 species on the Northeast list and map their locations.
12. Identify important regional wildlife corridors or patches that are important for GCN species (GIS map/product).
13. Develop metrics to track changes in the landscape at a regional and sub-regional scale.
15. Develop a mechanism to enhance landscape level conservation at the local level for regional issues.
18. Identify habitat connectivity issues for GCN species.

Slide 11)



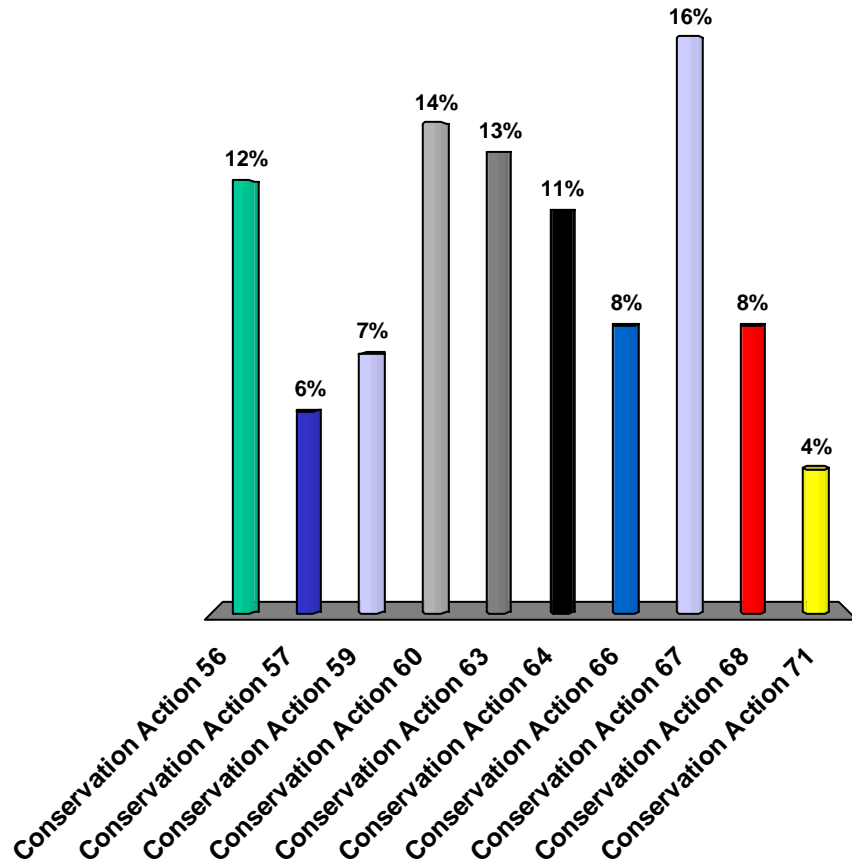
- 19. Identify focal areas for management for all taxa.
- 20. Identify species with conservation issues that require regional actions.
- 21. Develop model guidelines for training local planning boards on how to incorporate GCN species and their key habitats into local planning.
- 26. Identify impacts of wind energy and communications towers on bat and bird migration and develop pre- and post- construction monitoring guidelines.
- 27. Find ways to reduce wildlife transportation conflicts and identify ways to improve connectivity.
  
- 28. Develop a relational database for all GCN species in the Northeast and their threats to facilitate conservation efforts.
- 29. Develop model guidelines for landowner incentives to protect GCN species and their key habitats.
- 31. Identify top 20 invasive species and related issues that negatively impact GCN species and develop implementation actions and monitoring protocols to gauge effectiveness of management actions.
- 32. Develop management guidelines for freshwater wetlands supporting GCN species.
- 33. Analyze potential regional impacts of loss of federal protection of vernal pools and isolated wetlands on GCN species.

Slide 12)



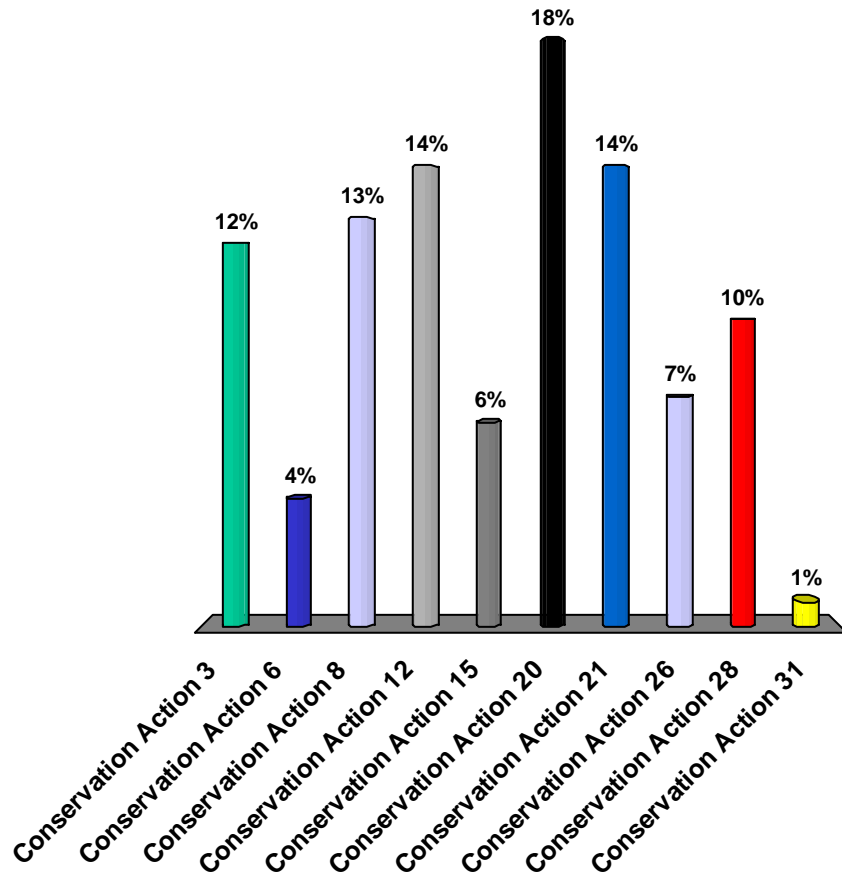
- 38. Assess impacts of nuisance species to GCN species and their habitats in the Northeast.
- 40. Identify a system of Northeast conservation focus areas to support sustainable populations of GCN species.
- 43. Identify and develop land protection strategies for large blocks of unfragmented habitats, including tax incentives and disincentives, easements, and cooperative management and funding mechanisms.
- 44. Coordinate Regional Sturgeon Conservation & Genetic Testing
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- 50. Develop model in-stream flow goals for 3 inter-jurisdictional watersheds (e.g. Delaware, New, Connecticut Rivers) to sustain the diversity, structure, and abundance of GCN species and their key habitats
- 54. Develop and implement coordinated monitoring and mapping of nightjars and marsh birds in the northeast (strongly supported by Northeast-PIF; featured in many WAPs)

Slide 13)



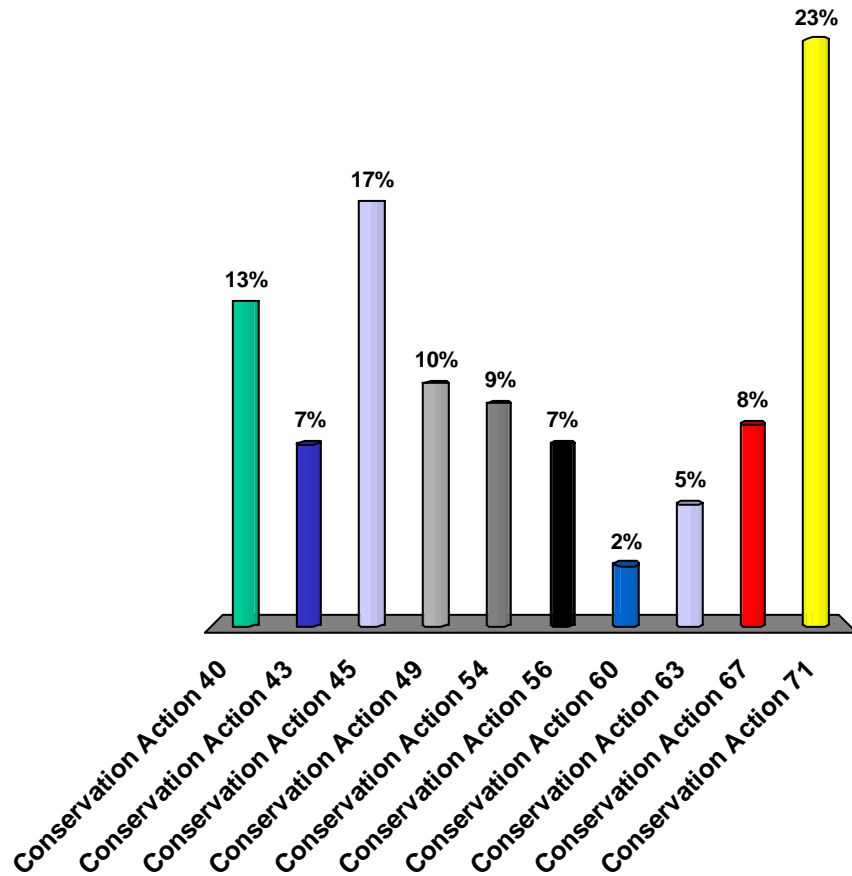
- 56. Develop habitat classification and quantify spatial and trend data for early successional habitat.
- 57. Develop management goals for extent and distribution of early successional habitat.
- 59. Enhance conservation of GCN terrestrial invertebrates by developing an online database that provides information to the public and facilitates the submission of data by the scientific community (ideally pick two focal groups like Lepidoptera and odonata that have high public profile and interest as a model for others)
- 60. Map historical and current distributions of diadromous GCN species and identify migratory barriers throughout the northeast region and establish habitat restoration goals.
- 63. Develop regional riparian buffer protection guidelines that include headwater streams.
- 64. Create coordinated regional surveys of migratory passerines, shorebirds and other migratory birds (woodcock) and identify regionally important sites
- 66. Develop Regional Status of rare fish and identify associated habitats using common classification system
- 67. Develop regional plan for early detection, response and control of invasive/exotic species and over abundant predators to reduce impact on Species of conservation concern
- 68. Improve Transportation Infrastructure to Accommodate Passage for Fish & Wildlife (e.g. road crossings as barriers to movement)
- 71. Select regional landcover, stream, and habitat classification system from existing suite of options and create regional GIS platform (note differences from #41), then identify quality and critically imperiled habitat types and locations

Slide 14)



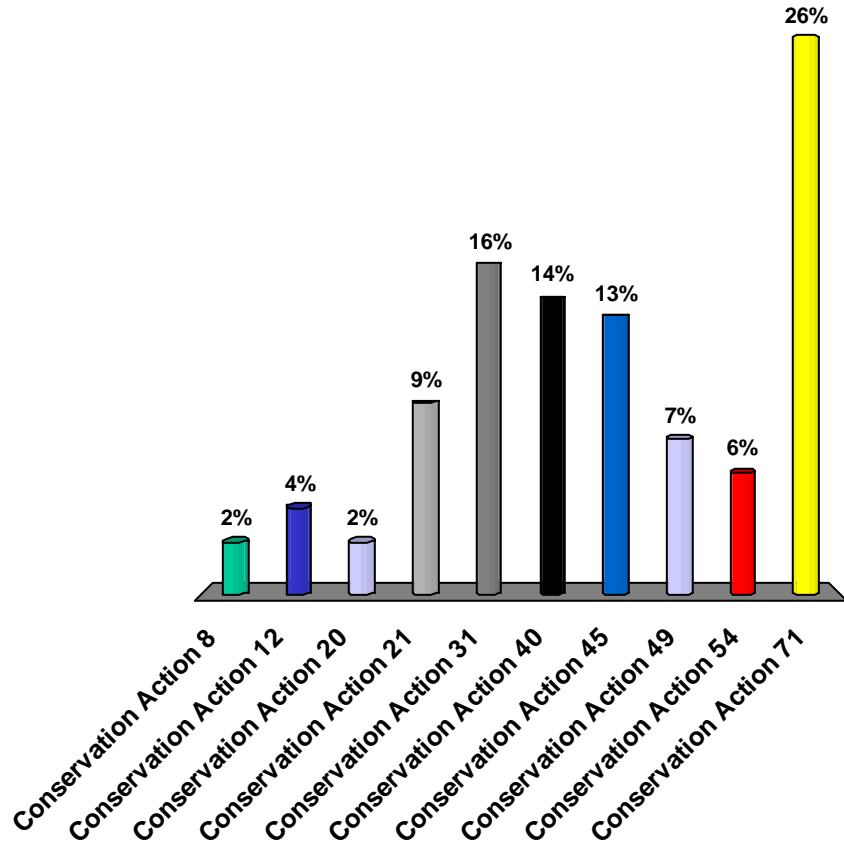
3. Identify regional high priority invertebrate species, map their potential habitats, and develop conservation actions to ensure population viability.
6. Establish Regional Working Groups by taxa to develop common data collection protocols and databases for regional analysis, action and monitoring.
8. Identify species for which the Northeast holds the greatest responsibility for their survival.
12. Identify important regional wildlife corridors or patches that are important for GCN species (GIS map/product).
15. Develop a mechanism to enhance landscape level conservation at the local level for regional issues.
20. Identify species with conservation issues that require regional actions.
21. Develop model guidelines for training local planning boards on how to incorporate GCN species and their key habitats into local planning.
26. Identify impacts of wind energy and communications towers on bat and bird migration and develop pre- and post- construction monitoring guidelines.
28. Develop a relational database for all GCN species in the Northeast and their threats to facilitate conservation efforts.
31. Identify top 20 invasive species and related issues that negatively impact GCN species and develop implementation actions and monitoring protocols to gauge effectiveness of management actions.

Slide 15)



- 40. Identify a system of Northeast conservation focus areas to support sustainable populations of GCN species.
- 43. Identify and develop land protection strategies for large blocks of unfragmented habitats, including tax incentives and disincentives, easements, and cooperative management and funding mechanisms.
- 45. Develop regional in-stream flow standards, guidelines and policy recommendations that allow for management of the quantity and temperature of flows that mimic natural conditions and protect aquatic life from thermal stress and other flow-related threats
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- 67. Develop regional plan for early detection, response and control of invasive/exotic species and over abundant predators to reduce impact on Species of conservation concern
- 71. Select regional landcover, stream, and habitat classification system from existing suite of options and create regional GIS platform (note differences from #41), then identify quality and critically imperiled habitat types and locations

Slide 16)



- 8. Identify species for which the Northeast holds the greatest responsibility for their survival.
- 12. Identify important regional wildlife corridors or patches that are important for GCN species (GIS map/product).
- 20. Identify species with conservation issues that require regional actions.
- 21. Develop model guidelines for training local planning boards on how to incorporate GCN species and their key habitats into local planning.
- 31. Identify top 20 invasive species and related issues that negatively impact GCN species and develop implementation actions and monitoring protocols to gauge effectiveness of management actions.
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## Appendix G

### NEAFWA Group Breakout Session Reports Combined & Priority Project #6 Description

#### **Priority Project #1 (71) Select regional landcover, stream, and habitat classification system from existing suite of options and create regional GIS platform, then identify quality and critically imperiled habitat types and locations**

Presenter: Larry Niles

Creating Regional Habitat Conservation Map – a foundation for proactive conservation projects

1. Adopt a common classification system for both terrestrial and aquatic system and a cross walk to existing state classifications
2. Advance 2001 National Land Cover Dataset (NLCD)
3. Create aquatic mapping product that would be the counterpart of NLCD
4. Insure imagery/ classification are comprehensible to non biologist
5. Create a comparison of the 2001 and 1992 NLCD imagery emphasizing development threat.
6. Include an overlay of the Habitat Conservation Network (local, state and federal public lands, conservation group lands, easements)
7. Envision this project as the basis for the project 2,3,5,6,7, 8 (species habitat models, focal areas for protection based on species or habitat, local land use planning)
8. All mapping should be available through each states web site for use by all state and local users including planning agencies
9. Developed and implemented through a committee that would contract out portions of the project
10. Start with an inventory of each states existing GIS capabilities

Group notes:

Creating regional Mapping Foundation for habitat Conservation

Must take advantage of existing system then use as a launching pad  
Then each state cross walks to that common system.

Perhaps use National Vegetation Classification system

We had to try to distinguish species habitat mapping from vegetation mapping

The group saw it as a sequential process that would end with species specific habitat mapping

Intermediate would be the mapping product with fine distinctions levels



## Appendix G: NEAFWA Group Breakout Session Reports Combined & Priority Project #6 Description

This product would be a cross walk procedure that would end in a 21 classification that would be used in satellite mapping

What about a hydrographic mapping, what states have this?

Geology gradient, elevation, stream, order, salinity

This is the base project for the other products

### What

11. Inventory of each states existing GIS capabilities for both Aquatic and terrestrial capabilities
12. Adopt a common classification system for both terrestrial and aquatic system and a cross walk to existing state classifications. National Vegetation Classification System
13. Make sure to research physical characteristics of watersheds that correlate with species assemblages (ME working on).
14. Consideration given to classification of marine systems as well.
15. Advance 2001 NLCD
16. Create aquatic mapping product that would be the counterpart of NLCD including (size, connectivity, gradient, length, salinity)
17. Create a comparison of the 2001 and 1992 NLCD imagery emphasizing development threat.
18. Include an Habitat Conservation Network Protection lands overlay (local, state and federal public lands, conservation group lands, easements)
19. All mapping should be available through each states web site for use by all state and local users including planning agencies
20. All map products will include metadata

### Considerations

1. Envision this project as the basis for the project 2,3,5,6,7, 8 (species habitat models, focal areas for protection based on species or habitat, local land use planning)
2. Developed and implemented through a committee that would contract out portions of the project
3. Insure imagery/ classification are comprehensible to non biologist

### Who

1. Establish steering committee GIS staff and WAP implementers (5 people), to create guidelines for the entire project
2. Grant will be made to a third party contractor and non-profit to insure flexibility in contracting
3. Contractor creates a state profile and check with state agency for accuracy
4. Contractor for both components would be the USGS or a mapping expert to interpret NLCD imagery for entire region, nature conservancy academics

## Appendix G: NEAFWA Group Breakout Session Reports Combined & Priority Project #6 Description

5. Contractor will compile all existing protective lands using existing digital based on an agreed standard by the committee
6. The committee will choose classification system. Each state will be asked to cross walk the classification system with existing state system. A staff person will be assigned.

### When

1. Compile state profiles 3 months
2. Create classification system within 6 months
3. create aquatic mapping within 12
4. create protected lands overlay 18 months
5. Create GIS mapping 18 months
6. complete project 24 months

### Budget

We have to ask around

**Priority Project #2 (31) ID top 20 invasive species and related issues that negatively impact GCN species and develop implementation actions and monitoring protocols to gauge effectiveness of management actions.**

Presenter: Mary Pfaffko

Top 20???:

- Phragmites – probably one of most predominate problems
- Mute swans
- Kudzu
- Zebra mussels
- Water chestnut
- Hydrilla
- Northern snakehead
- Asian carp
- Asian oyster
- Black carp
- Purple loosestrife
- ....

Action Items:

- Obtain top 20 list by state from each state's Invasive Species Council or similar entity; identify ones in common throughout the northeast (final table to include GCN species and habitats affected and how; also include economic and public health impacts)

## Appendix G: NEAFWA Group Breakout Session Reports Combined & Priority Project #6 Description

- Identify GCN species/habitats whose status is affected primarily by invasive species
- Identify other organizations that are already promoting control and eradication of invasive species and ensure we don't duplicate their efforts; capitalize on what they're doing
- Develop discussion document of what the states are doing now to monitor invasive species and effectiveness (longevity of control; acceptance of control methods); from this, develop monitoring protocol that is implemented region-wide to facilitate regional information sharing
- Develop document of best management practices of control practices that are best for wildlife conservation (vs. addressing human health needs)
- Develop technical guidance materials (e.g., pamphlet) to explain problems and provides alternatives for those species/issues not adequately addressed above using BMPs identified above (tie to quality of life issues => more informed public)
- Use products (lists, technical guidance) to heighten political awareness of control methods and solutions
- On-the-ground project: Need to finalize once the above are accomplished. Possible focus on phragmites? Identify areas that may benefit most from control with respect to GCN species.

“Invasive Species:” [use national definition (USGS)] Native and non-indigenous plants and animals

Action Items:

### Step 1 (6 months)

- affirm state ability to address the project relative to the Wildlife Action Plan (perhaps state Action Plan coordinator should be state point of contact). Look at other invasive groups/efforts.
- Each state identifies invasive species that are negatively impacting GCN species and habitats and why/how (collaboration of Action Plans and Invasive Species Councils, but with focus on Wildlife Action Plans). Review state invasive action plans well.
- States provide some criteria that will be factors in ranking species (e.g., extent of impact of the invasive species to the decline of the species)
- State PI or consultant hired to collect this information; input all into a relational database
- Establish ranking criteria to determine how to prioritize the species
- Using this matrix, develop the top 20 (or less) list of invasive species of regional significance for wildlife that are risk of becoming endangered
- State review of the draft regional list (perhaps at regional meeting)

Products: State lists based on Action Plans; regional priority list; ranking criteria as to how organized these

## Appendix G: NEAFWA Group Breakout Session Reports Combined & Priority Project #6 Description

Cost of this Phase: \$25,000

### Step 2

- Identify how each state is effecting control and monitor these regional species and determine how effective (e.g., longevity of control; acceptance of control methods)
- Link to health and economic issues where related to conservation of GCN species.
- Identify other organizations that are already promoting control and eradication of invasive species and ensure we don't duplicate their efforts; capitalize on what they're doing; also need plans that have been developed; id holes
- Identify opportunities to plug into other regional and national invasive species efforts

### Step 3

- Identify potential solutions for control
- Develop discussion document of what the states are doing now to monitor invasive species and effectiveness (longevity of control; acceptance of control methods); from this, develop monitoring protocol that is implemented region-wide to facilitate regional information sharing
- Develop document of best management practices of control practices that are best for wildlife conservation (vs. addressing human health needs)
- Develop technical guidance materials (e.g., pamphlet) to explain problems and provides alternatives for those species/issues not adequately addressed above using BMPs identified above (tie to quality of life issues => more informed public)
- Use products (lists, technical guidance) to heighten political awareness of control methods and solutions
- On-the-ground project: Need to finalize once the above are accomplished. Possible focus on phragmites? Identify areas that may benefit most from control with respect to GCN species.

### **Priority Project #3 (40) ID a system of NE conservation focus areas to support sustainable populations of GCN species.**

Presenter: Dan Brauning

- A. Hot spots of regional significance
- B. Matrix habitats ie. Large blocks/connectivity
  - Eg. Regional unfragmented landscape blocks
- C. Areas supporting species/habitats of responsibility

Process—state-driven/approved process (working with partners):

1. Define criteria (e.g. species or groups of species)

## Appendix G: NEAFWA Group Breakout Session Reports Combined & Priority Project #6 Description

2. Collect nominations from all states with other regional initiatives
3. Map
4. Describe conservation attributes
5. Develop conservation guidance

### Outcome (benefits)

1. Increase communication and network
2. Maps
3. Guidance for action (conservation) based on focal area priorities
4. Encourage state conservation action; ie. Get regional support

### Types of Regional Focus Areas

1. Hot Spots of Regional Significance
2. Matrix Habitats/Landscapes & Connectivity
3. Areas supporting responsibility species and habitat

### Process

1. Define Criteria: Core group develops draft criteria model for states' review, refinement concurrence and how to apply the criteria regionally
  - a. Contract with a consultant (GIS/Conservation Planner)
  - b. Criteria will be flexible to accommodate differences in amount, size and quality of habitat types across the region
2. States are requested to submit Focal Area nominations
3. States use criteria and state Action Plans, and other existing data sources and planning efforts to identify and nominate submissions
  - a. Submissions include GIS files
  - b. Conservation Attributes
4. Core group reviews, refines and selects regional focal areas from the list of submissions
5. Develop GIS database and maps
6. Initial list is reviewed by states, states and core group conduct QC/QA
7. Describe conservation attributes associated with each Focal Area (and capture in a centralized, web accessible database), including
  - a. Identify threat
  - b. Conservation values
  - c. Conservation Opportunities
8. Develop conservation guidance for focal areas based on strategies from states' Action Plans.
  - a. Consultant works with states to coordinate strategies
9. States work together to conserve and restore focal areas. Reporting and dissemination of information to conservation partners, including conservation organizations, state and federal agencies, and regional and local governments.

Dan Brauning, Tom O'Shea, John Kanter will prepare proposal details

**Budget:** \$99,999

Appendix G: NEAFWA Group Breakout Session Reports Combined & Priority Project #6 Description

**Project Schedule**

Criteria Development upon funding thru 12/30/06

States identify and submit focal areas list 1/1/07 thru 3/1/07

Core Group receives and review submissions 3/2/07 thru 6/1/07

GIS database and map development, initial map 3/2/07 thru 9/1/07

States Review initial map /GIS database 9/1/07 thru 10/1/07

Compilation of Focal Area descriptions of conservation attributes 10/1/07 thru 12/31/07

**Priority Project #4 (45) Develop a regional in-stream flow standards, guidelines, and policy standards that allow for management of the quantity and temperature of flows that mimic natural conditions and protect aquatic life from thermal stress and other flow-related threats.**

- **Coordinate through NE Region in-stream flow council**
- **Need to pull in federal and NGO partners**

Presenter: Rick Jacobson

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1. Develop revisions to QPPQ equations to make the parameters easier to apply; based on GIS derived data like watershed size, % stratified drift. This means that the data could be gathered from each state and run from a regional GIS standard. Uses NHD standards.
  - a. Ongoing in background
2. Draft collection of selected Indicators of Hydraulic Alteration (IHA) metrics (degree of difference between natural and unaltered stream flow on individual stream) and other metrics and apply weights to assess total deviation (Black et al, 2000)
  - a. Could be done first
3. Make analysis of ecological function to the hydrograph related to SGCN species at different lifestages.
4. Identify test area to apply metrics to determine metric sensitivity
5. Can the test area findings be scaled/transferred/applied across watersheds in the region?
6. Narrow/prioritize list of SGCN
  - a. Determine most responsive species – in that endangered species may not respond in a short timeframe, or may be so rare that they are not regularly detectable.
7. Identify early, non-regulatory opportunities for flow manipulation as a more immediate action project. Develop and implement a set of rule curves for a stream. Potential partners are TNC, ACOE. Need documentation to happen. Look for groundwater extraction systems and surface water diversion systems.
8. Monitoring the response of systems is key.

Items 1-6 could be accomplished in 18 months and produce implementation projects by the end of that period.

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Link to National Fish Habitat Initiative.

Thermal stress mitigation projects could be identified across the region as short term, high visibility actions.

Existing State Instream Flow Initiatives:

Connecticut  
Rhode Island  
Massachusetts  
Pennsylvania  
New Jersey  
Vermont  
New Hampshire  
Maine  
New York

Partners:

USGS  
USFWS  
EPA  
ACOE  
Trout Unlimited – On-going initiative  
The Nature Conservancy – On-going initiative  
Delaware River Basin Commission– On-going initiative  
Instream Flow Council, Northeast Region  
Academic Institutions (e.g., UMass, UConn, VPI)

Funds Administration:

- Master Applicant – ?
- RFPs for
  - QPPQ
  - GIS Data layer inventory, gap analysis equation integration

Objective 1: create capacity for each state to develop reference hydrographs for every watershed within their political jurisdiction

Tasks:

- Revise QPPQ Equation and develop integrative GIS package to construct reference hydrographs
- Inventory Supporting data layers for coverage and degree of development
- Identify and fill GIS data layer gaps

## Appendix G: NEAFWA Group Breakout Session Reports Combined & Priority Project #6 Description

### Cost, Duration:

- QPPQ development - \$100,000, 2-years
- GIS data layer development and integration - \$100,000, 2-years

### Task Assignment:

- QPPQ development – Academic Institution (selected through RFP process)
- GIS data layer development and integration – Academic Institution (selected through RFP process)

Objective 2: create framework for each state to develop altered hydrographs for every watershed within their regulatory jurisdiction

### Task:

- Compile water diversion and return flow data (including temporal, anthropogenic fluctuations – e.g., peaking hydropower) upstream of point of interest
- Establish proportional impact of upstream groundwater extraction (e.g., assume 1:1 relation between metered rate of withdrawal and extraction from associated stream course)
- Adjust reference hydrograph by water management identified in preceding tasks

### Cost, Duration:

- ?

### Assignment:

- ?

Objective 3: identify SGCN and distinct bioperiods that are threatened by flow alteration

### Task:

- Compile list of fluvial dependent SGCN (e.g., plants, invertebrates, fish, amphibians, reptiles, mammals, birds)
- Identify species and bioperiods most threatened by alterations in flow regime (“Threats to Key Habitats”)

### Cost, Duration:

- ?



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Assignment:

- ?

Objective 4: identify subset/composite IHA statistics to quantify ecologically significant deviations from the reference hydrograph for distinct bioperiods of the subset of SGCN

Task:

Cost, Duration:

- ?

Assignment:

- ?

Objective 5: Beta test instream goal development using reference and altered hydrographs, and metrics of hydraulic alteration in (1) groundwater altered system, and (2) surface water altered system

Task:

- Develop reference hydrograph for candidate basin(s)
- Develop altered hydrograph for groundwater and surface water altered systems
- Apply metrics of hydraulic alteration to quantify degree of alteration
- Develop instream goals protective of targeted SGCN
- Develop water management operational parameters to meet instream flow goals
- Quantify impacts of meeting instream flow goals on existing (or mock) water management scenarios

Cost:

- ?

Assignment:

- ?

Objective 6: develop and implement a flow management protocol for (1) a surface water diversion and (2) a ground water diversion – FUTURE ACTIVITY

Objective 7: monitor community response – FUTURE ACTIVITY

**Priority Project #5 (21) Develop model guidelines for training local planning boards on how to incorporate GCN species and their key habitats into local planning.**

Presenter: Jenny Dickson

Steps for implementation:

1. Contract someone to do data gathering tasks in NE region (listed below)
2. Contract someone to identify network of state or regional programs that may affect land-use decisions (including possible funding sources)
3. Develop the “tool kit” for delivery by states in region
4. Develop appropriate mediums (hard copy, newsletter, web-based, etc.) to disseminate info to network of land-use planning communities.
  - a. Make this adaptive to include new information.
  - b. Host regional workshops
    - i. Agency
    - ii. Land-use staff
  - c. Could be part of other regional meetings

Data gathering from NE

- Existing data delivery systems
  - What and how are states providing info to local managers (map-based, text, etc.)
  - What is the follow-up? (meetings, tech assistance, etc.)
- Current government system in state
  - Town vs. county-level
  - Role of regional planning groups (RPAs)
- Legal framework in each state Environmental laws
- What does state provide to towns as BMPs for GCN species
- Address “collectable species”

Build on our collective knowledge to develop an effective “tool kit” for local land-use planners. [tool kit = BMPs, easements, bonds, resource/contact list, tax incentives, regulations, and more]. (Sources—Organization of Wildlife Planners, Human Dimensions experts)

- Be aware of data gaps (GCN species) and try to fill them as we move forward with landscape-level conservation.
- Reach out to regional land-use planning organizations – one of biggest threats in region is habitat loss via development.

Keep in mind best way to deliver message –

- Water quality
- Clean air
- Town “image” (nice place to live)

Are there “carrots” to get towns, landowners, developers, to do the right thing?

- Incentives

## Appendix G: NEAFWA Group Breakout Session Reports Combined & Priority Project #6 Description

- Streamline/accelerated permit process

Who else do we plug in?

- Developer and realtor organizations
- Environmental consultants
- Urban planners
- Geographers
- Consensus builders, etc

(Bigger menu of options to get goal accomplished)

### Data Gathering

Compiling and summarizing existing information from the NE Region on the following land use guidance areas.

1. Existing data delivery systems that indicate what and how the states are providing to local land managers (map-based information; written text; etc.)
2. Current governmental system existing within each state and the role (e.g. town vs. county-level management) regional planning groups (RPAs)
3. The legal framework in each state to address GCN species conservation
4. What do states provide to towns as BMPs for GCN species

Identify network of state or regional programs that may affect land-use decision making including the identification of related funding sources.

Analyze the compiled information to select the most innovative and effective aspects of regional programs.

Who: Contractor (possibly Env. Law Inst.)

Timeframe: 1 year to 18 months

Outcomes:

The project will result in creation of a report detailing the most innovative and effective aspects of regional land-use guidance which will then serve as the foundation for a toolkit for local land use planners which will be developed and distributed as the second phase of the project.

Budget: approx \$150,000 (would need estimates)

Grant application should be submitted by NEAFWA. Any received funds should be given back to the association and contract should be written by them with guidance from proposal developers.

**Priority Project #6 - Develop Regional Indicators & Measures (of SGCN, Habitats, Threats & Strategy Effectiveness) to Ensure Successful Conservation**

## Appendix G: NEAFWA Group Breakout Session Reports Combined & Priority Project #6 Description

Note: The material below was developed in advance of the meeting and was not discussed by the whole group during breakout sessions.

Presenter: Jon Kart

### **Background & Need**

State Fish & Wildlife Departments have been monitoring wildlife and wildlife habitat within their respective states and have participated in monitoring efforts at regional, national and international levels for many years. The resulting data inform departments' adaptive management and strategic planning efforts and have been vital to successful, science-based wildlife management.

With the advent of the State Wildlife Grants Program (SWG) and state Wildlife Action Plans (each containing hundreds of Species of Greatest Conservation Need—SGCN), states have accepted responsibility for a broad and challenging array of monitoring responsibilities. Action Plans and the SWG program are widely touted as important, cost-effective tools for maintaining healthy wildlife populations. Congress, the federal Office of Management & Budget, and many stakeholders are intensely interested in the accuracy these claims and eagerly await monitoring and performance reports from states and the US Fish & Wildlife Service.

Specifically, states are expected to monitor SGCN, habitats and strategy effectiveness to inform adaptive management and Plan revision. Action Plans describe a range of monitoring activities at multiple levels including: individual species, guilds, natural communities and landscapes; threat monitoring; and implementation and effectiveness monitoring. Working individually, states will come up against the following problems and limitations as they work to meet both their monitoring goals and their ultimate goals for conserving all their Species of Greatest Conservation Need:

1. Most states do not have the staffing or financial resources to adequately implement monitoring plans *and* fully implement recommended conservation actions.
2. Some of the Species of Greatest Conservation Need (SGCN) identified by states are wide-ranging (e.g., marten, bobcat, marine mammals) and/or relatively rare. State-level monitoring may produce sample sizes too small for statistically meaningful analyses.
3. Myriad indicators have been proposed to track species status and conservation. But if these indicators and methods for quantifying data are not compatible among states, then aggregating data across state lines will be unnecessarily difficult.
4. Many SGCN and their habitats may respond to conservation actions (and to some threats) slowly (years to decades).
5. Congress and the federal Office of Management & Budget (and the American public) will not wait years—let alone decades—for reliable performance data. They will continue their year-in, year-out process of determining which programs to fund and which to cut.

Working together at the outset, to ensure compatibility and coordination regionally (and nationally) in state monitoring efforts, will allow states to make the most of their Wildlife Action Plans and State Wildlife Grant funds. Moreover, this will help prove that Action

## Appendix G: NEAFWA Group Breakout Session Reports Combined & Priority Project #6 Description

Plans and SWG are critically important, cost-effective tools for maintaining and restoring healthy wildlife populations.

### **Objectives**

1. Clearly identify the purposes for which we want to monitor and how progress will be measured.
2. Identify the indicators and measures for SGCN and habitats (including those that can only be monitored at regional scales) that are compatible with each state's Action Plan implementation goals. Evaluate these for suitability, practicality and cost-effectiveness.
3. Encourage states in the region to participate in coordinated monitoring efforts using the indicators and measures identified in #2. Develop methods to efficiently aggregate and analyze data from states.
4. Conduct threat monitoring and incorporate threat impact when measuring overall conservation success for a SGCN or habitat.
5. Identify the monitoring protocols thought to be most useful and develop new protocols for those species or species groups or indicators where needed.
6. Develop standards for data collection and management.

### **Benefits**

Until now there has been little effort to standardize Action Plan development. But with plan implementation now underway and 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 to later.

Additionally:

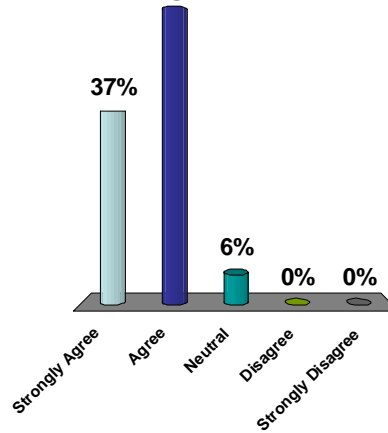
- For rare, wide-ranging species and others that don't recognize political boundaries multi-state and regional monitoring efforts may be vital to ensuring conservation success.
- Compiling region-wide data will increase sample sizes and thereby increase the statistical power to detect changes in population 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.
- Improved chances for rapid detection of status change for species and habitats.
- Standardizing protocols and measures and improving data sharing among states will increase abilities to compare the effectiveness of strategies and programs.

Appendix H: NEAFWA Meeting Evaluation Results

Question 1:

We had the opportunity to identify conservation actions with our neighboring states or colleagues in the region?

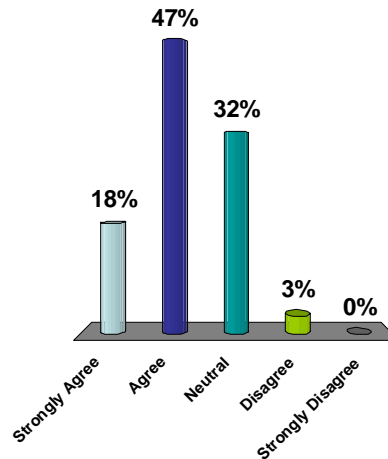
1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly Disagree



Question 2:

This process allowed the most efficient identification and prioritization of coordinated conservation actions.

1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly Disagree



## Appendix H: NEAFWA Meeting Evaluation Results

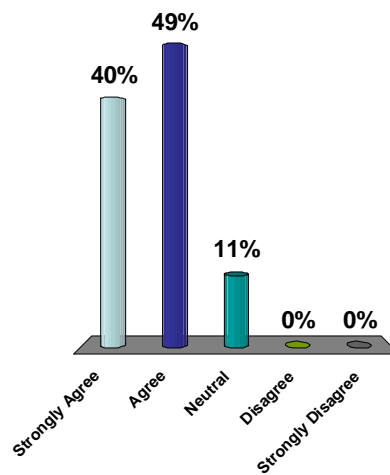
### Question 2 Additional Comments:

1. Some high priorities left out, but I understand the complexity of narrowing down a long list of priorities
2. Some more work on initial list (by committee contractor), not lumping, fleshing out, organizing, would have improved considerably. I fault the NEWDTC for this - just didn't make it a priority.
3. Not perhaps the most efficient – but good process.

### Question 3:

The prioritized action items will allow collaboration with other states in the NEAFWA.

1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly Disagree

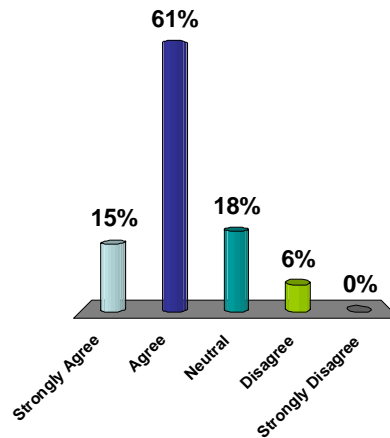


Appendix H: NEAFWA Meeting Evaluation Results

Question 4:

The necessary people were in attendance to meet the objectives.

1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly Disagree



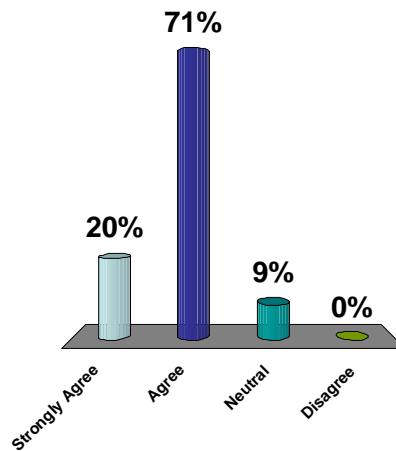
Question 4 Additional Comments:

1. Unfortunately, some necessary people couldn't get travel approval
2. Meeting seemed to lie light on aquatic representatives.

Question 5:

I feel this meeting met the overall objectives.

1. Strongly Agree
2. Agree
3. Neutral
4. Disagree

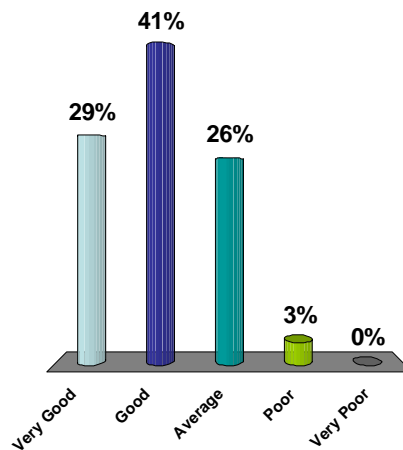




Question 6:

## The materials used at the meeting were:

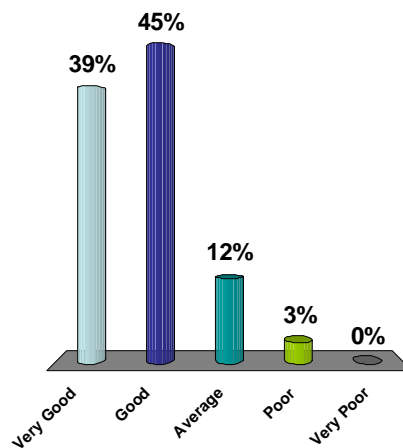
1. Very Good
2. Good
3. Average
4. Poor
5. Very Poor



Question 7:

## The meeting's facilitation was:

1. Very Good
2. Good
3. Average
4. Poor
5. Very Poor

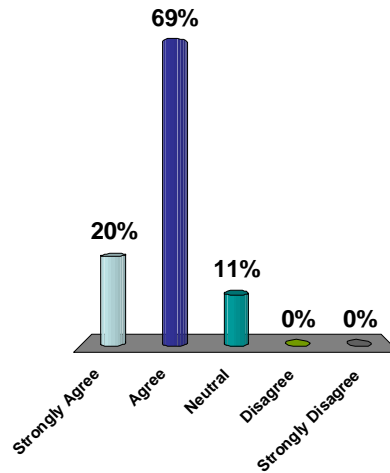


Appendix H: NEAFWA Meeting Evaluation Results

Question 8:

The meeting, overall, was *successful towards launching collective efforts* among states in this region.

1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly Disagree



Question 9: Please provide any suggestions regarding facilitation that could improve future regional State Wildlife Action Plan meetings (agenda, discussion management, etc.) on the back of the evaluation form

1. If possible, have priorities better integrated to avoid duplication, etc. Although I don't have any suggestions it's difficult to do for 14 states!
2. Excellent – Difficult topic Well Done
3. Voting was helpful but additional opportunities to address whether the highest priorities were included would have been helpful.
4. Ban the phrases “low hanging fruit” and “crosswalk” from all future workshops.
5. (1) Getting project proposals out to meeting participants several weeks beforehand would have helped greatly by bringing participant to the mtg. educated and ready to roll; generating new proposals/fill gaps early.  
(2) Skip the loong & repetitive presentations on states' action plans.  
(3) The group would have been better served if we had initially:
  - a. grouped similar titles
  - b. combined titles where appropriate
  - c. dropped titles deemed inappropriate
  - d. have the group rank titles H/M/L
  - e. Focused voting on the highs & mediums using the process used during out session with the clickers  
(4) The moderator should have had the ability to cut off some circular conversations earlier

## Appendix H: NEAFWA Meeting Evaluation Results

6. Prioritizing 5 projects then trying to go back and trying to develop 5 more seemed to take a couple of ours during the early afternoon of the first day. If we wanted 10 we should have started with 10.
7. Handled project “monitoring” #6/73 poorly!
8. One suggestion would be to ask states for their top 5 actions in advance of the meeting. Actions with strong overlap should be combined prior to voting to prevent splitting of votes and ultimately impacting final rank.
9. Just a little confusion during one stage of agenda when group did not want to discuss in detail next 5 topics for more detailed planning. Eventually facilitator gave into the group feeling, but it was over an hour of down time.
10. Increase front end discussion of purpose and desired outcomes. Less on state show and tell on their plans. Hear more from states about their suggested actions before lumping/rewriting.
11. Beef up the pre-meeting work – project descriptions fully fleshed out and out with enough time so people could digest, get feedback from colleagues, etc. Thanks Dave and Sarah! Awesome Job!!! (as usual!)

Question 10: Please provide any additional comments on the back of the form or email to Sarah ([sarah@djcase.com](mailto:sarah@djcase.com)).

1. (1) Overall I think the meeting was a good start to providing an opportunity for the NE Region states to discuss regional priorities and should be a regular, ongoing effort (annual, every two years)  
(2) Facility was very good, but don't believe these need to be convened at such posh facilities. We could use these funds to protect GCN's
2. Outstanding facilitation of a difficult topic. Great enthusiasm that helped keep people engaged throughout the 3 days! It could have been dry and boring with a different facilitation team. Thanks for the great job Sarah and Dave.
3. Since we did not have approp technical staff to develop detailed proposals, more emphasis on prioritization and initial project development would have been better than having groups with incomplete knowledge try to develop details.
4. (1) It would have been helpful to have a better way to check the voting process as it moved along. Perhaps a spreadsheet of all the ideas and then move across the spreadsheet to see how the project ideas developed out.  
(2) This comment is directed at the convenor?. It would have been helpful to have a better idea of the Grant Proposal regulations before we began fleshing out the ideas. Also, there seem to have been multiple goals that in the end well maybe not, but it might have been more effective to show those goals more clearly with the group at the outset.
5. I strongly object to a regional conservation action being essentially forced on the group because a NEWAA member believes it to be a high priority. This reflects poorly on the time/effort spent during the workshop to build consensus and reach regional agreement however valuable the idea may be. An alternate mechanism to better develop the idea could have been sought. There was a distinct lack of invertebrate coverage. No participants with a strong invertebrate background (terrestrial or aquatic) were in attendance. This likely introduces some level of

## Appendix H: NEAFWA Meeting Evaluation Results

- bias toward voting on invertebrate-related conservation actions. I would strongly encourage other regions to invite some invertebrate specialist to their workshops. Omitting a huge taxonomic group that acts as a foundation and often indicator species for other SGCN populations and key habitats should be avoided if possible.
6. Related to question 4. The group (by overwhelming majority) identified a mapping project as the highest priority, however, it seemed only a few states sent staff to this meeting in a high level of mapping expertise. Future effort should recognize that mapping/GIS project will be a major component of SWG. Similarly, states did not send many folks with invertebrate expertise.
  7. Voting system was extremely helpful, otherwise discussions with a large group could go on forever. Overall facilitator did an excellent job moving a difficult task forward. Meeting should have some goals selected by directors since we are always anticipating or guessing what their desires are.
  8. Process seemed like it sometimes drove meeting more than purpose starting with a list from ME Wildlife Diversity Group may not have been the best way to approach the regional collaboration. Large complex issue, so not easy to address (our collective reality).
  9. One of the most important aspects of the meeting was identifying and prioritizing regional action projects – yet this was the most rushed aspect of the meeting. Some time of Wednesday morning needed to be set aside to review the complete list of 72 items, combine items of similar product and topic, and agree on a finalized list prior to voting. This would have identified items which were subsets of other projects, demonstrated the connection between action items and reduced redundancy on the list. It would have also allowed the discussions for additional projects which were missing off the list to be brought into the discussions in a more timely fashion. Also suggestion overall is on the full day of the meeting break after lunch till 2→3 in the afternoon. Giving a several hour break allows for further relaxed discussions, gives a necessary break – the when you reconvene you get more active discussion and product to replace the usual tired discussion/silence you typically get in the later afternoon of an all day meeting.