



# Northeast State Wildlife Action Plan Coordinators Meeting

21-23 March, 2017  
Amherst & Hadley, MA

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Hosted by:  
U.S. Fish and Wildlife Service  
Region V

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## ACKNOWLEDGMENTS

The NE State Wildlife Action Plan Coordinators graciously acknowledge Dee Blanton for guiding all aspects of meeting development in support of regional collaboration. We also appreciate Colleen Sculley's participation and logistical support throughout the event. Our gratitude to the many partners who attended the meeting, provided presentations, participated in the "lunch and learn" at the Region V Headquarters, and contributed to the productive discussions on diverse and complex topics.

## BACKGROUND

### Meeting Purpose

1. Provide tangible guidance and resources to Northeast State Wildlife Action Plan Coordinators to assist with implementing their recently revised Wildlife Action Plans.
2. Foster communication among states, thus contributing to efficiency in implementing State Wildlife Action Plans.

### Rationale

Each state's Wildlife Action Plan Coordinator is knowledgeable and well-positioned to provide perspectives on the structural and functional aspects of their states' plan. Following recent revision of the region's State Wildlife Action Plans, this meeting will:

1. Offer a forum to discuss detailed Wildlife Action Plan topics that cannot be addressed via conference calls.
2. Advance a more integrated approach to range-wide species conservation.
3. Promote communication and collaboration on topics common among Wildlife Action Plans, thus offering potential efficiencies since states may be implementing similar activities.

### Anticipated Outcomes

1. Identification of topics: for collaboration, sharing information on proposed conservation actions, and enhancing communication to foster implementation of Wildlife Action Plans. Includes both actions that are undertaken individually by states, but in a consistent fashion that leads to greater impact, and actions that are undertaken collectively, (e.g. creation of BMPs or monitoring protocols).
2. Improved efficiencies in implementing Wildlife Action Plans (i.e., one over-arching effort rather than fourteen smaller, perhaps inconsistent initiatives).

## MEETING OVERVIEW

### Summary

A brief (5-minute) overview of each state's Wildlife Action Plan was provided by the SWAP Coordinators. Each state's plan is available on the North Atlantic LCC website:

<http://northatlanticlcc.org/resources/state-wildlife-action-plans>

Themes from these overviews included:

- Sharing of prioritized actions

- Web-enabling of plans.
- Coordination of SWAPs with other planning documents (e.g., State forest action plans)
- Communication with encompassed a broad range of initiatives and audiences. This was considered important.
- Providing information to local decision-makers to support implementing on-the-ground conservation actions.
- Understanding the RSGCN/SGCN- regulatory/non-regulatory perspectives.
- Recognition of need for communication nationally among Conservation Coordinators with the recommendation for dedicated AFWA liaison/staff.

#### AFWA Update

- A significant outreach campaign for the Alliance for America's Fish & Wildlife is being developed to highlight the SWAPs and need for additional funding.

#### Northeast SWAP Database

- A functional NE SWAP database is now available for use by states.

#### North Atlantic Landscape Conservation Cooperative

- Projects have been developed to work across broad landscapes require extensive time to develop, implement and produce products.

Examples of efforts complementary to SWAPs and which connect across major landscapes, include:

- Boone & Crockett, *Wildlife in the 21<sup>st</sup> Century* initiative [https://www.boone-crockett.org/conservation/conservation\\_wcp.asp?area=conservation](https://www.boone-crockett.org/conservation/conservation_wcp.asp?area=conservation)) which has recommendations complementary to the SWAPs.
- SE Climate Change Adaptation Strategy (SECAS) and potential for linking with initiatives in the Northeast.

#### *Regional Conservation Opportunity Areas (RCOAs) & Technical effort*

- RCOA: Roll-out April 1, 2017.
- Learn more at: <http://naturesnetwork.org>

#### Northeast Climate Science Center (NECSC)

- Review of NECSC capacity and ongoing initiatives.
- Potential for collaboration.
- Exchange of information that could lead to actionable science.

#### COMMUNICATION

##### **Internal (SWAP Coordinators)**

**Outcome:** There was agreement to keep the bi-monthly conference calls, with a recommendation to consider expanding the duration to a couple hours when topics required.

##### **External (Partners)**

- Expertise is available throughout the region for developing messaging. For example, the NEAFWA I&E Committee, NECSC and others would be great resources.

- A broad range of SWAP communication tools and needs were discussed including web-enabling of plans and common messages in multiple media.

### Policy Issues

- Enhance communication with AFWA team leading the Alliance for America's Fish & Wildlife to understand messaging.
- States need to be prepared for implementing these funds should they become available.

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## Action Items, Requests & Outcomes

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### Day 1

**1-1 Action:** Develop a fact sheet or similar outreach tool that is directed at anglers (and other resource user groups) as an example of real change in streams with which they may be familiar. Perhaps Trout Unlimited could help with this effort. Topics could include changes in species composition or phenology such as insect emergences. This would help make climate change "real".

**1-2 Action:** Design a decision tree to help answer when to let go or shift strategies- need tools to make these decisions.

**1-3 Action:** Use the RSGCN list for initial review of species that might be considered for the "stop spending money" list.

For NECSC (Themes)

- Enhance data for models
- Support assessment of relationship between climate change threats and actions
- Help provide recommendations to local landowners
- Develop fact sheets

**1-4 Action:** Consider reviewing overlap of Coastal Area Sea Level Rise with RCOAs.

**1-5 Action:** Find intersections of topics with states and contact states before the products are made publicly available; consider receiving feedback from states in development of tools.

**1-6 Action:** Social scientists are needed to help broadcast messages about climate change.

**1-7 Action:** NECSC will help develop and design thematic outreach materials (i.e., fact sheets) - "this tool is a good resource to x...." organized around a specific topic (e.g., coastal resilience).  
What is our best conservation strategy to provide the best management actions?

**1-8 Action:** Look at data gaps in the RSGCN list; and have NECSC look at data gaps; then states can work with partners to help fill these gaps.

**1-9 Action:** Use tools to help revive the RCN process. See how these tools can be used to support landowners. Now need to consider the message.

**1-1 Request:** Michelle would appreciate feedback on messaging that appears to be resonating with the public in our states.

**1-2 Request:** What are some immediate products needed? Michelle provided information (see example in the folder provided at the meeting).

### Day 2

For a host of thematic actions, see synthesis of BREAKOUT GROUP discussions on:

- [Natural System Modification](#)

**2-1 Action:** Workgroup-Make a joint request (with partners) for finer-scale (e.g., 5-meter pixel) Landsat data.

- [Disease and Invasive Species](#)
- [Pollution](#)

**2-2 Action:** Identify the SWAP and NE Fish and Wildlife Diversity Technical Committee role regarding pollinators.

- [Climate Change](#)

### **Communication**

#### *Internal (SWAP Coordinators)*

**2-1 Outcome:** There was agreement to keep the bi-monthly SWAP Coordinator calls, with a recommendation to consider expanding the duration to a couple hours when topics required.

### **Communication**

**2-3 Action:** Workgroup-Develop a working group to discuss approaches for sharing web-enabling tools and outreach materials. Consider common messaging.

#### *External (Partners)*

**2-4 Action:** At the NEAFWA meeting, request I&E Committee assist SWAP coordinators with messaging, including implementation messages, and develop summary information to avoid wording that does not resonate with the public. Develop regional messaging to promote implementation (e.g., best ways to get word out and how to use them).

### **Tracking Partner Implementation of SWAPs**

**2-5 Action:** Workgroup-Develop a working group to discuss and provide recommendations for this topic.

**2-6 Action:** Develop a menu of workgroups. Include a matrix of members on these work groups.

## **Day 3**

### **Policy Issues: State and Federal**

#### **Alliance for America's Fish and Wildlife** (formerly Blue Ribbon Panel)

**3-1 Action:** Ask Patty Allen to participate in SWAP Coordinator bimonthly conference calls.

**3-2 Action:** Invite Sean Saville to the National SWAP meeting.

**3-3 Action:** Invite Sean to participate in the SWAP Coordinator bi-monthly conference calls (~15 minutes).

**3-4 Action(s):** Topics for states:

- Start discussions on how funds will be used; include recreational opportunities (maybe law enforcement)
- Consider staff expansion (e.g., federal assistance, biologists). Think creatively about people.
- Funding can be used for recreational use and specific law enforcement activities.
- Pre-identify activities and options for implementation.

**3-5 Action:** Need to discuss how states are re-building their coalitions.

**3-6 Action:** Develop priority actions for funding based on discussion of cooperative actions.

### **Regional Coordination**

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**3-7 Action:** Develop a refugia map (NECSC) and collaborate with NALCC. If data are requested, there needs to be field verification for quality assurance.

#### **Data-Sharing**

**3-8 Action:** States with LCCs; NALCC and APPLCC should coordinate their approaches for data distribution.

**3-9 Action:** Expand the AppLCC Riparian Restoration Tool (cold water streams) eastward to encompass the North Atlantic LCC.

**3-10 Action:** Review similar tools to assess functionality and how they coordinate.

#### **NE Regional Field Guide**

**3-11 Action:** Instead of coordinating individual action plans; show the consolidated efforts. Karen and Elizabeth are compiling information from across the region to develop a regional species list, actions, and threats roll-up report.

#### **National SWAP Coordinators Meeting**

**3-12 Action:** Talk with states and other SWAP coordinators about shared interests.

#### **Recommended Workgroups**

- Enhanced Landcover/landuse imagery.
  - Communications, including web-enabling tools and outreach materials.
  - SWAP implementation tracking, especially for conservation partner actions.
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## **DAY 1, 03-21-17**

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Welcome, Chris Burkett

U.S. Fish and Wildlife Service

Colleen Sculley Introduced—Deb Rocque, Deputy Regional Director

Key messages from the Service:

- Congratulations on achievements with the Wildlife Action Plans
- Eleven (11) of 14 plans have been reviewed & nine have been approved by the Services' Headquarters.
- There is a need to avoid species listings and the Wildlife Action Plans support these efforts.
- Wildlife Action Plans are also aligned with work of the Landscape Conservation Cooperatives (LCCs)
- Collaboration and shared responsibilities-objectives.
- Great relationship between the Service and States.
- The Service is here to support the states.

Participant Introduction

See List of [Attendees](#)

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### Snapshot: “Elevator Presentations”

#### ME (Amanda Shearin)

Outreach was a major task in the revision process with over 100 groups engaged and continuing convene partners in an effort to determine needs.

Efforts are also underway to develop:

- a spatial tool,
- documents for landowners, and
- species distribution information.

#### NH (Emily Preston)

Developed a wildlife action plan implementation team that includes NGO partners, staff, and natural heritage staff. Conservation Actions were prioritized in the Plan. Over 100 scientists were involved in the Plan revision and partners provided considerable non-federal match.

#### VT (Jon Kart)

Zoning decisions are made locally; Landscape scale prioritization (COA), “community scale” - areas that lean towards what is available nearby. Therefore, an on-line mapping tool “BioFinder” was developed to support local groups. This tool is similar to “BioMap” developed in MA.

#### MA (Lynn Harper)

MA Fish & Wildlife and partners have been devoted to supporting biodiversity, land conservation, habitat management. Focus on early successional habitats will require more fire management. A target is to have 5% of lands in early successional forests. A document is being developed to guide management actions. To support SWAP communication an outreach specialist has been hired.

#### RI (Amanda Freitas)

Outreach is a high priority and companion documents to the SWAP are being developed to address needs of special groups. There is collaboration (reciprocity) between local and state governments for this work.

#### CT (Brian Hess)

Similar to other states, CT never stopped implementing our actions between the 2005 and 2015 plans. This time around, we are putting more focus on finding partnerships regionally and within the state to enact the plan. So, regional projects fit very nicely with what we are doing. Another example is Osprey Nation, a citizen science project run as a cooperative effort between CT-DEEP and the Connecticut Audubon Society.

#### NY (Joe Racette)

Implementation never stops. Notable accomplishments of the revisions process were bringing people together people and enhancing the scientific foundation of the plan. A specific effort was directed at coordinating the SWAP with other plans in NY. Historically, a focus of protection over the past several years has been land protection. The revised plan will shift to a more targeted conservation. NY is beginning to focus on urban wildlife (e.g., peregrine falcon, nighthawks, and migrating birds through urban areas) The NY WAP has public support.

**NJ (Karen Terwilliger)**

Karen provided an overview of the NJ Plan, which will be submitted in May. Key parts of the plan will be focal species and areas, and a web-enabled database.

**PA (Cathy Haffner & Diana Day)**

Revision of the Pennsylvania Wildlife Action Plan resulted in new processes including: a SGCN selection flowchart and prioritization scheme. Throughout the revision process there was an emphasis on scientific accountability and repeatability. A Conservation Opportunity Areas Tool is “under construction”. Implementation has been ongoing including: presentations, forthcoming meeting of the external Advisory Committee, collaboration and coordination with partners, and development of a draft communications strategy.

**DE (Joe Rogers)**

Karen was acknowledged for her support in revising the DE SWAP. As a small state it is easy to work with partners. There is consideration for web-enabling the SWAP and for maintaining coordination with stakeholders.

**MD (Annalise Kenney)**

The MD SWAP focuses on habitats and includes information on plants, with special attention to climate change. This plan developed with implementation in-mind. MD bird conservation partnership established to help with implementation. Benefitted from NECSC and other regional efforts (LCCs). Prioritization based on what is realistic; perhaps not ideal.

**WV (Kieran O'Malley)**

The WV SWAP is a framework for conservation; for use by public, trusts, etc. Delineated by conservation focus areas in threats are identified. open conversations with user groups; much more outreach to non-traditional groups; leveraging swaps; looking to other grass root groups to assist with outreach. Also embraced by regulatory agencies-using SGCN lists to guide development (e.g., wind, gas development). Web-enabling various tools.

**VA (Chris Burkett)**

The 2005 VA SWAP was focused on research and not easy to implement. Wanted the new plan to be: 1-actionable, 2-locally relevant, 3-tied to other plans. VA has 21 planning regions—Plan is organized within each of these regions. Chris provided an example of a project that was identified in the plan and now will be a collaborative effort with SWG; several other examples of how this plan is being used by a variety of groups.

**Discussion with Partners**

Following the overview of the SWAPs, the meeting was opened for general comments and discussion. Highlights of the discussions include:

**Regulatory/non-regulatory role of SWAPs**

How are SGCN and habitats addressed in regulatory/non-regulatory approaches?

- (MA) there is authority under the ESA; developers need to consult with MA.
- (WV) has a tool embraced by regulatory agencies.

**Coordination between Forest Action Plans and SWAPs**

What is being done to link these plans?

- (CT) forestry staff were engaged with in the plan revision process
- (VT) forestry department took the lead in relating work to climate change
- (VA) plans are closely aligned and DGIF and VaDoF have implemented joint training sessions for field biologists and foresters.

**Engaging Urban/suburban constituents**

- (RI) people most interested in conservation are in the urban-suburban areas. One practice is to promote native plants. In urban areas, other topics of interest could be; fish passage, promoting riparian buffers, actions on noise pollution, light pollution.
- (NY) Work is underway to begin addressing urban wildlife. Recently one of the best attended SWAP related meetings was in Manhattan—lots of interest. The NY SWAP helped bring people together to talk about problems.
- (VA) Look at northern and southeastern sections of Virginia's SWAP these are predominantly urban areas.

What species benefit most from urban habitat enhancement?

- Rusty-patch bumblebee, peregrine falcon, chimney swift.
- Bats are using urban areas but are under-studied.
- Role of Citizen-scientists (ME) Amanda
- Look to USFWS-connecting people with nature initiative (<https://www.fws.gov/northeast/cpwn/>)

**AFWA Update** (Mark Humpert)**Collaboration among the NE states is critical and exemplary.**

- SWAPs are essential and focus of the Blue Ribbon Panel (now Alliance for Americas Fish & Wildlife-AAF&W) funding.
- Messaging for the new initiative (AAF & W) has been developed; with emphasis on the need to prevent endangered species.
- A logo is being developed—currently under review.
- A Bill (House) (similar to the previous Bill in the last Congress, is anticipated by next month.
- A “Fly-In” in support of this funding may be organized later this spring.
- The intent is to develop a more strategic coalition rather than the broad Teaming With Wildlife coalition.
- There may be a request for Directors to support the diverse needs of the campaign for this funding.

**Communication needs**

- It will be important to develop the correct language that will resonate with the public for developing fact sheets, videos; note jobs and economy and potential for this work to complement the anticipated infrastructure bill.

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## NE SWAP Database: Demonstration and Hands-on Practice

### History of the SWAP Database (Karen Terwilliger)

- An early step towards the Northeast SWAP database was developing a common language across the region. This resulted in the Northeast Lexicon  
*Crisfield, E. 2013. The Northeast Lexicon: Terminology Conventions and Data Framework for State Wildlife Action Plans in the Northeast Region. A report submitted to the Northeast Fish and Wildlife Diversity Technical Committee. Terwilliger Consulting, Inc., Locustville, Virginia.*
- Initial format of the database was too involved for so a “SWAP Database Lite” was developed.

### NE SWAP Database Demonstration (Peter Good)

Peter led an informative demonstration on how to use the database for various searches.

## Regional Species of Greatest Conservation Need (RSGCN)

Recognizing the resource priorities in the Northeast requires a 3-prong approach.

- NE SWAP Database: helps consolidate information in one location allow regional summarization.
- SWAP Coordinator knowledge: their experience and ability to synthesize information is a vital resource.
- Develop regional priorities through a structured process.

### Summary

Beginning in the summer 2016, a select team of SWAP Coordinators, assisted by Elizabeth Crisfield, initiated development of a logical process to evaluate species identified in SWAPs throughout the region and determine regional importance. In her presentation, Elizabeth, provided an overview of the Regional Species of Greatest Conservation Need (RSGCN) process and taxonomic summaries.

## Landscape Conservation Cooperatives (LCCs)

### North Atlantic LCC (Ken Elowe)

- History of the RCN effort (genesis at Albany I, circa 2007). The various collaborative efforts contributed to the founding of the LCCs.
- Collectively, this work lead to Albany II; fostering States want to work together.
- Projects have been developed to work across broad landscapes require extensive time to develop, implement and produce products.

Examples of efforts complementary to SWAPs and which connect across major landscapes, include:

- Boone & Crocket, *Wildlife in the 21<sup>st</sup> Century* initiative ([https://www.boone-crockett.org/conservation/conservation\\_wcp.asp?area=conservation](https://www.boone-crockett.org/conservation/conservation_wcp.asp?area=conservation)) which has recommendations complementary to the SWAPs.
- SE Climate Change Adaptation Strategy (SECAS) and potential for linking with initiatives in the Northeast.

## Regional Conservation Opportunity Areas (RCOA)

### Review of the RCOA project (Scott Schwenk & Steve Fuller)

- Coordination of efforts

- Actions based on science
- Efficient implementation
- Terrestrial and wetland core areas
- Aquatic core areas and buffers
- Habitat for imperiled species
- Regional connectivity & marsh migration
- Restoration tools + support tools
- Several slides (examples from CT) for the areas noted above.
- Products are available on the NALCC Conservation Planning Atlas.

#### **Review of the RCOAs & Technical Features**

- Process is helping to focus conservation actions; 10% of the landscape holds 32% of the SCGN.
- RCOAs- Roll out April 1
- To find out more: <http://naturesnetwork.org>

Collaboration between the LCCs and SWAPs can include:

- Translating science to species and habitat strategies, to deliver science support and workshops.
- NALCC technical support to steer RCN science projects.
- FWS strategic focus areas align with SWAPs (e.g., at-risk turtles, pine barrens, riparian species, aquatic connectivity).
- Leveraging partnerships.

#### **NE Climate Science Center (NECSC)**

(Michelle Staudinger & Toni Lyn Morelli)

Michelle provided an overview of the NECSC following the SWAP synthesis (Staudinger, Morelli and Alexander 2015) and Toni Lyn reviewed specific studies. The goals of the presentation were to:

- Review NECSC capacity and ongoing initiatives.
- Explore potential for collaboration.
- Exchange information that could lead to actionable science.

Key topics of discussion were:

Staff capacity

The NECSC has staff who can assist with Climate Assessment and Scenario Planning  
Vulnerability Assessment Reports have been updated from the 2015 SWAP Report.

- Focus on habitats with water as these are the most vulnerable to Climate Change.
- Expanded work on marine mollusk and diadromous fishes.
- Working on sea turtles.
- MA has, or is developing, a Rapid Assessment which considers adaptive capacity.

Ecological Drought in the Northeast

- Webinars are available for viewing.

MA Climate Action Tool

- Information relevant to other states.

- Synthesis of Strategies and Actions (see handout).

#### Sea Level Rise

- Used a Structured Decision Modeling approach to identify general actions, but this may not be sufficiently specific. So, a Coastal Response Model provides more detailed graphical representation of SLR impacts.
- A visualization tool is forthcoming
- Incorporating “ecosystem services”; review of “threshold data” and how it can influence management decisions.
- Twenty-five (25) of 45 species had threshold data, but this came from a single source and is thus totally inadequate information.

#### Capstone Study

- Multi-year, multi-species data compilation and synthesis.
- Assesses ecological and human implications in response to climate change.
- Making the case for living shorelines (green to gray continuum). A graphic was displayed which could be useful for other purposes.

#### Climate adaptation Options

- Response
- Resilience
- Resistance

See: Morelli et al. 2016. PLOS ONE, Aug-10-2016, Volume 11, Issue 8, p.e0159909, (2016)  
PLOS One, 2016 | Managing Climate Change Refugia for Climate Change Adaptation.

- In her presentation, Toni Lyn discussed the Climate Change Refugia Conservation Cycle and included a graphic of physical basis for climate change refugia (i.e., identifying Refugia)
- Toni Lyn proposed the following scenario: Where climate change is not having much of an effect, go to those areas and address non-climate change threats. Historical species distribution could be used to evaluate persistence and potential impacts of climate change. Maps are available for the NE region.
- Examples were also provided for: phenological shifts (invasive species vs native species), range shifts (S. Pine Beetle, Emerald Ash Borer). A notable management effort was Invasive Species Managers incorporation of climate change into management practices.

### Collaboration Among States-Identifying common areas of implementation and collaboration

This session was an open discussion on how regional partners (e.g., North Atlantic LCC, NE Climate Science Center, U.S. Fish and Wildlife Service, and others) could support State Wildlife Action Plans across the Northeast.

#### Climate Change and other stressors

How can it be determined which current, ongoing stressors are most relevant to climate change resilience-building?

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- Identify refugia and *then* focus on ongoing stressors.
- Look at the most vulnerable species, and then look at the stressors in their habitats.
- Flooding is part of climate change, so we can look at dams/culverts upgrades. It's something we've worked on forever, but the threats to humans from flooding from climate change helps tip the scale toward action.
- Infrastructure, disease, human element tips the scales toward actions that also benefit humans
- Climate change is an intensifier for existing stressors – so I don't really have to talk about climate change in order to work on the right things.

### Tools and Resources

What kinds of tools and resources do states need to explain climate change?

- Often products are too coarse to apply at the state and local scale.
- The NECSC is available to support SWAP Coordinators.

**1-1 Action:** Develop a fact sheet or similar outreach tool that is directed at anglers (and other resource user groups) as an example of real change in streams with which they may be familiar. Perhaps Trout Unlimited could help with this effort. Topics could include changes in species composition or phenology such as insect emergences. This would help make climate change “real”.

### Species and Habitat Conservation Initiatives

When do we give up on a species or habitat?

- We change the way we protect species – not within one state, but concede it will shift geographically.
- Designing sustainable landscapes for place-based species may require us to give-up locally on maintaining these species.
- Example: Snowshoe hare in VA is considered a lost cause in this state.
- Dan Decker from Cornell has developed information on this topic; Example: Not managing for a salamander.

**1-2 Action:** Design a decision tree to help answer when to let go or shift strategies- need tools to make these decisions.

When does the significance of a habitat drop below the importance of others? Where are conservation actions more feasible and will persist for decades?

- Use sea level rise modeling with RCOA to prioritize coastal protection. Note: Coastal initiatives is one of the topic areas of the RCN.
- Core habitats need to be connected; should consider a pattern approach that effects the largest number of species.
- Per the work of UMass, NECSC, LCC and “Designing Sustainable Landscapes”, the areas need to be connected by corridors to give species a chance to adapt.
- Collaborative approach to map important habitats - focus on groups of species with particular vulnerabilities (re: Toni Lyn's analyses).
- RCOA tool may be able to map climate vulnerable species.

It may be a national policy issue when species are listed as Threatened and Endangered due to climate change. If this occurs, then we may need to look at regional responsibility.

When do we stop spending money on a species?

**1-3 Action:** Use the RSGCN list for initial review of species that might be considered for the “stop spending money” list.

**Integrating SWAP implementation and Regional Partner initiatives** (e.g., data needs, resources, communication).

**1-4 Action:** Consider reviewing overlap of Coastal Area Sea Level Rise with RCOAs.

- Emphasis from states is to remove non-climate stressors from large intact habitats (WV, RI); ME is also doing something similar—bringing together diverse groups to look at various non-climate stressors (e.g., dams).
- State have their own biomaps and similar tools, so the LCC and NECSC should be connected to those that states are using.
- Need to sync-up with states when regional projects are being developed. Pick a few states, some with and some without data.
- How do portray refugia? Are anticipated changes in temperature 50-80 years out beyond the current error bars on temperature?

**1-5 Action:** Find intersections of topics with states and contact states before the products are made publicly available; consider receiving feedback from states in development of tools.

**1-6 Action:** Social scientists are needed to help broadcast messages about climate change. The NECSC has tools that can help, but welcome suggestions to help states. Need to consider the messenger in developing tools.

**1-1 Request:** Michelle would appreciate feedback on messaging that appears to be resonating with the public in our states.

**1-2 Request:** What are some immediate products needed? Michelle provided information (see example in the folder provided at the meeting)

**1-7 Action:** NECSC will help develop and design thematic outreach materials (i.e., fact sheets) -“this tool is a good resource to x...” organized around a specific topic (e.g., coastal resilience).

- Public Opinion is important to consider when developing messaging. Elizabeth provided an overview of a Yale climate study-public opinion survey.

What is our best conservation strategy to provide the best management actions?

Ken-mentioned major forest owners (small and large) who are interested in management.

**1-8 Action:** Look at data gaps in the RSGCN list; and have NECSC look at data gaps; then states can work with partners to help fill these gaps.

**1-9 Action:** Use tools to help revive the RCN process.

- See how these tools can be used to support landowners.
- Now need to consider the messages.

The focus of the discussions were directed to questions and ideas for the USFWS

- USFWS is developing work plans for six (6) species (e.g., Chesapeake Logperch), to either keep from listing or advance towards listing.
- Also interest in developing approaches for habitat management.



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## DAY 2, 03-22-17

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### Day 1 Review

**Themes or needs identified during Day 1.** What are the next steps?

#### Communications

- Make climate change real.
- Need for social science understanding for effective messaging.
- Demonstrate benefits of this work for humans and wildlife to foster support.

#### Implementation of Plans

- Questions re: prioritization-need to share & coordinate prioritized actions.
- Tracking implementation.
- Web-enabling plans.
- Information needs to be made available to local decision-makers.
- Enhance coordination with other plans (e.g., State Forest Action Plans).
- Need for a dedicated AFWA coordinator to facilitate communications with the states.
- Data updates (e.g., conservation lands data, enhanced habitat maps, repackage RCOA, use RSGCN to update RCOA).

#### Suggestions for the LCCs

- Translate science to species and habitat strategies, to deliver science support and workshops.
- NALCC technical support to steer RCN science projects.
- Leverage partnerships.

#### Suggestions for the NECSC

- Enhance data for models.
- Support assessment of relationship between climate change threats and actions.
- Help provide recommendations to local landowners.
- Develop fact sheets.

### Day 2 Agenda

This morning's theme continues from Day 1 with "collaboration among states". The initial discussion focused on a review of regional collaborative opportunities.

### Discussion

Topic (from Agenda):

#### **Identifying the most important high-priority regional conservation actions**

*Open discussion and listing of actions*

#### Monitoring

- Test of the regional monitoring protocol
- Tracking the work of partners; this could be a topic for further work by a sub-group.

#### Ongoing Efforts

- Identify efforts requiring “next steps”. Are there accomplishments that requires next steps? Consider development of “results chains”.

#### Invertebrates

- Invertebrate research & assessments may be a priority; would help Pennsylvania because we do not have jurisdictional authority.
- The topic has interest. How far to go with this topic? Want enough information to show that the topic has been well-thought out, but not too detailed.
- Karen & Elizabeth noted assessment of Tier 1 species and potential for Tier 2.

#### Habitats

- Review of small-patch habitats (e.g., living shorelines, old-growth forests). Identify these areas, and management.
- Think about habitat, species targets that will result in an action.

#### Conservation Actions

- What actions are regional? What actions are local? There are probably some shared learning features. The land-use planning project was not effective. Perhaps a pilot project.
- Residential & Commercial Development---Incorporating SGCN in local planning.

#### Communications

- Need to consider messaging.

#### Other

- Consider mutual topics for Competitive SWG.

### Break-out Groups

Meeting participants convened into thematic discussion sub-groups to identify potential conservation actions for collaboration.

#### Natural Systems Modifications

- Fire Learning Network (FLN): partners working locally for habitat management.
- Aquatic Connectivity: Dam removal, each state has its own process. May want to crosswalk with RCOA areas. Review of culvert project and priorities. Federal funding to implement projects. Research on design. Appalachian-Riparian Restoration Decision Support Tool.
- Beaver management: Habitat loss, conversion, degradation, etc. Perhaps a topic for the Habitat Technical Committee and Furbearer Committee.
- Tracking habitat change and loss: For local habitat (e.g., vernal pools).

**2-1 Action:** Workgroup-Make a joint request (with partners) for finer-scale (e.g., 5-meter pixel) Landsat data.

- Talk with NOAA and other agencies who use these data/imagery.

### Disease and Invasive Species

- Talk with NECSC about priority invasive species and diseases.
- Consider compilation of research on biological controls.
- Raise awareness of disease in captive bees.
- Interface with national and regional invasive councils.
- Chemical use on urban plants; sharing messaging that helps inform consumers. Messaging at retail level of neonicotinoids to SGCN/RSGCN.
- BSaI, WNS, Ranavirus—next steps. Perhaps development of a Rapid Assessment Protocol to keep diseases out.
- Bumble bee diseases introduced as part of agricultural practices should be reviewed.

### Pollution

- Support habitat restoration in riparian zones.
- Gather stream impairment data, especially in shared waters. VA spatially explicit plan.
- Consider linking cores mapped across the region would foster collaboration. Could be a regional effort for common habitats.
- Roads and road maintenance—road salt & de-icing. Can the RCOA tool be used to help identify priority areas where this could be assessed? Consider working with DOTs.
- Develop scaled approach to buffer development that is non-regulatory, voluntary.
- Pollinators—What do we do here? What is our niche?
  - Bumblebees—are there “hot spots” for these on the landscape. Consider developing target areas. NRCS is working on this topic.

**2-2 Action:** Identify the SWAP and NE Fish and Wildlife Diversity Technical Committee role regarding pollinators.

- Identify ways to integrate SWAPs with management plans of Military bases and NRMPS. These facilities often have lots land.

### Climate change

- SGCN/RSGCN targets: Identify priority candidates for assisted migration.
- Connectivity:
  - Habitat: Incorporate connectivity into grant proposal scoring, land acquisition in the context of climate change.
  - Downscale connectivity models (e.g., Nature’s Networks) to local scales to identify priority connectors that benefit regional SGCN; integrate these into existing models (e.g., Maine’s BwH riparian and habitat block connectors).
  - Understand the role of developed/impacted lands/restoration in facilitating connectivity; can the Nature’s Network restoration tool help inform this?
  - Connect with groups (e.g., Staying Connected, Delaware Bayshore Initiatives, Wildlands and Woodlands) that are already implementing these actions.
- Focus on riparian buffers; conserve large forest blocks, opportunities to incorporate regional priorities into forest certification.
- Conserve large forest blocks (large forestry corporations) and consider incorporating regional

conservation priorities in forestry certification programs.

- Identify opportunities for marsh migration (strategic acquisitions, easements, restoration, etc.); incorporate these values into grant scoring.
- Consider impact of agricultural, for example irrigation, on large-scale drought impacts, tile drainage and impacts on habitats.

### Lunch & Learn

The meeting traveled to U.S. Fish and Wildlife Service Regional Office for lunch. Shortly thereafter, a presentation authored by Chris and Dee (delivered by Chris) provided an overview of State Wildlife Action Plans. Discussions followed. The presentation can be viewed at: <https://youtu.be/DWgXUYLAIs>  
Following the event, the group returned to the Lord Jeffrey Inn.

### State Initiatives-Successes, Common Issues, & Collaboration

#### Communications: Communicating Wildlife Action Plans to Partners and the Public

##### VA

(Chris Burkett)

Exploring Virginia's Wildlife Action Plan (web-enabled tool)

- Planning districts summarized
- Organized by HUC 12 watersheds...each county will have about 4 watersheds
- Tool allows display of species by HUC.
- Plan is habitat-based; 2 groups-good habitats and habitats requiring improvement.

##### WV

(Kieran O'Malley)

21 Conservation Focus Areas (CFAs)

Developed an **Outreach Plan Template**

- Title
- Goals
- Target Audience
- Message
- Activities
- Advertising
- Implementation

##### **Formats**

- Print
- Electronic
- Visuals
- Personal Contact
- Other

**Features and approaches include:**

- Partnering with NRCS on Working Lands for Wildlife (Cerulean, Golden-Winged Warbler, Monarch).
- Uses MA Forest Stewardship Outreach Plan.
- Identify electronic media that serve an area.
- Developing fact sheets for species.
- Conducting face-to-face meetings.
- Regional biologists-initially conduct outreach to partners.
- Tailored to each focus areas.

Website review: WV provides public accessibility to enter information on location of Timber Rattlesnakes. This approach is promoting and allowing “citizen scientist” monitoring of this species.

**NH**

(Emily Preston)

- Data, Maps, Actions.
  - Landowners, communities, land trusts; Fact sheets have been developed for each of these groups.
  - Theme is “Taking Action for Wildlife”.
  - Develop actions specific to: State Lands Team .
  - Worked with lands teams that help implement the plan.
  - Providing training for the Coop. Extension, USDA-NRCS, NH Fish & Game and University of NH
- Searchable actions-
- I am a (audience)
  - I want to (topic)
  - I am interested in (climate change, streams, turtles)

**PA**

(Cathy Haffner & Diana Day)

- Pennsylvania has developed a Communications Strategy (currently under review) to guide outreach efforts for the PA Wildlife Action Plan.
- A web-enabled *Conservation Opportunity Areas Tool* is under development. The tool will provide outputs that include species, habitat, environmental threats and conservation actions in user-defined areas (10 acres = minimum geographic area). The tool will provide easier access to the Plan.

**ME**

(Amanda Shearin)

- Wildlife Action Plan communication.
- Communication Action created by partners.
- See output for each species.
- Questions: How can I use this information? Where can I find the information?

- In the process of web-enabling the tool; working with partners.
- Also lists partners working in the area.
- Different habitats can be shown as layers.

## VT

(Jon Kart)

- Vermont has developed a landowner's guide to use the tool.
- In-reach is a challenge because it is contrary to the typical hunting and angling activities.
- Animal rights groups are finding parts of the SWAP acceptable, but not all.

**2-3 Action:** Workgroup-Develop a working group to discuss approaches for sharing web-enabling tools and outreach materials. Consider common messaging.

## Internal (SWAP Coordinators)

This discussion was directed at developing an approach for convenient and effective communication among the SWAP Coordinators.

- Mixing of WDPM and SWAP coordinators in a conference call can be confusing. It was suggested to maintain separate conference calls of these committees.
- "Internal" refers to communication within the region. Should this group maintain the bimonthly conference calls?

**2-1 Outcome:** "Yes" there was agreement to keep the bi-monthly calls, with a recommendation to consider expanding the duration to a couple hours when topics required.

## External (Partners)

- "External" partners—how do we communicate with them?
- Brief partners (e.g., NECSC, LCCs) on regional funding sources.
  - May want to provide Chris' presentation.
- Developing a "13 States plus D.C. Wildlife Action Plan" will be the topic of discussion for the next SWAP Coordinators conference call!
  - Should consider messaging per the NE region which could serve as a "Field Guide to NE Wildlife Action Plans".

**2-4 Action:** At the NEAFWA meeting, request I&E Committee assist SWAP coordinators with messaging, including implementation messages, and develop summary information to avoid wording that does not resonate with the public. Develop regional messaging to promote implementation (e.g., best ways to get word out and how to use them).

## National SWAP Coordinators Meeting Recommendations

- Duration: Suggested meeting duration- 3 days.
- Format: Factor in time for regional break-out groups.
- Participation: NE SWAP coordinators are willing to help facilitate sessions.

- Support other regions by demonstrating the model from the Northeast. We have a good model, here are some features that may be helpful. Perhaps by watershed. Adapted our efforts from Western Governors' Association

#### Other

- Discussion of AFWA's recent survey for success stories to promote the Alliance for America's Fish & Wildlife (formerly Blue Ribbon Panel)
- There appeared to be a lack of synchrony between the survey and on-the-ground topics.

## SWAPs-Tracking State Implementation

### WSFR 5-Year Report (Chris Burkett)

- This effort is focused on documenting the effectiveness of WSFR grant programs.
- Background on development of effectiveness measures and metrics.
- Data sources-past federal aid reports, TRACS, SWAPs, National Survey of Fishing, Hunting, and Wildlife Associated Recreation, other state management plans, etc. Team is trying to use existing data whenever possible.

A survey was sent to state directors and federal aid coordinators to help identify metrics for the next five years. The potential metrics included four categories:

- Species
- Habitats
- Recreational
- Administrative

Timeline: Report scheduled due at end of 2017.

Data disposition: Data used to develop the report will be archived in TRACS

Format: There is consideration for use of ESRI "Story Maps" to illustrate case studies.

Drafts of the reports will require review.

### Effectiveness Measures for SWG

NE states long recognized need to demonstrate effectiveness (outcomes) of SWG-funded projects. Anticipated AFWA effectiveness measures for SWG would be integrated into the USFWS Wildlife TRACS system. NE SWAPS indicated states would use TRACS to curate the data for reporting purposes.

The Joint Task Force has eliminated the Outcome measures from Wildlife TRACS for all grant programs including SWG. TRACS will collect output measures only.

Colleen volunteered to organize a meeting between the NE SWAP Coordinators and members of the Wildlife TRACS team to review the proposed output metrics to see if they would be sufficient. Meeting was scheduled for April 7, 2017. Ron Essig and Dan Hogan would be invited.

The NE SWAP Coordinators agreed effectiveness measures are important for the SWAP implementation efforts. To be most effective, the states still need a central system capable of curating, compiling, and reporting project data. Wildlife TRACS is the most logical opportunity.

New Hampshire's Director is a member of the JTF. NE SWAP Coordinators agreed to provide Emily P. with information she can use to discuss this issue with her director.

If we are unsuccessful in getting effectiveness measures restored to Wildlife TRACS, the NE SWAP Coordinators agreed to explore other options to meet our data needs.

### SWAPs-Tracking Partner Implementation

**2-5 Action:** Consider developing a working group to discuss and provide recommendations for this topic.

- One example, the Conservation Registry (<http://www.conservationregistry.org/>) - may not be the correct system, but does track projects.
- PA is hosting an Advisory Committee Meeting where this topic will be discussed.
- May be able to work this topic through the RCN program.
- Documenting projects will help the partners feel connected to implementing the Plan.
- We must not lose sight of the original reason for the Plan—to keep species from becoming endangered.

Several workgroups were proposed throughout the meeting, so the following action was suggested.

**2-6 Action:** Develop a menu of workgroups. Include a matrix of members on these work groups.

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## DAY 3, 03-23-17

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### Day 2 Review

- Effectiveness Measures
- SWAP Tracking (External)
- Request for better Landsat/GIS data
- Communications
  - Web-enabling tools
  - Various formats and messaging
  - Work with NE I&E
- Topics for National SWAP Meeting
  - Leaders of topics

### Policy Issues: State and Federal

This session encompassed a broad range of policies that affect SWAPs.

- AFWA and NWF focus is on Alliance for America's Fish & Wildlife (formerly BRP), so less time and staff are directed towards STWG and related information.
- AFWA staff dedicated to SWAPs is limited and this is a concern of SWAP coordinators. National



coordination is limited.

**3-1 Action:** Ask Patty Allen to participate in SWAP Coordinator monthly conference calls.

This could inform Sean Saville.

**3-2 Action:** Invite Sean Saville to the National SWAP meeting.

- Concerns were expressed about AAF&W funds being used for “game” activities rather than SWAP.

**3-3 Action:** Invite Sean to participate in the SWAP Coordinator bi-monthly conference calls (~15 minutes).

**3-4 Action(s)** Topics for states:

- Start discussions on how funds will be used; include recreational opportunities (maybe law enforcement).
- Consider sources of match; general discussions about how funding would be used.
- Consider staff expansion (e.g., federal assistance, biologists). Think creatively about people.
- Funding can be used for recreational use and specific law enforcement activities.
- Pre-identify activities and options for implementation.

This effort is different from other attempts; people on the Blue Ribbon Panel are engaged, devoted, and in the right focal areas.

**3-5 Action:** Need to discuss how states are re-building their coalitions.

**3-6 Action:** Develop priority actions for funding based on discussion of cooperative actions.

### Preparing for Infrastructure Investment Opportunities

A potential Infrastructure Bill could provide opportunities to support wildlife. How can we be sure that wildlife-favorable infrastructure is included in this legislation? States should consider developing a list of “green” projects. Essentially, be ready!

### Regional Coordination

**3-7 Action:** Develop a refugia map (NECSC) in collaboration with NALCC. If data are requested, there needs to be field verification.

### Data-sharing

**3-8 Action:** States with LCCs; NALCC and APPLCC should coordinate their approaches for data distribution.

ROCA tool has not been tested and reviewed by states.

Messaging is lacking on coordination with state-based systems.

**3-9 Action:** Expand the AppLCC Riparian Restoration Tool (cold water streams) eastward to encompass the North Atlantic LCC.

**3-10 Action:** Review similar tools to assess functionality and how they coordinate.

### NE Regional Field Guide

**3-11 Action:** Instead of coordinating individual action plans; show the consolidated efforts.

Karen and Elizabeth are compiling information from across the region to develop a regional species list, actions, and threats. This will be a report.

### Habitat Committee

Given the relevance of habitats for SGCN, suggested topics for the Habitat Committee include:

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- Beaver management
- Fire Learning Networks

Are there examples of successes?

- MD-removal of woody vegetation in wetlands. Consider working with developers and DOTs on other options within the area of construction or in other priority areas.
- VT-There is interest in providing the proper structures by the various DOTs. VT has developed a “habitat and highway” program—conduct field visits to demonstrate the wildlife benefits of a project. This program has been underway for 6-8 years.
- MA-Jointly funded position that helps address resource concerns in transportation projects.
- NY-Discussions with NY DOT have often been built on personal connections.

Keep in mind messaging on this; climate change is not a priority.

Is there an approach to coordinate multiple projects?

- MA-This has to be initiated a year or more in-advance.
- WV-Have reviewers (consultants) who can assess sites rather than waiting for F&W department staff to conduct reviews.
- CT-May need to have a mechanism for the process such as wetland mitigation. Depends on the process/association of the state with the USACOE.

### RCN Conservation Priorities

Jenny provided a historical perspective on the RCN program and included a review of recent guidance from Directors and 2017 RCN grants.

**Priority Outcomes** is the term used for RCN topics (“suggested” by Directors)

Highlights the high-priority regional threats (used IUCN categories)

- Purpose
- Threat
- Targets
- Actions
- Complementary Actions

“Priority Outcomes” include:

- Herptofauna
- Turtles
- Early successional habitats (includes work for pollinators)
- Stabilize & enhance RSGCN for stream habitats
- NEFWDTC-essential support and capacity to identify and update current conservation needs.
- Build resilience in coastal habitats

For the next generation of RCN, the focus will be on 2-3 topics/projects over a 5-year period. In year 3 or 4, the process of reviewing and developing RCN topics would begin again.

- It might be helpful if we identified how the “Priority Outcomes” may affect each state. The SWAP database will help.

- There will be a fact sheet that identifies the states benefitting and relevance to SWAPs.
- Projects must be supported by both the Fish and Wildlife Administrators.

### National SWAP Meeting

**3-12 Action:** Talk with states and other SWAP coordinators about shared interests. Ask this of members serving on the national SWAP coordinators meeting.

### Recommendations

- Three (3) days for a national meeting.
- Factor in regional break-out sessions.
- Perhaps the NE SWAP coordinators help facilitate sessions.
- NE states are invested in the regional process which can be implemented due to coordination by Karen & Elizabeth.
- This effort can be adapted by other regions.

### Suggested Topics

- *Best Practices for implementation*
  - Develop a website to access these practices.
  - Communications (tools); invite groups that specialize in this action. (example pictures of people's eyeballs)
- *Regional & International Collaboration* (collaborating across state or international boundaries)
  - Look to other states re: RCN topic (poster, special session).
- *Collaborating with Partners Providing Data and Analytical Support* (e.g., LCCs and Climate Science Centers (Techniques).
  - How to coordinate and share with other states? Need to tell them how it helps them in their state.
- *Tools to help us connect with....*
  - Benefits of ecosystems services; connect to human benefits.
  - What tools are available? This could relate to the AAF&W efforts.
  - Quantifying return on investment in the environment.
- *Effectiveness measures for SWG projects*
  - Must be able to demonstrate effectiveness over time. Try to de-couple this from TRACS; through research and other evaluative methods
- *Tracking Plans*
  - Find out more how states are tracking SWAP implementation by partners.
- *Communications*
  - What are the most effective words and photos, etc.?

## RESOURCES

### Attendees

#### ATTENDEES

#### NE SWAP COORDINATORS MEETING

21-23 MARCH, 2017, LORD JEFFREY INN, AMHERST, MA

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### RESOURCES

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## References

Morelli, Toni Lyn, Daly Christopher, Dobrowski Solomon Z., Dulen Deanna M., Ebersole Joseph L., Jackson Stephen T., Lundquist Jessica D., Millar Constance I., Maher Sean P., Monahan William B., et al. , [Managing Climate Change Refugia for Climate Adaptation](#), PLOS ONE, Aug-10-2016, Volume 11, Issue 8, p.e0159909, (2016)

Staudinger, Michelle D., Morelli Toni Lyn, and Bryan Alexander M. [Integrating Climate Change into Northeast and Midwest State Wildlife Action Plans](#). DOI Northeast Climate Science Center Report, Amherst, MA, p.201 pp, (2015)

## USFWS Blog: Something for everyone in State Wildlife Action Plans



### [Something for everyone in State Wildlife Action Plans](#)

by [bridgetmacdonald](#)

In a special presentation for FWS staff, State Wildlife Action Plan coordinators from across the Northeast region showcased updated plans that outline strategies for protecting the most vulnerable species.

[bridgetmacdonald](#) | March 30, 2017 at 11:17 am | Categories: [Blog entries](#) |

URL: <http://wp.me/p33RFt-69M>