

Working Towards
NJ's Vulnerability Assessment of
Habitats and Wildlife
to the
Impacts of Climate Change



Where to start?

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Getting started

➔ Partnership with National Wildlife Federation and the Conserve Wildlife Foundation of NJ:

- Coordinated workgroup
 - 13 non-NJ DEP (10 non-profits)
 - 6 NJ DEP (3 DFW, 1 NHP, 2 Office of Climate and Energy)
- Purpose
 - Help refine our needs
 - Develop *Request for Proposal*



➔ Step 1: Developing an RFP

- Discussed potential end product(s)
 - Assessment of ? to climate change
 - Management guidance per the assessment's findings
- Habitat vs. Wildlife



- Habitat selection – 2nd workgroup



➔ Step 1: Developing an RFP (cont'd)

- Wildlife – subset of focal species from the habitats under review

- SGCN (pref. umbrella species)
- Cultural concern

- Management-dependent species

- Recreational opportunities
- Economic impacts (fish spawning areas)

- Common species that may be at risk due to climate change

- Immigrants

- How might we accommodate incoming species



Photo: Eric Sambol



➔ Step 1: Developing an RFP (cont'd)

- Outlined a basic approach
 - Assess 15 habitats (& focal wildlife)
 - Transparency
 - Approximate timeline, 1 yr.
 - Multi-source information & use of expert panel
 - Agreed upon range of climate change and emissions scenarios and time periods (2020, 2050, 2080)
 - Exposure, sensitivity and adaptive capacities (resilience) of habitats to CC
 - Indirect effects to wildlife
- Out to bid...



Step 2: Selecting habitats for the assessment

- Which habitat classification system should we use for this process?
- Contacted a number of northeast states; responses from VA, NY, & MA = The Nature Conservancy's NE Habitat Classification System.
- NE Habitat Classification System (NatureServe): 47 non-urban habitats in NJ



Step 2: Selecting habitats for the assessment (cont'd)

- Recruited a 2nd workgroup
 - Target inter-agency, university personnel and partners around the state with habitat and ecological communities understanding
- Workgroup
 - Not all participants active ea session
 - 6 non-NJ DEP (4 non-profits, 1 academia, 1 pvt consultant)
 - 11 NJ DEP (9 DFW, 1 NHP, 1 Forester)



Step 2: Selecting habitats for the assessment (cont'd)

- Workgroup – 3 “sessions”:
 - Introductory phone conference with homework assignment,
 - Compilation email of homework results, and
 - In-person meeting to discuss & refine remaining selection
- Refined the potential list of 47 habitats down to 22
 - Workgroup agreed that DEP would further refine the list to identify the 15 habitats for the assessment
 - Distribution
 - Acreage
 - Connectivity



Formation Class	Habitat System
Forest and Woodland*	Northeastern Interior Dry-Mesic Oak Forest*
Forest and Woodland*	Northern Atlantic Coastal Plain Maritime Forest*
Forest and Woodland*	Appalachian (Hemlock)-Northern Hardwood Forest*
Forest and Woodland*	Northern Atlantic Coastal Plain Basin Peat Swamp*
Forest and Woodland*	Northern Atlantic Coastal Plain Basin Swamp and Wet Hardwood Forest*
Forest and Woodland*	Northern Atlantic Coastal Plain Tidal Swamp*
<u>Shrubland</u> and Grassland*	Northern Atlantic Coastal Plain Dune and Maritime Grassland*
<u>Shrubland</u> and Grassland*	Northern Atlantic Coastal Plain Sandy Beach*
<u>Shrubland</u> and Grassland*	Laurentian-Acadian Freshwater Marsh and Laurentian-Acadian Wet Meadow-Shrub Swamp*
<u>Shrubland</u> and Grassland*	Northern Atlantic Coastal Plain Fresh and <u>Oligohaline</u> Tidal Marsh*
<u>Shrubland</u> and Grassland*	Northern Atlantic Coastal Plain Tidal Salt Marsh*
Aquatic (in part)*	North Atlantic Intertidal Mudflat and North Atlantic Tidal Sand Flat*
With the assistance of Rutgers University, the DFW will select three (3) aquatic habitats from the following three (3) categories:	
Aquatic	Brook Trout Streams ¹
Aquatic	Acidic waters of the Pinelands ¹
Aquatic	Trout Maintenance Streams ¹



➔ Where are we?

- Habitat Selection
 - Working w/ Rutgers University to refine the aquatics
- Vulnerability Assessment
 - Held “kick-off” meeting with w/ Rutgers University
 - RU is recruiting an expert panel
 - DFW is gathering additional GIS data layers, developing a list of wildlife for review
- Wildlife Action Plan
 - Results of assessment will be considered by Stakeholders and DEP to revise the State Wildlife Action Plan.



Questions?

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