

How Species and Habitats Can Help Your Town Adapt to Climate Change



**And many
conservation
partners!**

**Emily Preston
Wildlife Biologist**



New Hampshire Fish and Game Department



ECOSYSTEMS AND WILDLIFE

Climate Change Adaptation Plan

Amendment to the
**New Hampshire
Wildlife Action
Plan**



October 2013

Funded by State Wildlife Grants
and
Conservation License Plate Funds



Major Coastal Issues

- Inundation
- Erosion of beaches, dunes and salt marshes by storm surge.
- Changes in species due to temperature increases and salinity changes.
- Damage to habitat from hardening of shores.



Major Terrestrial and Aquatic Issues

- Individual species will shift ranges
- Flooding
- Hydrological changes
- Temperature
- Increases in invasive species



Strategies

1. Conserve Areas for Habitat Expansion and/or Connectivity
2. Habitat Restoration and Management
3. Restore Watershed Connectivity
4. Protect Riparian and Shoreland Buffers
5. Invasive Species Plan
6. Comprehensive Planning
7. Stormwater Policy and Flood Response
8. Revise Water Withdrawal Policies
9. State Energy Policy



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Strategy Categories

10. Funding

11. Modeling, Research and
Monitoring

12. Technical Assistance and
Outreach

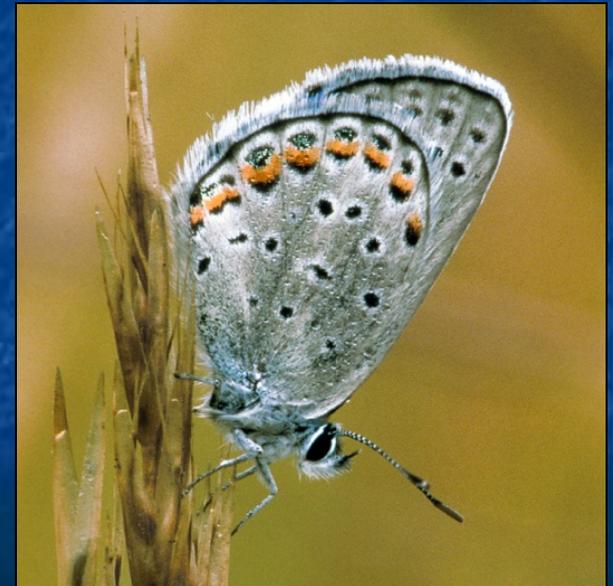


Goal:

Intact natural ecosystems!

Not necessarily those we have now – they will probably look different.

- Intact ecosystems will help mitigate effects of climate change.
- How can we help and how can we avoid making things worse?



How Can Communities Help Themselves and Wildlife?

- PLANNING!!!
- Flood Control
- Reduce Storm Damage
- Infrastructure Protection
- Drinking Water Protection
- Keep cool!
- Keep Warm - Alternative energy sources



Surry, May 2005



Manchester May 2006



Flood Control

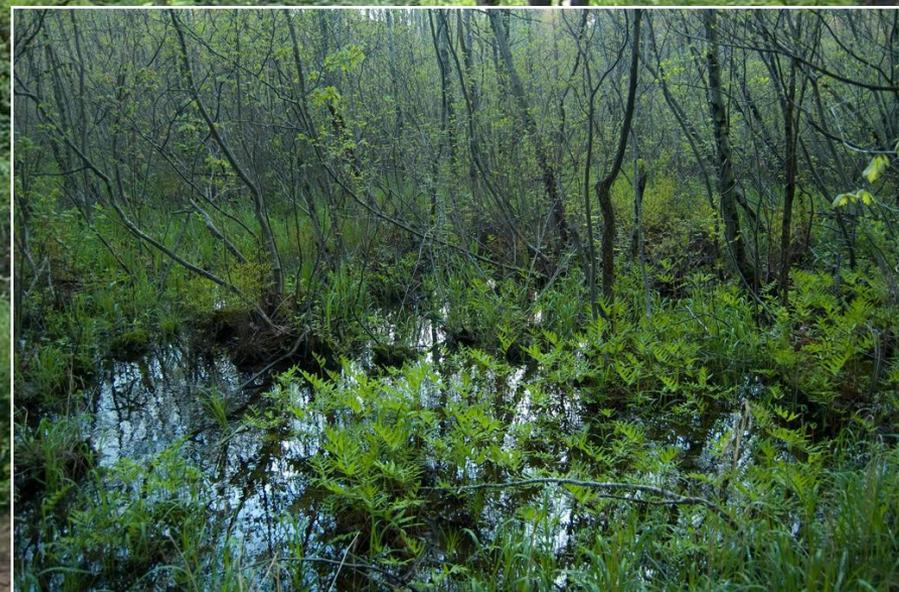
Hurricane Irene Aug. 2011
Rutland, Vt.



Lebanon, July 2013



Floodplains



Culverts



Culvert assessment
and upgrade
planning

Stormwater Management



Pervious

vs.

Impervious

Coastal Storm Surge



North Hampton
March 2013



Hurricane Sandy
Hampton Beach
October 31, 2012



Seacoast Online

Storm Damage Repair



Opportunity for habitat restoration?
How can we make it work for all of us?



AP



AP

Drinking Water



Private and
public wells

Commercial water withdrawals



Keep Cool!

Promote Shade Trees

Diverse tree species
are better for wildlife.



Biofuels



Town Documents

Include:

- Wildlife Habitat
- Flood Control: culverts and floodplains
- Storm Protection
- Drinking Water

INTO



- Master Plan
- Hazard Mitigation Plan
- Capital Improvement Plan
- Transportation Plan
- Town Ordinances
- Climate Adaptation Plan

Prevent additional harm!

Citizen Science: National Phenology Network

Phenology is the study of seasonal biological events observed in plants, animals and microbes.

Examples:

- First flowering date
- Timing of animal emergences
- Dates when babies are observed or fledge
- Arrival dates of migratory animals

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