
The Long-View: Climate, Species, and Habitats

December 2012

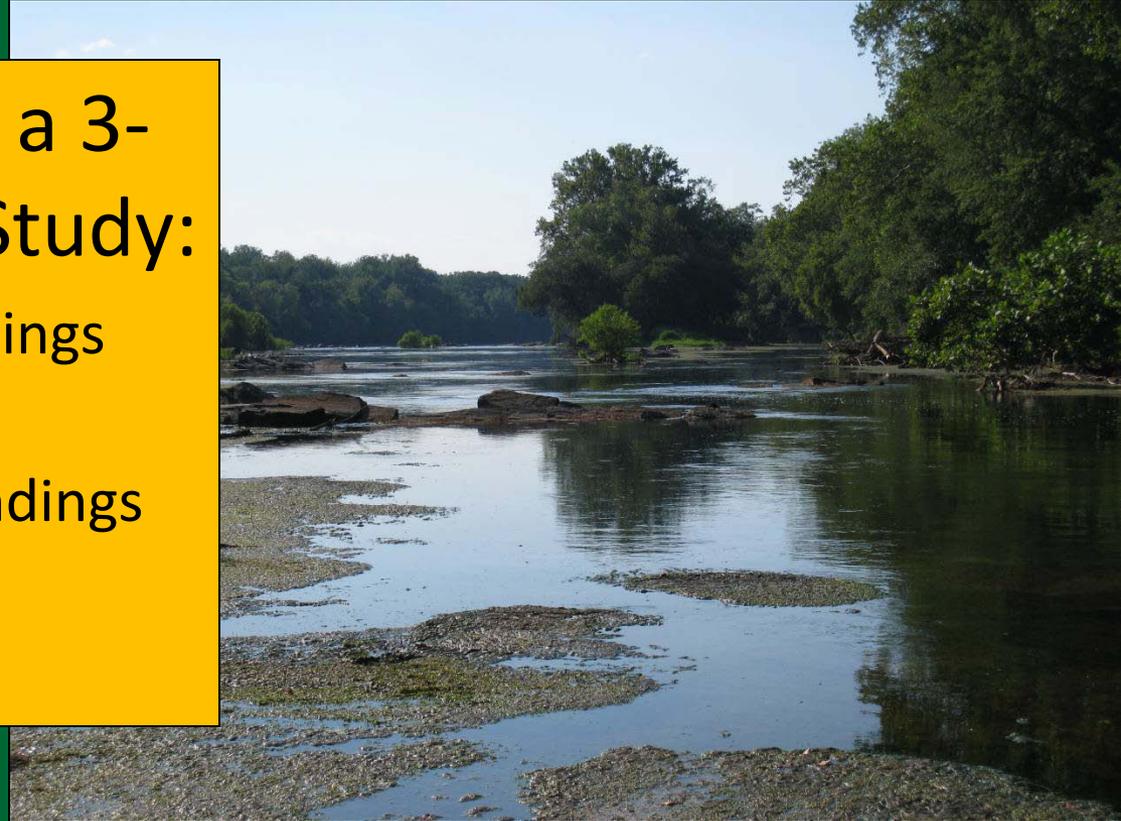
Chris Burkett
Wildlife Action Plan Coordinator
Virginia Department of Game and Inland Fisheries



Why am I here?

Process of Concluding a 3-Year Climate Change Study:

- Help make people aware things we've been doing.
- Describe and summarize findings
- Talk about some next steps



2009 Climate Change Strategy

■ Climate Adaptation Strategy

- DGIF, NWF, VCN
- Multi-stakeholder effort
- Completed Oct. 2009
- Designed to be place to start

One of the Most Important Needs:

Develop a better understanding of how climate change might impact Virginia's wildlife and habitats.

Virginia's Strategy

for Safeguarding Species of Greatest
Conservation Need from the Effects of

Climate Change



Prepared by:

National Wildlife Federation
Virginia Department of Game and Inland Fisheries
Virginia Conservation Network

Virginia's Effort

Partner With NWF and CMI for a 2-Step Project

Determine:

- the changes predicted for Virginia's climate

and

- what those changes might mean for Virginia's wildlife and habitats

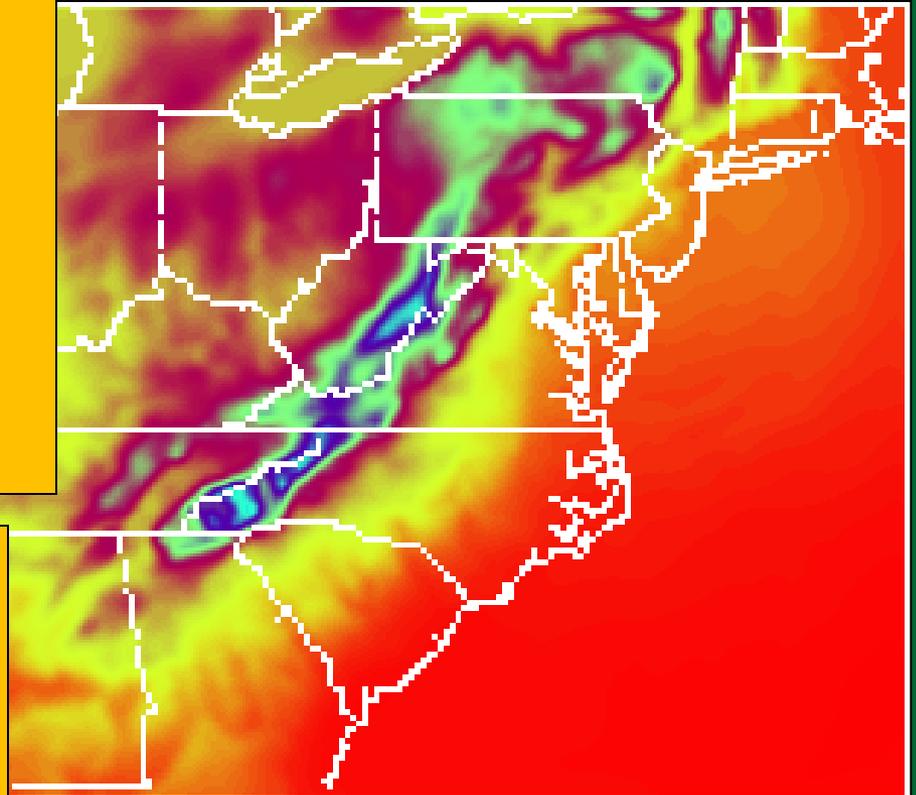


Phase 1 - Modeling

- Virginia- Specific Climate Model
 - 10km X 10km
 - Reports at 2060 and 2095
 - 2 GHG scenarios (B1 and A1FI)
 - Virginia Tech and Kutztown University

Developed or Calculated data on 30+ different climate variables dealing with:

- Temperature
- Precipitation
- Winds
- Vegetative Responses
- Soils



Phase 2 -Threats Assessment

- 20 Species
 - Plants or Animals
 - Must be associated with the Action Plan (SGCN, habitat component, or threat)
 - Predictions based on current distributions and climatic tolerances



Forest Composition



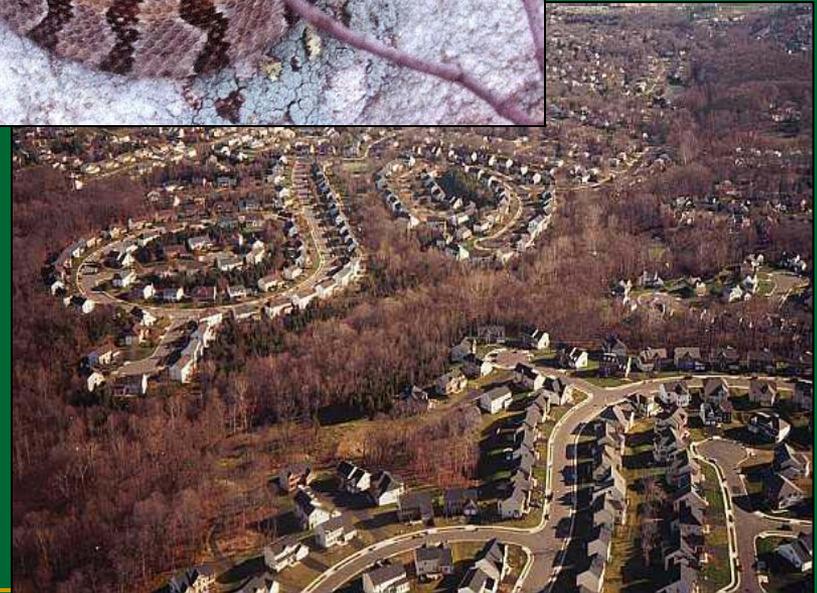
- Potential for changing forest composition.
 - Climate could be more favorable for some species (So. Red Oak and Bald Cypress)
 - Less favorable for others (Black Oak, White Oak, No. Red Oak)
 - Concerns about rate of transition.
 - Potential secondary impacts - habitat

Secondary Impacts

- Many species aren't likely to be directly impacted
 - Likely secondary impacts – Timber Rattlesnake
 - Secondary Impacts



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Possible Extirpations

- Possible extirpations
 - Brook Trout
 - Loss of cold water habitats



Invasive Species

- Invasive Species – gypsy moth
- likely to do well under predicted conditions
- could impact others species –
 - oaks, adapting
 - Black bears responding to oaks



Important Ideas from Stakeholders

Management Opportunities



Virginia Has:

- Wildlife Management Community
- Landuse Planning Community
- Forestry Community
- NGO Community

Healthy Populations in Healthy Habitats
Will Have the Best Opportunity to Adapt.

New Questions & Opportunities



photo by Susan Watson

Working To Determine...

- ❑ What to do with the data?
 - ❑ Archive
 - ❑ Summarize
 - ❑ Availability
- ❑ Next Research Steps?
 - ❑ Conserved lands
- ❑ Collaborations?

Thank You For Coming!



Chris Burkett
Wildlife Action Plan Coordinator
Virginia Department of Game and Inland
Fisheries
4010 West Broad Street
Richmond, VA 23230
804-367-9717
Chris.Burkett@dgif.virginia.gov

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