



North Carolina Wildlife Resources Commission

Workshop Summary Report

Climate Change and the NC Wildlife Action Plan

September 1-2, 2010

Workshop Overview. Approximately 140 individuals attended the September 1-2, 2010 Climate Change and Wildlife Action Plan Workshop hosted by the North Carolina Wildlife Federation on behalf of the North Carolina Wildlife Resources Commission (NCWRC) and held at the Raleigh Convention Center. Production of the workshop was a cooperative effort between the Defenders of Wildlife, National Wildlife Federation, North Carolina Wildlife Federation, the North Carolina Wildlife Action Plan Workshop Steering Committee, and the NCWRC. Additional support was provided by Progress Energy and the Renaissance Computing Institute (RENCI).

The workshop was designed as the first step in developing a process for integrating climate change information into the North Carolina Wildlife Action Plan (WAP). Stakeholders were introduced to current knowledge about climate change impacts on North Carolina's wildlife resources through a presentation by Defenders of Wildlife during the plenary session. The presentation highlighted their report, *Understanding the impacts of climate change on fish and wildlife in North Carolina*, which reviews the state of climate change science; discusses anticipated impacts to wildlife species and their habitats; and presents planning options for conservation of sensitive species and habitats.

The Workshop goals outlined in the agenda were:

- to engage Stakeholders on the issue of potential climate change impacts to wildlife;
- to collect Stakeholder input on revision of the WAP; and
- to garner support for using the Plan as a framework for addressing climate change as it relates to wildlife.

The following summary captures Stakeholder input collected during breakout sessions.

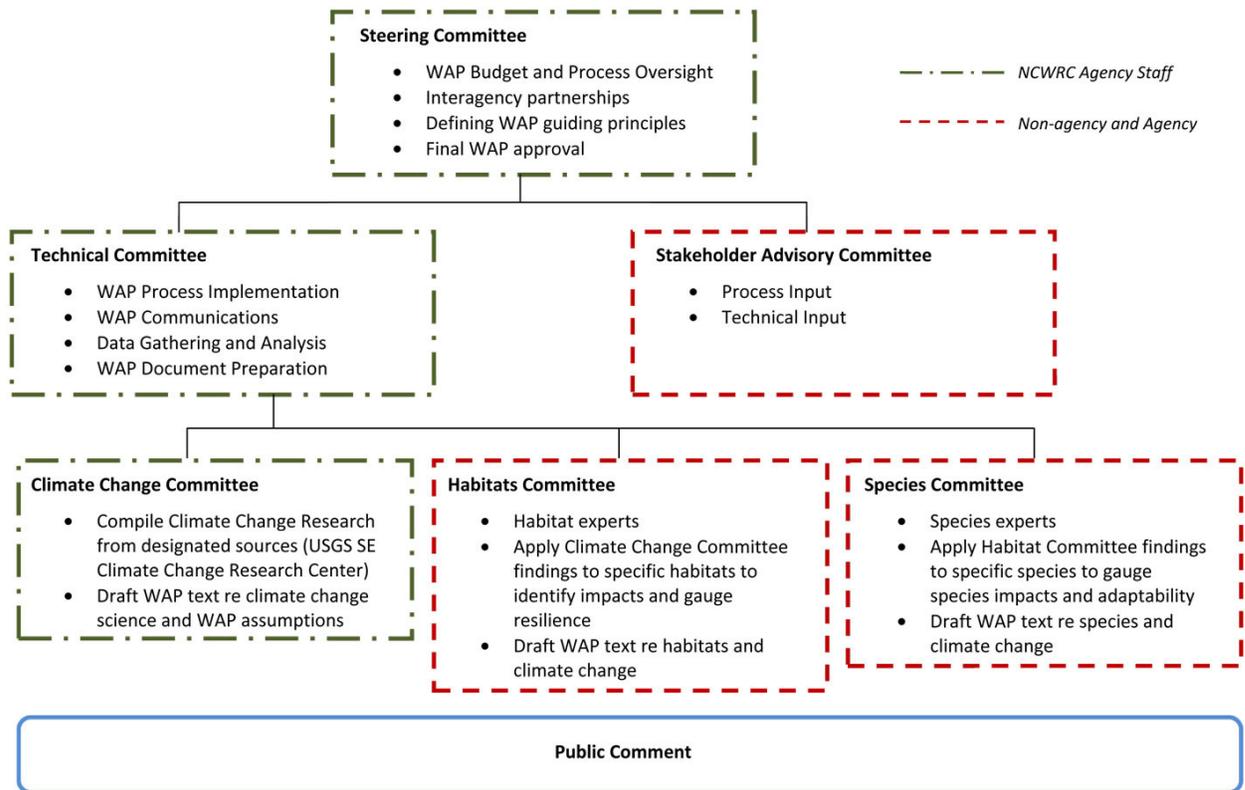
Stakeholder Input – Climate Change: Stakeholders identified the top three climate change impacts on wildlife as sea level rise; habitat changes (including species range and habitat biodiversity); and changes in weather patterns such as temperature and precipitation.

Stakeholder Input – Organizational Structure. Stakeholders provided feedback on a flow chart diagram that outlined the relationship between several leadership, Technical, and Stakeholder committees (diagram below). The general consensus indicated that the proposed organizational structure, with a few modifications, should work well to accomplish revision of the Plan. Specific recommendations for the structure and responsibilities of particular committees are highlighted in the following sections.



Integrating Climate Change into the NC Wildlife Action Plan/ September 1-2, 2010

Organizational Structure: Proposed Climate Change Integration into the NC WAP



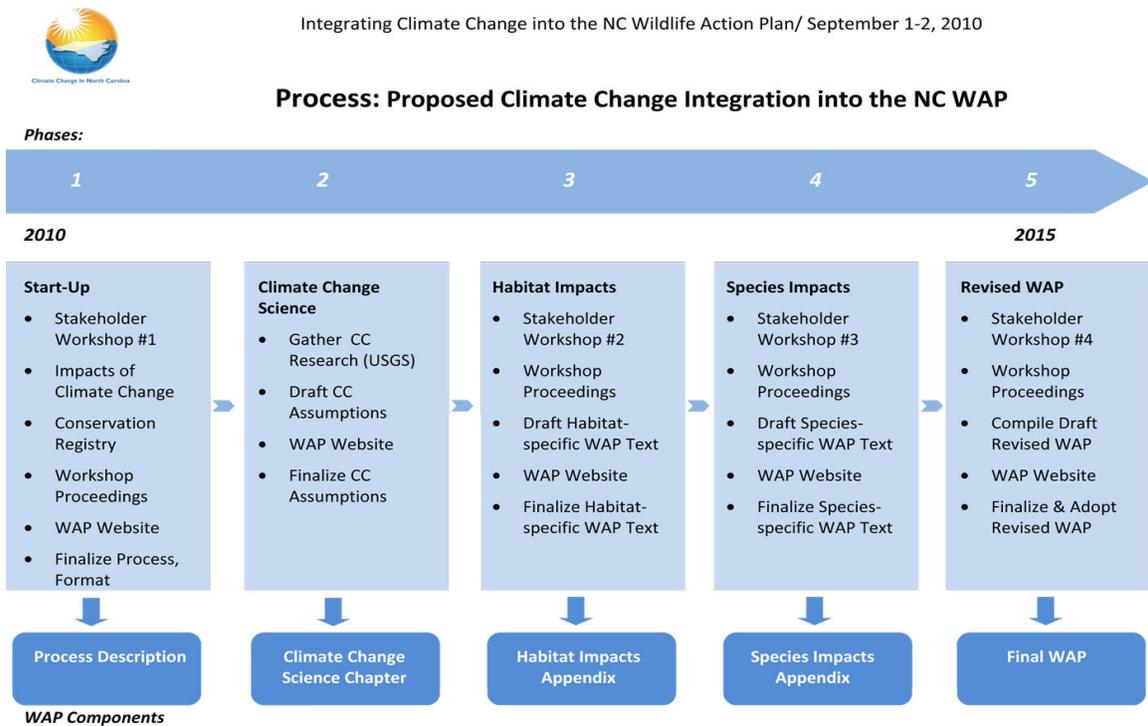
A Steering Committee that includes non-NCWRC staff was recommended by a majority of breakout session groups. This committee would be responsible for defining the guiding principles for WAP revision and maintaining interagency partnerships.

Stakeholder Committee participation needs to represent interests beyond wildlife by integrating representation from the new Landscape Conservation Cooperatives (LCCs), soil and water districts, sportsman groups, Council of Government organizations, public, conservation organizations, estuarine and marine fisheries, utilities, developers, education and outreach, socio-economic, agriculture, tourism, interstate climate change planning, and parties that may have dissenting views about climate change. Public participation needs to be better defined with a method for capturing public input. Use of non-traditional tools, such as Wikispaces and video conferencing, are encouraged to facilitate wider participation by Stakeholders and the public.

A Climate Change Committee responsible for coordination with other state agencies working toward integrating climate change measures in North Carolina was recommended. The committee should include non-NCWRC members with technical expertise in climate change science.

Technical and Stakeholder Advisory Committee communication paths need to be defined; in general, communication between all committees represented on the diagram needs to be defined. It was recommended to revise the flow chart diagram to illustrate the review process' organizational structure.

Stakeholder Input – Revision Process. After reviewing a diagram (below) depicting a proposed revision process, Stakeholders indicated the process should proceed in multiple phases. The phases include initiation of the process; cooperative development of the technical content with incorporation of climate change; prioritization of conservation measures and ongoing research needs; and solicitation for review of the completed draft document. The revision process should be iterative instead of linear, with climate change, habitat, and species information being developed in parallel rather than sequentially. There was agreement that the revision process could be completed well before 2015.



The Steering and Technical Committees should be responsible for initiating the revision process. This initial phase must define how the remaining committees will be established. Early public input could be solicited by surveying groups and individuals who use the WAP or have implemented conservation goals outlined in the document.

Stakeholder and Technical Committees must have direct communication during development of the technical content. Climate change should be incorporated concurrent with development of

the technical content and will require close coordination between the Climate Change, Technical, and Habitat and Species Committees; additional consultation with outside experts should be incorporated as needed.

Climate change science should be introduced in the WAP via a chapter specific to climate change, explaining what climate change is, and summarizing the predicted changes to climate and general implications for wildlife. Strategies and recommendations for incorporating specific climate change information include the following:

- Integrate into conservation measure strategies and priorities throughout the WAP.
- Focus on addressing climate change impacts and incorporate threat assessment information developed by Natural Heritage Program.
- Conduct vulnerability assessments, especially for sensitive species and habitats and implications of management priorities.
- Priorities should focus on habitats, species, and management actions following an assessment of climate change impacts.
- Develop best practices, establishing compensatory mechanisms, and identification of potential policy changes.
- Use spatial analysis and interactive mapping to represent prioritized conservation measures.
- Develop mapping data and share it with Stakeholders.
- Appendix includes list of threats by rank (including climate change threats), a glossary of climate change terms, and a synopsis of climate change information found in the WAP.

Stakeholder Input – Access. The WAP should be an interactive document available as a searchable database on the Internet. Specific recommendations include the following:

- GIS tools should be part of the online content.
- Include an overview of changes between the original and revised documents; a stand alone Executive Summary; and a “Report Card” summarizing achievements.
- Workshops, social media, webinars, and public access broadcast media should be used as methods to introduce the new document and explain how it should be used.

Synthesis. The information in this summary has been presented “as reported” from the workshop summary prepared by RENCI and without analysis of the content. The goal of this summary is to capture the recommendations provided by Stakeholders during the workshop. The Stakeholder Steering Committee will review and analyze this information and use it to inform the next steps needed to facilitate incorporation of climate change impacts during the WAP revision process.