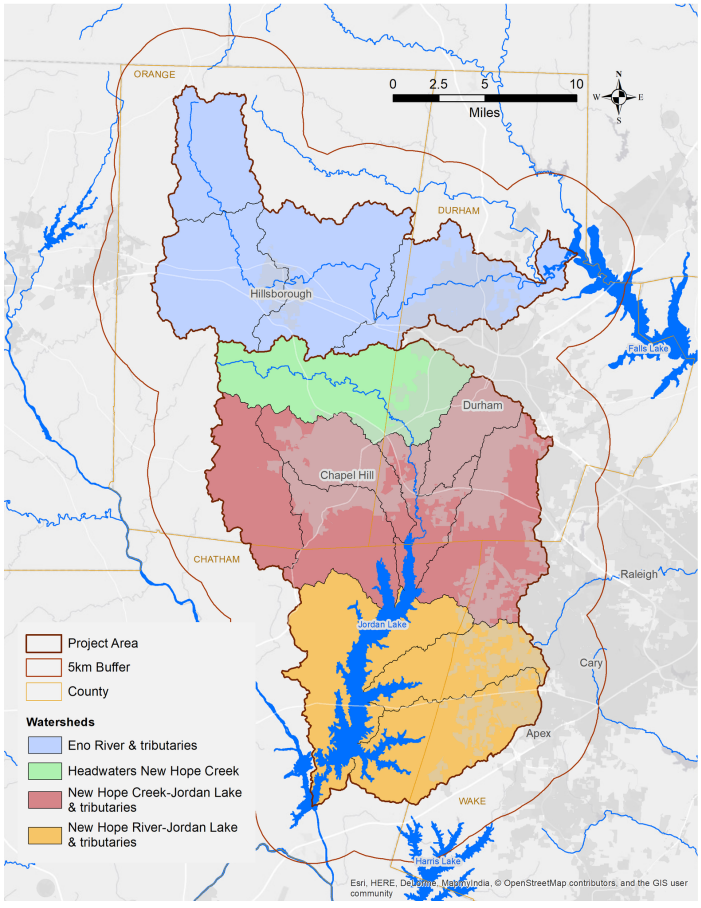
A Partners for Green Growth project funded by the North Carolina Wildlife Resources Commission and Orange County, NC, and administered by the North Carolina Botanical Garden Foundation, Inc.

A LANDSCAPE PLAN FOR WILDLIFE HABITAT CONNECTIVITY IN THE ENO RIVER AND NEW HOPE CREEK WATERSHEDS, NORTH CAROLINA

A recent collaboration between local governments, conservation groups, universities, and ecologists identifies priority areas where land protection is needed to ensure habitat connectivity for local wildlife. Movement of animals within and between habitats is essential for their survival – for finding food, shelter, water, and mates, as well as maintaining genetic diversity and adapting to climate change.



The project partners collaborated across Orange, Chatham, Durham, and Wake counties to identify priority corridors that connect a network of critical wildlife habitats within and between the Eno River and New Hope Creek watersheds. The project uses existing conservation data and a geographic information systems approach to identify habitat and corridors that are essential for landscape connectivity. The results can be used to shape an overall landscape conservation strategy that fosters coordination on shared conservation goals based on ecological systems rather than jurisdictional boundaries. Results are relevant for land use decision-making, transportation improvement planning, and wildlife conservation.

READ THE FULL REPORT

https://ncbg.unc.edu/eno-new-hope-plan/

WHY PLAN FOR LANDSCAPE CONSERVATION?

Habitat connectivity is key

The loss of biological diversity in North Carolina—across all plant and animal groups—is primarily caused by habitat loss and fragmentation. As human population density increases, existing conservation lands are becoming disconnected from other natural habitats by roads, development, and other causes of habitat fragmentation. In the face of increasing threats, including climate change, wildlife species need protected corridors between habitat areas to survive and thrive. Connecting wildlife habitat also secures benefits for water quality, native plants, the local economy (including working farms and forests), and public health.

Planning for and implementing landscape conservation is the only way to address these issues. Without a plan for landscape conservation, the existing patchwork of conservation lands will become further isolated, and wildlife populations will decline. A proactive approach to coordinate conservation action across communities is needed.

This collaborative project identifies a network of priority habitats and corridors that, if protected, restored, or reconnected (through improved wildlife crossing structures), can support wildlife populations and other ecosystem services. The wildlife species considered in this project—such as the Eastern box turtle, Four-toed salamander, and Bobcat—are identified as species in need of conservation by the NC Wildlife Resources Commission and the NC Natural Heritage Program.

This project also reviewed local government policies, ordinances, and conservation priorities to generate recommendations for landscape conservation planning and implementation.

Bobcat

Eastern box turtle

Four-toed salamander

Photo Credit Melissa McGaw

For more information on this project including how to support these efforts, please visit https://ncbg.unc.edu/eno-new-hope-plan