

DURHAM · CHAPEL HILL · CARRBORO

**DCHC**

METROPOLITAN PLANNING ORGANIZATION

PLANNING TOMORROW'S TRANSPORTATION

# **DCHC MPO**

# **Wildlife Crossing Planning**

**DCHC MPO Board**

**May 28, 2024**

**David Miller, DCHC MPO**

**Ramona McGee, Southern Environmental Law Center**

**Ron Sutherland, Wildlands Network**

# Presentation Overview

**1- Background on wildlife crossings**

**2 – Local ongoing wildlife crossing planning efforts (Triangle Connectivity Collaborative and Wildlands Network)**

**3 - DCHC MPO's wildlife crossing planning process**

**4 – Discussion and questions**

# Background on Wildlife Crossings

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# Background on Wildlife Crossings

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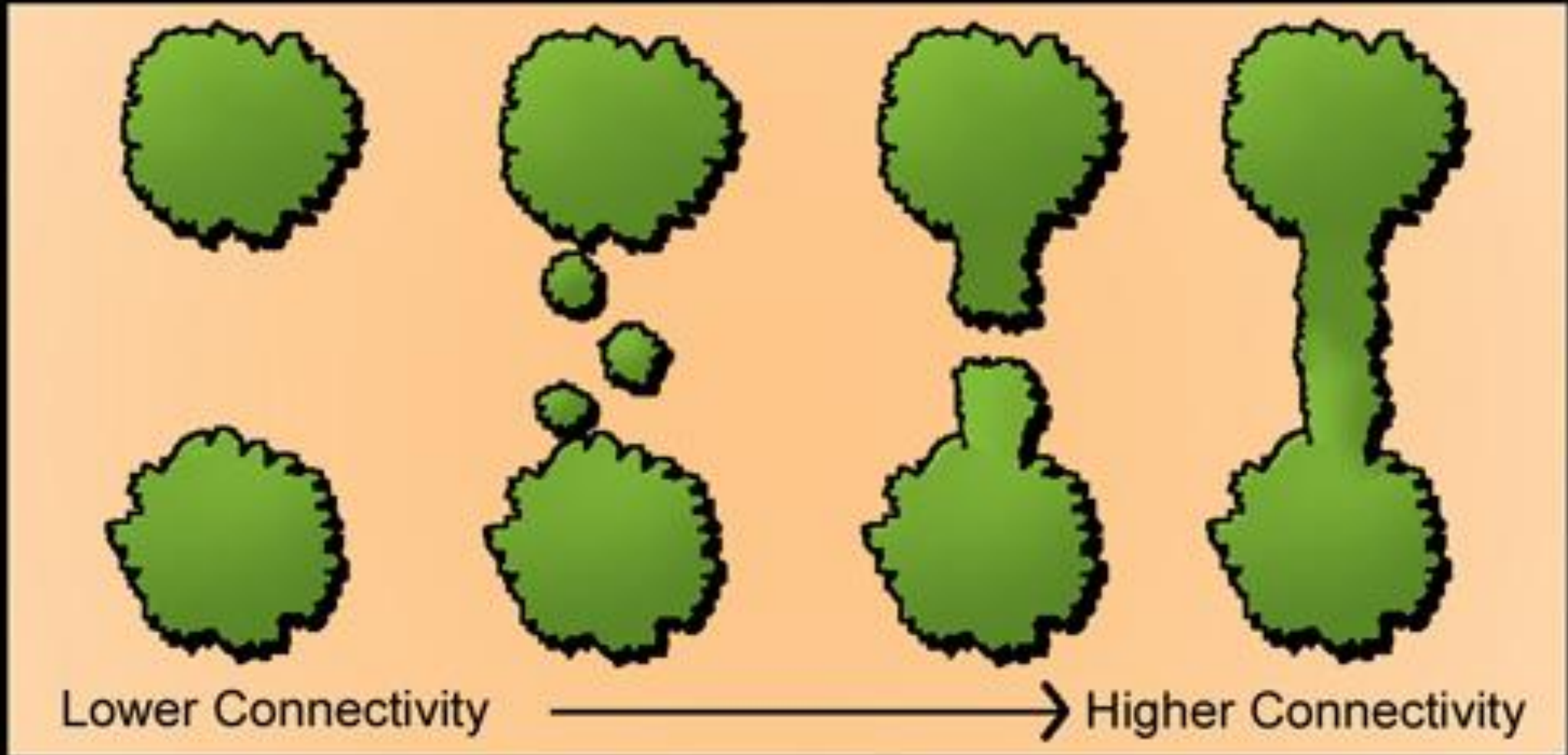
Ron Sutherland, Wildlands Network

# Road Ecology 101

Ron Sutherland **Wildlands**  
NETWORK 



# Habitat Connectivity









# Wildlife Corridor



# Wildlife Road Crossing



Roads are  
key barriers





SUR 20km

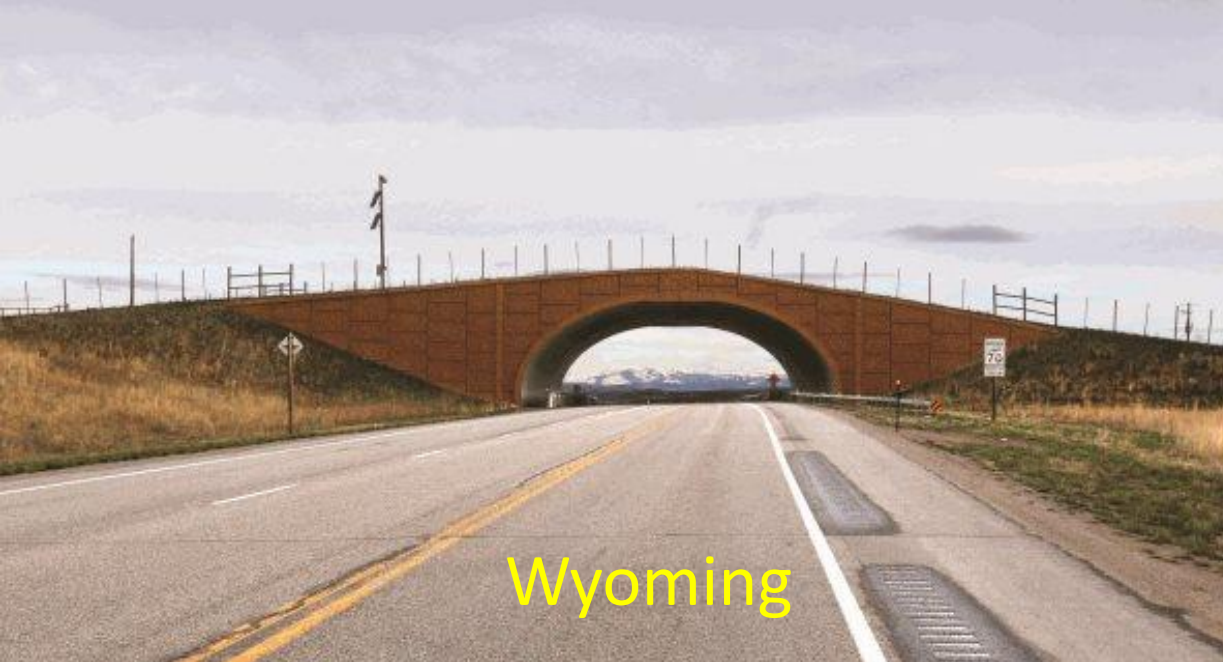


Banff National Park, Canada



>80% reduction in wildlife crashes via 48 crossing structures + fencing





Wyoming



Nevada



Utah



Colorado





Hitchcock Center

New wildlife  
tunnel  
for small  
animals in  
western NC



# Modifications to normal structures



# Local Ongoing Wildlife Crossing Planning Efforts

**1 – Background on wildlife crossings**

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(Wildlands Network and Triangle Connectivity Collaborative)**

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# Local Ongoing Wildlife Crossing Planning Efforts

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## Wildlands Network

Ron Sutherland, Wildlands Network



Wildlands  
Network Road  
Ecology Work

# Continental Conservation

Scientific Foundations of Regional Reserve Networks



Edited by  
Michael E. Soulé  
John Terborgh  
The Wildlands Project



reagan 2019



# Prioritizing Wildlife Road Crossings in North Carolina

To Reconnect Wildlife Habitat and Improve Road Safety

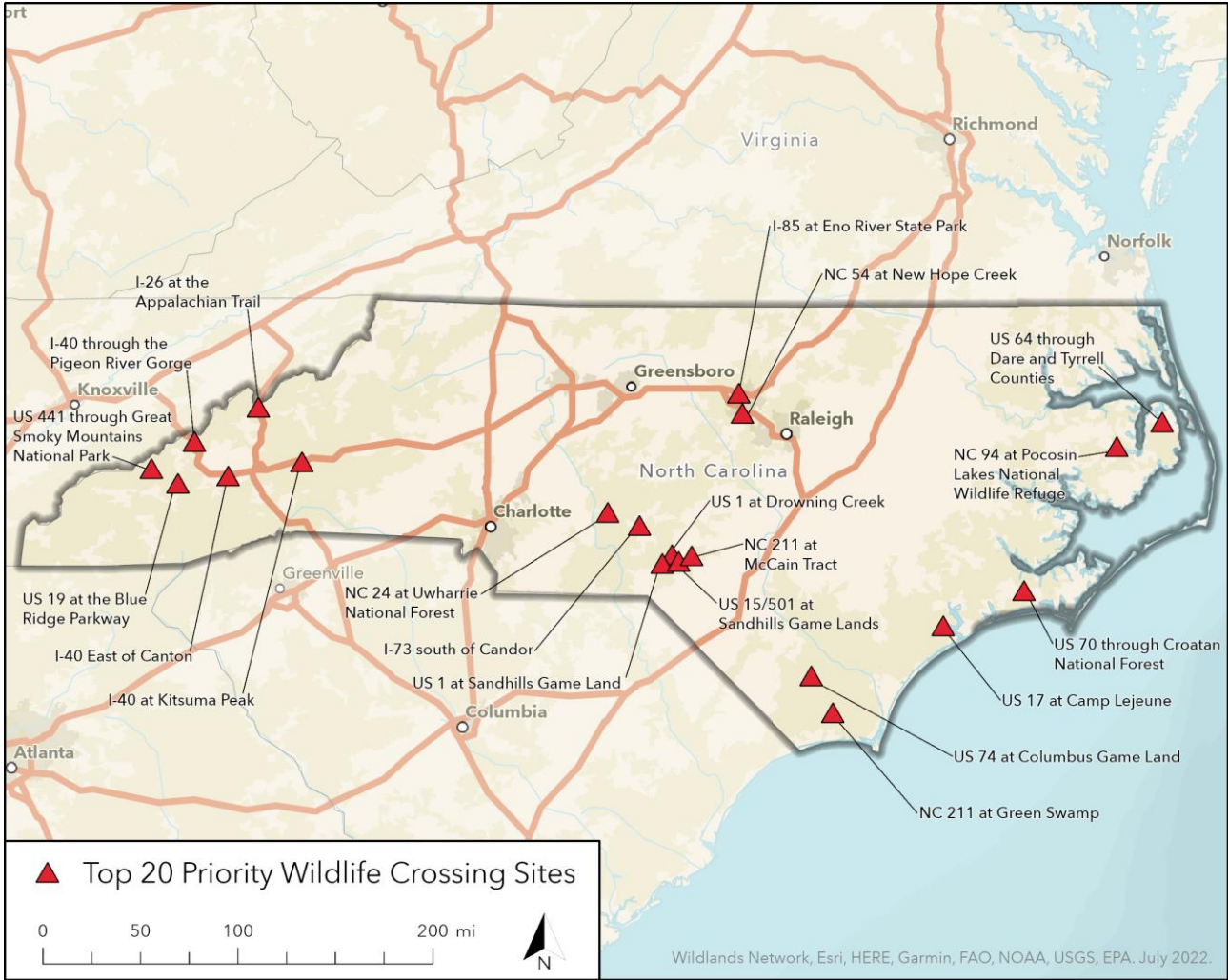
September 2022



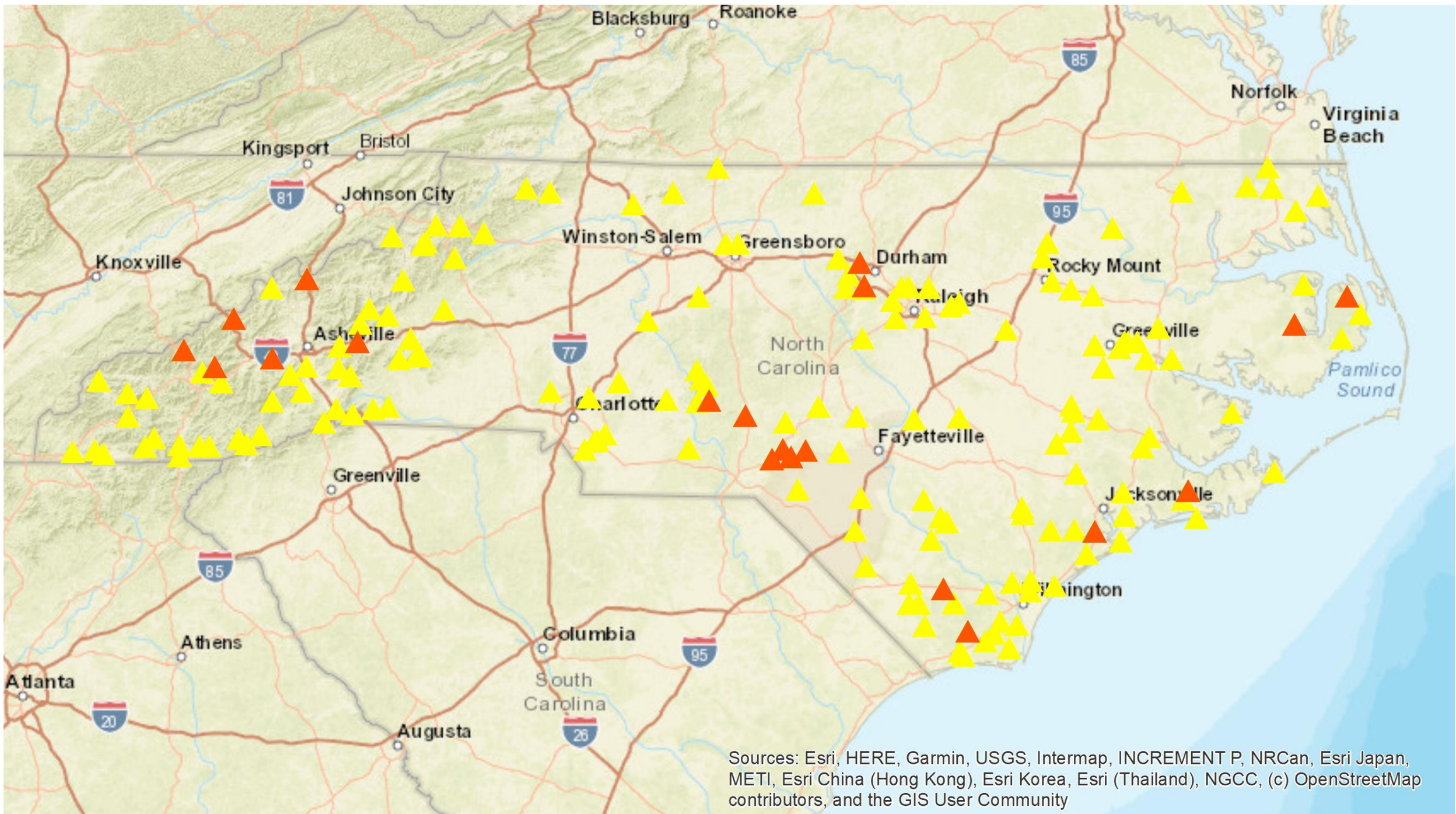
Bear running down road near Alligator River National Wildlife Refuge. Photo: Houston Bumgarner

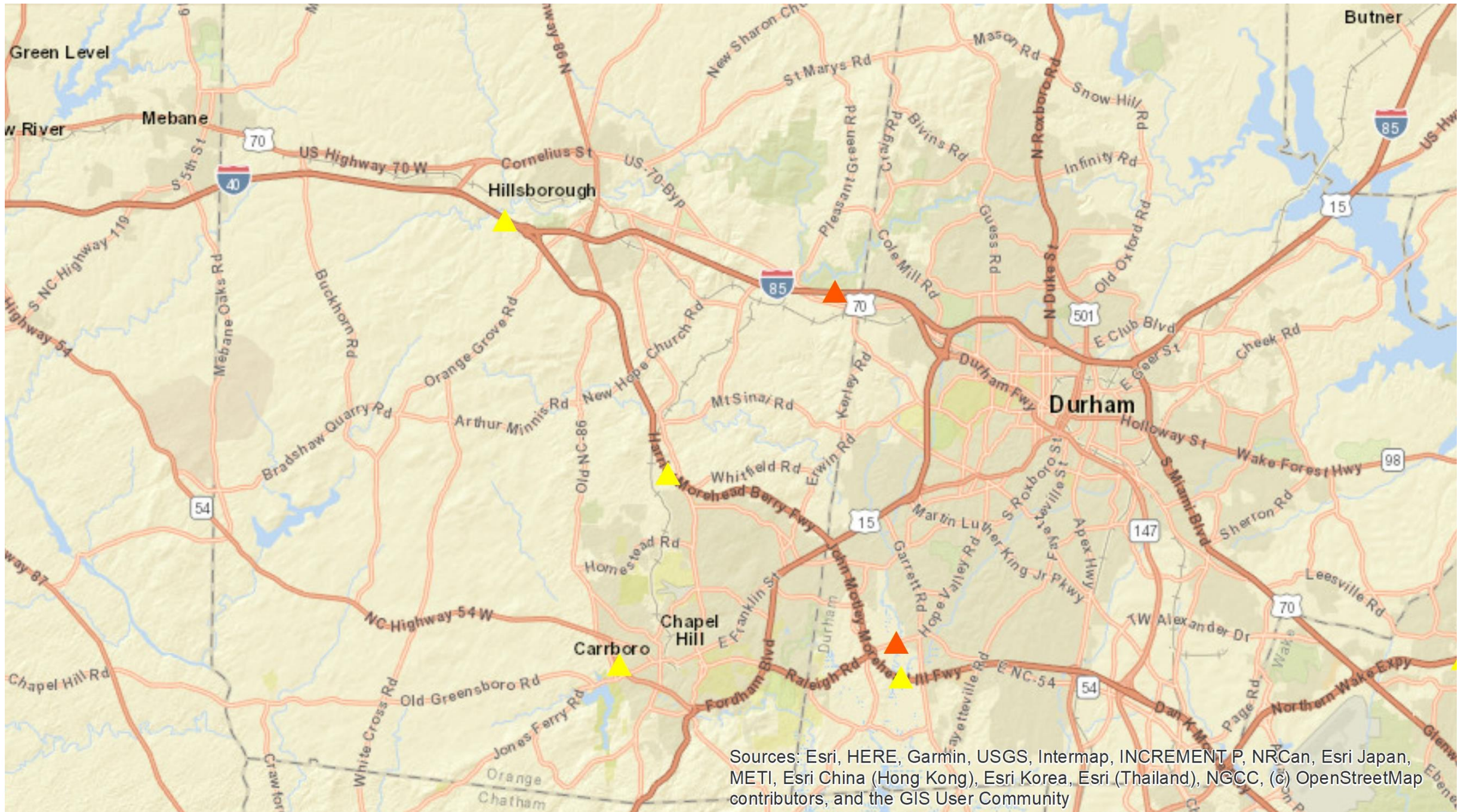
Dr. Ron Sutherland - Chief Scientist  
Alex Vanko - GIS Specialist  
Nikki Robinson - North Carolina Project Manager

# Read the report at [wildlandsnetwork.org](http://wildlandsnetwork.org)







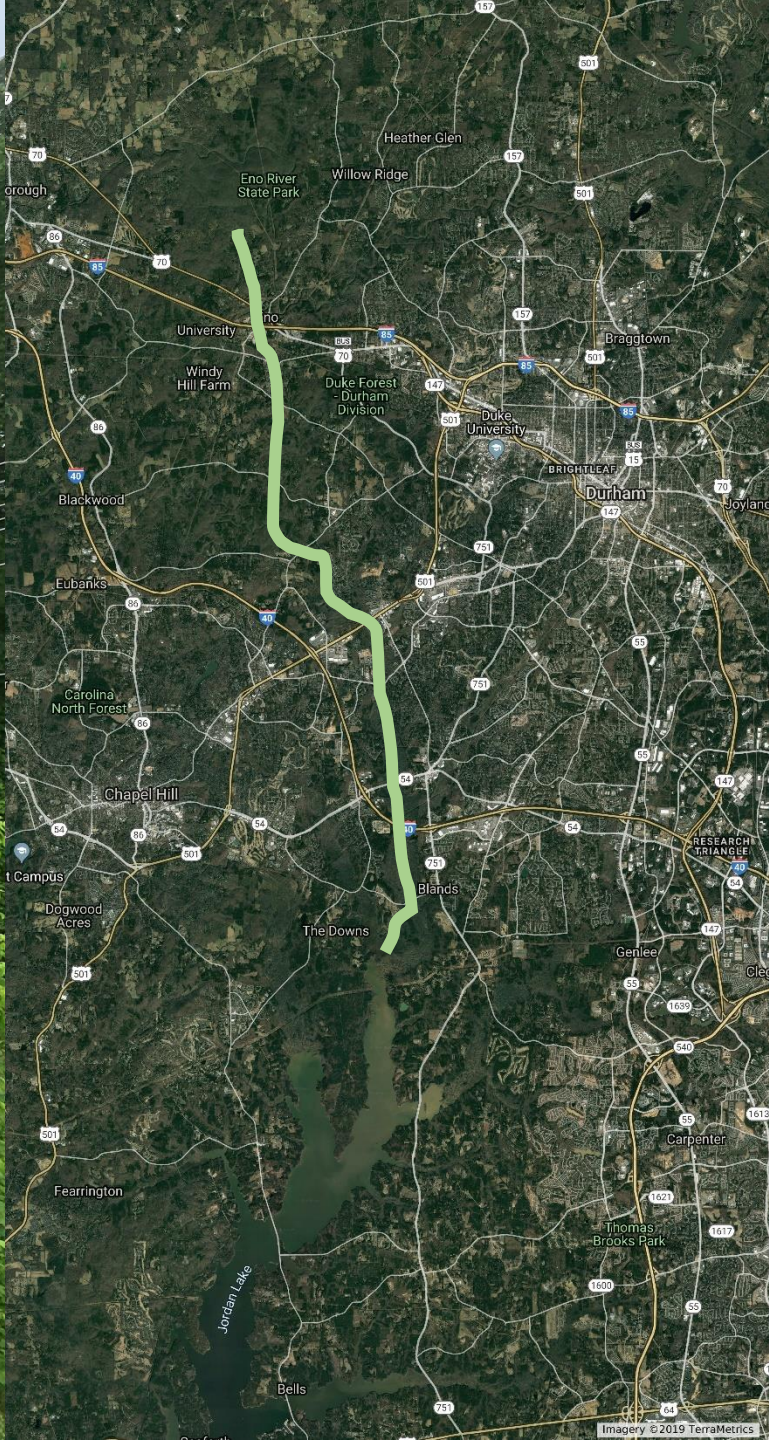


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

# Evaluating the use of New Hope Creek bridges by wildlife

Ron Sutherland





15-501

NC 54











NC 54



2019-07-16 11:23:08 PM

89°F ●

M 1 ⚡



DB9



# Connectivity Policy





[ron@wildlandsnetwork.org](mailto:ron@wildlandsnetwork.org)

# Local Ongoing Wildlife Crossing Planning Efforts

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## Triangle Connectivity Collaborative Transportation Workgroup

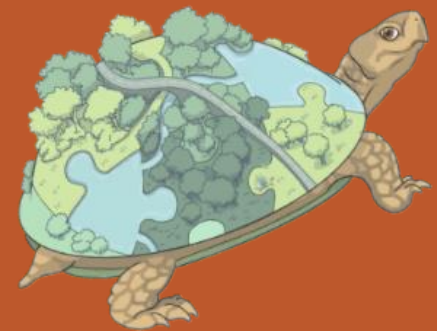
Ramona McGee, Southern Environmental Law Center

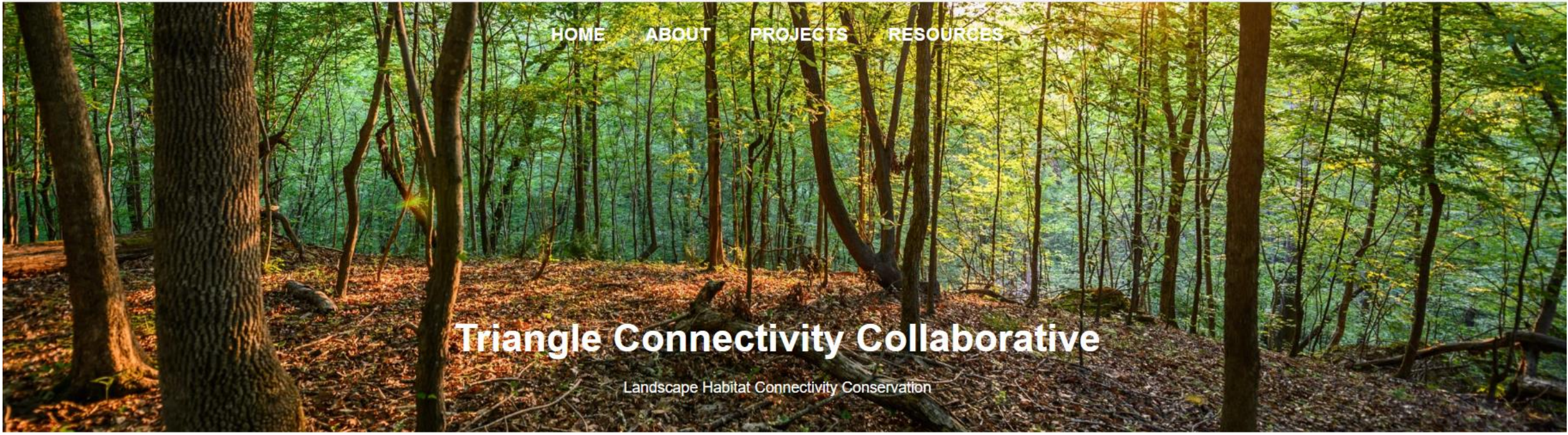


# Triangle Connectivity Collaborative: Habitat Network Analysis & Transportation Planning

Ramona McGee

Southern Environmental Law  
Center





# Triangle Connectivity Collaborative

Landscape Habitat Connectivity Conservation



NORTH CAROLINA  
BOTANICAL  
GARDEN  
FOUNDATION, INC.



DUKE FOREST  
Teaching & Research Laboratory  
ESTABLISHED 1931



## Our Mission



*To conserve and restore landscape habitat connectivity that ensures long term protection and resilience of biodiversity and natural resources.*





**2015**

Initial meetings with  
Eno-New Hope  
stakeholders



**2017**

Grant from  
NCWRC and  
Orange County  
to create a  
landscape  
conservation plan



**2019**

Release of  
Eno-New Hope  
Landscape Plan

**2020**

Catalyst Fund Grant to hire a  
coordinator and create a  
Strategic Action Plan



**2022**

Completion and  
release of Strategic  
Action Plan





# Eno-New Hope Connectivity Conservation **Strategic Action Plan**

- PLAN WAS FUNDED BY THE NETWORK FOR LANDSCAPE CONSERVATION
- INVOLVED OVER 60 STAKEHOLDERS
- COMPLETED IN 2022

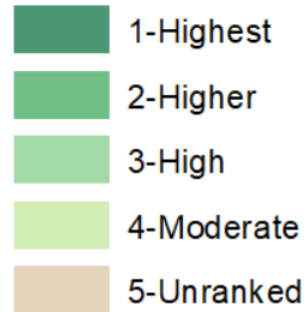


# WHAT DOES THE DATA MEAN?

## Legend

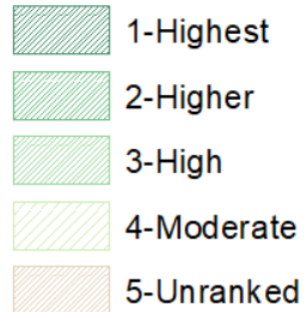
### Habitat Patches

#### Connectivity Priority



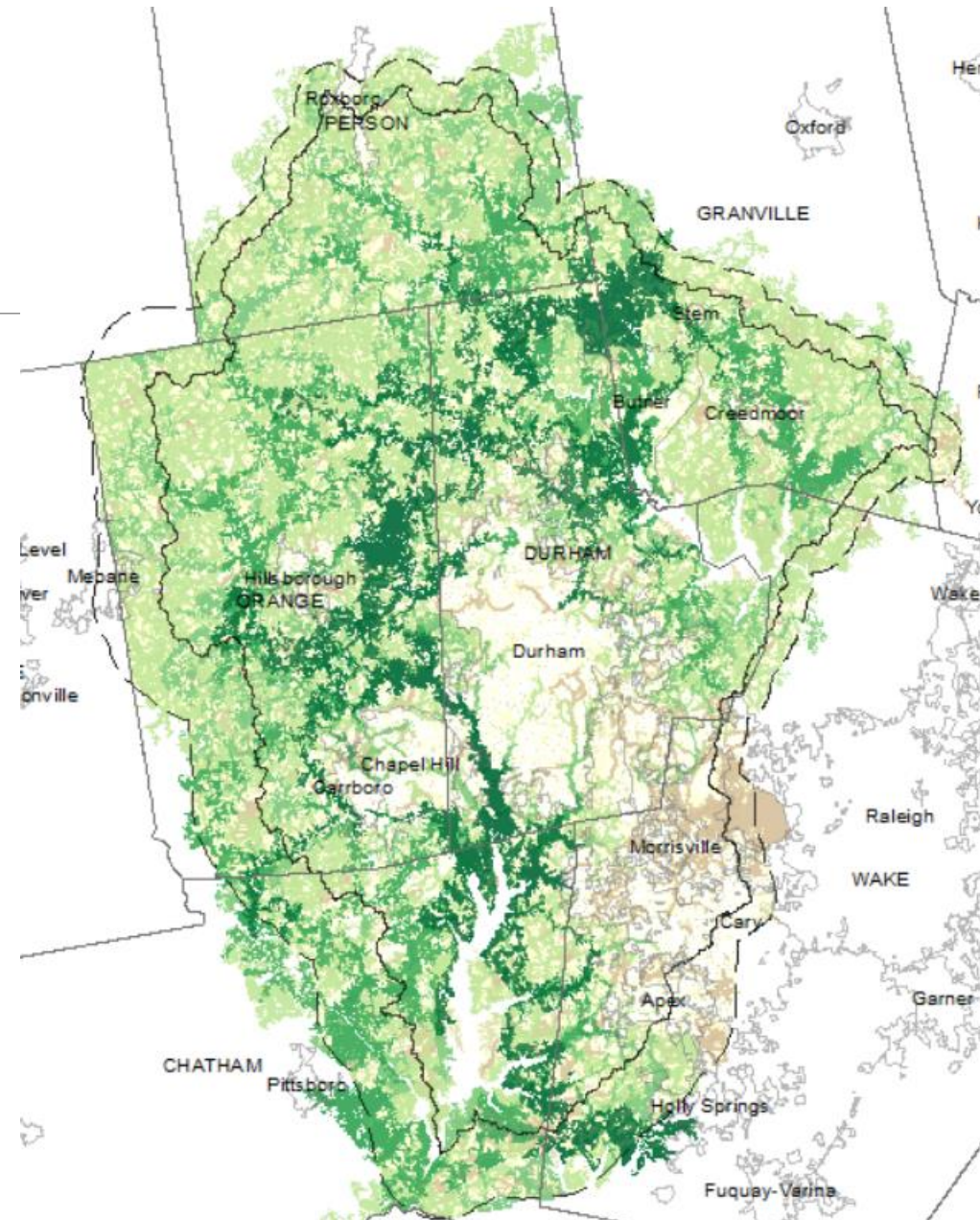
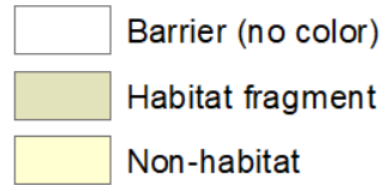
### Corridors

#### Connectivity Priority



### Background

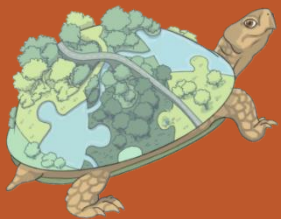
#### Type



[www.connectedconservationnc.org](http://www.connectedconservationnc.org)



Kathy Lee



# DCHC MPO's Wildlife Crossing Planning Process

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# NC and DCHC MPO Wildlife-Vehicle Crash Data

NCDOT's 2020-2022 Statewide Animal-Related Crashes report, shows that:

- 59,644 wildlife-vehicle crashes occurred
- 13 people were killed
- 2,679 people were injured
- \$183.3 million in property damage caused

## DCHC MPO Entire County Data (from NCDOT 2020-2022 report):

County	County Ranking (Crashes)	Total Crashes	Total Fatalities	Total Injuries	Damage
Chatham	21	936	0	31	\$ 2,756,642
Orange	30	801	0	48	\$ 2,557,150
Durham	35	638	0	38	\$ 2,032,220
<b>Total</b>		<b>2,375</b>	<b>0</b>	<b>117</b>	<b>\$ 7,346,012</b>

1. <https://www.ncdot.gov/initiatives-policies/safety/driving-safety/Documents/animal-crash-report.pdf>

# Planning Process and Plan Elements

1. **Identify wildlife crossing sites** in the Durham urbanized area.
2. **Visit, evaluate and develop recommendations** for existing bridge and culvert infrastructure at identified wildlife crossing sites.
3. **Coordinate with key stakeholders** (i.e., NCDOT, member jurisdictions, local land trusts, conservation groups) as sites are identified and recommendations developed.
4. **Administer a public engagement process** to gather feedback on recommended projects.
5. **Develop a funding strategy and identify funding sources** to help deliver wildlife crossing recommendations.
6. **Adopt the recommendations in local and state transportation planning (SPOT, STIP, CTP) and MPO planning (Wildlife Crossing Plan, CTP and MTP)** so that all new road and bridge projects that cross wildlife corridors (or core areas) are informed by the recommendations from the start.
7. **MPO Board and NCDOT BOT adopt relevant projects into MTP and CTP.** Local councils and county board of commissioners adopt relevant changes to local ordinances.

# On-site Assessments

- Determine type of structure (bridge, culvert, etc.)
- Photographs
- Width and vertical clearance of structure
- Visible daylight through the structure
- Waterways / flooding potential
- Evidence of wildlife (tracks, roadkill)
- Existing wildlife crossing solutions (dry paths, fencing, raised platforms, etc.)
- Existing barriers for wildlife passage (rocks, debris, water, road/structure noise, etc.)
- Wildlife crossing recommendations



*Old Chapel Hill Road at New Hope Creek in Durham County, DCHC MPO*



*Minnesota DOT, P. Cramer*

# Anticipated Timeline

The existing and ongoing wildlife crossing planning by the Triangle Connectivity Collaborative Transportation Workgroup and Wildlands Network has positioned DCHC MPO to develop the plan in one year.

## Key dates:

- **MPO Planning:** January 2024 – December 2024
  - Site identification, visits and evaluations; data analysis; development of recommendations; public engagement; CTT guidance; review by MPO TC and Board
- **Request to Release Draft for Public Comment:** TC – September 10; Board – September 24
- **Public Engagement and Comment Period for Draft Plan:** September 24 to October 21
- **Plan Adoption**
  - **TC considers recommending the MPO Board adopt the plan:** November 5
  - **MPO Board considers adoption of the plan:** November 19
- **Incorporate Recommendations into CTP update:** December



# Anticipated Public Engagement Timeline

## September 24 to October 21, 2024

### MPO Board Meeting and Release for 21-Day Public Comment Period (September 24)

- Advertisement via social media, email blast via Constant Contact, DCHC MPO website, press release to be shared by MPO members, and newspapers ads (*Triangle Tribune*, *Que Pasa*)
- Survey and feedback form to accompany draft plan

### Public Engagement Opportunities

- **October 15** – Virtual information session (Zoom platform for accessibility)
- **October 16** – Public open house in Durham County (location TBD)
- **October 17** – Public open house in Orange County (location TBD)
- **October 21** – Public open house in Chatham County (location TBD)

# Discussion & Questions

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# Discussion & Questions

## **Project Contacts:**

David Miller – [david.miller@dchcmpo.org](mailto:david.miller@dchcmpo.org)

Madeline Galliano – [madeline.galliano@dchcmpo.org](mailto:madeline.galliano@dchcmpo.org)

## **Project Webpage:**

[www.dchcmpo.org/what-we-do/programs-plans/special-studies/wildlife-crossing-planning-study](http://www.dchcmpo.org/what-we-do/programs-plans/special-studies/wildlife-crossing-planning-study)