

GREEN GROWTH TOOLBOX

Nature-Friendly Planning



Jeff Marcus

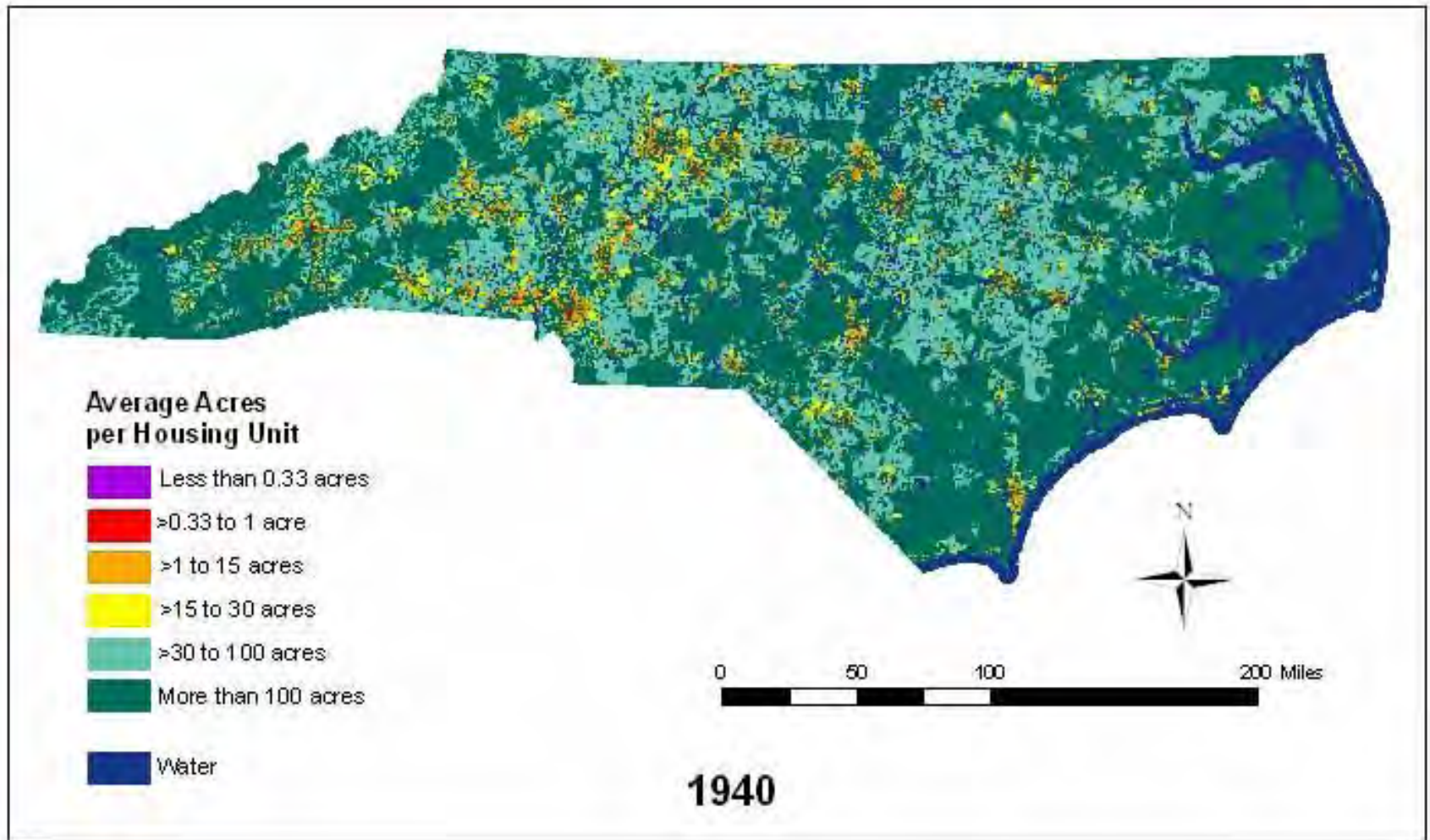
North Carolina Wildlife Resources
Commission



Growth in North Carolina

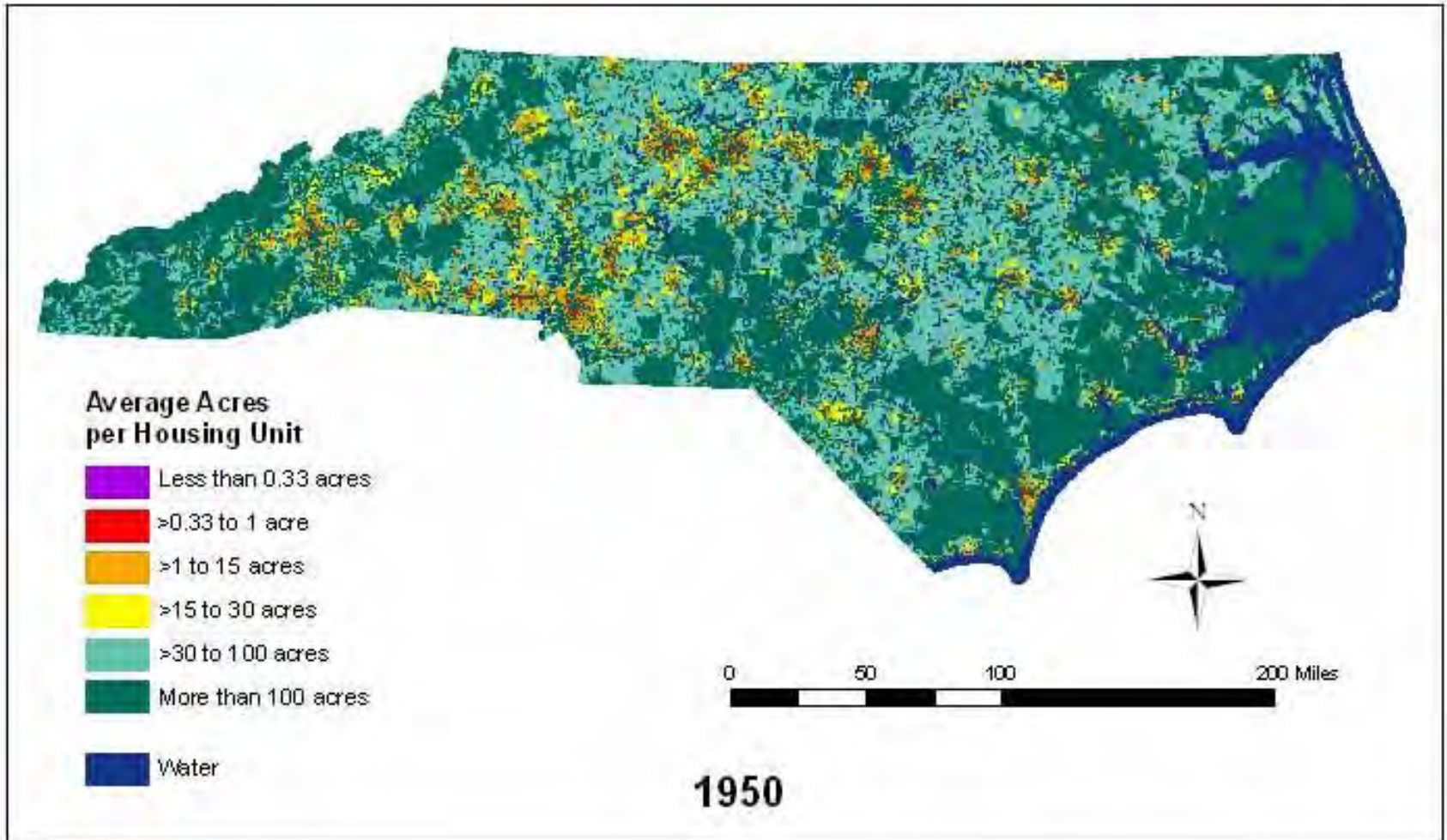
- NC is the 5th fastest growing state
- 3 million people will move to NC over the next 20 years
- 2 acres of land are developed for each new resident
- More than 125,000 acres of forests and fields are developed each year
- NC is home to more “sprawl centers” than any other state

Housing Density



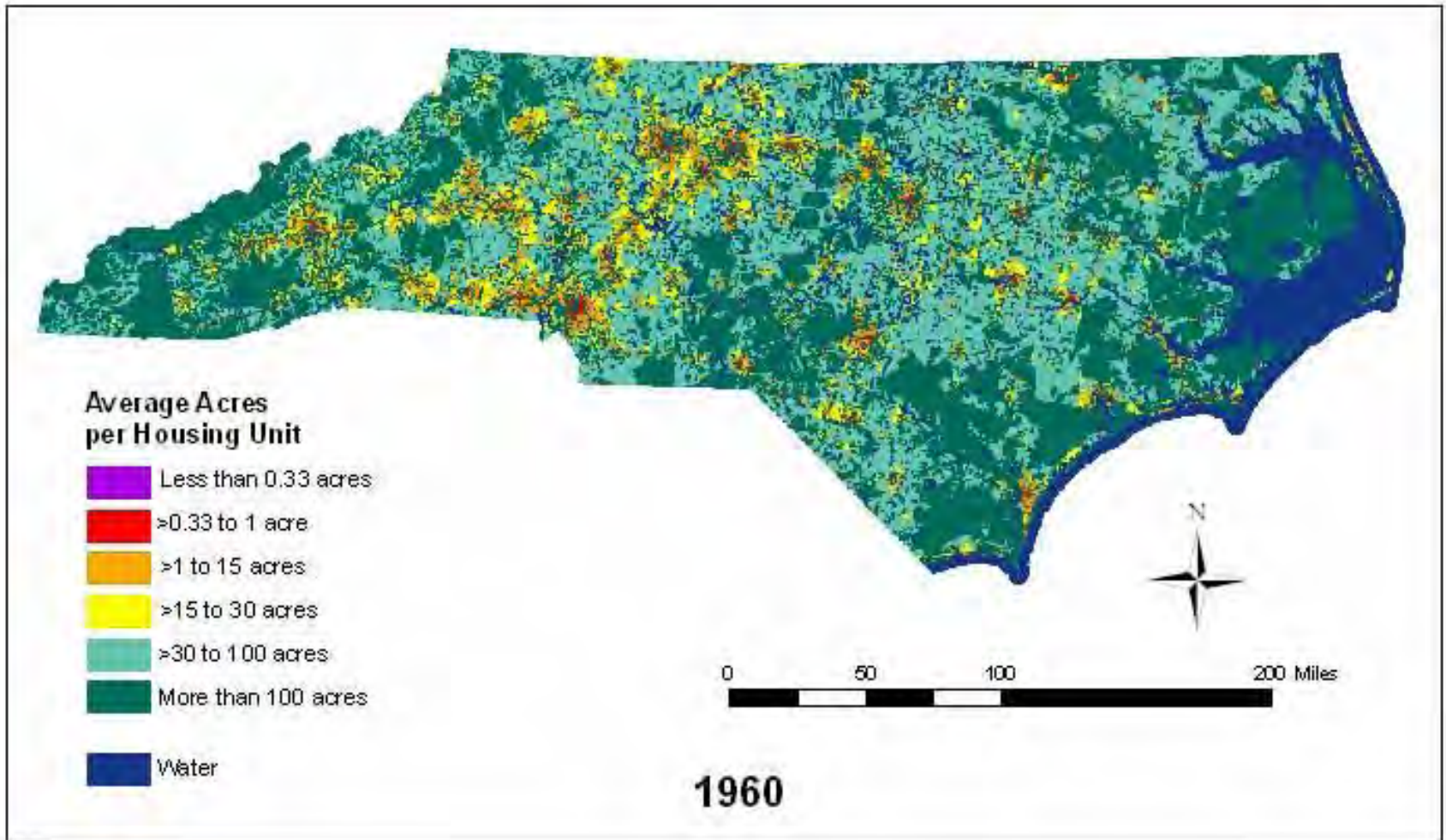
Conservation Trust for North Carolina (2007) *From Rural to Suburban In Less Than A Century: Changes in Housing Density in North Carolina from 1940-2030*

Housing Density



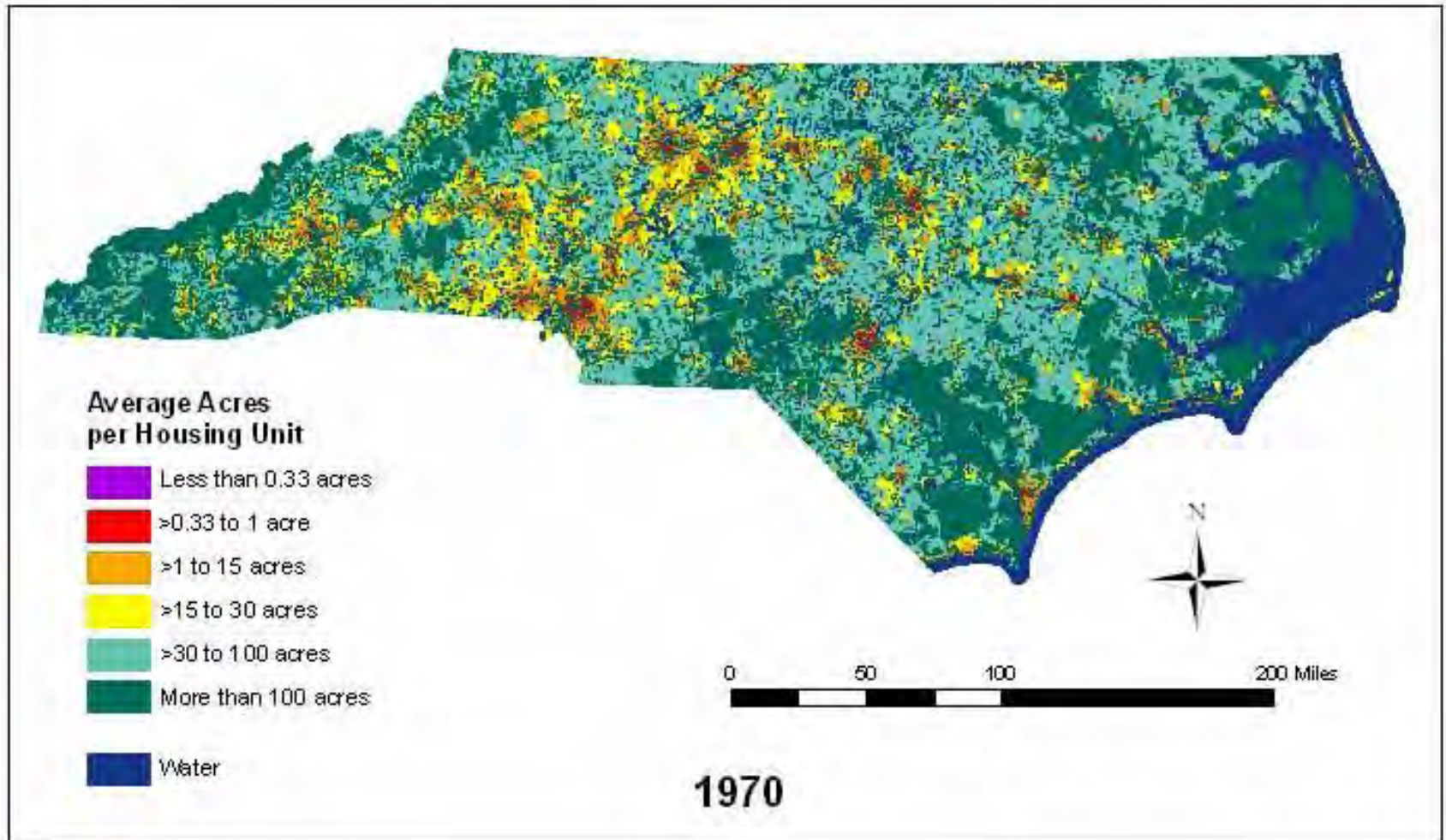
Conservation Trust for North Carolina (2007) *From Rural to Suburban In Less Than A Century: Changes in Housing Density in North Carolina from 1940-2030*

Housing Density



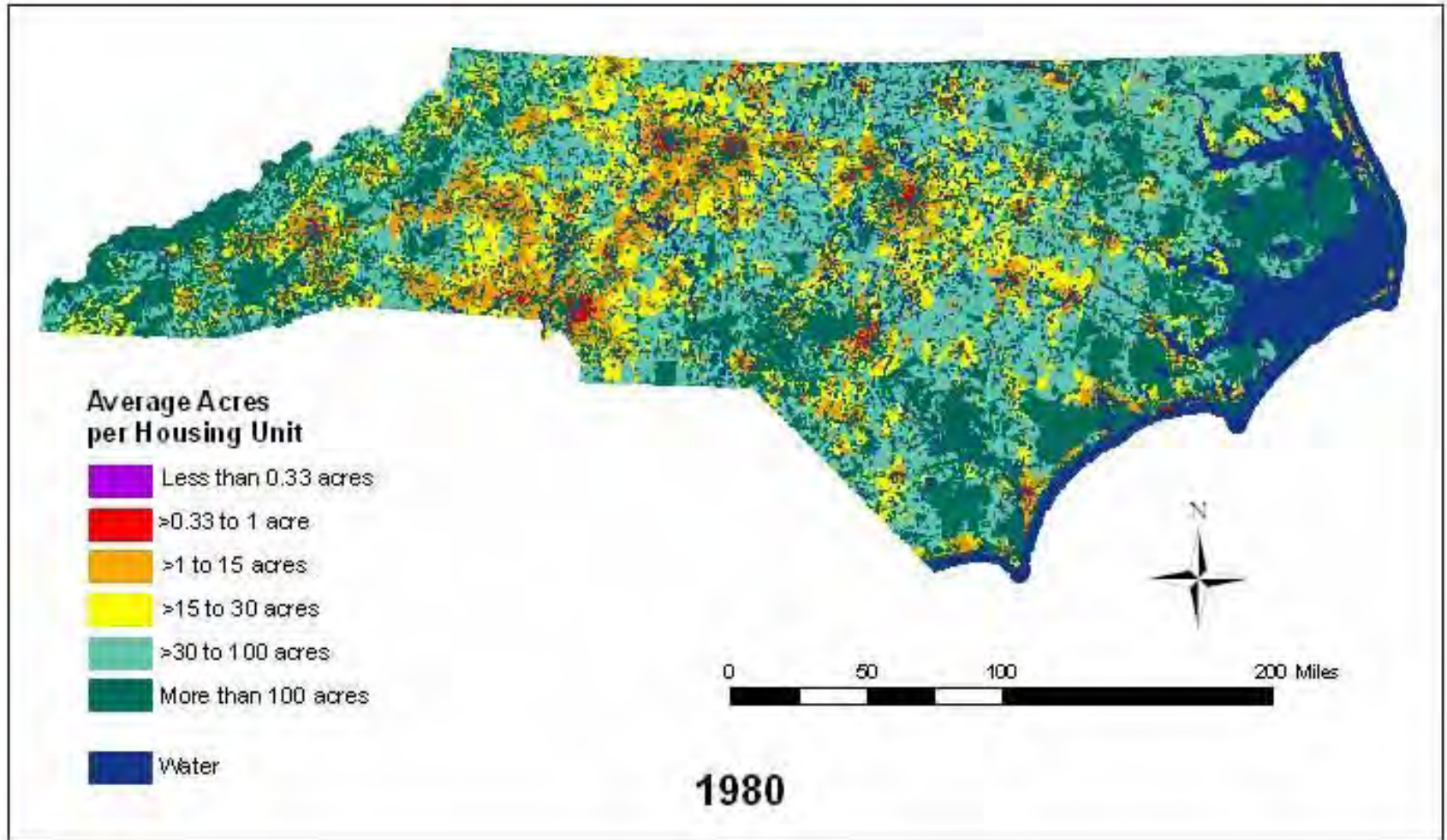
Conservation Trust for North Carolina (2007) *From Rural to Suburban In Less Than A Century: Changes in Housing Density in North Carolina from 1940-2030*

Housing Density



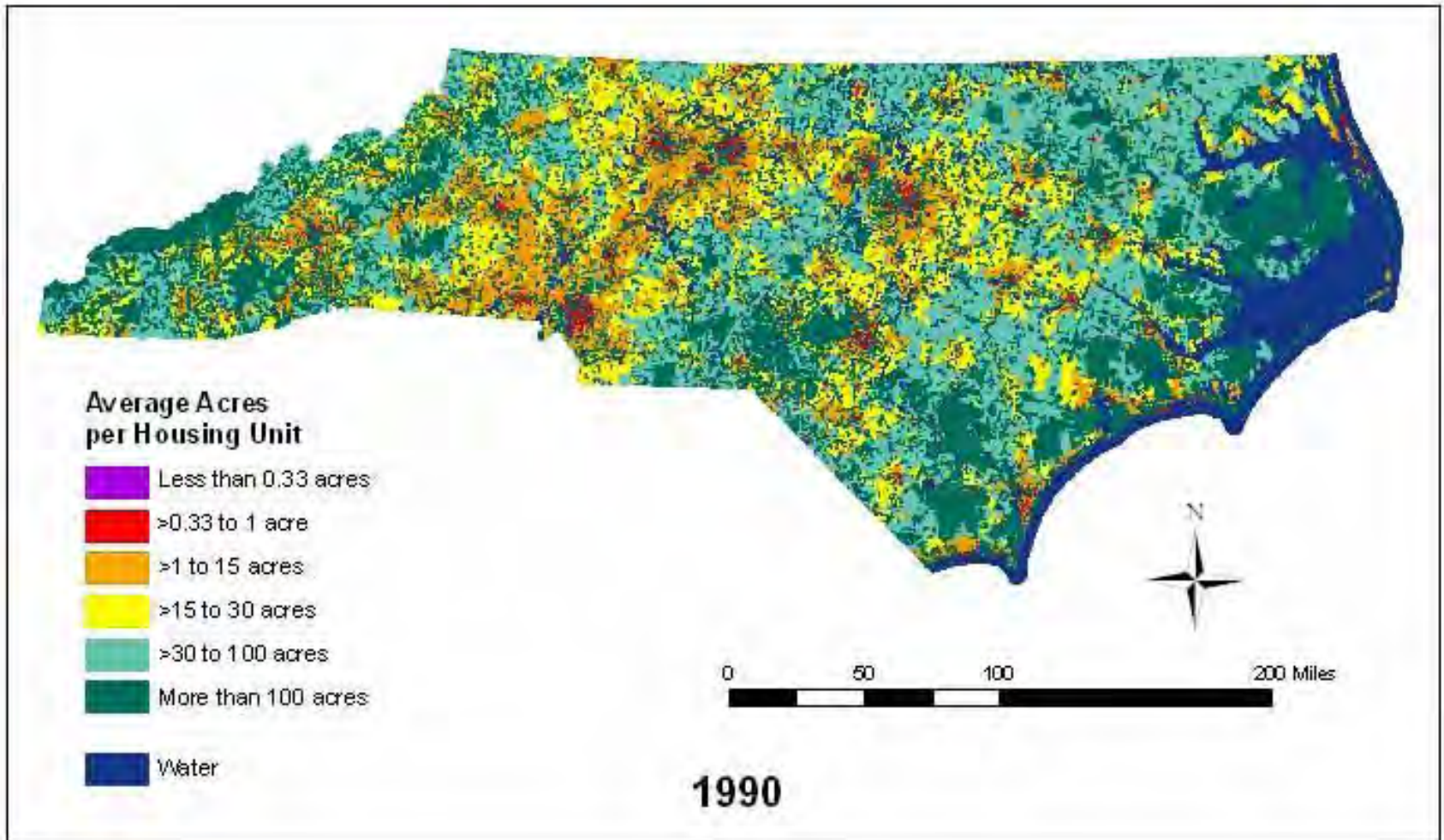
Conservation Trust for North Carolina (2007) *From Rural to Suburban In Less Than A Century: Changes in Housing Density in North Carolina from 1940-2030*

Housing Density



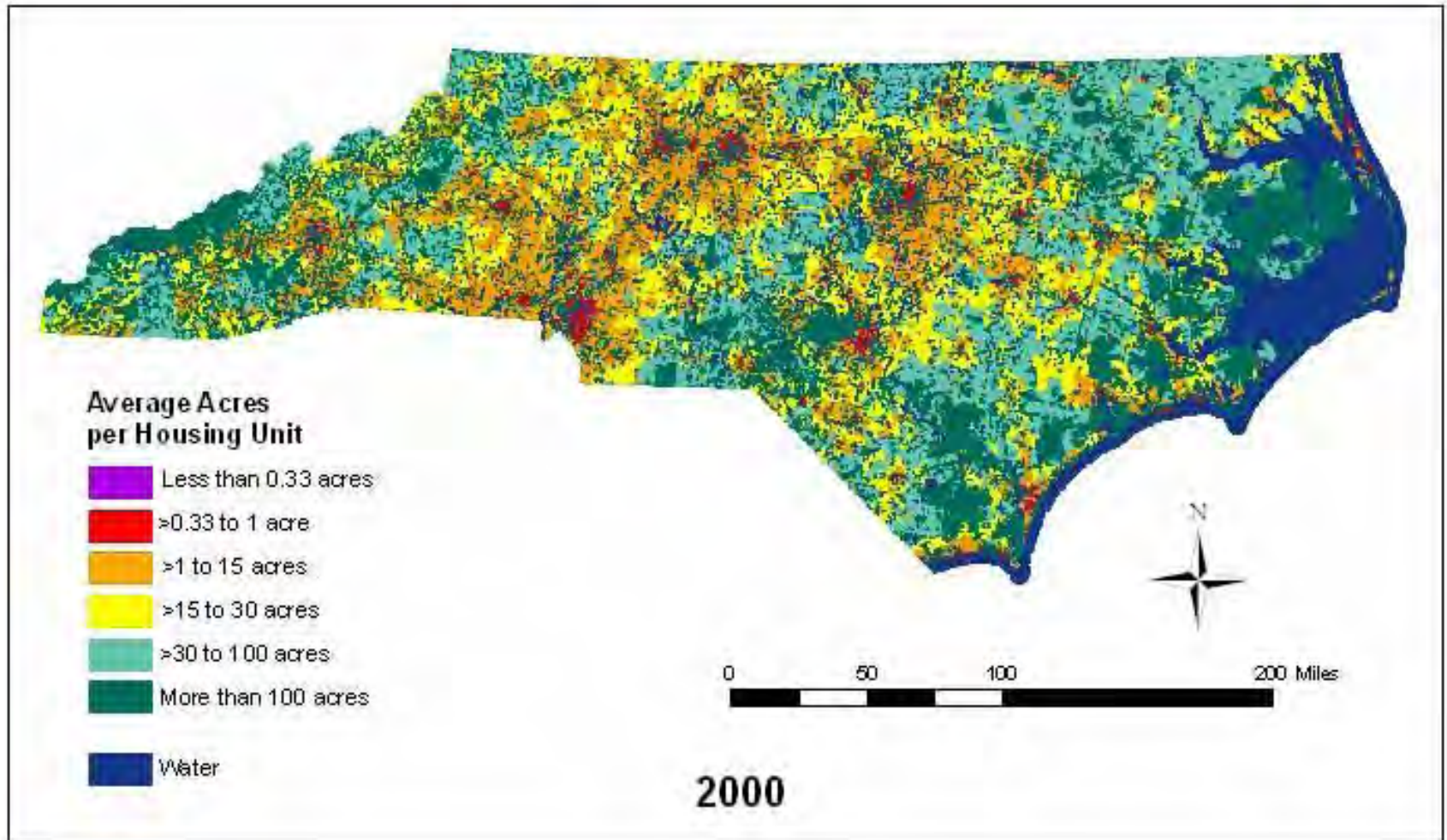
Conservation Trust for North Carolina (2007) *From Rural to Suburban In Less Than A Century: Changes in Housing Density in North Carolina from 1940-2030*

Housing Density



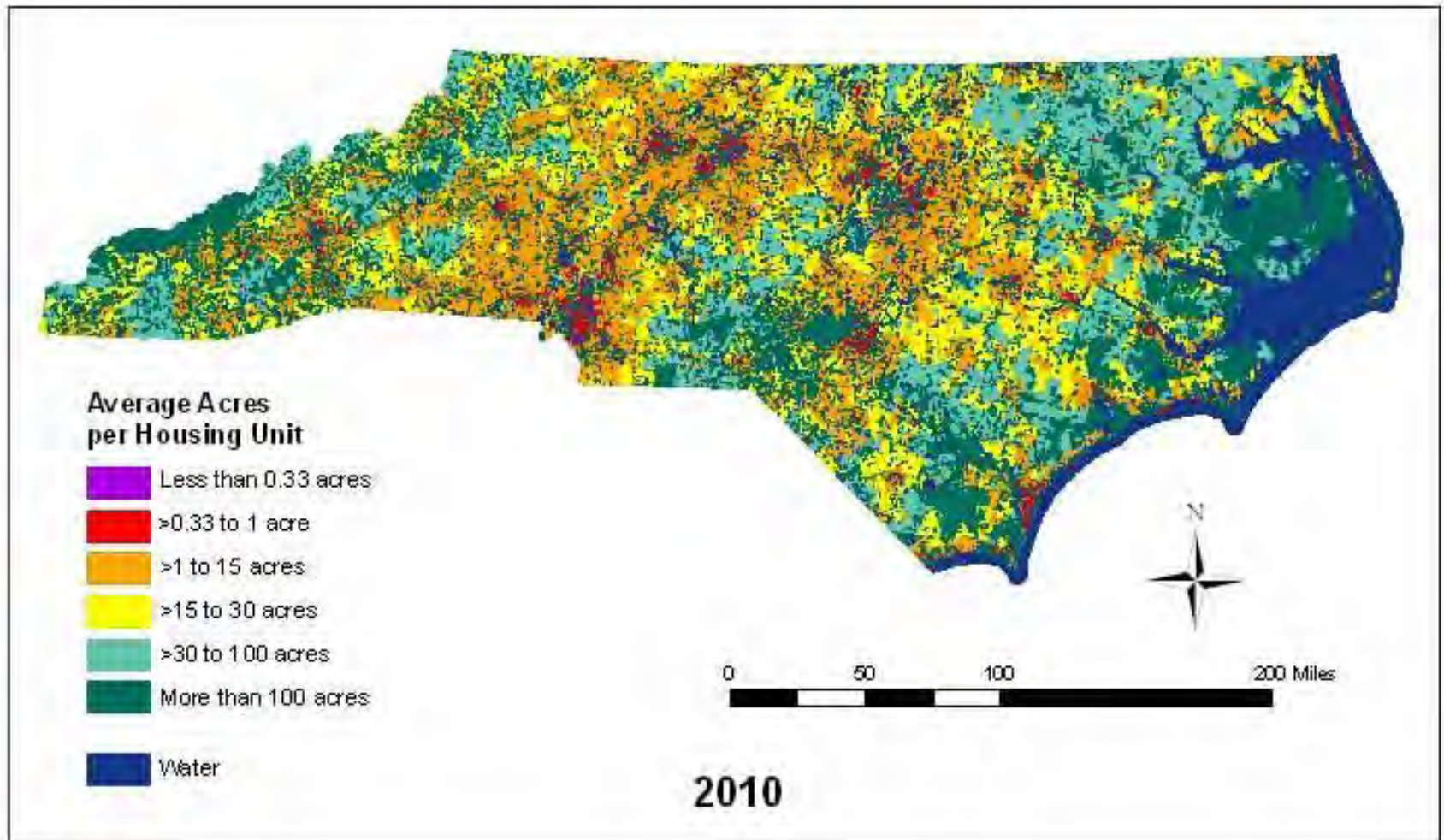
Conservation Trust for North Carolina (2007) *From Rural to Suburban In Less Than A Century: Changes in Housing Density in North Carolina from 1940-2030*

Housing Density



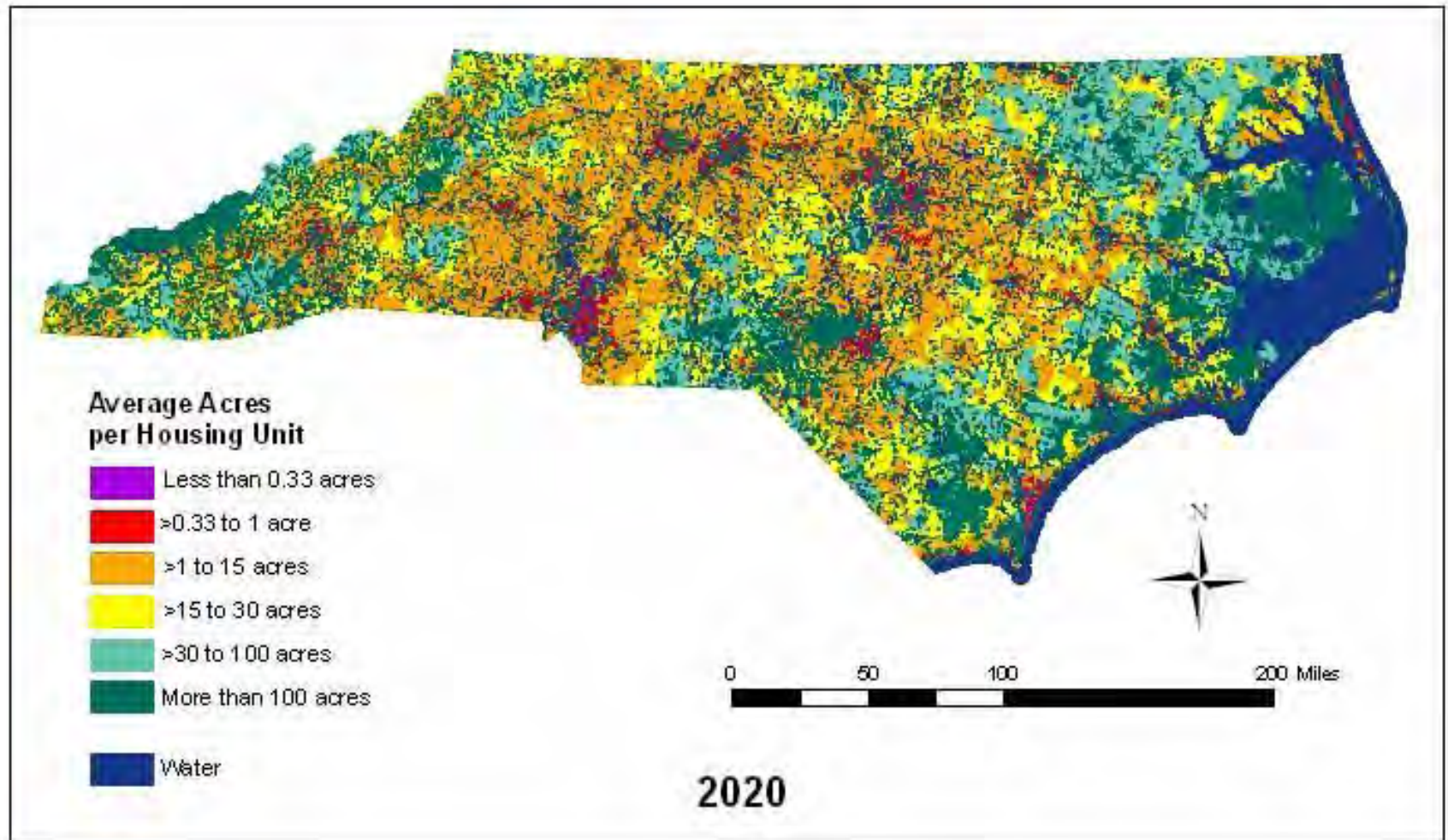
Conservation Trust for North Carolina (2007) *From Rural to Suburban In Less Than A Century: Changes in Housing Density in North Carolina from 1940-2030*

Projected Housing Density



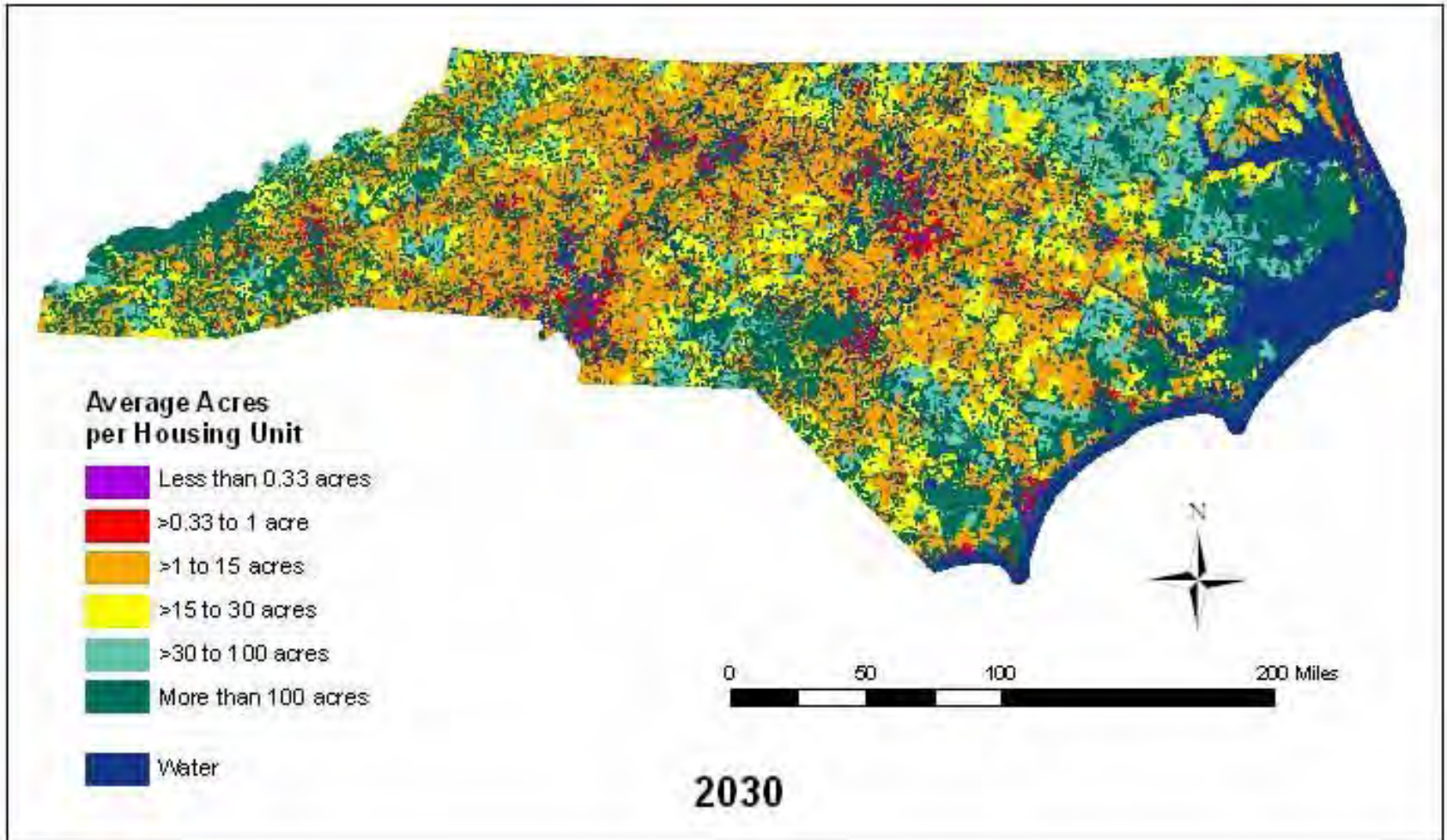
Conservation Trust for North Carolina (2007) *From Rural to Suburban In Less Than A Century: Changes in Housing Density in North Carolina from 1940-2030*

Projected Housing Density



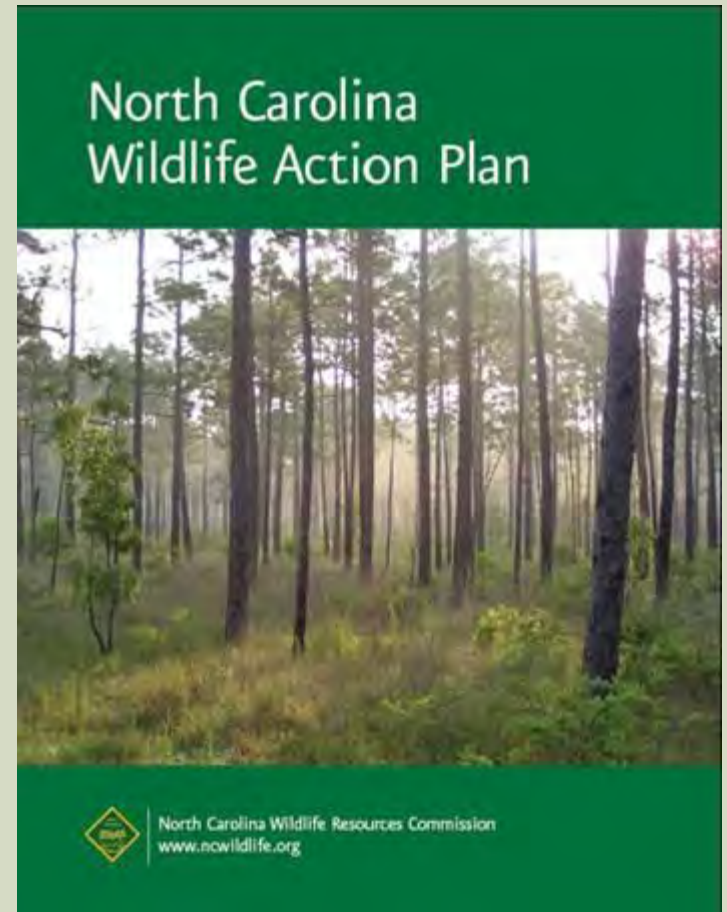
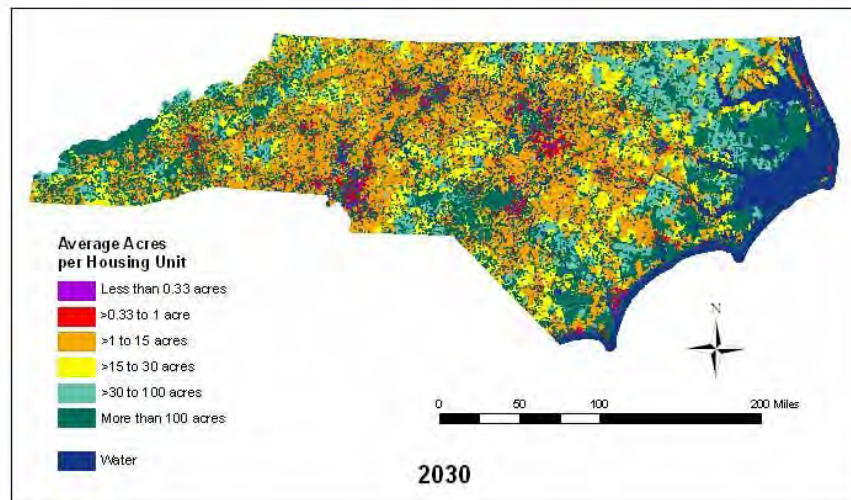
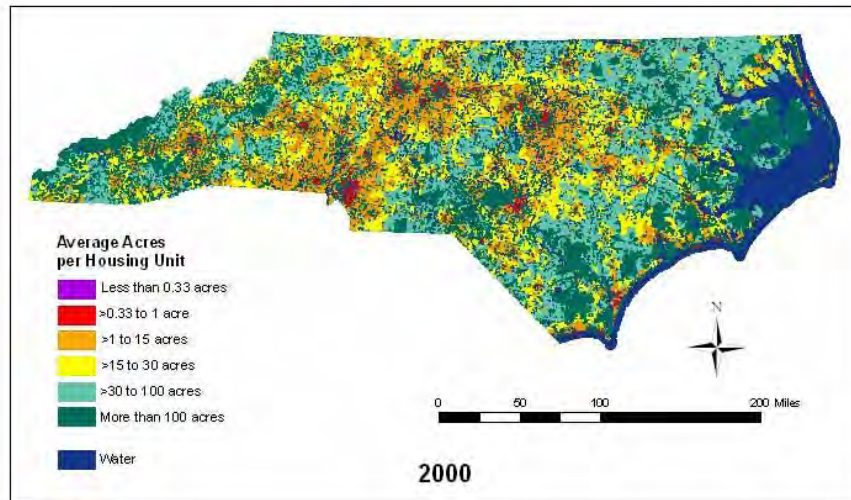
Conservation Trust for North Carolina (2007) *From Rural to Suburban In Less Than A Century: Changes in Housing Density in North Carolina from 1940-2030*

Projected Housing Density



Conservation Trust for North Carolina (2007) *From Rural to Suburban In Less Than A Century: Changes in Housing Density in North Carolina from 1940-2030*

Patterns of growth top threat to wildlife resources



<http://www.ncwildlife.org/plan>

Gap Between Wildlife Biologists & Land Use Decision Makers

• • •



Biologists



Elected Officials



Planners & Developers

Our Challenge



- **Bridge the gap** between biologists and land use decision makers
- **Develop “nature-friendly” communities** that conserve priority habitats alongside new homes, businesses, shopping centers

What is Green Growth?

Conserving **priority wildlife habitat** while building homes, businesses & shopping centers



Priority Species: Spotted Salamander

- Breeds in wetlands free of fish
- As adult lives in forest under logs
- Concern because loss of ephemeral pools and adjacent forest



Priority Species: Worm-eating Warbler

- Neotropical migrant
 - Overwinters in Central America
 - Migrate north to Eastern US in April/May
 - Breeds in forests, often on steep slopes
- “Forest interior” species
 - Concern because of forest fragmentation



Conserving Habitat



Green Growth



Not Green Growth



The Green Growth Toolbox



- Technical assistance tool
- Handbook, website, GIS dataset
- Training workshop
- Follow-up technical assistance

Achieve Green Growth by...



1. Using Conservation Data
2. Green Planning
3. Greening Ordinances
4. Greening Development Review & Site Design

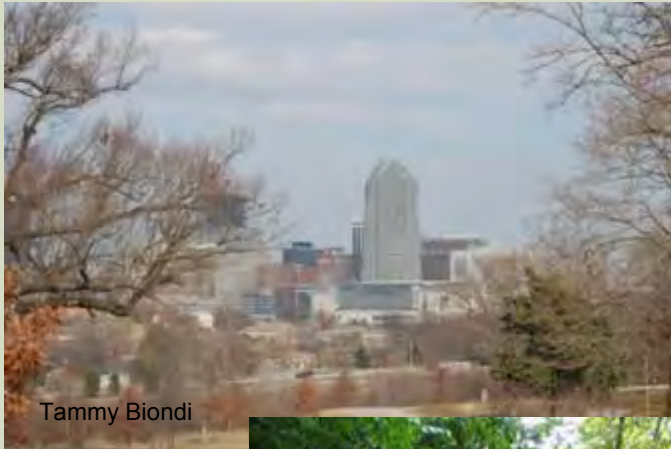
Using Conservation Data



Spotted Turtle

- GIS dataset
 - Statewide dataset
 - Regional datasets
- Use data in planning
 - Visioning and plan-making
 - Ordinance and rule-setting
 - Development review and site design

Green Planning



Tammy Biondi



- Land use planning to conserve priority habitats alongside developed areas
- Steer future development to areas where there will be less impact
- Write “wildlife conservation” sections for local plans
- Menu of conservation strategies
- Example plans



Kentucky warbler

Greening Ordinances



- Structuring zoning and development ordinances to conserve priority habitats alongside development



Marbled Salamander

- General principles of “green ordinances”
- Example ordinances

Greening Development Review & Site Design



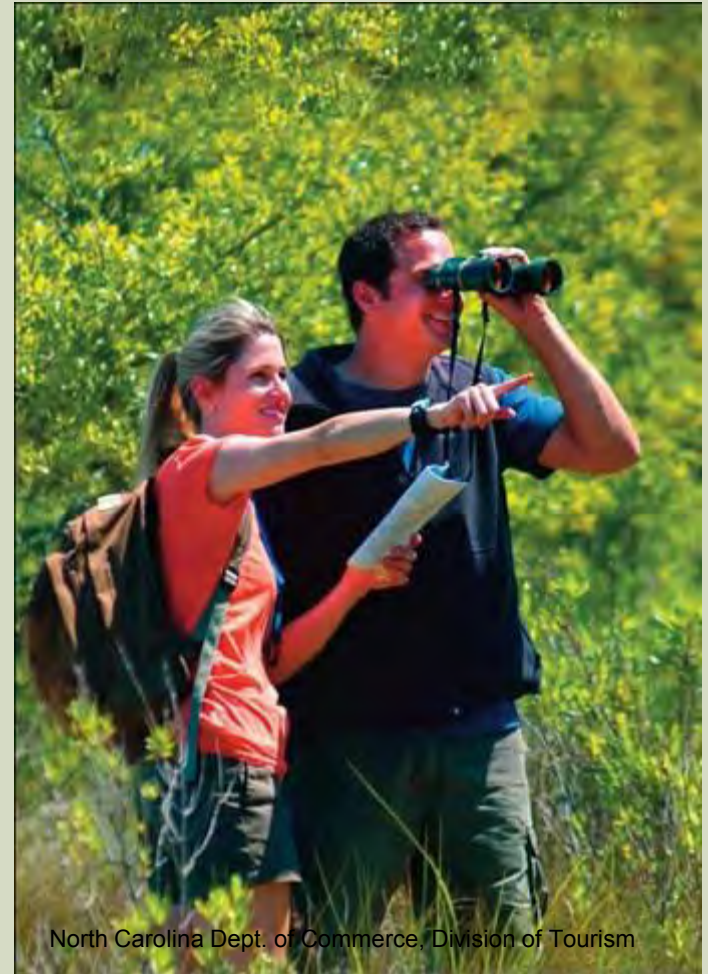
- Using conservation data to review development proposals



- Applying wildlife-friendly development practices to site design

How Green Growth Benefits Communities

- Maintain healthy ecosystems that provide “free” ecosystem services
- Create nature-based tourism opportunities
- Improve quality of life for citizens
- Attract new businesses
- Increase prosperity



North Carolina Dept. of Commerce, Division of Tourism

How to Use the GGT



- GIS data and handbook are available for download
- Training workshops available for local governments in some regions of NC
- Train the trainer workshop for interested conservation partners
- Regional partners:
 - NC Coastal Land Trust
 - Sustainable Sandhills
 - Land of Sky Regional Council



Green Growth Toolbox - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.ncwildlife.org/greengrowth/

Most Visited Getting Started Latest Headlines



GREEN GROWTH TOOLBOX

Nature-friendly planning



- Green Growth Home
- About GGT
- Why Green Growth
- Conservation Data
- Green Planning
- Greening Ordinances
- Greening Development Review
- Training Workshops
- Technical Guidance
- Contact Us
- Download Handbook



The Green Growth Toolbox (GGT) is a technical assistance tool designed to help North Carolina's towns and cities grow in nature-friendly ways. With the Green Growth Toolbox—handbook, GIS data package, and Web site—North Carolina communities can protect important habitats alongside homes, workplaces, and shopping centers. Contact us to find out how your community can start using the Green Growth Toolbox.



N.C. Wildlife Action Plan

One NC Naturally
Conservation Planning Tool

REQUEST A TRAINING WORKSHOP

DOWNLOAD THE BROCHURE

DOWNLOAD THE HANDBOOK

DOWNLOAD CONSERVATION DATA

© 2008 NORTH CAROLINA WILDLIFE RESOURCES COMMISSION - [Terms and Conditions](#)

Done zotero

<http://www.ncwildlife.org/greengrowth/>

www.ncwildlife.org/greengrowth



Jeff Marcus

NC Wildlife Resources Commission

jeff.marcus@ncwildlife.org

(910) 281-4388