

CHATHAM COUNTY COMPREHENSIVE PLAN

Agriculture Focus Group Meeting 11/03/2016



AGENDA

- Project Update
- Ag Survey
- Agricultural Suitability Analysis
- Water
- Food Access
- Strategy Ideas
- Discussion



THE PLANNING PROCESS

THE PLANNING PROCESS

1

**County-Assessment
+ Draft Goals**

“Chatham Today”
Assessment of current
and emerging conditions,
identification of issues
and opportunities, and
development of goals

2

**Develop Initial
Concept Plan + Policy
Ideas**

“Shaping Chatham’s
Future”
Development of future
land use concepts and
policy ideas

3

**Refine Concept Plan
+ Policy Framework**

“Putting the Plan into
Action”
Refine concepts and
policies and draft action
steps and strategies

4

**Plan Documentation
+ Adoption**

Collection of plan
components into a final
plan report document to
be presented for adoption

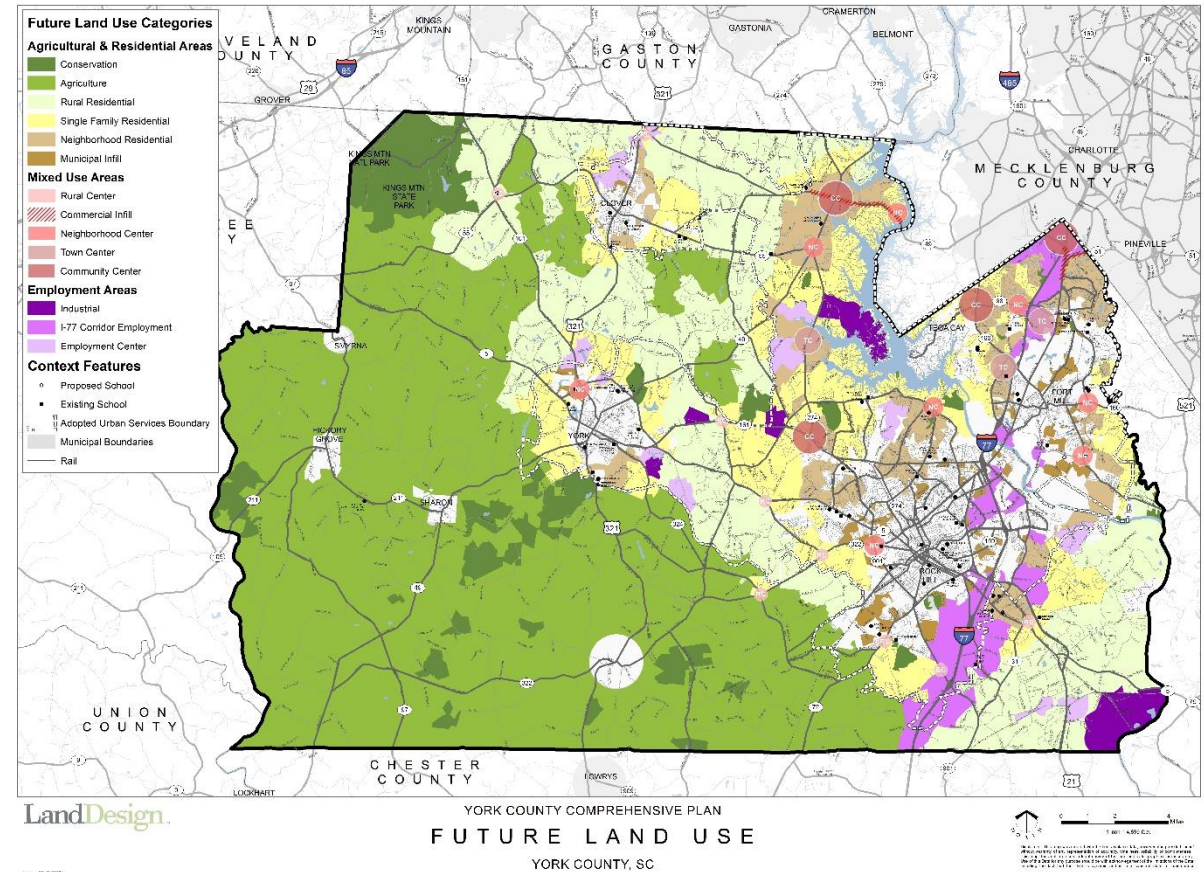


We are here



DELIVERABLES

- Vision / Goals
- Agricultural Assets Map
- Agriculture Suitability Analysis
 - → Strategic Farmland Map
- Future Land Use Map
- Policies / Strategies
- Action Plan (Programs, Projects)



AGRICULTURAL ELEMENT UPDATE

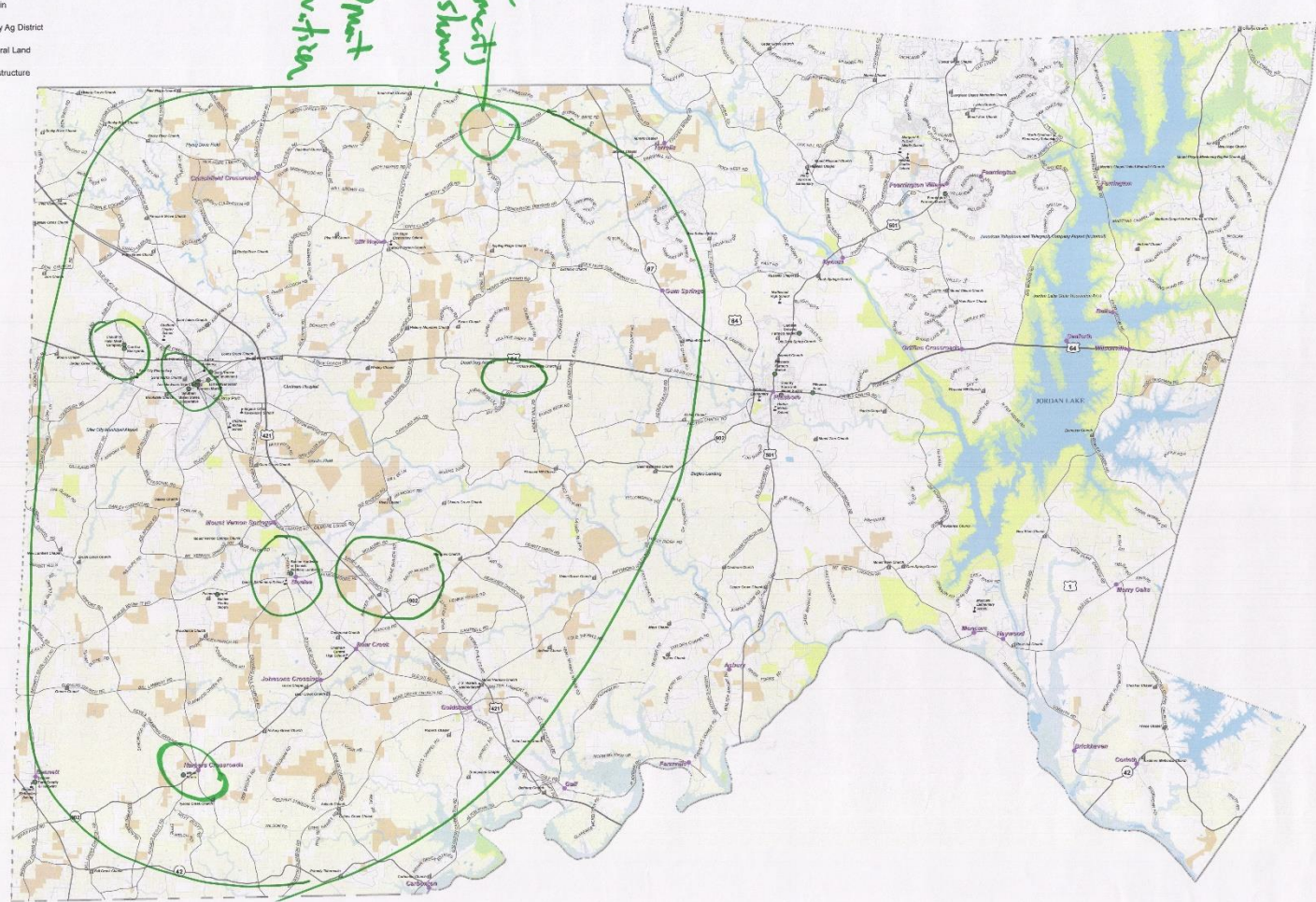
- Ag Focus Group
 - 4(or 5) step process:
 - Ag Assets Map (in draft form)
 - Agricultural Suitability Analysis (data driven, customized based on input)
 - Strategic Farmland Map (first draft, edits)
 - Recommendations on how the SFM appears in comp plan, what policies refer to it, etc.
 - Likely there will need to be continued discussion after the Comp Plan on this.
 - Agricultural Survey
 - Needed to get more feedback from agricultural stakeholders (farmers (all sizes), processing industry, other groups)



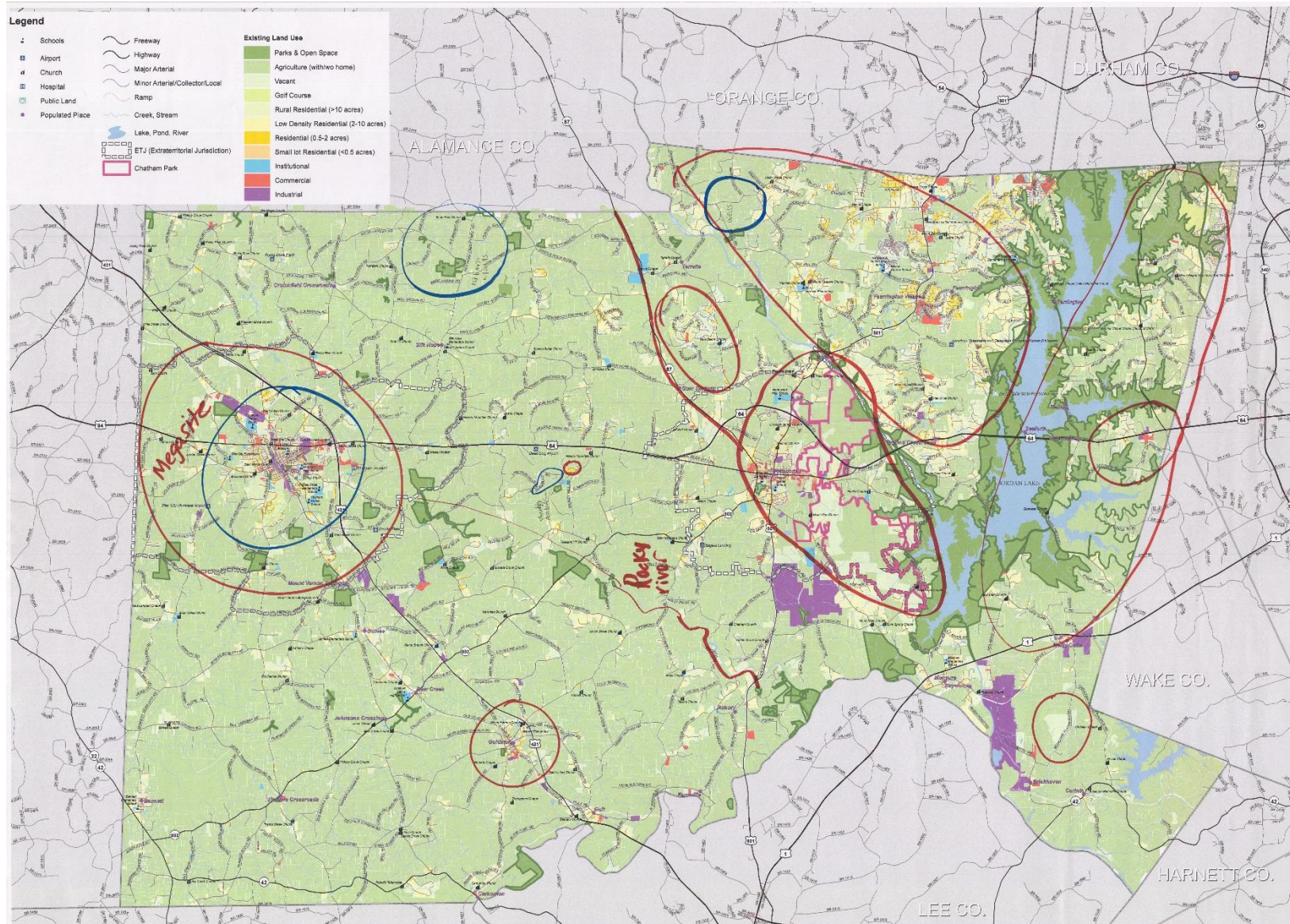
- Existing Land Use
- Parks & Conservation Easements
 - Nature Preserves
 - Floodplain
 - Voluntary Ag District
 - Agricultural Land
 - Ag Infrastructure



TLC
Essentially
not shown
+ Feed
not
Conservation

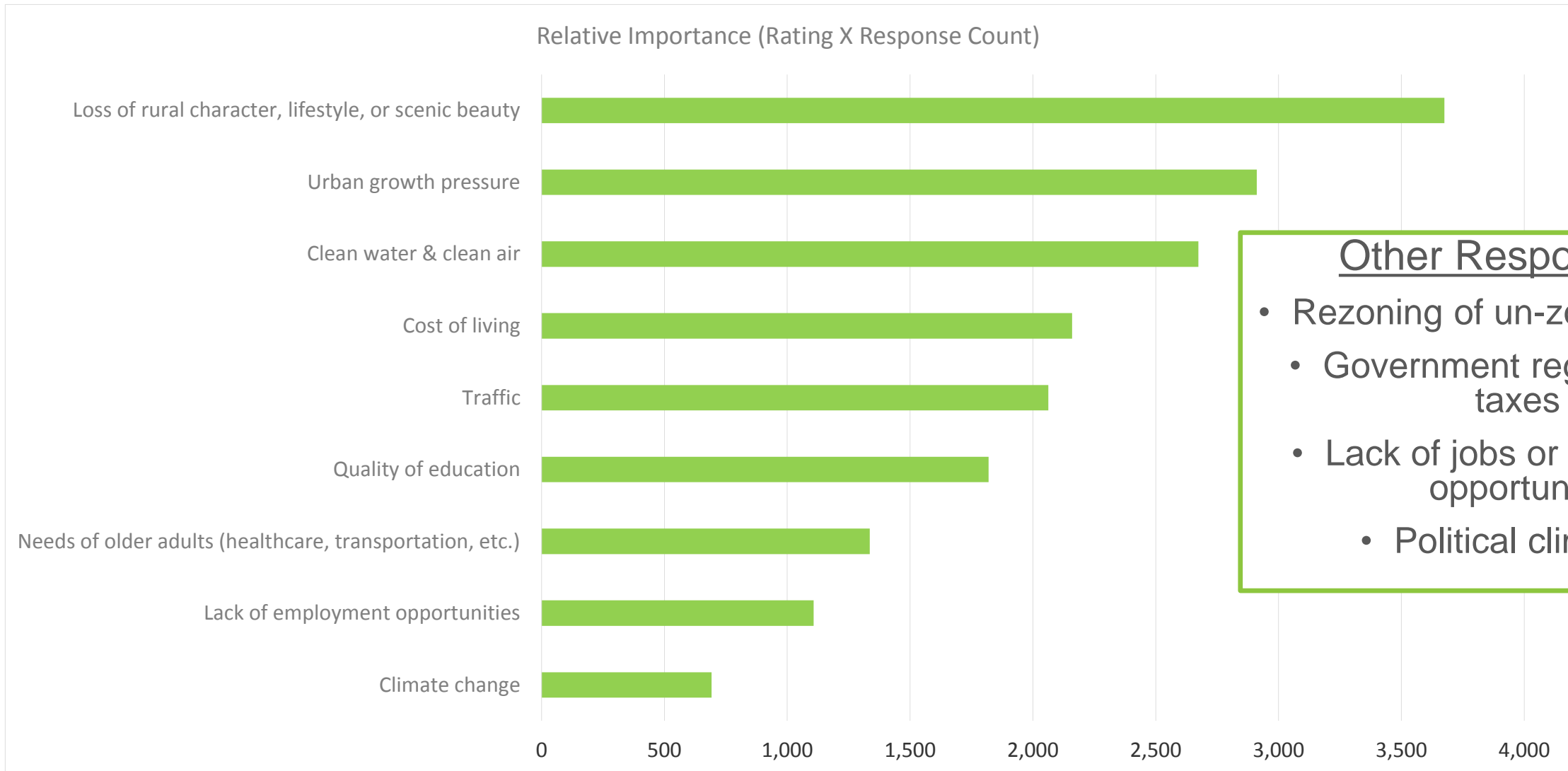


AG FOCUS GROUP MTG #1



AG FOCUS GROUP MTG #1

Q8: What are your biggest concerns about the future for you and your family?



- Other Responses
- Rezoning of un-zoned areas
 - Government regs and/or taxes
 - Lack of jobs or business opportunity
 - Political climate



RECENT FINDINGS

What does rural character mean to you?

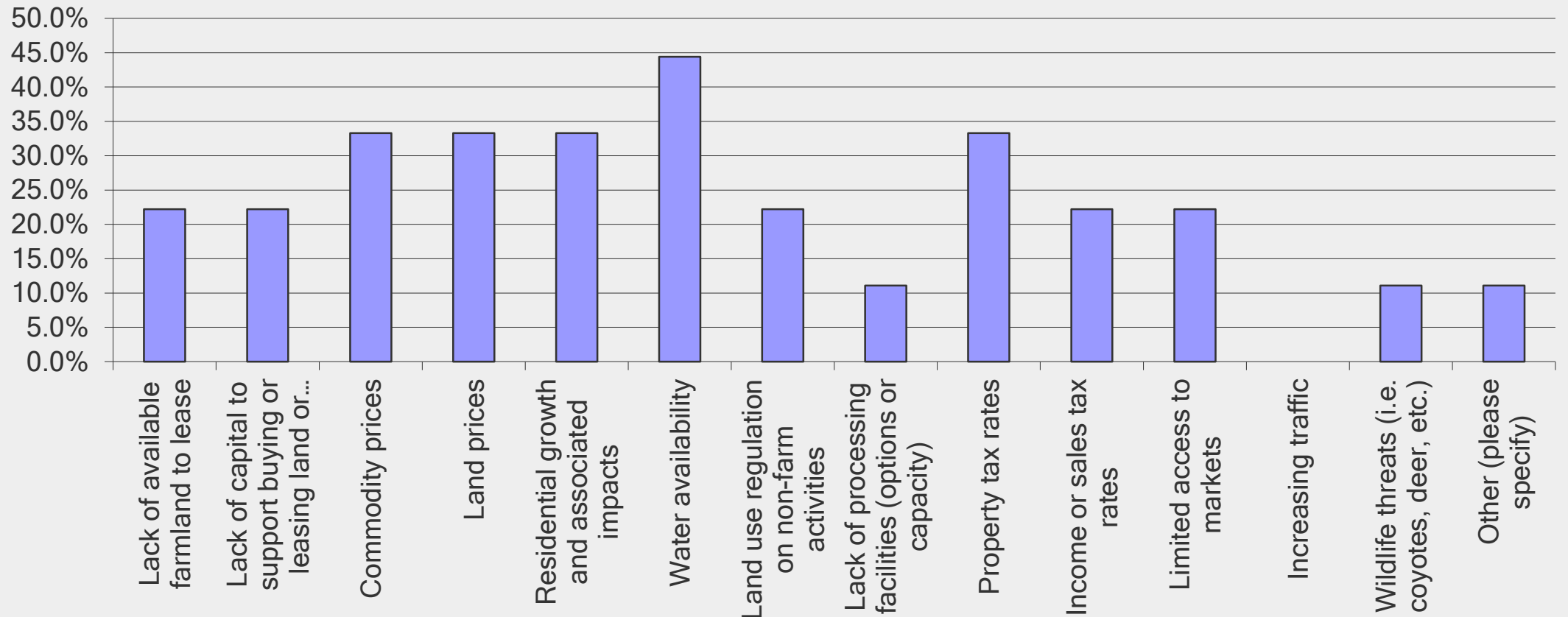
- Online input
 - Rural heritage, architecture and/or aesthetics
 - Lifestyle (peace and quite, privacy, etc.)
 - Clean air / water
 - Forests and wildlife
 - Limited regulation
- Peppercfest
 - Above plus: Community, Being Able to Farm, Scenic Beauty



Public Input @ Peppercfest

AG SURVEY

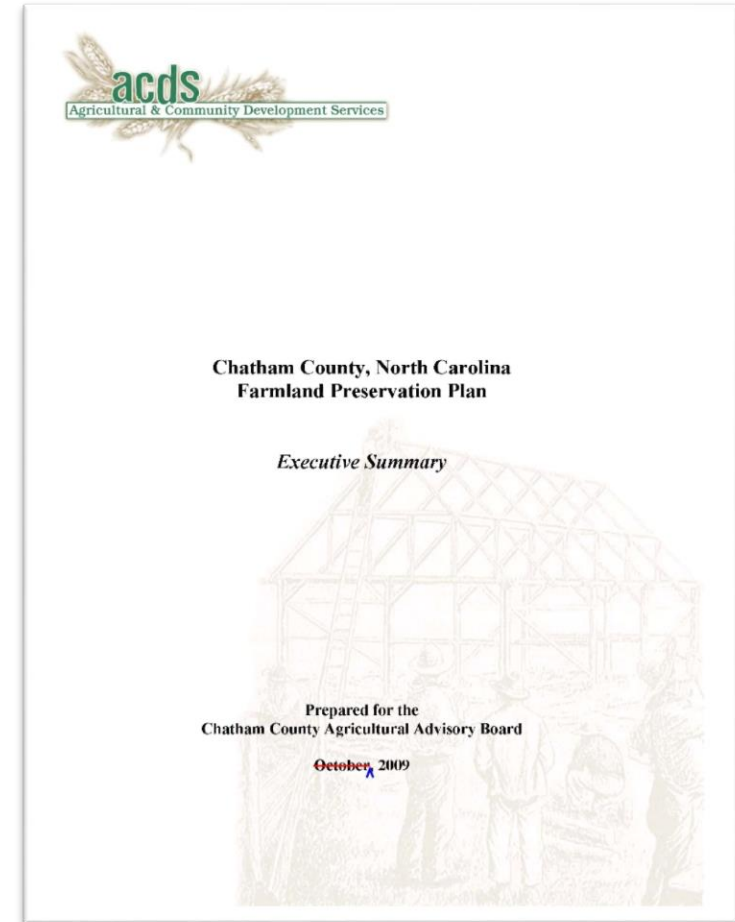
What are the primary threats to agricultural operations you are involved with in Chatham County? (Choose up to 4)



FARMLAND PRESERVATION PLAN

Recommendations in the FPP

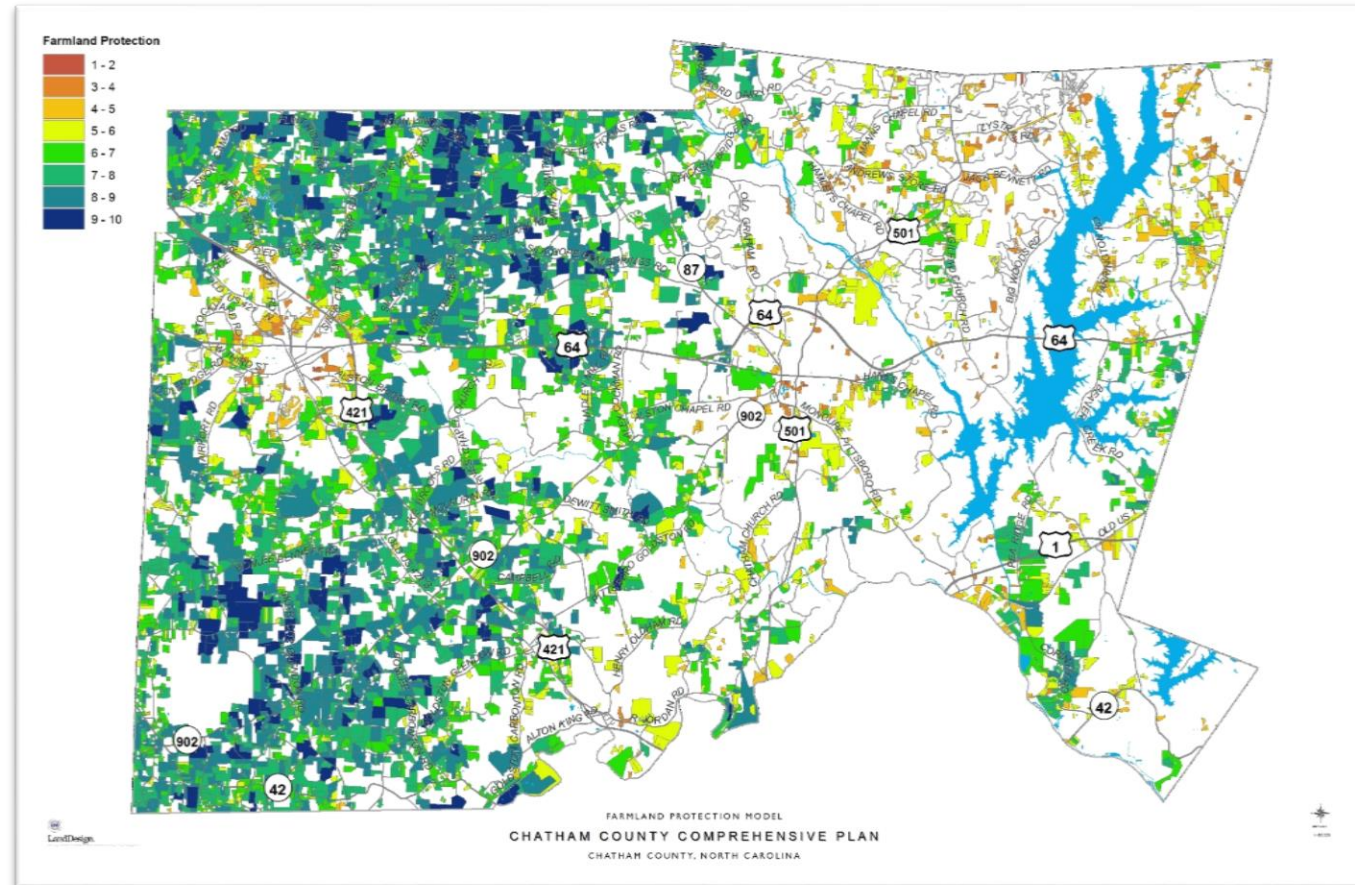
- Strengthen the VAD Program
- Transfer of Development Rights
- Build Support for a County Working Lands Protection Program (PDR)
- Update Subdivision Regulations and Zoning to Meet the Needs of Agriculture and the Community
- Ensure that Agriculture Has Long-Term Access to Water Supplies
- **Develop a Strategic Farmland Map**
- Develop an Integrated Marketing System that Expands Opportunity to Direct Market and Wholesale Trade
- Create an Alternative Energy Development Program



CTNC WORK

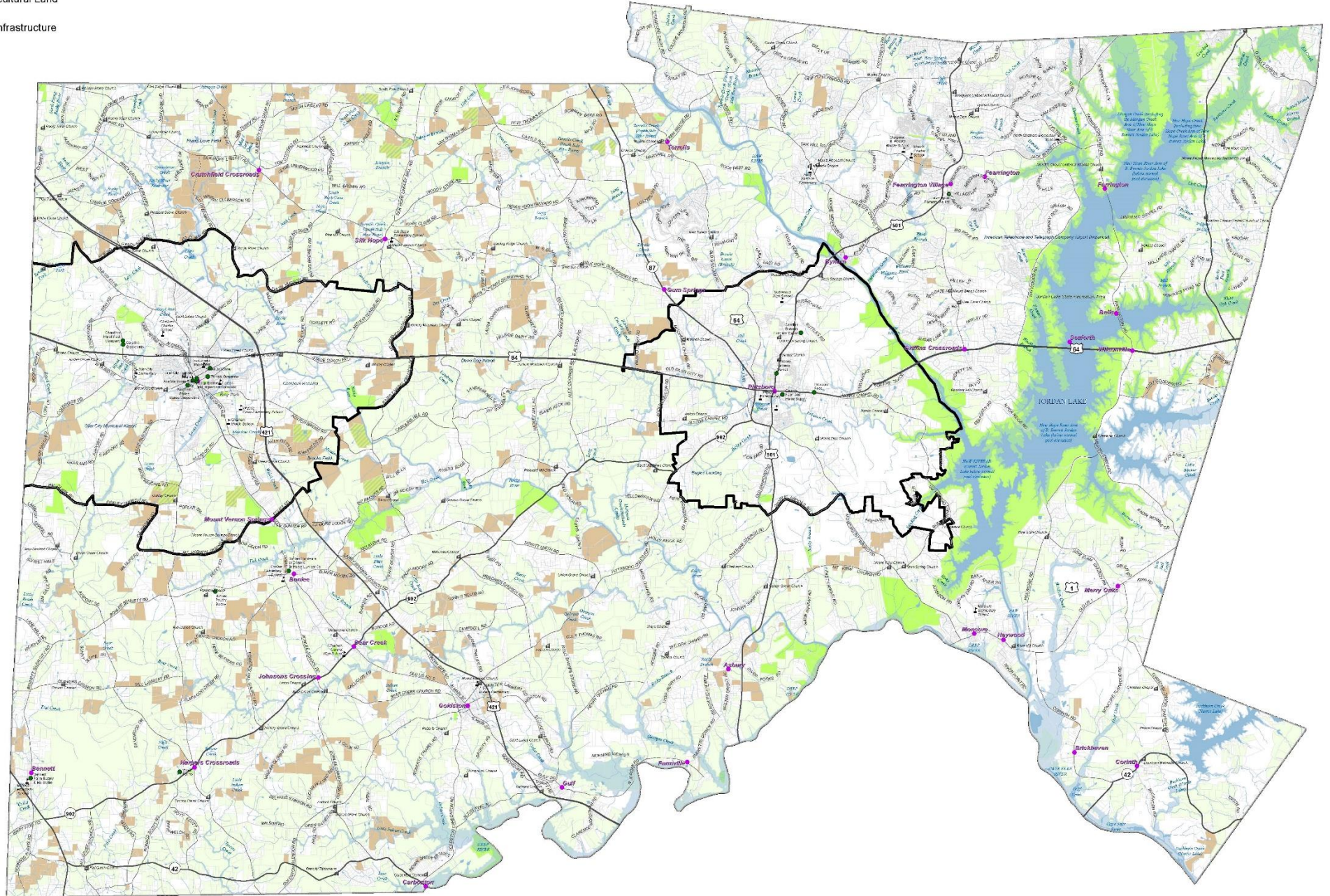
Triangle Farms for Food Project

- Identified farmland protection priorities for conservation trusts
 - These will help define focus areas for outreach efforts (i.e. to determine interest for voluntary conservation easements)
- Discussed at last meeting
- Included these factors
 - Soils (29%)
 - Acres of farmland (25%)
 - Distance to urban areas (18%)
 - Proximity to agricultural protected areas (16%)
 - Surrounding population (12%)
 - Present use value
- **It was decided that this process needed to be customized for Chatham County**





AGRICULTURAL ASSETS

-  Parks, Managed Areas & Conservation Easements
-  Voluntary Ag District
-  Agricultural Land
-  Ag Infrastructure
-  Floodplain
-  ETJ (Extrateritorial Jurisdiction)



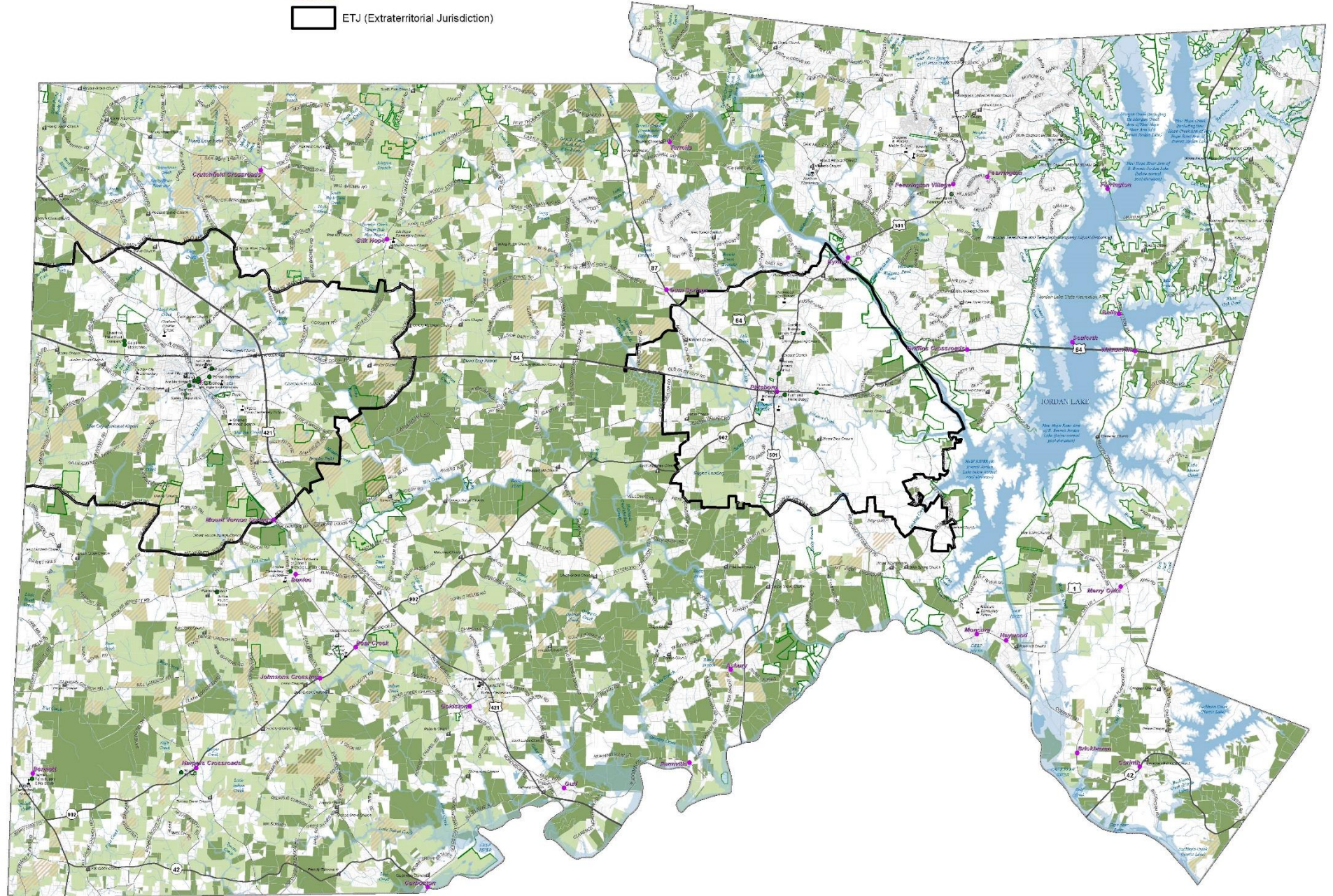
PRESENT USE VALUE TYPE

PUV Type

-  Majority Crop or Pasture or at least 10 Acres
-  Majority Forestry or Horticulture and > 10 Acres Crop/Pasture





Other


-  Parks, Managed Areas & Conservation Easements
-  Voluntary Ag District
-  ETJ (Extraterritorial Jurisdiction)



PRIME FARMLAND SOILS

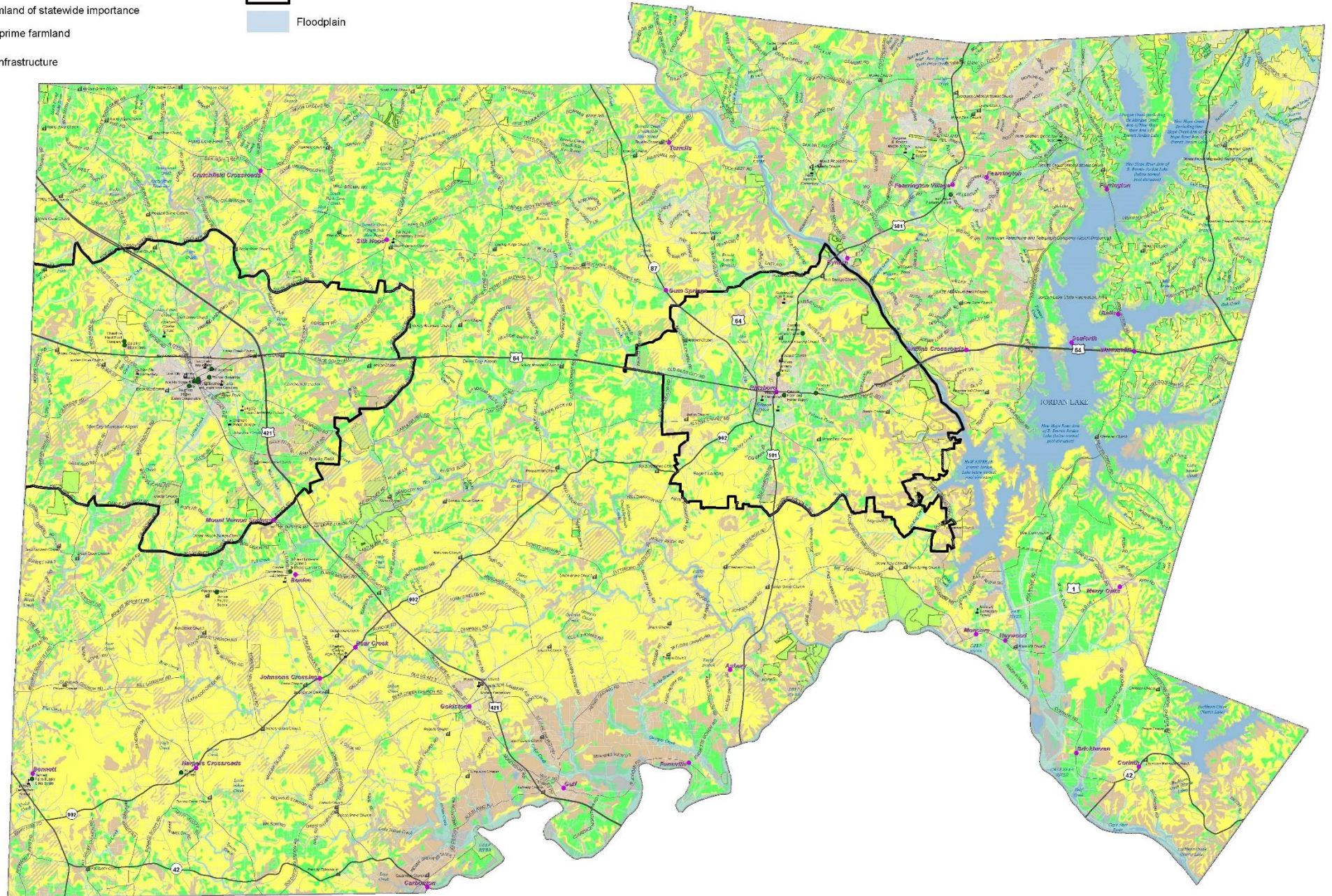
Farmland Class

-  All areas are prime farmland
-  Prime farmland if drained or protected from flooding
-  Farmland of statewide importance
-  Not prime farmland

-  Ag Infrastructure

Context Features

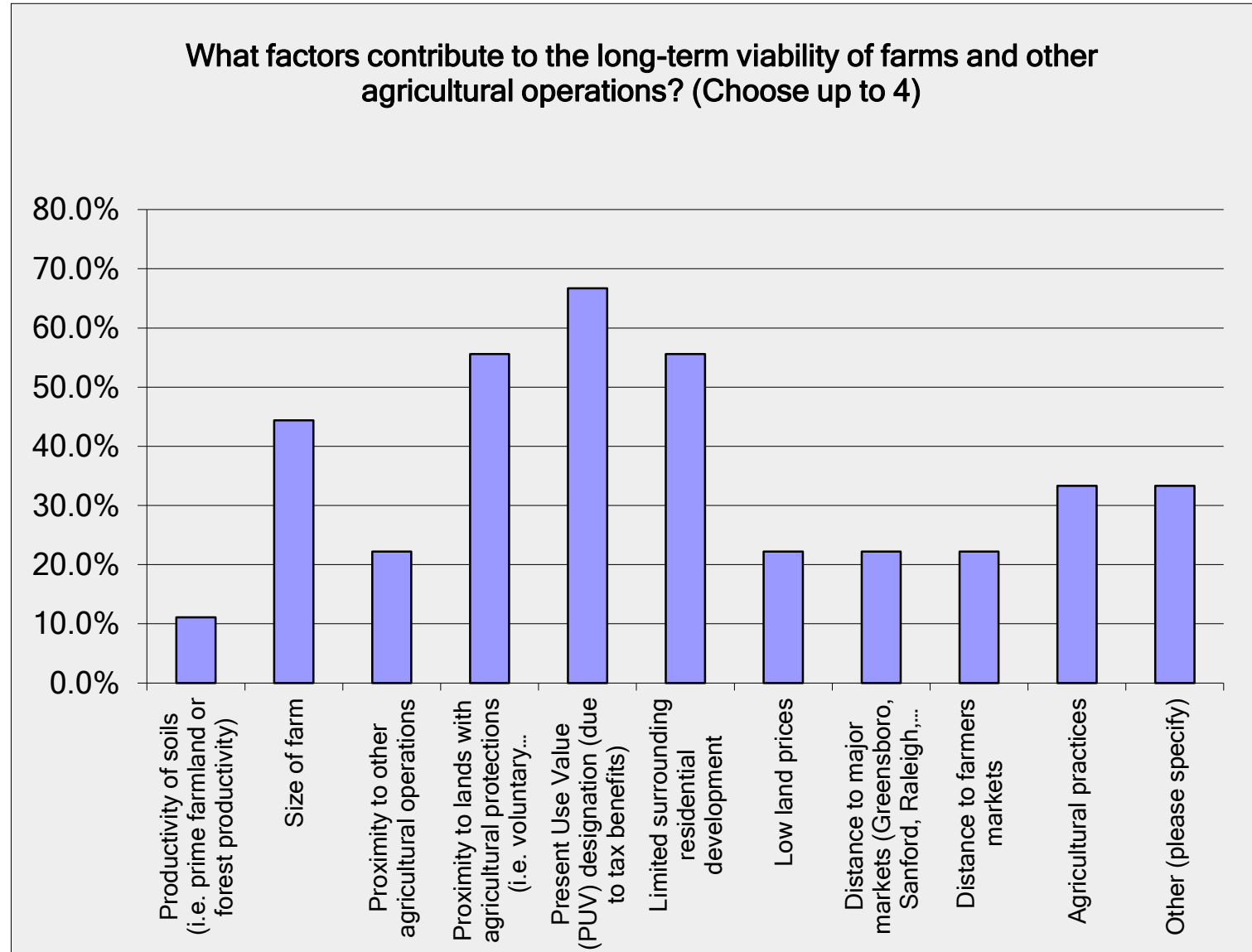
-  Parks, Managed Areas & Conservation Easements
-  ETJ (Extraterritorial Jurisdiction)
-  Floodplain



LONG TERM VIABILITY OF FARMLAND

Feedback so far

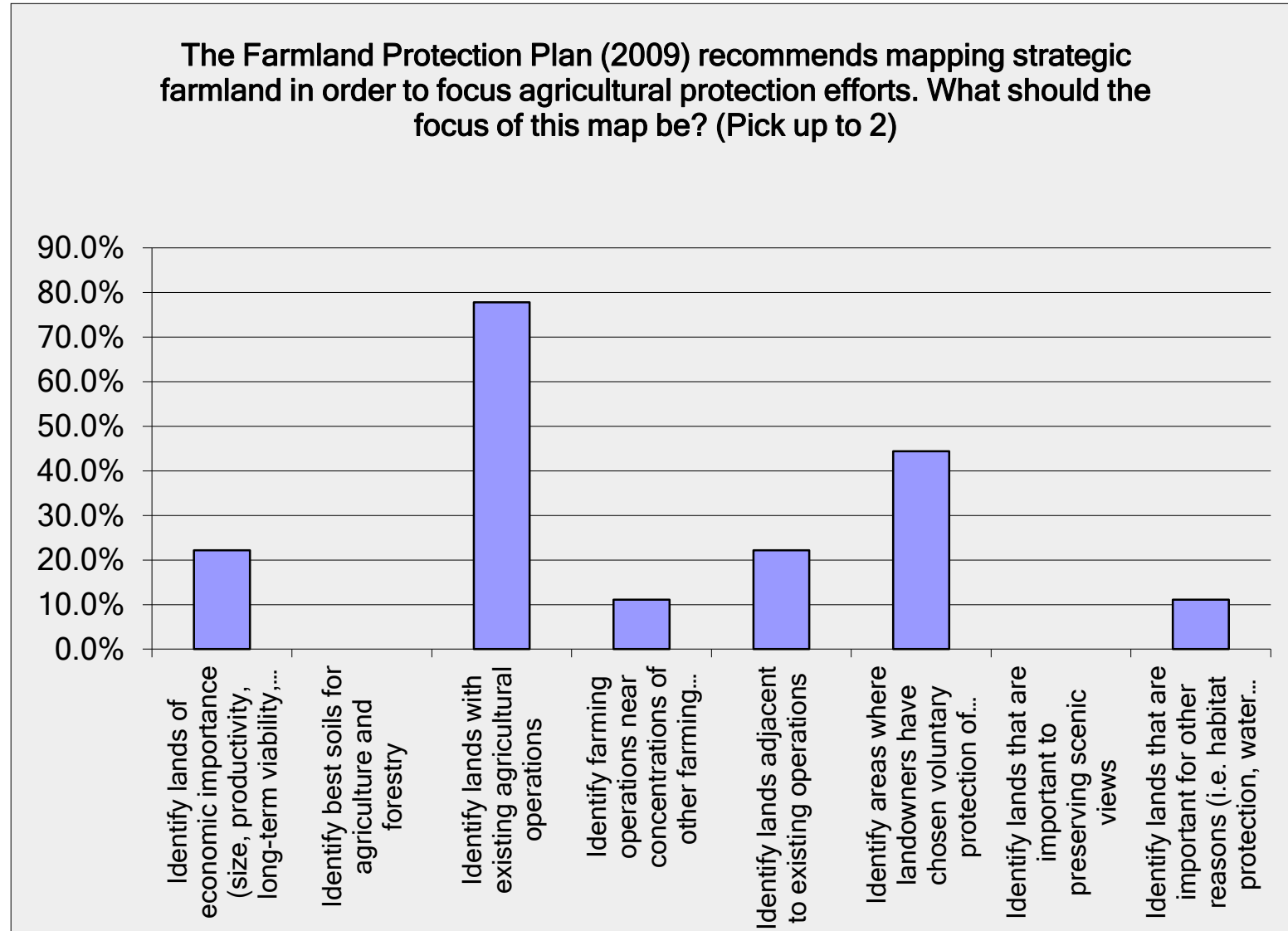
- Present Use Value Designation
- Limited surrounding residential development
- Proximity to lands with agricultural protections
- Size of Farm



FOCUS OF STRATEGIC FARMLAND MAP

Feedback so far

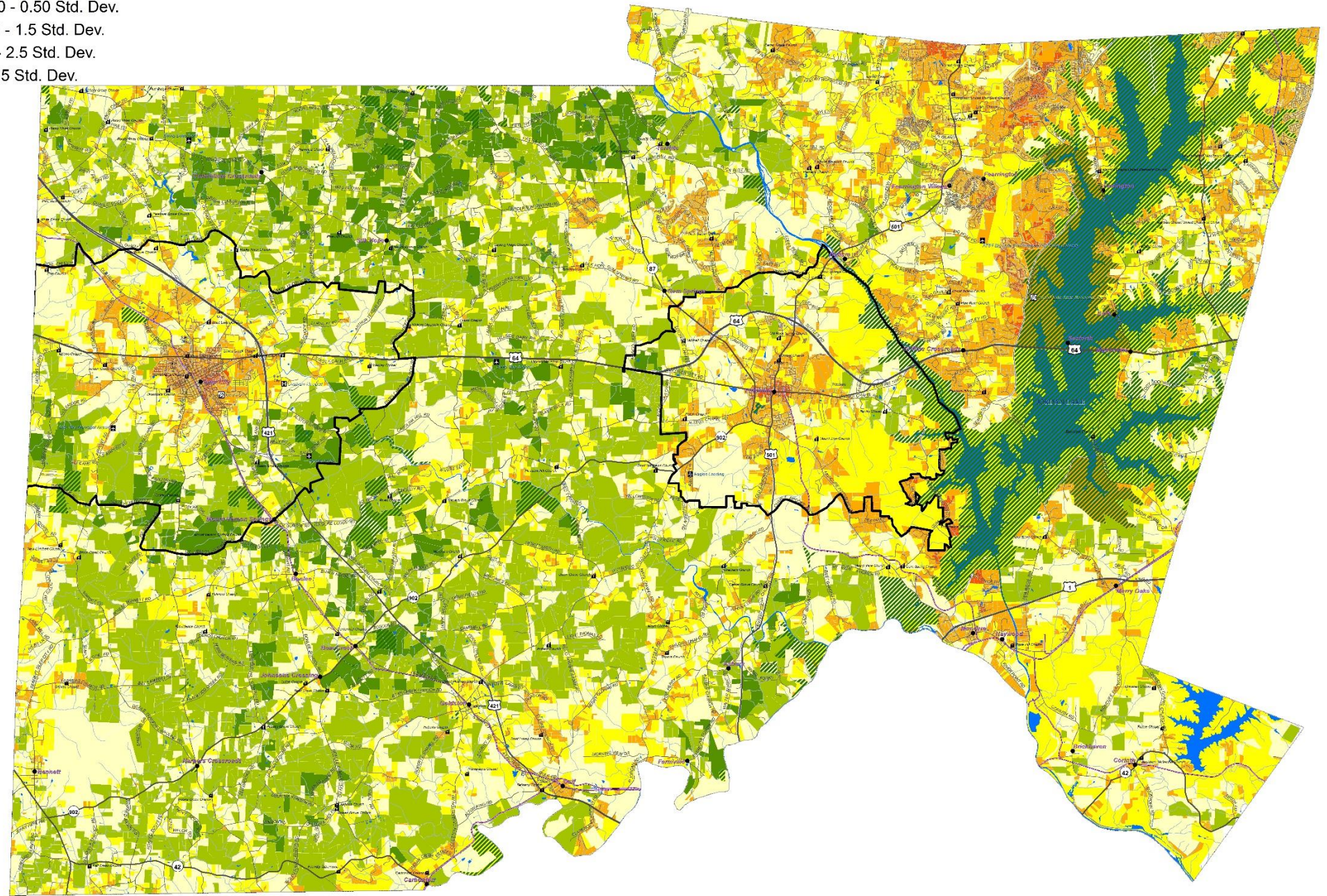
- Existing agricultural operations
- Near protected lands—i.e. PUV, VAD, or conservation easements (shows intent to continue)
- Size and productivity (soils)
- Near concentration of operations
- Other reasons



DRAFT FACTORS

Objective:	Determine lands MOST suitable for agriculture	
Subobjective #	Description	Methodology
Subobjective 1.1	PUV Designation	PUV designation or not
Subobjective 1.2	Near Conservation Easements	Within 1 mile of Conservation Easements (1 point)
Subobjective 1.3	Within or adjacent to Voluntary Agricultural Districts	Within 1/4 mile of VADs - 1, Not within 1/4 mile = 0
Subobjective 1.4	Size	Acres <10 = 1, 10-20 = 2, 20-50 = 3, >50 = 4
Subobjective 1.5	Soils	Majority Prime Farmland = 3, Majority Farmland of Statewide Importance or Prime Farmland if drained or protected from flooding = 2, Other = 1
Subobjective 1.6	Near Concentration of Operations	Convert parcels to points, calculate point density based on 1 mile radius

DRAFT AG SUITABILITY

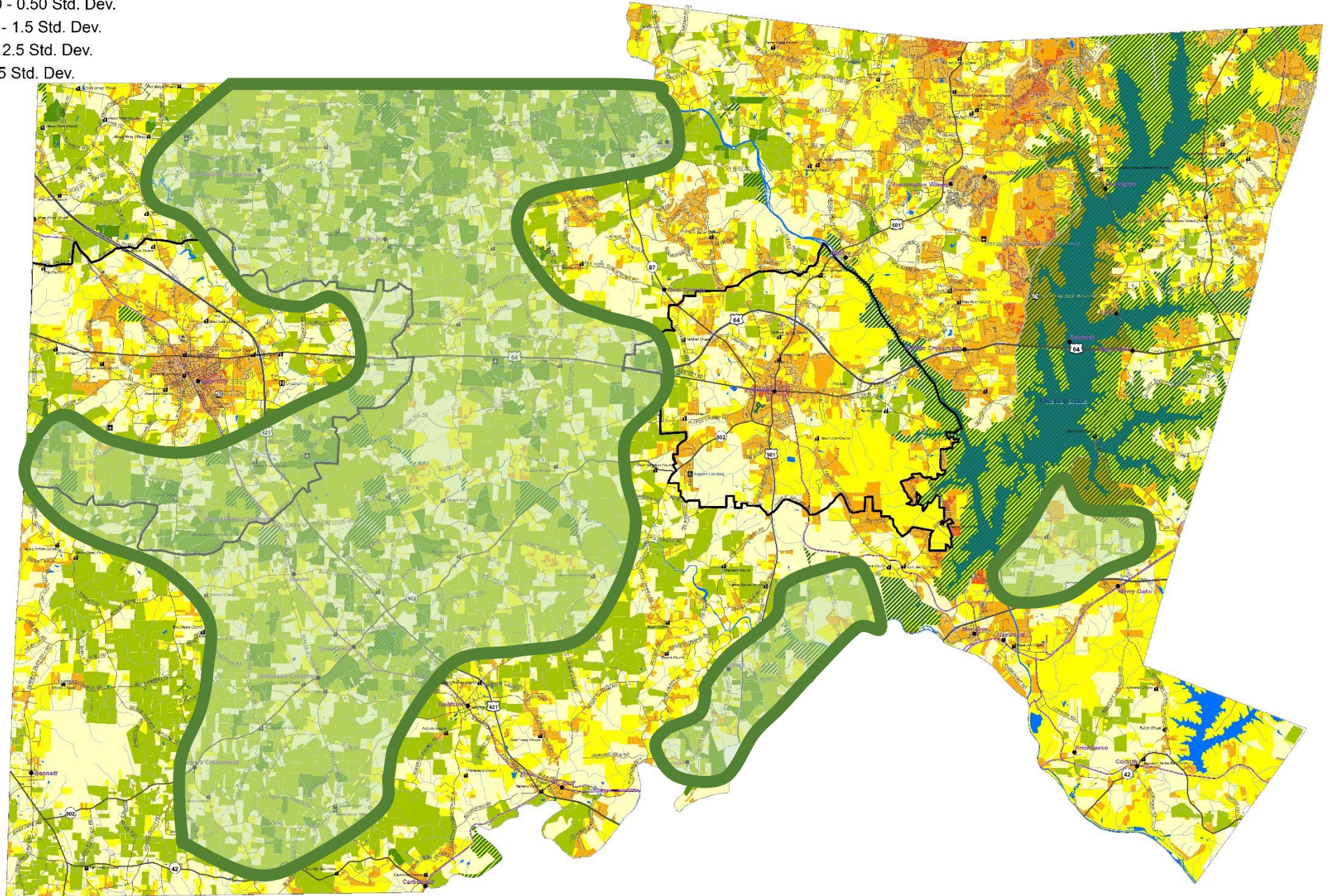


POTENTIAL STRATEGIC AG LANDS

Agricultural Suitability Analysis

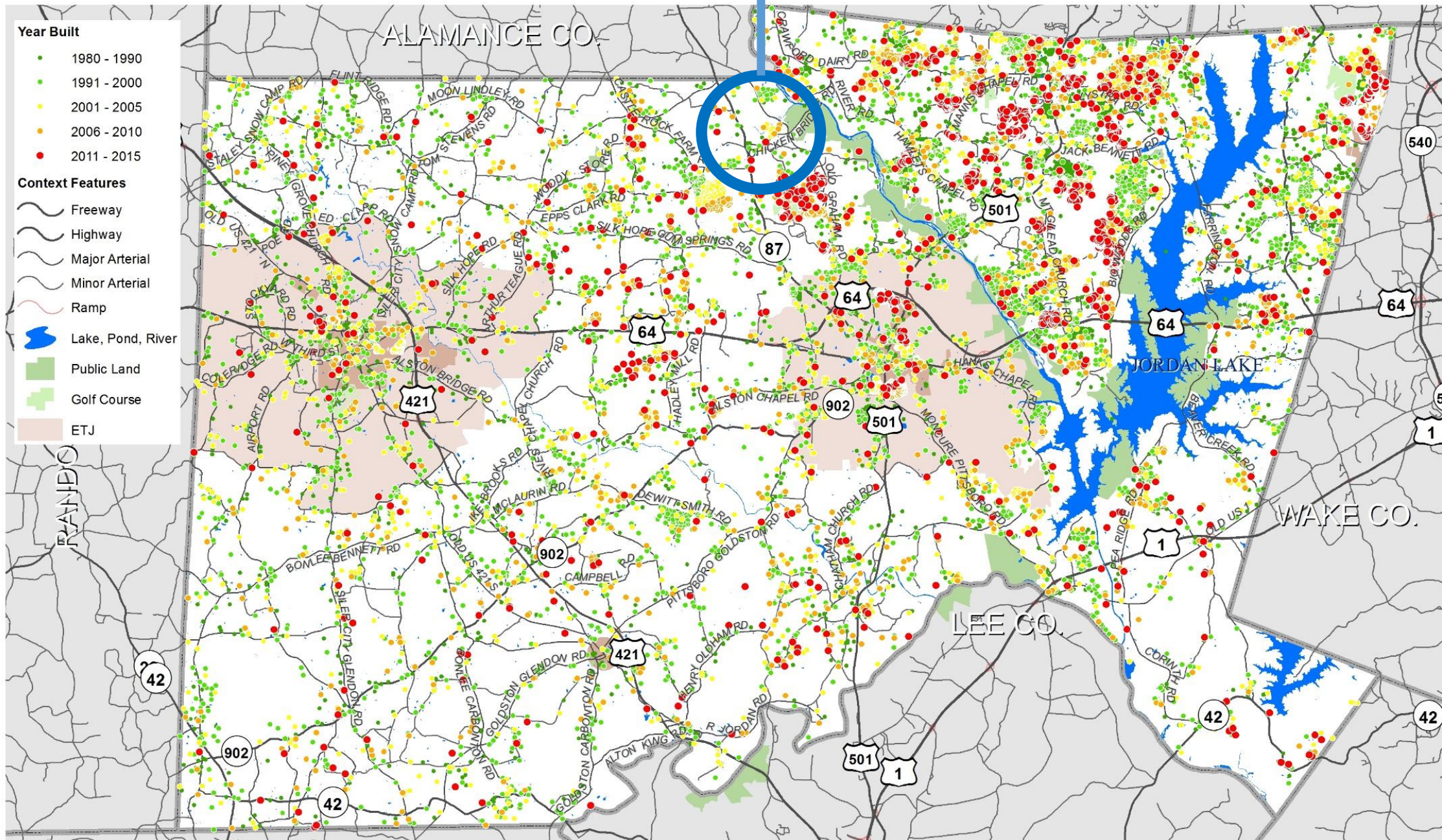
- < -1.5 Std. Dev.
- 1.5 - -0.50 Std. Dev.
- 0.50 - 0.50 Std. Dev.
- 0.50 - 1.5 Std. Dev.
- 1.5 - 2.5 Std. Dev.
- > 2.5 Std. Dev.

Managed Area or Conservation Easement

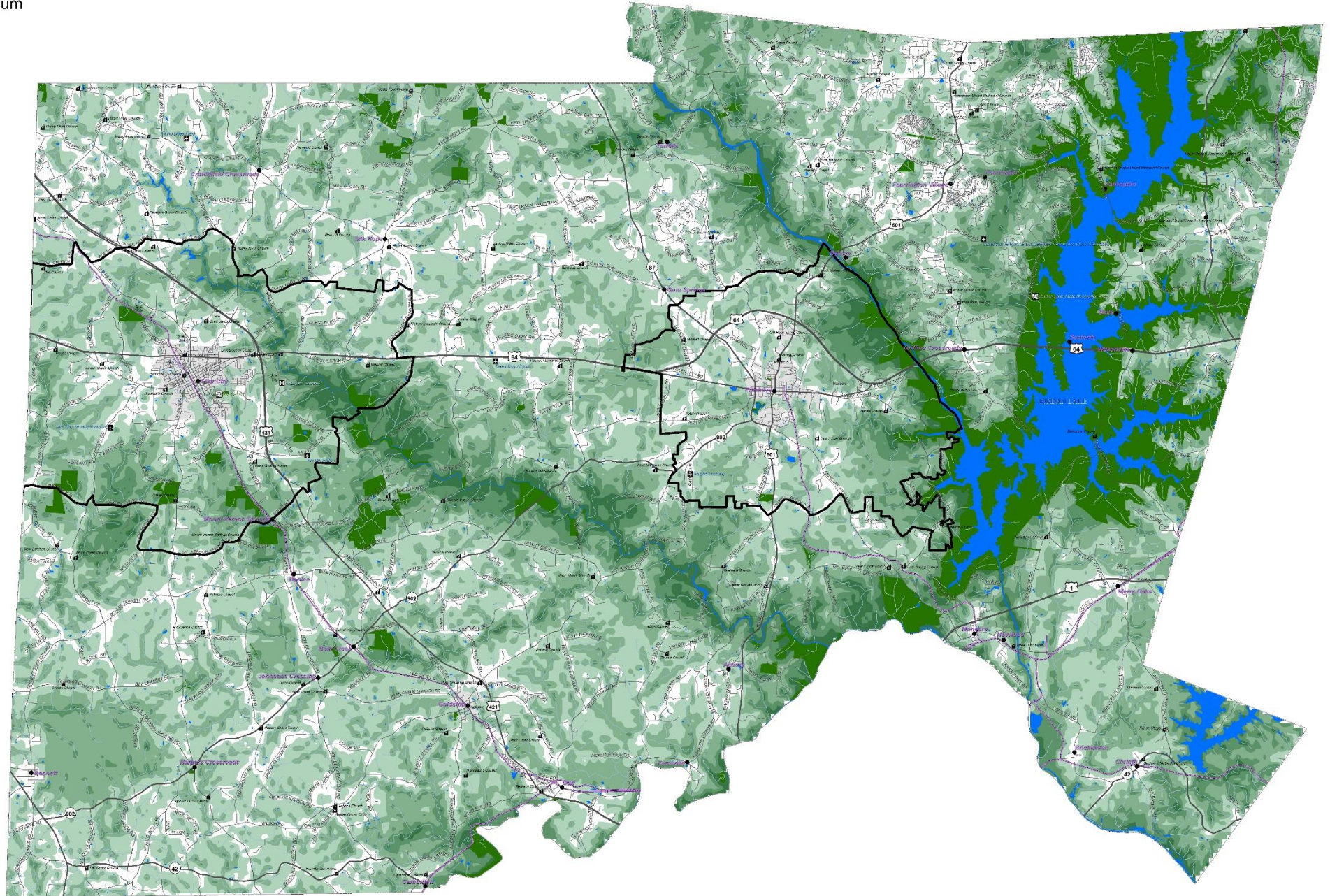
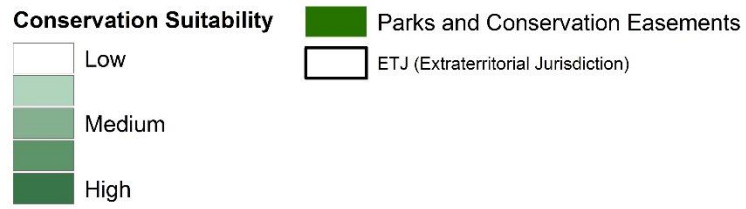


RECENT GROWTH

R1 ZONING ALLOWS 2,000 DWELLINGS IN APPROX. THIS AREA



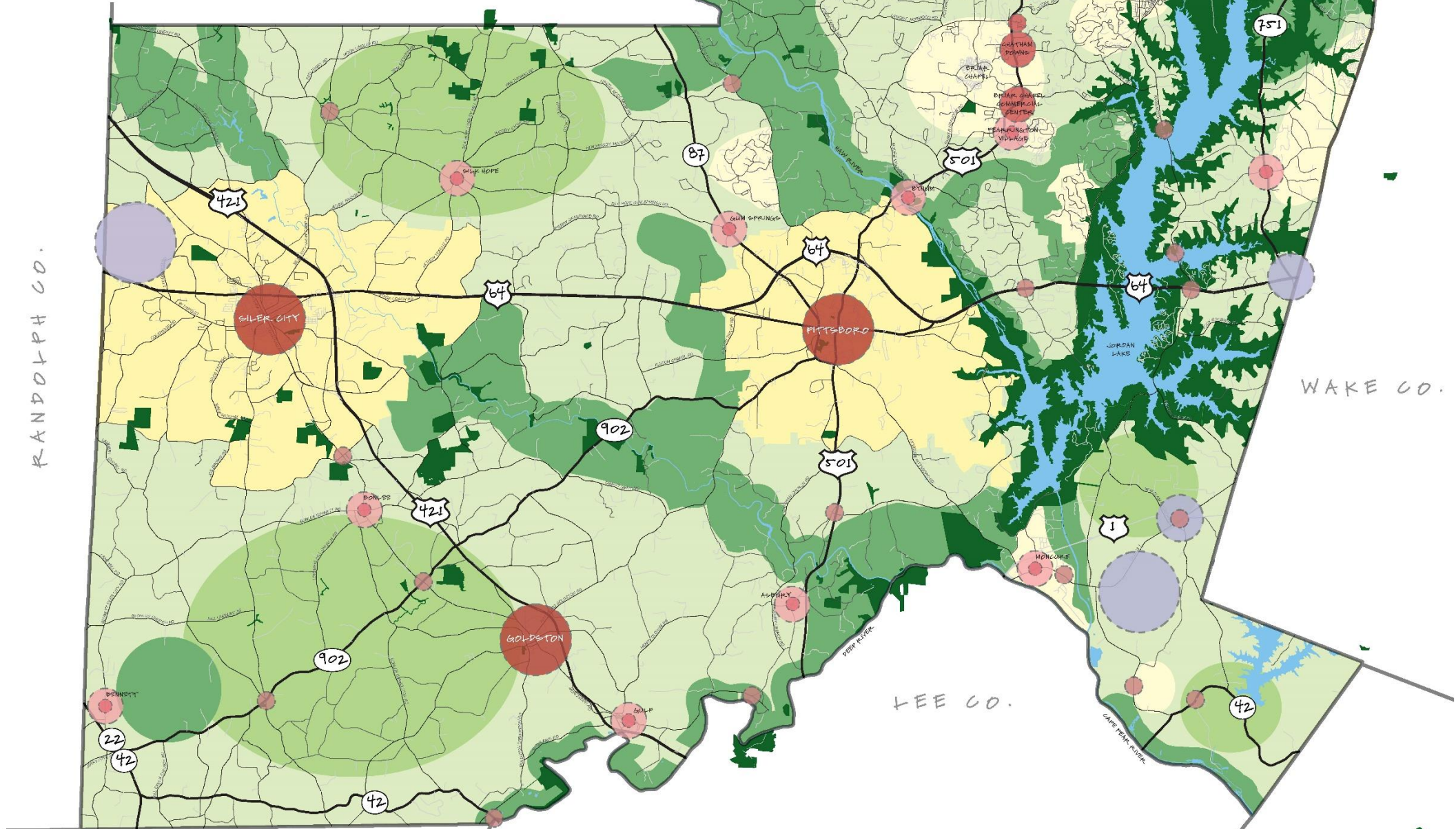
CONSERVATION SUITABILITY



DRAFT FRAMEWORK PLAN

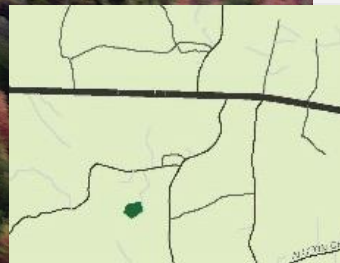
LEGEND

- | | | |
|---|--|--|
|  TOWN CENTER |  VILLAGE & VILLAGE CENTER |  RURAL |
|  EMPLOYMENT CENTER |  CROSSROADS COMMUNITY |  AGRICULTURE |
|  COMMUNITY CENTER |  ETJ |  CONSERVATION |
|  NEIGHBORHOOD CENTER |  COMPACT RESIDENTIAL |  PARK / PROTECTED LANDS |



Low density development is comprised of single family homes on large lots or in conservation subdivisions as well as some commercial buildings designed to protect function and form of rural character. Pastures, cropland, and timberland dominate the landscape.

- Mix of uses include agriculture, large lot residential, supporting service uses, and home-based & small scale businesses
- Buildings: 1- and 2-story, more for farm buildings
- Streets: rural two-lane (“farm-to-market”) roads
- Public/open space: conservation easements, regional greenway trails, preservation sites (historic and cultural), private space in large lots (POA esmt)





CASE STUDY: Willowsford, VA

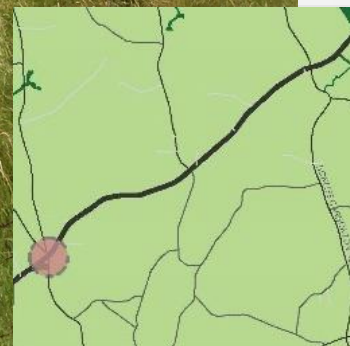
RURAL BUSINESSES

Agricultural related businesses are protected by state and county laws. What types of non-farm businesses are compatible with or help support farming directly or indirectly?

- Agritourism farm enterprises; these are now taxed as entertainment (or otherwise restricted). This reduces their use as a way to keep small farms viable through farm tours, workshops, farm dinners, etc. These are not truly "non-farm" but are treated as such.
- agricultural equipment (large and small) suppliers and repair shops are needed in relatively close proximity.
- "Stockyard, Chaudry meat processing, Black and Clapp Bros. Tractor, Southern States, feed and fertilizer suppliers, now Mountaire, all the chicken producers support the cattle pastures with manure fertilizer, and in turn support all the farmers growing crops and vegetables.
- Farmer's Markets are crucial, and we now have 4 in this county and several in neighboring counties. Carrboro market is good prices but essentially not open for new vendors. New options in nearby densely populated areas will help marketing."
- Railways, Diesel Truck repair, Hardware, By-Product removal, Supply of natural gas, Electrical Supply,
- Grocery stores that sell local produce and goods!!
- Anything that adds extra income...

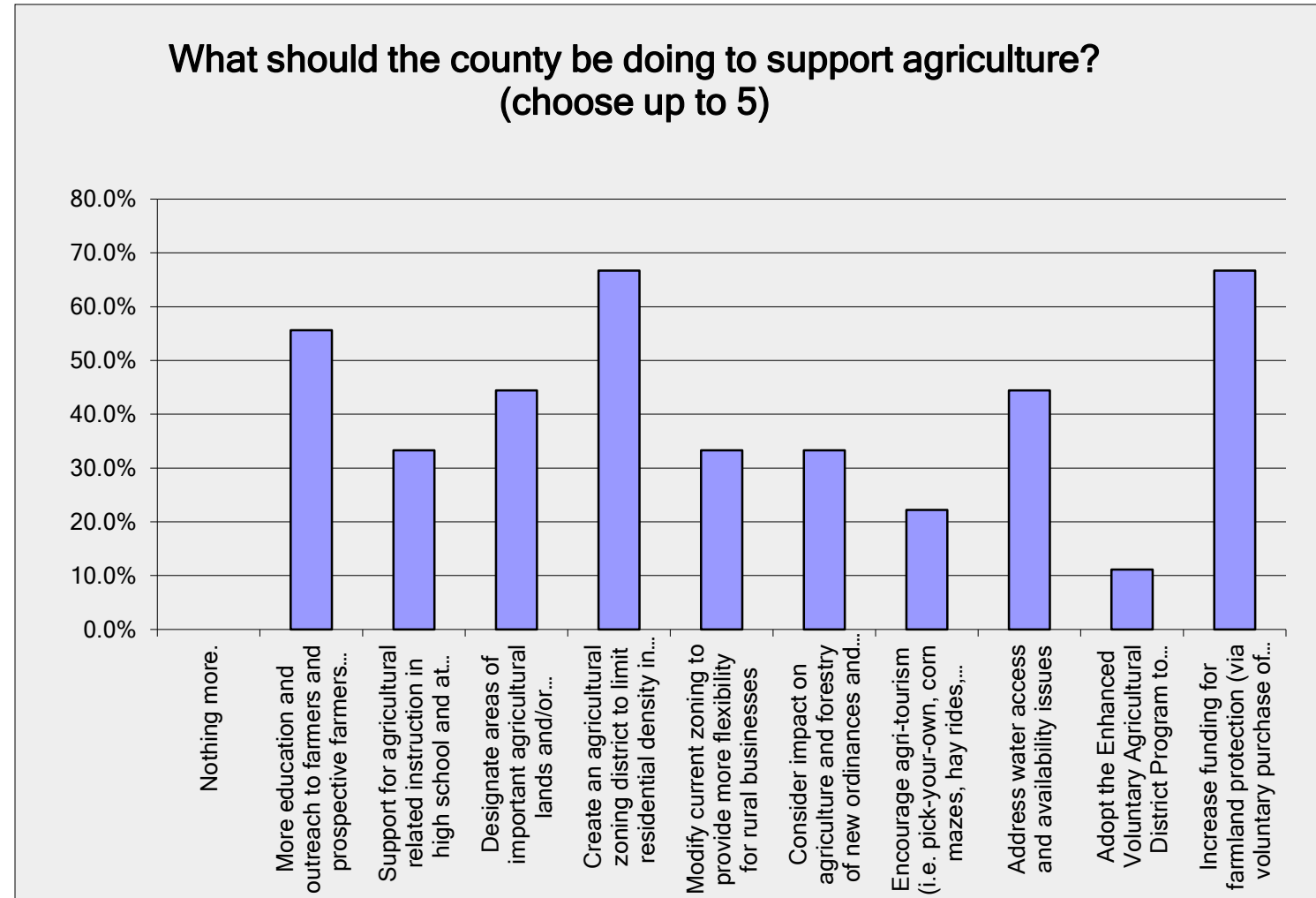
The location of large-scale working farms and timberlands, this area is comprised of intensive, highly productive operations.

- Mix of uses include large-scale agriculture, related processing facilities, **supporting commercial and service uses**, single family homes on very large lots
- Buildings: 1- and 2-story, more for farm buildings
- Streets: rural two-lane (“farm-to-market”) roads
- Public/open space: conservation easements, protected



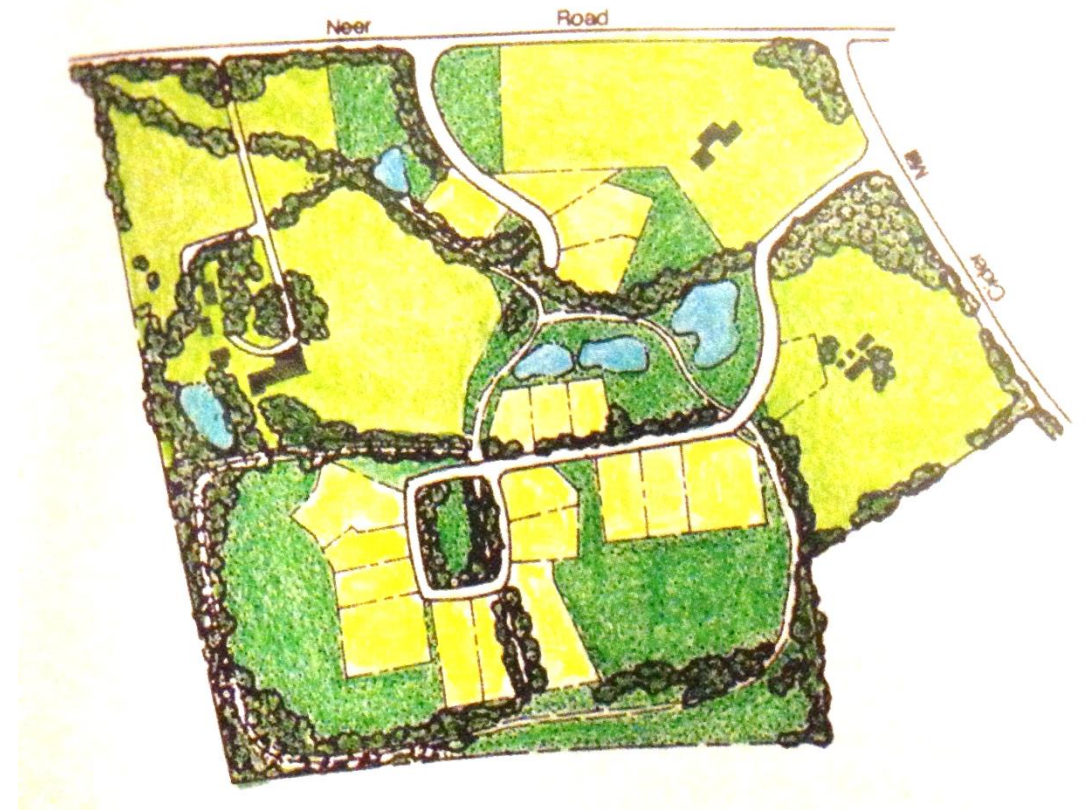
POTENTIAL STRATEGIES

- Create an Ag zoning district
 - Density
 - Design (i.e. buffers of farms)
- Increase funding for farmland protection
- Designate areas of important ag lands
 - Improved Disclosure for VADs
- Address water
- More education and outreach



ZONING AND POLICY

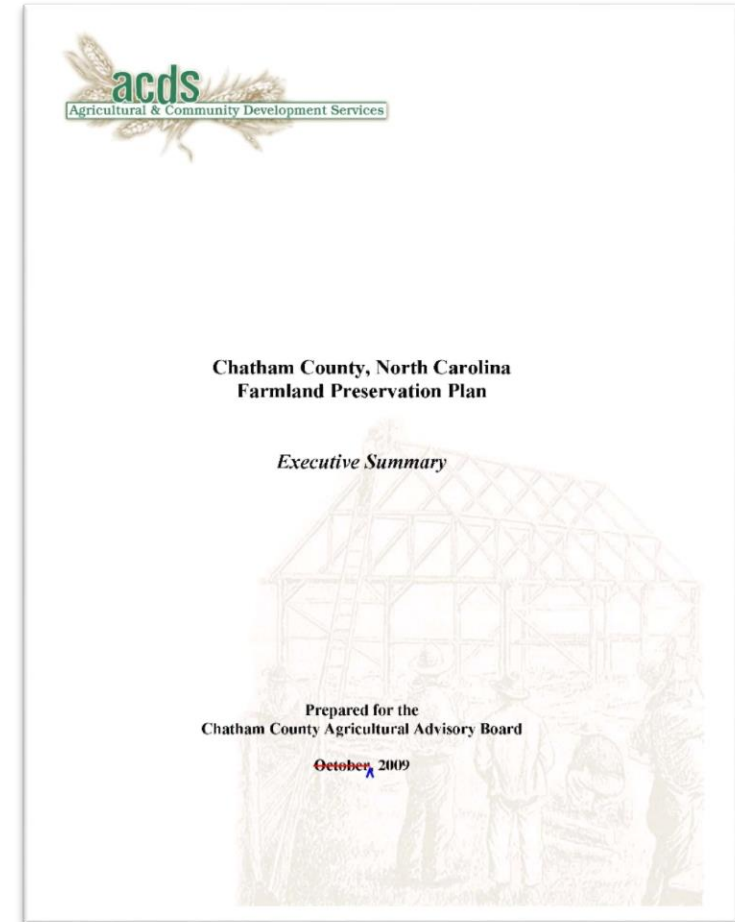
- Euclidian zoning
 - R1, R5, min lot size
 - Uses specified
- Performance based zoning
 - If, then...
 - These uses ok, more intense uses may be ok but may have to meet requirements
 - Some uses not ok or req. SUP
- Sliding scale zoning
 - >10 acres – 1 DU per 2 acres
 - 10-20 acres – 5 + 1 per 5 (i.e 7 DU for 20 ac.)
 - >20 – 7 + 1 per 10 (i.e. 10 for 50 ac.)
- Importance of design
 - Can minimize impact on adjacent operations, preserve rural views, etc.



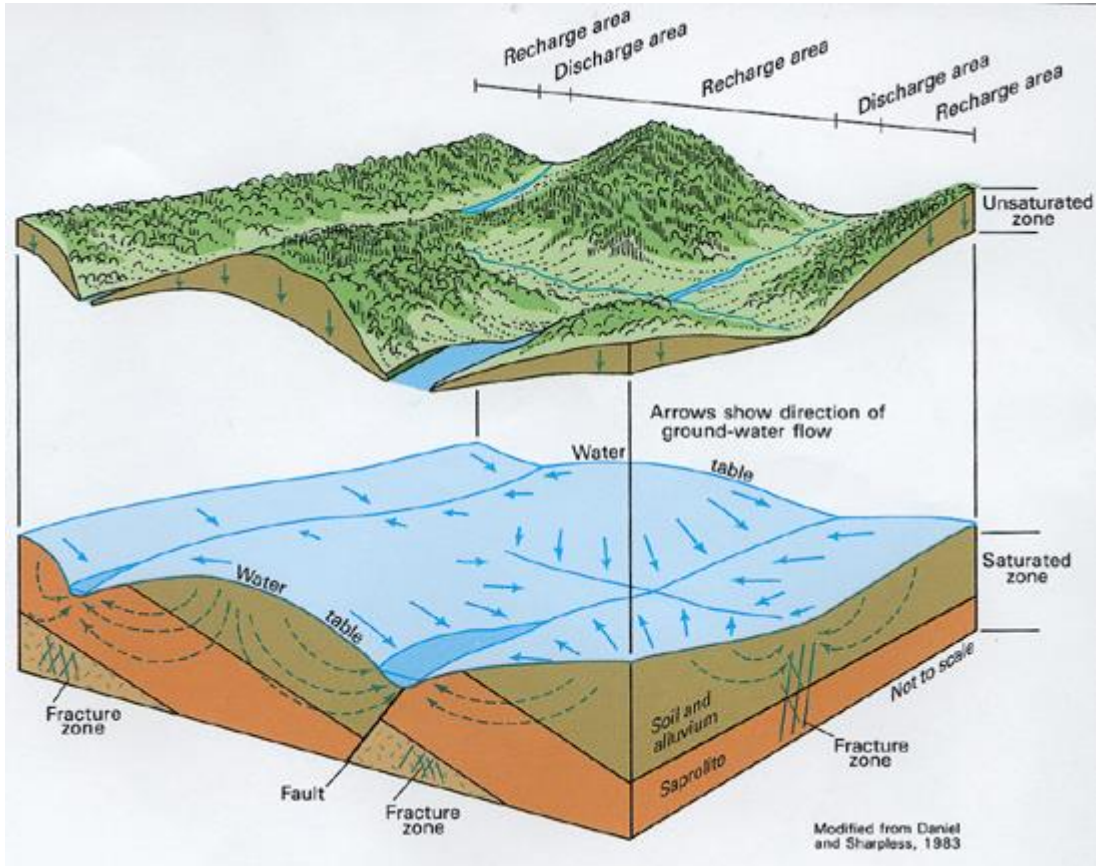
FARMLAND PRESERVATION PLAN

Recommendations in the FPP

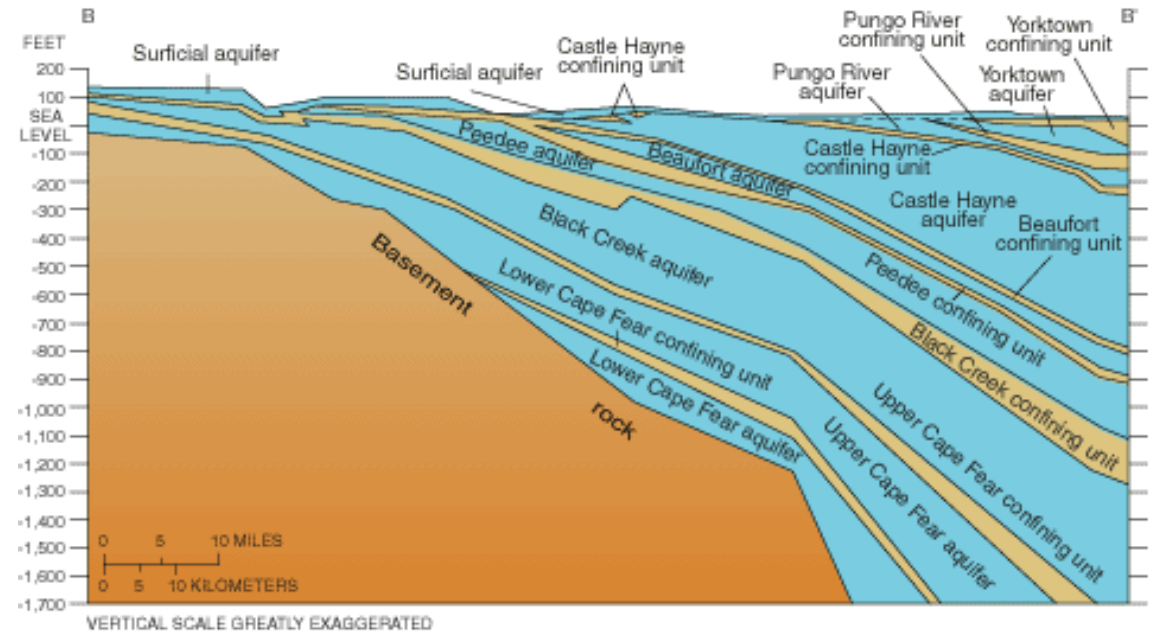
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WATER SECURITY

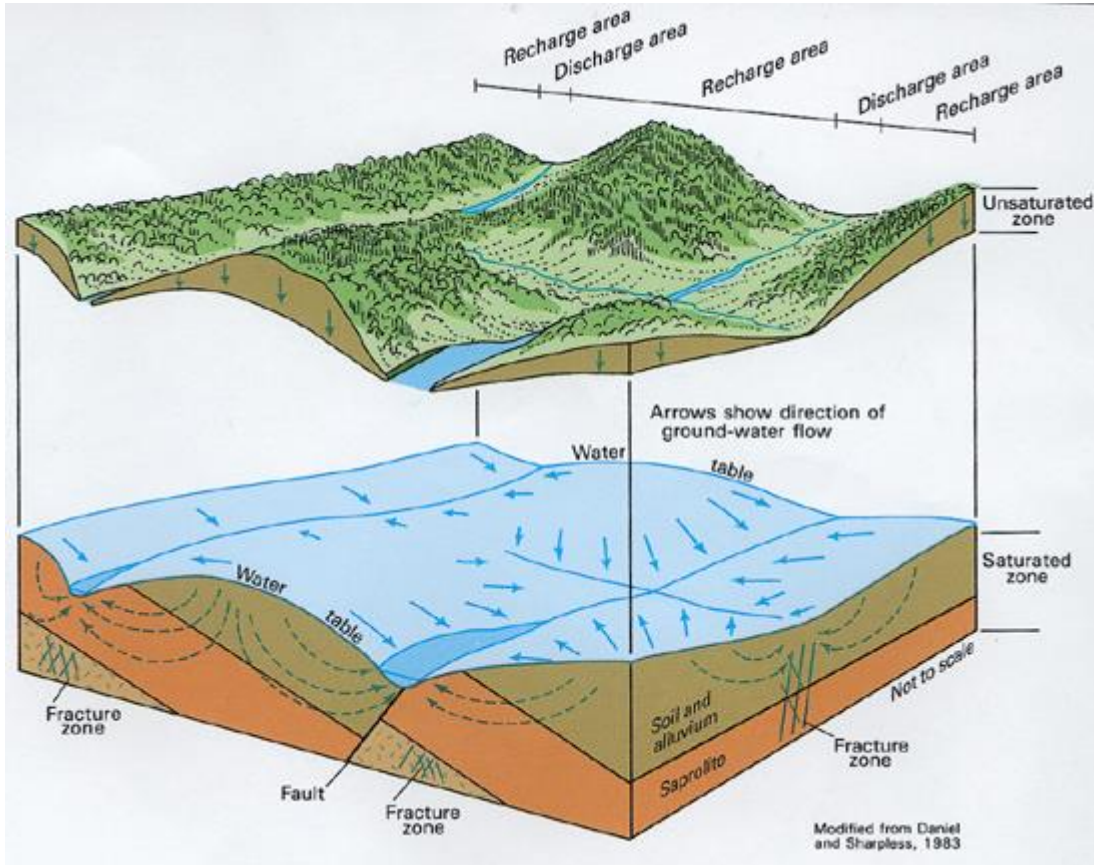


Piedmont Hydrology



Coastal Plain Hydrology

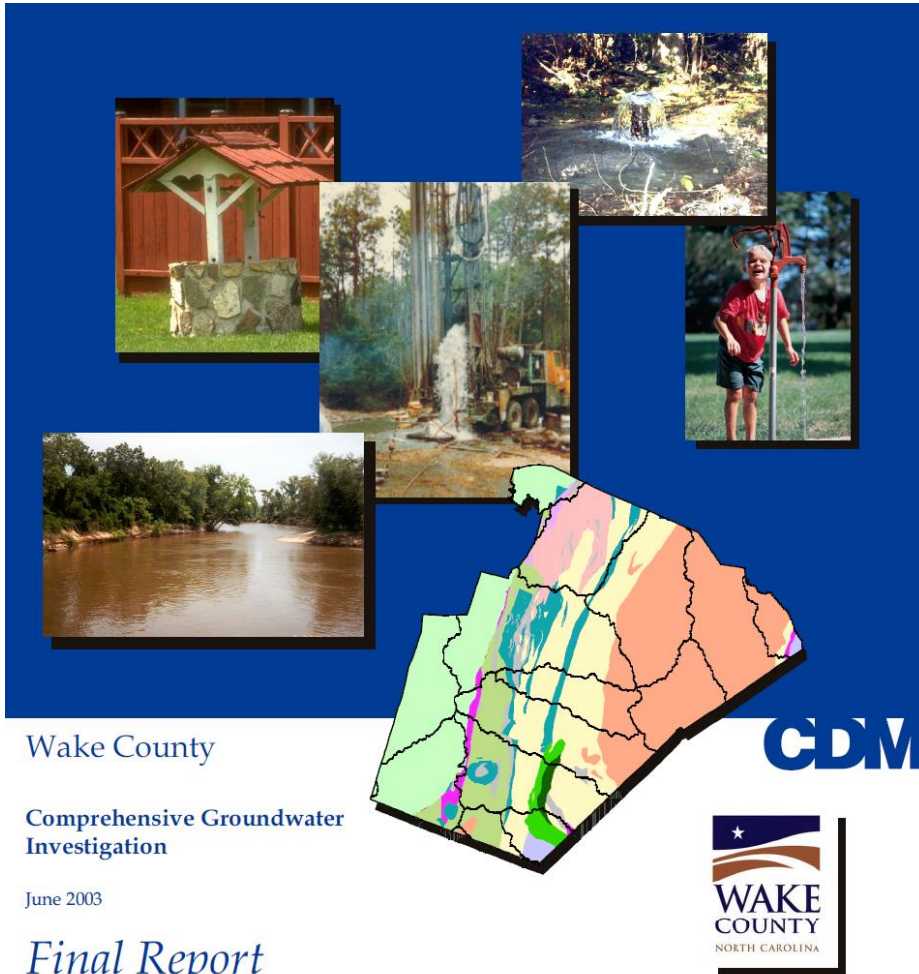
WATER SECURITY



- Fractured bedrock aquifers make it difficult to monitor and predict effects on groundwater
- “Because of the complex distribution of fractures in almost every type of rock, no single method can unambiguously map fractures and their capacity...” --USGS

WATER SECURITY

- Groundwater withdrawal inventory
 - Domestic Wells
 - Community Wells
- Recharge rates
- Base stream flow impacts of use



WATER SECURITY

Wake County Groundwater Sustainability Stakeholder Committee Report

1.0 Introduction

Groundwater continues to be an important resource in Wake County. Almost one quarter of the County's residents rely on groundwater for their water supply. Recent Wake County environmental initiatives, including the *Comprehensive Groundwater Investigation in 2003*, have emphasized the importance of groundwater as a crucial current and future water supply especially to those areas of the County where the extension of water and sewer service is not planned.

Building on the recommendations of the *Comprehensive Groundwater Investigation*, the Wake County Department of Environmental Services (DES) initiated a stakeholder-driven process to investigate issues related to groundwater resources and review and recommend potential groundwater management solutions appropriate to Wake County. The process began in June of 2006 with the formation of the Groundwater Sustainability Committee (see inset), as part of the Environmental Services Committee, Water Quality Subcommittee. The County formed the committee in response to the concerns of several private well owners, two of which served on the committee. One of the committee's well owners experienced a dry well

1.1 Purpose, Goals, and Objectives

The 2003 *Comprehensive Groundwater Investigation Report*, also developed by a stakeholder committee, included eight major recommendations related to groundwater resources in Wake County. Recommendation No. 3 from the report proposed that the County implement a community-based process to develop principles and policies for

groundwater resource sustainability and prepare strategies that can be implemented to achieve groundwater sustainability. With that goal in mind, the current committee (some of which were part of the original stakeholder committee) began developing a list of specific objectives, questions, and concerns that might be considered during the process. For example:

Groundwater Sustainability Stakeholder Committee	
Stakeholder	Affiliation
Dr. John Fountain (Chair)	North Carolina State University
Greg Bright	Wake County Dept. of Environmental Services
Steve Bristow	Wake County Dept. of Environmental Services
Mark Bailey	Wake County Dept. of Environmental Services
Reginald Goodson	Wake County Planning Dept.
Celena Everette	Wake County Dept. of Community Services
Jill Strickler	Aqua America/Heater Utilities
George Rogers	City of Raleigh Public Utilities
Allen Hardy	Public Water Supply Section- NCDENR
George Kevalak	Citizen and Private Well Owner
Steve Zoufaly	Citizen and Private Well Owner
Rusty Ammons	RLA Development
Nat Wilson	NCDENR Division of Water Resources
John Boyette	Boyette Well
David Hutson	Acme Well Drilling
Rick Bolich	NCDENR Aquifer Protection Section
Melinda Chapman	United States Geological Survey
Buck Kennedy	The Wooten Company
John Boyer	CDM (Consultant, Non-voting member)
Natalie Rittinger	CDM (Facilitator, Non-voting member)

- What are the implications of resource competition on private wells? What are a well owner's legal rights?
- What are the assurances that existing wells are going to be protected?
- What are the impacts of development around an existing, low-yielding well?

- Primary concern was impacts to existing wells
- Question of reasonable use
- Recommended:
 - Collect additional data on groundwater trends and usage
 - Establish a permit process for high capacity wells --- (like Guilford Co.)
 - Wells outside of water service areas that withdraw more than 10k gallons per day have to get a special permit



Red Roots Farm

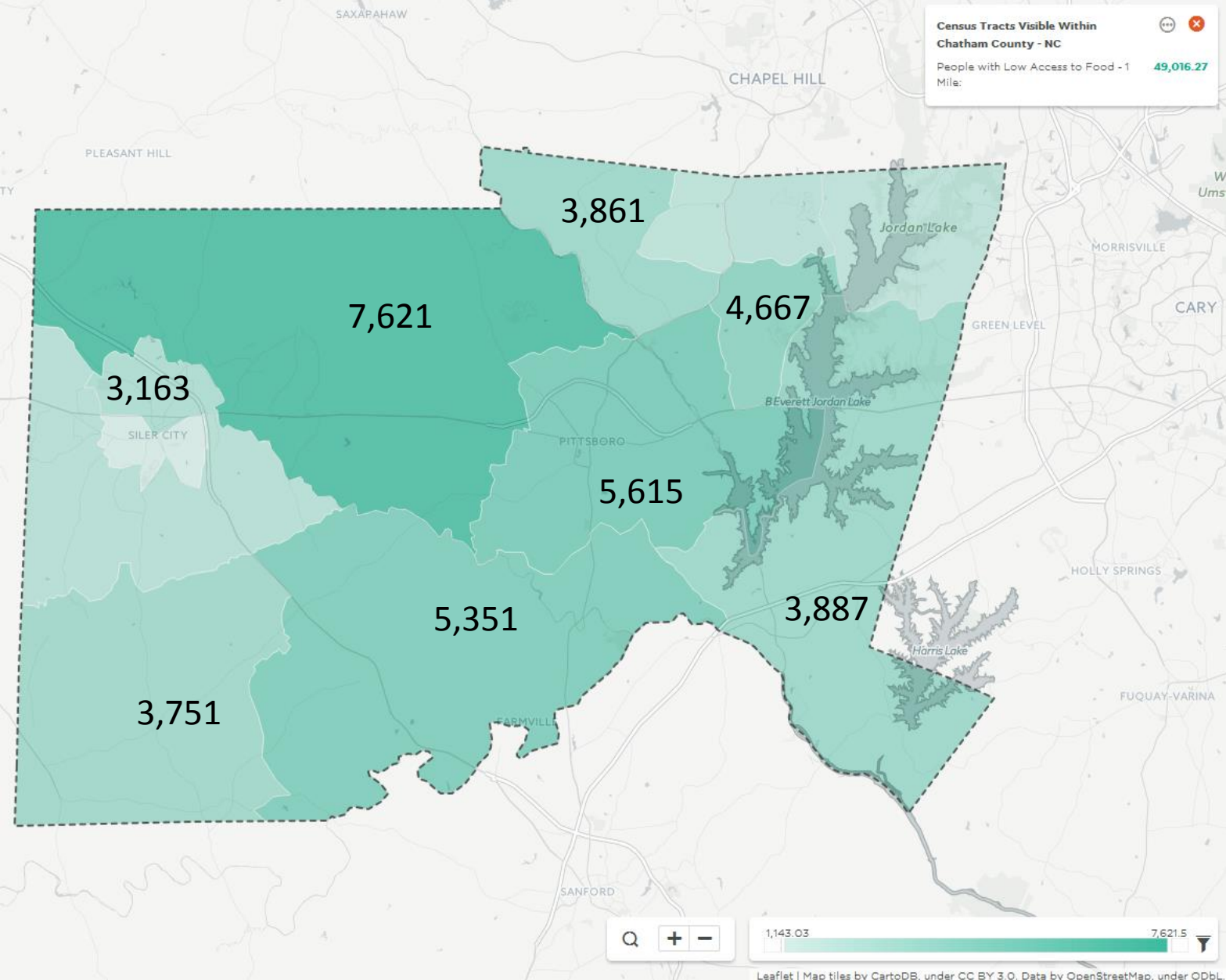
Chatham County, NC
www.redrootsfarm.com

FOOD ACCESS

FOOD ACCESS

People with low access to food

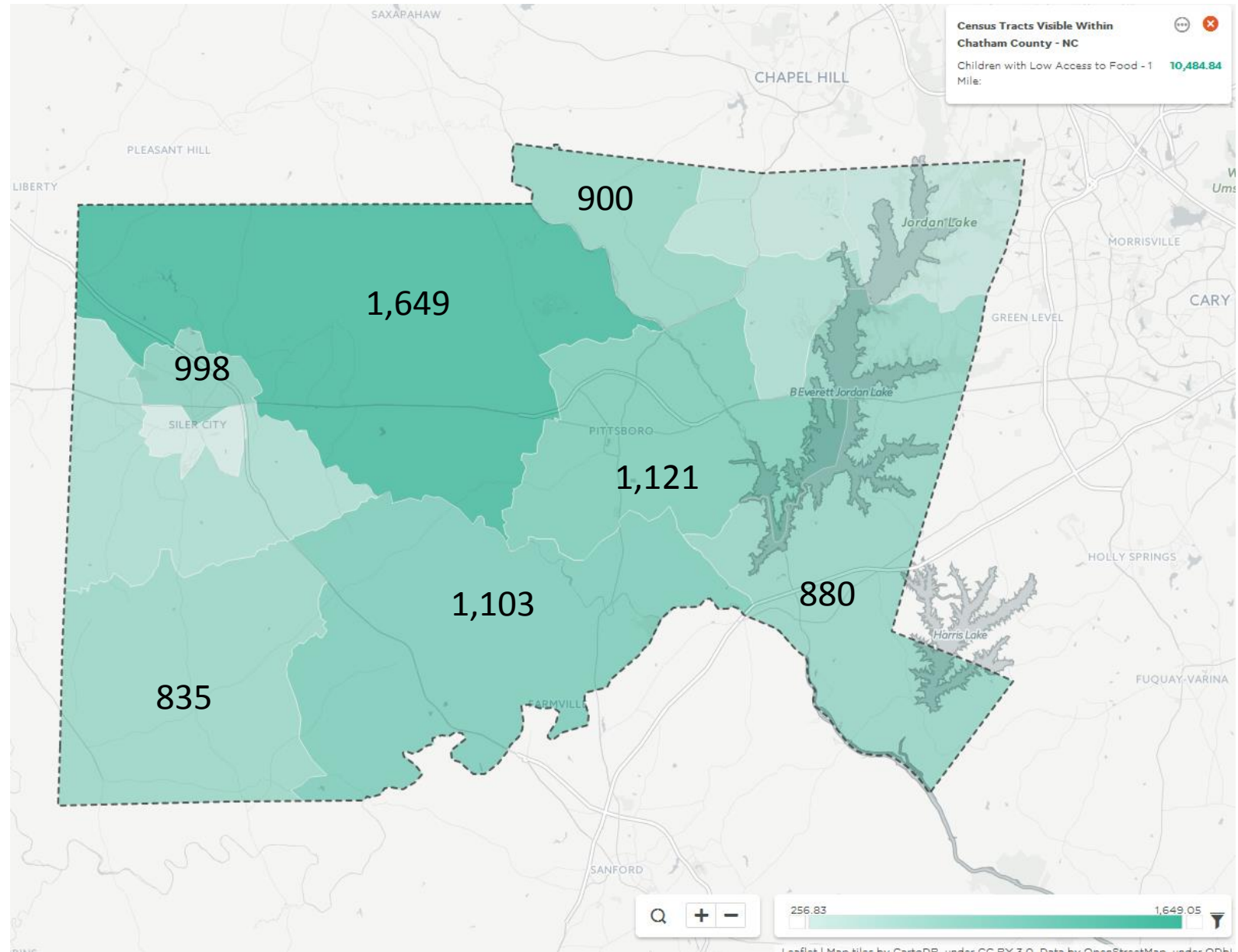
- 49,016
- Without food access within 1 mile



FOOD ACCESS

Children with low access to food

- 10,484
- Without food access within 1 mile



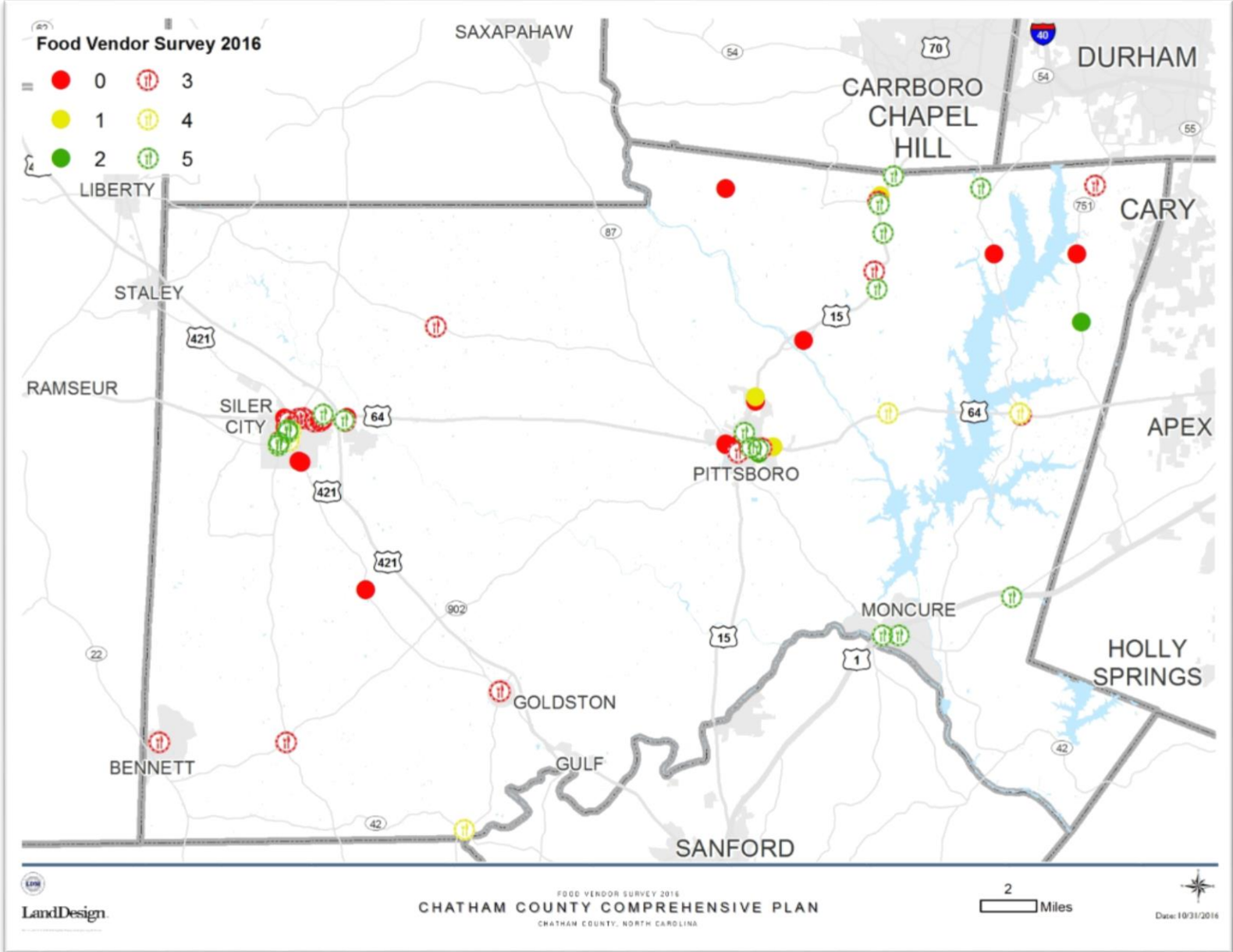
FOOD ACCESS

% of population with access

- 70% Within 5 miles
- 44% Within 2 miles
- 31% Within 1 mile

Strategies

- Programs / incentives to get existing outlets to a 2, 4 or 5
- Increase # of outlets with 1-5s
- Remove regulatory hurdles



FOOD ACCESS

Farm exemptions

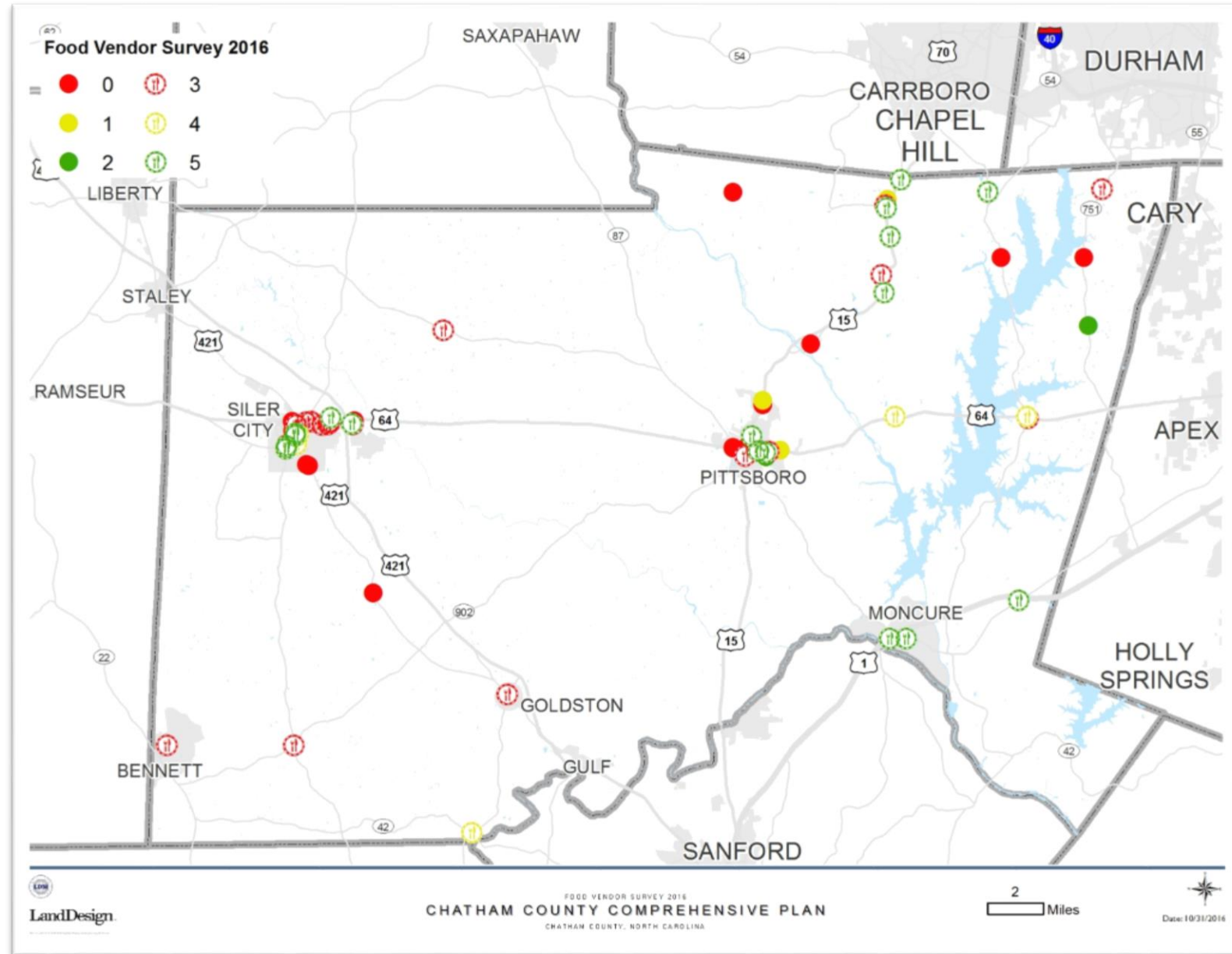
- Farm produce is exempt

Other potential issues

- Lost outlets in Goldston since 2013 (farmers market and Goldston Grocery)
- Municipal permitting of food outlets may be prohibitive
- Siler City recently passed a new ordinance to remove barriers

Question:

- Is there a role for local agriculture?



WHAT'S NEXT

- Refine the Agriculture Suitability map (survey resp.)
 - Refine the Future Land Use map
 - Develop Draft Strategic Agricultural Land Map
 - Reference map in Comp Plan
- What policies should be associated with what areas?
 - Design recommendations
 - Performance based zoning approach to businesses
 - Density recommendations for residential (R3 or sliding scale)
 - Density transfer options
 - Voluntary Purchase of Dev. Rights

