

Palmetto 2040 Visioning Session FINAL REPORT

MARCH 2024

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Table of Contents

1	Overview of Palmetto 2040
1	Development of a Localized Conservation Priorities
3	General Recommendations
5	County Recommendations
6	State Recommendations
7	Other Conservation Priorities
7	Supporting Information
7	References
8	Attachment A. Localized Values Map
9	Attachment B. Headwaters Area Map
10	Attachment C. Headwaters Zone Projected Development Map
11	Attachment D. Projected Development Map
12	Attachment E. Headwaters Zone Current Development Map

Overview of Palmetto 2040: Visioning Alternative Futures, Launching Solutions

According to American Farmland Trust's (AFT) *Farms Under Threat: The State of the States* report, South Carolina is at very high risk for future farmland loss, with over 280,000 acres of farmland converted to non-agricultural uses between 2001 and 2016, giving the Palmetto State the eighth highest "threat score" in the nation. Lexington County led the state in farmland conversion, with over 29,000 acres converted to non-agricultural uses.

For this project, AFT used geospatial mapping and land cover analysis to identify how Lexington County's farmland would fare under alternative development scenarios, discuss tradeoffs among these factors, and develop potential policy solutions for reaching the most optimal path for future development regarding agricultural conservation.

The South Carolina Department of Agriculture, Lexington County Farm Bureau, American Farmland Trust, and the Winthrop Family Fund provided support for the project, with SustainSC as the convening partner.

Development of Localized Conservation Priorities

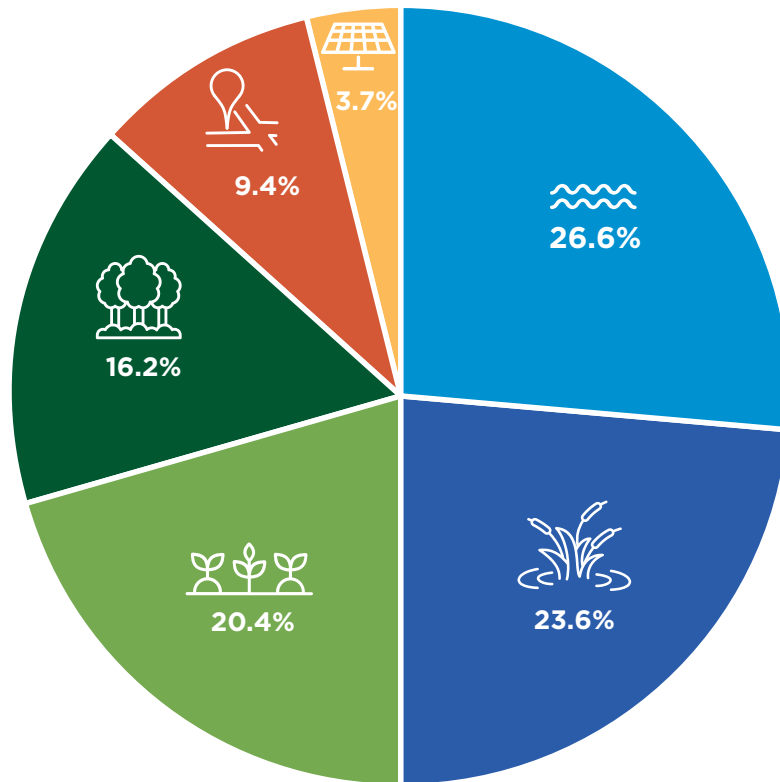
During a November 2023 in-person meeting, AFT administered an anonymous survey asking attendees representing the supporting organizations to place their land-based conservation priorities on a scale from low to high. Survey scores were then analyzed using a multi-criteria decision-making method (Analytic Hierarchy Process; AHP) to determine the relative priority of each survey item, averaged across all surveys.

Each survey item corresponded to a land cover data layer (i.e., conservation priority). AFT then developed a Localized Values (LV) map layer to visualize the priorities of the attendees by assigning priority weights to the corresponding land cover data (see Attachment A).

Based on the priority results, attendees indicated a high preference for the conservation of waterways and wetlands, followed by the conservation of farms and forests. Lands close to already developed areas or lands suitable for solar were of lowest conservation priority. For policy insight, the protection of waterways and wetlands captured 50% of attendee conservation priorities; the protection of waterways/wetlands AND farms/forests captured 87% of attendee conservation priorities (Table 1).

TABLE 1. WEIGHTED CONSERVATION PRIORITIES AS INDICATED BY MEETING ATTENDEES.

ITEM	WEIGHT	DATA SOURCE
Waterways	26.6%	Riparian Buffers (Stokes and Smidt, 2022)
Wetlands	23.6%	National Wetland Inventory (USFWS, 2023)
Farms	20.4%	2016 Land Cover (American Farmland Trust, 2020)
Forests	16.2%	2016 Land Cover (American Farmland Trust, 2020)
Lands Close to Developed Areas	9.4%	Future Scenarios of Development (AFT, 2022)
Lands Suitable for Solar	3.7%	Solar Suitability (AFT, 2022)



AFT then used feedback from project partners, the LV layer relative to projected development scenarios, and the weighted conservation results to develop guiding recommendations. Ongoing efforts to this project include coalition building to utilize the recommendations.

General Recommendations

Project partners indicated a strong preference for the holistic balance of urban progress with the preservation of natural and working lands, especially where those lands provide valuable ecosystem services (e.g., riparian areas). Additionally, there was a strong desire for the in-fill of developed lands to prevent future development compromising the overall conservation priorities of adjacent farmland.

Development threats in Lexington County are not confined to high density urban sprawl but also include the fragmentation and disruption of natural and working lands through conversion to low-density residential. The county offers both suitability for the continued development of high-density urban locations, as well as suitability for low density residential through abundant waterfront areas, forested rural parcels, and scenic agricultural landscapes located within proximity to a relatively dense roadway system connected to the urban hubs. Further influencing land transactions and subsequent development of natural and working lands in the county are additional factors like proximity to schools and other public utilities (e.g., sewers). Likewise, viable farmlands also depend on infrastructure to help facilitate sales, distribution of goods, and access to water or other operational needs (e.g., equipment delivery). Based on these factors, there are many general recommendations that can support the overall Lexington County priority of advocating for community development while protecting natural and working lands (Table 2).

TABLE 2. AMERICAN FARMLAND TRUST’S GENERAL RECOMMENDATIONS FOR LEXINGTON COUNTY.

1. Cost of Community Service Study
Implement a case study approach used to determine the fiscal contribution of existing local land uses. A Cost of Community Service study can be used to fiscally evaluate working and open lands on equal ground with residential, commercial, and industrial land uses.
2. Community Quality of Life Survey
Identify public perceptions for their current quality of life while identifying the key items that shape the quality-of-life priorities for the community.
3. In-Fill Availability Study
Identify the total area available for development within already urbanized lands to promote smart growth that reduces urban sprawl.
4. Economic Loss due to Farm Loss
Quantify the expected economic losses due to agricultural land transformation.
5. Farmer Spokespersons from Trusted Resources
Partner with key members of the agricultural community who can champion the agricultural conservation conversation to promote land protection from trusted resources.
6. Ensure Business Viable Solutions for Farmers
Ensure management decisions capture the economic viability of the local farming community.
7. Link Ecosystem Services to Farmland Protection
Agricultural conservation in Lexington County can be catalyzed through the ongoing recognition of the ecosystem services provided by working lands.
8. Ongoing Education and Communication
Building conservation initiatives requires continued knowledge sharing and education of the public who ultimately drive decision-making outcomes.

County Recommendations

Lexington County is unique in that there is a drainage basin divide in the middle of the county where land use within this divide area has direct downstream effects throughout the county, especially in downstream urban areas (see Attachment B). Most importantly, this divide area (i.e., headwaters area) also has some of the highest and most concentrated LV lands and is most under threat of future development, particularly through low density residential development.

There are direct threats to the highest LV lands through urban conversion along waterways and within headwater locations (see Attachment C). Additionally, there is projected sprawl away from the urban center and onto adjacent rural lands that have high priority for farm and forest conservation. In-fill through the development of lands closest to urban areas is not largely present in the urban development forecasts, where most new development appears throughout the middle of the county, as well as scattered pockets of development along waterfronts or larger roadways.

Lexington County appears to be particularly poised to capture its land protection and farmland conservation goals through the emphasis of a Headwaters Protection Zone. Lands located within this environmentally-vital headwaters area provide abundant agricultural and ecosystem services while buffering downstream urban areas.

Additionally, learning opportunities targeted on farmland conservation remains an ongoing need. Creating an agricultural conservation holiday as part of a K-12 education campaign can help generate support; this holiday could perhaps be integrated into the popular Lexington County Peach Festival which is located within the recommended Headwaters Protection Zone (Table 2).

TABLE 2. AMERICAN FARMLAND TRUST'S POLICY RECOMMENDATIONS FOR LEXINGTON COUNTY.

1. Create a Headwaters Protection Zone as a priority area within a larger comprehensive plan.
The highest priority lands are largely in headwater areas. These areas are also under high threat of development. Creating a Headwaters Protection Zone as a focus area within a larger land conservation plan can help strategically uphold ecosystem services, permanently protect agricultural lands, and prevent against development onto high priority lands.
2. Create a local Agricultural Conservation holiday as part of a K-12 education campaign.
Permanent protection of highly valued lands requires ongoing education and communication, particularly within the next generation.

State Recommendations

Statewide recommendations target programs and initiatives that apply to Lexington County but are managed at the state level (Table 3). These recommendations are largely aligned with the state budget instead of the county budget, though county programs can be modeled after state programs. State recommendations place Lexington County within the broader framework of South Carolina and the Southeast region and are more in line with federal initiatives through the United States Department of Agriculture like the Agricultural Conservation Easement Program. Likewise, these larger initiatives allow Lexington County to advance representation and service to beginning and underserved farmers through additional funding streams.

TABLE 3. AMERICAN FARMLAND TRUST’S POLICY RECOMMENDATIONS FOR SOUTH CAROLINA.

1. Allocate funding for the conservation of highly valued lands.
Permanently protect highly valued lands through the purchase of conservation easements, including lands that have support the Lexington County agricultural industry but may not directly align with the ranking criteria from other agricultural easement programs (e.g., non-traditional or forested poultry lands).
2. Establish incentive programs for the adoption of regenerative farming practices.
Make farming more profitable and viable for long-term agricultural use through incentives for landowners who adopt specific farming practices that support larger ecosystem services and water quality improvements, more than those provided through other assistance programs given the tightly linked hydrology of Lexington County watersheds and land use.
3. Establish a Beginning Farmers Ecosystem Services grant program.
Lower the barrier to beginner farmer assistance by adding early farmers as a ranking metric for easement acquisition where opportunities exist in local, state, and federal programs.
4. Allow for permanently protected agricultural lands to be subdivided if resulting parcels remain viable farming operations.
For existing and new conservation easements, establish a minimum acreage for viable farming operations, with subdivision provisions that are subject to local, state and/or federal programs.
5. Permit tax breaks in land transactions that sell from farmer-to-farmer.
Financially empower agricultural landowners to keep farms in the hands of farmers by incentivizing land transactions that remain agricultural in nature.

Other Conservation Priorities

Project partners also added other land-related policy priorities as part of the land value survey. Write-in items included: local agricultural diversity, prime soils, urban greenspace, environmental biodiversity, public recreation areas, and wildlife corridors. These write-in responses support the overall priority of promoting environmental services (e.g., biodiversity) while protecting lands that hold unique ecological value (e.g., highest quality soils) or uphold the agricultural industry at-large (e.g., local agricultural diversity). While these write-in items are not explicitly captured in the LV, they do offer supporting conservation discussion points focused on the localized valuation of lands for protection.

Supporting Information

See Attachment D for a map of LV. See Attachment E for a map of current development within a Headwaters Protection Zone.

References

American Farmland Trust (2020). Farms Under Threat: The State of the States. Land Cover, 2016. <https://csp-fut.appspot.com/>

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Lexington County, South Carolina: Localized Values Index

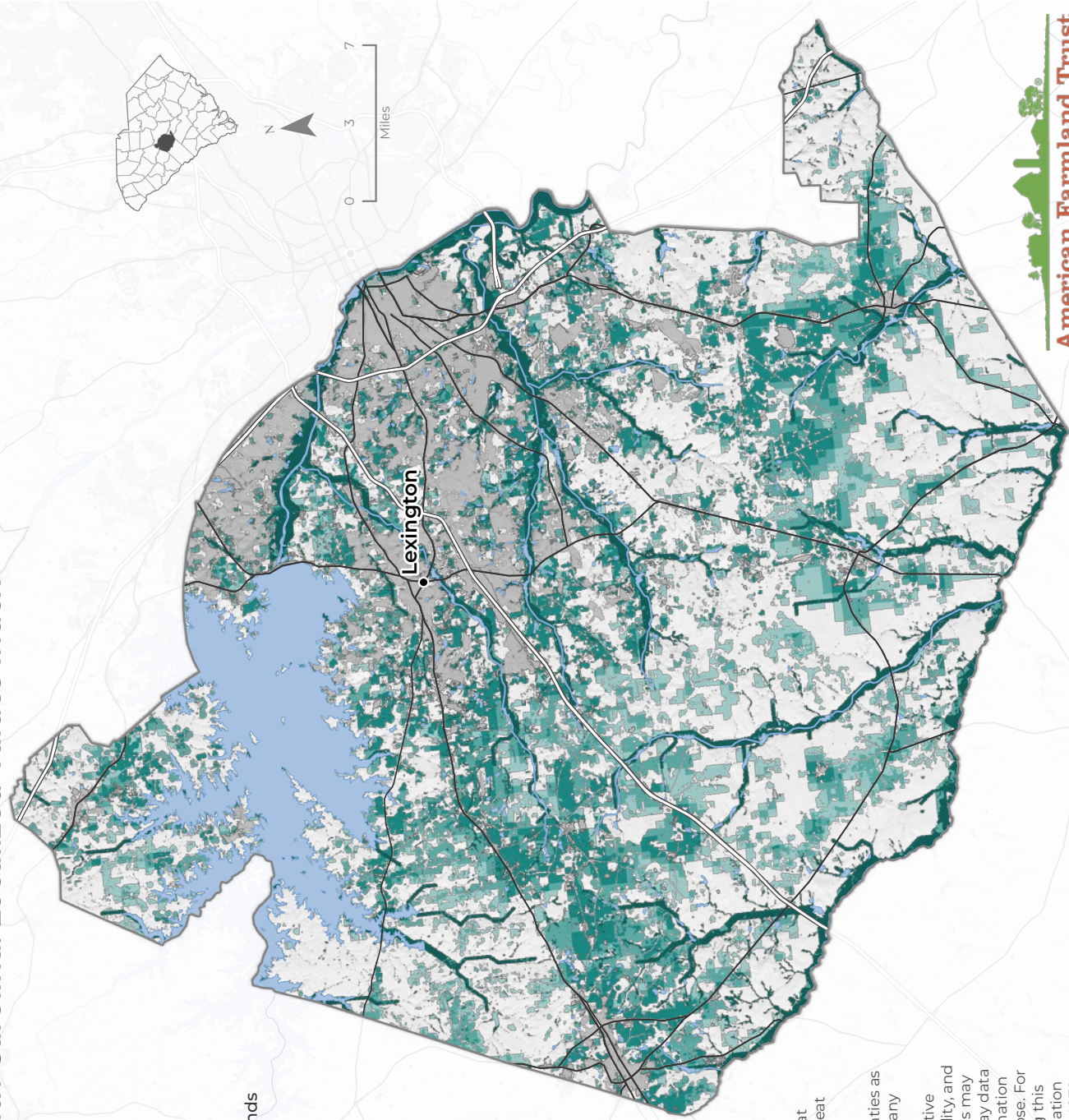
Attachment A

Localized Values Index



Land Cover

- Urban and Highly Developed Lands
- Forest, Federal and Other Lands
- Water
- Primary Roads
- Secondary Roads



Sources

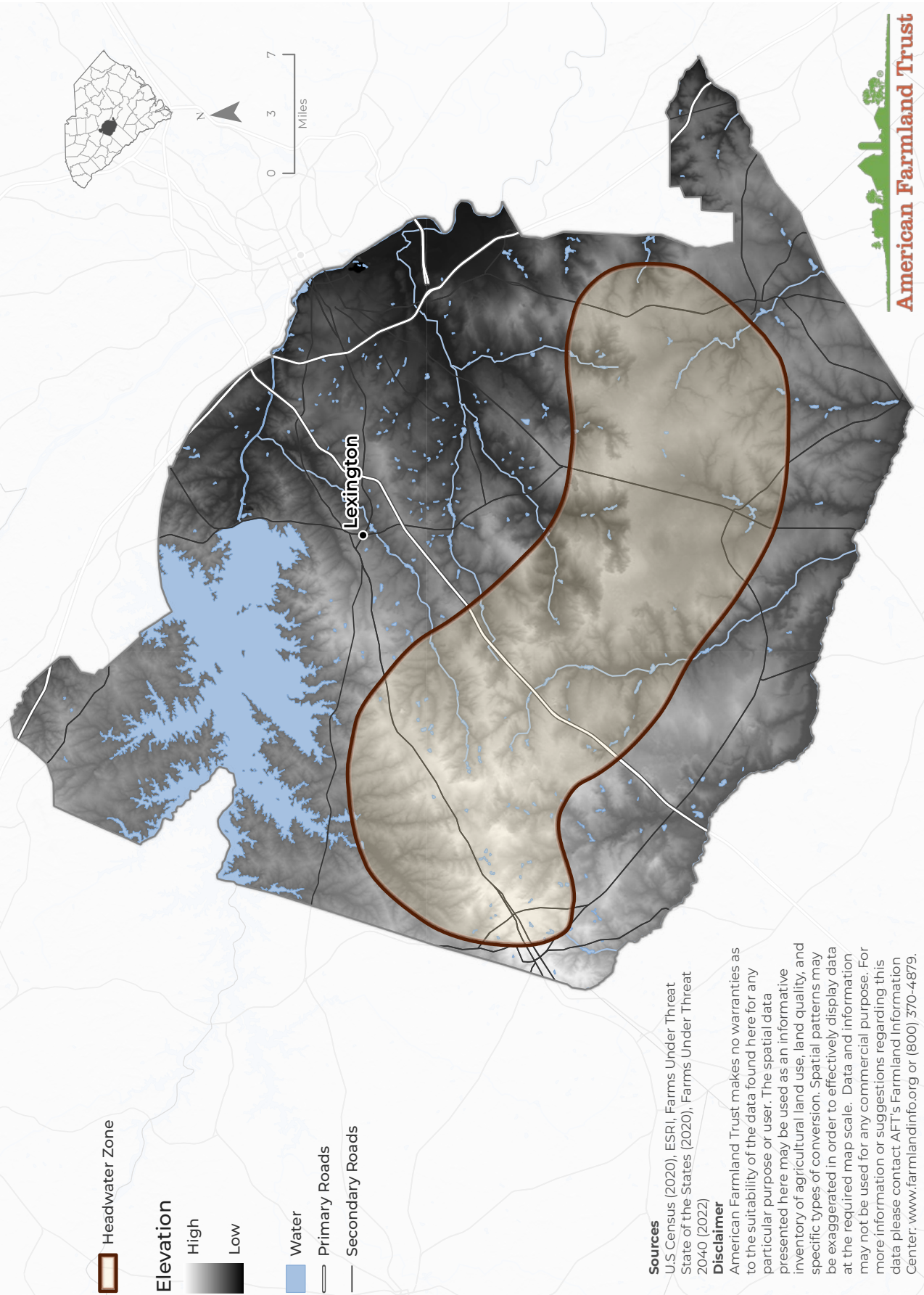
U.S. Census (2020), ESRI, Farms Under Threat State of the States (2020), Farms Under Threat 2040 (2022)

Disclaimer

American Farmland Trust makes no warranties as to the suitability of the data found here for any particular purpose or user. The spatial data presented here may be used as an informative inventory of agricultural land use, land quality, and specific types of conversion. Spatial patterns may be exaggerated in order to effectively display data at the required map scale. Data and information may not be used for any commercial purpose. For more information or suggestions regarding this data please contact AFT's Farmland Information Center: www.farmlandinfo.org or (800) 370-4879.



Lexington County, South Carolina: Elevation



Headwater Zone

Elevation

High
 Low

Water

Primary Roads

Secondary Roads

Sources

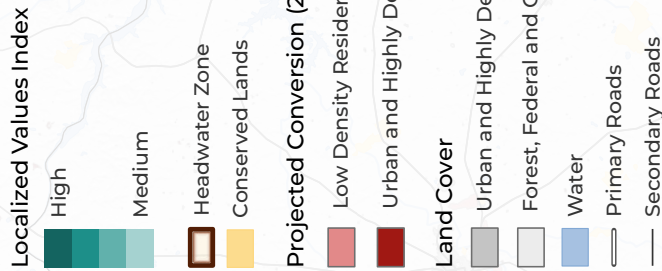
U.S. Census (2020), ESRI, Farms Under Threat
State of the States (2020), Farms Under Threat
2040 (2022)

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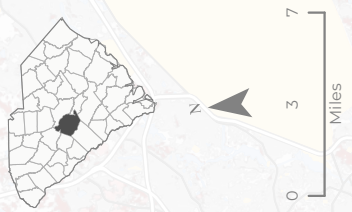


Lexington County, South Carolina: Localized Values Index and Business as Usual Development Projections (2040)

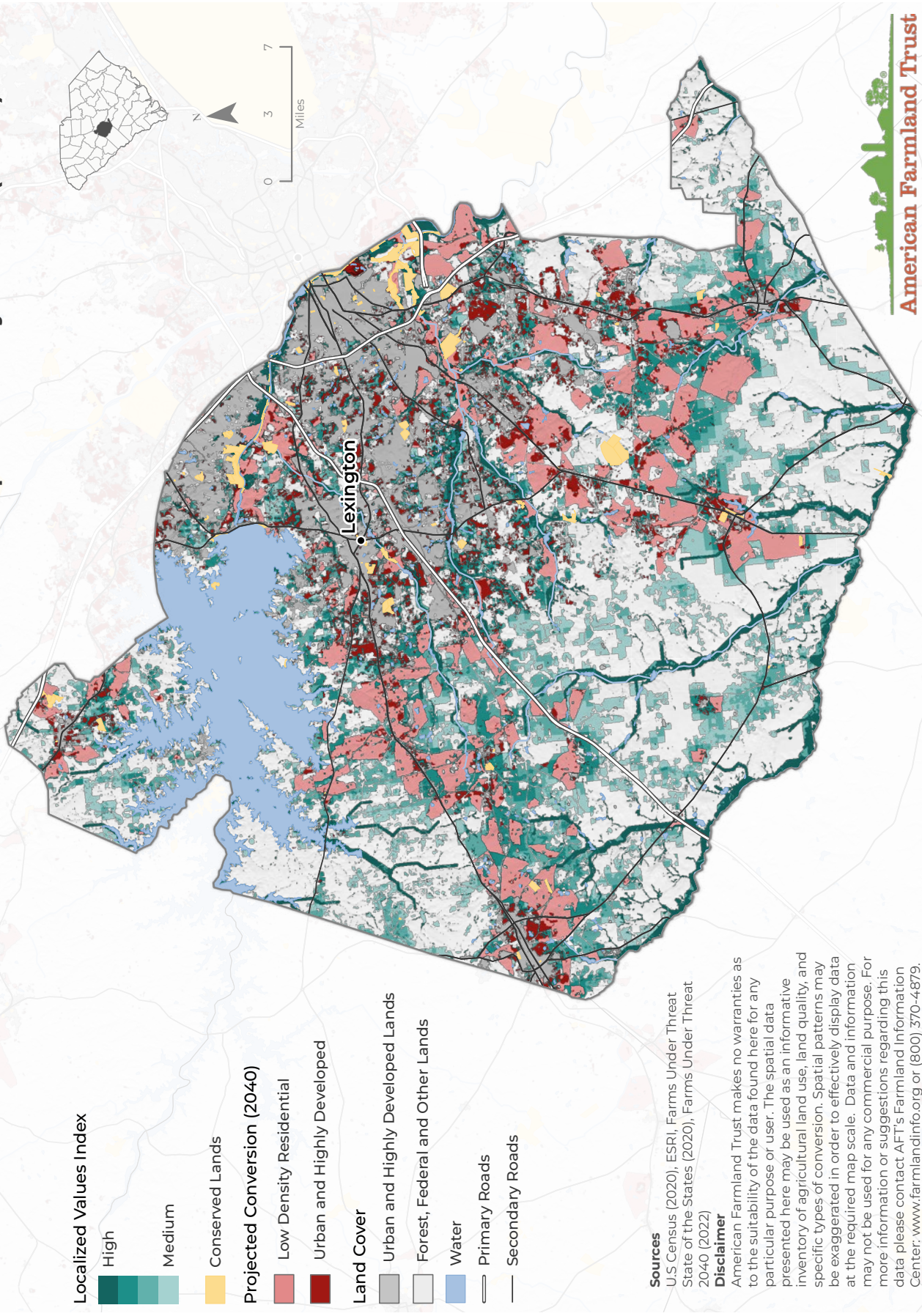


Sources
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Lexington County, South Carolina: Localized Values Index and Business as Usual Development Projections (2040)



Localized Values Index

- High
- Medium

Conserved Lands

- Conserved Lands

Projected Conversion (2040)

- Low Density Residential
- Urban and Highly Developed

Land Cover

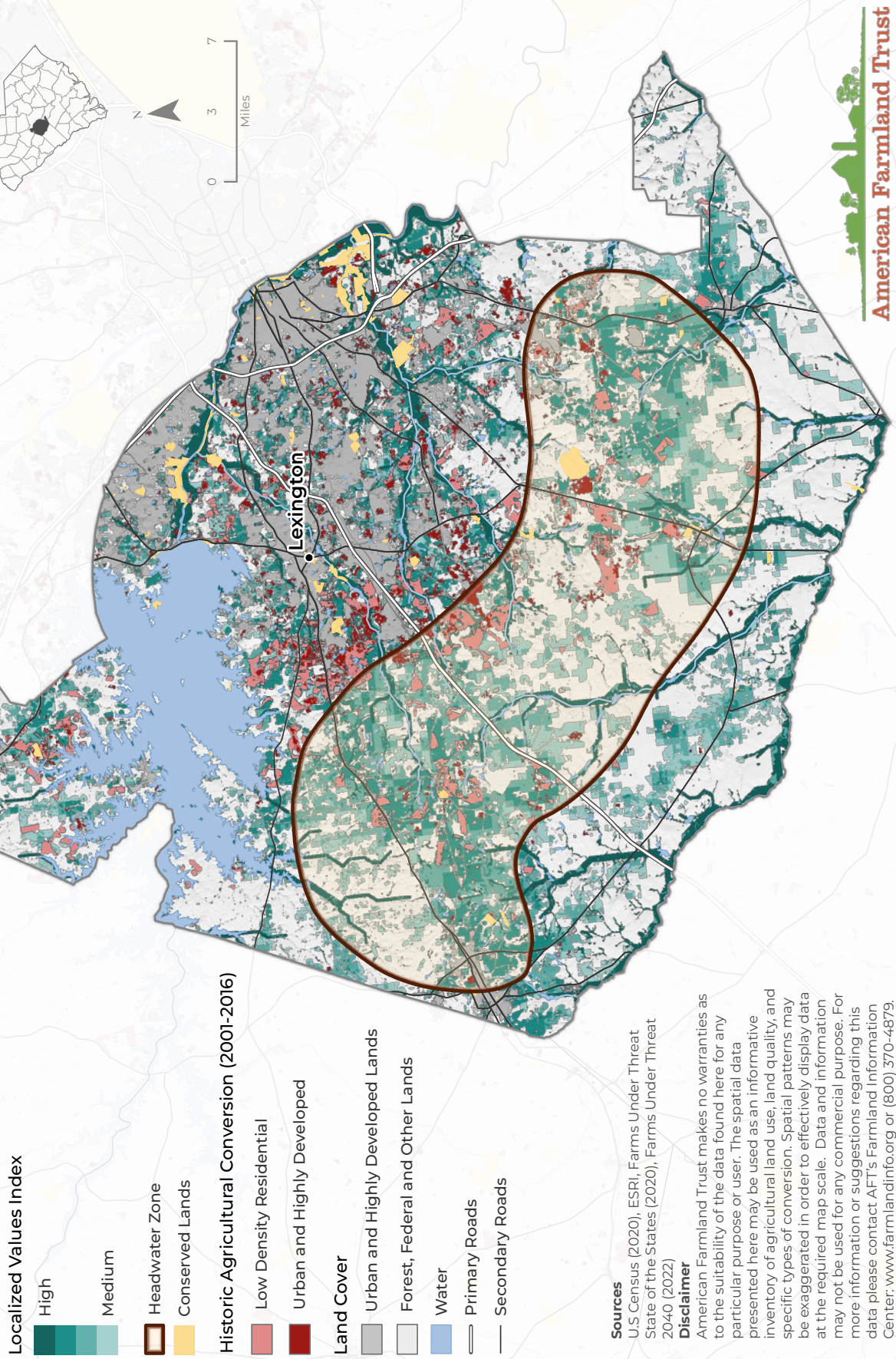
- Urban and Highly Developed Lands
- Forest, Federal and Other Lands
- Water
- Primary Roads
- Secondary Roads

Sources
 U.S. Census (2020), ESRI, Farms Under Threat
 State of the States (2020), Farms Under Threat
 2040 (2022)

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Lexington County, South Carolina: Localized Values Index and Historic Conversion of Agricultural Land



Sources
 U.S. Census (2020), ESRI, Farms Under Threat State of the States (2020), Farms Under Threat 2040 (2022)

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