

# NC Land & Water Fund Case Study: Natural and Working Land and Ecosystem Services Priority Overlays

Reference slides for NC LWF Lunchbox Talk, December 14, 2020

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# Context

NC Executive Order 80 (2018) directed state agencies to integrate climate adaptation and resilience planning into their policies and operations, including managing their lands for climate benefits.

The Natural and Working Lands Action Plan was developed as part of the state Resilience Plan and focused on the opportunities for preserving and managing natural and working lands (forests, agriculture, and wetlands) in NC to remove carbon from the atmosphere and enhance resilience to climate-related threats.

In support of the NWL Action Plan, we mapped the opportunities for preserving the benefits of existing natural lands through protection and enhancing those benefits through reforestation. We used these maps to assess the scale of opportunity and where state resource managers could get the best return on investment.

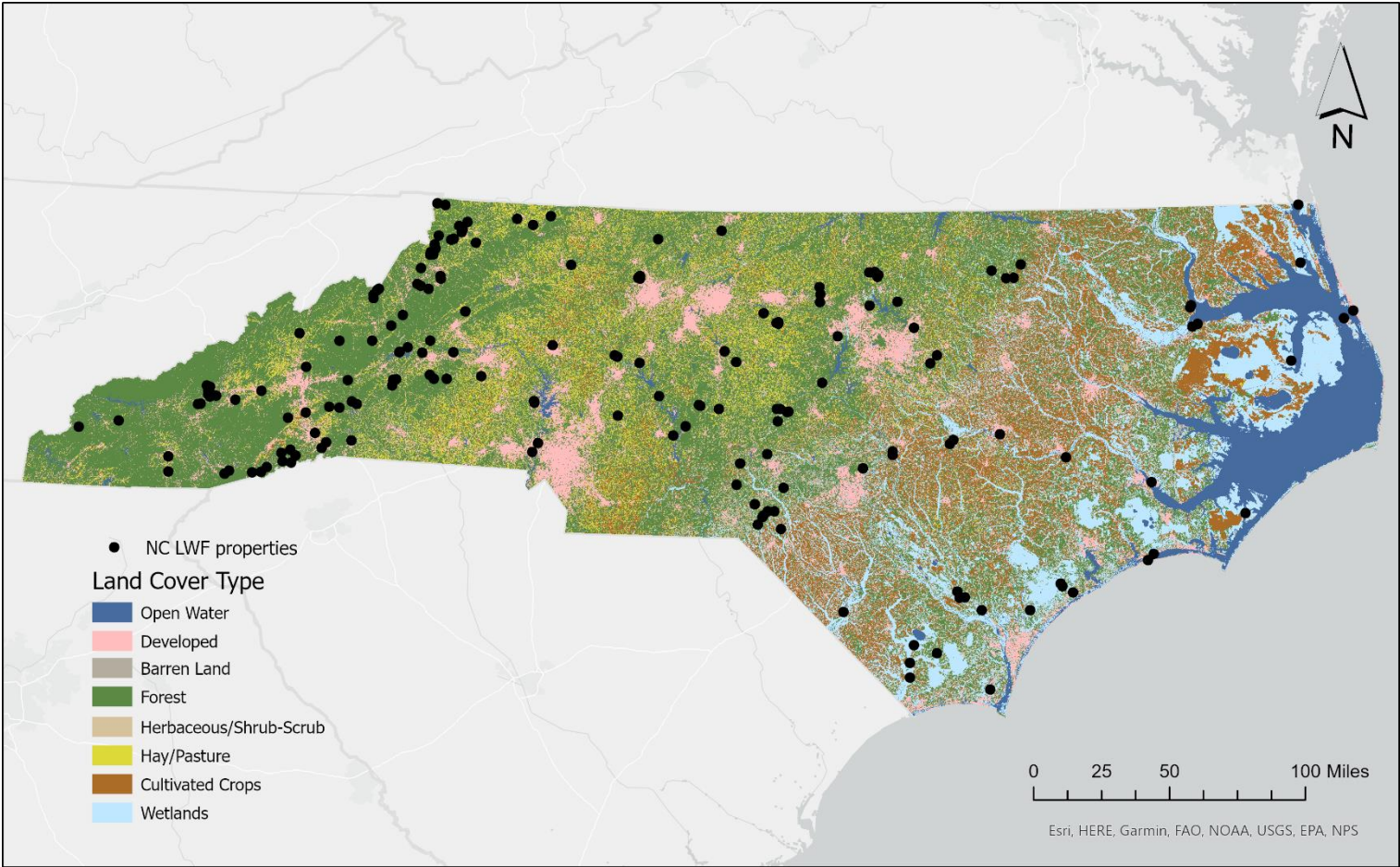
# Overview and methods

NC LWF properties include natural and working lands (forests, wetlands, agricultural land) that can provide a variety of benefits. There may also some opportunities for reforestation on LWF properties to enhance their benefits. The analysis may also highlight new areas for LWF investment that could enhance carbon and resilience benefits.

We applied a state-wide analysis of North Carolina's natural and working lands to 186 LWF properties acquired between 2015 and 2019, to identify how existing forests and reforestation opportunities can contribute to carbon mitigation, recreation, and community resilience (e.g., through flood attenuation and water supply protection).

The methods for these analyses use state- and national-scale data sources (e.g., National Land Cover Database, Protected Areas Database, USFS forest yield tables, and data from a national assessment of natural climate solutions by [Fargione et al. 2018](#)). They were designed to provide an indication of potential scale of carbon and resilience opportunities in North Carolina, rather than specific estimates for small parcels. More information on methods is available [here](#).

# Land cover types on NC LWF properties



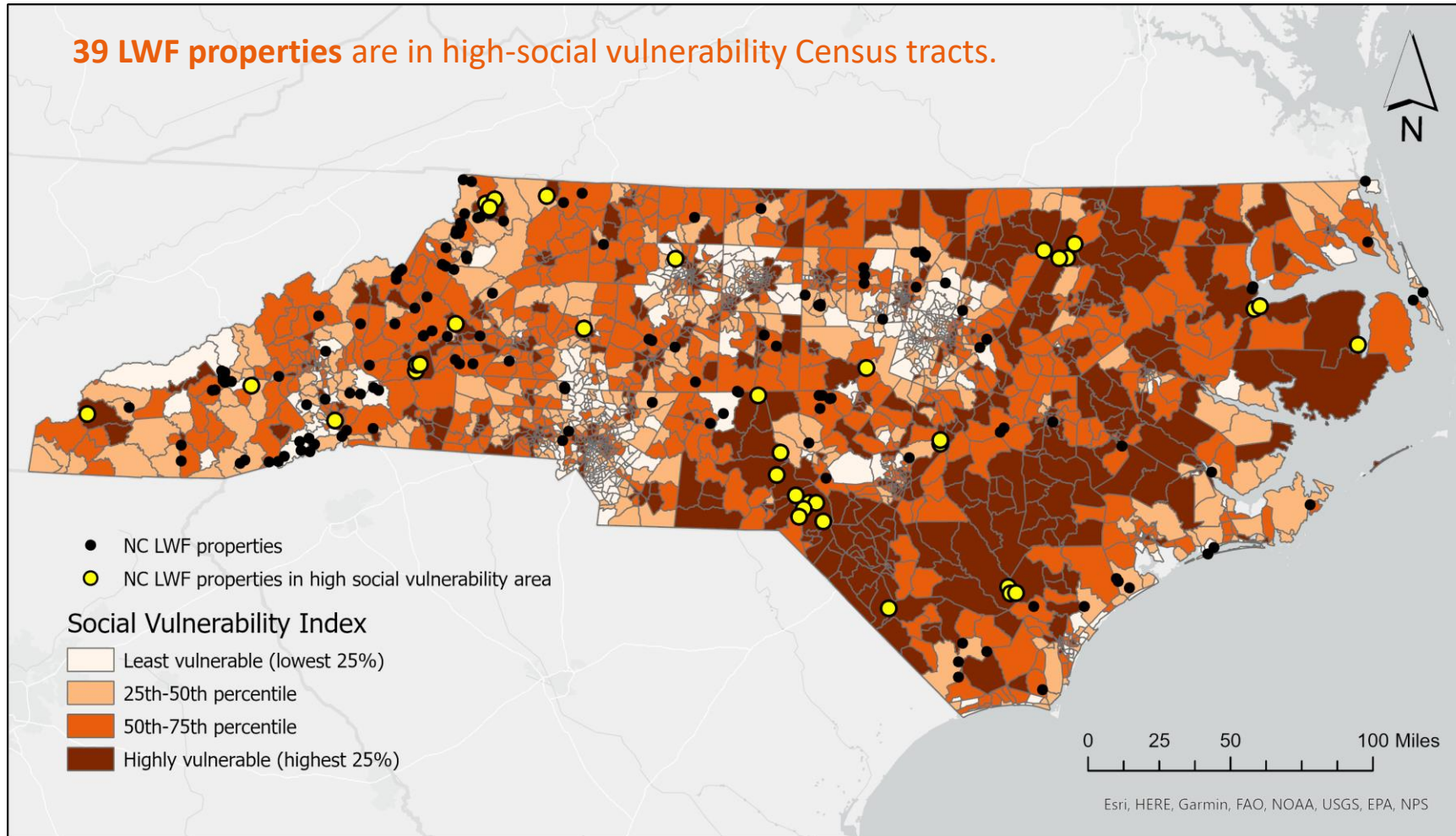
Based on national-scale land cover data (NLCD 2016), NC LWF properties are largely made up of forests and wetlands.

Land Cover Type	Number of properties with land cover	Total area across all LWF properties (acres)
Forest	179	54,005
Wetlands	83	25,704
Herbaceous/shrub-scrub	103	3,654
Developed	143	1,037
Cultivated crops	37	1,015
Open water	44	754
Hay/Pasture	70	619
Barren Land	8	45



# LWF properties and social vulnerability

The CDC's Social Vulnerability Index (SVI) indicates the relative vulnerability of every U.S. Census tract, based on 15 social factors, which are grouped into 4 themes. Each tract receives a ranking for each census variable and for each of the four themes, as well as an overall ranking.



## **Overall Vulnerability** **Socioeconomic Status**

1. Below Poverty
2. Unemployed
3. Income
4. No High School Diploma

## **Household Composition & Disability**

5. Aged 65 or older
6. Aged 17 or younger
7. Older than age 5 with a disability

## **Minority Status and Language**

8. Single-parent households
9. Minority
10. Speaks English "Less than Well"

## **Housing Type & Transportation**

11. Multi-unit structures
12. Mobile homes
13. Crowding
14. No vehicle
15. Group quarters

# Defining carbon benefits of LWF properties

Forests and forested wetlands can contribute to carbon opportunities in several ways. We considered two carbon benefits in this analysis:

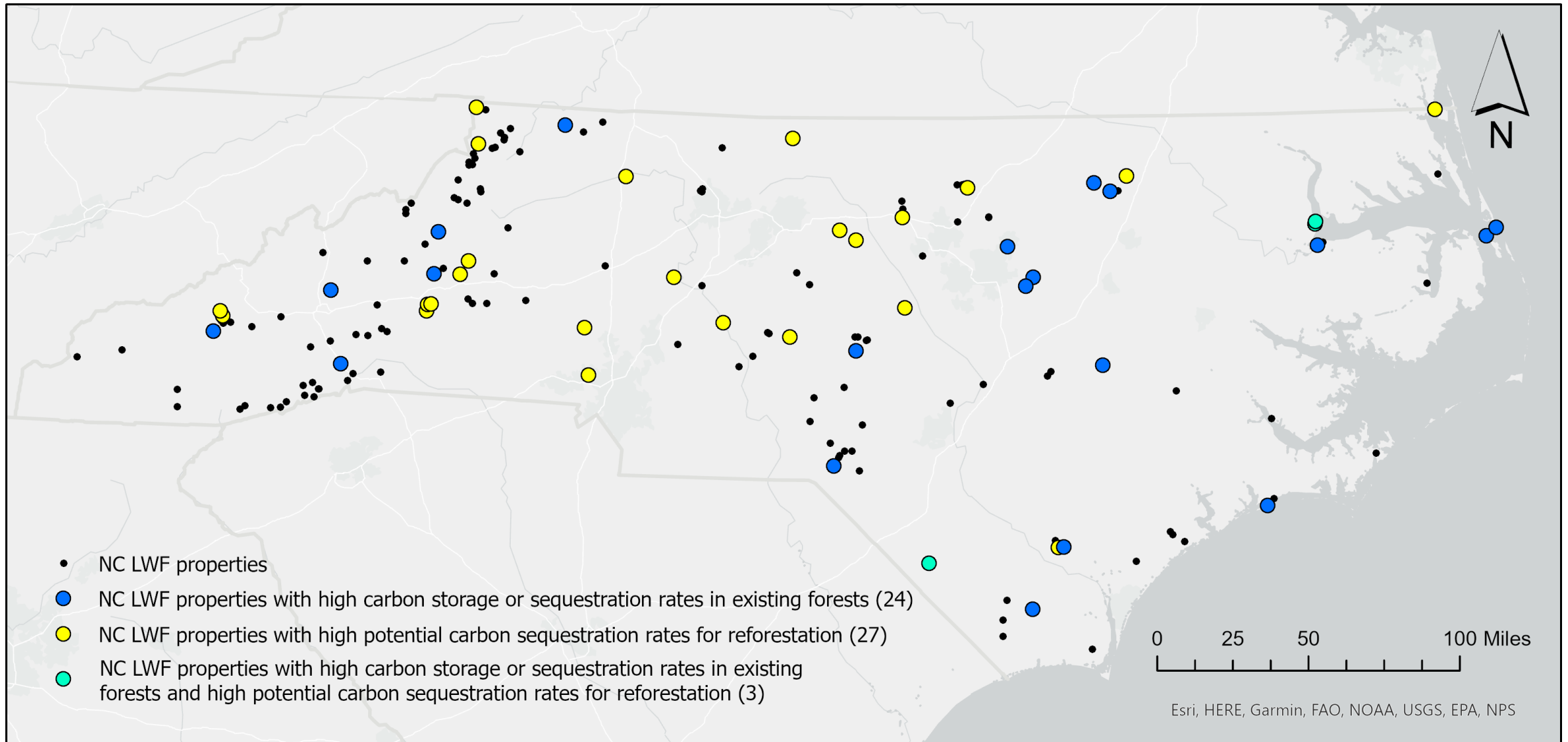
- Carbon storage and sequestration in existing forests
- Potential carbon sequestration from reforestation

Existing forests store carbon in their biomass and soil and continue to sequester carbon each year. Younger forests sequester carbon more quickly than older forests. Reforestation promotes rapid carbon accumulation as trees grow.

While all forests store and sequester carbon, we focused on identifying properties where existing forests have high carbon density ( $\geq 400$  metric tons CO<sub>2</sub>-e/acre) or high carbon sequestration rates ( $\geq 2.5$  metric tons/acre/year), and properties where reforestation will sequester  $\geq 100$  metric tons/year.

We focused on identifying properties that have one or both of these carbon benefits.

# Carbon benefits from forest protection and reforestation



# Carbon benefits summary

Benefit	Total carbon storage, metric tons CO2-e or sequestration, metric tons CO2-e/year (total carbon storage or sequestration in high social vulnerability areas)	Equivalent to...
<b>Carbon storage</b> from existing forests	30.0 million metric tons CO2-e (7.06 million metric tons CO2-e)	NC's total GHG emissions for 73 days* (NC's total GHG emissions for 17 days)
<b>Carbon sequestration</b> from existing forests	136,450 metric tons CO2-e (34,030 metric tons CO2-e)	Annual emissions from 29,478 cars** (Annual emissions from 7,350 cars)
<b>Potential carbon sequestration</b> from reforestation	10,840 metric tons CO2-e/year (5,230 metric tons CO2-e/year)	Annual emissions from 2,342 cars** (Annual emissions from 1,130 cars)

\*NC 2017 GHG Inventory

\*\*US EPA's Greenhouse Gas Equivalencies Calculator



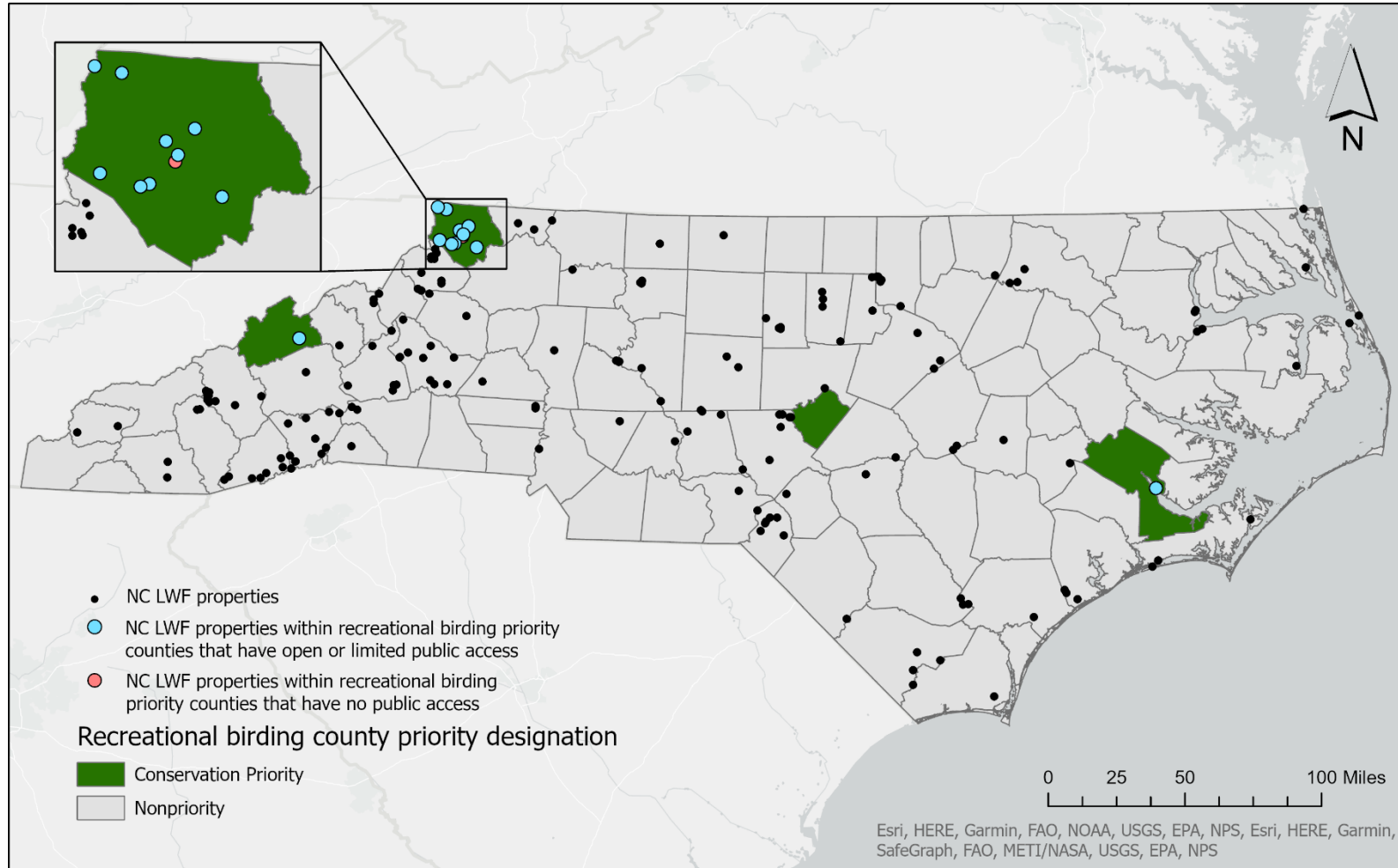
# Defining recreational benefits of LWF properties

Publicly accessible land can contribute to recreation opportunities in several ways. We considered two recreational benefits in this analysis:

- Recreational birding opportunities
- Open space recreation access within walking distance (one-half mile) of LWF properties

We focused on identifying properties where land conservation to support recreational birding and open space recreation access are most needed. For recreational birding, these are areas with high levels of birding activity occurring on unprotected land. For open space access, these are places with large numbers of nearby residents who currently have few nearby open spaces.

# Recreational Birding Conservation Priority Areas

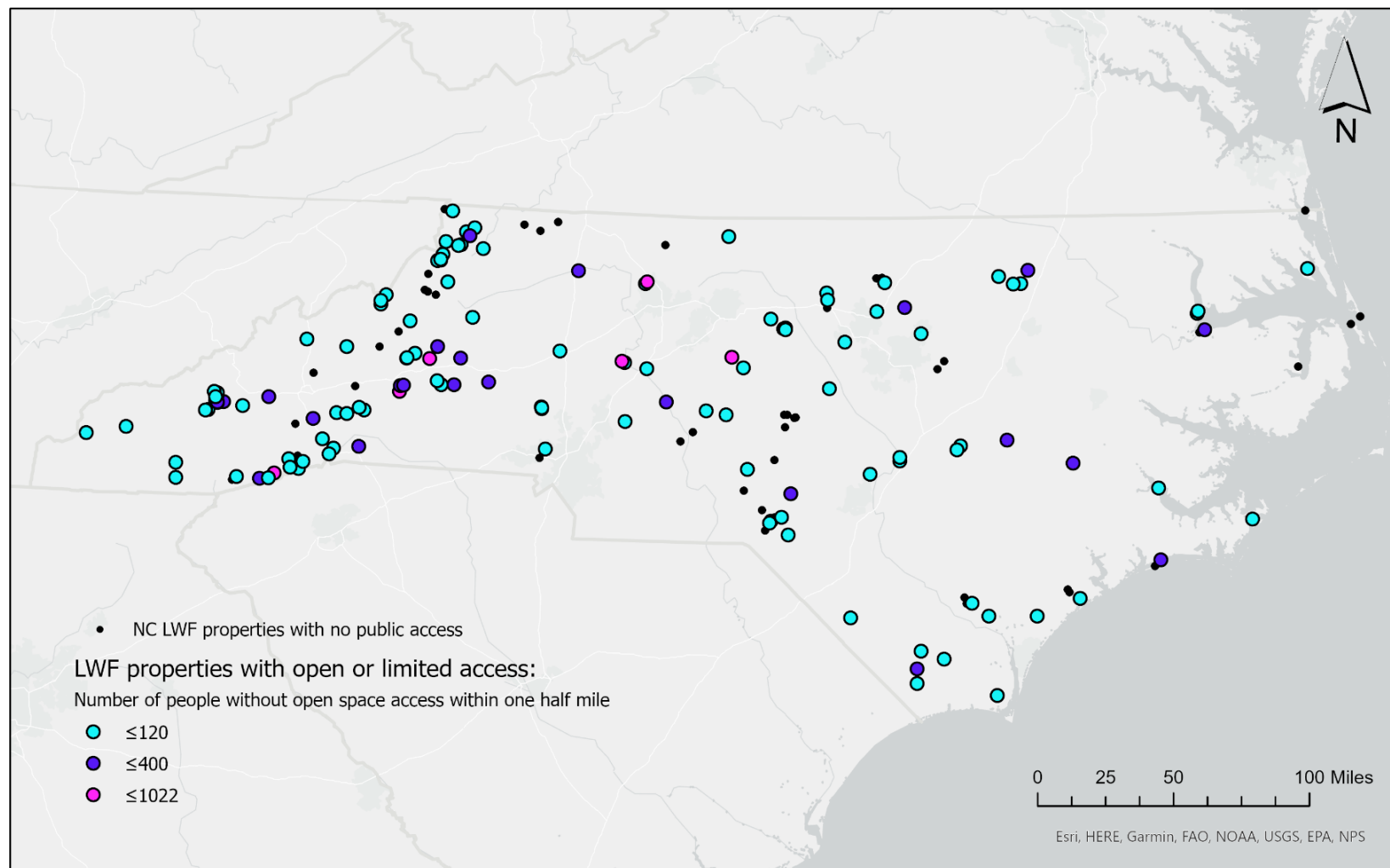


Publicly accessible, protected lands provide excellent opportunities for recreational birding. Land conservation to provide birding opportunities is especially important within **conservation priority areas**, where birding activity is high and most of that activity currently takes place on privately owned lands.

There are **12 LWF properties** within **recreational birding conservation priority areas**. Of these, **11 have open or limited public access**, and **1 has no public access**.

In total, approximately **279,000 birding days** took place in the three priority areas containing LWF properties in 2011.

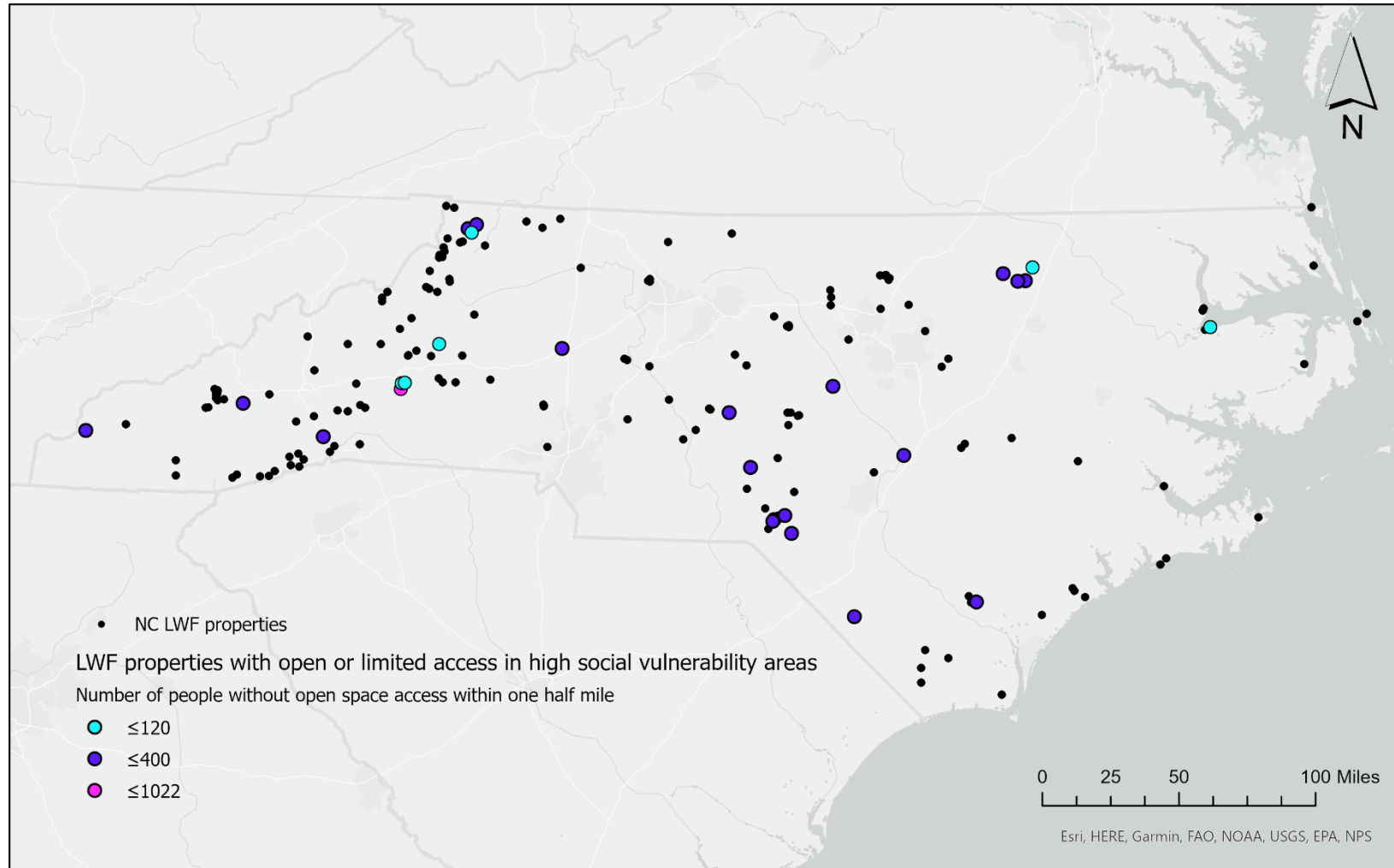
# Open Space Recreation Access Opportunities within Walking Distance



Publicly accessible open space is directly related to human health and mental and physical well-being. In addition to recreation, open spaces can also provide indirect services to human health such as air quality regulation, water filtration, and carbon sequestration. Land conservation through NC LWF can increase access to open space for residents.

A total of **162 LWF properties** have some public access. Out of these, there are **6 LWF properties with more than 400 people who have low access to open space** within one half mile of the property.

# Open Space Recreation Access Opportunities in High Social Vulnerability Areas



Out of the 162 LWF properties that have open or limited access to the public, **34 are located in high social vulnerability areas**. Of these 34 properties, **21 are within walking distance of people who have low access to open space**. These 21 properties present opportunities to increase open space access for residents that live in high social vulnerability areas.

# Recreation benefits summary

Benefit	# of LWF properties with this benefit (# in high social vulnerability areas)	Total area of LWF properties contributing to this benefit, acres (area in high social vulnerability areas)
Recreational Birding	12 (4)	6,025 (2,123)
Open Space Recreation Access	162 (34)	120,609 (26,863)

# Defining resilience benefits of LWF properties

Forests can benefit community resilience in many ways. We considered 5 resilience benefits in this analysis:

- Flood attenuation by floodplain and wetland forests in high flood risk watersheds
- Water purification by floodplain and wetland forests in water quality hazard watersheds
- Air pollution reduction by forests in urban areas
- Water supply protection by forests in water supply watersheds
- Wild pollination potential by forests near pollinator-dependent crops

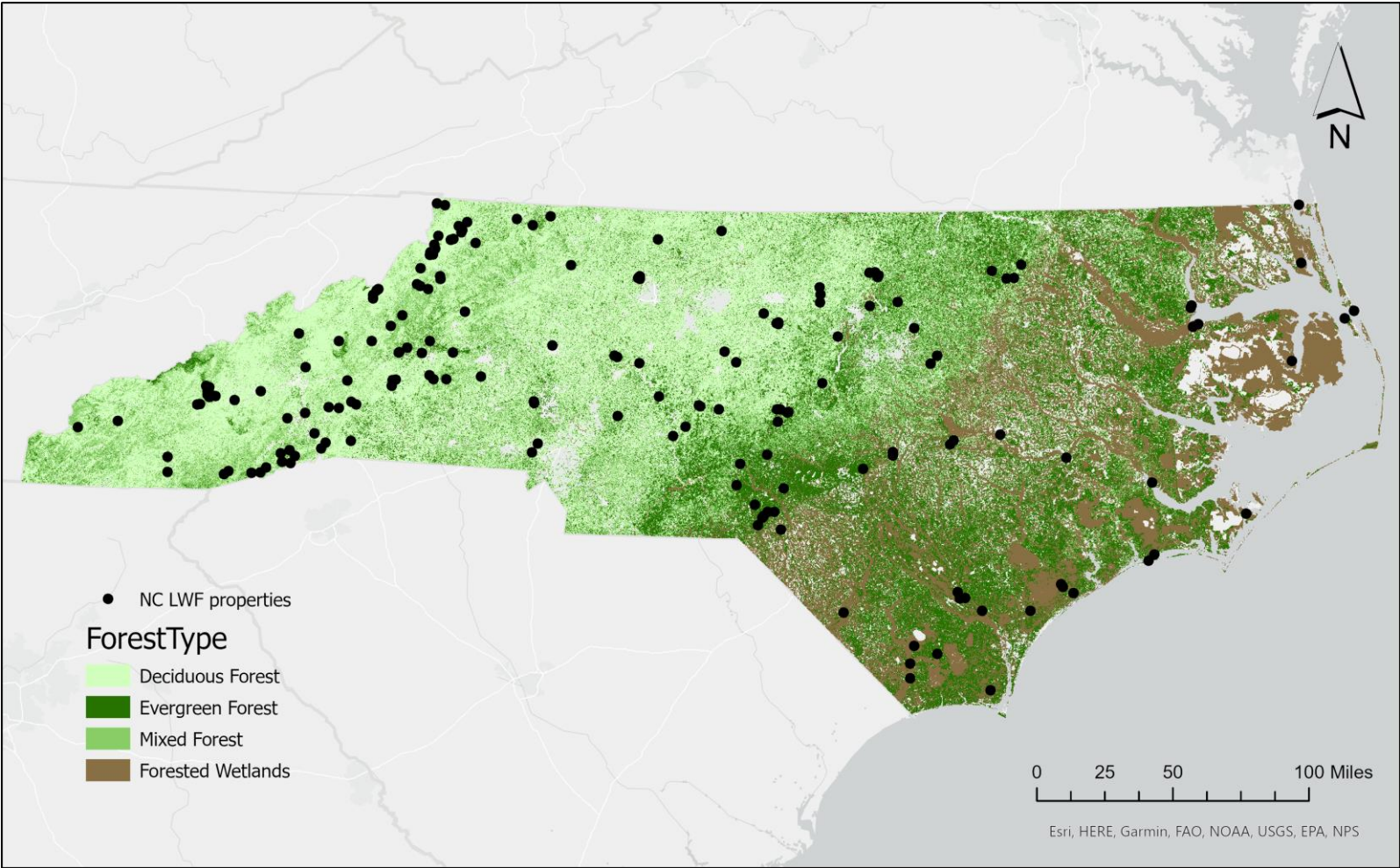
While even a very small amount of forest can provide some benefit, we focused on identifying properties with at least 100 acres of forest that contribute to one of these benefits. These are the properties where forest protection or management is most needed to ensure the forests continue to provide the benefit.

The maps on slides 16-25 and the tables on slides 26 and 27 use 100 acres as the threshold for determining whether a property provides a particular resilience benefit.

The first four resilience benefits (slides 17-24) are presented in groups of 2 maps. The first map for each resilience benefit depicts how much LWF land is contributing to that benefit. The second map depicts the proportion of unprotected forests in each watershed or urban area, where there may be opportunities for future LWF land acquisitions. Please note that these are relatively coarse-scale assessments designed for scoping, not for detailed project planning or assessment.



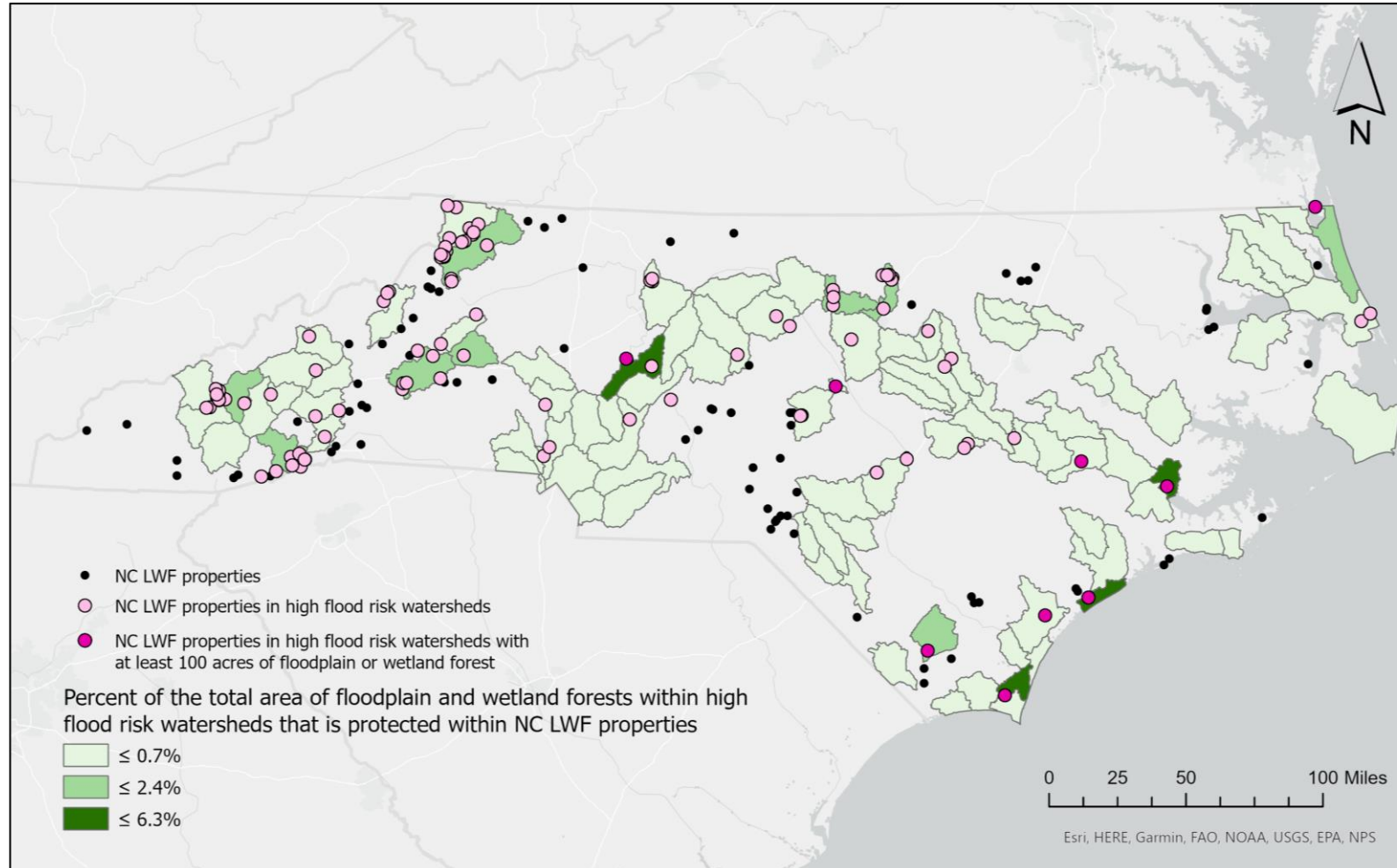
# Forest types on LWF properties



There are about **78,000 acres of forests and forested wetlands** across 185 of the 186 LWF properties.

Forest Type	Total area of each forest type across all LWF properties (acres)
Deciduous Forest	29,983
Forested Wetlands	23,291
Mixed Forest	13,081
Evergreen Forest	10,942

# Contribution of LWF properties to flood attenuation in high flood risk watersheds



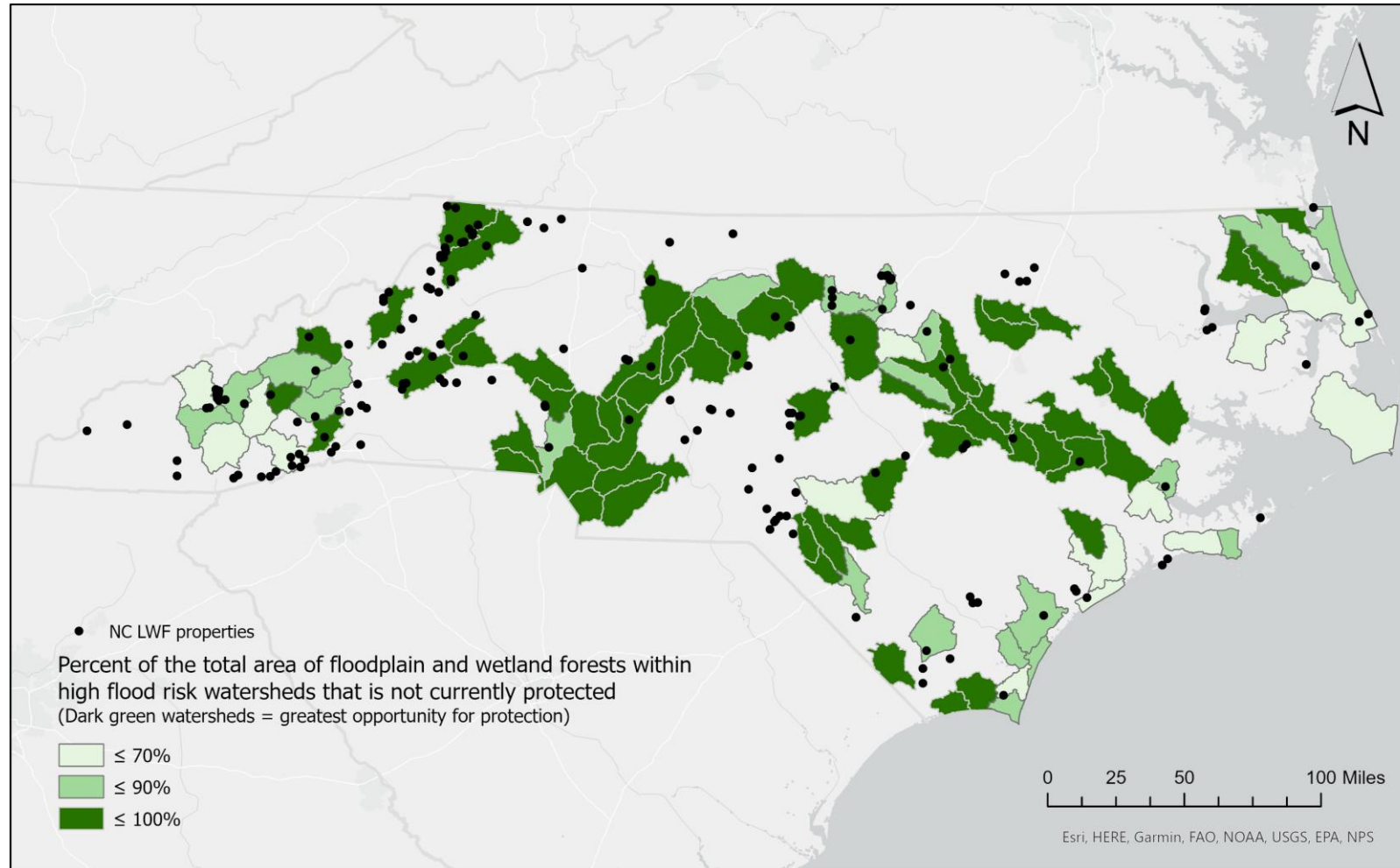
Forests and wetlands in the floodplain can slow flows of water, reducing downstream flooding and release of water pollutants from facilities and contaminated sites. Having forests and wetlands, rather than populated areas, in the floodplain also means that fewer people and less property are at risk of flooding.

High flood risk watersheds are HUC 10 watersheds in North Carolina with at least 3,000 people living in flood-prone areas. There are **95 LWF properties** within high flood risk watersheds. Of these, **9 LWF properties** have at least 100 acres of floodplain or wetland forests, totaling **4,134 acres of floodplain and wetland forests**.

The green shading on this maps depicts how much LWF properties are contributing to flood attenuation in each high flood risk watershed. The **dark green watersheds** are where LWF properties are protecting the largest proportion of floodplain and wetland forests.

Note: this map does not capture downstream flooding effects.

# Opportunities for future LWF land acquisitions to contribute to flood attenuation in high flood risk watersheds



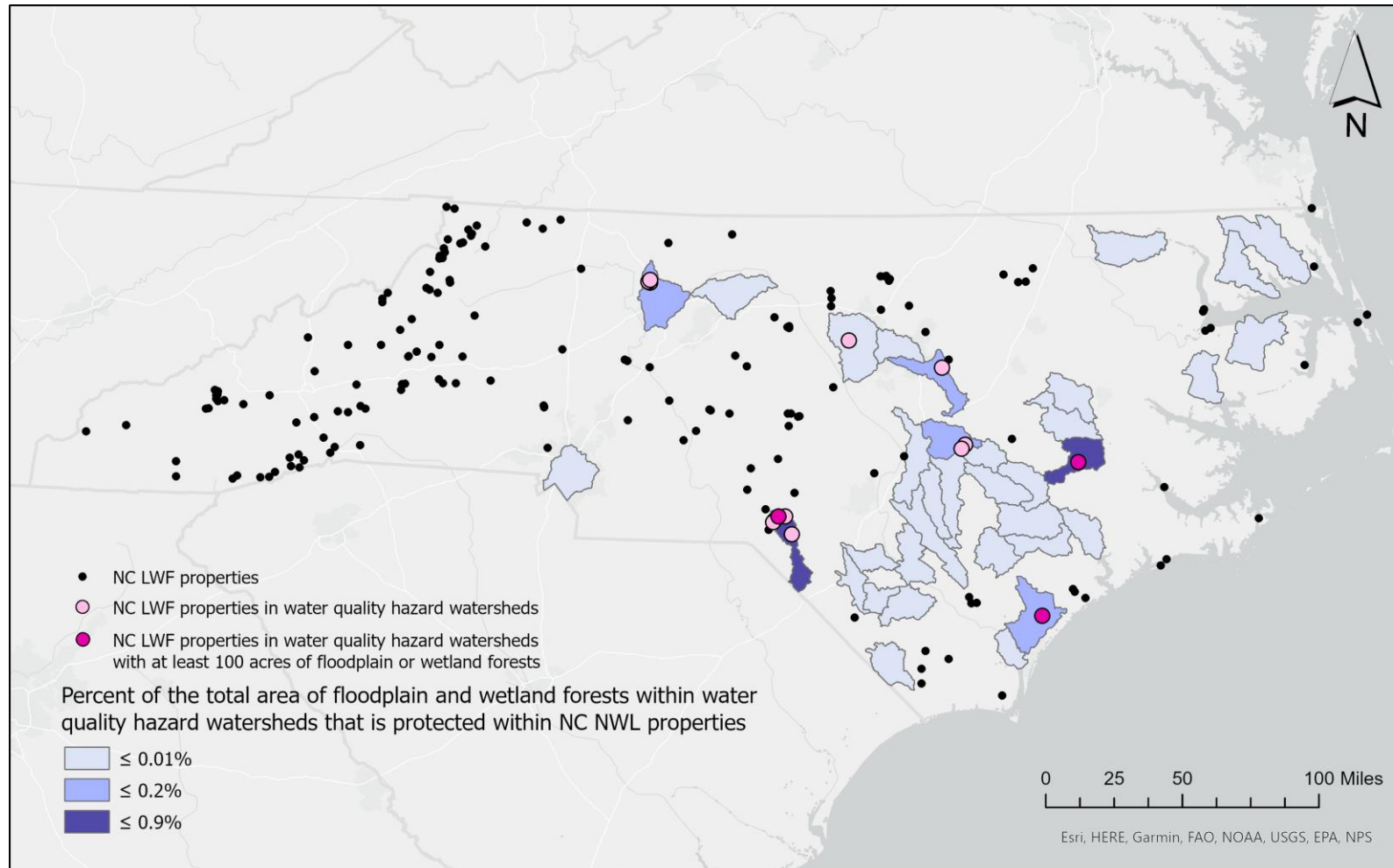
By evaluating the proportion of floodplain and wetland forests within high flood risk watersheds that is **not** protected, we can also determine where future LWF acquisitions would have the greatest potential to contribute to flood attenuation.

The **dark green watersheds** are those that are most in need of protection and that would benefit most from land conservation through LWF properties. There are **59 watersheds with low protection (more than 90% of floodplain and wetland forests are unprotected)**. Of these watersheds, **35 have no LWF properties within them**.

LWF properties tend to be near other protected areas, rather than filling gaps where land protection is needed.



# Contribution of LWF properties to water purification in water quality hazard watersheds

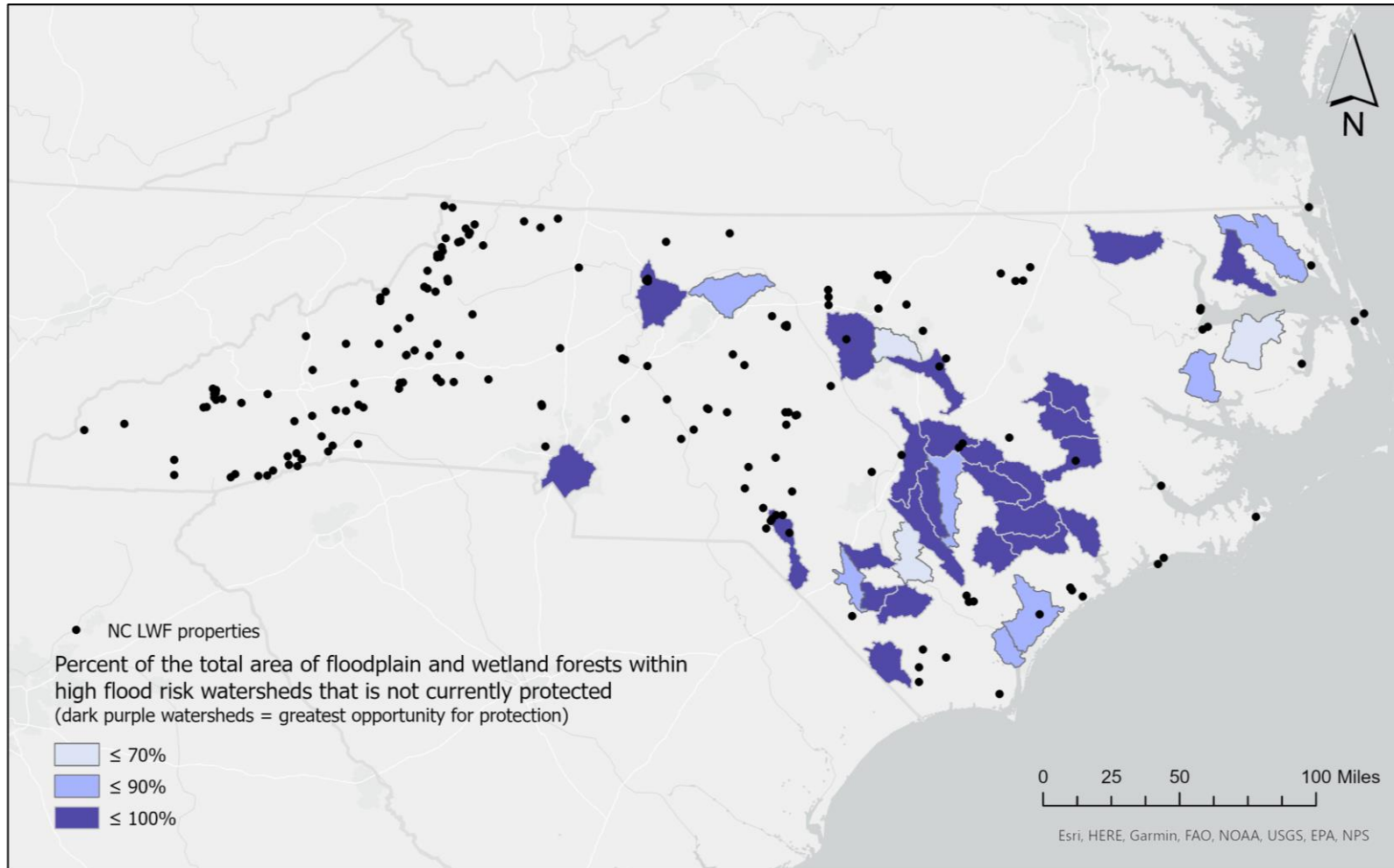


When flooded, point-source pollutants, such as sewer treatment plants and hazardous waste sites, can contribute nutrients, sediment, and pathogens to the water bodies within the watershed. Water quality hazard watersheds are HUC 10 watersheds in North Carolina with at least 10 point-source water quality hazards. Floodplain and wetland forests help to remove pollutants before they reach waterways.

There are **13 LWF properties** in water quality hazard watersheds. Of these, **3 LWF properties** have at least 100 acres of floodplain and wetland forests, totaling **503 acres of floodplain and wetland forest**.

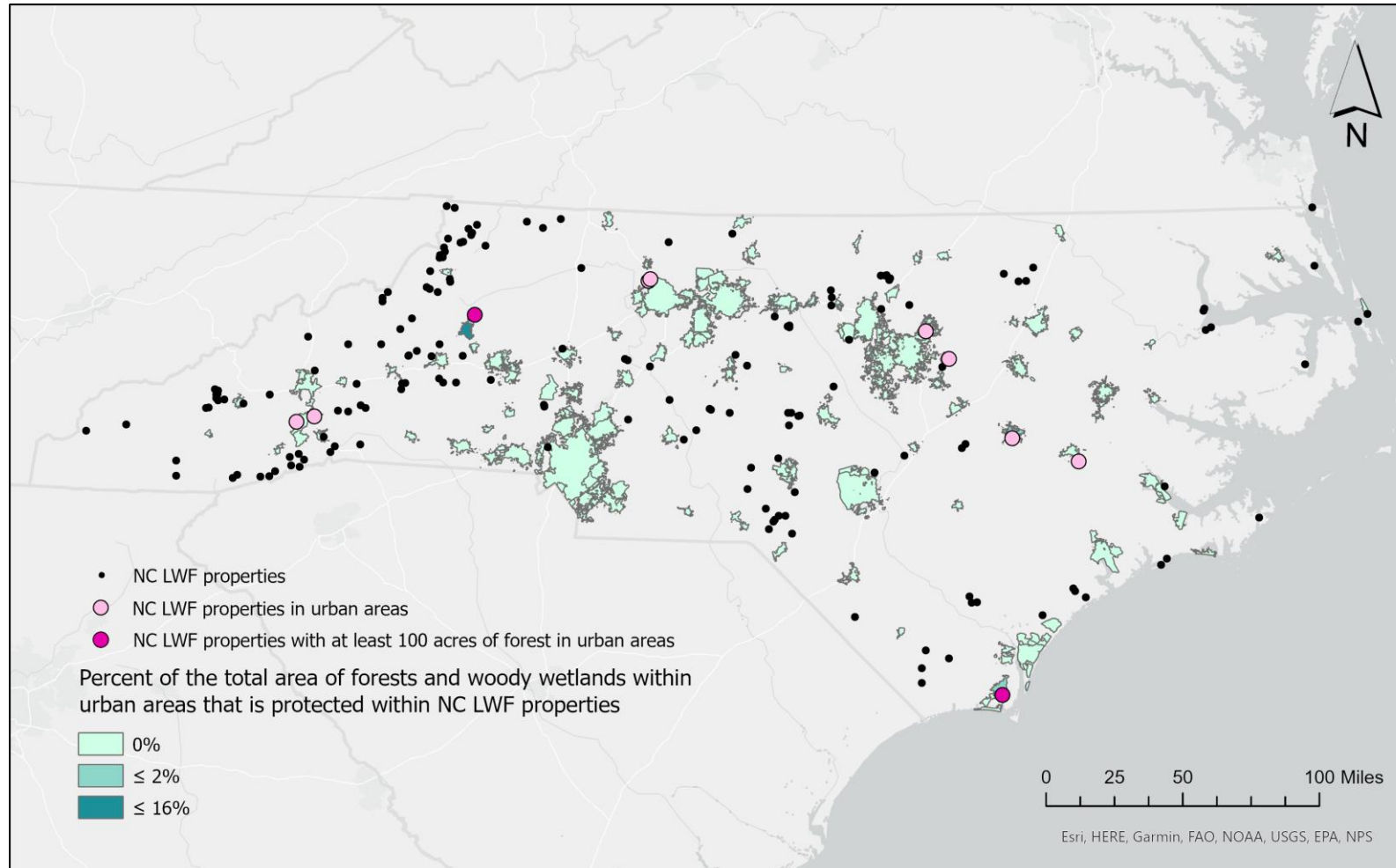
The purple shading on this map depicts how much LWF properties are contributing to water purification in each water quality hazard watershed. The **dark purple watersheds** are where LWF properties are protecting the largest proportion of floodplain and wetland forests.

# Opportunities for future LWF land acquisitions to contribute to water purification in water quality hazard watersheds



The **dark purple watersheds** are those that are most in need of protection and would benefit from the addition of LWF properties. There are **25 watersheds with low protection (more than 90% of floodplain and wetland forests are unprotected)**. Of these watersheds, **18 have no LWF properties within them**.

# Contribution of LWF properties to heat and air pollution reduction in urban areas



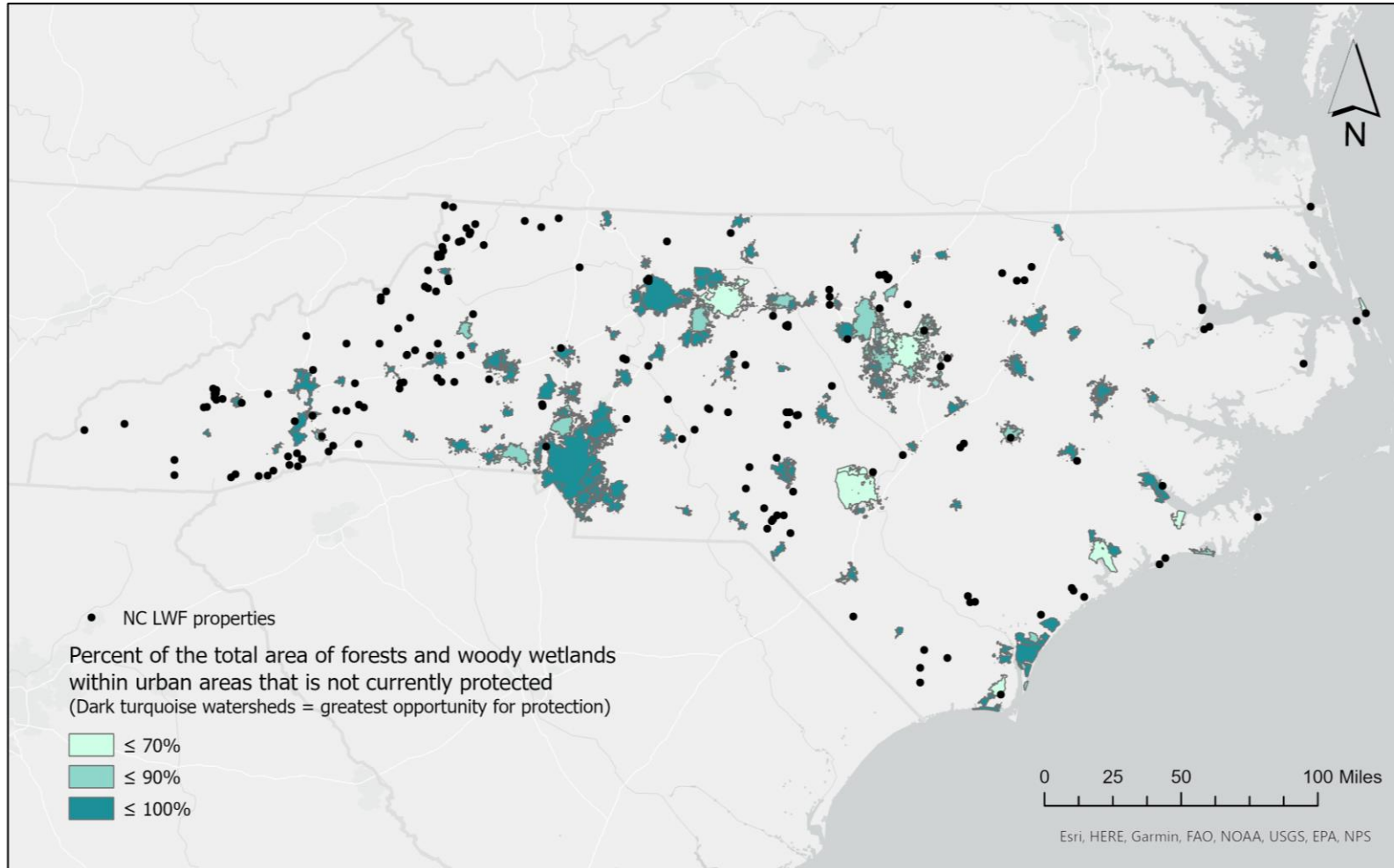
Forests in urban areas remove air pollutants and help to offset urban heat effects, which can reduce electricity use.

Urban areas are defined as the municipal boundaries for towns and cities with at least 5,000 people. There are **10 LWF properties** in urban areas. Of these, **2 LWF properties** have at least 100 acres of forests and woody wetlands, totaling **698 acres of forests and woody wetlands**.

The turquoise shading on this maps depicts how much LWF properties are contributing to heat and air pollution reduction in each urban area. The **dark turquoise urban areas** are where LWF properties are protecting the largest proportion of forests and woody wetlands.

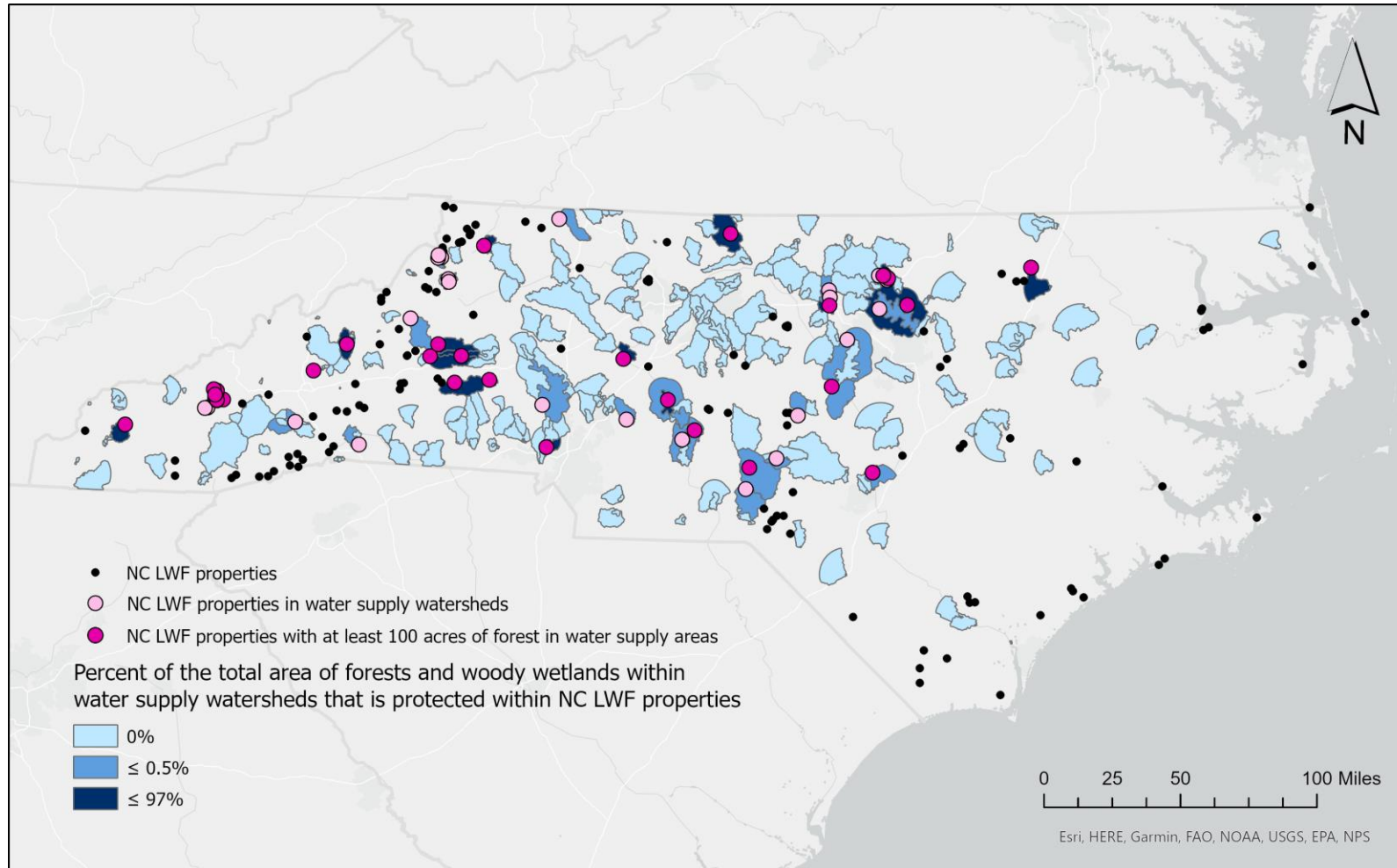


# Opportunities for future LWF land acquisitions to contribute to heat and air pollution reduction in urban areas



The **dark turquoise urban areas** are those that are most in need of protection and would benefit from the addition of LWF properties. There are **121 urban areas with low protection (more than 90% of forests are unprotected)**. Of these urban areas, **117 have no LWF properties within them.**

# Contribution of LWF properties to water supply protection in water supply watersheds

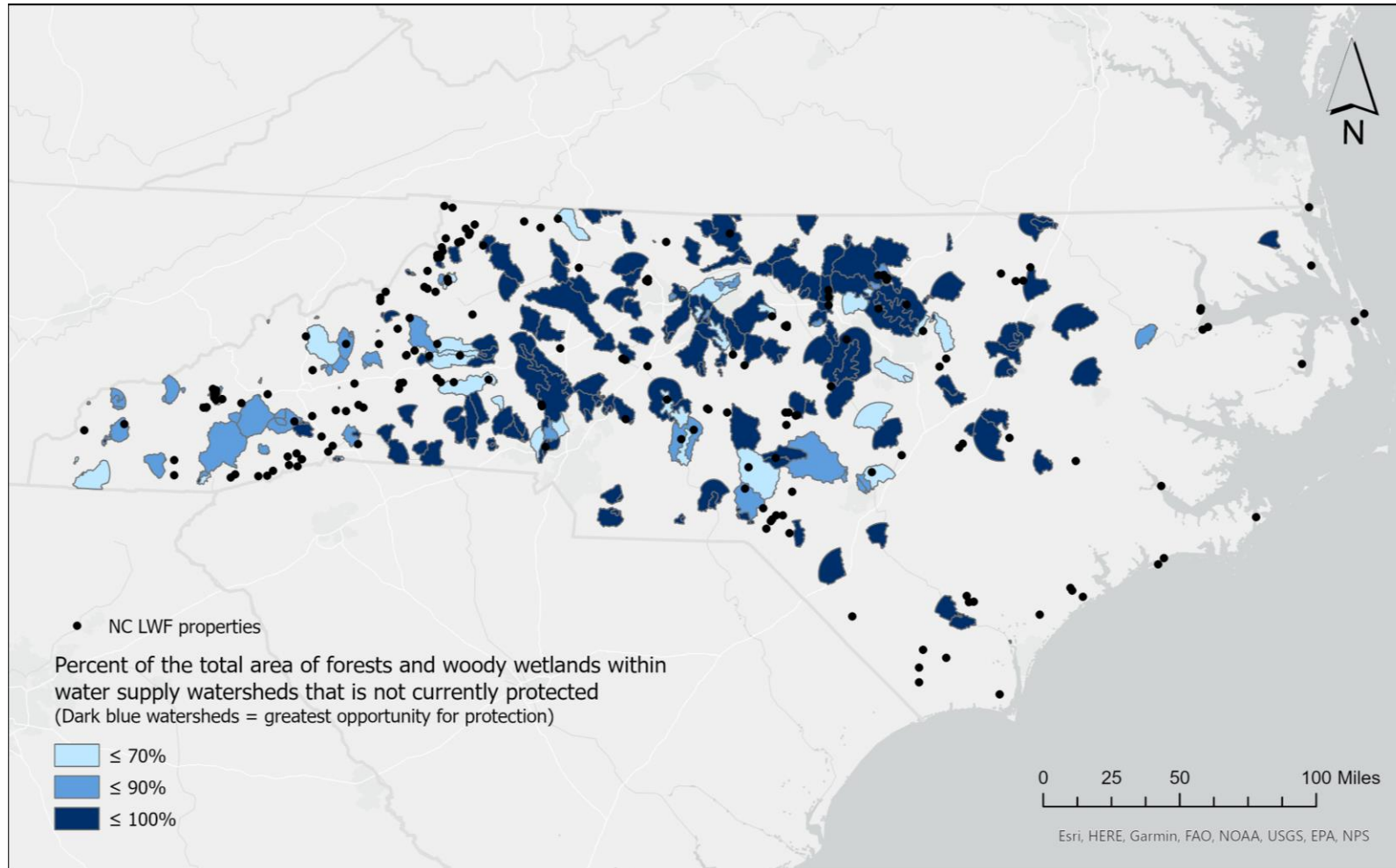


Forests in water supply watersheds (HUC 10 watersheds) protect drinking water supplies by filtering out pollutants before they reach waterways.

There are **57 LWF properties** in water supply watersheds. Of these, **33 properties** have at least 100 acres of forests in water supply watersheds, totaling **17,911 acres of forests and woody wetlands**.

The blue shading on this maps depicts how much LWF properties are contributing to water supply protection in each water supply watershed. The **dark blue watersheds** are where LWF properties are protecting the largest proportion of forests and woody wetlands.

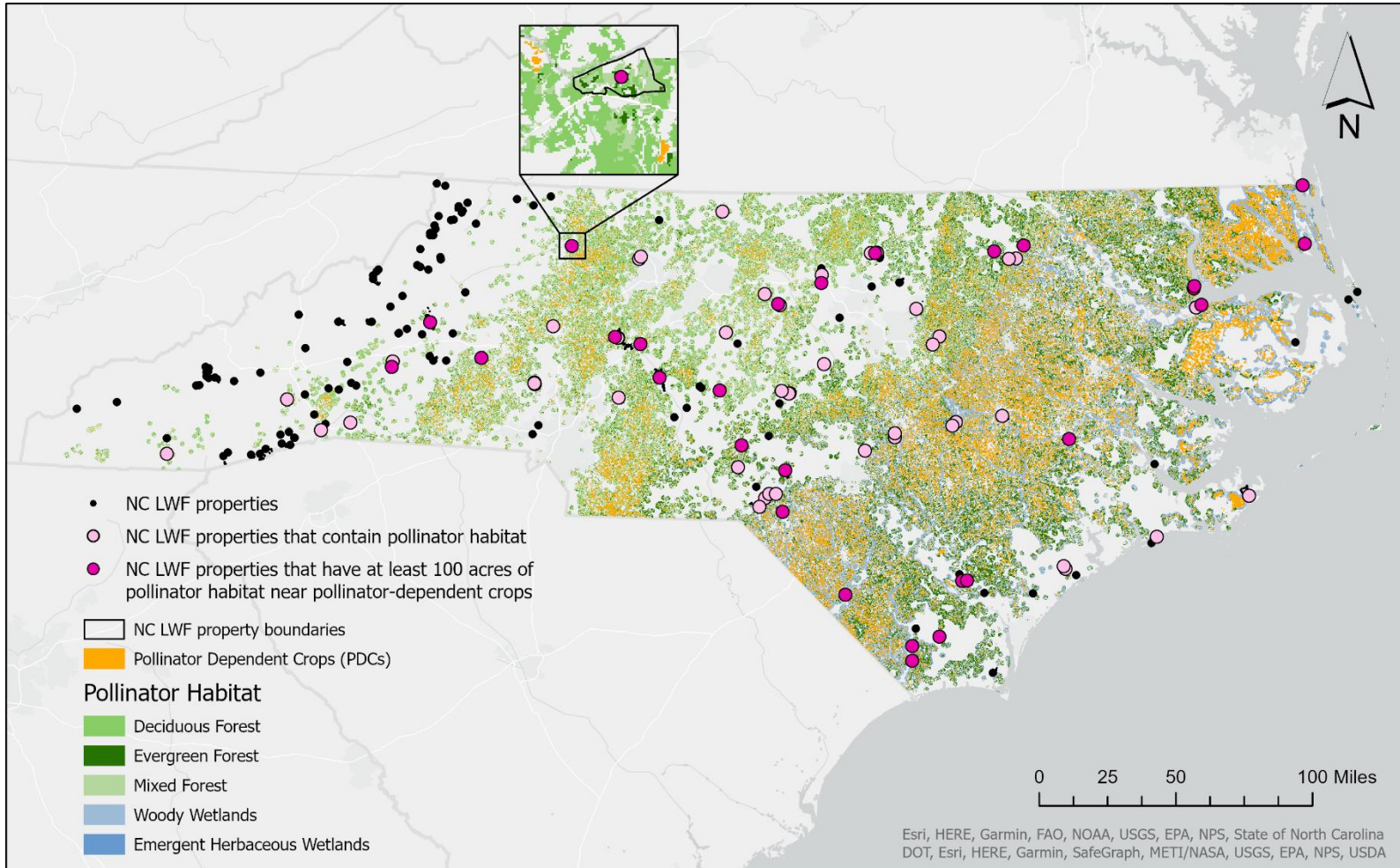
# Opportunities for future LWF land acquisitions to contribute to water supply protection in water supply watersheds



The **dark blue watersheds** are those that are most in need of protection and would benefit most from the addition of LWF properties. There are **307 watersheds with low protection (more than 90% of forests are unprotected)**. Of these watersheds, **285 have no LWF properties within them.**



# Pollinator habitat within LWF properties



Forests and other natural land cover on LWF properties provide habitat for wild pollinators, which increase yields of pollinator-dependent crops when they are within flight range of the crops.

There are **74 LWF properties** that contain pollinator habitat near pollinator-dependent crops. Of these, **28 LWF properties** have at least 100 acres of pollinator habitat, totaling **11,933 acres** of pollinator habitat.

# Existing forest resilience benefits summary

Benefit (definition of area contributing to benefit)	# of LWF properties with this benefit (# in high social vulnerability areas)	Total area of LWF properties contributing to this benefit, acres (area in high social vulnerability areas)
<b>Flood attenuation</b> (LWF properties with at least 100 acres of unprotected floodplain and wetland forests in a high flood risk watershed)	9 (1)	4,134 (111)
<b>Water purification</b> (LWF properties with at least 100 acres of unprotected floodplain and wetland forests in a water quality hazard watershed)	3 (1)	503 (101)
<b>Air pollution reduction</b> (LWF properties with at least 100 acres of unprotected forests in urban areas)	2 (0)	698 (0)
<b>Water supply protection</b> (LWF forests with at least 100 acres of unprotected forests in water supply watersheds)	33 (4)	17,911 (2,112)
<b>Wild pollination</b> (LWF properties with at least 100 acres of wild pollinator habitat within flight range of pollinator-dependent crops)	28 (11)	11,933 (3,420)

# Existing forest benefits by LWF property

Showing select properties with at least 940 acres of forest. Full list available in spreadsheet (see slide 34).

**Green text** indicates that the property has at least 100 acres contributing to the benefit or will benefit at least 100 people (open space access).

Property name	Acres of forest contributing to resilience benefits					Recreational Benefits		Carbon benefit (MT CO2-e)	
	Flood attenuation	Water quality risk reduction	Air pollution reduction	Water supply protection	Wild pollination	Within Recreational Birding Priority Area?	Number of people that do not have park access within one-half mile of each CWMTF property	Carbon storage, total	Annual carbon sequestration, total
Johns River Tracts				1456.7	777.7	No	154	834878.0	4244.9
NCWRC, Tuckertown Tr, Tuckertown GL				2266.4	717.9	No	152	759418.0	3859.0
Alcoa Trs, High Rock Lk	707.9			451.2	1612.1	No	1021	918716.7	4008.9
FCNC, Bobs Cr Wilderness Ph3	28.0				307.3	No	407	858612.7	3871.4
Harrison Tr, Roanoke R					713.0	No	193	378351.2	3003.1
Orton Creek – Orton Longleaf LLC Tract	581.8		104.3			No	7	494081.5	1208.4
Rocky Swp				280.0	566.9	No	283	445113.2	1947.4

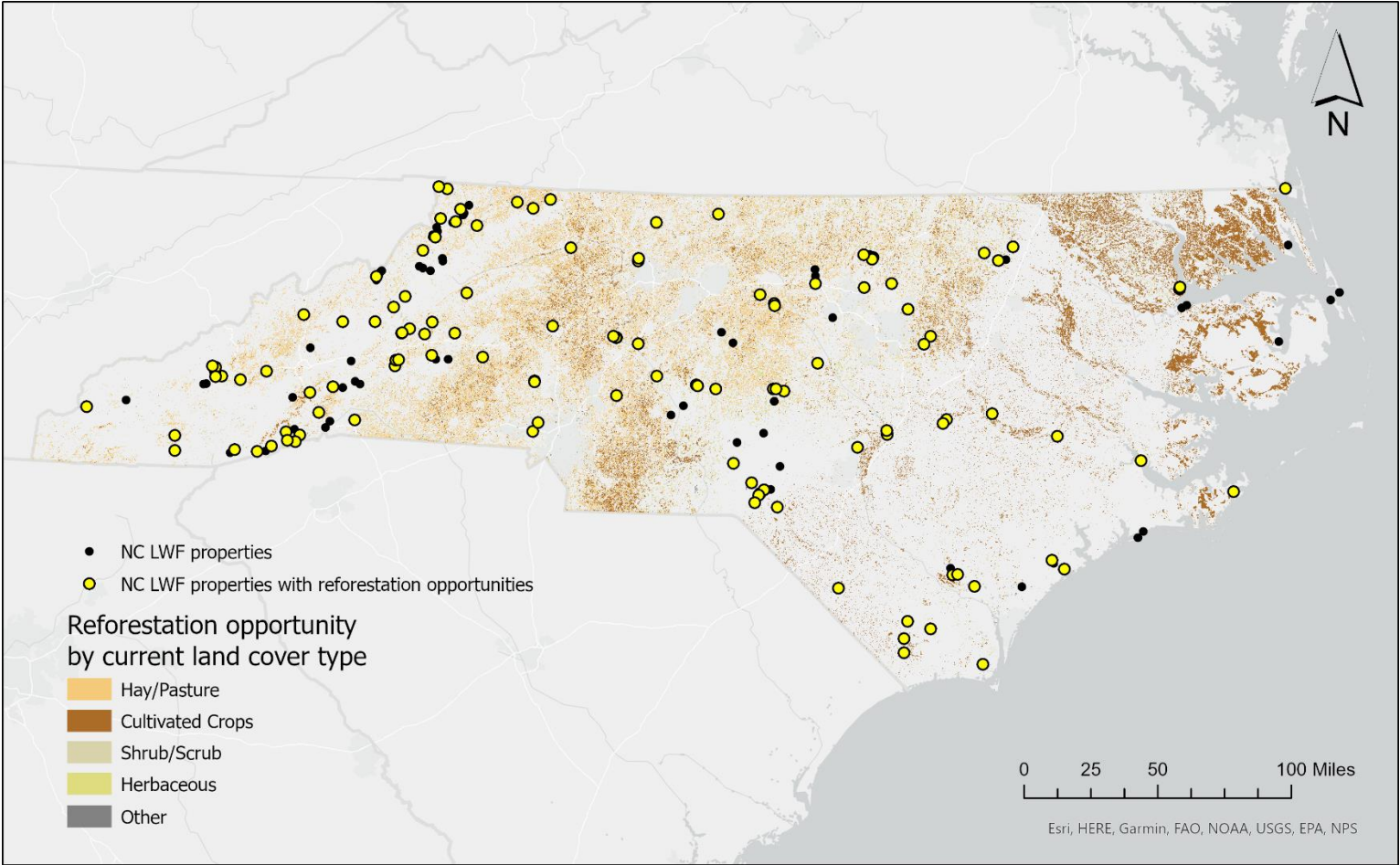


# Reforestation opportunities

We identified areas with reforestation potential, defined as land that is not currently forested, wetland, or developed and has the biophysical conditions needed to support forest, throughout NC. This method was based on a national assessment of natural climate solutions by [Fargione et al. 2018](#)

Most reforestable land in NC is currently being used for agricultural purposes. We would not expect this land to be reforested unless there are significant incentives. Reforestation is more likely in places that are already being managed for conservation, such as LWF properties.

# Reforestation opportunities by current land use

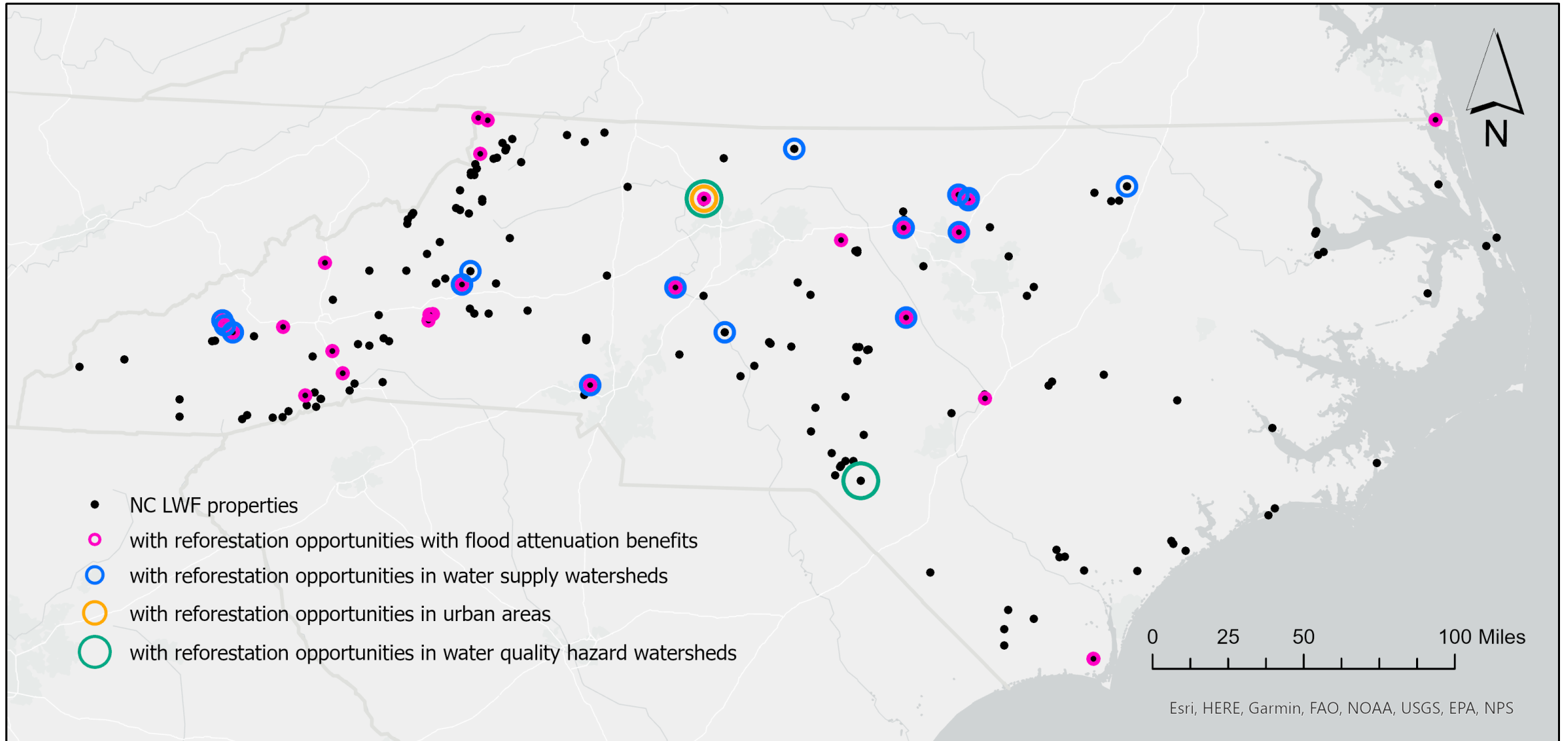


Most of the reforestable land on LWF properties is shrub-scrub and herbaceous, which has potential for reforestation. However, some of this land is being used for pasture and crops, much of which we do not expect to actually be reforested.

**119 LWF properties** have some potential for reforestation, with a total of **3,468 acres of reforestation opportunity**.

LWF land with reforestation potential by current land cover type	Area of reforestation potential across all LWF properties (acres)
Scrub-Shrub	1393
Herbaceous	940
Hay/Pasture	585
Cultivated Crops	544
Other	6

# Community resilience benefits from reforestation



Note: Showing properties with at least 10 acres of reforestation opportunities for each resilience benefit.

# Reforestation resilience benefits summary

Benefit (definition of area contributing to benefit)	# of LWF properties with this benefit (# in high social vulnerability areas)	Total area of LWF properties contributing to this benefit, acres (area in high social vulnerability areas)
<b>Flood attenuation</b> (LWF properties with at least 10 acres of reforestation opportunity in the floodplain of a high flood risk watershed)	27 (5)	1,405 (552)
<b>Water purification</b> (LWF properties with at least 10 acres of reforestation opportunity in the floodplain of a water quality hazard watershed)	2 (1)	34 (24)
<b>Air pollution reduction</b> (LWF properties with at least 10 acres of reforestation opportunity in urban areas)	1 (0)	10 (0)
<b>Water supply protection</b> (LWF properties with at least 10 acres of reforestation opportunity in a water supply watershed)	16 (3)	1,071 (204)

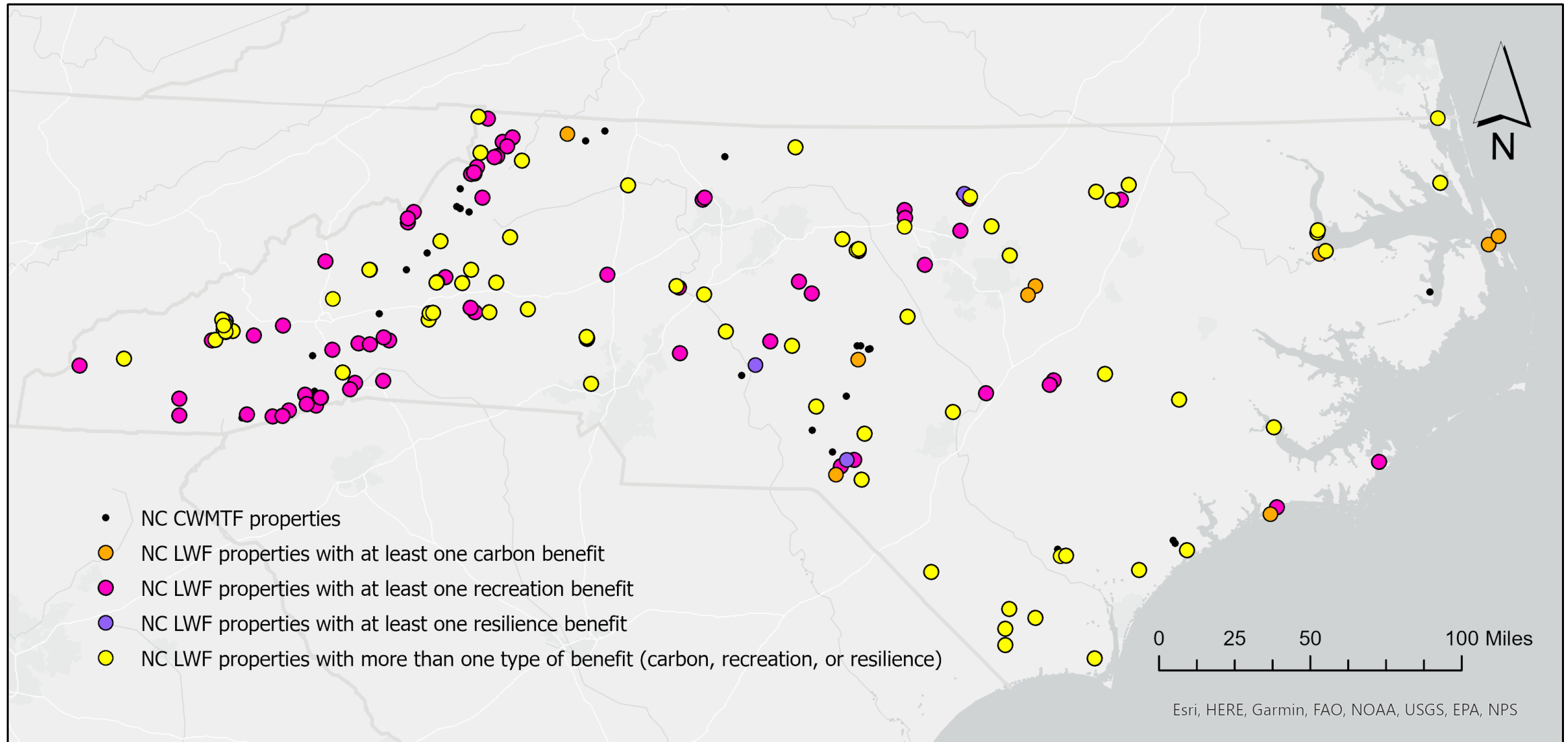
# Benefits from reforesting LWF properties

Showing properties with at least 127 acres of reforestation opportunity. Full list available in spreadsheet (see slide 34).  
**Green text** indicates that the property has at least 10 acres of reforestation potential that would contribute to the benefit.

Property name	Total reforestation opportunity, acres	Reforestable acres contributing to benefit				Potential carbon sequestration (MT CO2-e/year)
		Flood attenuation	Water quality risk reduction	Air pollution reduction	Water supply protection	
Rocky Swp	319.4				82.1	980.3
Deep R	293.1	189.5			31.4	917.1
Galloway Farm, Dan River	275.1				275.1	863.8
FCNC, Bobs Cr Wilderness Ph3	245.3	85.0				774.4
Bobs Cr Wilderness Ph 2	221.9	221.9				699.4
Alcoa Trs, High Rock Lk	187.5	147.7			35.4	576.6
Johns River Tracts	155.5				90.3	489.1
Lumber River - Big McQueen Tract	127.0					387.1

in high social vulnerability Census tract

# Carbon, recreation, and resilience benefits summary



Note: carbon benefit is defined as high carbon storage or sequestration (existing or potential), as defined on slide 8



# Carbon, recreation, and resilience benefits summary

	Number of LWF Properties
With at least one carbon benefit	48
With at least one recreation benefit	132
With at least one resilience benefit	60
With more than one type of benefit	70
With all three benefits	19

Note: There are areas of overlap between the categories, so the numbers of LWF properties are not additive.

# LWF property spreadsheet

The spreadsheet attached along with the slide deck contains details on carbon, recreation, and resilience benefits provided by existing forests (tab 1) and potentially provided by reforestation (tab 2) on all 186 LWF properties.

General information					Resilience benefits of existing forest (green shading = more than 5 acres contributing to benefit)						
comple name	Property Name	Applicant Number	Area, acres	Contains forest? (1 = yes)	Contains protected land? (1 = yes)	High social vulnerability area? (1 = yes)	Forest in high flood risk watershed, acres	Forest in high water quality risk watershed, acres	Forest in urban area, acres	Forest in water supply watershed, acres	Pollinator habitat within flight range of pollinator-dependent crops, acres
use Ridge Conservancy	Lillis Property Acquisition-Middle Fork Greenway	2015-002	18.9	1			8.2			10.9	
use Ridge Conservancy	Pond Mountain Linkage	2015-003	525.7	1	1		5.3			4.7	30
use Ridge Conservancy	Tater Hill Bog Preserve Acquisition & Boundary Adj	2015-004	53.0	1							
use Ridge Conservancy	Valle Crucis Community Park Expansion	2015-005	5.0	1							
abamas SVUCD	Surfner Vae Pratre SHVA	2015-006	186.1	1			7.8			66.3	
acolina Mountain Land Conservancy	Beavallow Mountain Phase IV	2015-007	220.6	1							
acolina Mountain Land Conservancy	Cher Bell Trail Park	2015-008	30.3	1							
atatahla Lands Conservancy	Holly Track Preserve	2015-009	391.5	1	1		40.5			179.0	
at Var Preservation Trust	Auerasboro Battlefield - West and Kenan Tracts	2015-010	247.4	1			8.0	1.6			
ervation Fund, The	Cattal Peak	2015-012	287.1	1	1					142.0	
ervation Fund, The	Indian Creek	2015-014	154.9	1	1		12.0			70.0	
ervation Fund, The	Mayhew Stomp Creek	2015-015	433.0	1			4.5			252.3	
ervation Fund, The	Smith Creek	2015-016	862.5	1						3077.5	
ervation Trust for North Carolina	Saddle Mountain Expansion	2015-017	189.5	1						77.8	
othills Conservancy of NC	Shells Adams Left Prong Catawba	2015-020	352.5	1	1						
othills Conservancy of NC	Vhigpooevell Property	2015-021	84.9	1							
othills Conservancy of NC	Vidlosses-Armstrong Creek Watershed	2015-022	1730.0	1							
othills Conservancy of NC	Seymour Johnson Land acquisition	2015-023	85.7	1	1		43.1		48.0		
othills Conservancy of NC	Bennett Property, Barnes Creek Headwaters	2015-024	265.9	1							
othills Conservancy of NC	Cochran Lands, Uwharrie River	2015-027	295.8	1						180.6	
othills Conservancy of NC	Lenoir Watershed	2015-033	996.8	1			31.1			594.0	
othills Conservancy of NC	Bluff Mountain, Jones	2015-035	930.6	1			12.3				
othills Conservancy of NC	Otton Creek - Otton Longleaf LLC Tract	2015-038	810.4	1	1		580.0			104.3	
othills Conservancy of NC	Sandhills Juniper Creek - Haskell Tract	2015-040	581.9	1	1			100.5			
othills Conservancy of NC	Star Fork Bog Addition	2015-041	56.7	1			6.8				
othills Conservancy of NC	Midcroth Bay	2015-043	320.5	1				89.2			
othills Conservancy of NC	Paddy Mountain Plant Conservation Preserve Cook	2015-044	937.8	1	1						
othills Conservancy of NC	Bennettsville Battlefield-Cole Hollowell Tracts	2015-045	215.2	1			63.6	63.8			
othills Conservancy of NC	Bullhead Mountain Additions	2015-047	18.1	1							
othills Conservancy of NC	Elk Knob State Park - Main Tract	2015-048	60.9	1							
othills Conservancy of NC	Elk Knob State Park - Miller Hees Tract	2015-049	230.0	1				2.0			
othills Conservancy of NC	Lumber River - Big McQueen Tract	2015-050	955.8	1	1						
othills Conservancy of NC	Headwaters of the East Fork of the French Broad R	2015-056	4405.6	1	1						
othills Conservancy of NC	Gibson & Pugin	2015-059	750.5	1	1			76.9			
othills Conservancy of NC	Vaccamaw River/Campbell Group II	2015-063	854.3	1				1200.5			
othills Conservancy of NC	Fath Rock	2015-064	212.1	1				1.6			
othills Conservancy of NC	Histone Bernhans Church Properties (3 sites)	2015-066	110.1	1							
othills Conservancy of NC	Glencon-Carriage Bridge Tract	2015-068	36.1	1							
othills Conservancy of NC	Sanctuary	2015-070	37.9	1							
othills Conservancy of NC	Vacuaville Watershed at Eller Cove	2015-072	475.1	1	1		4.2			295.7	
othills Conservancy of NC	8025-Flaccoon Rd Wetlands	2015-073	27.7	1	1		6.7				
othills Conservancy of NC	Gantt Tract, Dickens Creek	2015-075	1284.2	1	1		32.4			704.8	
othills Conservancy of NC	Twelve Hawks, Fishing Creek	2015-079	54.3	1							
othills Conservancy of NC	Parkview - Buffalo Creek	2015-080	86.8	1				39.2		18.1	
othills Conservancy of NC	Cane Mountain Area - Presnell Tract	2015-081	550.4	1					19.3	40.5	
othills Conservancy of NC	Abbey Creek Greenway	2015-082	210.0	1							
othills Conservancy of NC	Harmon Knob Phase I	2015-083	260.8	1							
othills Conservancy of NC	Tater Bog Preserve - Pardue	2015-084	16.0	1						6.5	
othills Conservancy of NC	Burnt Mountain	2015-089	23.3	1							

General information											Reforestation potential with the resilience benefit			
comple name	Property Name	Applicant Number	Area, acres	Contains forest? (1 = yes)	Contains protected land? (1 = yes)	High social vulnerability area? (1 = yes)	Area of reforestation potential, acres	Reforestation potential in high flood risk watershed, acres	Reforestation potential in water quality hazard watershed, acres	Reforestation potential in urban area, acres	Reforestation potential in water supply watershed, acres	Reforestation potential in water supply watershed, acres	Reforestation potential in water supply watershed, acres	Reforestation potential in water supply watershed, acres
use Ridge Conservancy	Lillis Property Acquisition-Middle Fork Greenway	2015-002	18.9	1										
use Ridge Conservancy	Pond Mountain Linkage	2015-003	525.7	1				44.5	44.5					
use Ridge Conservancy	Tater Hill Bog Preserve Acquisition & Boundary Adj	2015-004	53.0	1										
use Ridge Conservancy	Valle Crucis Community Park Expansion	2015-005	5.0	1				3.3						
use Ridge Conservancy	Surfner Vae Pratre SHVA	2015-006	186.1	1				4.8	4.8					4
acolina Mountain Land Conservancy	Beavallow Mountain Phase IV	2015-007	220.6	1				0.4	0.4					
acolina Mountain Land Conservancy	Cher Bell Trail Park	2015-008	30.3	1										
atatahla Lands Conservancy	Holly Track Preserve	2015-009	391.5	1	1			32.1	32.1					32
at Var Preservation Trust	Auerasboro Battlefield - West and Kenan Tracts	2015-010	247.4	1				21.3	19.2		6.2			
ervation Fund, The	Cattal Peak	2015-012	287.1	1	1			3.8						3
ervation Fund, The	Indian Creek	2015-014	154.9	1	1			58.7	58.7					58
ervation Fund, The	Mayhew Stomp Creek	2015-015	433.0	1				49.1	49.1					49
ervation Fund, The	Smith Creek	2015-016	862.5	1				2.0						2
ervation Trust for North Carolina	Saddle Mountain Expansion	2015-017	189.5	1				0.2						0
othills Conservancy of NC	Shells Adams Left Prong Catawba	2015-020	352.5	1	1									
othills Conservancy of NC	Vhigpooevell Property	2015-021	84.9	1				26.9						
othills Conservancy of NC	Vidlosses-Armstrong Creek Watershed	2015-022	1730.0	1										
othills Conservancy of NC	Seymour Johnson Land acquisition	2015-023	85.7	1					4.4			4.4		
othills Conservancy of NC	Bennett Property, Barnes Creek Headwaters	2015-024	265.9	1				4.2						
othills Conservancy of NC	Cochran Lands, Uwharrie River	2015-027	295.8	1										
othills Conservancy of NC	Lenoir Watershed	2015-033	996.8	1				2.0	2.0		2.0			
othills Conservancy of NC	Bluff Mountain, Jones	2015-035	930.6	1				0.4	0.4					
othills Conservancy of NC	Otton Creek - Otton Longleaf LLC Tract	2015-038	810.4	1	1			12.9	12.9					
othills Conservancy of NC	Sandhills Juniper Creek - Haskell Tract	2015-040	581.9	1							0.4			
othills Conservancy of NC	Star Fork Bog Addition	2015-041	56.7	1				8.0	10.0					
othills Conservancy of NC	Midcroth Bay	2015-043	320.5	1				24.9			24.9			
othills Conservancy of NC	Paddy Mountain Plant Conservation Preserve Cook	2015-044	937.8	1	1									
othills Conservancy of NC	Bennettsville Battlefield-Cole Hollowell Tracts	2015-045	215.2	1				1.8	1.8		1.8			
othills Conservancy of NC	Bullhead Mountain Additions	2015-047	18.1	1										
othills Conservancy of NC	Elk Knob State Park - Main Tract	2015-048	60.9	1				6.2						
othills Conservancy of NC	Elk Knob State Park - Miller Hees Tract	2015-049	230.0	1										
othills Conservancy of NC	Lumber River - Big McQueen Tract	2015-050	955.8	1	1									
othills Conservancy of NC	Headwaters of the East Fork of the French Broad R	2015-056	4405.6	1	1									
othills Conservancy of NC	Gibson & Pugin	2015-059	750.5	1										
othills Conservancy of NC	Vaccamaw River/Campbell Group II	2015-063	854.3	1										
othills Conservancy of NC	Fath Rock	2015-064	212.1	1										
othills Conservancy of NC	Histone Bernhans Church Properties (3 sites)	2015-066	110.1	1				0.2	0.2		0.2			
othills Conservancy of NC	Glencon-Carriage Bridge Tract	2015-068	36.1	1				5.6						
othills Conservancy of NC	Sanctuary	2015-070	37.9	1										
othills Conservancy of NC	Vacuaville Watershed at Eller Cove	2015-072	475.1	1	1									
othills Conservancy of NC	8025-Flaccoon Rd Wetlands	2015-073	27.7	1	1									
othills Conservancy of NC	Gantt Tract, Dickens Creek	2015-075	1284.2	1	1			1.1	1.1					
othills Conservancy of NC	Twelve Hawks, Fishing Creek	2015-079	54.3	1					95.8					95
othills Conservancy of NC	Parkview - Buffalo Creek	2015-080	86.8	1										
othills Conservancy of NC	Cane Mountain Area - Presnell Tract	2015-081	550.4	1										
othills Conservancy of NC	Abbey Creek Greenway	2015-082	210.0	1										
othills Conservancy of NC	Harmon Knob Phase I	2015-083	260.8	1										
othills Conservancy of NC	Tater Bog Preserve - Pardue	2015-084	16.0	1										
othills Conservancy of NC	Burnt Mountain	2015-089	23.3	1				2.2	2.2					