

**ORANGE COUNTY  
BOARD OF COMMISSIONERS  
ACTION AGENDA ITEM ABSTRACT  
Meeting Date: February 20, 2018**

**Action Agenda  
Item No. 6-a**

**SUBJECT:** Greene Tract Conceptual Plans

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**DEPARTMENT:** County Manager and Planning and Inspections

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**ATTACHMENT(S):**

1. Conceptual Plan Overview
2. Environmental and Cultural Features Map
3. Land Use Conceptual Plans
4. Land Use and Density Outcomes
5. Affordable Housing Potential

**INFORMATION CONTACT:**

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**PURPOSE:** To consider development and preservation alternatives for the Greene Tract and authorize staff to communicate the Board's preferences to the Towns of Chapel Hill and Carrboro. These preferences include decisions on:

1. Reconfiguration of the Headwaters Preserve area;
2. Size of the development and preservation areas within the Greene Tract;
3. Density of the development area;
4. Land uses and affordable housing preferences in the development area such as
  - a. Single use (residential) versus mixed use development (residential and commercial)
  - b. Affordable housing versus mixed income/market rate housing
  - c. Goals for the number or proportion of affordable units

**BACKGROUND:** The Greene Tract is a 164 acre parcel of which 104 acres is jointly owned by Orange County, Chapel Hill, and Carrboro. The remaining sixty (60) acres is owned by Orange County and has been designated as the Headwaters Preserve.

Last year, the owners of the jointly owned portion of the Greene Tract agreed to have the Mayors and BOCC Chair consider different preservation and development options for the property. This discussion resulted in three alternatives that illustrate high, medium, and low development intensities. All of the alternatives include an elementary school site, a site for a future park, the preservation of significant environmental and cultural areas, and a preliminary road network and infrastructure design. The three alternatives also consider the project area's current environmental conditions, elements of the 2002 Joint Governments' Resolution, the Rogers Road Task Force report, the Mapping Our Community's Future report, and previous land use discussions. These three alternatives are contained in Attachment 3.

In addition to the high, medium, and low development intensity scenarios, the Mayors and Chair requested an examination of the entire Greene Tract, including the Headwaters Preserve, in an effort to preserve the most environmentally sensitive areas and to develop the most appropriate areas of the entire 164 acre Tract. As a result, staff amended the proposed conceptual plan, reconfiguring the Headwaters Preserve and the jointly owned areas. This reconfiguration

maintains the same total acreage for each of the areas but aligns them differently. The reconfigured tracts were drafted with environmental staff from the Town of Chapel Hill, the Town of Carrboro, and Orange County in order to create new parcels which endeavored to protect environmental features and habitats located on site. The proposed reconfigured Headwaters Preserve area alternatives are also contained in Attachment 3.

Attachment 4 includes land use and density outcomes for the different alternatives. Attachment 5 includes potential affordable housing outputs based on different affordable housing proportions.

**FINANCIAL IMPACT:** There is no immediate financial impact related to this item.

**SOCIAL JUSTICE IMPACT:** The following Orange County Social Justice Goals are applicable to this agenda item:

- **GOAL: ESTABLISH SUSTAINABLE AND EQUITABLE LAND-USE AND ENVIRONMENTAL POLICIES**

The fair treatment and meaningful involvement of people of all races, cultures, incomes and educational levels with respect to the development and enforcement of environmental laws, regulations, policies, and decisions. Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies.

- **GOAL: FOSTER A COMMUNITY CULTURE THAT REJECTS OPPRESSION AND INEQUITY**

The fair treatment and meaningful involvement of all people regardless of race or color; religious or philosophical beliefs; sex, gender or sexual orientation; national origin or ethnic background; age; military service; disability; and familial, residential or economic status.

- **GOAL: ENSURE ECONOMIC SELF-SUFFICIENCY**

The creation and preservation of infrastructure, policies, programs and funding necessary for residents to provide shelter, food, clothing and medical care for themselves and their dependents.

**RECOMMENDATION(S):** The Manager recommends the Board define its preferences for the Greene Tract in terms of

1. Reconfiguration of the Headwaters Preserve area;
2. Size of the development and preservation areas within the Greene Tract;
3. Density of the development area;
4. Land uses and affordable housing preferences in the development area

The Manager further recommends the Board authorize staff to communicate the Board's preferences to Chapel Hill and Carrboro town staffs and request feedback from the towns by May 1, 2018. Upon receipt of feedback from both towns, County staff - in concert with town staffs - will prepare a draft resolution for future approval by the Board of Commissioners, the Chapel Hill Town Council and the Carrboro Board of Aldermen to codify the preferences/input from all three entities. With adoption by all three governing boards, the resulting resolution would supersede the 2002 Resolution that outlined the County and Towns' intentions for developing the Greene Tract.

## **Greene Tract Conceptual Plans Information on Factors Considered During Creation Process**

The staff-created conceptual plans for the Greene Tract are a result of several months of iterations and input from a variety of staff from the three jurisdictions. While planning staffs were the lead on creating the conceptual plans, input was also sought and incorporated from environmental and stormwater staffs.

The following information addresses some anticipated questions regarding why the conceptual plans are presented as they are.

### Environmental Features

Although the Greene Tract lies entirely within the planning jurisdiction of the Town of Chapel Hill, 104 acres of the Greene Tract are co-owned by Orange County and the Towns of Chapel Hill and Carrboro while 60 acres are owned solely by Orange County. Planning staffs chose to **apply the most stringent development regulation of the three jurisdictions** when determining stream and wetland buffers and preservation of other environmental features such as forest types. For example, if one jurisdiction requires a 50-foot stream buffer and another requires a 65-foot stream buffer, a 65-foot stream buffer was used as the stream buffer on the conceptual plan.

The Upland Hardwood Forest areas were slated for preservation as at least one jurisdiction would normally request/require preservation of these types of forests if a development proposal were made.

### Road Configuration

All previous planning efforts of the Greene Tract/Rogers Road area have strongly stated that Purefoy Drive and/or Lizzie Lane should not be the only access to the Greene Tract. Connections to the south, north, and/or east must be made. The early iterations of maps (not included in materials) sought to avoid a stream crossing and connected to Merin Road, near the southeast corner of the Greene Tract, by traversing the area between two stream buffer areas. However, this configuration was revised as environmental and stormwater staff members stated that **a stream crossing would be preferable to impacting the Upland Hardwood Forest areas while also bisecting preserve connectivity.**

Staffs have spoken with Norfolk Southern railroad representatives regarding a crossing on the east side of the Greene Tract. While Norfolk Southern is amenable to reviewing any requests, the **railroad generally requires closure of at least one existing crossing for each new crossing. Staff has not been able to identify existing crossing(s) that could be proposed for closure** in order to make a connection from the Greene Tract to Weaver Dairy Road Extension to the east.

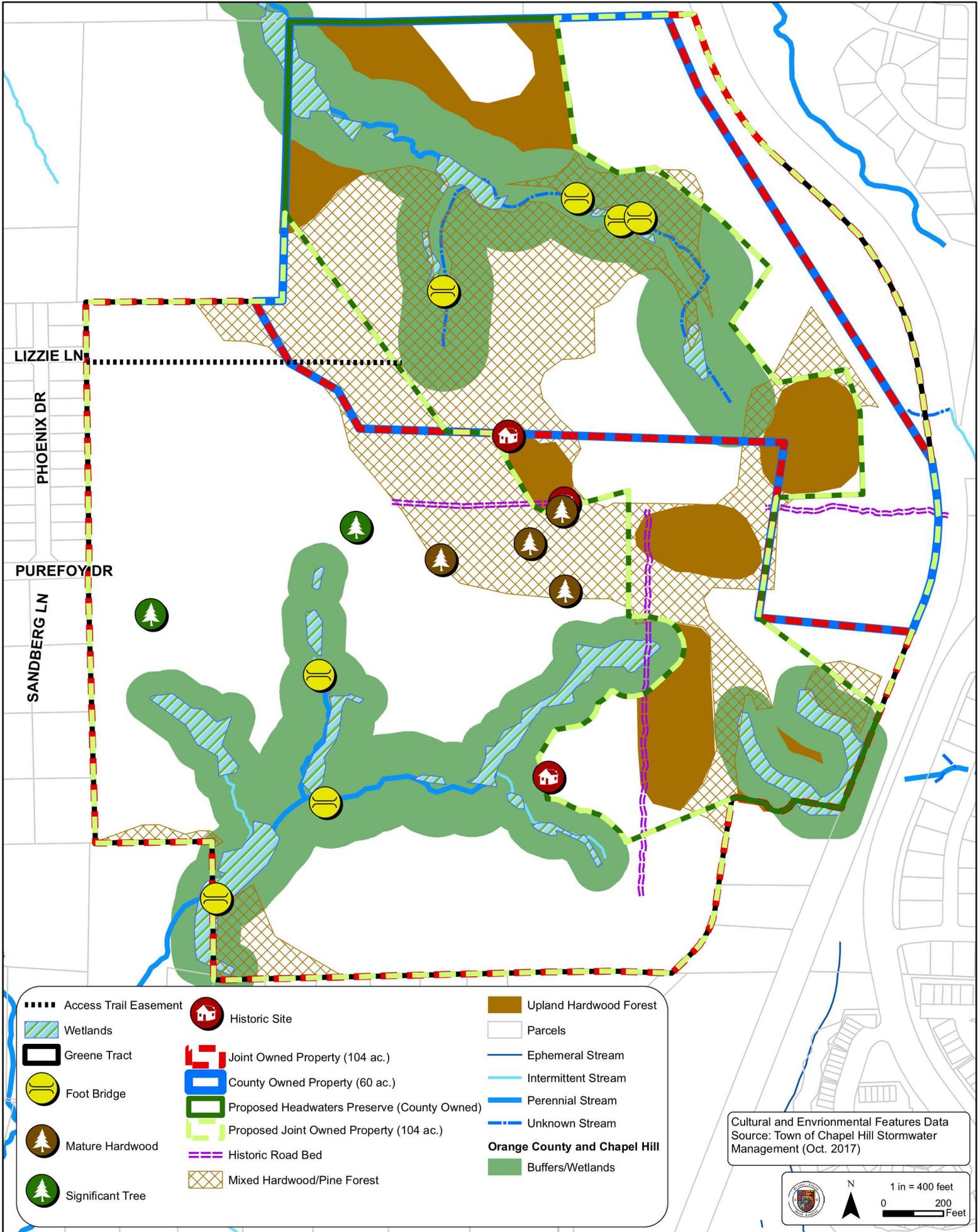
A connection to the north (to Eubanks Road) might be possible through an edge corridor of the “Neville Tract” if an alternative site can be found to conduct the Solid Waste activities occurring on the Neville Tract.

#### Reconfigured Preserve Area

Quarterly “Managers, Mayors, Chair” (MMC) meetings have been taking place to provide the opportunity for staffs and the Town/County managers, Town mayors, and County chair to meet and receive updates/guidance on Rogers Road sewer system and planning issue status, including progress on Greene Tract planning. Staff received direction to consider the **reconfiguration of the County-owned 60-acre portion of the Greene Tract to encumber the most preservation-worthy lands**. Staffs conducted the analysis and the conceptual plans incorporate a reconfigured County-owned preserve area.

If a reconfigured preserve area is desired, future work would include re-platting the parcels to reflect different parcel boundaries and ownership from those that currently exist.

# Greene Tract - Environmental & Cultural Features



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|--|--|--|
| <ul style="list-style-type: none"> <li>■■■■ Access Trail Easement</li> <li>▨ Wetlands</li> <li>▭ Greene Tract</li> <li>○ Foot Bridge</li> <li>● Mature Hardwood</li> <li>● Significant Tree</li> </ul> | <ul style="list-style-type: none"> <li>● Historic Site</li> <li>▭ Joint Owned Property (104 ac.)</li> <li>▭ County Owned Property (60 ac.)</li> <li>▭ Proposed Headwaters Preserve (County Owned)</li> <li>▭ Proposed Joint Owned Property (104 ac.)</li> <li>--- Historic Road Bed</li> <li>▨ Mixed Hardwood/Pine Forest</li> </ul> | <ul style="list-style-type: none"> <li>▭ Upland Hardwood Forest</li> <li>▭ Parcels</li> <li>— Ephemeral Stream</li> <li>— Intermittent Stream</li> <li>— Perennial Stream</li> <li>— Unknown Stream</li> <li><b>Orange County and Chapel Hill</b></li> <li>▭ Buffers/Wetlands</li> </ul> |
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Cultural and Environmental Features Data  
 Source: Town of Chapel Hill Stormwater Management (Oct. 2017)



# Greene Tract Land Use Conceptual Plan

Three alternatives were drafted which included a project area of approximately 164 acres of land divided into proposed land uses based on the project area's environmental conditions, elements of the 2002 Chapel Hill Resolution, Rogers Road Task Force report, Mapping Our Community's Future report, and local government leaders' objectives for the Greene Tract.

Alternatives must provide three levels of development and incorporate:

- School site
- Recreational facility site
- Park space
- Natural preservation areas
- Development
- Road network and infrastructure
- Environmental buffers
- Cultural areas of significance

Additional consideration will be required for several elements of the Greene Tract:

- Roadway design
- Site infrastructure (i.e. water, sewer, fiber)
- Open space, recreational facility, and tree canopy preservation
- Environmental (i.e. wetlands, streams, buffers, stormwater regulations)
- Low Impact Development
- Cultural and historical features
- Density, land use, and zoning regulations
- Transit

- Further evaluation will impact and alter the proposed alternatives in the future
- Site plan review process will address additional land use issues and help shape the plan for the Greene Tract

## Land Use Categories

**Proposed Joint Owned Preserve:** Includes areas of existing wetlands and streams located on the Greene Tract. Wetland and stream information is based on information collected from Town of Chapel Hill, Town of Carrboro, and Orange County staff. Buffer standards were determined based on a review of the Towns' and County's standards and utilizing the most restrictive. Additional analysis and delineation will be required moving forward. These areas would not be developed, but will remain as natural preserve areas in the future.

**Additional Preserve:** Includes areas for future preservation and upland hardwood forest which are not contained in the required preserve areas. In addition to the acreage proposed to be preserved, approximately 10 – 20% of the acreage proposed for development will be utilized for open space to provide areas of on-site preserve and connections to other areas of offsite preserve.

**Proposed Headwaters Preserve (County Owned):** Includes the original 60 acres designated for preservation by the Towns and County.

**Elementary School Site:** Includes acreages allocated for a future elementary school site. The proposed school site has been relocated to the southern portion of the site due to environmental constraints and is not included as part of the original 18 acres designated for development in the Rogers Road Task Force Report. Chapel Hill—Carrboro City Schools staff has reviewed the proposed alternatives and provides support for the proposed location.

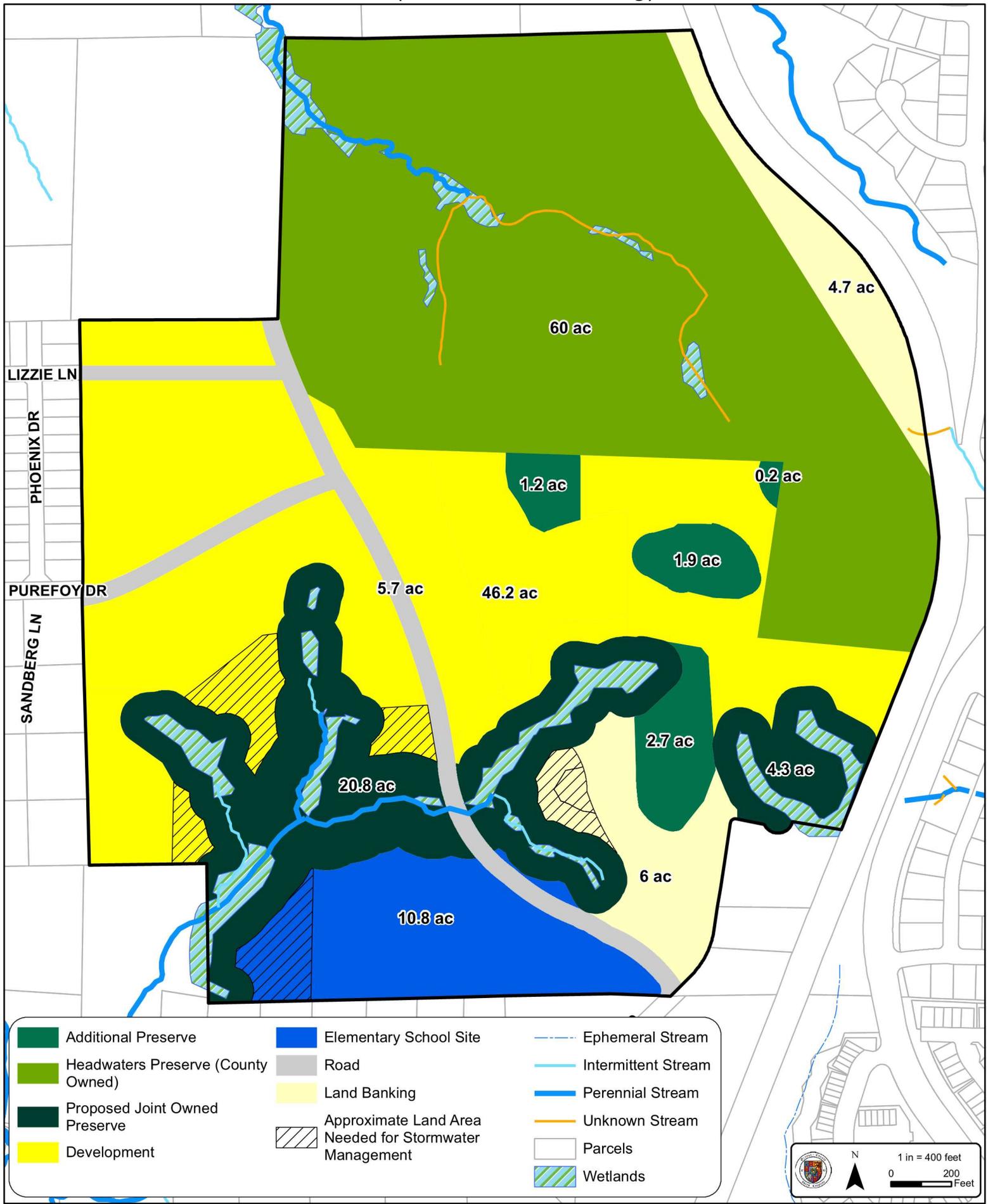
**Recreational Facility Site:** The proposed recreational facility site is also located on the southern portion of the Greene Tract in order to provide access to the future elementary school students. Chapel Hill—Carrboro City Schools staff provides support for the proposed recreational facility site, which could also support community usage.

**Development:** Includes areas proposed for development in the short term. The location for this category was determined based on site elevations and proximity to existing infrastructure. In addition, the proposed location for development includes the original 18 acres identified for affordable housing in the Rogers Road Task Force Report. Includes possible locations for on-site stormwater facilities.

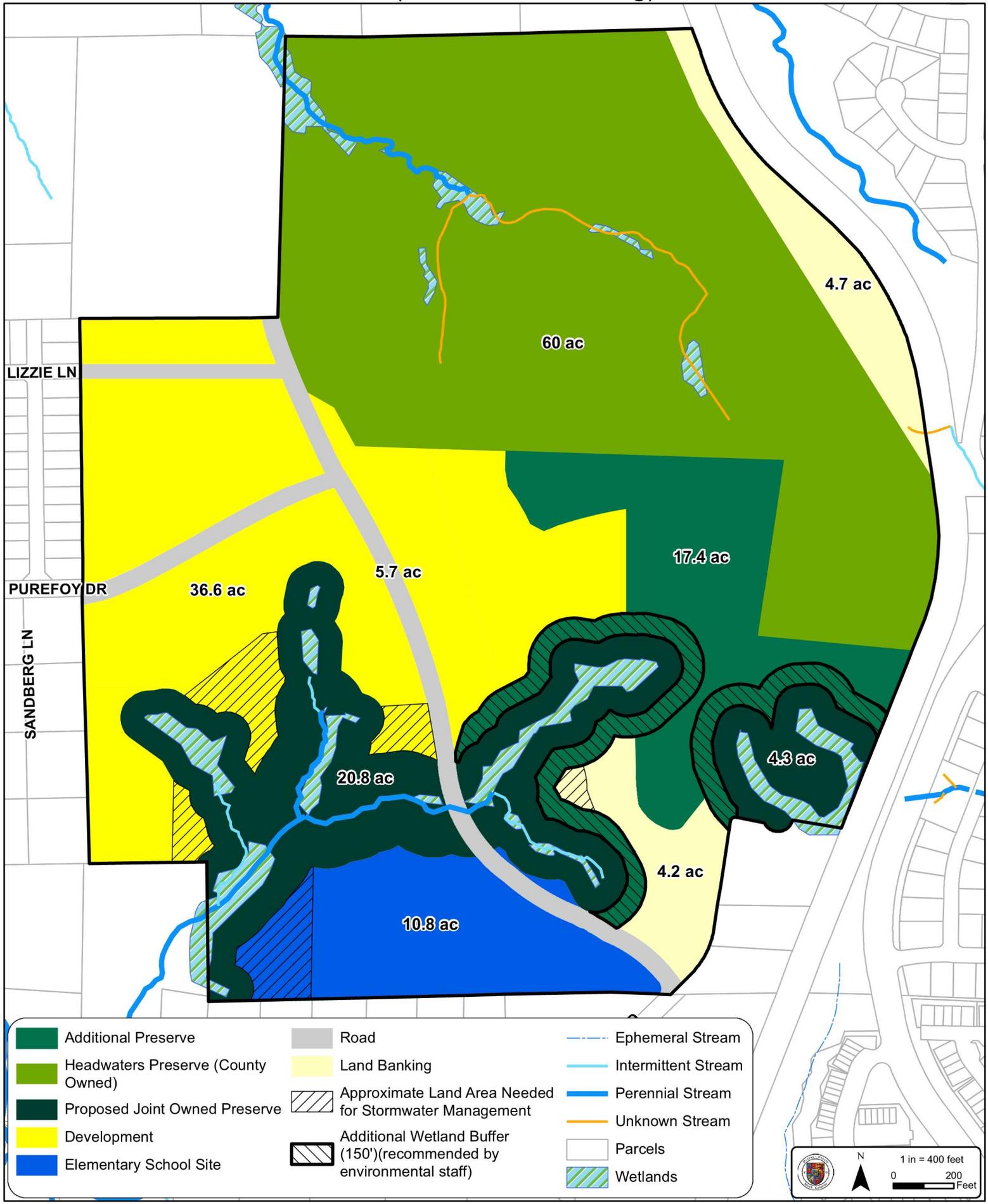
**Road:** The preliminary roadway design was based on existing environmental concerns and elevations contained on site. The proposed alternatives recognize a need for additional roadway connections in the future.

**Land Banking:** Includes areas without environmental concerns and access to infrastructure which may provide an opportunity for future development. These areas will remain undeveloped in the short term, but may be evaluated for development (i.e. residential, commercial, health services, and/or park/recreational facility) in the long term (5-10 years) depending on the needs of the community and planning partners at that time.

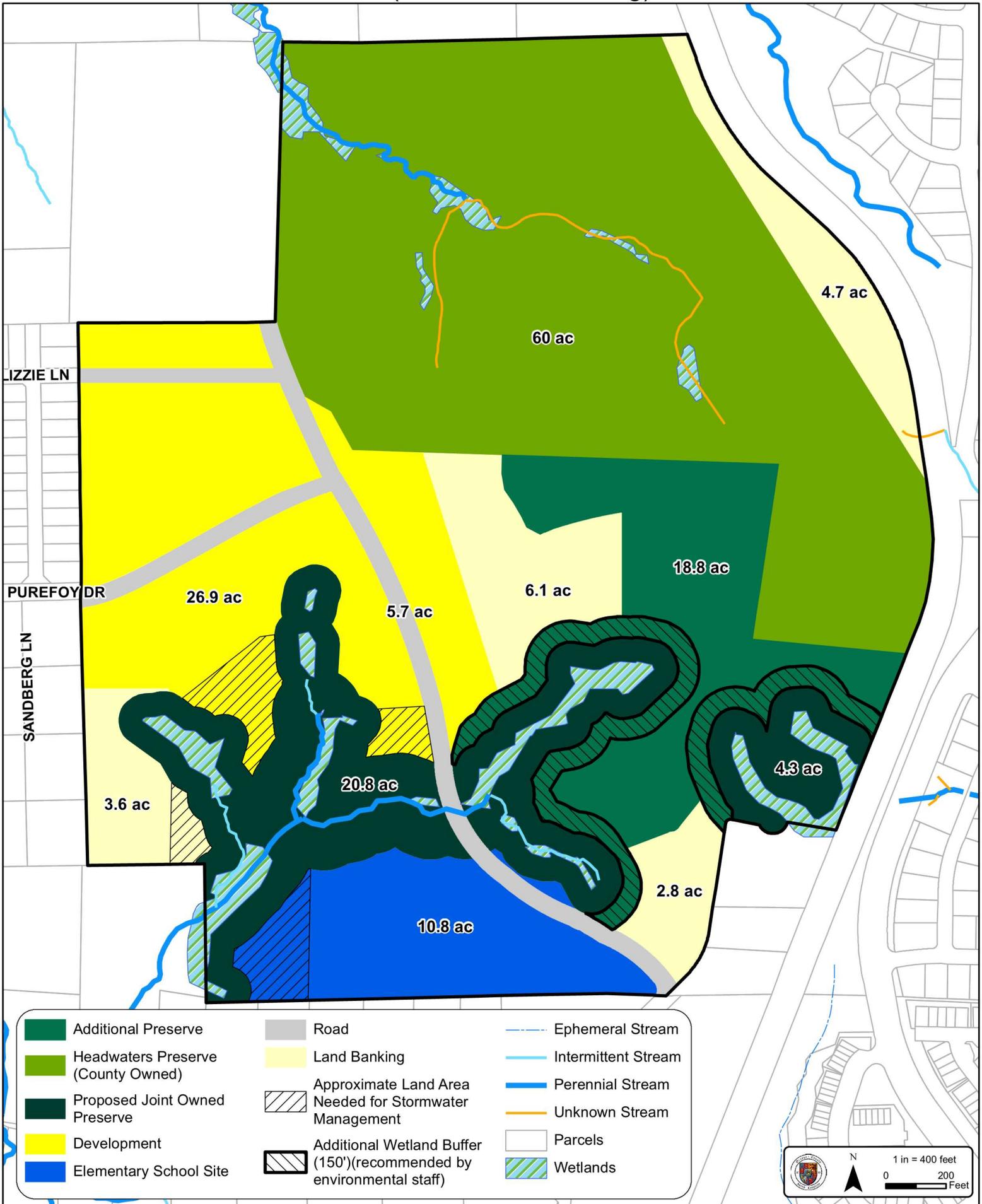
# Greene Tract Land Use Conceptual Plan - Alternative 1 (High) (Headwaters Existing)



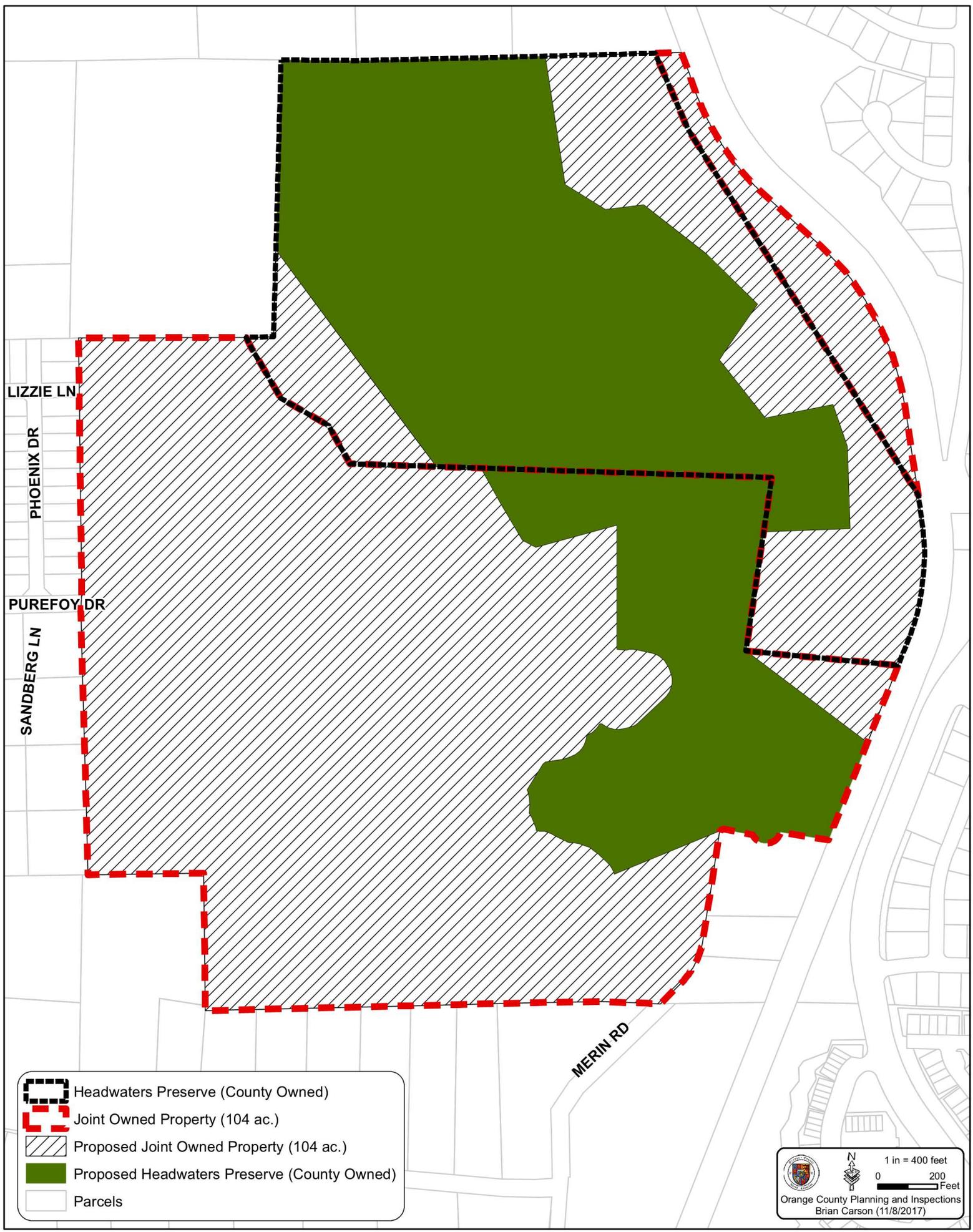
# Greene Tract Land Use Conceptual Plan - Alternative 2 (Medium) (Headwaters Existing)



# Greene Tract Land Use Conceptual Plan - Alternative 3 (Low) (Headwaters Existing)



# Possible Modifications to Headwaters Preserve Area <sup>10</sup>

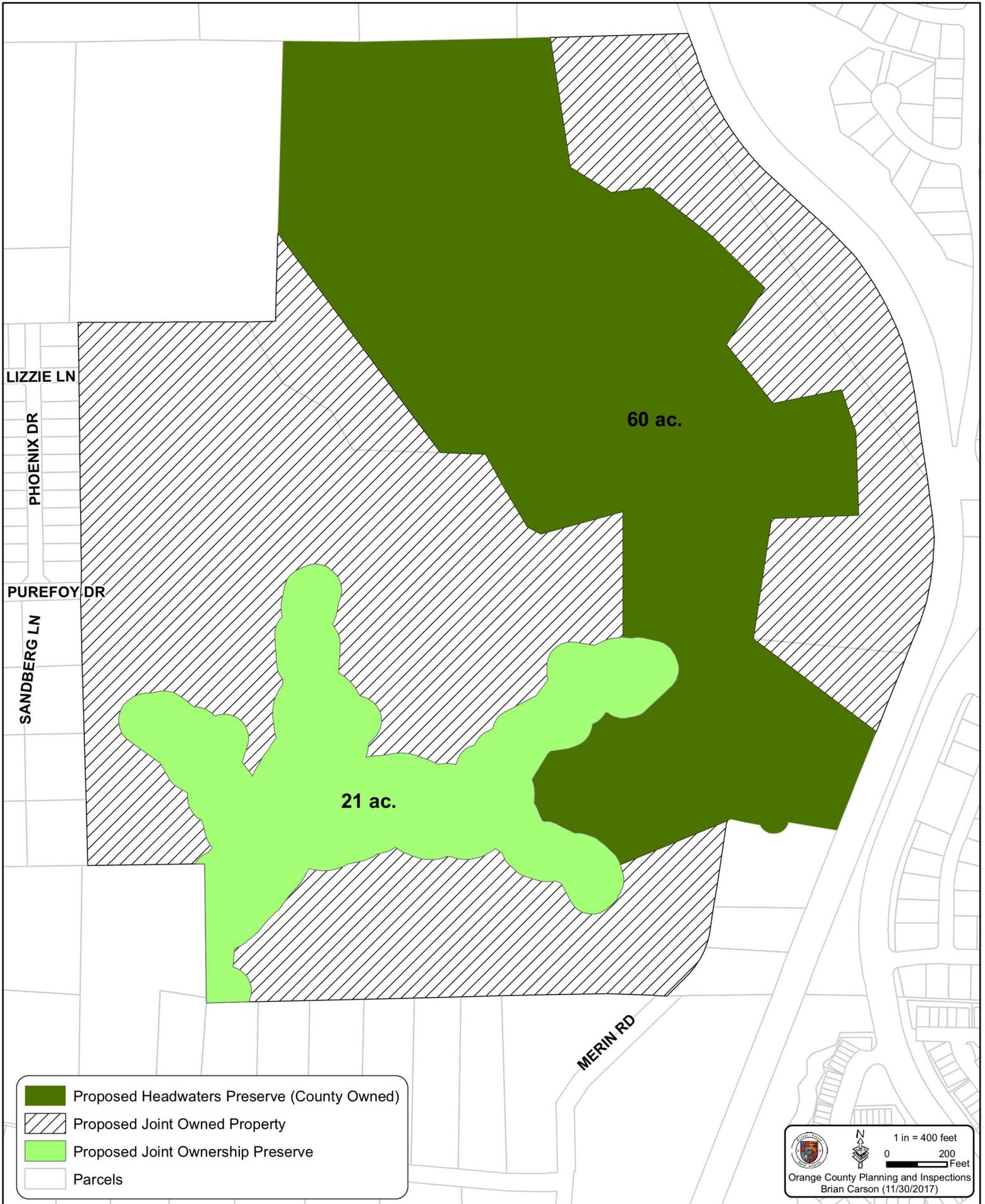


-  Headwaters Preserve (County Owned)
-  Joint Owned Property (104 ac.)
-  Proposed Joint Owned Property (104 ac.)
-  Proposed Headwaters Preserve (County Owned)
-  Parcels

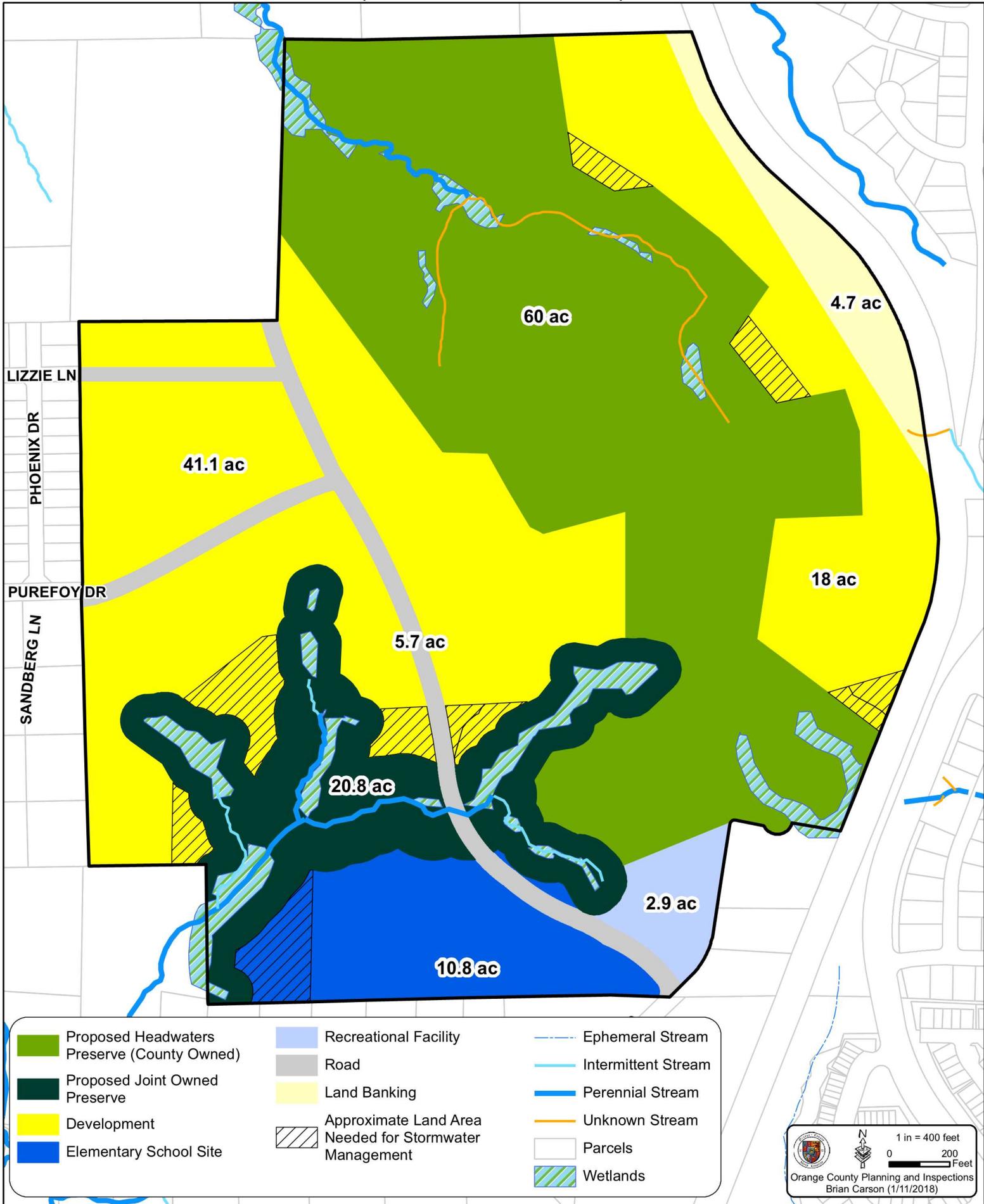
 1 in = 400 feet  
0 200 Feet  
Orange County Planning and Inspections  
Brian Carson (11/8/2017)

# Possible Modifications to Headwaters Preserve Area

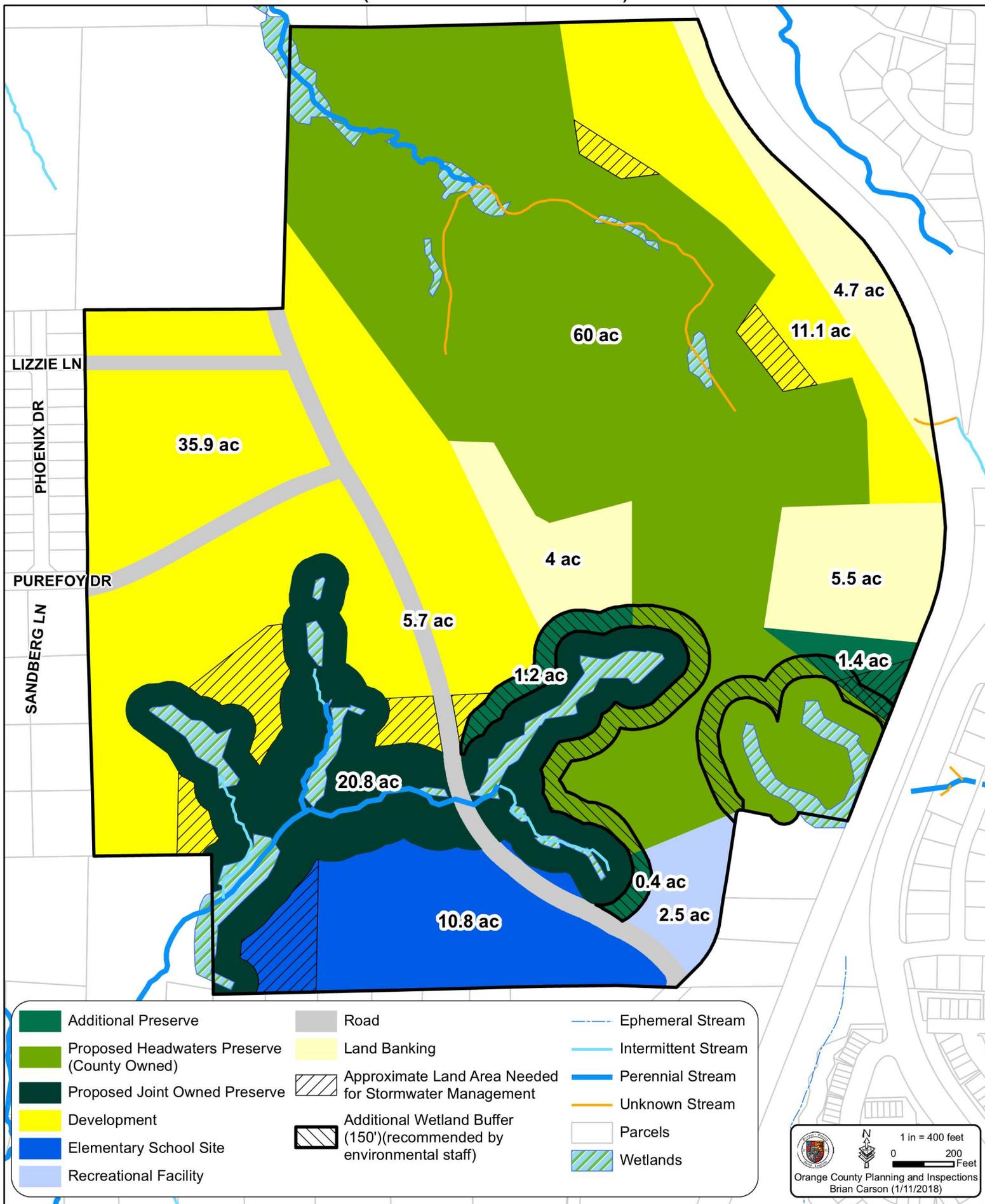
## Total Preserve Area



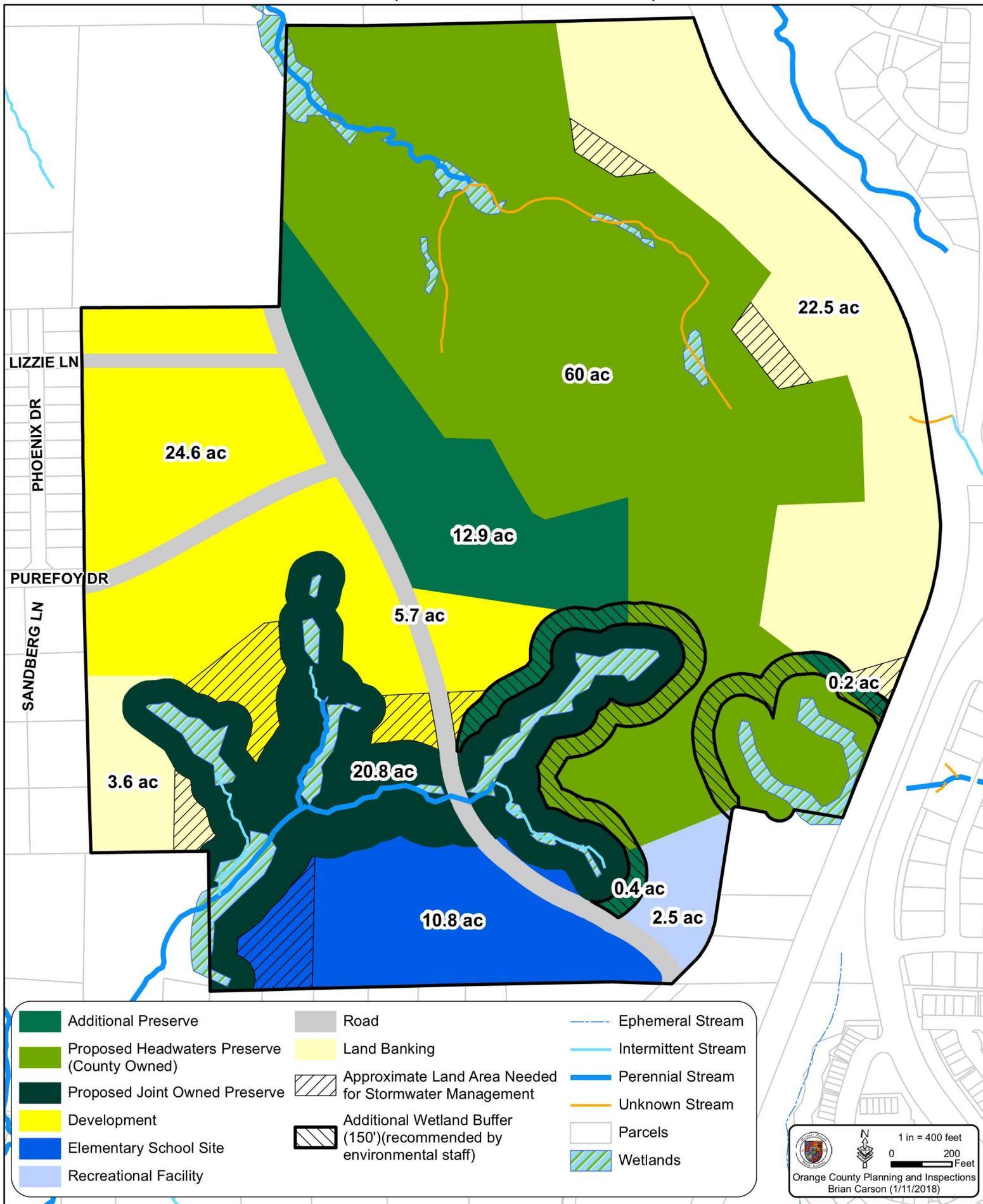
# Greene Tract Land Use Conceptual Plan - Alternative 1 (High) (Headwaters Modified)



# Greene Tract Land Use Conceptual Plan - Alternative 2 (Medium) (Headwaters Modified)



# Greene Tract Land Use Conceptual Plan - Alternative 3 (Low) (Headwaters Modified)



<b>Alternative 1</b> Illustrates a high development option with the greatest amount of acreage designated for development compared to the other alternatives.	Preserve		Development		Land Banking	
	20.8 ac.	20%	78.5 ac.	75.5%	4.7 ac.	4.5%
	Based on 59.1 acres	Low Density (4-6 units/acre)	Medium Density (6-10 units/acre)	High Density (10-20 units/acre)		
	236 - 354	354 - 591	591 - 1182			

<b>Pros</b> <ul style="list-style-type: none"> <li>More acreage designated for development in the short term</li> <li>Provides greatest opportunity for highest number of affordable housing and market rate housing to help meet housing demand in the urban area</li> <li>More acreage available for development to offset infrastructure costs</li> <li>Allows for double road frontage to offset road and infrastructure costs</li> <li>More development and residential units to support transit</li> </ul>	<b>Cons</b> <ul style="list-style-type: none"> <li>Additional stormwater treatment will be needed due to greater amount of potential development and increased impervious surfaces</li> <li>Protects the least amount of mixed hardwood/pine forest from short term development</li> <li>Only allows for the required 80 foot wetland buffer</li> <li>Depending on density, may have greater traffic impacts to Purefoy Drive and Merin Road</li> </ul>
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<b>Alternative 2</b> Illustrates a moderate development option by shifting acreage away from the development land use with the transfer of acreage to additional preserve and land banking. Also allows for a 150 buffer along a portion of the existing wetlands located onsite.	Preserve		Development		Land Banking	
	23.8 ac.	22.9%	66 ac.	63.4%	14.2 ac.	13.7%
	Based on 47 acres	Low Density (4-6 units/acre)	Medium Density (6-10 units/acre)	High Density (10-20 units/acre)		
	188 - 282	282 - 470	470 - 940			

<b>Pros</b> <ul style="list-style-type: none"> <li>Proposes 150 foot wetland buffer adjacent to wildlife corridor</li> <li>Allows for additional areas of preserve</li> <li>Provides opportunity for a mid-range of affordable housing and market rate housing to meet the general housing demand</li> <li>More acreage available for development to offset infrastructure costs</li> <li>Allows for double road frontage to offset road and infrastructure costs</li> </ul>	<b>Cons</b> <ul style="list-style-type: none"> <li>Less acreage is available for development in the short term or to offset infrastructure costs</li> <li>Less opportunity for affordable housing and market rate housing to help meet housing demand in the urban area</li> </ul>
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<b>Alternative 3</b> Illustrates a low development option by shifting additional acreage away from the development land use category to the additional preserve and land banking.	Preserve		Development		Land Banking	
	34.3 ac.	33%	43.6 ac.	41.9%	26.1 ac.	25.1%
	Based on 24.6 acres	Low Density (4-6 units/acre)	Medium Density (6-10 units/acre)	High Density (10-20 units/acre)		
	98 - 147	147 - 246	246 - 492			

<b>Pros</b> <ul style="list-style-type: none"> <li>Proposes 150 foot wetland buffer adjacent to wildlife corridor</li> <li>Allows for additional areas of preserve</li> <li>Strives to protect the existing wildlife corridor and provide for landscape connectivity</li> <li>Protects the greatest amount of Mixed Hardwood/Pine Forest from short term development</li> <li>Depending on density, may have less traffic impacts to Purefoy Drive and Merin Road</li> </ul>	<b>Cons</b> <ul style="list-style-type: none"> <li>Less acreage is available for development in the short term</li> <li>Provides lowest opportunity for affordable housing and market rate housing to help meet housing demand in the urban area</li> <li>Less acreage available for development to offset infrastructure costs</li> <li>Does not allow for double road frontage to offset road and infrastructure costs</li> <li>Less development and residential units to support transit</li> </ul>
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## Affordable Housing Potential

<b>Alternative 1 (High) – Potential Number of Residential Units</b>			
<b>Based on 59.1 Acres</b>	<b>Low Density 4 - 6 units/acre</b>	<b>Medium Density 6 - 10 units/acre</b>	<b>High Density 10 - 20 units/acre</b>
		<b>236 - 354 units</b>	<b>354 - 591 units</b>
<b>Potential Number of Affordable Housing Units</b>			
<b>15%</b>	35 – 53 units	53 – 88 units	88 – 177 units
<b>20%</b>	47 – 70 units	70 – 118 units	118 – 236 units
<b>35%</b>	82 – 123 units	123 – 206 units	206 – 413 units

<b>Alternative 2 (Medium) – Potential Number of Residential Units</b>			
<b>Based on 47 Acres</b>	<b>Low Density 4 - 6 units/acre</b>	<b>Medium Density 6 - 10 units/acre</b>	<b>High Density 10 - 20 units/acre</b>
		<b>188 - 282 units</b>	<b>282 - 470 units</b>
<b>Potential Number of Affordable Housing Units</b>			
<b>15%</b>	28 – 42 units	42 – 70 units	70 – 141 units
<b>20%</b>	37 – 56 units	56 – 94 units	94 – 188 units
<b>35%</b>	65 – 98 units	98 – 164 units	164 – 329 units

<b>Alternative 3 (Low) – Potential Number of Residential Units</b>			
<b>Based on 24.6 Acres</b>	<b>Low Density 4 - 6 units/acre</b>	<b>Medium Density 6 - 10 units/acre</b>	<b>High Density 10 - 20 units/acre</b>
		<b>98 - 147 units</b>	<b>147 - 246 units</b>
<b>Potential Number of Affordable Housing Units</b>			
<b>15%</b>	14 – 22 units	22 – 36 units	36 – 73 units
<b>20%</b>	19 – 29 units	29 – 49 units	49 – 98 units
<b>35%</b>	34 – 51 units	51 – 86 units	86 – 172 units