



**Integrity,  
Accountability,  
Respect,  
& Equity.**

# **Tompkins County's Unique Natural Areas (UNA) Inventory Update**

Tompkins County Public Library  
Wednesday, November 13, 2024  
6:00 PM

**Tompkins**  
CountyNY.gov

# Purpose of Tompkins County Unique Natural Areas Inventory

To identify and describe areas in the County with outstanding environmental quality

To promote the conservation and/or preservation of UNAs for the benefit of future generations

To help people make informed choices about development in, or near, these areas.

*The EMC shall “foster unified action...propose priorities and promote coordination...in the development and management of our [County] natural resources*

# A Unique Natural Area designation....

Is advisory, not regulatory

Does not allow the public to come on private property without landowner permission

Does not provide legal protection for an area

Can be referenced in municipal planning and zoning



# Unique Natural Area Inventory historical timeline

**1973** Started with 26 Natural Areas as required by the NYS enabling legislation in 1972

**1976** Craig Tufts' CU Master's Thesis

“A Preliminary Inventory of Some Unique Natural Areas in Tompkins County, New York” identified 96 sites.

**1990** Robert Wesley hired, 181 sites included in Update.

**2000** Large binder published and given to all municipalities and libraries in Tompkins County with 192 sites. Comprehensive outreach to owners of all parcels included in UNAs. Inventory wins “Project of the year” at NYSAEMC Conference.

**2024** Last boundary revisions completed. Now includes 14.7% of all land in Tompkins County, about 43,800 acres. Currently 195 sites.

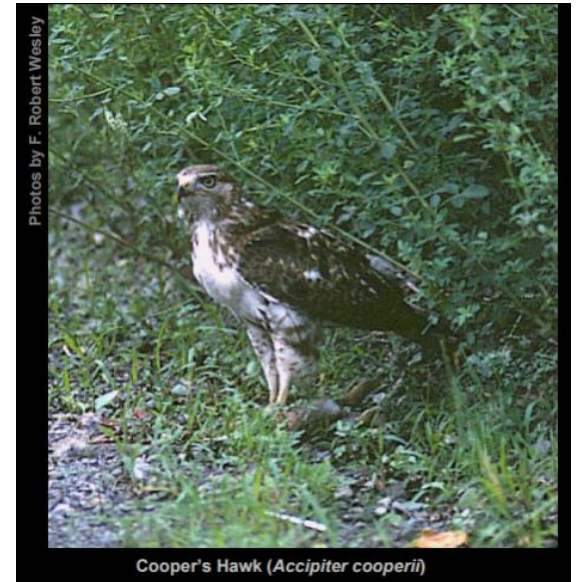


# UNAs include one or more of the following characteristics

- Designated area or preserve
- State- or County-designated wetland
- Contains diverse flora or fauna
- Rare or scarce plant or animals
- Historical botanical or zoological importance
- Geological importance
- Important teaching site (e.g. meadow with a diverse array of common plants all in one place)



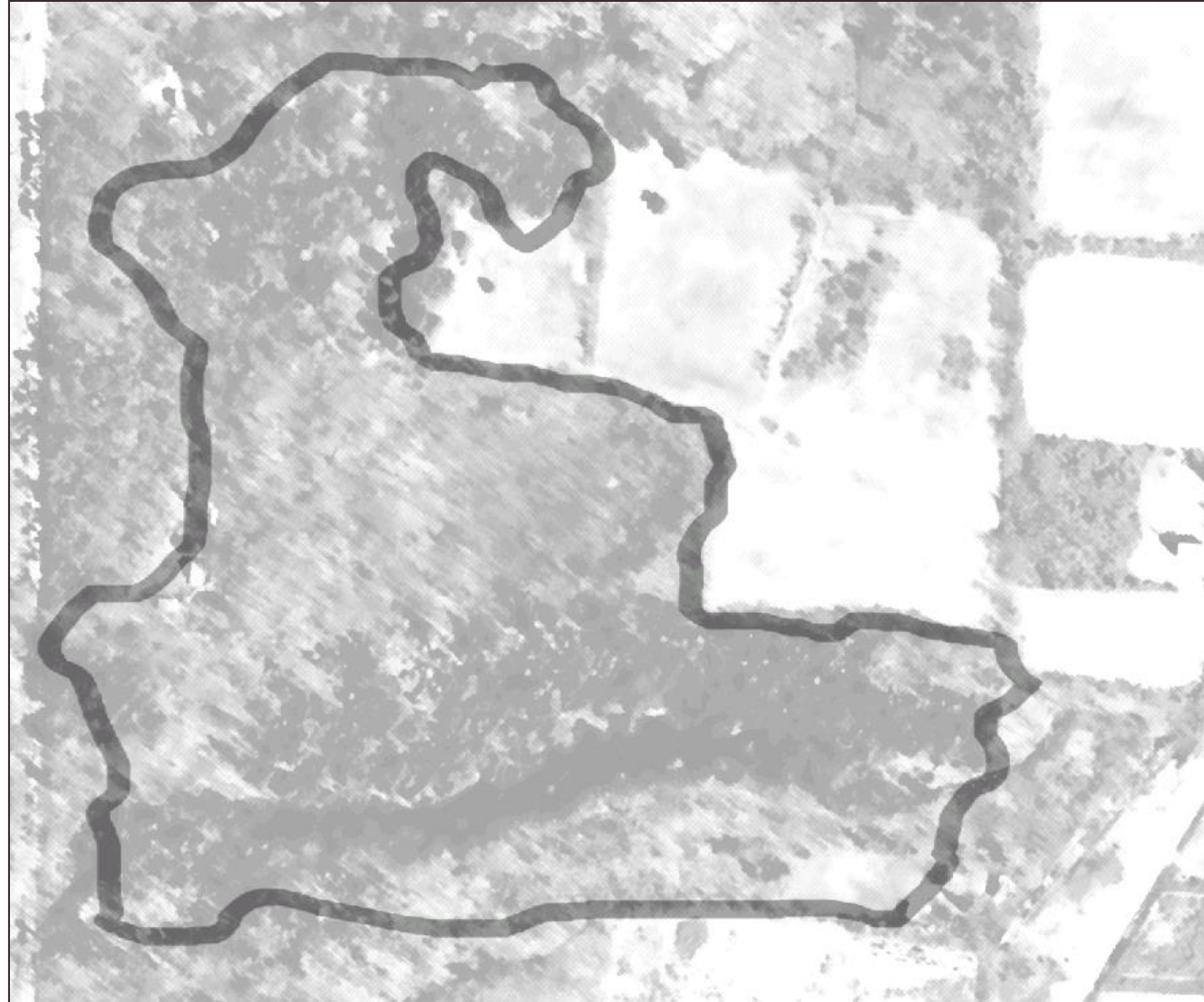
- Old growth woods
- Important birding site
- Quality of plant or animal community
- Recreational value
- Scenic vista
- Wilderness
- Archeological or paleontological site
- Cultural or historical importance
- Urban greenspace



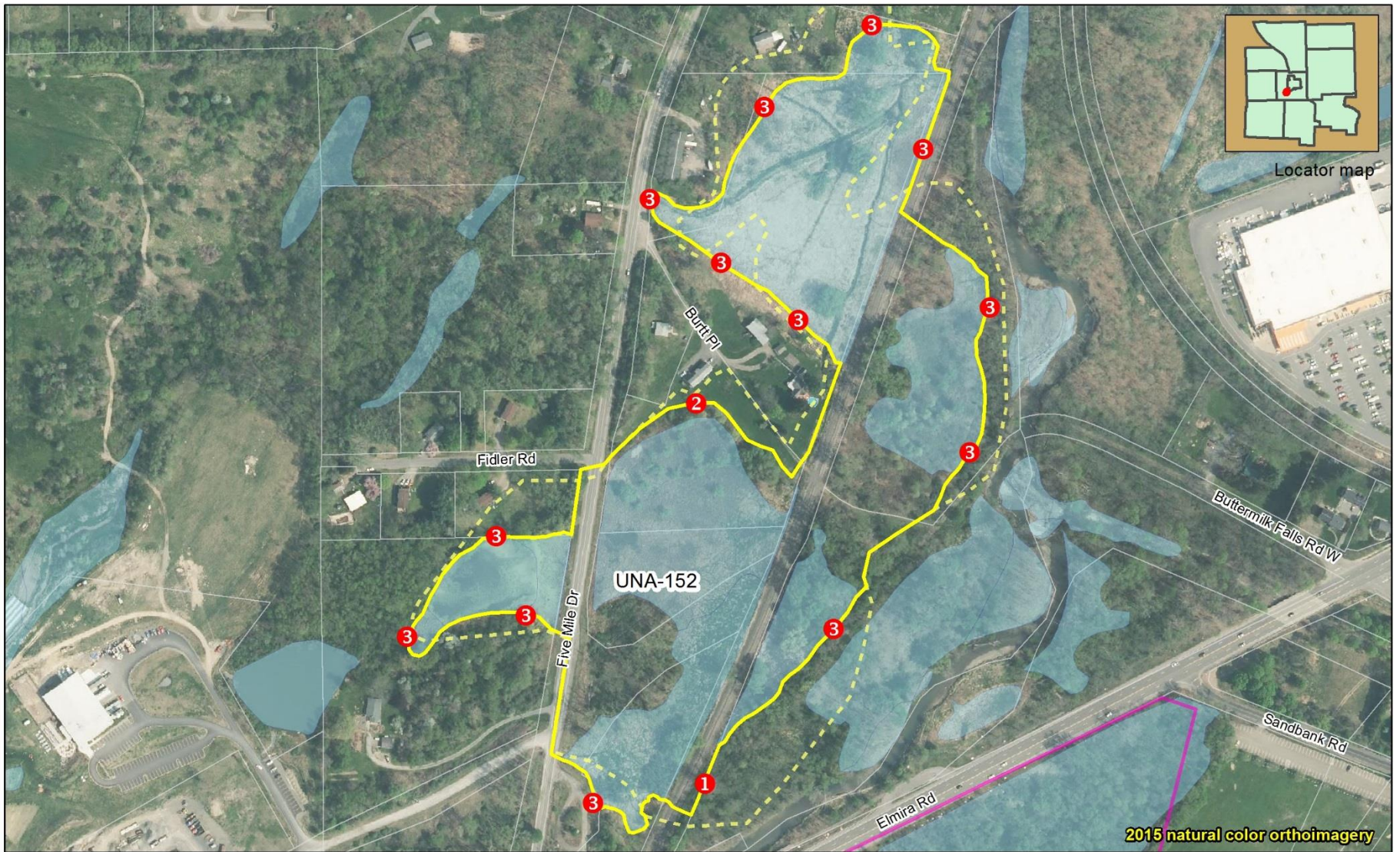


# Early UNA boundary delineation methods

- Field assessments
- Expert knowledge
- Historical records
- Second- and third-generation photocopies of low-resolution aerial imagery from 1990 and earlier
- Hand-delineated with marker and then transferred manually to GIS
- Limited GIS data












**Name** Fleming Meadow  
**Code** UNA-152  
**Original acres** 31.18  
**Revised acres** 25.81  
**Percent change** -17.24

Reasons for change

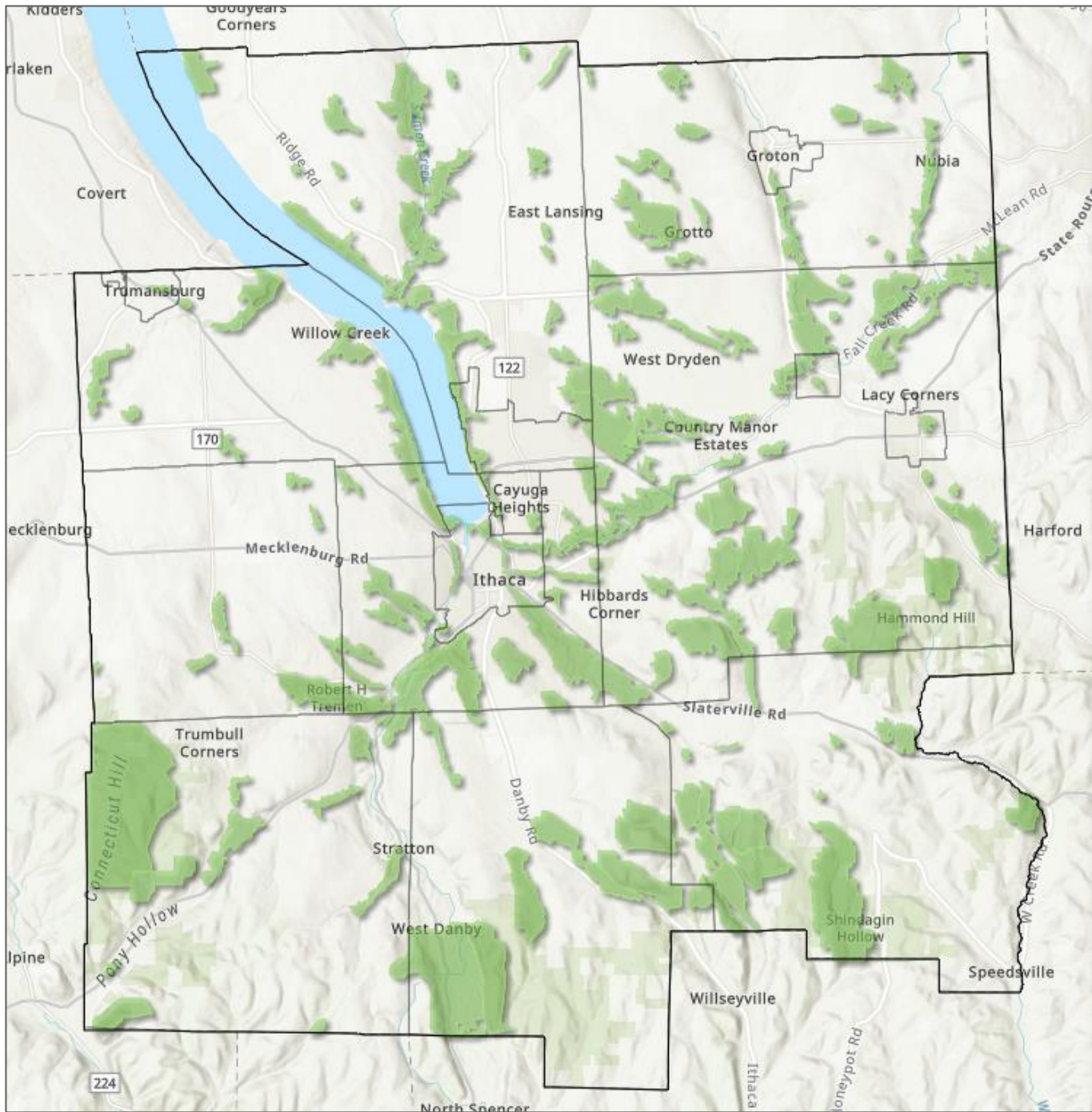
- 1** Snap to tax parcel line
- 2** Follow edge of mature vegetation
- 3** Follow edge of wetland

-  Batch 4 revisions
-  Other UNAs
-  Previous boundary
-  Cayuga Lake Watershed Network Wetlands
-  Tompkins Parcels 2017

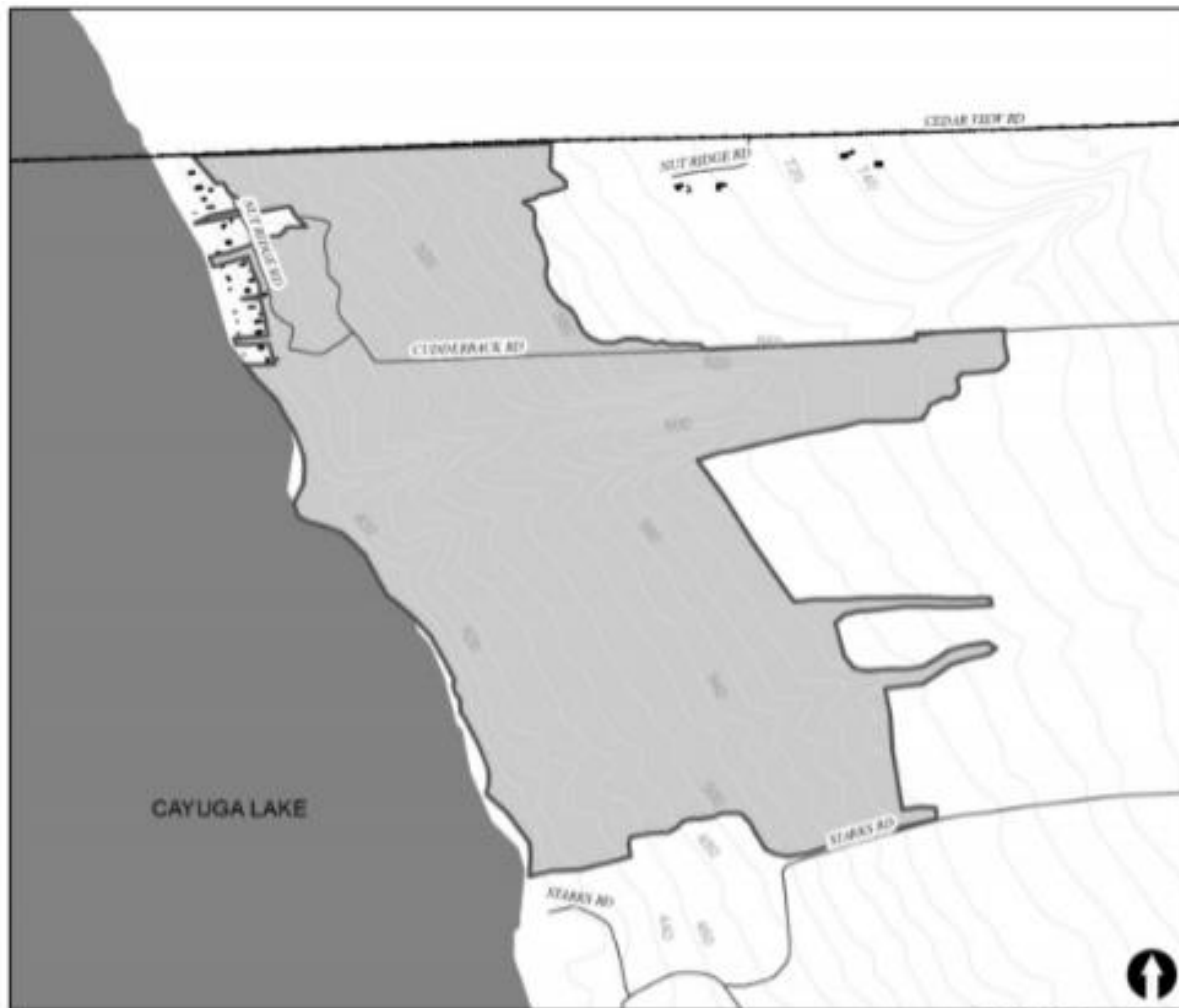




[Click here to open map](#)



2024







### UNA-195 Nut Ridge on Cayuga Lake

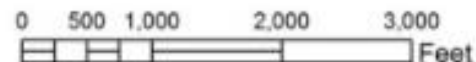
Tompkins County Environmental Management Council  
Inventory of Unique Natural Areas in Tompkins County

Map updated: December 2016

UNA boundaries were delineated by field biologists based on a review of air photographs, digital GIS base maps (building footprints, 20-foot contours, streams and wetlands), and field visits. UNA boundaries are approximate and should be used for general planning purposes only. As a practical matter, the County does not warrant the accuracy or completeness of the information portrayed. The end user of this map agrees to accept the data "as is" with full knowledge that errors and omissions may exist, and to hold harmless the County for any damages that may result from an inappropriate use of this map.

TOWN OF LANSING

-  20-foot contour
-  Building footprint
-  Municipal boundary
-  Unique Natural Area UNA-195





# Reasons for adding Nut Ridge (“Bell Station”/now “Cayuga Shores Wildlife Management Area”) to the UNA

- Quality of example of plant community
- Geologic significance
- Birding site
- Diverse flora
- Rare or scarce ecological community types
- Wetlands
- Scenic/ aesthetic value
- Recreational value
- Cultural and potential archeological site
- Important teaching site
- Local significance

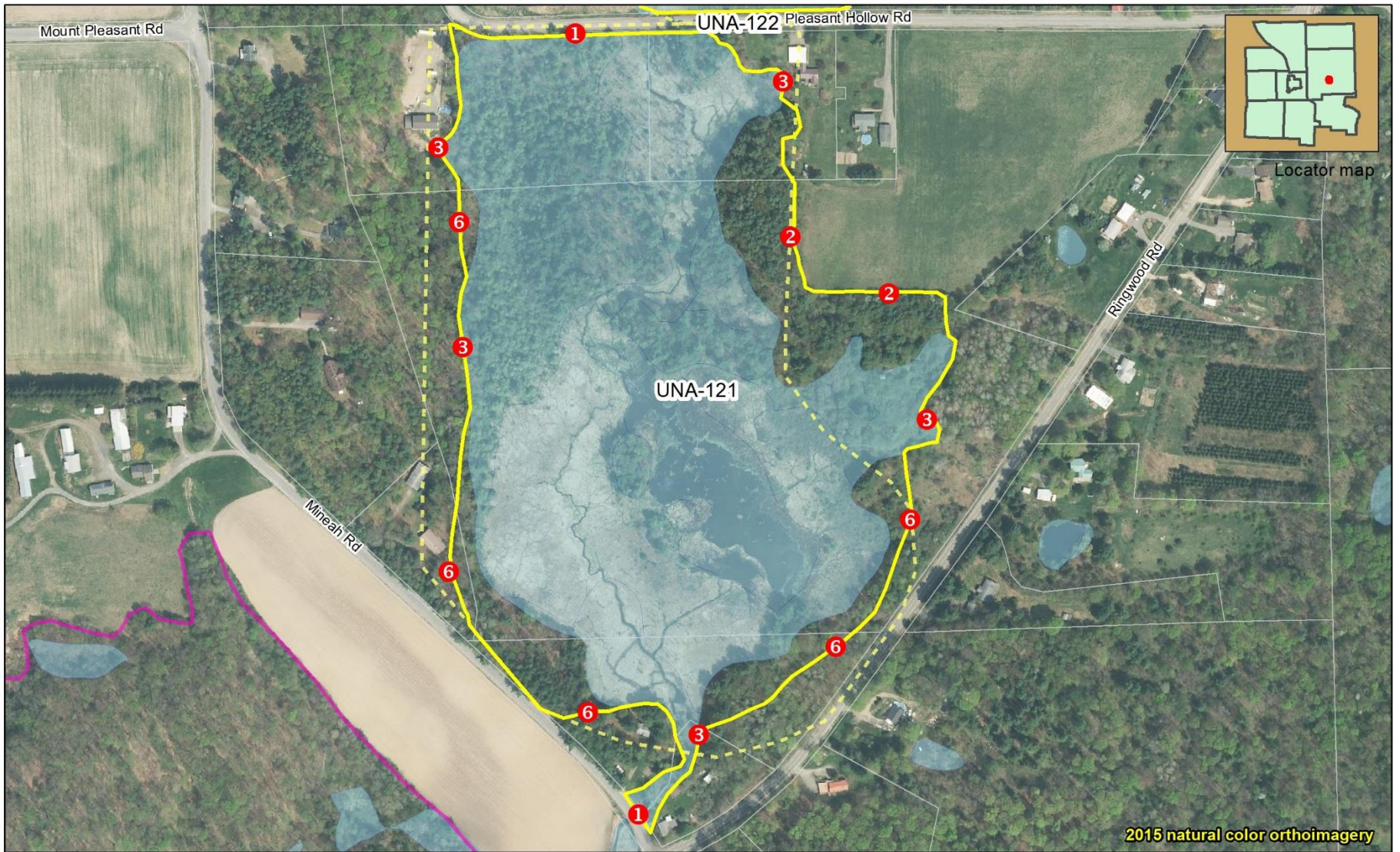


# Guidelines for boundary reviews updates

- Snap to property lines if justified
- Inclusion of National Wetland Inventory
- Lidar mapping of wetlands provided by Nick Hollingshead
- Conform to edge of vegetation
- Inclusion of newly protected lands (e.g. nature preserves)
- Changes in landcover since last field visit or aerial photo

- 1** 1: Snap to tax parcel line
- 2** 2: Follow edge of mature vegetation
- 3** 3: Follow edge of wetland
- 4** 4: Cut out farm field
- 5** 5: Cut out yards, lawns, driveways or other development
- 6** 6: Follow contour line
- 7** 7: Incorporate documented rare plants
- 8** 8: Follow edge of existing/re-mapped UNA





2015 natural color orthoimagery

<b>Name</b>	<b>Pleasant Hollow Swamp, South</b>
<b>Code</b>	<b>UNA-121</b>
<b>Original acres</b>	<b>40.33</b>
<b>Revised acres</b>	<b>38.55</b>
<b>Percent change</b>	<b>-4.42</b>

- Reasons for change
- ① Snap to tax parcel line
  - ② Follow edge of mature vegetation
  - ③ Follow edge of wetland
  - ⑥ Follow contour line

- Batch 4 revisions
- Other UNAs
- Previous boundary
- Tompkins County 2012 Wetland Data
- Tompkins Parcels 2017

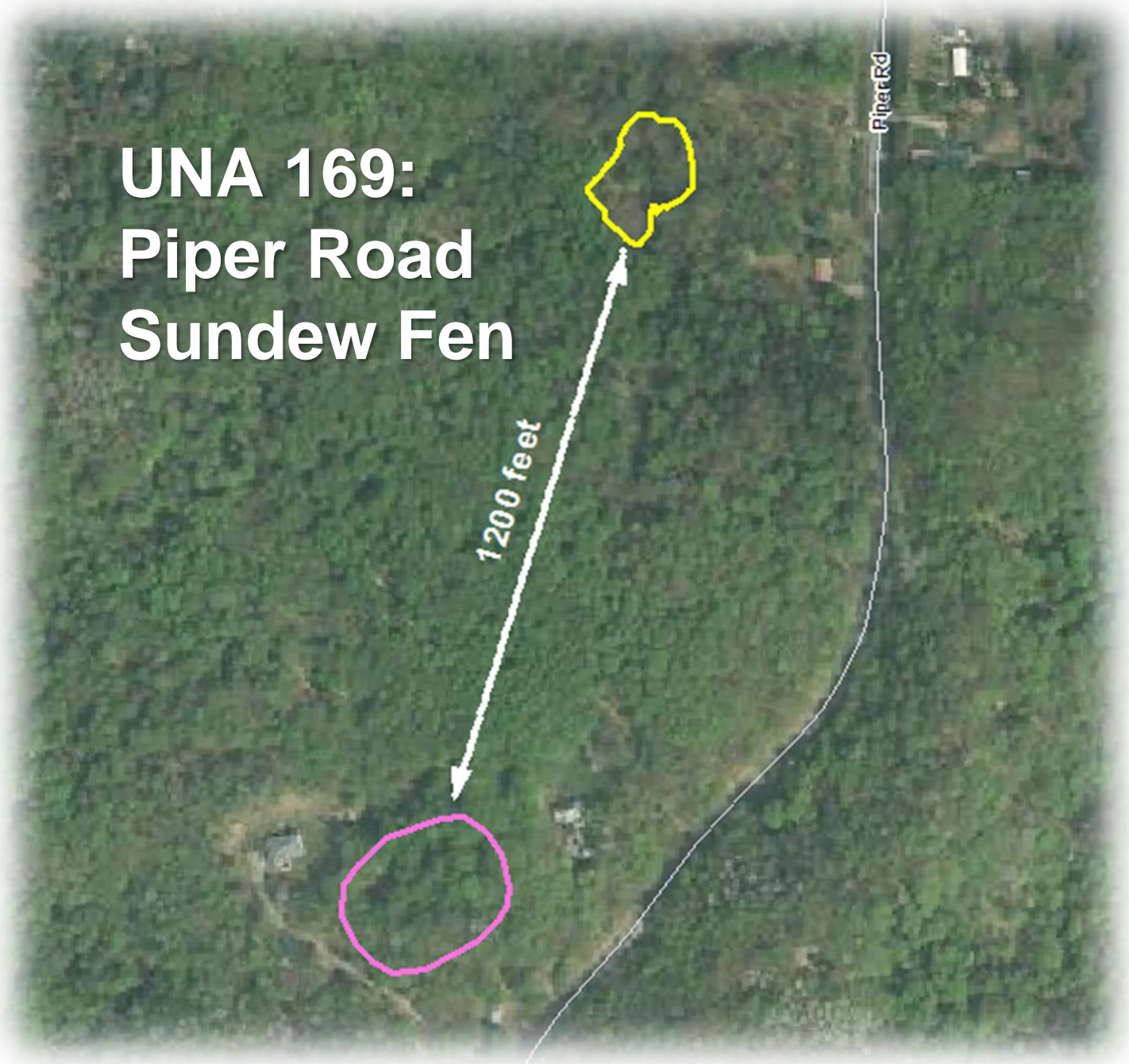




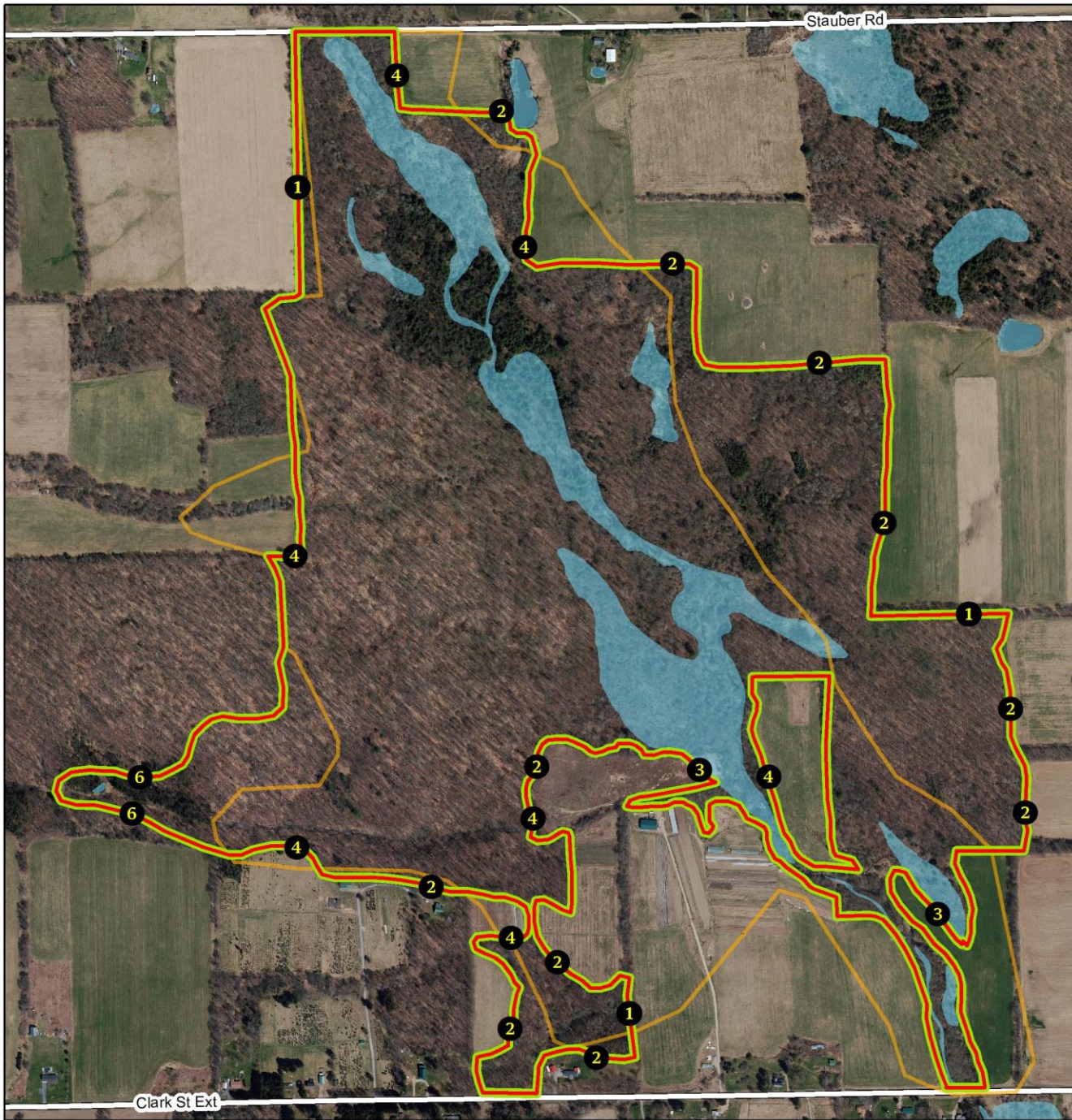
**UNA 169:  
Piper Road  
Sundew Fen**

1200 feet

Piper Rd









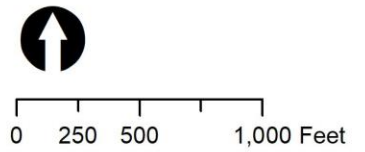


# Webster Creek Swamp

UNA-008

Batch 3, reasons for update

- 1** 1: Snap to tax parcel line
- 2** 2: Follow edge of mature vegetation
- 3** 3: Follow edge of wetland
- 4** 4: Cut out farm field
- 6** 6: Follow contour line
-  Batch 3, 2023 revisions
-  Batch 3, 2016 revisions
-  2001 UNAs
-  Tompkiins County wetlands










# The Hog Hole

UNA-098



Batch 3, reasons for update

-  2: Follow edge of mature vegetation
-  Batch 3, 2023 revisions
-  Batch 3, 2016 revisions
-  2001 UNAs
-  Tompkins County wetlands



0 200 400 Feet










2012 natural color orthoimagery

**Name**  
**Code**  
**Original acres**  
**Revised acres**  
**Percent change**  
**Reasons for changes**

**Townley Swamp, West**  
**UNA-50**  
**261.94**  
**196.49**  
**-24.99**  
**adjust to road, tax parcel, mature forest**

-  Batch 2 revisions
-  Batch 1 revisions
-  UNA 2000 boundaries
-  TompkinsParcels2013
-  National Wetlands Inventory





**SITE NAME:** Townley Swamp, West Branch**SITE CODE:** UNA-50**DATA LAST UPDATED:** 2/6/2015**OLD SITE CODE:** DR-21**LOCATION****Municipality:** Town of Dryden**Latitude:** 42 32 17 N**USGS Quad:** West Groton**Longitude:** 76 26 28 W**Tax Parcel Numbers Included in this Site:**

*Tax parcel data is accurate as of June 1, 1999. For up-to-date information on tax parcel descriptions and ownership, contact the Tompkins County Assessment Department. When a UNA covered less than 0.025 ac. of a parcel, the parcel was excluded from this list.*

DR 21.-1-13

DR 21.-1-14.12

DR 21.-1-14.2

DR 21.-1-18

DR 21.-1-19.2

DR 21.-1-19.4

DR 21.-1-24.13

DR 21.-1-24.4

DR 21.-1-24.5

DR 21.-1-24.6

DR 21.-1-24.7

DR 21.-1-33

DR 21.-1-34.1

DR 21.-1-35

DR 21.-1-36

DR 21.-1-37

**SITE AND VEGETATION DESCRIPTION**

Townley Swamp is one of the largest and most pristine swamps in Tompkins County. In the rich, mesic forest adjacent to the swamp; sugar maple, basswood, white ash, red maple, and bitternut hickory are found abundantly. Musclewood, spicebush, arrowwood, and nannyberry occur in the understorey. Herbs are abundant and diverse and species diversity is generally high. The swamp is mostly hemlock, red maple, yellow birch forest. Black ash is present in some areas. The ground is hummocky with water pools between the hummocks. Bryophytes are abundant and diverse. There are some areas of speckled alder thicket.

**REASONS FOR SELECTION**

- Rare or scarce plants
- Historic botanical/zoological site
- Rare or scarce community types
- State-designated wetland
- Diverse fauna
- Old-growth forest

**SPECIAL LAND-USE INFORMATION****Special Land-Use Designations and Features**

- A mature forest stand with trees over 150 years old is found on this site.
- Some or all of this site lies in an agricultural district, certified pursuant to NYS Agriculture and Markets Law.
- The Tompkins County Greenway Coalition has identified a biological corridor which includes this site.

**Water Resources**

- Wetlands identified on the National Wetlands Inventory are found on this site.
- A stream runs through this site.
- All or some of a Class 4 NYS Freshwater Wetland lies on this site.
- A NYS protected stream runs through this site.

**CONSERVATION OF THE SITE****Adjacent Land-Use:**

Agriculture and abandoned agricultural land.

**Evidence of Disturbance and Threats to Site:**

There has been logging on some parts of the upland areas. American elm may once have been a canopy dominant in some open areas. Flooding and changes in drainage are considered threats to the site.

**Special Conservation/Management Needs:**

The site does not have an adequate protective buffer.

**PHYSICAL CHARACTERISTICS OF THE SITE****Size (acres):** 196.49 **Elevation (ft.):** 1198 to 1265 **Aspect:** flat**Topographic Features**

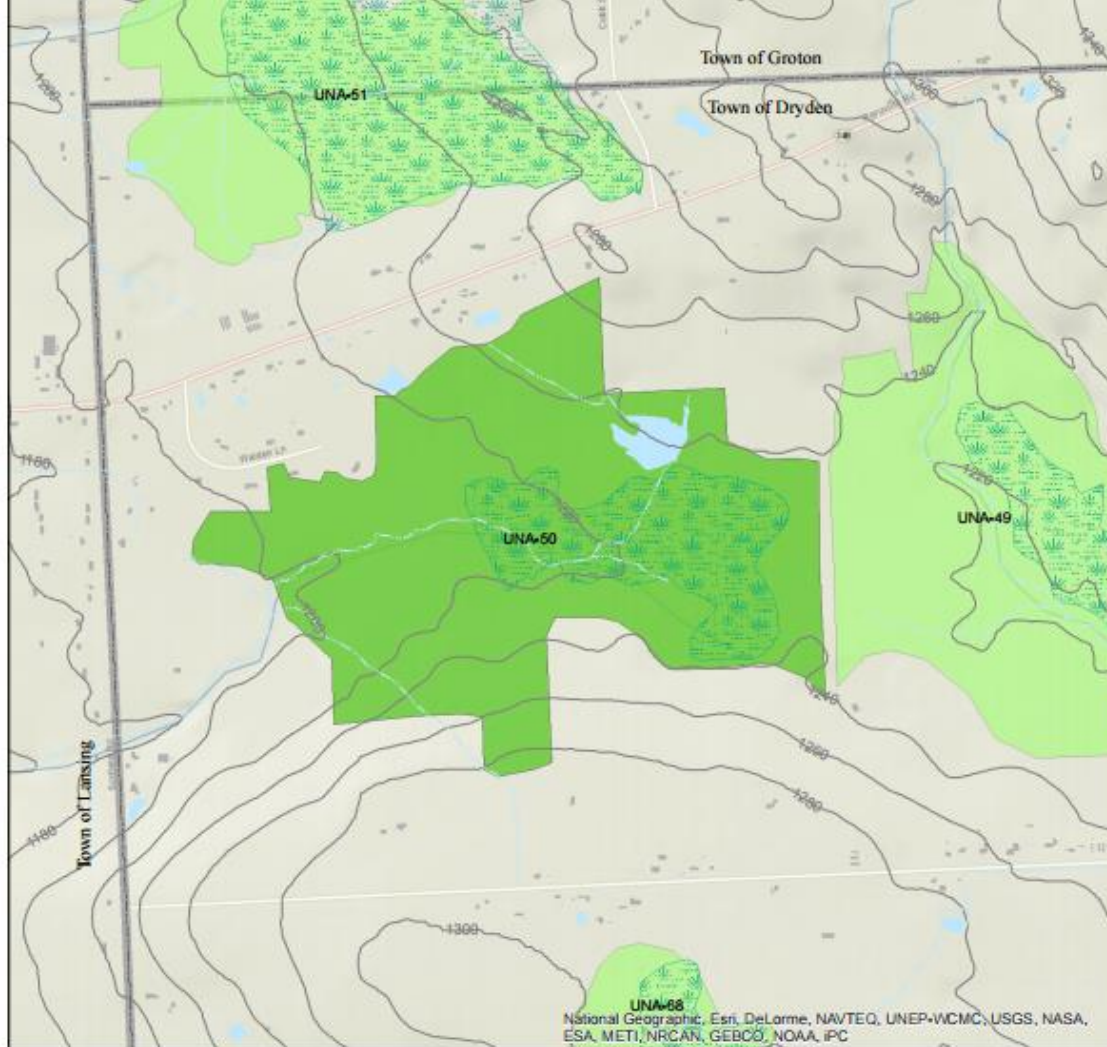
Wetland swamp on upland.

**Slope %**

- Flat  
 3 to 15  
 15 to 25

**Topographic Position**

- Crest  
 Upper Slope  
 Mid Slope



## UNA-50 Townley Swamp, West

Tompkins County Environmental Management Council  
Inventory of Unique Natural Areas in Tompkins County.

Last Updated 2014

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- Unique Natural Area 50
- Other Unique Natural Areas
- NYSDEC Freshwater Wetlands
- Municipal Boundaries
- 20ft contours





## Field visits





# Our process

Each year a few site visits have been done as part of the UNA update process.

Those sites chosen for visits typically are:

- Ones that have not been visited before, or
- Newly designated UNAs, or
- Sites that are threatened by development or seen some other recent change of status.

Visits are timed to be most likely to be able to find rare species or rare plant communities.

Locally rare or scarce species and ecological community types are noted, as are changes since previous visits (if there were).

# QUESTIONS?

For additional information after this meeting, please contact the Tompkins County Planning and Sustainability Department  
607-274-5560

Or email Planner Darby Kiley [dkiley@tompkins-co.org](mailto:dkiley@tompkins-co.org)