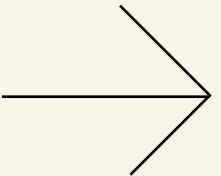




Presented by Cory Dame
Joint Comprehensive Plan 2027

Town & Village of Liberty Natural Resources Inventory



Inventory of Existing Conditions

Natural Resources

- Land
- Soils
- Peaks
- Wetlands
- Wildlife
- Considerations



Land

The Town and Village of Liberty encompass a vast area, much of which remains “undeveloped” or dedicated to open space.

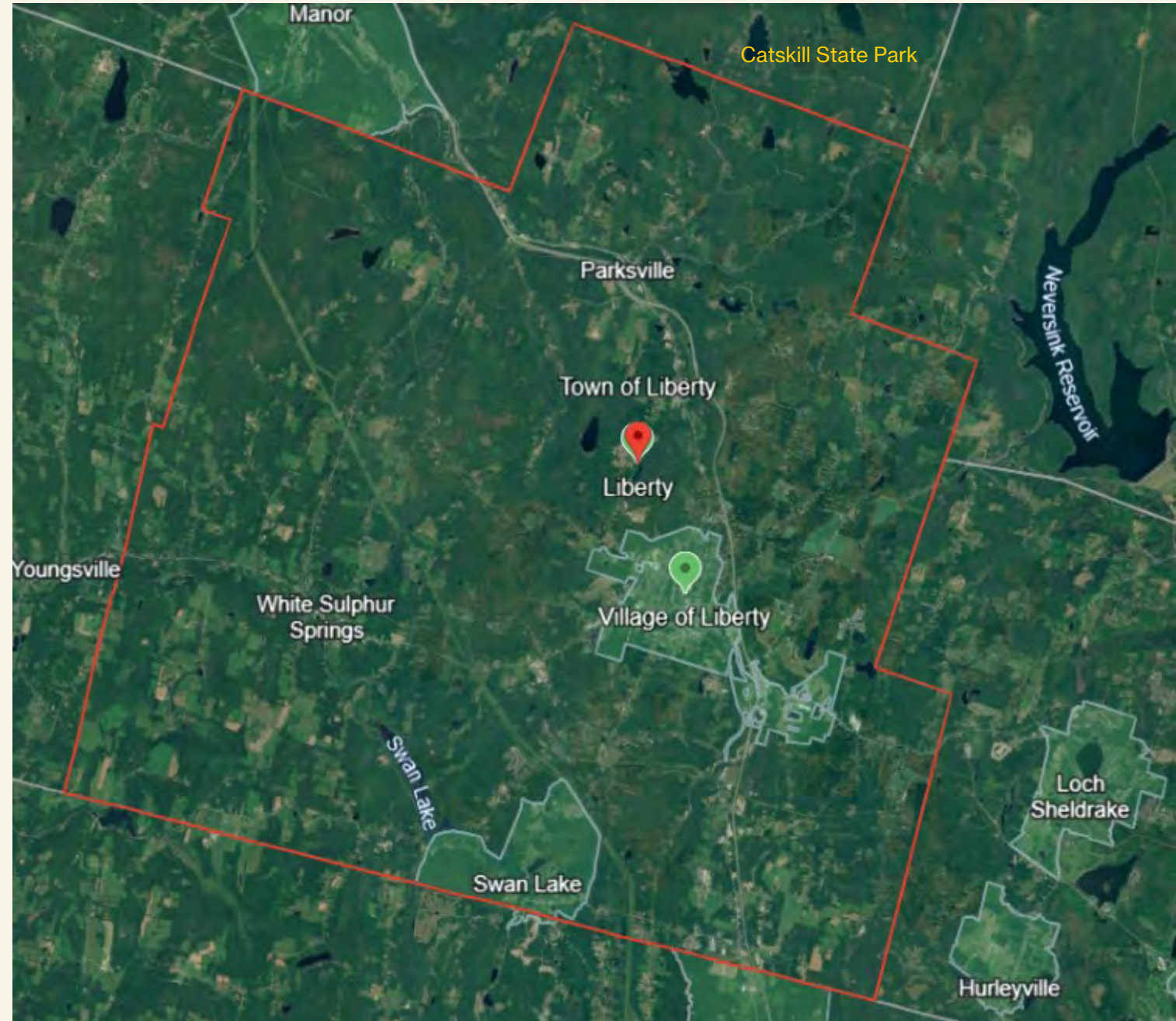
Total Land Area:

Approximately 85 sq. mi. / Roughly 54,400 acres

Within this:

The Village of Liberty: Occupies a much smaller footprint, focused on higher-density residential and commercial use.

The Town (Outside the Village): Consists largely of low-density residential areas, agricultural land, and vast tracts of forest.



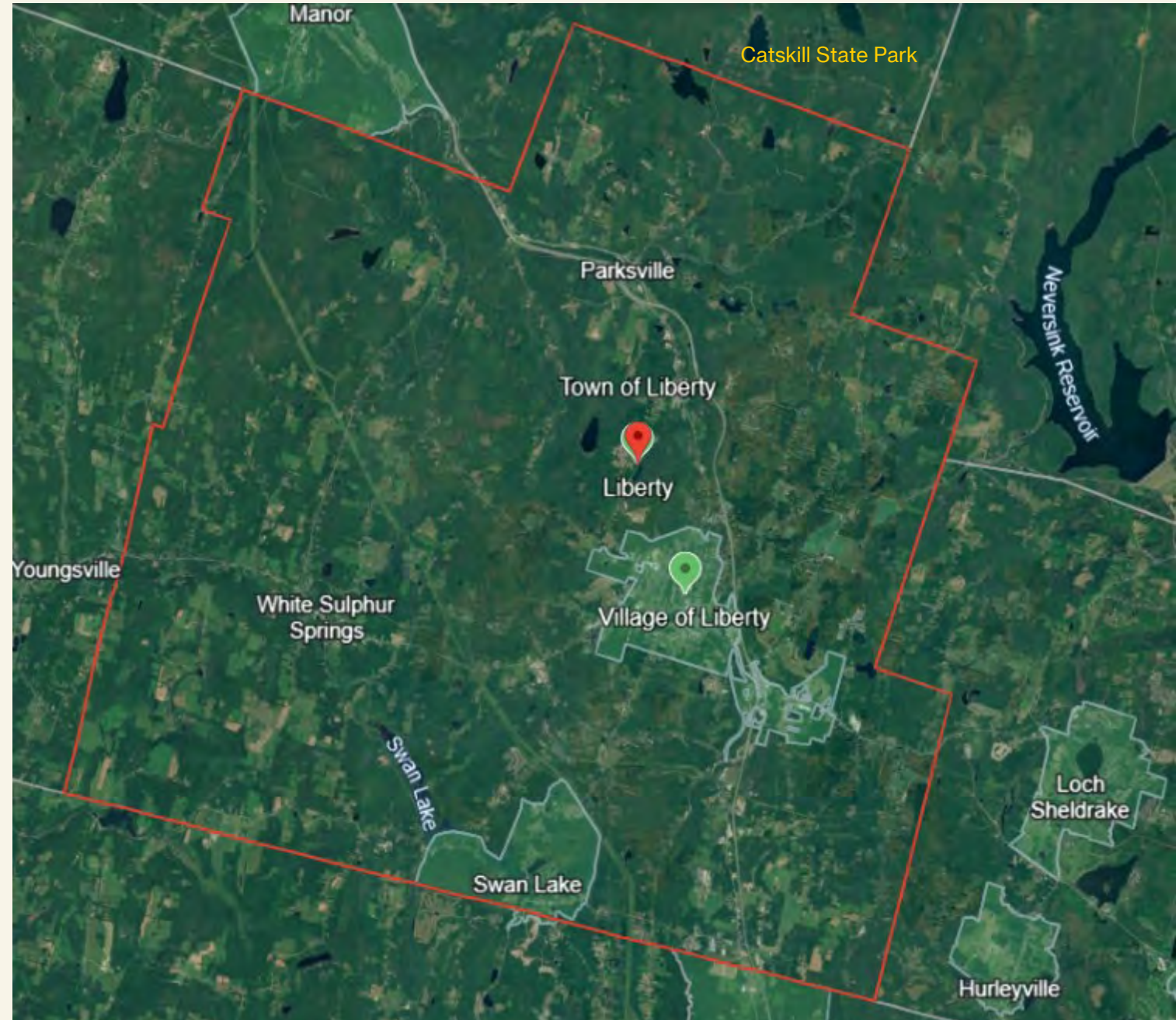
Land

A significant portion of Liberty's 54,000+ acres is considered "undeveloped" in terms of commercial or dense residential structures. This includes:

Vacant and Forested Land: Thousands of acres are categorized under Rural Development (RD) and Low-Density Residential (R-1) zones. Some large individual tracts exceed 400+ acres, such as those enrolled in the 480a Forestry Program. Forests are primarily dominated by northern hardwood forests and mixed oak-northern hardwood transition forests, featuring significant stands of sycamore, maple, beech, birch, oak, declining stances of hemlock, ash, and walnut.

Protected Open Space: Large sections of the northern town border the Catskill State Park, ensuring those acres "Forever Wild".

Market Availability: At any given time, there are typically 30 to 50 active listings for undeveloped land in Liberty, ranging from small 0.5-acre lots to expansive parcels over 100 acres.



Soils

The Town and Village of Liberty, NY, are situated within a region primarily characterized by acidic glacial till soils derived from sandstone, shale, and siltstone. Because of the area’s rugged topography and "fragipan" (a dense subsoil layer), the soil types here dictate everything from building foundations to the success of local dairy farms.

Primary Soil Series

The landscape is dominated by the Lackawanna-Wellsboro-Oquaga association.

These soils are often reddish in color due to the underlying Catskill bedrock.

Soil Series	Characteristics	Best Uses
Lackawanna	Well-drained , deep silt loam with a dense "fragipan" layer 18–36 inches down.	Agriculture: Excellent for hay, corn silage, and pasture. Forestry: Supports high-quality sugar maple and beech.
Wellsboro	Moderately well-drained . Similar to Lackawanna but holds more moisture in the upper layers.	Pasture: Highly productive for grazing. Development: Requires careful planning for septic systems due to the dense subsoil.
Oquaga	Shallow and well-drained ; often found on steeper hillsides and ridges.	Recreation: Ideal for hiking trails and parks (like Walnut Mountain). Forestry: Best left as protected woodland to prevent erosion.
Tunkhannock & Arnot	Well to Excessively well-drained Often found near stream valleys or very rocky outcrops.	Infrastructure: Areas with higher gravel content (Tunkhannock) are often utilized for road ballast and aggregate.



USDA Web Soil Survey
<https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

Peaks

Prominent Mountains and Hills in Liberty, NY:

Walnut Mountain is the second-highest mountain in Sullivan County. It is the site of Walnut Mountain Park, which offers extensive hiking and biking trails.

Walnut Mountain: 2,080 ft

Revonah Hill: 2,142 ft.

Grants Hill: 2,106 ft.

Chuck Hill: 2,011 ft.

East Hill: 1,058 ft.

The Village itself sits at an average elevation of 1,506 feet, making it one of the higher-elevation municipalities in the region.

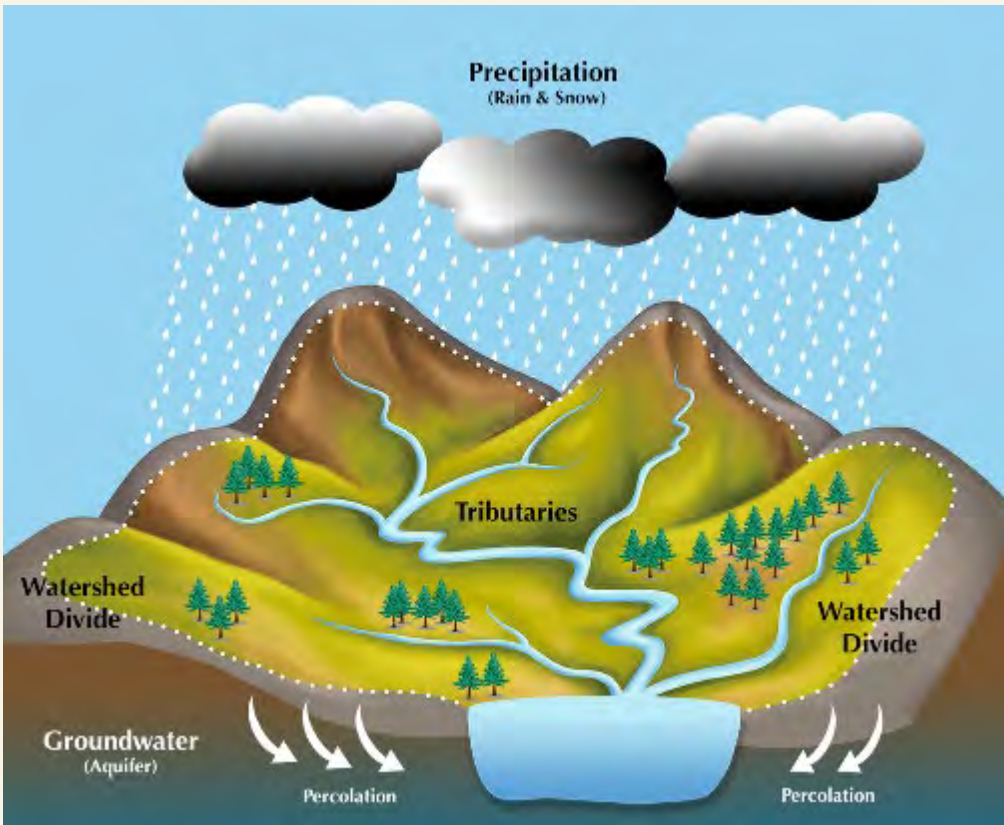


View from the Top of Walnut Mountain looking toward Swan Lake

Wetlands

WATERSHED

A **watershed** is an area of land that catches rain and snowmelt and drains it all into a common body of water, such as a stream, river, lake, or ocean



Wetlands

HYDROLOGY

The local hydrology is divided between the Delaware River Basin and the New York City Water Supply watershed.

Rivers and Waterways:

Mongaup River: The primary drainage for the town. Key branches include:

Middle Mongaup River: Flows through the central portion of Liberty.

East Mongaup River: Runs near the eastern boundaries.

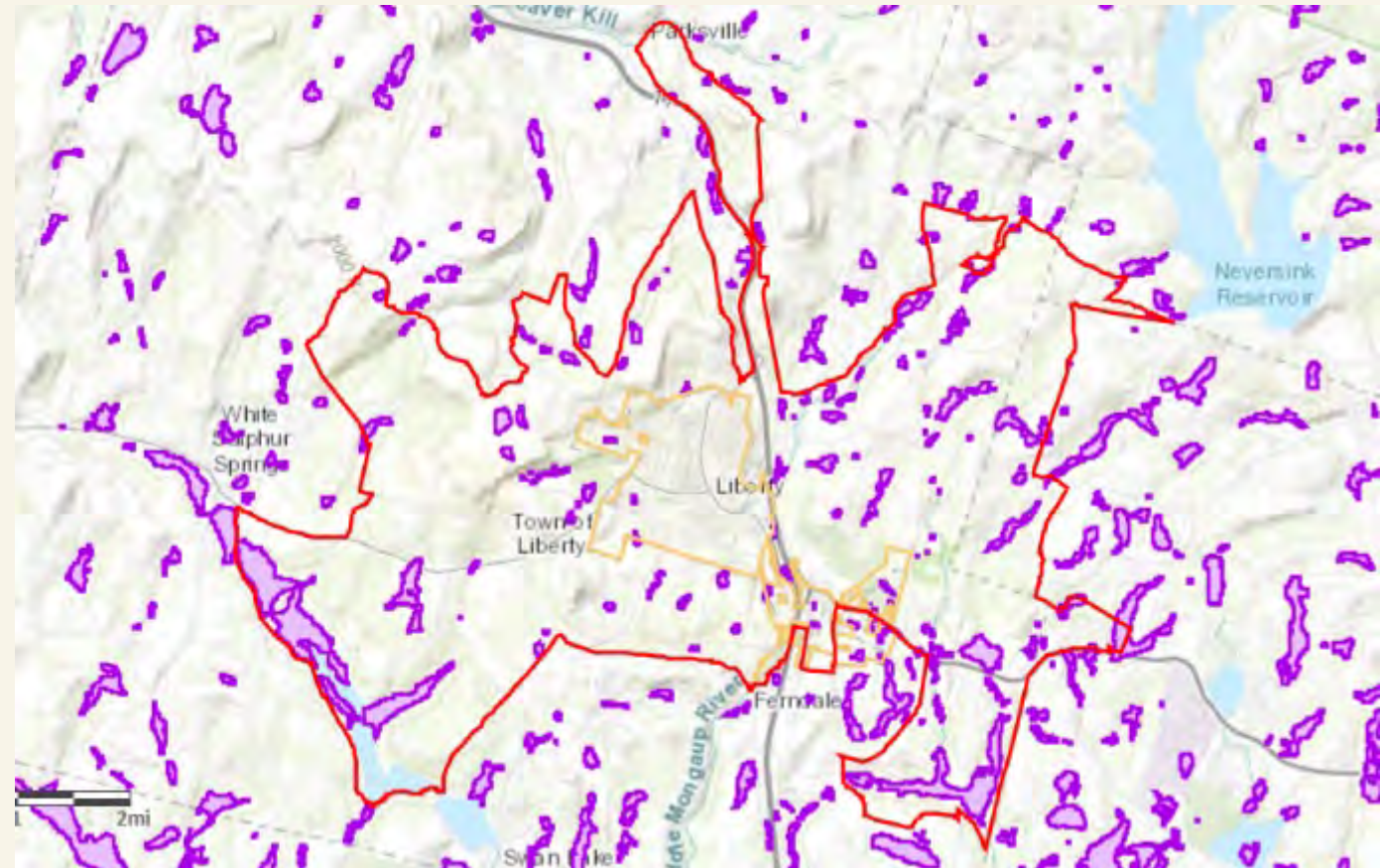
Little Beaverkill: Drains the smaller northern portion of the town, eventually flowing toward the East Branch of the Delaware River.

Significant Streams and Tributaries:

West Branch Mongaup River: Located near the town's western outskirts.

Lily Pond: A critical water source for the Village, though technically a body of standing water, it is the headwater for local filtration systems.

Neversink Reservoir Watershed: A very small portion of the town's eastern edge drains toward this major reservoir.



NYSDEC Wetland Map

NYS DEC Environmental Resource Mapper

<https://gisservices.dec.ny.gov/gis/erm/>

Wetlands

HYDROLOGY

Lakes and Ponds

Delaware River Watershed

- **Lily Pond:** A critical water source for the Village, though technically a body of standing water, it is the headwater for local filtration systems.
- **Cranberry Pond**
- **Matawa & Lenape Lakes**
- **Revonah Lake**
- **Melbern Lake**
- **Lake Marie**
- **Swan Lake:** 93.7 acres, Class B
- **Hanoffee Lake**
- **Sunset Lake**

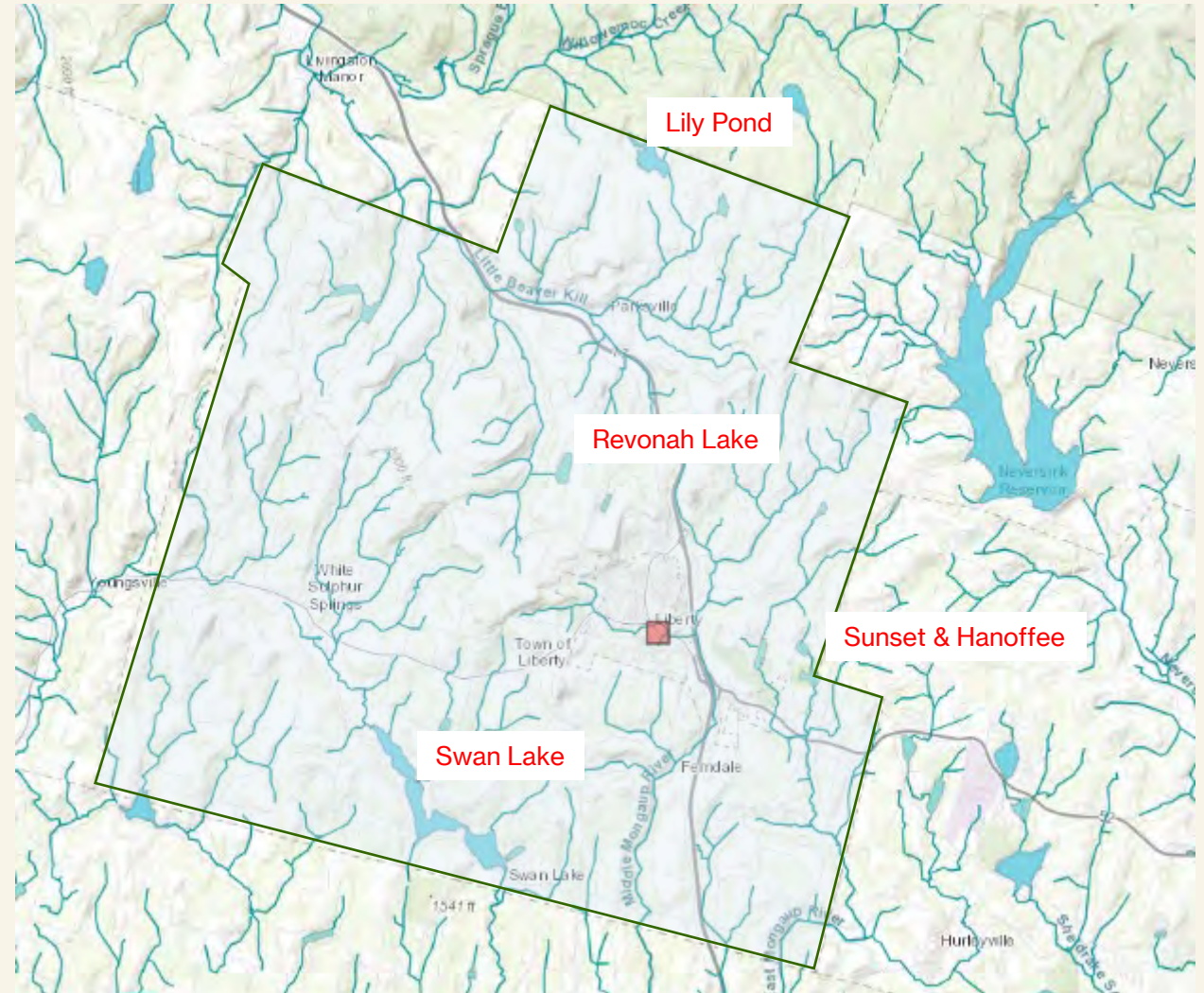
A very small portion of the town's eastern edge drains towards the Neversink Reservoir a major contributor to NYC water.

Citizens Statewide Lake Assessment Program (CSLAP)

Upper Little York Lake and Somerset Lake

more information at:

<https://dec.ny.gov/environmental-protection/water/water-quality/sampling-activities>



NYSDEC DEC info Locator

<https://gisservices.dec.ny.gov/>

Wildlife

Because Liberty sits adjacent to the "Forever Wild" lands of the Catskill Forest Preserve, it serves as a hunting and foraging ground for diverse animal species.

Large and Medium Mammals

Black Bear: Extremely common in the wooded outskirts of the town. They rely on the hardwood forests for "mast" (acorns and beech nuts) in the fall.

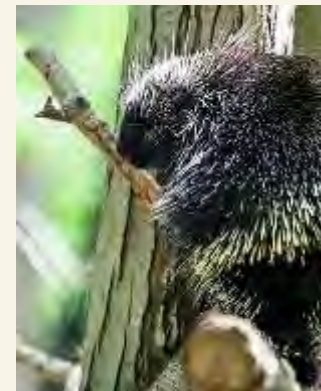
White-Tailed Deer: The most visible large mammal, thriving in the "edge" habitats where forests meet the open fields of the Village.

Bobcats and Coyotes: These elusive predators utilize the dense hemlock stands for cover while hunting smaller prey.

Fisher: A large member of the weasel family, the fisher has made a strong comeback in Sullivan County's deep forests.

Small Mammals and Marsupials:

- **Eastern Cottontail Rabbit**
- **Porcupine**
- **Cave bats** (hibernate and overwinter) and **Tree Bats**, including the brown bat which migrate south in the winter
- **Opossum**
- **Red and Gray Squirrels**
- **Chipmunks**
- **Beaver**
- **Raccoon**
- **Fox**



Wildlife

Birds and Raptors

Sullivan County is one of the "birdiest" counties in New York, and Liberty's forests support:

Bald Eagles: While they nest near the larger reservoirs (like the Neversink or Mongaup), they are frequently seen soaring over Liberty's waterways.

Wild Turkeys: Large flocks are common in the mixed hardwood-oak sections of the town.

Forest Interior Birds: Species like the Red-shouldered Hawk, Pileated Woodpecker, and various wood-warblers depend on the large, unbroken tracts of forest in the northern part of the town.



Wildlife

Amphibians, Snakes and Aquatic Life

The "seeps" and wetlands within the forest support:

Salamanders: Including the Spotted Salamander and the Red-spotted Newt (often seen as bright orange "efts" on hiking trails after rain).

Native Brook Trout: Found in the high-gradient, cold-water streams protected by hemlock canopies, prime locations include the Middle Mongaup and Little Beaverkill.

Snakes including Watersnake, Copperheads, Garter Snakes, Milksnakes, Racers, Timber Rattlesnake and Redbelly Snake.

Frogs and Toads: including Bullfrog, Spring peeper, Cope's gray tree frog, Leopard Frog, and American Toad

Turtles: including Box Turtle, Painted Turtle Wood Turtle

Beneficial Insects and Pollinators are not to be overlooked: including various bees, hornets, wasps, dragonflies, caddis and mayflies, ladybugs, butterflies and moths.



"We do not inherit the Earth
from our ancestors; we
borrow it from our children."

- Indigenous Tribal Proverb

Considerations

*The Tribal Proverb reflects the deep respect for nature and future generations found in many Indigenous cultures. For example, the Iroquois (Haudenosaunee) follow the **Seven Generation Law**, which requires leaders to think about how their decisions will impact seven generations into the future.*



General

- Utilize available GIS data to map critical natural resources and explore revisions to zoning laws designed to protect those resources and reduce environmental impacts of new development.
- Identify locations where sensitive, rare, threatened or endangered species may be present, and consider adopting regulations to restrict development/disturbance in those areas.
- Identify key viewsheds worthy of protection and consider adopting ridgeline development guidelines and/or regulations designed to preserve views to and from these locations.
- Review and update the Town's Cluster Development regulations (§147-21) to ensure that natural resources are adequately protected and environmental impacts are minimized.
- Update definitions in municipal codes to explicitly define utility-scale BESS, data centers, and fulfillment hubs as distinct conditional uses restricted to heavy or specialized industrial districts to protect water resources, air quality, viewsheds.
- Impose strict maximum lot coverage limits, minimum green space, and mandatory light shielding policies to prevent night sky pollution.
- Explore zoning amendments that would require applicants to deduct environmentally constrained lands (wetlands, floodplains, steep slopes, etc.) before calculating the maximum allowable density permitted.

Wetlands and Water Resources

- Educate and encourage local lake associations to participate in the Citizens Statewide Lake Assessment Program (CSLAP) and support volunteer monitoring of aquatic invasive species and harmful algal blooms.
- Explore creating a “Lake Protection Overlay District” to minimize environmental impacts from development and protect unique and sensitive lake shore areas within the Town.
- Encourage protection of wetlands and other environmentally sensitive areas within the town identified in the NYS Open Space Plan. This document – to be updated in 2026 -- identifies New York State's open space priorities and conservation values, and guides investment of State land protection funds.
- Explore adopting local wetlands regulations establishing a minimum 100-foot buffer around all existing wetlands (regardless of jurisdiction) to reduce potential impacts on wetlands and water courses.

Climate Change and Renewables

- Consider taking necessary steps to advance Climate Smart Community and Clean Energy Community designation for both the Town and Village.
- Implement floodplain management measures and floodplain protections activities as part of FEMA's Community Rating System.
- Continue to identify mitigation strategies for vulnerable areas identified in the Sullivan County Hazard Mitigation Plan (2026) including providing backup power to critical public facilities, hardening infrastructure associated with flood-prone roadways, and assessing the condition of the Swan Lake dam.
- Map areas within the Town that are most suitable for solar farms due to southern exposures to sun, location near distribution lines, and proximity of end users, and review/update regulations to ensure adequate protection of natural resources.

Considerations

Share your thoughts

Email: corydame.design@gmail.com and I will pass them along

Use the easel pad near the kitchen to leave your thoughts.