

2022 Ledyard Open Spaces Acquisition Plan

Background

Ledyard's undeveloped land is critical in shaping the town's character as a rural suburb. The presence of significant wetlands, ledges, and lack of infrastructure limits the density of development in significant parts of the town, which contributes to a more rural characteristic that residents express a desire to protect and preserve.

For the Plan of Conservation and Development, open space is defined as land that is privately or publicly owned but is permanently protected and held in the public interest. This includes managed open space. "Perceived open space" can be transformed into "preserved open space" through the creation of a cohesive vision that helps the community grow "by choice, not by chance." Guided by this unified open space system, the community can act to create and maintain its overall vision for the future rather than simply reacting to individual development proposals.

Following the adoption of the 2003 Plan of Conservation and Development, the town of Ledyard established a limited-duration Open Space Committee (2004), which established a Plan for the Preservation of Open Space to provide the Town of Ledyard with a Ledyard Plan of Conservation & Development (2/27/2020) comprehensive strategy to "identify, protect, and preserve open space, and manage town-owned open properties to achieve the maximum benefit to town residents and wildlife.

These efforts realized several goals, such as establishing the "Open Space Acquisition Fund" and adopting an ordinance to designate a portion of the Municipal real estate conveyance taxes to be directed to that fund. These open space preservation efforts should continue and be enhanced to ensure the goals of protecting vulnerable habitats and ensuring connectivity of our green spaces.

The above-outlined principles, documents, and programs shall be the primary guidance used to realize our objectives.

Targeted Goals:

1. Water Resource Protection

The Commission should collaborate with the various Town commissions such as Planning and Zoning, Land Use, and Inland Wetlands and Waterways to develop policies and regulations to protect our water resources. Ledyard's Source Water Protection Plan of 2008 should become the leading source for developing policies.

Although the guiding principle of the Commission's decisions and policies should be the protection of all water resources within the town, particular interest should be given to the following water resources.

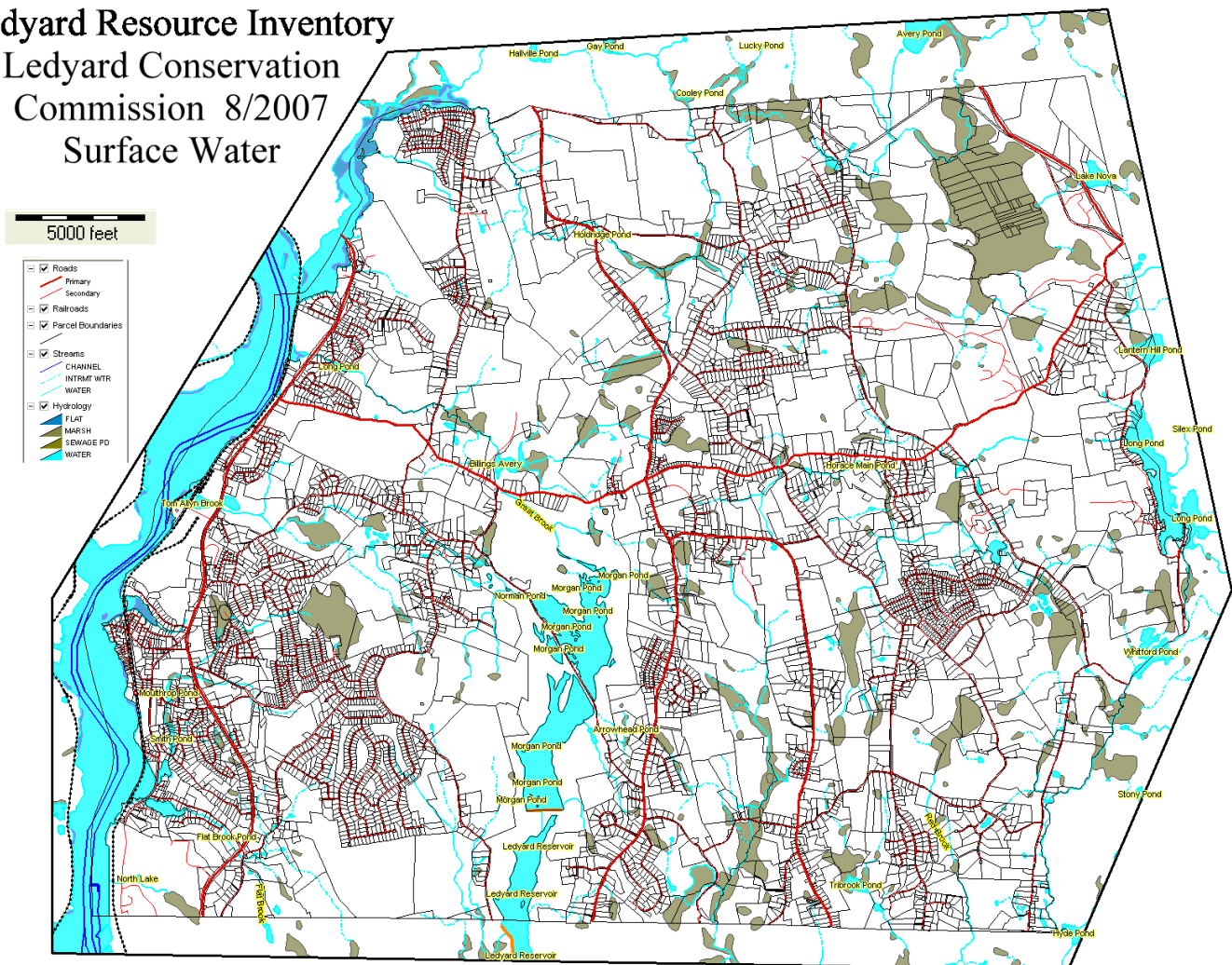
- A) Shewville Brook: With the recent completion of the fishway at the dam on Hallville Pond, it now enables anadromous fish to migrate to Shewville Brook. Plans to construct a fishway around another dam on the brook will allow the fish to migrate from Poquetanuck Cove to Avery Pond in Preston. White-Hall Preserve has approximately a 500' frontage on the brook. The town's Natural Diversity Database designates the area around White-Hall as unique or fragile. The re-establishment of this fishery will enhance the diversity of this area.
- B) Whitford Brook: Currently, considerable progress and success have been made to re-establish the passage of anadromous fish from the sea to Long Pond and Lantern Hill Pond. With the removal of two dams and the plans to construct a fishway at the southern end of Long Pond, Whitford Brook will be critical in re-establishing this important fishery.
- C) The Loftus Well Field Aquifer is located in the southeast area of town, astride Shewville Road and bordering Whitford Brook. To the north of Whitford Brook is the Lantern Hill Aquifer area. A large portion of Whitford Brook and the Whitford Brook Watershed is located within Ledyard and extends on into Stonington and Groton. This watershed starts north of Lantern Hill and encompasses the area surrounding Lantern Hill and Whitford Brook as it flows from Long Pond toward the Long Island Sound

through the Mystic River. The entire length of this area is listed on the town's Natural Diversity Database as Federal or State listed species and critical habitats.

D) Drinking Water: In the 2002 Milone and MacBroom report, the Drinking Water Quality Management Plan was prepared for Groton Utilities to identify future drinking water sources. Several watersheds located in Ledyard were proposed. These watersheds, Joe Clark Brook (Tri Town Trail), Red Brook and Haley's Brook (Founders Preserve), and Shewville Brook, also contain current open spaces parcels and trails.

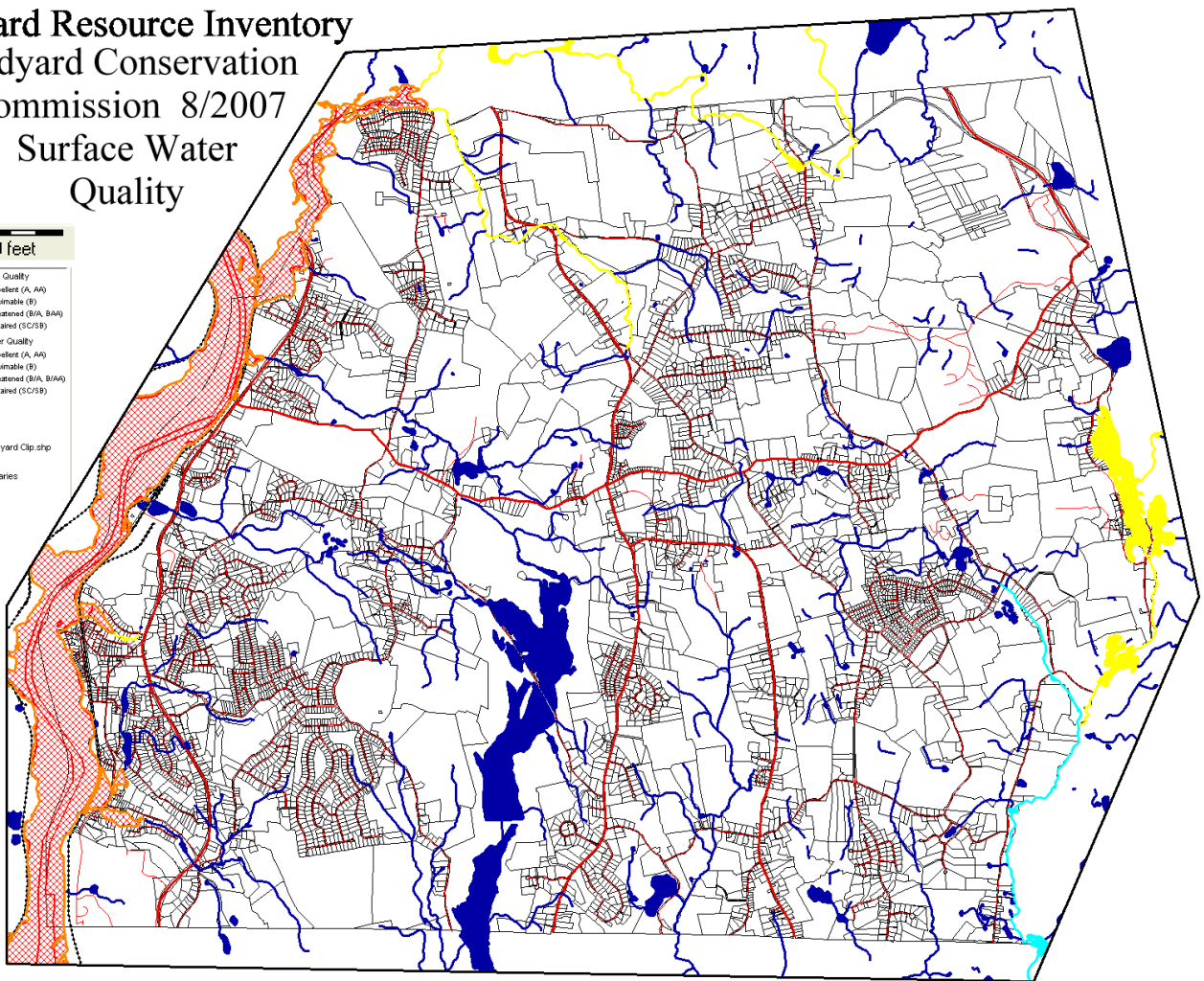
E) The Town and Groton Utilities partnership to protect water sources would benefit both parties. Discussions and collaboration on goals, projects, future acquisition plans, and such should be a part of the relationship.

Ledyard Resource Inventory
 Ledyard Conservation
 Commission 8/2007
 Surface Water



Ledyard Resource Inventory
Ledyard Conservation
Commission 8/2007
Surface Water
Quality

- 5000 feet
- Stream Water Quality
 - Good to Excellent (A, AA)
 - Fishable, Swimmable (B)
 - May be Threatened (B/A, B/A)
 - Coastal Impaired (C/3B)
 - Surface Water Quality
 - Good to Excellent (A, AA)
 - Fishable, Swimmable (B)
 - May be Threatened (B/A, B/A)
 - Coastal Impaired (C/3B)
 - Roads
 - Primary
 - Secondary
 - Railroads Ledyard Clip.shp
 - Parcel Boundaries



2. Tri Town Trail

The Tri Town Trail will be Southeastern Connecticut's first regional recreation trail. When complete, it will be a 14-mile recreational trail through a natural, scenic valley that connects Bluff Point State Park in Groton through Ledyard to Preston. The trail will connect 4,000 acres of state and local open space, have only three major road crossings, and impact fewer than ten private properties. It will start at sea level – climb 400' – and nearly return to sea level. Completing the Tri Town Trail will require partnerships or easements with private, corporate, open space, and utility landowners. The Tri Town Trail Association is progressing toward acquiring permission to develop the trail. When complete, the trail will stretch from Bluff Point northward through the central areas of Groton and Ledyard to Preston Community Park. This trail will connect multiple municipalities, economic centers, residential areas, and areas of significant natural resources to form a regional recreational facility as well as a truly functioning alternative transportation corridor.

The largest landowner in both the Town of Groton & Ledyard is the City of Groton. The City of Groton owns several large and contiguous parcels of land that bisect both Towns on a north-south axis. These parcels of land contain reservoirs and water treatment operations. Since the reservoir's establishment, the City of Groton has controlled all activities and access to its properties following the guidelines established by the CT Department of Public Health (DPH).

In 2001, the Town of Groton developed a plan to build a multi-use trail alongside Route 117 connecting the Poquonnock Plains & Poquonnock Bridge Neighborhoods near Bluff Point to the Copp Property in the Center Groton area (RT 1 to RT 184). In cooperation with Groton Utilities, a route was agreed upon utilizing the Route 117 right-of-Way and City of Groton property. The plan was endorsed by 18 significant stakeholders and received a state grant for construction. However, approval for the matching funds needed by the Town failed in the RTM by two votes – and the project was never built.

In 2003, the Town of Groton undertook a Town-wide Bicycle, Trails & Pedestrian Master Plan. That plan, completed in 2004 by Brian Kent Associates (now Kent + Frost Landscape Architecture – author of this study), identified a north-south

connection from Bluff Point to Ledyard as a significant need. Other trails identified as needs around Bluff Point are currently under design and construction and could connect to this proposed trail. In early 2008, the impetus for this current project came to be when David Holdridge, a Ledyard Town Councilor, approached the Utility Commission (governing body appointed by the Mayor of the City of Groton to oversee Groton Utilities) to ask for permission to access reservoir properties for trail access. Groton Utilities responded that it does not allow public access to its properties but encourages approved escorted group activities.

In February 2008, Dave Holdridge and Representative Tom Reynolds held an informational meeting to gauge interest in developing a trail from Bluff Point to Preston. The meeting was well attended, with significant representation from the Towns, including Mayors, First Selectmen, Town Managers, Town staff, and Groton Utilities and City representatives.

In June of 2008, the committee was officially authorized when the Groton, Ledyard, and Preston town governments passed resolutions empowering and authorizing the Bluff Point to Preston Trail Committee. A steering committee was formed by all Towns designating three representatives. Additionally, Al Dion was chosen to represent Groton Utilities (Herb Cummings replaced Mr. Dion upon his retirement). It is important to note that the chief elected official from all governmental bodies was represented on the steering committee. The SCCG agreed to help administer the project and act as the fiduciary.

On Oct. 2, 2021, the Grand Opening of the Northern Section of the trail was held. This section is a 4.1-mile trail that includes significant biodiversity and historical sites.

An east-west connection from the Tri Town Trail to the Poquetanuck Cove Preserve would be desirable. In 1953, Desire Parker purchased this 234-acre piece of land. In 1988, she followed through on her lifelong plan to permanently protect her land along Poquetanuck Cove by donating it to The Nature Conservancy along the watercourse, a 1.5-mile loop trail that passes through various habitats. Walking along the trail, visitors first see the secondary growth of oak-beech forests that was once farmland. In the area are a number of large "wolf" trees, which are relics from the agricultural era when trees along the edges of fields could spread their branches. As the trail continues, it enters a cool, moist hemlock ravine containing a stream flowing across moss-covered rocks. The trail emerges from the shadows to stunning views of the cove and Duck Island. It then crosses drought-influenced pitch pine areas before returning to mixed hardwood forests of oaks and beech.

3. Great Oak Greenway

In 2018, the Town of Ledyard, in partnership with Avalonia Land Conservancy, was awarded the recognition of the Great Oak Greenway, a State of Connecticut Greenway. The Great Oak Greenway consists of two adjacent town-owned properties and the connection to 250 acres of Avalonia land. An Open Space Subdivision application transferred approximately 25 acres of open space to the Town-owned property at 800 Long Cove Road. This property sits adjacent to the Nathan Lester House and Great Oak Park, which has nearly 2.5 miles of existing trails. The property also is the site of the historic 18th-century Nathan Lester Homestead and Tool Museum. The Greenway also includes the Avalonia Pine Swamp Wildlife Corridor, which extends from the north of the Nathan Lester property, encompassing multiple trail systems, extensive swamps, and upland woods habitat protection.

The Great Oak Greenway will enhance existing recreational opportunities while augmenting Ledyard's significant educational/historic asset. The Great Oak Greenway will guide planning decisions to preserve significant natural resources and wildlife habitats while providing new recreational opportunities:

- A) Natural resource protection: The Greenway contains numerous high-value habitats which support known populations of New England Cottontail, a candidate for Federal listing as endangered. It is also a corridor for many endangered, threatened, and special concern birds. The parcels contain numerous vernal pools, bogs, marshes, shrubland, wetlands, and riparian areas. Greenway designation would enhance ongoing conservation and wildlife protection efforts, including an existing local effort to provide and protect habitat for the New England Cottontail.
- B) Water quality preservation: The Greenway protects the Groton reservoir and several watershed areas, including Thompson Brook, Allyn Brook, and one of the area's major aquifers.
- C) Recreational opportunities: Greenway will serve as the initial greenway in Ledyard through spectacular and varied terrain, from highly accessible trails

to single tracks. The potential exists to expand the existing trail systems and provide alternate access to Tri-Town Trails, an ongoing priority in Ledyard.

D) Educational opportunities: Boosts visibility and access to the historically significant Nathan Lester House and Tool Museum and offers CT wildlife and habitat education opportunities.

The endorsement of the Great Oak Greenway creates the first greenway in Ledyard. The Great Oak Greenway promotes the natural, recreational and historical resources of the Great Oak Park and the Pine Swamp Wildlife Corridor through the establishment of the Great Oak Greenway.

With the Great Oak Greenway, Ledyard can prioritize connections over fragmentation, provide linked open space and trails for close-to-home recreation opportunities, reduce essential habitat loss, protect vital watersheds and, importantly, provide guidance for future targeted land conservation. Indeed, Ledyard has the opportunity to expand this Greenway through the conservation of undeveloped land on either side of this proposed greenway. These currently unpreserved areas contain indispensable conservation land comprised of native shrubs, grassland, and a large tract of currently unprotected Coastal Forest.

The encompassed ecoregion provides critical habitats that offer food, protection, nesting sites, and resting areas for a variety of native bird species, some of which are state-listed species of special concern or endangered (brown thrasher, eastern meadowlark, sharp-shinned hawk, barn owl, black-billed cuckoo). There is also a thriving population of mammals, including coyotes, red foxes, bats, and deer. In addition, the freshwater wetlands, brooks, and vernal pools are home to a large variety of amphibian species, including blue and yellow spotted salamanders, marbled and northern redback salamanders, northern leopard and spadefoot frogs, and turtles. The Thompson Brook originates within the specified greenway and supports a healthy population of wild Brook Trout, the only native species of trout in CT and whose population has plummeted due to dramatic habitat loss.

This greenway space is within the Ledyard Coast Focus Area (Figure 3) and would expand and support existing local efforts to provide and protect habitat for the New England Cottontail (Figure 4). Poquetanuck Cove is home to Bald Eagle and osprey and valuable brackish marshes at the northern end of the proposed expanded Greenway. The cove is also home to one of the most expansive wetlands on the Thames River south of Norwich.

The Great Oak Greenway and potential expansion areas represent a noteworthy combination of natural resource and wildlife protection coupled with recreation and educational opportunities. By connecting existing open space and trail segments within Ledyard and other municipalities, the Town can create a significant regional recreation corridor that simultaneously protects high-value conservation land and habitat while providing educational opportunities for areas of historical and ecological significance.

The greenway has the potential to expand north from the Pine Swamp Wildlife Corridor to the Avery Preserve and the Poquetanuck Cove Preserve. Expansion to the south would pass through the Mystic Valley Hunt Club, connect with Groton's proposed West Green Belt, connect to the southern end of the Tri Town Trail, and provide for alternate routes.

4. Colonel Ledyard Park– Avery Farm Nature Preserve Corridor

The Colonel Ledyard Park has multiple athletic fields and a flat, well-marked loop trail through the woods with a short side path to the remains of a historic hand-dug, stone-lined well, and an old stone foundation.

Abutting the park to the south is the private 188 ac. Ledyard Sportsman Club. Although this parcel is not open to the public, it constitutes a large, unfragmented conservation parcel.

The Avery Farm Nature Preserve is a historic 305-acre farm that spans the border of Ledyard and Groton in a scenic rural setting. It is contiguous to the 91-acre Candlewood Ridge property, Groton and Ledyard town-owned open spaces, and the Town of Groton conservation easement on a 7-acre former cranberry bog. Over 430 acres of habitat area are available for wildlife and watershed protection.

Acquired in December of 2015, the Avery Farm Preserve project was funded by member donations, community clubs, local organizations, businesses, local and national foundations, the Town of Ledyard, and grants from the CT DEEP Open Space and Watershed Land Acquisition Program, and the North American Wetlands Conservation Act Program.

In 2013 the Avery/Weber family approached GOSA to find a way to protect their land in perpetuity. Without this forward-thinking, this large tract of land could

have become vulnerable to fragmentation and significant habitat loss. The family donated the 152 acres located in Groton. The 18th-century farmhouse and surrounding 1.5 acres in Ledyard are held as private property. The State of CT holds a conservation easement on the 305-acre property. GOSA manages the fields, which are closed to the public, through renewable lease agreements for farming.

Avery Farm is part of a critical large block of diverse wildlife habitats highlighted on the State of CT Natural Diversity Database maps: grasslands, hedgerows, early succession forest, oak-hemlock-hickory upland forest, Atlantic white cedar swamps, a habitat-managed power utility corridor, forested peatlands, kettle type bogs, poor fens, multiple seeps, several Tier 1 vernal pools, Ed Lamb Brook, Haley Brook, and at the southern edge a 38-acre marsh. Included in this topography is a north-south ridge that extends to Candlewood Ridge.

- A) Avery Farm is characteristically rugged to the west with ledges, steep cliffs, rocky outcrops, large boulder fields, and glacial erratics. The watershed feeds west towards the Ledyard/Groton reservoir system through seeps and overland flows.
- B) The Avery Farm watershed flows to the east into Haley Brook, Mystic River, and the Long Island Sound. Wooded swamps and seeps provide stormwater storage, filtration, groundwater recharge, and flood control for vulnerable areas downstream. Colonial stone slab bridge crosses Haley Brook.
- C) This corridor connects Groton's planned Central Green Belt and Ledyard's 2006 proposed greenway.

5. Burton - Founders Preserve Corridor

The 64 ac. Burton Preserve is found behind the Ledyard High School and has a 0.5-mile trail that leads to the Morgan-Billings Cemetery. In the future, an improved trail linking this trail with the trail in the adjacent Pike-Marshall Preserve is planned. The preserve has extensive wetlands and is the source of Lee Brook.

Pike-Marshall Preserve, owned by the Nature Conservancy, is a 247 ac. preserve with 1.5 miles of trails.

A narrow ravine bounded by shear rock walls up to 30 feet tall is visible from the trailhead. This ravine forms the end of a north-south fault line, a fracture between two blocks of rock. From the north, the trail is an old spur trail leading to a spring from which water was once bottled and sold to turn-of-the-century farmers.

The 96.5-acre property, known as Founders Preserve, had been the town's first conservation subdivision and was approved in 2007; more than half of the property was to be left as open space. The developer filed an appeal the next month, saying conditions made by the Planning Commission, which included reducing the proposed 39 lots to 35 and then to 32 and requiring an archaeological study, reduced the property's value. The land was never developed, and the town foreclosed on it. The property includes a 20-acre lake that has become a popular nesting site for herons and stonework believed to be of indigenous origin. It was also a former settlement of Rogerene Quakers.

Under the transfer agreement, Avalonia will protect the land in perpetuity and allow for passive recreation, such as hiking, on the property. Conditions allowing for bow hunting by lottery per town lottery.

The Cranwood Homes Association, a 22 ac. open spaces parcel, abuts Founders Preserve to the north. Abutting Founders Preserve to the south in Groton is the Deerfield Park Open Space which is part of Groton's planned Eastern Green Belt as part of the current open spaces plan.

This green corridor will be able to support a future inter-town trail system.

6. Pequot Trail-Long Pond Corridor

Pequot Trail, which begins in Preston and runs through the Rose Hill Management Area, is part of the State's Blue Trail system. It is envisioned to connect with the Narragansett Trail passing by Long Pond and over Lantern Hill. This trail network will also connect with other already established and proposed trails in North Stonington. Consideration could also be given to establishing a trail that follows the abandoned Norwich to Westerly Trolley Line. The rail bed runs alongside Rt. 2 with portions on utility easements and the Mashantucket Pequot Tribal Nation land.

We are exploring developing an alternative route from the Burton Preserve toward Long Pond and making connections with the previously mentioned trails.

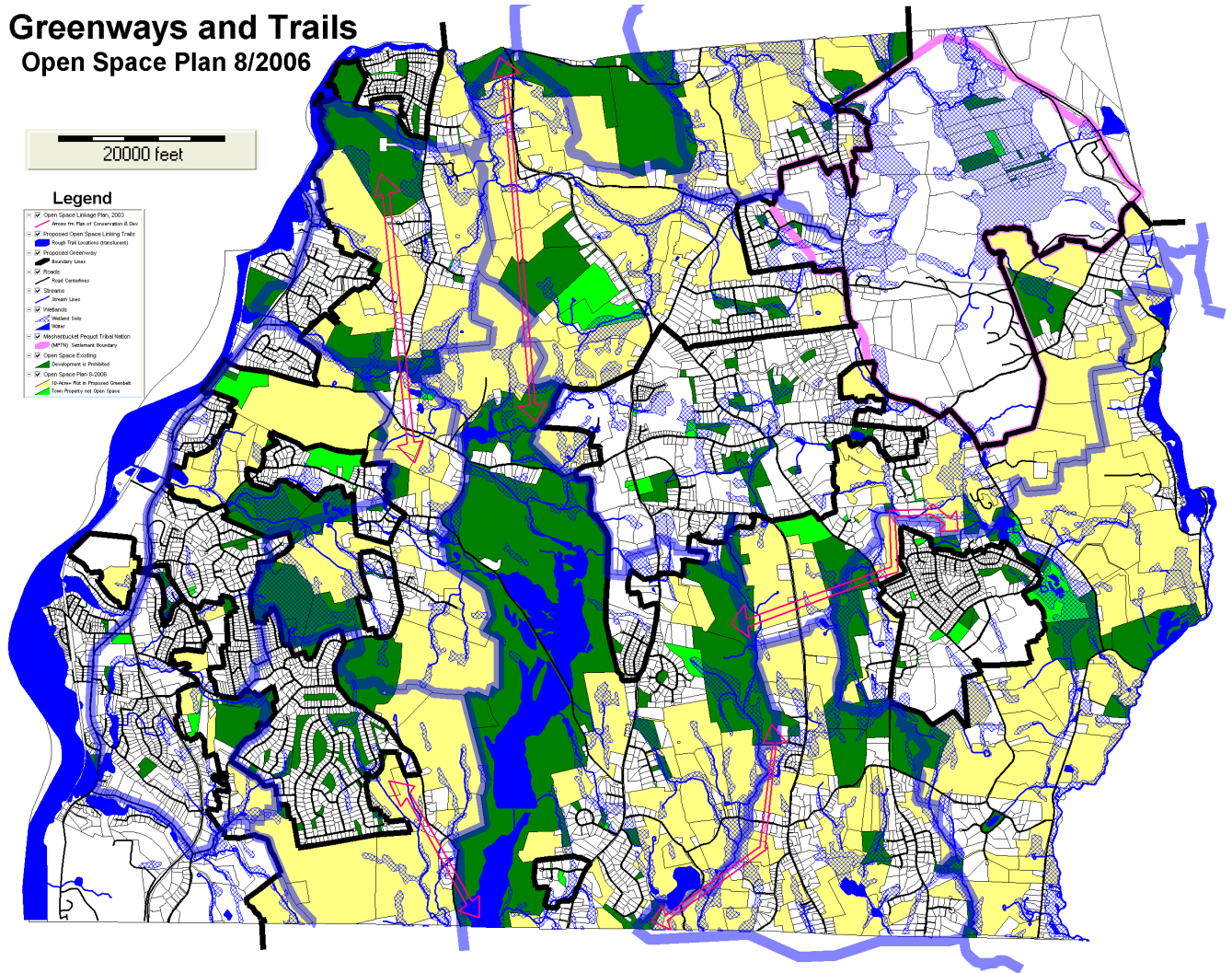
Greenways and Trails

Open Space Plan 8/2006

20000 feet

Legend

- Open Space Linkage Plan, 2003
- Areas of Potential Conservation & Use
- Proposed Open Space Linking Trails
- Rough Trail Locations (Draft/Under)
- Proposed Greenway
- Boundary Line
- Roads
- Road Centerlines
- Streams
- Stream Lines
- Wetlands
- Wetland Sals
- Water
- Massachusetts Pequot Tribal Nation
- (MPTN) Settlement Boundary
- Open Space Existing
- Development is Prohibited
- Open Space Plan 2006
- Wetland Plan & Proposed Greenway
- Town Property not Open Space



OPEN SPACE CONSERVATION PLAN FOR THE TOWN OF GROTON CONNECTICUT

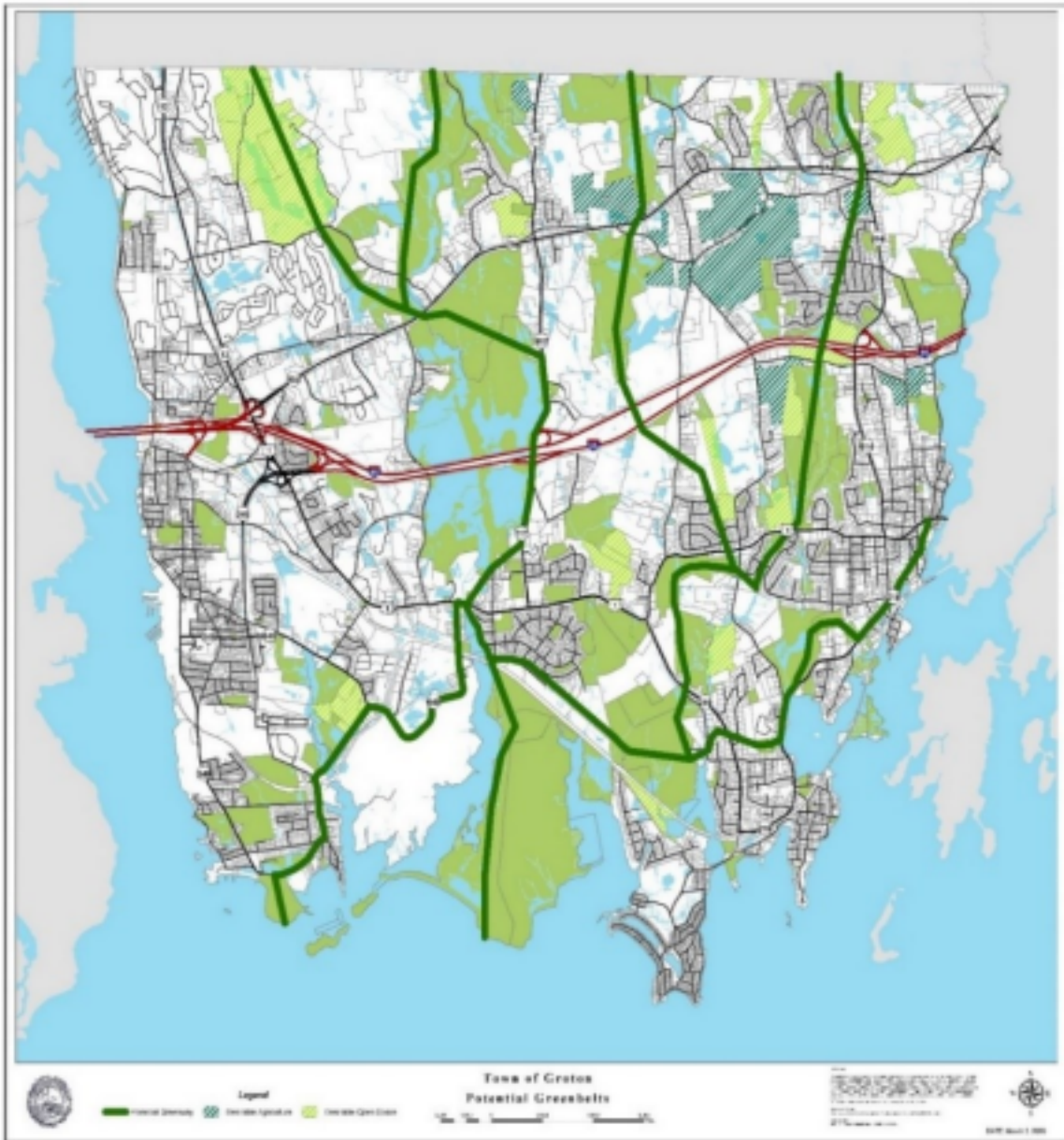


Figure 2-5 Plan of Conservation and Development Potential Greenbelts

