

Cliffdale Meadow Restoration Proposal
Teatown Lake Reservation
September 22, 2020



Teatown maintains approximately 35 acres of meadow habitat at the site of Cliffdale Farm on Teatown Road in the town of Cortlandt. Currently, the meadows at Cliffdale are shrubby and heavily fragmented by hedgerows. This is unsuitable habitat for grassland nesting birds which require a minimum of 10 acres of uninterrupted open space and fields dominated by warm season grasses and wildflowers. After a walkthrough of the site in late 2018, The National Resources Conservation Service (NRCS) informed Teatown we were eligible for federal funds to improve habitat quality for grassland birds through the Environmental Quality Incentives Program (EQIP).

Creating this habitat space is imperative because of the declining presence of meadow habitats in the Northeast. The lower Hudson Valley was once dominated by agricultural land that created a vast network of resources for birds. Over the past 60 years, an estimated 66% of open space has been converted to residential and commercial properties or reforested in the Northeast. Cliffdale offers a unique opportunity to fill this need for habitat space without creating a large-scale disturbance.

In mid-August 2020, NRCS awarded Teatown EQIP funds and reached out with a site plan to improve our existing meadow habitat by removing the hedgerows between three of Teatown's highest quality fields. The plan involves obstruction removal of 83 trees of various sizes and 675 feet of existing stone wall, as well as a plan for revegetation of the disturbed area with high quality meadow plants through reseeding and replanting. The timeline for this work is included (page 1-3); it is consistent with federally established best management practices to reduce disturbance for wildlife.

Despite the large acreage of meadow habitat at Cliffdale, most fields are small 2 to 3-acre parcels divided by stone walls, trees, and invasive shrubs. Per the NRCS guidelines to connect the fragmented fields and improve contiguous grassland bird habitat, the hedgerows that divide each parcel must be removed. Hedgerow trees and shrubby invasives serve as camouflage for birds of prey that perch on field edges and prey on the nests of grassland birds. The only way to reduce this predation is by creating fields that are large enough for grassland birds to nest in field interiors that are far enough away from edges so they can hide from

predators. Removing the 83 trees across these hedgerows is the only way to remove the predator trap and create safe habitat space.

The presence of the stone walls within the fields also creates management challenges. To prevent the formation of new hedgerows, regular mowing is required to prevent the establishment of new trees and shrubs. The stone walls prevent the use of the tractor along the edges and would need regular weed whacking, which is a time-consuming task that is cost prohibitive for a non-profit organization. The stone walls in the proposal (aerial overview and photos attached, pages 4-9) are in poor condition and stones have been falling from the walls without repair for decades. In total, 675 feet of wall are proposed to be removed. Stones will be moved to an adjacent forested area on site that is unsuitable for meadow habitat marked in the attached detailed construction site map (page 10). This will prevent introducing invasive seeds to a new site. After stones have been removed from the hedgerow, the exposed dirt will be leveled and graded to match the rest of the meadow. If additional soil is needed only clean fill will be used to prevent the introduction of invasive seeds. An aggressive native seed mix will be used on all disturbed ground to revegetate the area with herbaceous plants and invasives will be selectively managed as they emerge to ensure a predominantly native ground cover establishes. Erosion netting will be installed as necessary to ensure that any new or disturbed soil is stabilized. Work will be done during the winter so the equipment is expected to cause minimal impact, but any areas that are compacted or disturbed will also be revegetated with a native seed mix consistent with the NRCS recommendations. Due to Teatown's non-profit status and plans to revegetate the site with suitable meadow species, we are requesting the revegetation fee typically collected by the town of Cortlandt for extensive tree removal be waived. Furthermore, all work will be isolated to field edges well away from the septic and well structures of the existing buildings of the property (see attached construction site map, page 10).

The work done for this meadow restoration will be in line with the aesthetic of Cliffdale and Teatown Road. The trees and stone walls along the edge of Teatown Road will be unaffected, so there will be minimal visual change from outside of the property (see tree site plan on page 11 for locations of trees to be removed). The land will not be regraded and will be returned to a more historic representation of meadow lands in the region. This project will help jumpstart a 30-year management plan to restore the northern fields that will eventually create a large network of habitat with 30-40 acres of connected meadow that will bring unique bird species to Teatown.



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Conservation Plan

TEATOWN LAKE RESERVATION INC
 1600 SPRING VALLEY RD STE 1
 OSSINING, NY 10562

OBJECTIVE(S)

This Conservation Plan was developed in order to meet the requirements of the producer and the Environmental Quality Incentives Program (EQIP). This Conservation Plan addresses resource concerns in an environmentally safe manner in order to protect and improve all natural resources.

Brush Management (314)

Install Brush Management to control woody vegetation at the location specified on the conservation plan map. Follow all the installation requirements specified in the implementation requirement documents. Maintain the practice as specified in the Operation and Maintenance for the lifespan of the practice.

Note: When using chemical or biological control (with the exception of grazing animals for biological control) the specific recommendations must be made by a qualified person or entity following all label requirements and University or other peer reviewed recommendations. A Prescribed Grazing Plan (528) that meets NRCS standards is required when utilizing grazing animals to control brush.

-- indicates no data is available

Tract	Field	Planned Amount	Month	Year	Applied Amount	Date
99	3	1.0 ac	08	2021	--	--
99	3	1.0 ac	08	2022	--	--
--	Total:	26.0 ac	--	--	--	--

Critical Area Planting (342)

Establish vegetation on severely eroding areas or other areas requiring extra ordinary means to establish vegetation on locations specified on the conservation plan map. Follow all installation specifications (i.e. species selection, PM type, rate/spacing, planting methods, planting dates, fertility, etc.) detailed on the implementation requirements documents (i.e. job sheets, IR, etc.). Operate and Maintain the installed practice for its entire Lifespan as specified.

-- indicates no data is available

Tract	Field	Planned Amount	Month	Year	Applied Amount	Date
99	3	1.0 ac	09	2022	--	--
--	Total:	26.0 ac	--	--	--	--

Early Successional Habitat Development-Mgt (647)

Mow the area outside of the primary nesting season (April 1st through July 15th). Treat with broadleaf herbicide spot treatment as necessary to control invasive, noxious and woody vegetation. Removal of the mown material is highly recommended to ensure the health, vigor, and quality of the cover. Refer to the NRCS Conservation Practice Job Sheet for Conservation Cover (327) for additional guidance.

-- indicates no data is available

Tract	Field	Planned Amount	Month	Year	Applied Amount	Date
99	3	10.0 ac	08	2024	--	--
99	3	10.0 ac	08	2025	--	--
99	3	10.0 ac	08	2026	--	--
--	Total:	26.0 ac	--	--	--	--

Herbaceous Weed Treatment (315)

Install Herbaceous Weed Control at the location specified on the conservation plan map. Follow all the installation requirements specified in the implementation requirement documents. Maintain the practice as specified in the Operation and Maintenance for the lifespan of the practice.

Note: When using chemical or biological control (with the exception of grazing animals for biological control) specific recommendations must be made by a qualified individual or entity following all label requirements and University or other peer reviewed recommendations. A Prescribed Grazing Plan (528) that meets NRCS standards is required when utilizing grazing animals to control brush.

-- indicates no data is available

Tract	Field	Planned Amount	Month	Year	Applied Amount	Date
99	3	8.8 ac	08	2021	--	--
99	3	8.8 ac	08	2022	--	--
99	3	8.8 ac	08	2023	--	--
--	Total:	26.0 ac	--	--	--	--

Obstruction Removal (500)

Safely remove and dispose of unwanted obstructions and other material to facilitate application of conservation practices or planned land use. Install the practice at the location and extent specified on the plan map and supporting plan documentation. Implementation requirements and an operation and maintenance plan will be provided prior to commencement.

-- indicates no data is available

Tract	Field	Planned Amount	Month	Year	Applied Amount	Date
99	3	1.0 ac	03	2022	--	--
--	Total:	26.0 ac	--	--	--	--

NRCS will evaluate the area for Threatened and Endangered Species and Cultural resources prior to design and construction. NRCS will advise landowner to take appropriate measures in order to protect any of the resources if found on site.

Landowner will be responsible to contact Dig Safely New York (Call 811) in order to locate any underground utilities that may be on site.

Conservation Plan Map

Client(s): TEATOWN LAKE RESERVATION INC
 Westchester County, New York
 Approximate Acres: 26.00

Assisted By: OSCAR VELEZ-JUARBE
 NRCS
 MILLBROOK SERVICE CENTER
 WESTCHESTER COUNTY SOIL & WATER CONSERVATION DISTRICT

Land Units: Tract 99, Fields 3

Tract	Land Unit	Practice Name	Planned Amt	Planned Date
99	3	Obstruction Removal (500)	1.0	2022



Prepared with assistance from USDA-Natural Resources Conservation Service



	Practice Schedule PLUs	Conservation Practice Polygons
		
		Obstruction Removal (500)





Figure 1. Hedgerow 2, far edge boundary for removal. Stone wall in poor condition.



Figure 2. Hedgerow 2 far area facing away from Cliffdale driveway, represents a variety of tree size classes and far boundary for tree removal.



Figure 3. Existing Cliffdale driveway accessible from Teatown Rd. Shows Hedgerow 1, right and construction staging area of driveway (far end just past field on left).



Figure 4. Hedgerow 1, overgrown with invasive vines, nearest Teatown Rd.

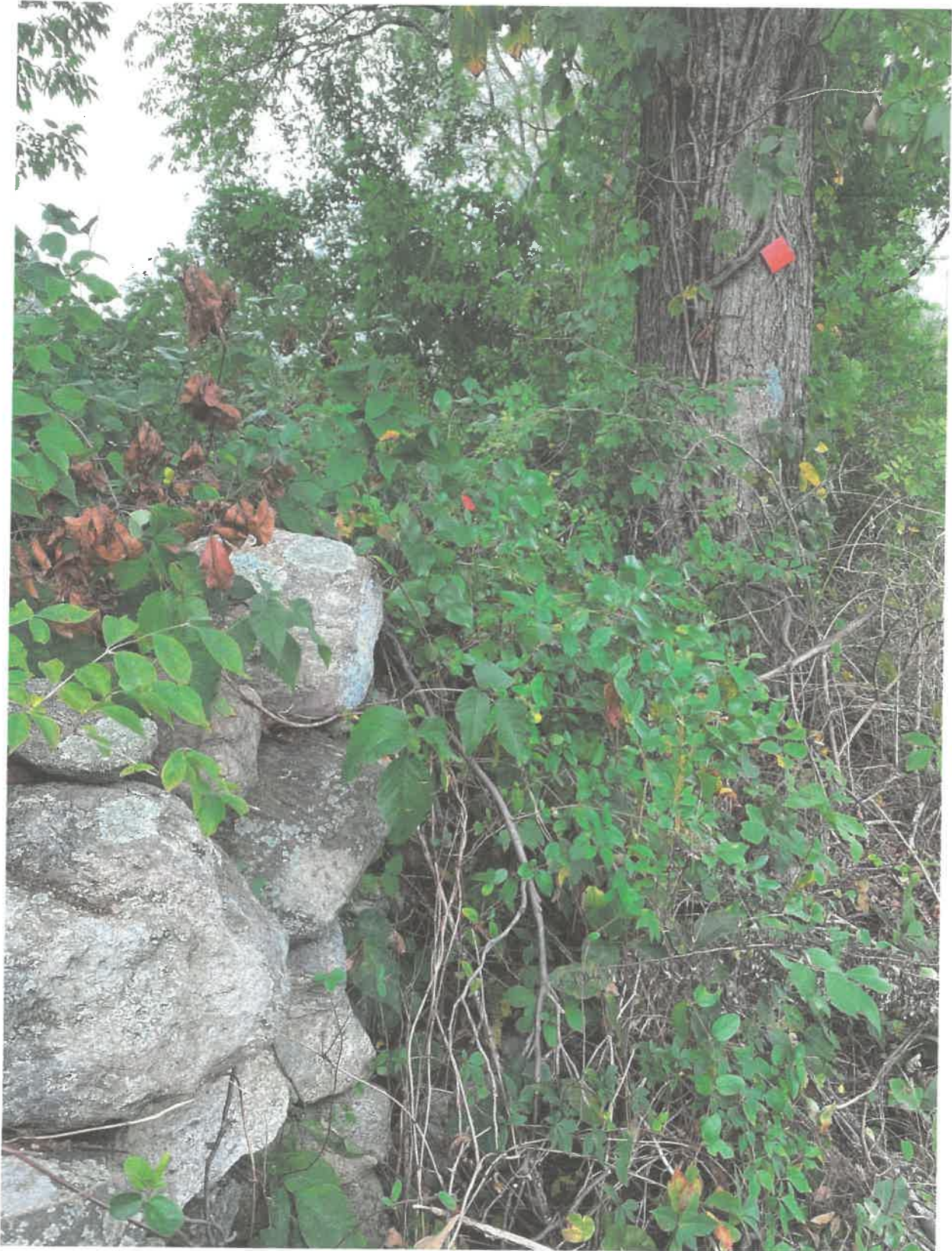
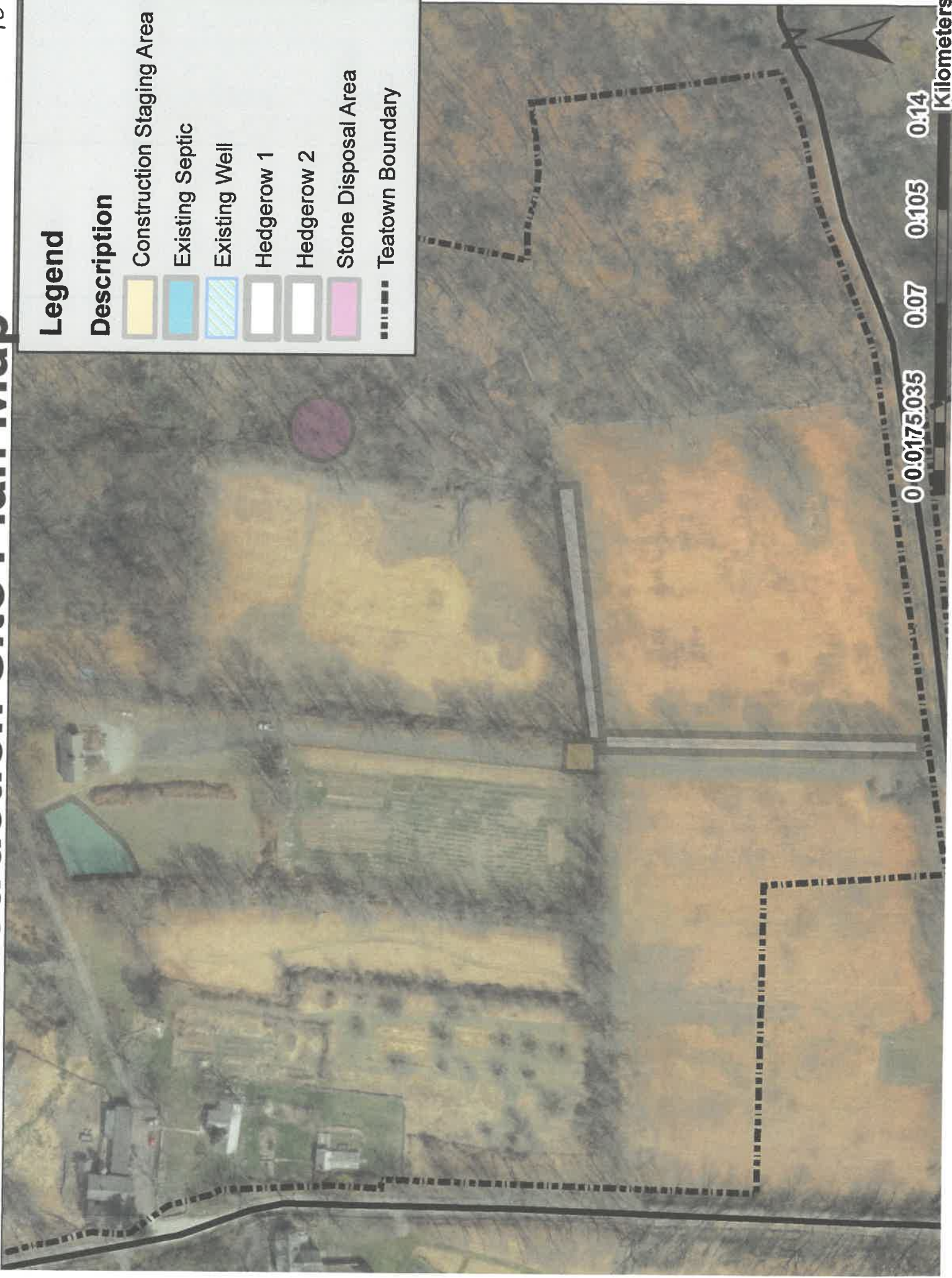


Figure 5. Hedgerow 1, overgrown with invasive vines.

Construction Site Plan Map



Legend

Description

- Construction Staging Area
- Existing Septic
- Existing Well
- Hedgerow 1
- Hedgerow 2
- Stone Disposal Area
- Teatown Boundary





0 0.0175.035 0.07 0.105 0.14

Kilometers

Tree Removal Site Map

Legend

Description

-  Construction Staging Area
-  Hedgerow 1
-  Hedgerow 2
-  Teatown Boundary

