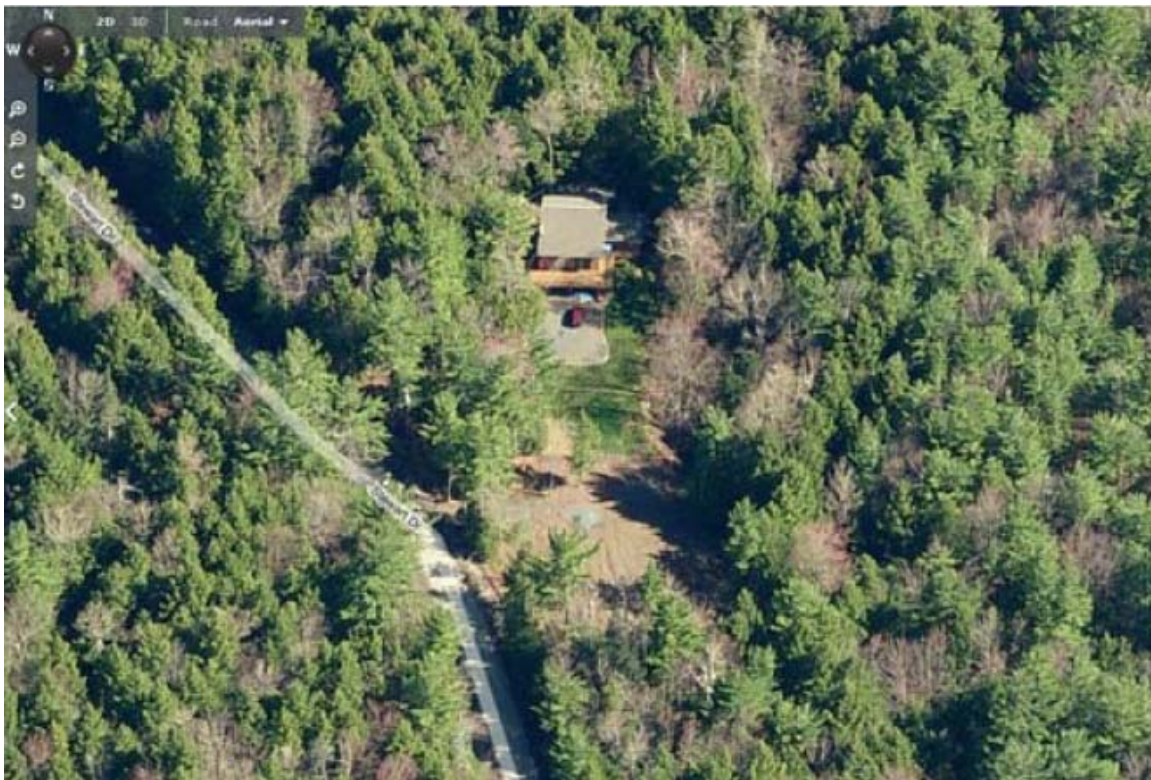


Riparian Corridor Management Plan

Batavia Kill

Avella Property – Maplecrest, NY



Prepared by:

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Greene County Soil and Water Conservation District

November 9, 2009



Introduction to the Catskill Streams Buffer Initiative

Maintaining healthy and intact riparian areas is a high priority of the Greene County Soil and Water Conservation District (GCSWCD) Catskill Streams Buffer Initiative, as is improving the condition of degraded riparian buffers. Through the protection and enhancement of the riparian corridor we are protecting water quality, protecting and increasing habitat diversity and offering some level of stabilization for streambanks through natural biological means. Well vegetated riparian buffers filter upland pollutants, provide rooting mass for bank stability, and lower stream water temperatures. Numerous streams in the Catskills have been walked with detailed mapping of the vegetation conducted within the riparian corridors, documenting various stream conditions, need for supplemental vegetation, presence of invasive species, and other conditions impacting the health of the riparian area. While 75% of the West of Hudson Watershed is forested, it is apparent that some riparian areas lack this protective cover.

The overall goal of the Catskill Streams Buffer Initiative is to inform and assist landowners in better stewardship of their riparian (streamside) area through protection, enhancement, management, or restoration. The New York City Department of Environmental Protection and its partners (County Soil & Water Conservation Districts and Cornell Cooperative Extension) will assist private, riparian landowners throughout the West of Hudson Watershed by providing:

- 1) Riparian Corridor Management Plans to create awareness about riparian management issues specific to individual properties
- 2) Best management practice design and/or prescriptive measures and installation to encourage positive riparian stewardship and
- 3) Educational materials and activities as needed by landowners to understand the critical role of their buffer and how to maintain it in optimal functioning condition.

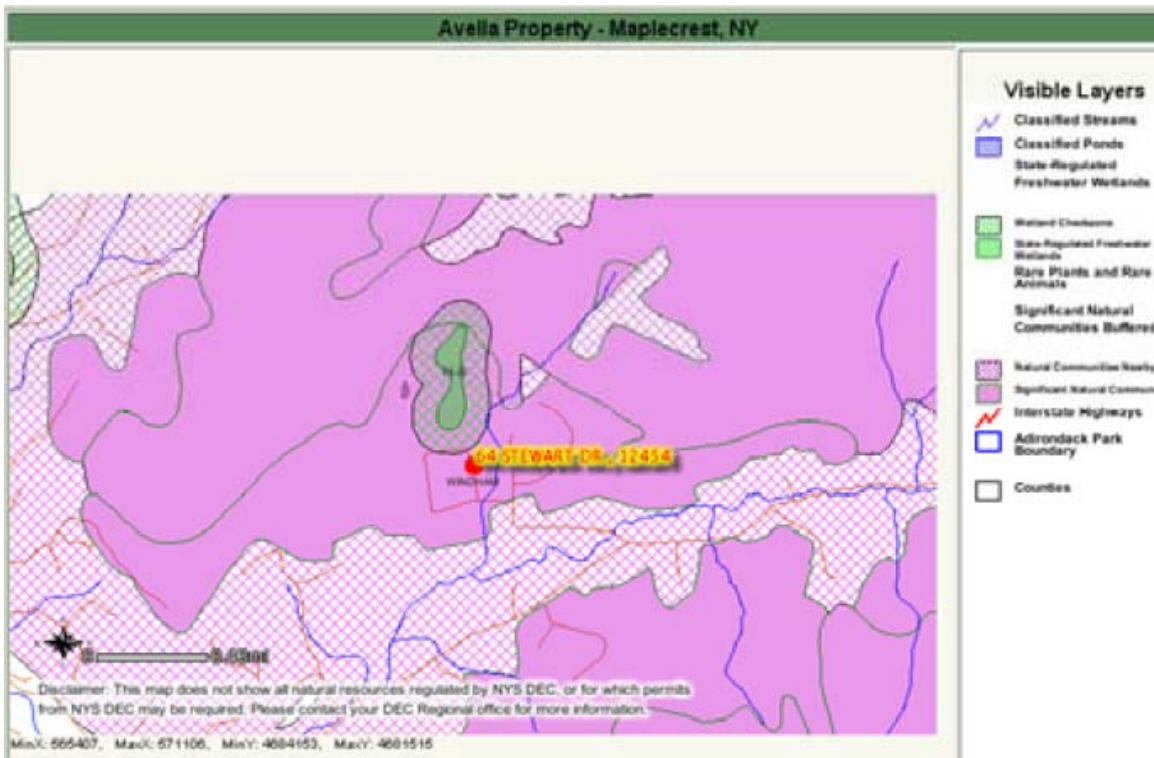
Any watershed landowner with property within the mapped buffer area can receive technical assistance and a Riparian Corridor Management Plan.



The Catskill Streams Buffer Initiative helps residential landowners protect their property and preserve natural habitat along stream banks in the Catskill/Delaware watershed areas through the use of vegetative buffers.

Site Visit Description / Existing Conditions

Mike and Jane Avella own a 5.1 acre parcel located within the Catskill Park at 64 Stewart Drive in Maplecrest. The northern property line is marked by a small C stream, an unnamed tributary of the Batavia Kill that drains the south east slopes of Elm Ridge.¹ The drainage area is 0.33 mi². The Avella's called the GCSWCD office regarding erosion on their property after attending the Watershed Tour in June 2009. Land-cover on the parcel is primarily forest with the exception of a mowed lawn that was enlarged to install an absorption field for their septic system. Land-use / land-cover for the surrounding area is predominately forest with limited residential development. The percent of area covered by forest is 98.2%. No Japanese knotweed was visible at the site visit. There is a healthy riparian buffer on the left side of the stream. Surrounding forest has been classified as Beech-Maple mesic Forest.



Avella property map generated by NYS DEC Environmental Resource Mapper

The soil type located within the project area is Lewbeach channery silt loam. This series consists of moderately deep, well drained soils formed in till derived from sandstone, siltstone and shale. Slope ranges from 15 to 25 percent. Mean annual temperature is 44 degrees F. and mean annual precipitation is about 52 inches. Most of the soils in this series are forested or used for unimproved pasture. Native trees include sugar maple, black cherry, red maple, beech, ash, birch, and hemlock.

¹ All waters of New York State are provided a class and standard designation based on existing or expected best usage of each water or waterway segment. Classification C is for waters supporting fisheries and suitable for non-contact activities.

Landowner Issues / Concerns

The Avella's, full time residents of the property since 1999, have expressed concern about localized erosion on the right streambank. The lawn collects water during each rain event. The accumulated water then drains to the tributary and erodes the bank. Landowners say in the past 4 to 5 years they have lost 5 to 6 feet and that the rate of erosion is accelerating. They have planted a few small hemlocks. The lawn is mowed up to the edge and jewelweed was growing on the bank at the time of the site visit. The riparian buffer looks healthy in the surrounding areas both up and downstream and on the opposite side. Bank height is 30 feet. Owners participated in CWC's Septic Program in 2006 and had the absorption field replaced. There is now a large (less than .5 acre) area of mowed lawn where there was previously forest cover.

Landowner Goals / Contributions

- 1) Minimize and prevent stream bank erosion
- 2) Protect front yard

Landowners are willing to sign 5 year license agreement and help monitor and maintain installed vegetation. Preferred buffer width is 10 feet over the right bank.

Recommendations – Best Management Practices (BMPs)

- 1) **Apply to CSBI for funding support to install one or more of the practices below.**
- 2) **As deep rooted woody vegetation is critical to maintaining slope stability, this site could benefit from enhanced buffer width and establishment of more woody vegetation.** Planting and maintaining a healthy buffer of native trees and shrubs along the streambanks is one of the most cost effective and self-sustaining methods for landowners to protect streamside property.
- 3) **Increase native riparian vegetation and habitat.** Plantings can include a variety of flowering shrubs, trees and sedges native to the Catskills. Native species are adapted to our regional climate and soil conditions and typically require less maintenance than exotic species following planting and establishment. Riparian buffer plantings will enhance the overall ecological function of the riparian corridor.
- 4) **Maintain root systems that hold soil in place by not mowing right to the stream edge.** Degrading buffer zones can be improved by not mowing in the buffer zone. Keeping a buffer zone of trees and shrubs, especially in the first 50 to 100 feet, along streambanks helps to minimize erosion and protect property, filter pollutants, and increase habitat value.
- 5) **Participate in CWC's Septic Maintenance Program** to clean system out every 3-5 years.

Resources List

Batavia Kill Stream Management Plan

<http://www.gcswed.com/stream/bataviakill/smp/>

Batavia Kill SMP Executive Summary

http://www.catskillstreams.org/pdfs/BataviaKillExec_Summ.pdf

Catskill Streams Buffer Initiative

http://www.catskillstreams.org/pdfs/CSBI_application.pdf

Catskill Watershed Corporation Septic Maintenance Program

<http://www.cwconline.org/programs/septic/maintain.html>

DEC Protection of Waters Program

<http://www.dec.ny.gov/permits/6042.html>

DEC Environmental Resource Mapper

<http://www.dec.ny.gov/animals/38801.html>

Riparian Buffers

http://www.catskillstreams.org/stewardship_streamsideside_rb.html

Soils

National Cooperative Soil Survey

Official Series Description Series, 1999

<http://soils.usda.gov/technical/classification/osd/index.html>

CATSKILL STREAMS BUFFER INITIATIVE

DATE 1/18/2010

OWNER MICHAEL G. AVELLA SR AND MARTHA J AVELLA

ADDRESS or SITE NAME 64 STEWART DR MARBECREST NY 12454

STREAM NAME BATAVIA KILL TRIB Watershed SCHOTTLAR Tax Parcel 97.001-34

Have you participated in the Catskill Streams Buffer Initiative in the past? (if Yes, explain)

NO

History of working with GCSWCD, NYCDEP, USACE, Other agency? (who, when)

POSITIVE RESULTS - DYE TEST - REPAIRED ABSORPTION FIELD

Do you participate in any other NYC Watershed Programs? (how, when)

LARRY KELLY - TECHNICAL PROGRAM SPECIALIST
845-586-1400 OCT 15 2004

- Catskill Watershed Corporation (CWC)?
- Conservation Reserve Enhancement Program (CREP)?
- Watershed Agricultural Council's (WAC) Forestry or Whole Farm Programs?

Land-use History?

PURCHASED HOUSE 1989
BECAME FULL TIME RESIDENTS 1999

Flooding History?

NOT IN FLOOD ZONE

Goals for the Property?

PROTECT FRONT YARD

Do you anticipate any major changes on your property within the next 5 years? (explain)

NO

Please return form to Laura Weyeneth, Catskill Streams Buffer Initiative Coordinator at laura@gcswcd.com or GCSWCD, 907 County Office Building, Cairo, NY 12413

Landowner Self-Evaluation Form

Goals for the Project? <i>PREVENT STREAM BANK EROSION</i>
Preferred Buffer Width: 5-10 ft 10-25ft 50-100 ft. 100-300ft. Other: <i>10 FT</i>
Landowner Participation and Commitment to the Project? (explain) <input type="checkbox"/> Cost share (% of total) <input type="checkbox"/> Project installation assistance <input checked="" type="checkbox"/> Project maintenance/monitoring <i>YES WILL MONITOR AND MAINTAIN</i> <input type="checkbox"/> Easement/License agreement (10yr/5yr) <i>INSTALLED SHRUBS</i> <input type="checkbox"/> Attend training on related topics <input type="checkbox"/> Other:
Landowner concerns: (Site access, invasive sp, wildlife, etc.) <i>DEER HOUSE</i>
Issues with site access for project installation and staging: (explain) <i>NONE</i>
Is site visible from road? <i>YES</i>
Would you agree to use this as a demonstration project for other landowners interested in the CSBI program? <i>YES</i>
Are neighbors interested in streamside assistance? (Identify) <i>NO</i>

Please return form to Laura Weyeneth, Catskill Streams Buffer Initiative Coordinator at laura@gcswcd.com or GCSCWD, 907 County Office Building, Cairo, NY 12413

Landowner Self-Evaluation Form

SITE SKETCH

NOTES/COMMENTS:

- LANDOWNERS PARTICIPATE IN VOLUNTEER PLANTING -
FARBER FARMS '08 AND ASHLEIGH STREAMS '07
- WATERSHED TOWIT
- WOTY DOGWOOD IN '08
- PARTICIPATE IN GCSWCD MEETINGS AND INFORMATIONAL
SEMINARS
- JANE DOES NOT LIKE HIGH GRASS

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