CONSERVATION CORNER

NEWSLETTER OF THE
ORANGE COUNTY SOIL & WATER CONSERVATION DISTRICT
225 DOLSON AVENUE, SUITE 103, MIDDLETOWN, NY 10940
AUGUST 2013

RESPONSIBLE FARMERS PROTECTING LOCAL RESOURCES

Board Meetings
Monthly meetings are held the third Monday of the month at 9:00 am at the District Office. We suggest calling ahead to confirm.

Website
Visit us on our new website at www.ocsoilny.org

CHECK US OUT ON FACEBOOK!

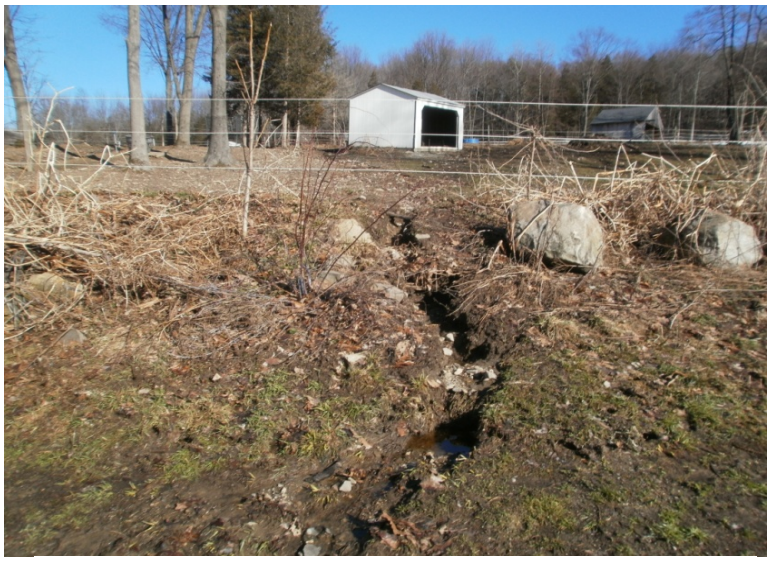
Phone
(845) 343-1873

Fax
(845) 344-1341

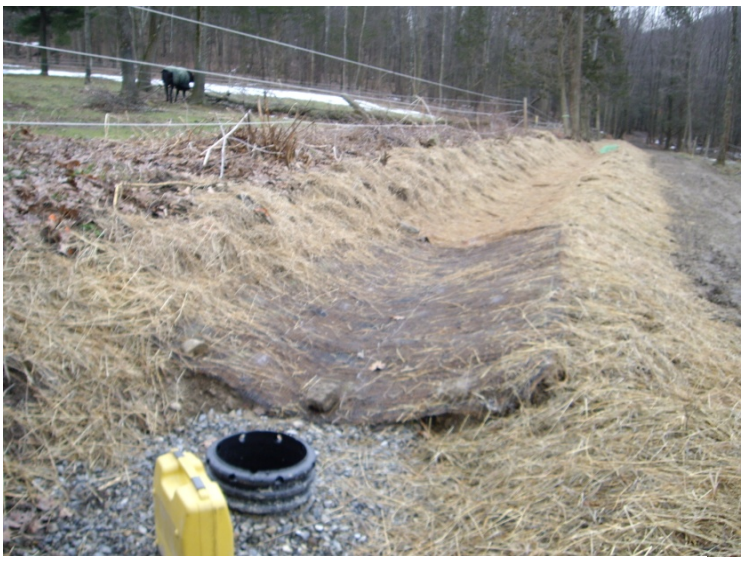
Winslow Therapeutic Riding Center is a not-for-profit organization whose programs are designed to meet the needs of children and adults with physical, mental, or social disabilities, as well as those who wish to learn about horses and riding in a therapeutic environment. The Conservation District has been assisting Winslow with management and improvement of their pastures. In 2008, a project was done to intercept runoff from woodlands above the pastures. This year, a second project was done to better control runoff from the pastures and surrounding farm roads. The following pictures describe some of this year's work. Funding for this work and other farm projects described in this newsletter was from the New York State Agricultural Nonpoint Source Abatement and Control Program (ANPSACP), from the Conservation District's regular operating funds (supported by the County of Orange), and from the project participant.

AGRICULTURAL CONSERVATION

STORMWATER MANAGEMENT

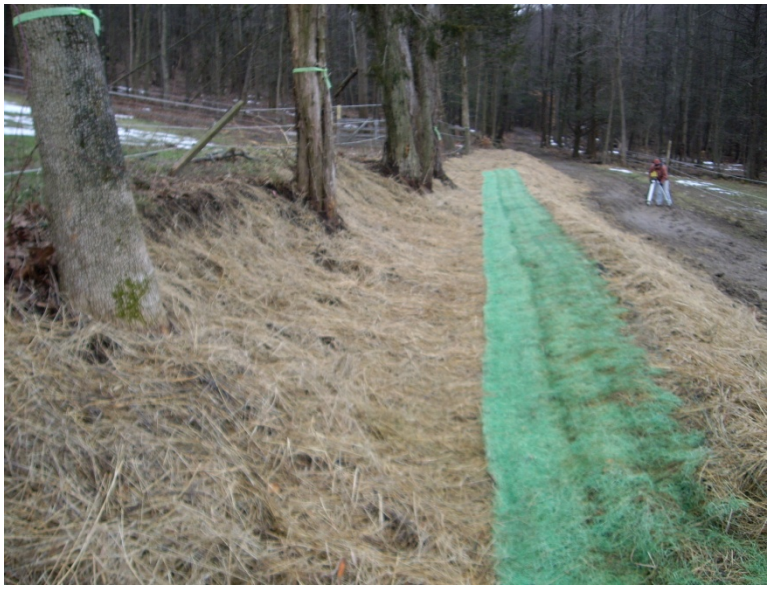


Before - Gullies develop from pastures with inadequate vegetation.

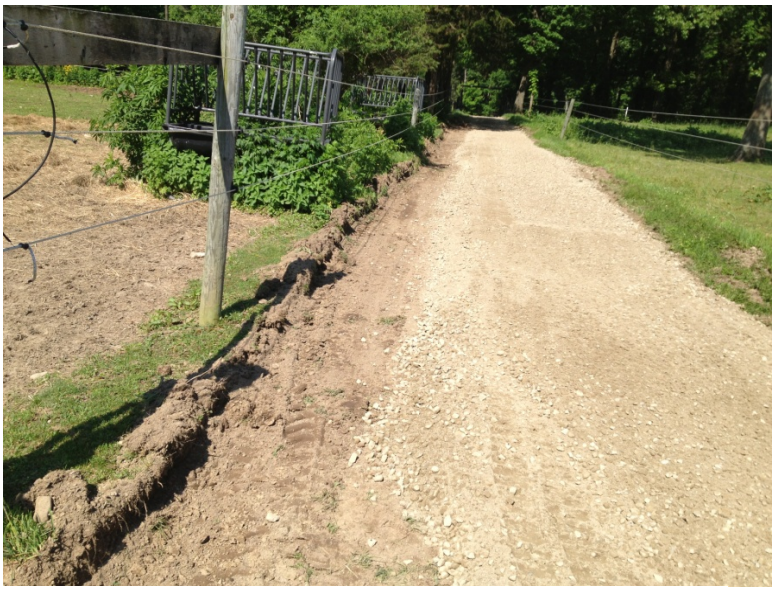


During – A sidehill ditch, or diversion, breaks slope length to control erosion. Note pipe riser in foreground that conveys ditch flow to safe outlet.

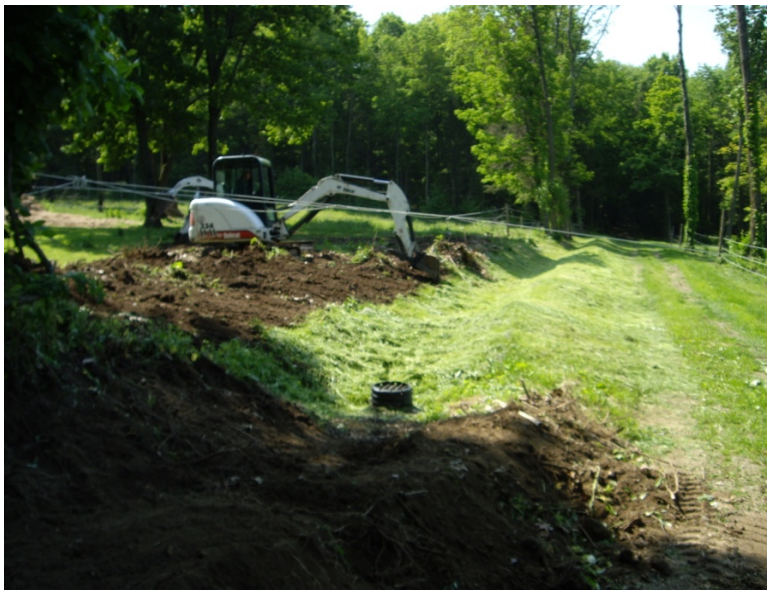
Winslow Continued



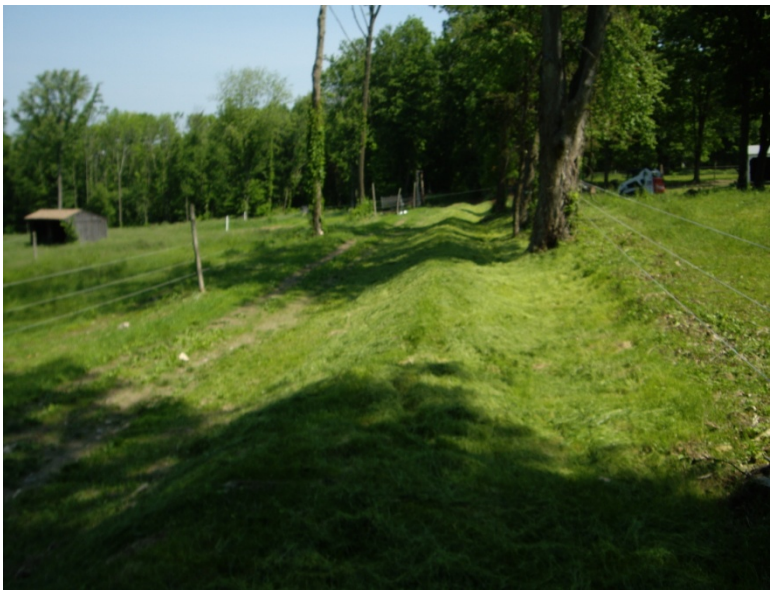
During – A rolled erosion control product (RECP) is used to ensure that the sidehill ditch does not wash out before vegetation gets well established.



During – Farm roads can collect and concentrate runoff. On this project, farm roads were carefully crowned or tipped, with collected runoff directed to areas with well established vegetation.



During – Slope above sidehill ditch is 'softened'. Extra soil used to re-grade gullies in adjacent pasture.



After - Vegetation well-established in sidehill ditch.

"THE LANDSCAPE OF ANY FARM IS THE FARMER'S PORTRAIT OF HIMSELF. CONSERVATION IMPLIES SELF-EXPRESSION IN THAT LANDSCAPE, RATHER THAN BLIND COMPLIANCE WITH ECONOMIC DOGMA." **–** *Aldo Leopold 1939*

SWCD Welcomes Ricky Franke, Jr.

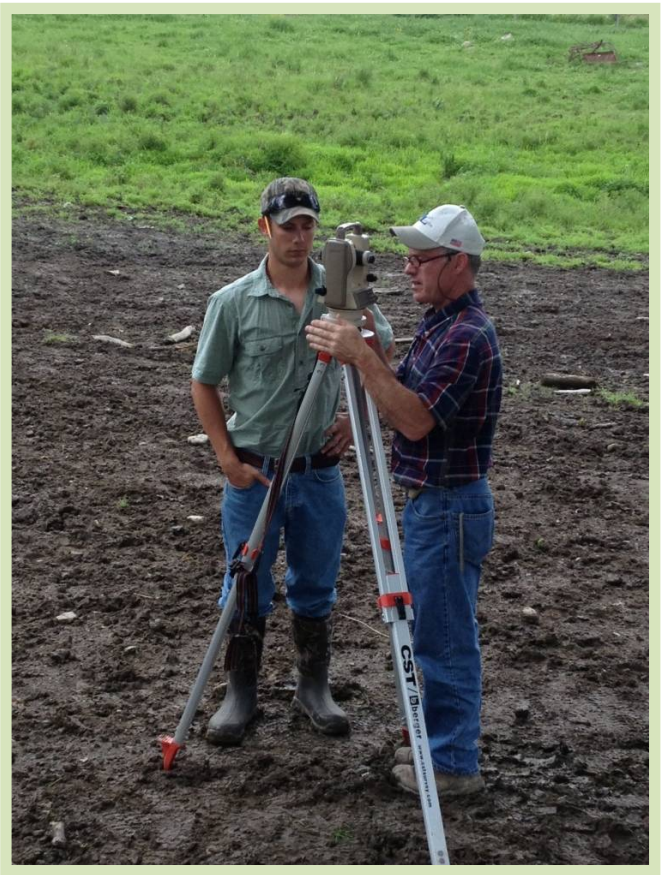
The Orange County Soil and Water Conservation District is proud to have Richard Franke Jr. join the team.

Rick was hired as a District Technician and started work on May 28, 2013. He attended Paul Smiths College in the Northern Adirondack Park where he graduated with a Bachelor's of Science in Natural Resource Management and Policy and minored in Geographic Information Systems.

Rick loves the outdoors and spends his time snowmobiling, hunting and trapping.

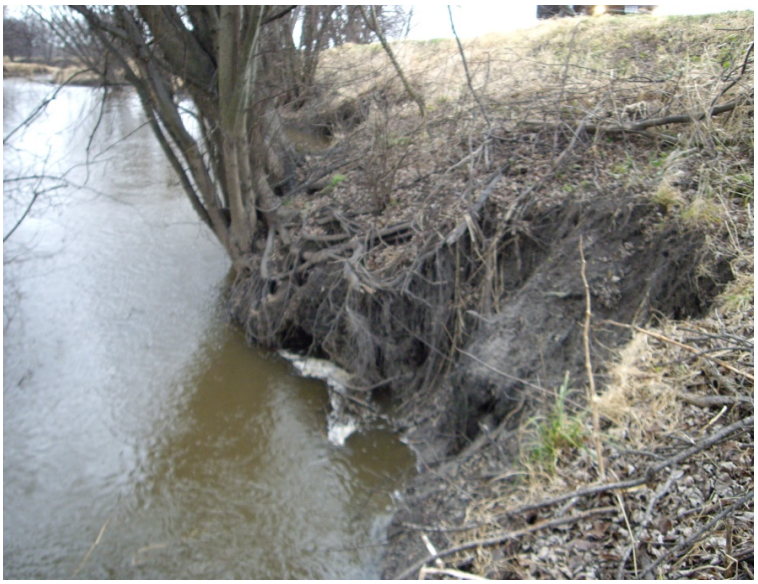
"I couldn't ask for a better job" says Rick. "Not only are my co-workers great people but the type of work is fun and rewarding." Rick added that this job has the perfect mix of office and fieldwork.

"I have been spending the majority of my time collecting data on road culverts in the Woodbury Creek Watershed. This data is going to be used by Hydrologists at Cornell University to determine the effects of rain fall events on road culverts." Rick added that he is anxious to see the final results of the study. "Each day is a learning experience and I'm glad to be here" says Rick.

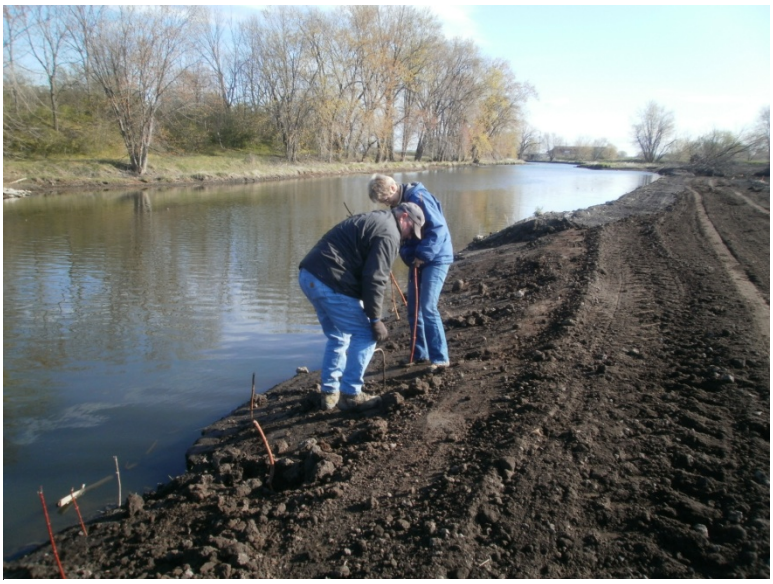


Ricky Franke, Jr., District Technician, out surveying with Kevin Sumner, District Manager of the Orange County Soil & Water Conservation District.

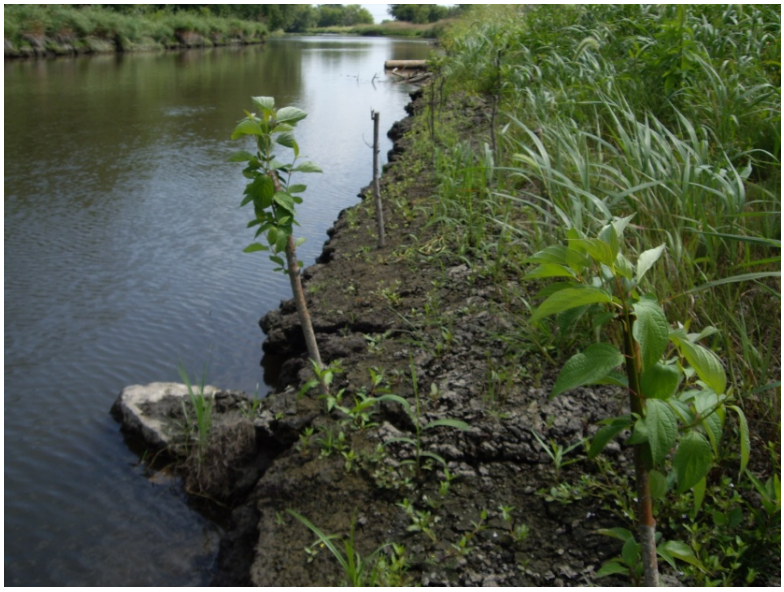
DeBuck Critical Area Protection



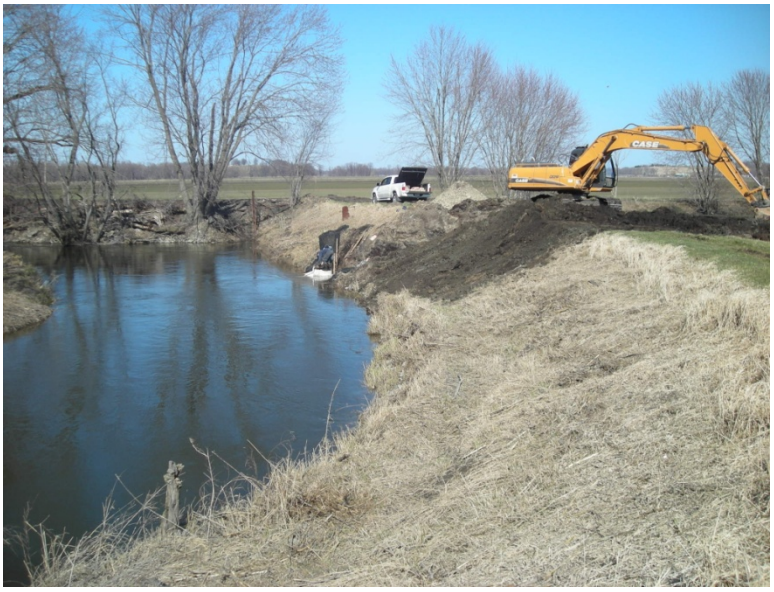
Before – Typical unstable banks in the Pine Island section of the Wallkill River.



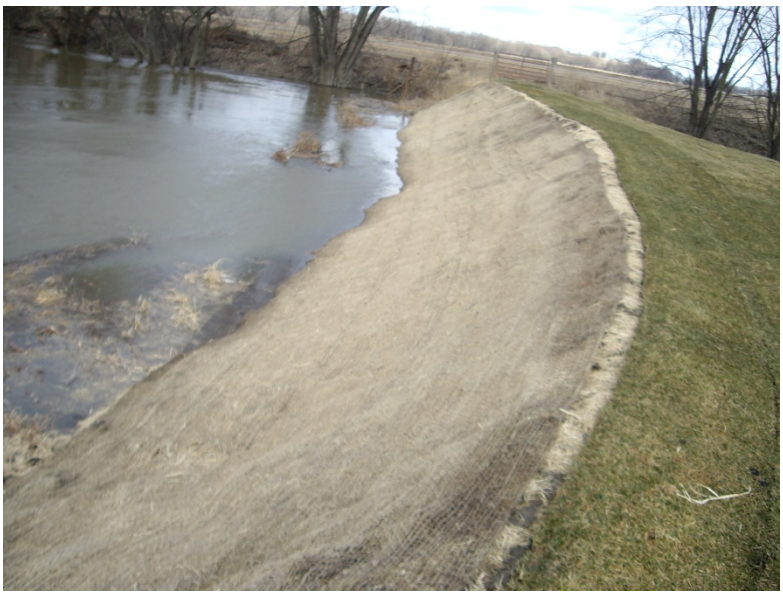
Farm owners and SWCD staff plant 'live stakes' on the banks of the Pochuck Creek. These cuttings, harvested locally from shrub dogwoods and willows, can be a cheap and efficient way to establish natural bank stabilization. Unfortunately, survival was poor on this site. However, live stake cuttings from the same source did well on another site this same year (see Joyce Streambank Stabilization Project).



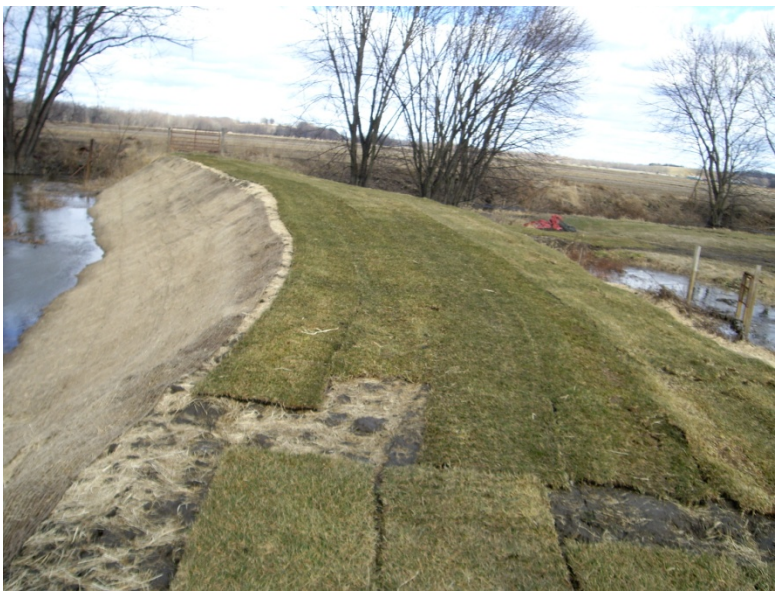
Red Osier Dogwood "live stakes' leafing out on streambank.



Steep banks on the Wallkill River are being graded back to a softer slope.



After re-grading, the river bank is mulched, and mulch is pinned in place with biodegradable jute netting.



Sod is used to establish immediate stabilization at the top of the streambank.

"GOOD FARMERS, WHO TAKE SERIOUSLY THEIR DUTIES AS STEWARDS OF CREATION AND OF THEIR LAND'S INHERITORS, CONTRIBUTE TO THE WELFARE OF SOCIETY IN MORE WAYS THAN SOCIETY USUALLY ACKNOWLEDGES, OR EVEN KNOWS. THESE FARMERS PRODUCE VALUABLE GOODS, OF COURSE; BUT THEY ALSO CONSERVE SOIL, THEY CONSERVE WATER, THEY CONSERVE WILDLIFE, THEY CONSERVE OPEN SPACE, THEY CONSERVE SCENERY."

— *Wendell Berry, Bringing it to the Table: Writings on Farming and Food*

Conservation District Preparing for Next Round of NYS Agricultural Conservation Funding

For almost 20 years, the State of New York, via the New York State Soil and Water Conservation Committee (NYSSWCC), has offered competitive funding for a wide variety of agricultural water quality protection practices. Known as the Agricultural Nonpoint Source Abatement and Control Program (ANPSACP), this funding is made available exclusively to NY's 57 Soil and Water Conservation Districts (SWCD) and complements other funding sources such as USDA.

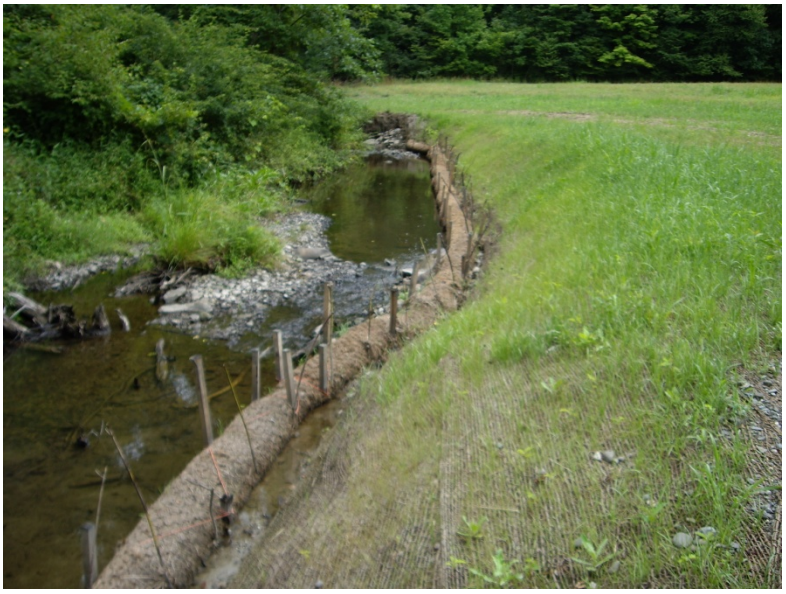
Orange County SWCD is anticipating preparing a proposal to Round 20 of the ANPSACP sometime in late 2013. Agricultural landowners/landusers are encouraged to contact the SWCD as soon as possible if interested in obtaining funding for a conservation project. Applicants should be aware that they will be required to go through an inventory/evaluation process called Agricultural Environmental Management (AEM) as a precursor to requesting funding for conservation practice implementation. Projects eligible for funding through this program include but are not limited to barnyard runoff control (concrete pad, roof water collection, manure management structure, etc.), streambank stabilization/stream protection, and cropland/pastureland erosion control. Other projects that can be shown to protect water quality may also be eligible.

Applicants should also be aware that their project request, if deemed eligible by our office, will be grouped with other project requests and submitted to NYSSWCC for consideration. Orange County's proposals will be ranked against proposals from other New York SWCD's and may or may not receive funding. Since projects must be grouped by 'watershed' with a separate proposal for each watershed, we may not be able to accommodate all applicants to this Round 20 funding due to staffing constraints associated with developing multiple grant proposals. Depending on the level of response to this offering, some applications may need to be held over to future ANPSACP grant rounds.

We will need ample time to review funding requests and incorporate selected projects into our Round 20 proposal. Therefore, interested farmers/agricultural landowners should contact Orange County SWCD by October 1st if they wish to be considered for inclusion in our Round 20 proposal. "Sign-up" may be done by phone call (845) 343-1873, email (chris.hopmayer@ocsoil.org) or by stopping at our office at Suite 103, 225 Dolson Avenue, Middletown, NY 10940 (M-F, 8AM-4:30PM). Please confirm that your name has been added to our 'Round 20 Funding Request Register' to ensure that your request in reviewed.

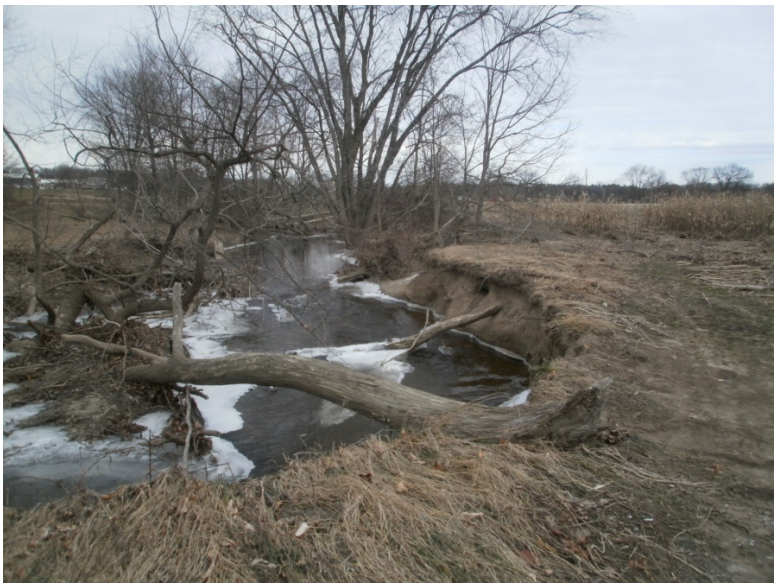
Joyce Streambank

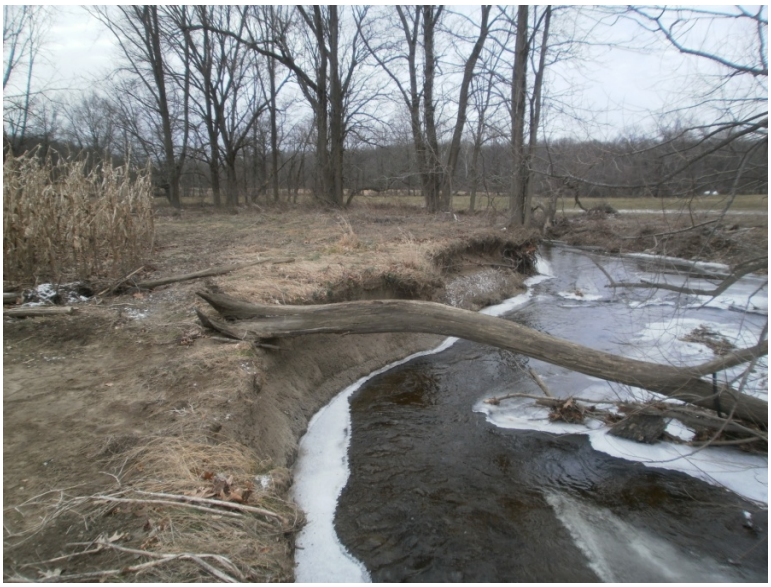
Before – Typical bank erosion on Indigot Creek.



After – 'coir logs' are staked in at the base of the regraded streambank. Live stakes will 'take over' as coir logs rot away.

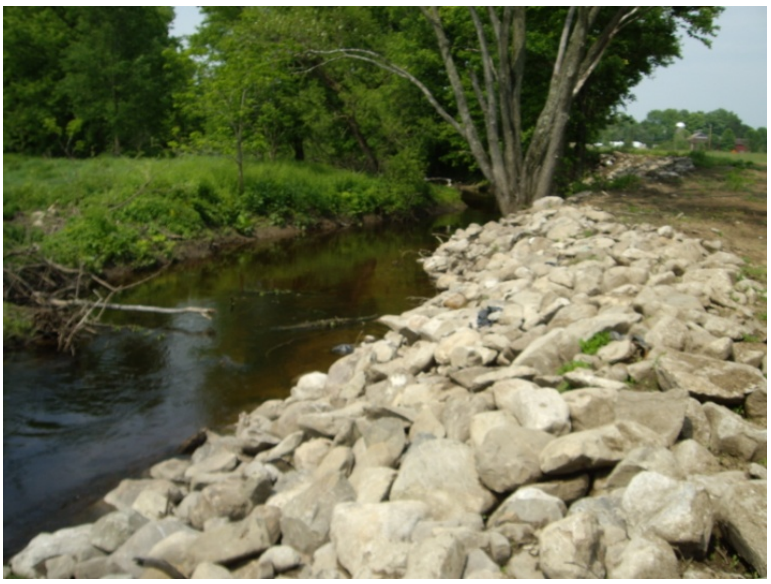
G. Vellenga Streambank

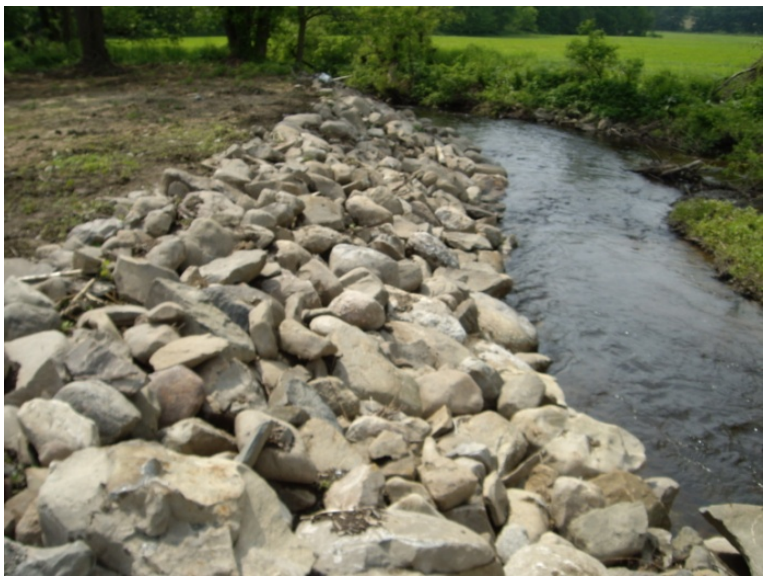




Before – Unstable banks deliver excess sediment to Indigot and Rutgers Creek.

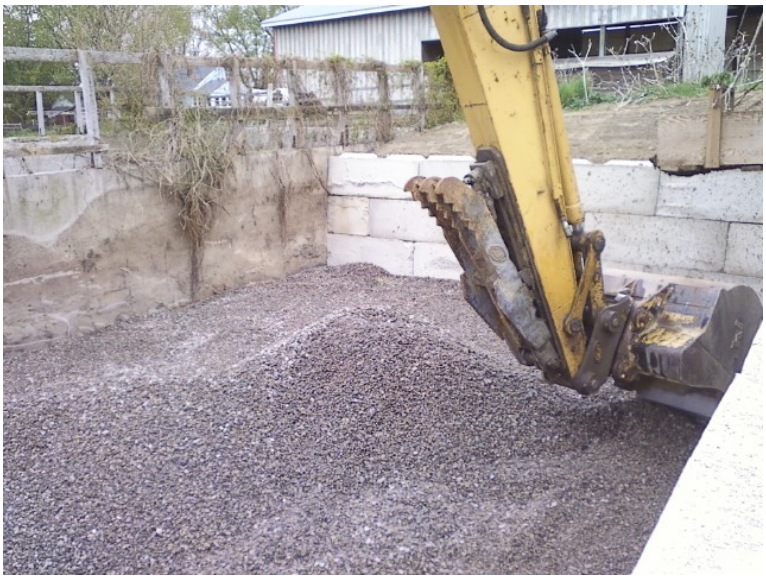
Vellenga Continued





After – Fieldstone harvested from the farm is used to armor the streambank after it is regraded to a softer slope.

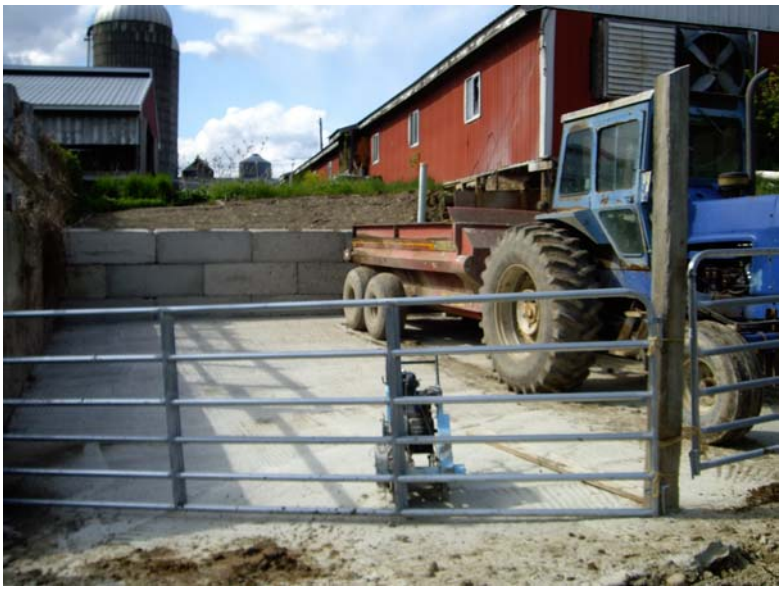
Gibbs Spreader Loading Area Improvement



First - drainage was installed to remove a spring that kept the spreader loading area wet and muddy.

Second - retaining walls were installed and the concrete pad area was prepared with the required base material and slope.

Gibbs Continued



Last - a 5 inch thick concrete pad was poured. The farmer can now load the spreader and easily clean up any spilled manure.

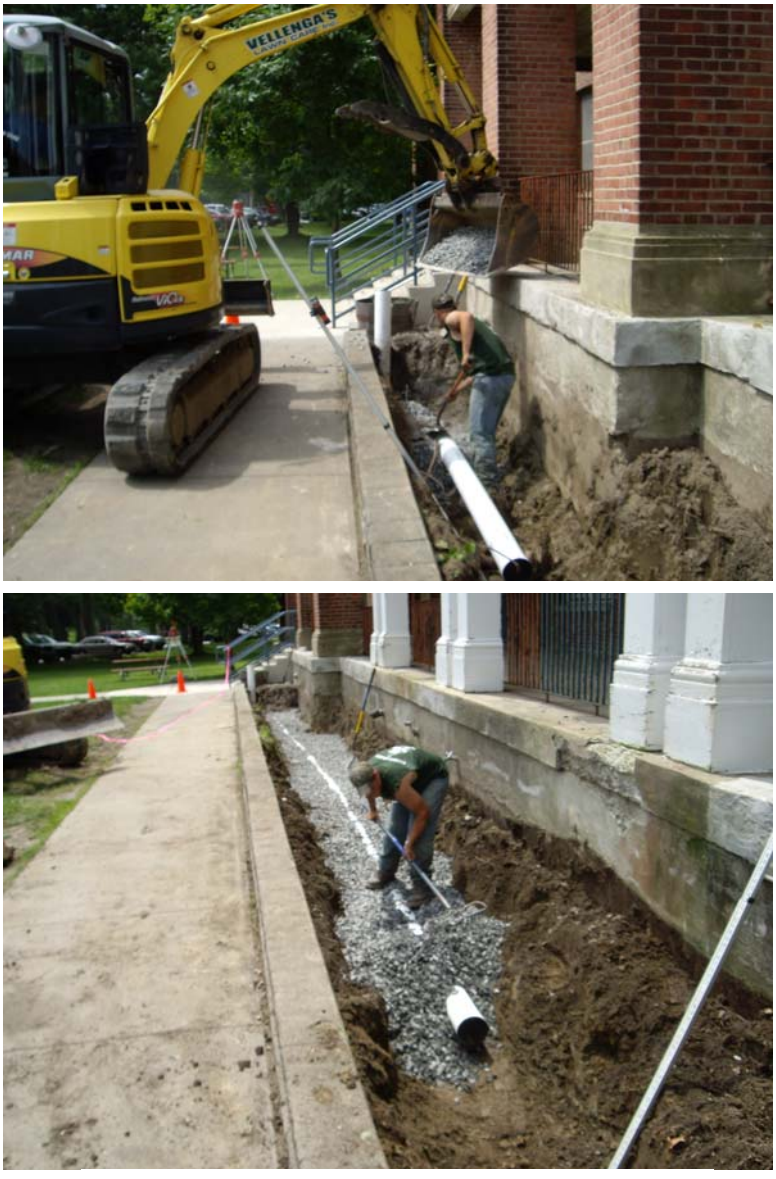
The love for all living creatures is the most noble attribute of man. — *Charles Darwin, English naturalist (1809–1882)*

Stormwater Management/Green Infrastructure

Seward Avenue Projects

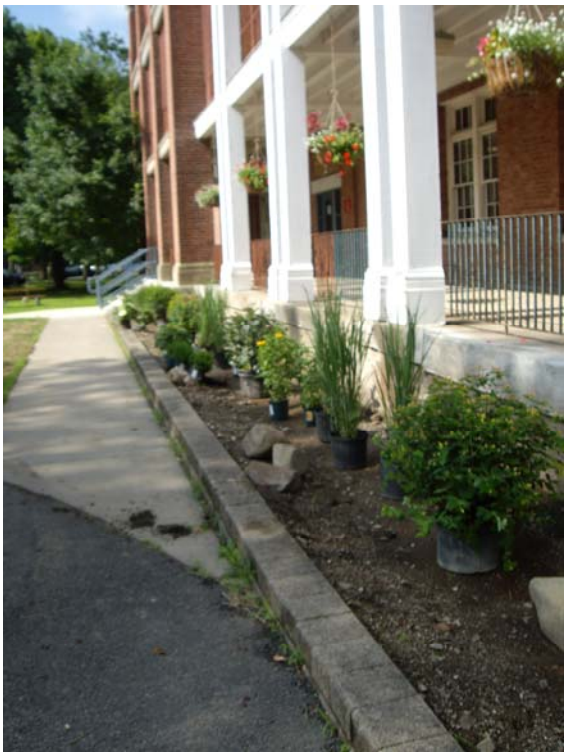
In recent years, OCSWCD has become increasingly involved in projects to demonstrate environmentally sensitive management of runoff from older urban areas. Current stormwater management laws require most new developments to implement 'runoff reduction' and related urban runoff management measures, but these laws generally do not extend to existing urbanized areas.

At Orange County's 18 Seward Avenue office building (itself a 'retrofit' of a building from the old Middletown Psychiatric Center), we have partnered with Cornell Cooperative Extension (CCE), the County of Orange and Lehman and Getz Consulting Engineers to help demonstrate how modern stormwater management measures can sometimes be 'retrofitted' into existing urban areas. Two years ago a 'rain garden' was built in front of the building. This year, with financial assistance from the New England Interstate Water Pollution Control Commission (NEIWPCC) and NYSDEC's Hudson River Estuary Program, we completed two additional runoff reduction/green infrastructure demonstration practices at this facility, and an additional practice at Warwick High School. The Warwick project was the result of a collaboration between OCSWCD, Lehman and Getz, and the Warwick Central School District. With financial assistance from Scotts Paper Company, we also completed a small rain garden at the Newburgh campus of SUNY Orange in partnership with the College and CCE.

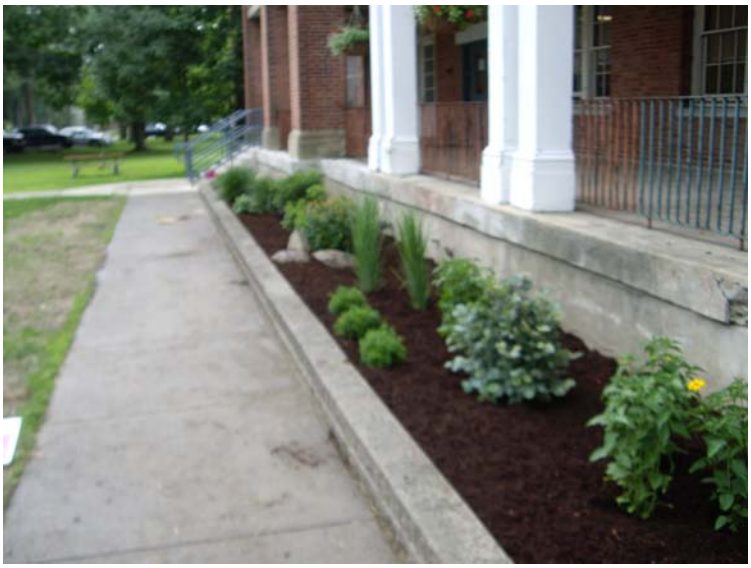


Installing under-drain in stormwater planter.

Seward Avenue Projects Continued



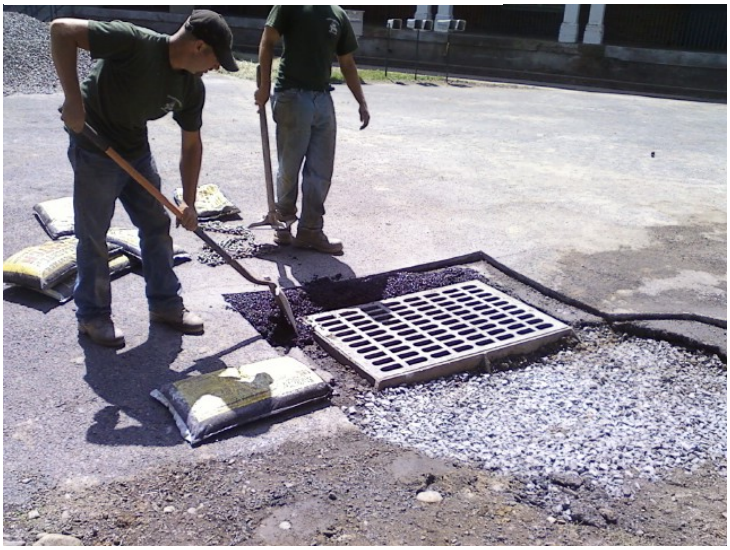
During - Plants laid out for stormwater planter.

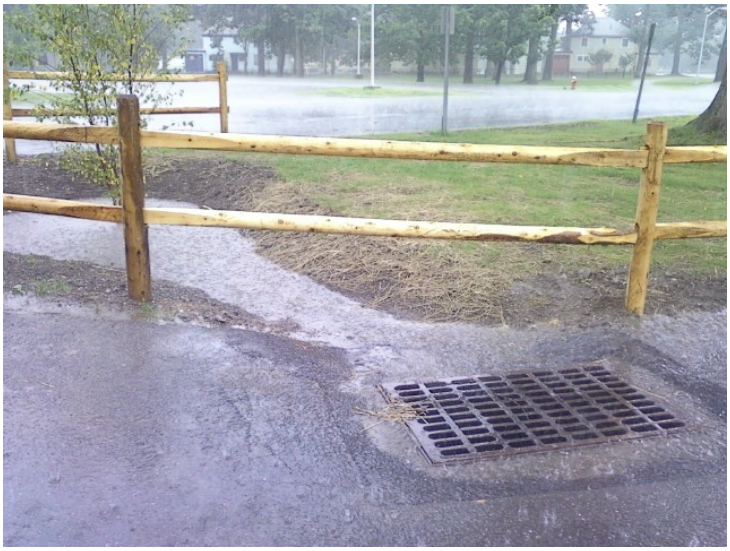


After – planting bed has been improved aesthetically, and now functions as a stormwater filtering practice.

A River Birch was chosen to anchor a 'tree filter' practice. Split rail fencing prevents vehicles from driving into the practice and improves appearance of the building.

Seward Avenue Projects Continued



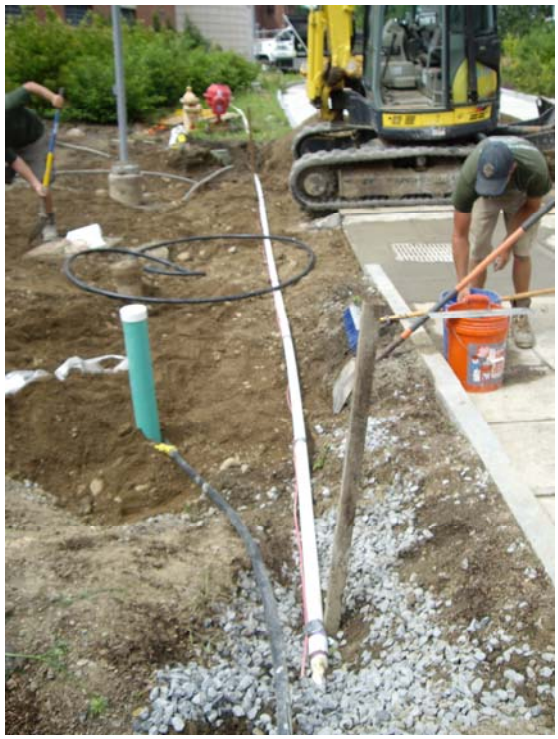


Tree Filter In Action

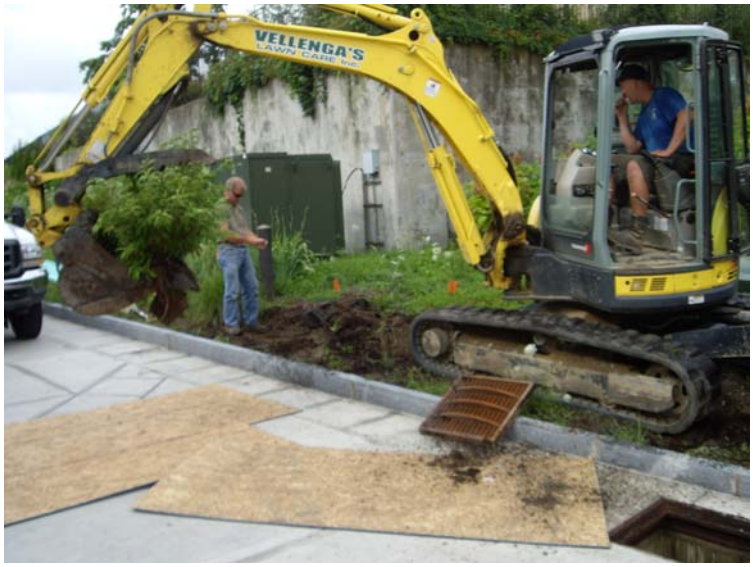
Modifications around an existing catch basin re-direct parking lot runoff to a 'tree filter' – essentially a small rain garden. Runoff filters through a select soil mix, allowing for pollutant removal, before either soaking into the native soil under the filter or draining back to the nearby catch basin via a perforated pipe.

Newburgh Rain Garden Project

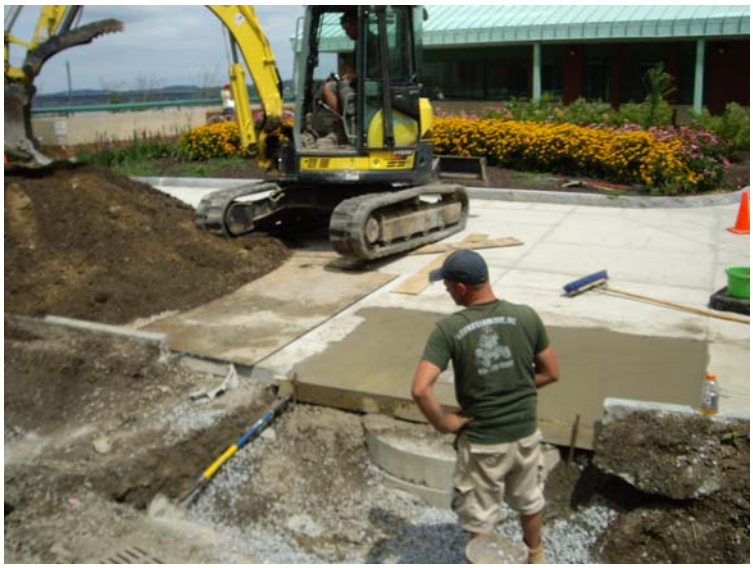
Sidewalk concrete was cut out around an existing catch basin and re-poured to direct impervious area runoff to a rain garden. A section of curbing was also removed.



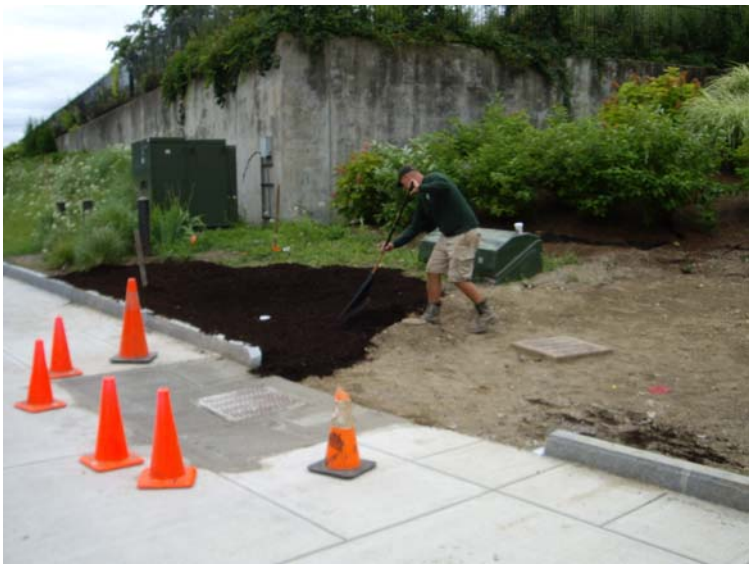
Water pipes disturbed during construction were repaired/replaced



Rain garden under-drain is outletted into existing catch basin.

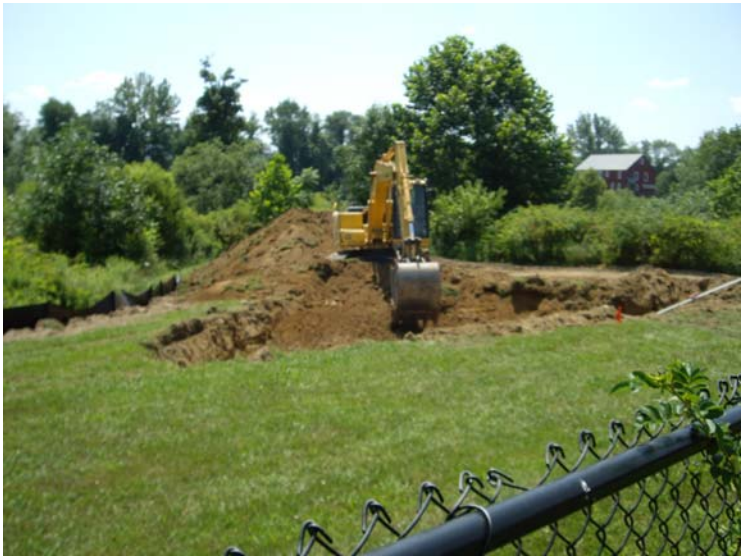


"Select soil" is added to support plants and act as filter medium.

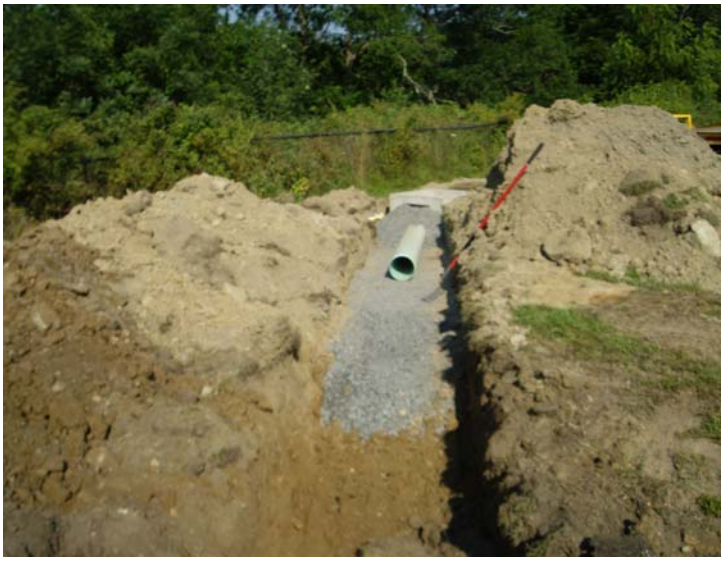


Mulch is spread over the rain garden floor, ready for planting.

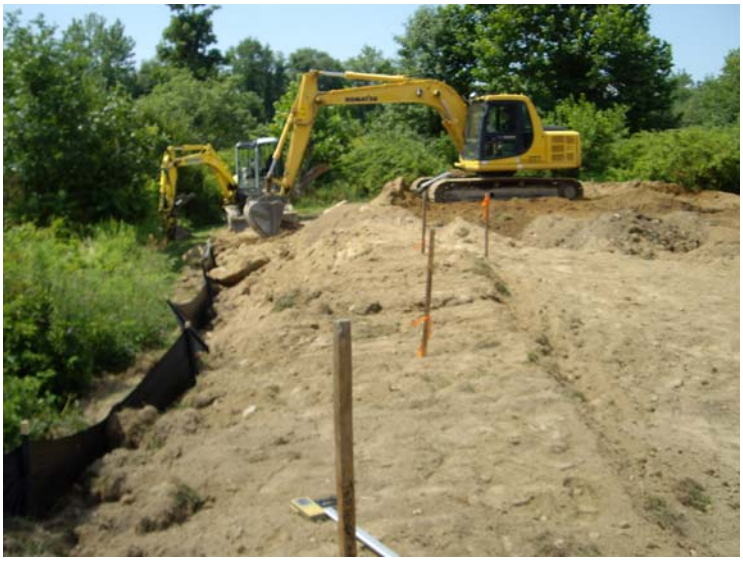
Warwick High School Bioretention Basin



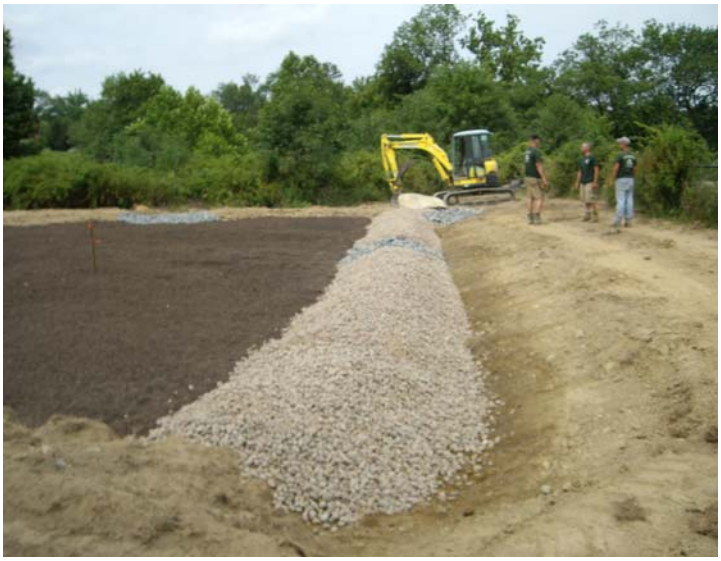
An existing mildly sloping lawn area downslope from a large parking lot offered a near-ideal location for a 'bioretention basin.'



Parking lot runoff is intercepted in an existing storm drain and diverted to a new pipe that outlets to the bioretention basin.



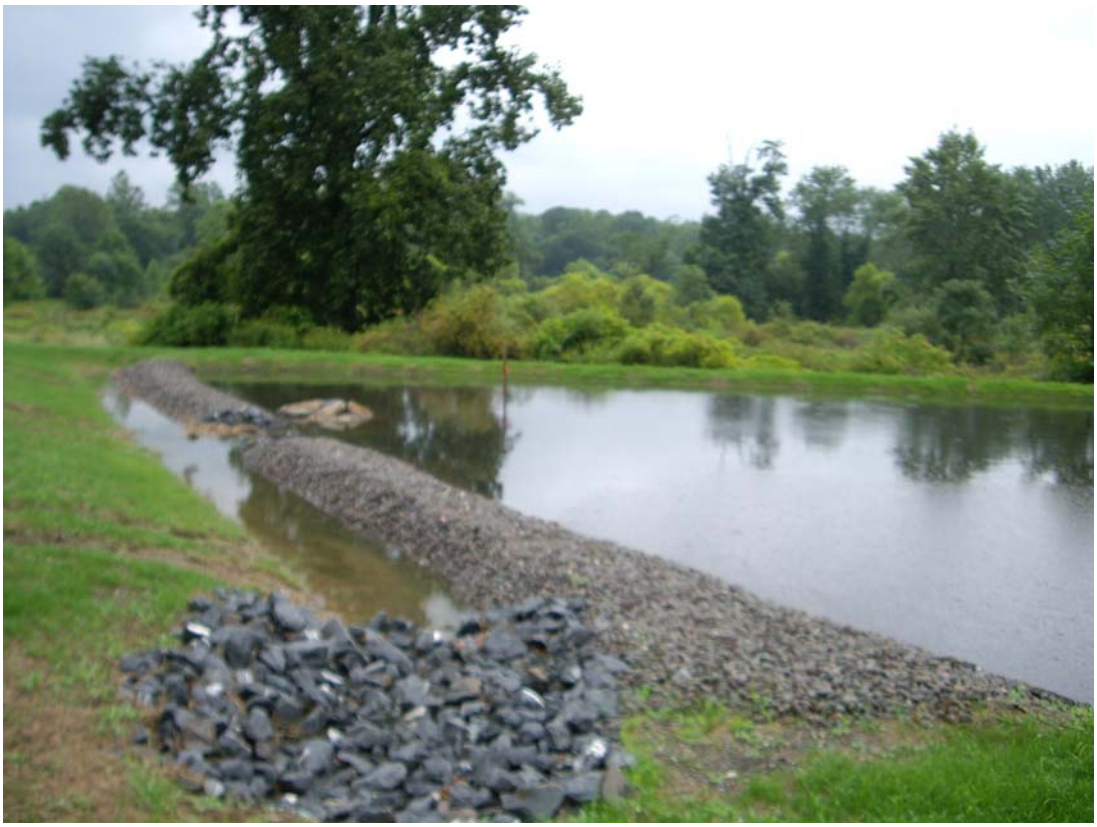
Grade stakes guide the contractor in constructing a low berm and establishing the basin to the design maximum ponding depth (about 6 inches).



A low berm covered with river rock separates the main storm water treatment area from the smaller 'forebay' where pre-treatment – mainly in the form of sediment removal – can occur.

Warwick High School Rain Garden Project Continued

Bioretention Basin near completion with mulch over the floor – ready for addition of plants. Note large asphalt parking lot in background – most of which now drains to the Basin.



Bioretention Basin in operation, protecting nearby Wawayanda Creek. Note separate pool in forebay area.