

Section 2.12

Stream-related Activities and Permit Requirements

NYS DEC Permit Requirements

Certain human activities can have a detrimental impact on water resources. New York State preserves and protects lakes, ponds, rivers and streams with Environmental Conservation Law (ECL) Title 5 of Article 15. New York State Department of Environmental Conservation created the Protection of Waters Regulatory Program to implement this policy.

All waters of the State have a classification and standard designation based on the existing or expected best usage of each water or waterway segment. The classification AA or A is assigned to waters used as a source of drinking water. Classification B indicates a best usage for swimming and other contact recreation. Classification C is for waters supporting fisheries and suitable for non-contact activities. Classification D, the lowest classification standard, reflects a best usage for fishing.

Waters with classifications, A, B, and C may also have a standard of (t), indicating that it is able to support a trout population, or (ts) indicating that it supports trout spawning; some reaches have not been documented but nonetheless support trout spawning, even though they have not yet received the (ts) designation. Special requirements apply to sustain these waters that support these valuable and sensitive fisheries resources. The Rondout Creek and most of its tributaries have a classification and standard of C(t) or higher, and as such are subject to the stream protection provision of the Protection of Waters regulation.

A Protection of Waters Permit is required for disturbing the bed or banks of a stream with a classification and standard of C(t) or higher. For example, 1) the construction of a bridge or placement of a culvert to allow access across a stream; 2) any type of stream bank protection, e.g. placement of rip-rap, or other revetment; 3) lowering stream banks to establish a stream crossing (i.e. creation of a ford); 4) using equipment to remove debris in a stream, all require a permit.

Some examples of activities which are exempt from the requirement to obtain a Protection of Waters permit are:

- 1) agricultural activities involving the crossing and re-crossing of a stream by livestock or rubber tired farm equipment at an established crossing;
- 2) removal of fallen tree limbs or trunks where material can be cabled and pulled from the stream without disruption of the stream bed or banks, using equipment placed on or above the stream bank.

There are occasions when permits from other state or local agencies are required; county or town permits, flood plain permits or other approvals may be necessary. There is no charge for the Protection of Waters Permit. For permit applications and any questions regarding the permit process contact:

NYSDEC Region 3
Bureau of Environmental Permits
21 South Putt Corners Road
New Paltz, NY 12561
(845) 256-3087
<http://www.dec.ny.gov/permits/6042.html>

Living Streamside in the Rondout: Frequently Asked Questions about Working In/Near the Stream

Stream health can be measured ecologically by the plants and animals that live in it, but also by its *riparian* (streamside) buffer area and the stability of its bed and banks. A stable stream is one that does not undergo accelerated erosion. This means the stream does not move laterally (the banks remain stable) or vertically (the stream bed does not build up or cut down) over short periods of time, or in response to average yearly flows.

Streams can be very sensitive to man-made disturbances, and without precautions, stream-related projects can quickly cause stream banks to become unstable. Experience shows that projects (such as flood control or stream bank stabilization) performed in the past have done more harm than good to the nation's waterways. Studies of these projects have contributed to the development of new technology and design practices that seek to work better with the natural ability of streams to remain stable over time.

Following are answers to some of the questions most commonly asked by homeowners about activities they are considering undertaking that may impact the health and stability of streams. Where you may need more information, contacts are provided. Please contact your local Soil and Water Conservation District office for site-specific information. Also noted are activities that may not be beneficial to overall stream health. This information constitutes some of the best professional guidance available today.

If you seek to:

1) Construct a private bridge for vehicles or foot-traffic over the stream, or install a culvert under a driveway or along a stream

Resource Guidance: Efforts should be made to avoid widening or narrowing the stream beyond its naturally stable width. Often, you can observe stable conditions in a section of stream nearby. Each stream has a stable set of dimensions (width, depth and cross sectional area), which are necessary to maintain effective sediment and water transport. Widening or narrowing can lead to stream instability that could also eventually undermine the bridge.

To minimize the potential for erosion or other problems, try to locate a bridge at a narrow and straight reach, and not on a bend. A bridge functions much better than a culvert as a stream crossing, so bridges are preferable to culverts wherever possible. A bridge spanning the entire stream will reduce potential erosion damages and prevent debris from catching on the bridge in a flood. If a culvert is absolutely necessary, the size and placement are critical to maintaining stream stability and ensuring the culvert stays in place and minimizes impact on fish passage. DEC's Habitat Unit staff can advise you on size and placement. Multiple culverts (two or more) are rarely permitted.

Permits: Depending on the specific conditions of a stream crossing (bridge or culvert) project, permits are required from the Army Corps of Engineers (ACOE), the New York State Department of Environmental Conservation (DEC) and the New York City Department of Environmental Protection (DEP). An ACOE permit is required when more than 25 cubic yards of fill material will be used below the "ordinary high water mark" (the approximate yearly flood level). Because the streambed or banks will be disturbed, stream crossing construction requires an Article 15 Stream Disturbance Permit from the DEC. Depending upon whether or not there are any drainage features (streams or wetlands) on the property that will be involved as a result of the project, it may require a Crossing, Piping and Diversion Permit (DEP). Also, if the bridge is part of new construction that involves disturbance of more than 1 acre, it must be reviewed under the DEC stormwater State Pollution Discharge Elimination System (SPDES) program. If the project will disturb more than two acres, it may need a Stormwater Pollution Prevention Permit (SPPP) from DEP.

Contacts: Start by contacting the DEC Habitat Unit staff to determine which state permits are needed. In Region 3 (Ulster and Sullivan Counties), please contact a representative of the Bureau of Habitat at 845-256-3087. For NYSDEC Stormwater permits in Region 3 contact Pat Farakane at 914-428-2505 ext. 359, and at NYCDEP, contact Brenda Drake at 845-340-7215.

2) Divert water from a stream

Resource Guidance: Any diversion of water from a stream, especially during warmer summer months, can negatively impact downstream ecology by reducing the amount of cool water available to aquatic life. This condition can be especially urgent when streamflows are naturally at their lowest levels and trout are in survival-mode. Improper installation of pumps or waterlines can also disturb the streambed or banks, and potentially initiate erosion problems that can worsen over time and move up and downstream to neighboring properties. Finally, water taken from the stream for use nearby will eventually return to the stream, often warmer or containing substances (i.e., lawn chemicals, salts, oils or soap from cars or driveways) that may further stress fish and other aquatic life, or reduce water quality for downstream users.

Permits: Any diversion must be reviewed by DEC.

Contacts: Contact the DEC Habitat Unit. In Region 3 (Ulster and Sullivan Counties), please contact a representative of the Bureau of Habitat at 845-256-3087.

3) Pave or repave a driveway near a stream

Resource Guidance: By preventing water from slowly percolating into the ground, impervious surfaces (i.e., pavement and buildings) and developed land drainage improvements can accelerate rain runoff into streams, changing the amount and timing of water they receive and in effect delivering it all in one big “gush.” Generally, by the time a watershed exceeds approximately 10% impervious land cover, the streams that capture the runoff are impaired. A particular concern is localized streambed or bank erosion that these poorly drained surfaces encourage. Localized scour and erosion problems can move upstream or downstream, quickly or slowly, and cause erosion on neighboring properties. Designing “stream friendly” drainage for existing or new impervious surfaces can reduce stream damages from stormwater runoff.

Permits: A DEC Article 15 stream disturbance permit may be required. Seek DEC guidance if the impervious surface is within 50 feet of the stream. If the disturbance is more than 1 acre, it must be reviewed under the DEC stormwater State Pollution Discharge Elimination System (SPDES) program as well. If the project will disturb more than two acres, it may need a Stormwater Pollution Prevention Permit (SPPP) from DEP. New driveways being paved for the first time will be required to have a setback from the stream under DEP’s regulations.

Contacts: Start by contacting the DEC Habitat Unit to determine what state permits are needed. In Region 3 (Ulster and Sullivan Counties), please contact a representative of the Bureau of Habitat at 845-256-3087. For DEC Stormwater permits in Region 3 call 914-428-2505 ext. 359 and at DEP, contact call 845-340-7215.

4) Cut or trim vegetation on the streambank

Resource Guidance: Stable streambanks in the Catskills are usually accompanied by healthy woody vegetation. Shrub and tree roots provide holding power for streambank soils that cannot be achieved solely with grasses or herbs. For a more thorough discussion on the role of vegetation in stabilizing streambanks, see Section 2.6. To maximize stream bank stability as well as ecological and aesthetic benefits of riparian vegetation, discontinue mowing and allow a buffer of dense vegetation to grow, or plant woody vegetation.

If you are removing a log jam (a pile of trees that have fallen into the stream and are trapping more trees and stream sediment): this requires technical assistance to ensure that the removal process does not initiate new erosion areas upstream or downstream. Log jams can cause considerable property damage. While biologically they may actually be beneficial to the stream, resource management agencies understand the property damage they can cause, and will work with you towards the most beneficial solution. If you are removing individual trees, they must be cut up into smaller pieces and removed from the stream so they will not get caught further

downstream and cause or worsen another log or debris jam. If the log jam or falling trees are not on your property, but are causing damage to your property, you must coordinate with your neighbor.

Permits: The DEC will require an Article 15 Stream Disturbance Permit if the project will disturb the bed or banks of the stream.

Contacts: Seek permit information from the DEC Habitat Unit. In Region 3 (Ulster and Sullivan Counties), please contact a representative of the Bureau of Habitat at 845-256-3087. Your local Rondout Creek Stream Management Plan Project staff can provide technical assistance; contact Karen Rauter, 845-985-2581. DEP Stream Management Program staff can also provide assistance; contact Mark Vian at 845-340-7851.

5) Stabilize an eroding streambank

Resource Guidance: Streambank stabilization is a common need in the Rondout valley. As the management plan reveals, there are eroding streambanks that threaten water quality, private property and public and private infrastructure (i.e., bridges, culverts and roads). Care should be taken in designing stabilization work to ensure that the stream is not over-widened, narrowed, or encroached upon. Borrowing fill material from nearby gravel bars in the stream should be avoided (see FAQ #7). Seek technical assistance to identify why your streambank is unstable so the solution addresses these causes; and seek a solution that does not transfer the erosion problem up or downstream. The agencies referenced below can advise you on streambank stabilization projects. Neighboring properties may need to be involved to properly address the erosion concern.

Permits: Streambank stabilization will require a DEC Article 15 Stream Disturbance Permit. An ACOE permit is required when more than 25 cubic yards of fill material will be used below the “ordinary high water mark” (the approximate yearly flood level); the DEC can advise you about determining these limits.

Contacts: Seek permit information from the DEC Habitat Unit. In Region 3 (Ulster and Sullivan Counties), please contact a representative of the Bureau of Habitat at 845-256-3087. Your local Rondout Creek Stream Management Plan Project staff can provide technical assistance; contact Karen Rauter, 845-985-2581. DEP Stream Management Program staff can also provide assistance; contact Mark Vian at 845-340-7851.

6) Build a house or other structure

Resource Guidance: Siting a new home near a stream can define your enjoyment of that stream and relationship to it. Proper location for homes and facilities must consider stream flooding behavior, no matter how high above or far back from the stream the location may appear during low flows. As some areas on the FEMA floodplain maps may contain errors due to stream channel migration or infrastructure changes over time, technical assistance is necessary to identify approximate floodplain boundaries, and design your site in as “stream friendly” a manner as possible. By giving the stream area to flood and move (because a slow rate of erosion is a natural stream adjustment process), you’ll be able to enjoy living streamside, as well as reduce home maintenance costs from streambank erosion or flood inundation.

Permits: Many permits are needed for new construction, and listing them is beyond the scope of this guidance document. If the house or structure is within 50 ft of a streambank, contact DEC to determine if an Article 15 stream disturbance permit is needed. If the house or driveway will be within 100 ft. of a perennial (flows all year round) stream, you'll need an Individual Stormwater Permit (DEP). If your project to construct a single family residence that will disturb more than 1 acre of land, you must submit a notice of intent to work and an erosion control plan to the DEC under their Stormwater State Pollution Discharge Elimination System (SPDES) program. If your project will disturb more than 2 acres, you'll need a Stormwater Pollution Prevention Permit (DEP). Your Town Code Enforcement Officer will guide you through the State and local regulations. In many communities, the building inspector serves in this capacity.

Contacts: For DEC Article 15 permits in Region 3 (Ulster and Sullivan Counties), please contact a representative of the Bureau of Habitat at 845-256-3087.

For DEC Stormwater permits in Region 3, contact Pat Farakan, and for DEP permits: Brenda Drake, 845-340-7215. Contact your Town Clerk for the number of the local code enforcement officer, and/or building inspector.

7) Extract gravel from the stream

Resource Guidance: There is a common belief that cleaning gravel from streams is necessary to improve flood conveyance capacity and reduce flooding. Others wish to use skimmed stream gravel for construction-related projects. Stream scientists promote the concept that it is important to the natural process of the stream that it must be able to move both water and sediment delivered from its watershed effectively in order to maintain its shape and provide optimum water quality and aquatic habitat. Therefore, the impacts of altering the stream channel warrant a look at the impacts not only on moving water, but also the transport of sediment (the gravel), to ensure the continued functionality of the stream. Excavating gravel usually disturbs the sensitive balance the stream maintains between its slope (steepness) and the amount and size of sediment it can move. Gravel mining reduces the amount of bed material available in the stream system, as a result the stream begins to erode its bed and banks in efforts to bring its sediment load back into balance with its slope and the amount of water in the stream. Gravel mining typically results in accelerated erosion and deposition processes that harm fish habitat. If you are removing gravel to increase flood conveyance capacity, please bear in mind that this has been found to be a damaging practice. If you are excavating gravel for construction-related projects, give consideration to non-stream sources.

Permits: DEC rarely permits gravel removal. Any removal will require a DEC Article 15 Stream Disturbance Permit. An ACOE permit is required when more than 25 cubic yards of fill material will be used below the "ordinary high water mark" (the approximate yearly flood level). The DEC can advise you about the need for an ACOE permit.

Contacts: Start by contacting the DEC Habitat Unit to determine what state permits are needed. In Region 3 (Ulster and Sullivan Counties), please call 845-256-308. Your local Rondout Creek Stream Management Plan

Project staff can provide technical assistance; contact Karen Rauter, 845-985-2581. DEP Stream Management Program staff can also provide assistance; contact Mark Vian at 845-340-7851.