

## **2.13 Stream-related Activities and Permit Requirements**

### **NYS DEC Permit Requirements**

Certain kinds of human activities can have a detrimental impact on water resources. The policy of New York State is to preserve and protect lakes, ponds, rivers and streams, as set forth in the Environmental Conservation Law (ECL) Title 5 of Article 15. To implement this policy, the New York State Department of Environmental Conservation created the Protection of Waters Regulatory Program.

All waters of the State have a classification and standard designation based on 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. Special requirements apply to sustain these waters that support these valuable and sensitive fisheries resources. The Schoharie 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 would be: 1) agricultural activities involving the crossing and recrossing of a stream by livestock or rubber tired farm equipment at an established crossing; or 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. The appropriate offices should be consulted. There is no charge for the Protection of Waters Permit. For permit applications and any questions regarding the permit process contact:

NYSDEC Region 4

Bureau of Habitat

65561 St Hwy 10

Stamford, NY 12167

(607) 652-7741

<http://www.dec.state.ny.us/website/reg4/index.html>

### **Living Streamside in the Schoharie:**

#### **Frequently Asked Questions about Working In/Near the Stream**

Everyone wants their stream to look and be healthy. 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. Streams are very sensitive to anthropogenic (man-made) disturbances, and if stream related projects do not take the necessary precautions, a stable stream can quickly become unstable. Experience has shown that many stream related projects (such as flood control or stream bank stabilization) that have been performed in the past have done far more harm than good to the nation's waterways. Studies that have focused on some of these projects have contributed to the development of new technology to better work 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.

We have also noted those 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 reach 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 should span the entire stream to 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 2 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 4 (Greene, Schoharie and Delaware Counties), contact Jerry Fraine at 607-652-7366. For DEC Stormwater permits in Region 4 contact Peter Freehafer at 518-357-2381 and at DEP, contact Brenda Drake at 845-340-7633.

## **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 4 (Greene, Schoharie and Delaware Counties), contact Jerry Fraine at 607-652-7366.

## **3) Pave or repave a driveway near a stream**

Resource Guidance: By not allowing water to slow down and percolate into the ground, impervious surfaces (i.e., pavement and buildings) and associated land drainage improvements that occur from development 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 already impaired. A particular concern is localized streambed or bank erosion that a poorly drained impervious surface can encourage. Localized scour and erosion problems can, quickly or slowly, move upstream or downstream

and cause your property or a neighbor's property to erode. 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 2 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 4 (Greene, Schoharie and Delaware Counties), contact Jerry Fraine at 607-652-7366. For DEC Stormwater permits, in Region 4, contact Peter Freehafer at 518-357-2381, and at DEP, contact Brenda Drake at 845-340-7633.

#### **4) Cut or trim streamside (riparian) vegetation on the streambank**

Resource Guidance: Stable streambanks in the Catskills usually require woody vegetation. Shrub and tree roots provide holding power for streambank soils that cannot be achieved solely by grasses or herbs. For a more thorough discussion on the role of vegetation in stabilizing streambanks, see Section 2.7. To maximize stream bank stability as well as ecological and aesthetic benefits of riparian vegetation, discontinue mowing and allow a buffer of 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. These 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 technical assistance from the DEC Habitat Unit. In Region 4 (Greene, Schoharie and Delaware Counties), contact Jerry Fraine at 607-652-7366. DEP Stream Management Program staff can provide assistance, contact Beth Reichheld at 845-340-7512, or contact your local Soil and Water Conservation District: Greene County SWCD, Rene Van Schaack at 518-622-3620.

#### **5) Stabilize an eroding streambank**

Resource Guidance: Streambank stabilization is a common need in the Schoharie valley. As the management plan has revealed, 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 you don't over-widen, narrow, or encroach upon the stream. Borrowing fill material from nearby gravel bars in the stream should be avoided (see FAQ #7). Seek technical assistance to identify the set of causes of your streambank instability problem so the solution can address 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 technical assistance from the DEC Habitat Unit. In Region 4 (Greene, Schoharie and Delaware Counties), contact Jerry Fraine at 607-652-7366. DEP Stream Management Program staff can provide assistance, contact Beth Reichheld at 845-

340-7512, or contact your local Soil and Water Conservation District: Greene County SWCD, Rene Van Schaack at 518-622-3620.

**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. Because 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. Give the stream area to flood, and to move (because a slow rate of erosion is a natural stream adjustment process), so you’ll be able to enjoy living streamside, as well as reducing home maintenance costs from streambank erosion or flood inundation.

Permits: Of course, 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 is to construct a single family residence and it 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). You will also need to follow State and local regulations, and should contact your Town code enforcement officer. In many communities, the building inspector serves in this capacity.

Contacts: For DEC Article 15 permits: In Region 4 (Greene, Schoharie and Delaware Counties), contact Jerry Fraine at 607-652-7366. For DEC Stormwater permits, in Region 4, contact Peter Freehafer at 518-357-2381, and for DEP permits: Brenda Drake, 845-340-7633. 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. Proponents of gravel mining should reflect on stream processes including the concept that a stream must effectively be able to move both water and sediment delivered from its watershed to maintain its shape and provide optimum water quality and aquatic habitat. Therefore, any stream channel alterations should consider the impact not only on moving water, but also on sediment (the gravel) transport, to ensure these qualities of a functioning stream are preserved. 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, a non-stream source should be considered.

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 4 (Greene, Schoharie and Delaware Counties), contact Jerry Fraine at 607-652-7366. You can also seek technical assistance from the DEP and/or your local Soil and Water Conservation District: Greene County SWCD, Rene Van Schaack at 518-622-3620 and the DEP Stream Management Program, contact Beth Reichheld at 845-340-7512.



## **Additional Frequently Asked Questions**

*From: A Guide to Living in Harmony with Streams by the Chemung County SWCD,*

<http://www.chemungcountyswcd.com/Tire%20Page.htm>

### **Who owns the streambed?**

New York State is the sovereign owner of the beds of “navigable waters” in the state. This ownership gives the state the right to control the bed and to ensure that navigable waterways shall forever remain public highways. A stream and any contiguous wetlands may be classified as “navigable” if it is large enough for operation of a canoe or larger boat. For information about state ownership of a waterway and the activities for which state approval is required, contact the Lands Underwater program of the NYS Office of General Services (<http://www.ogs.state.ny.us/realEstate/permits/luwfaq.html>). As a general rule, the ownership and therefore control of the bed of non-navigable streams or other non-navigable bodies of water is vested in the proprietors of the adjoining uplands, unless their deed provides otherwise. In other words, if you own the bank of a non-navigable stream, you probably own the streambed and are referred to as a riparian owner. Regardless of who owns a stream, various government entities retain police power over activities that may impact navigation, public safety, the environment, or the rights of other property owners. Owning a stream does not give you the right to do whatever you please with it.

### **Who owns the water in a stream?**

In New York State, water in a stream is not “owned” by anyone. The relevant question is: Who has the right to use water in a stream? Water rights and water laws vary from state to state. New York follows the riparian rights doctrine developed under common law. Common law means that the rules were not enacted by the legislature, but were developed by the courts through the decisions they hand down. Riparian rights doctrine allows the owners of land bordering on a watercourse to withdraw a “reasonable” amount of water. The courts have generally held that domestic use or use on the land is “reasonable,” while removal of water from the riparian property is “unreasonable.” Because all landowners along a stream have “riparian rights,” none can use the water so as to deprive the others of their rights. If a water use interferes with the “reasonable” use of another riparian owner, the aggrieved party must go to court to protect his/her rights.

## **Who is responsible for the stream?**

Restoration of stream problems is generally the responsibility of the private landowner. Although various government agencies have regulatory jurisdiction over how a stream is managed, it is not their job to come and “fix” your stream. Government highway departments generally limit their stream work to that needed for protection of roads, bridges, and culverts. Other government resources are more likely to be available to assist with a project that restores a degraded stream system, rather than one designed for localized protection of private property. For information about stream maintenance and restoration assistance, contact the Greene County Soil and Water Conservation District (518-622-3620). Responsibility for a stream does not give you the right to do whatever you consider necessary to “fix” its problems. Assume that every stream is regulated unless you determine otherwise.

## **LIABILITY**

Common Law is that body of law developed from judicial decisions, based on custom and precedent. As such, it is constantly changing by extension or by interpretation. The central point of common law is damage. The owner of a bridge, hydraulic structure, or other stream project has a legal obligation to protect adjacent landowners from damages due to changes in natural drainage that result from that project. Anyone claiming such damage may file suit in court.

*If flooding occurs or gets worse after a stream has been modified (by diverting flow, modifying the channel, constructing a bridge, etc.), is the person who made the modification liable for damages?*

Yes, quite possibly. Courts have, according to common law, followed the adage “use your own property in such a manner as not to injure that of another.” This means that no landowner, public or private, has a right to use his/her land in a way that substantially increases flood or erosion damages on adjacent lands. A municipality or property owner may thus be liable for construction, improvements, or modifications that they should reasonably have anticipated to cause property damage to adjacent property. The lack of proper planning, design, and execution thereof, may be considered a clear indication of the lack of good faith and hence negligence with regard to damages that subsequently occurred.

*May someone be held liable for failing to remedy a natural hazard that damages adjacent property?*

Sometimes. Courts have generally not held governmental units and private individuals responsible for naturally occurring hazards such as stream flooding or bank erosion that damage adjacent lands. In keeping with this principle, a municipality would not be liable for failure to restrain waters between banks of a stream or failure to keep a channel free from obstruction that it did not cause. However, a small number of courts have held that government entities may need to remedy hazards on public lands that threaten adjacent lands. In addition, land owners and governments are liable if they take actions that increase the hazards.

*Can liability arise from failure to reasonably operate and maintain a bridge, drainage structure, dam, or flood control structure?*

Possibly. The owner of a dam or other water control structure is responsible for inspecting and maintaining it. Where there is a duty to act and the risk of not acting is reasonably perceived, then failure to take appropriate actions may be considered negligent conduct.

*May a regulatory agency be liable for issuing a regulatory permit for an activity that damages other private property?*

Yes, quite possibly. In fact a careful analysis of hundreds of cases in which the lawsuit involved permitting indicates that a municipality is vastly more likely to be sued for issuing a permit for development that causes harm than for denying a permit based on hazard prevention regulations. The likelihood of a successful lawsuit against a municipality for issuing a permit increases if the permitted activity results in substantial flood, erosion or physical damage to other private property owners.

*How safe is safe enough? Municipalities regularly issue permits for activities that are in compliance with existing laws, but might still be at risk of damage.*

For example, floodplain development regulations generally apply only to areas mapped as the 100-year floodplain. Yet significant flooding and erosion damages can and do occur outside of these regulated flood-prone areas. Some municipalities address this

additional risk by attaching conditions to their approvals for those projects with identified risks. These conditions can clearly state that the municipality is not obligated to fix personal property in the event of damage. One Town granted approval for a driveway bridge that met all applicable standards, but attached material clearly warning the applicant about the hazards of driving through floodwaters, the risk that emergency vehicles may be unable to reach the house during floods, the potentially high maintenance costs, and the potential liability for the owner if the project results in damage to other property.

*May governmental units be held liable for refusing to issue permits in floodways or high-risk erosion areas because the proposed activities could damage other lands?*

No. In general, landowners have no right to make a “nuisance” of themselves. Courts have broadly and consistently upheld regulations that prevent one landowner from causing a nuisance or threatening public safety.

*What precautions can be taken to avoid liability?*

Be “reasonable.” The overall issue, in most instances, is the “reasonableness” of an action by the community or property owner. Due to advances in technology and products, there is an increasingly high standard of care for “reasonable conduct.” The “act of God” defense is seldom successful because even rare flood events are now predictable. As a precaution, technical assistance from stream professionals should be obtained prior to implementing any stream project. Because a well-designed project is less likely to damage other lands, this reduces the potential basis for legal action. And if you are sued, the best defense is a well-documented record showing “due diligence.” That is, that you have done sufficient analysis and design to demonstrate the adequacy of the project with “a reasonable degree of certainty.”