

Issue Brief from Ulster County Executive Hein on the NYC DEP Pollution of the Lower Esopus

Ulster County, PO Box 1800, 244 Fair Street, Kingston NY 12402
January 18, 2011



Dear Concerned Ulster County Citizens,

According to U.S. Supreme Court Justice Oliver Wendell Holmes, "A river is more than an amenity, it is a treasure." By dumping unprecedented amounts of polluted water down the Lower Esopus with a blatant disregard for the people of Ulster County, the New York City Department of Environmental Protection (DEP) is harming our farmers and private property owners, our environment and our drinking water. To be clear, this is not just regular muddy water. The type of concentrated muddy water being sent into the Lower Esopus is considered "pollution" by both NYS and Federal laws. After exhausting all other efforts to end this unpermitted discharge, we have no choice but to take the first steps toward filing a lawsuit against the New York City DEP. It is my hope that this Issue Brief will thoroughly explain what is happening right now in Ulster County and why it must stop.

Please join me in telling DEP, NYS Department of Environmental Conservation (NYS DEC), the U.S. Environmental Protection Agency and all of your elected officials that this continued pollution is illegal and unacceptable.

Very truly yours, Michael P. Hein, County Executive

What's Wrong with this Picture?

These are photos of the same creek, at the same time of year.

The reason for the difference between the natural blue water (right) and muddy brown water (below) is that for the past 3 1/2 months DEP has been releasing polluted water from the Ashokan Reservoir to the Lower Esopus Creek.



The problem is obvious. The Lower Esopus is "turbid" or "excessively muddy" because of DEP's release. Turbidity is a pollutant and is regulated by both NYS and Federal laws. **DEP is acting as if environmental laws don't apply to them.** Meanwhile, Ulster County's environment, recreational opportunities, agriculture, and drinking water are being damaged. **This is wrong!**

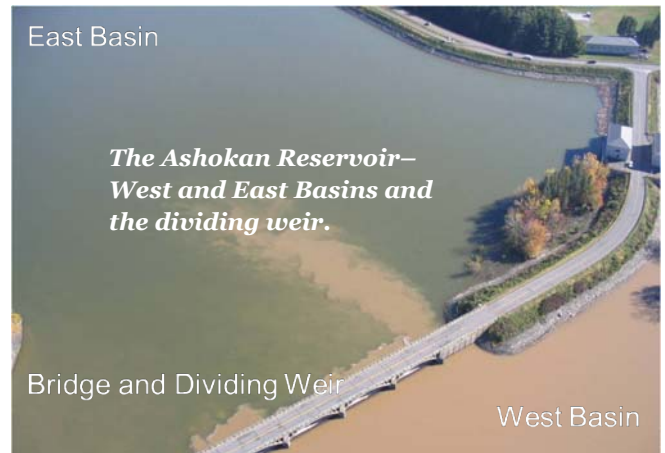
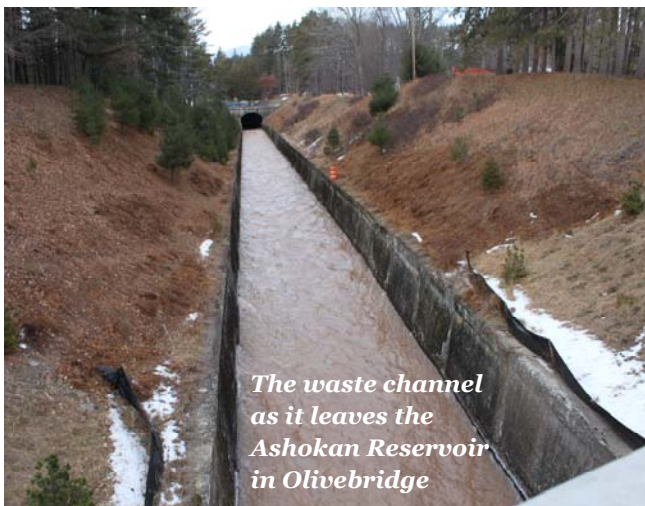
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The Esopus Creek is located in northern Ulster County where it travels sixty eight miles from the mountains of the Catskills to the Hudson River. In 1915, the City of New York completed construction of the Ashokan Reservoir by damming the Esopus Creek in Olivebridge. The Lower Esopus– the Esopus creek downstream of the dam- runs through the towns of Olive, Marbletown, Hurley, Ulster, and Saugerties as well as the City of Kingston and the Village of Saugerties.

Although the Ashokan was constructed with a “waste channel” designed to release water from the reservoir to the Lower Esopus, it was not used except for a short period in 2006 because of an emergency. In 2010, DEP instituted new operating procedures that called for releasing exceptionally turbid water from the reservoir into the Lower Esopus, as it alone deems “necessary.”

Why is DEP releasing this water? Elevated turbidity after storms is a long standing problem in the Ashokan. The designers knew this and constructed the Reservoir with two basins: the west basin which serves as a settling basin for the turbidity and the east basin which is used for drinking water.

In the past, whenever the Reservoir got especially turbid, the DEP treated the water with a chemical (Alum) to meet drinking water standards. Recently, DEP was required by NYS and the federal



Source: NYC Department of Environmental Protection

What is Turbidity? Turbidity refers to the amount of suspended solids in water and results in the water looking muddy or murky. It is a regulated pollutant under the Federal Clean Water Act and the New York State water quality standards. In the Ashokan, turbidity is specifically caused by clay deposits found in and near the streams in the Esopus watershed. Rushing water associated with storms mixes the clay sediments into surface water. The turbid surface water then flows into the Ashokan Reservoir.

government to reduce the amount of Alum used. **DEP then made a major change to its operations, behind closed doors and without community input, environmental review or rules regarding the waste channel’s operating parameters** to release turbid water from the west basin into the Lower Esopus before it could spill into the east basin, potentially harming NYC’s water quality and requiring treatment.

Why now? Two storms (October 1st and December 1st) resulted in elevated turbidity in the Ashokan. Since October 7, 2010, when releases started, over 47 billion gallons of turbid or polluted water have been sent by DEP to the Lower Esopus (and eventually to the Hudson River). That’s more than a third of the total capacity of the Ashokan Reservoir.

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Negative Impacts of Turbid Releases to the Lower Esopus

Harm to Agriculture: The Lower Esopus valley has extensive agricultural production that depends on the creek for clean irrigation water throughout the year. Turbid water can clog irrigation equipment and potentially impair the quality of the irrigation water to the point where crops cannot be sold at market.

Harm to Recreation: DEP's actions have already impaired use and enjoyment of the creek for kayaking and ice fishing. Continuing to pollute the Lower Esopus in the summer could also affect bathing beaches along the creek which must meet water clarity standards for safety.

Harm to our Water Supply: The sediment plume from the Esopus is clearly visible in the



Source: Times Herald Record

Hudson River. The Town of Esopus in Ulster County draws municipal drinking water from the Hudson River downstream of where the Esopus empties into it. During the releases, the water plant has experienced elevated turbidity readings resulting in a violation of NYS safe drinking water standards.

Harm caused by Increased Sediment Load: When a stream is turbid, the levels of light and oxygen within the water are reduced. This negatively affects everything living in the stream, from microscopic

organisms and submerged plants to aquatic insects and fish. In particular, it stresses fish and impacts their ability to feed and see their food. Fine sediment also physically impacts the stream channel by filling in the natural voids and spaces in the stream bottom. This reduces habitat for aquatic insects and smothers fish eggs and larvae.

Harm caused by Increased Water

Quantity: The increased amount of water sent by DEP into the Lower Esopus represents the single largest change to the creek's hydrologic regime (flow) since the completion of the reservoir. Unfortunately, the specific impacts of the current releases to the lower Esopus are unknown, because DEP has not provided the county with a baseline assessment prior to the release. A scientific study was needed *before* the initiation of releases.



Source: Ulster Publishing

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What's at Stake?

"The Esopus Creek is one of the jewels of the Catskill Mountains and Hudson Valley. A tributary to the mighty Hudson River, it provides drinking water, recreation, habitat and important ecological functions for the entire region." - A Journey Through Lower Esopus Creek



Sources: Kelly Myers and Chris Olney



Harm to our ecosystem, recreation, drinking water and food safety are some of the many negative impacts caused by DEP's pollution of the Lower Esopus.

What must DEP do?

The Lower Esopus is an important contributor to the quality of life for the people and places along it. It should not be the solution to NYC's turbid water problems. NYC must:

- Stop releases immediately.
- Develop clear water flood mitigation strategies.
- Rescind all decisions that led to the strategy of sending polluted water down the Esopus.
- Conduct studies involving *all parties* and consider *all alternatives*.
- Institute low-flow releases in accordance with New York State law.

◆What can you do?

- ◆ Write to your federal, state and local officials and tell them to demand that DEP stop sending polluted water to the Lower Esopus.
- ◆ Write to your local newspaper and tell them you support Ulster County suing DEP to stop the pollution.
- ◆ Visit our website at ulstercountyny.gov to voice your concerns to our elected officials.
- ◆ File a complaint with your insurance company if you live along the Esopus and are being harmed.
- ◆ File a complaint with the State Attorney General's Office (oag.state.ny.us) if you are being harmed by DEP's practices.

Ulster County
Box 1800
244 Fair Street
Kingston, NY, 12402
Phone: (845) 340-3800
exec@co.ulster.ny.us



