

Neversink River East Branch

MANAGEMENT UNIT 1

Summary of Post-Flood Recommendations

Intervention Level	Passive Restoration of the bank erosion site between Station 1140 and Station 1050 (BEMS ID # NEB1_1000) no longer necessary.
Stream Morphology	No change.
Riparian Vegetation	No change.
Infrastructure	No change.
Aquatic Habitat	No change.
Flood Related Threats	No change.
Water Quality	None.
Further Assessment	Include EBMU1 in comprehensive Local Flood Hazard Mitigation Analysis of Claryville MUs.

Stream Channel and Floodplain Current Conditions

The following description of stream morphology is the result of a survey conducted in December, 2011. “Left” and “right” references are oriented looking downstream, photos are also oriented looking downstream unless otherwise noted. Stationing references, however, proceed upstream, in feet, from an origin (Station 0) at the confluence with the Neversink Reservoir. Italicized terms are defined in the glossary.

EBMU1 begins at the downstream end of the bridge crossing of Frost Valley Road. The East and West Branches are separated by a forested corridor approximately 250-feet in width throughout most of EBMU1.

In 2010 erosion was documented on the right bank beginning at Station 1140 and continuing for approximately 90 feet until Station 1050 (BEMS ID# NEB1_1000). (See picture B407 for pre-flood condition) Moderate hydraulic scour of this 8-foot high bank had exposed cobble sized alluvial materials as well as the root structure of several trees. At the time, recommendations for this site minimally included

monitoring for future changes in condition (*passive restoration*). However, based on the lack of change observed at this site during the December, 2011 stream survey, the rate of erosion at this site does not appear to be severe enough to warrant intervention.

At Station 850 there was a v-shaped timber dam that spanned the entire width of the stream channel that was destroyed in flooding since 2010. The dam was forcing a portion of the flow into a side channel in the left floodplain which is now blocked by woody debris conveyed downstream and lodged on the floodplain during recent high flow events.



*Woody debris and sidecast blocking the left floodplain.
(P1010105)*

The stream reach from Station 850 to the confluence was excavated to open the channel after significant sediment aggradation during recent high flow events. This aggradation was likely augmented by backwatering from the confluence. Due to the restoration effort, the stream channel bed is now homogenous, and the adjacent forested floodplains are blocked by woody debris and sidecast sediments. While sediment depositional patterns shifted slightly through the remainder of this management unit, the remaining description of stream processes and resulting recommendations remain unchanged.

It is recommended that this entire MU be included in a comprehensive Local Flood Hazard Mitigation Analysis to investigate hydraulics and sediment transport in the stream corridor, from Station 10500 through the Halls Mills covered bridge on the mainstem of the Neversink River. The purpose of the analysis would be to develop options for reducing flooding threats to this relatively dense population center of the Neversink Valley.