
VI-B: Management Segment 2 (C.D. Lane Park to Hensonville CR 65)

Management Segment 2 begins at the outlet of the C.D. Lane Park Flood Control Structure and continues 3.7 miles westerly along County Routes 56 and 40. The segment extends through the Hamlet of Maplecrest and ends at Count Route 65 in Hensonville.



The segment contains twelve seasonal tributaries and the stream is spanned by five county bridges. The contributing drainage area is nine mi² at the flood control structure, and increases to 14 mi² near the end of the stream segment at County Route 65. A USGS crest stage gage, in operation since 1955, is located in the lower section of the segment near the County Route 40 bridge outside Hensonville. Importantly, the lower reach also contains a monitored Reference Reach. Stream Segment 2 is located in Valley Zone 4, which is dominated by a Type V valley with a moderately steep valley slope of 1.3%. The landform includes lateral and terminal moraines, alluvial terraces, and floodplains.

During the initial Phase I Inventory and Assessment conducted in 1997, Management Segment 2 had the least amount of measured stream bank erosion (400 feet of erosion over seven miles of stream length) and was considered to be the most stable segment of the entire Batavia Kill corridor. The dominant stream type is B3c, with small segments of C4, G and F stream types also present. The reference reach just above the hamlet of Hensonville was classified as a B3c and contains seven monumented cross sections which have been monitored by the GCSWCD and the NYCDEP Stream Management Program since 1997. Although the segment exhibits numerous signs of past modifications to the stream channel and floodplain, the stream has apparently adapted to the significantly modified hydraulic influences on the stream as a result of the flood retention structure at CD Lane Park, and appears to be highly stable. The stream segment contains a total of nine monitored cross sections that the GCSWCD has used to observe the status of the channel's stability.

During the assessment of the segment, it was apparent that both the stream's form and function were strongly influenced by the upstream flood control structure. While most of the Batavia Kill corridor has been impacted to some extent by the flood control project at C.D. Lane Park, the effect of this structure on the channel's shape (and therefore its ability to transport both water and sediment) is most readily apparent in Management Segment 2. A review of aerial photographs comparing pre-dam with post-dam stream condition shows



Figure VI-19: Review of aerial photographs from 1959 (top) and 2000 to assess flood control impacts on stream form and function.

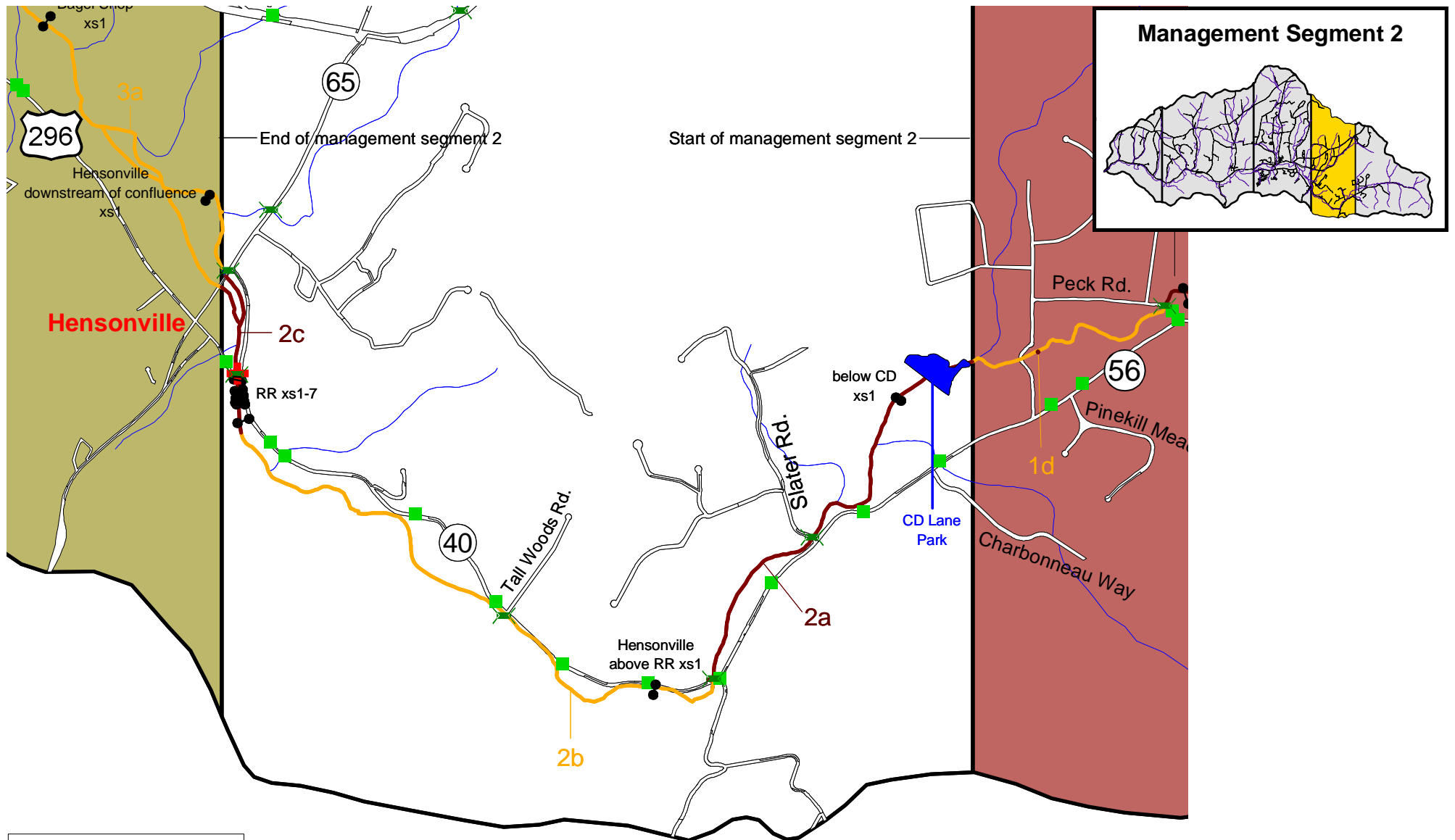
a distinct difference in sediment storage within the segment (**Figure VI-19**). In the 1959 photo (top), numerous point bars, mid channel gravel bars, and several side bars can be seen. This is characteristic of an active alluvial system with gravel and cobble being stored temporarily during transport from the headwaters to the Schoharie Creek and Schoharie Reservoir. By 2000 (bottom photo), these depositional features are notably absent, and the riparian vegetation has grown in stream-side areas that were once too active to be colonized by vegetation. The absence of in-channel sediment features (such as point bars) is a classic response to impoundments because they capture and trap the natural sediment supply from above. The aerial photographs also indicate a clearly discernable change in overall channel stability. In the 1959 photo, the lack of riparian vegetation and active erosion can be seen in several areas. Because the flood control dam has limited higher flows through the segment, the channel is experiencing very little streambank erosion or other adjustment processes.

As seen in **Figure VI-20**, the channel has good riparian vegetation and a stable, well imbricated streambed. The willows seen in the photo have colonized a depositional feature that is no longer actively scoured because CD Lane Park is holding back flows that would mobilize the sediments.

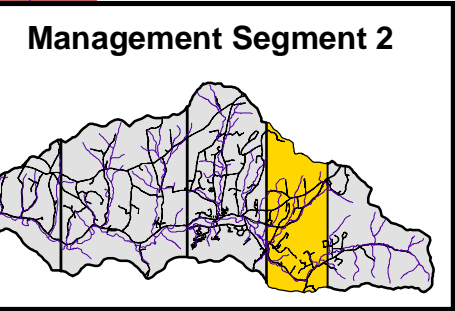
Management Segment 2 was further subdivided into three reaches to facilitate data collection and analysis (**Map VI-3**). In the following sections, the GCSWCD has summarized the stream condition, on-going stream processes, and recommendations for this segment.



Figure VI-20: Riparian vegetation to the stream's edge.



- Cross Section (xs)
- ✕ Bridges
- Culvert
- ⊕ Gage
- ▾ Management Reach 2a & 2c
- ▾ Management Reach 2b
- Management Segments
- ▬ Streams
- ▬ Roads



Batavia Kill Watershed
Segment 2 Management Reaches
 Map VI-3
 Greene County Soil & Water Conservation District
 Batavia Kill Stream Management Plan

Management Segments & Reaches-GCSWCD, based on management segments and reaches detailed in Batavia Kill Stream Management Plan.
 Map produced by Greene County Soil & Water Conservation District, January 2002.
 Note: GIS data are approximate according to their scale and resolution.
 They may be subject to error and are not a substitute for on-site inspection or survey.
 Data sources are located in list of figures, tables, and maps.