Dents Run 3895 Passive Treatment System
SRI O&M TAG Project #32 Request #2
OSM PTS ID: PA-278

Requesting Organization: Elk County Conservation District
Requesting Organization Representative: Micaela Lefever
Dates of work performed: 5/24/2023-6/27/2023

Initial Request: On 4/20/2023 a request was made to address concerns with sediment buildup and short circuiting from the Sediment Basin 1 (SB1) overflow structure.

Initial Site Visit, Observations, and Identified Needs: Vegetation and sediment build up within the Oxidation and Precipitation Channel 3 (OPC3), combined with a lower section of the channel embankment created a condition where water was close to overtopping in some areas. The riser extension for the SB1 overflow was dislodged, causing a portion of the system flow to receive only partial treatment and bypass the lower portion of the system.

Work Completed: Vegetation and metal precipitates were removed from the OPC3 to ensure water continues to be conveyed within the bounds of the channel. Material was removed from the outlet of the type M inlet box which flows to OPC3 to provide more settling capacity as a “stilling pool” within the system. As the weir from the type M inlet box is typically submerged, it was removed and left on site if installation is desired in the future.

To address the low areas of the OPC3 embankment, material was taken from the higher spots and used to increase the berm height of the channel in the lower elevation spots. Combined with clearing material from OPC3, this should provide a long-term solution for sediment retention within OPC3.

The leaks from the overflow riser within the settling pond has been a challenge since construction of the system. A 42” coupler was obtained and installed with the riser extension using spray foam to attempt to seal any gaps at the union. A minimal amount of water was pumped while performing the repair, but sludge capacity within the pond limited the ability of the pond to drain without a location to pump sludge. Unfortunately, a small amount of water was still leaking into the riser pipe after the repair. An additional effort will be needed to limit overflow and direct all flow into OPC3. Due to SB1 being essentially full sludge removal is needed before a permanent repair to the SB1 outlet riser can be made.

Recommendations & Future Considerations: Sediment Basin 1 (SB1) is essentially full and needs to be cleaned in the near future. Geotubes, pumped water filter bags, or sediment pond construction could be considered depending on the site conditions and desires of the landowner and interested parties.

Photo Log

Top Left : OPC3 full of cattails and sediment prior to removal (5/24/23).
Top Right: Re-attached SB1 overflow extension (6/23/23).
Bottom Left: OPC3 was cleared of material and the embankment height was raised (6/23/23).
Bottom Right: OPC3 embankment was re-seeded and mulched (6/23/23).

Photo Log

Top Left : Leaking SB1 overflow extension prompted repairs (6/22/23).
Top Right: OPC3 inlet weir was removed due to minimal usability (6/22/23).
Bottom Left: SB1 almost entirely full of sediment and in need of further maintenance (6/22/23).
Bottom Right: OPC3 type M inlet box “stilling pool” was excavated (6/16/23).