Yellow Creek 2C Passive Treatment System
SRI O&M TAG Project #53 Request #4
OSM PTS ID: PA-122

Requesting Organization: Blacklick Creek Watershed Association (in-kind partner)
Requesting Organization Representative: Dennis Remy
Dates of work performed: 3/2/2023-3/15/2023

Initial Request: On 9/22/2022, the Blacklick Creek Watershed Association (BCWA) requested assistance for a clogged pipe from the forebay at Yellow Creek 2C.

Initial Site Visit, Observations, and Identified Needs: As both BioMost and Stream Restoration Incorporated were familiar with the system and the issue appeared to be straightforward, an initial assessment was not conducted based on information provided by BCWA.

Work Completed: On March 2, 2023, BioMost, Inc mobilized to the site. It was observed that a portion of the flow from the forebay nearest to the access road was flowing with a majority of the flow from that pond flowing over the emergency spillway. An industrial sewer snake was utilized to attempt to clear any material blockages within the pipe with limited success, both from the upstream and downstream ends of the pipe. An apparent blockage was located near the road crossing. On 3/3/2023 an access hole was cut near the road culvert to assess the blockage and it was determined that the pipe was compromised. Further materials were needed to repair the pipe.

On 3/15/2023 the section of culvert underneath the road was excavated and replaced. Steel plates reinforced with a poured concrete base were placed over the driven sections of the road and buried. Proximity to a gas line on the east side of the road and a water supply line on the west side limited the burial depth of the culvert pipe. Placing steel plates above the pipe should reduce the chances of future damage to the pipe. Full flow from the forebay was observed to exit to the VFR after repairs were completed.

Of note, flow from the VFR outlet pipe prior to maintenance was approximately 0.05 gpm with 11 gpm entering the VFR, indicating a leak somewhere in the VFR embankment. Additionally, the system was designed with multiple inputs, both the current water from the forebay as well as a partial stream intake which currently does not enter the system due to challenges with the intake regularly clogging.

Recommendations & Future Considerations: On-going water monitoring and site inspections should continue. Debris should be cleared periodically from the mine discharge to reduce future maintenance needs. Agri-drain stop logs could be removed to see if lowering the water level in the VFR might enable enough head pressure to direct flow through the system rather than leaking through the embankment. Options should be explored for funding to rebuild the system.

Photo Log

Top Left: The 12” N-12 pipe was snaked from both ends (3/2/23).
Top Right: Access ports were drilled into the culvert and snaked (3/2/23).
Bottom: The culvert was excavated and damaged sections removed (3/15/23).

Top: A new section of 12” N-12 culvert was installed to replace the damaged sections (3/15/23).
Bottom: The culvert was bedded in concrete and steel plates were installed above the pipes along the tire tracks (3/15/23).