## McIntire Passive Treatment System SRI O&M TAG Project #70 Request #1 OSM PTS ID: PA-249

<u>Requesting Organization:</u> Slippery Rock Watershed Coalition <u>Requesting Organization Representative:</u> Cliff Denholm <u>Municipality/County:</u> Marion Township, Butler County <u>Dates of work performed:</u> 4/28/2020-4/30/2020

<u>Initial Request:</u> On 3/18/2020, the Slippery Rock Watershed Coalition (SRWC) requested assistance for the McIntire passive treatment system. The SRWC reported several issues at the site including:

- The influent pipe to TB1 was plugged causing water to flow on the access road to the Oak Ridge Pointing Dog Club building.
- The pipe at end of OPC for flow measurements had been washed out.
- The JVFP and wetland outlet channels were clogged with vegetation and debris.
- The outlet of HFLB2 was partially underwater preventing flow measurements.
- The SP1 final effluent spillway was experiencing significant erosion.

<u>Work Completed:</u> In April 2020, BioMost mobilized to the site. Large riprap was located on site and utilized to stabilize the system outlet channel near SB1. A flow measurement riser was installed at the outlet of the second HFLB (902-HFLB2). The JVFP outlet channel (902-JVFP) was cleared of vegetation to reduce chances of overtopping the embankment. A flow measurement pipe was re-installed at the outlet of the OPC into AFVFP (902-OPC). The pipe from the Forebay to the Treatment Basin (TB1) pond was excavated, snaked, and cleared of debris and iron sediment. OPC vegetation was removed as needed to maintain flow paths within the treatment system.

<u>Recommendations & Future Considerations:</u> Consider removal of the forebay outlet pipe to the Treatment Basin and constructing a channel in its place to reduce future maintenance challenges. Alternatively, a larger diameter culvert pipe could be installed and cleaned regularly to improve access for the Dog Club. Monitor the system outlet near SB1 to confirm riprap/boulders placed is an adequate erosion control measure. Photo Log



Top Left: A riser was installed at 902-HFLB2 for flow measurement (4/29/20).
Top Right: 902-JVFP outlet risers were cleared of vegetation (4/29/20).
Bottom Left: Riprap was added to the system outlet channel at SB1 to manage erosion (4/28/20).
Bottom Right: JVFP outlet channel after vegetation removal (4/29/20).



**Top Left:** Flow from collection pond above MC1/MC2 pipes was restricted due to low pH iron causing water to overtop the embankment.

Top Right: 902-OPC flow measurement pipe was reinstalled.

**Bottom Left:** MC1/MC2 pipes were excavated restoring designed flow paths to the Treatment Basin. **Bottom Right:** Treatment Basin elevation dropped after clearing iron precipitates from OPC.