Cottagetown Passive Treatment System

SRI O&M TAG Project #63 Request #2

OSM PTS ID: PA-28

Requesting Organization: Shade Creek Watershed Association (SCWA)
Requesting Organization Representative: Jeff Sarver
Dates Work Performed On-Site: 11/1/2023- 11/3/2023

Initial Request: Jeff Sarver of SCWA requested assistance with repair of a leaking valve at the Cottagetown passive treatment system and indicated concern about treatment performance.

Work Completed: BioMost mobilized with a mini excavator to remove the leaking flush valve for the VFP 11/1/23. After excavation and removal of the old valve, the pond was flushed overnight. On 11/2/23 a replacement (Valterra) gate valve was installed and backfilled. Functionality of the valve was checked on 11/9/23. Water is now properly flowing through the system.

Results and Discussion

Water monitoring of the system was last conducted by the Shade Creek Watershed in May 2025 as part of the Statewide Passive Treatment Snapshot. The sampling (see table below) indicated that the system is still performing fairly well and is producing net-alkaline water and removing the majority of the metals. The influent sample indicates that the discharge may be improving and the existing system may last longer.

Monitoring results at Cottagetown Passive Treatment System on 5/20/2025

Point	Lab pH	Lab Alk	Acidity	T. Fe	T. Mn	T. Al	SO4	TSS
MRCT1 (Raw)	5.53	15	9	4.5	0.9	1.5	197	<5
MRCT3 (Effluent)	7.10	39	-25	0.1	0.6	0.3	278	<5

No flow measurements or other field parameters were measured. All measurements for alkalinity, acidity, metals, sulfate, and total suspended solids (TSS) are in mg/L.

Recommendations & Future Considerations: On-going water monitoring and site inspections should continue. As the treatment system is now more than 25 years old, it may be time to consider rehabilitation, especially if treatment performance begins to decline. Ideally, additional water monitoring including flow measurements should be conducted monthly for a year prior to a new design.

Photo Log

Top Left: Old VFP wetland flush valve was exposed to confirm poor condition (11/1/23).
Top Right: Standing water was visible in the old valve riser casing prior to excavation (11/1/23).
Bottom Left: Installation of replacement valve (11/2/2023).
Bottom Right: Installation of replacement valve completed with T-post re-used as marker (11/3/23).