

Quassaick Creek Watershed Alliance

Stream @ Road Crossing's Data

Date: 8/25/14 Time: 2:00 pm Air Temp:

Stream Name: Silver Stream Trib. at Port Authorities SPDES discharge

County: Orange Municipality: Town of New Windsor

Road name @ stream crossing: Moores Hill Road

Lon.41.5023; lat.-74.0371

Location description: Stewart Airport off First Street at SPDES Permit 11 discharge

Participants: Ted Kohlmann, John Gebhards, Peter Smith

Report Contact: John Gebhards

Past 48 hour weather conditions: dry

Describe Steam Conditions: (algae growth, aquatic plants, marsh, wooded swamp, bank erosion, impoundments, channelization, litter) and Riparian Conditions: (residential or industrial development, agriculture, feed lots, quarries, woodlands)

Up Stream conditions: Two out falls at this location. Both had low clear flow. The westerly outfall from a metal culvert had some watercress growing in it, then 20 feet down stream a heavy iron oxide sludge is present. The easterly outfall had a very low flow from a concrete culvert and was clear. No evidence of contamination.

Down Stream conditions: very low flow

Stream Flow (Streamwalk nomenclature):

Stream width: a few feet, headwaters of this minor trib.

Comments: Iron bacteria colonize the transition zone where de-oxygenated water from an [anaerobic](#) environment and produce a sticky slime which is typically rusty in color, but may be yellow, brown, or grey. Groundwater may be naturally de-oxygenated by decaying vegetation in [swamps](#); and useful mineral deposits of [bog iron](#) ore have formed where that groundwater has historically emerged to be exposed to atmospheric oxygen.^[4] [Anthropogenic](#) sources like [landfill leachate](#), [septic drain fields](#), or leakage of light [petroleum](#) fuels like [gasoline](#) are other possible sources of organic materials allowing soil [microbes](#) to de-oxygenate groundwater.

Photo:

Westerly Outfall /c watercress



Easterly Outfall

