

**Stream & Location:** Cuyahoga River Dst. of Big Creek **RM:** 07.00 **Date:** 7/19/18

**DA:** Sochalety Station Period: 2.03 **Scorers Full Name & Affiliation:** Northeast Ohio Regional Sewer District

**River Code:** - **STORET #:** - **Lat./ Long.:** 41.4497 18.085 **Office verified location**

**1] SUBSTRATE** Check **ONLY** Two substrate **TYPE BOXES**; estimate % or note every type present

<p><b>BEST TYPES</b></p> <input type="checkbox"/> BDR / SLABS [10] <input type="checkbox"/> BOULDER [9] <input type="checkbox"/> COBBLE [8] <input type="checkbox"/> GRAVEL [7] <input checked="" type="checkbox"/> SAND [6] <input type="checkbox"/> BEDROCK [5]	<p><b>POOL RIFFLE</b></p> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<p><b>OTHER TYPES</b></p> <input type="checkbox"/> HARDPAN [4] <input type="checkbox"/> DETRITUS [3] <input type="checkbox"/> MUCK [2] <input type="checkbox"/> SILT [2] <input type="checkbox"/> ARTIFICIAL [0]	<p><b>POOL RIFFLE</b></p> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p><b>ORIGIN</b></p> <input type="checkbox"/> LIMESTONE [1] <input checked="" type="checkbox"/> TILLS [1] <input type="checkbox"/> WETLANDS [0] <input type="checkbox"/> HARDPAN [0] <input type="checkbox"/> SANDSTONE [0] <input type="checkbox"/> RIP/RAP [0] <input type="checkbox"/> LAGUSTURINE [0] <input type="checkbox"/> SHALE [-1] <input type="checkbox"/> COAL FINES [-2]	<p><b>QUALITY</b></p> <input checked="" type="checkbox"/> HEAVY [-2] <input type="checkbox"/> MODERATE [-1] <input type="checkbox"/> NORMAL [0] <input type="checkbox"/> FREE [1] <input checked="" type="checkbox"/> EXTENSIVE [-2] <input type="checkbox"/> MODERATE [-1] <input type="checkbox"/> NORMAL [0] <input type="checkbox"/> NONE [1]
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**NUMBER OF BEST TYPES:**  4 or more [2]  3 or less [0]

**Comments:** 12 2 4

**2] INSTREAM COVER** Indicate presence 0 to 3: 0-Absent; 1-Very small amounts or if more common of marginal quality; 2-Moderate amounts, but not of highest quality or in small amounts of highest quality; 3-Highest quality in moderate or greater amounts (e.g., very large boulders in deep or fast water large diameter log that is stable, well developed rootwad in deep / fast water, or deep, well-defined, functional pools)

<p><input type="checkbox"/> UNDERCUT BANKS [4]  <input type="checkbox"/> OVERHANGING VEGETATION [1]  <input type="checkbox"/> SHALLOWS (IN SLOW WATER) [1]  <input checked="" type="checkbox"/> ROOTMATS [1]</p>	<p><input type="checkbox"/> POOLS &gt; 70cm [2]  <input type="checkbox"/> ROOTWADS [1]  <input type="checkbox"/> BOULDERS [1]</p>	<p><input type="checkbox"/> OXBOWS, BACKWATERS [1]  <input type="checkbox"/> AQUATIC MACROPHYTES [1]  <input type="checkbox"/> LOGS OR WOODY DEBRIS [1]</p>	<p><b>AMOUNT</b>  <input type="checkbox"/> EXTENSIVE &gt;75% [11]  <input type="checkbox"/> MODERATE 25-75% [7]  <input type="checkbox"/> SPARSE 5-&lt;25% [3]  <input type="checkbox"/> NEARLY ABSENT &lt;5% [1]</p>
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**Comments:** 1 4 1 3

**3] CHANNEL MORPHOLOGY** Check ONE in each category (Or 2 & average)

<p><b>SINUOSITY</b></p> <input type="checkbox"/> HIGH [4] <input type="checkbox"/> MODERATE [3] <input checked="" type="checkbox"/> LOW [2] <input type="checkbox"/> NONE [1]	<p><b>DEVELOPMENT</b></p> <input type="checkbox"/> EXCELLENT [7] <input type="checkbox"/> GOOD [5] <input type="checkbox"/> FAIR [3] <input type="checkbox"/> POOR [1]	<p><b>CHANNELIZATION</b></p> <input checked="" type="checkbox"/> NONE [6] <input type="checkbox"/> RECOVERED [4] <input type="checkbox"/> RECOVERING [3] <input type="checkbox"/> RECENT OR NO RECOVERY [1]	<p><b>STABILITY</b></p> <input type="checkbox"/> HIGH [3] <input type="checkbox"/> MODERATE [2] <input type="checkbox"/> LOW [1]
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**Comments:** 1.5 1 (2.5) 5 (9.5) 2. (9.5)

**4] BANK EROSION AND RIPARIAN ZONE** Check ONE in each category for EACH BANK (Or 2 per bank & average)

<p><b>EROSION</b></p> <input checked="" type="checkbox"/> NONE / LITTLE [3] <input type="checkbox"/> MODERATE [2] <input type="checkbox"/> HEAVY / SEVERE [1]	<p><b>RIPARIAN WIDTH</b></p> <input type="checkbox"/> WIDE > 50m [4] <input type="checkbox"/> MODERATE 10-50m [3] <input type="checkbox"/> NARROW 5-10m [2] <input type="checkbox"/> VERY NARROW < 5m [1] <input type="checkbox"/> NONE [0]	<p><b>FLOOD PLAIN QUALITY</b></p> <input type="checkbox"/> FOREST, SWAMP [3] <input type="checkbox"/> SHRUB OR OLD FIELD [2] <input type="checkbox"/> RESIDENTIAL, PARK, NEW FIELD [1] <input type="checkbox"/> FENCED PASTURE [1] <input type="checkbox"/> OPEN PASTURE, ROWCROP [0]	<p><b>CONSERVATION TILLAGE [1]</b>  <input type="checkbox"/> URBAN OR INDUSTRIAL [0]  <input type="checkbox"/> MINING / CONSTRUCTION [0]</p>
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**Comments:** 3 3 0.75

**5] POOL / GLIDE AND RIFFLE / RUN QUALITY**

<p><b>MAXIMUM DEPTH</b>          Check ONE (ONLY)  <input checked="" type="checkbox"/> &gt; 1m [6]  <input type="checkbox"/> 0.7-1m [4]  <input type="checkbox"/> 0.4-0.7m [2]  <input type="checkbox"/> 0.2-0.4m [1]  <input type="checkbox"/> &lt; 0.2m [0]</p>	<p><b>CHANNEL WIDTH</b>          Check ONE (Or 2 &amp; average)  <input type="checkbox"/> POOL WIDTH &gt; RIFFLE WIDTH [2]  <input type="checkbox"/> POOL WIDTH = RIFFLE WIDTH [1]  <input type="checkbox"/> POOL WIDTH &lt; RIFFLE WIDTH [0]</p>	<p><b>CURRENT VELOCITY</b>          Check ALL that apply  <input type="checkbox"/> TORRENTIAL [-1]  <input type="checkbox"/> VERY FAST [1]  <input type="checkbox"/> FAST [1]  <input checked="" type="checkbox"/> MODERATE [1]  <input type="checkbox"/> SLOW [1]  <input type="checkbox"/> INTERSTITIAL [-1]  <input type="checkbox"/> INTERMITTENT [-2]  <input type="checkbox"/> EDDIES [1]</p>	<p><b>Recreation Potential</b>  <b>Primary Contact</b>  <b>Secondary Contact</b>          (circle one and comment on back)</p>
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**Comments:** 6 1 2

Indicate for functional riffles; Best areas must be large enough to support a population of riffle-obligate species: Check ONE (Or 2 & average).  NO RIFFLE [metric=0]

<p><b>RIFFLE DEPTH</b></p> <input type="checkbox"/> BEST AREAS > 10cm [2] <input type="checkbox"/> BEST AREAS 5-10cm [1] <input type="checkbox"/> BEST AREAS < 5cm [metric=0]	<p><b>RUN DEPTH</b></p> <input type="checkbox"/> MAXIMUM > 50cm [2] <input type="checkbox"/> MAXIMUM < 50cm [1]	<p><b>RIFFLE / RUN SUBSTRATE</b></p> <input type="checkbox"/> STABLE (e.g., Cobble, Boulder) [2] <input type="checkbox"/> MOD. STABLE (e.g., Large Gravel) [1] <input type="checkbox"/> UNSTABLE (e.g., Fine Gravel, Sand) [0]	<p><b>RIFFLE / RUN EMBEDDEDNESS</b></p> <input type="checkbox"/> NONE [2] <input type="checkbox"/> LOW [1] <input type="checkbox"/> MODERATE [0] <input type="checkbox"/> EXTENSIVE [-1]
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**Comments:** 0

**6] GRADIENT** (2.03 ft/mi)  VERY LOW - LOW [2-4]  MODERATE [6-10]  HIGH - VERY HIGH [10-5]

**DRAINAGE AREA** (786.0 mi<sup>2</sup>)

**% POOL:**  **% GLIDE:**   
**% RUN:**  **% RIFFLE:**

**Comments:** 10

Comment RE: Reach consistency/Is reach typical of stream?, Recreation/Observed - Inferred, Other/Sampling observations, Concerns, Access directions, etc.

**A) SAMPLED REACH**

Check ALL that apply

**METHOD**

- BOAT
  - WADE
  - L. LINE
  - OTHER
- STAGE**
- 1st -sample pass-- 2nd
  - HIGH
  - UP
  - NORMAL
  - LOW
  - DRY

**DISTANCE**

- 0.5 Km
- 0.2 Km
- 0.15 Km
- 0.12 Km
- OTHER

**CLARITY**

- 1st -sample pass-- 2nd
- < 20 cm
- 20-40 cm
- 40-70 cm
- > 70 cm/GTB
- SECCHI DEPTH

**CANOPY**

- > 85% - OPEN
- 55% - 85%
- 30% - 55%
- 10% - 30%
- < 10% - CLOSED

**C) RECREATION**

AREA DEPTH  
POOL:  >100ft<sup>2</sup>  >3ft

**B) AESTHETICS**

- NUISANCE ALGAE
- INVASIVE MAGROPHYTES
- EXCESS TURBIDITY
- DISCOLORATION
- FOAM / SCUM
- OIL SHEEN
- TRASH / LITTER
- NUISANCE ODOR
- SLUDGE DEPOSITS
- CSOs/SSOs/OUTFALLS

**D) J MAINTENANCE**

- PUBLIC / PRIVATE / BOTH / NA
- ACTIVE / HISTORIC / BOTH / NA
- YOUNG-SUCCESSION-OLD
- SPRAY / SNAG / REMOVED
- MODIFIED / DIPPED OUT / NA
- LEVEED / ONE SIDED
- RELOCATED / CUTOFFS
- MOVING-BEDLOAD-STABLE
- ARMoured / SLUMPS
- ISLANDS / SCoured
- IMPOUNDED / DESICCATED
- FLOOD CONTROL / DRAINAGE

**E) ISSUES**

- WWTP / CSO / NPDES / INDUSTRY
- HARDENED / URBAN / DIRT&GRIME
- CONTAMINATED / LANDFILL
- BMPs-CONSTRUCTION-SEDIMENT
- LOGGING / IRRIGATION / COOLING
- BANK / EROSION / SURFACE
- FALSE BANK / MANURE / LAGOON
- WASH H<sub>2</sub>O / TILE / H<sub>2</sub>O TABLE
- ACID / MINE / QUARRY / FLOW
- NATURAL / WETLAND / STAGNANT
- PARK / GOLF / LAWN / HOME
- ATMOSPHERE / DATA PAUCITY

**F) MEASUREMENTS**

- width
- depth
- max. depth
- bankfull width
- bankfull depth
- W/D ratio
- bankfull max. depth
- floodprone x<sup>2</sup> width
- entrench. ratio

Legacy Tree:

**Stream Drawing:**

