

Stream & Location: Hemlock Creek by Donna Rene Dr.

RM: 2.50 Date: 7/15/21

Scorers Full Name & Affiliation: Justin Telep Northeast Ohio Regional Sewer District

River Code: 19-001-008 STORET #: 303700 Lat./Long.: 41.3762 -81.6629 Office verified location ☐1] SUBSTRATE Check ONLY Two substrate TYPE BOXES;
estimate % or note every type present

Check ONE (Or 2 & average)

BEST TYPES

☐ BLDR / SLABS [10]
☐ BOULDER [9]
☐ COBBLE [8]
☒ GRAVEL [7]
☐ SAND [6]
☒ BEDROCK [5]

POOL RIFFLE

OTHER TYPES

☐ HARDPAN [4]
☐ DETRITUS [3]
☐ MUCK [2]
☐ SILT [2]
☐ ARTIFICIAL [0]

POOL RIFFLE

ORIGIN

☐ LIMESTONE [1]
☐ TILLS [1]
☐ WETLANDS [0]
☐ HARDPAN [0]
☐ SANDSTONE [0]
☐ RIP/RAP [0]
☐ LACUSTURINE [0]
☐ SHALE [-1]
☐ COAL FINES [-2]

QUALITY

☐ HEAVY [-2]
☐ MODERATE [-1]
☒ NORMAL [0]
☐ FREE [1]
☐ EXTENSIVE [-2]
☐ MODERATE [-1]
☒ NORMAL [0]
☐ NONE [1]

SILT

EMBEDDEDNESS

Substrate
13
Maximum
20NUMBER OF BEST TYPES: ☒ 4 or more [2] ☐ 3 or less [0] (Score natural substrates; ignore sludge from point-sources)

Comments

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.

AMOUNT

Check ONE (Or 2 & average)

☐ UNDERCUT BANKS [1]
☐ OVERHANGING VEGETATION [1]
☐ SHALLOWS (IN SLOW WATER) [1]
☐ ROOTMATS [1]

☒ POOLS > 70cm [2]
☐ ROOTWADS [1]
☒ BOULDERS [1]

☐ OXBOWS, BACKWATERS [1]
☐ AQUATIC MACROPHYTES [1]
☐ LOGS OR WOODY DEBRIS [1]

☐ EXTENSIVE >75% [11]
☐ MODERATE 25-75% [7]
☒ SPARSE 5-<25% [3]
☐ NEARLY ABSENT <5% [1]

Comments

Cover
Maximum
20
6

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

SINUOSITY

☐ HIGH [4]
☒ MODERATE [3]
☐ LOW [2]
☐ NONE [1]

DEVELOPMENT

☐ EXCELLENT [7]
☐ GOOD [5]
☒ FAIR [3]
☐ POOR [1]

CHANNELIZATION

☐ NONE [6]
☐ RECOVERED [4]
☐ RECOVERING [3]
☐ RECENT OR NO RECOVERY [1]

STABILITY

☒ HIGH [3]
☒ MODERATE [2]
☐ LOW [1]

Comments

Channel
Maximum
20
145

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

River right looking downstream

EROSION

☐ NONE / LITTLE [3]
☒ MODERATE [2]
☒ HEAVY / SEVERE [1]

RIPARIAN WIDTH

☐ WIDE > 50m [4]
☐ MODERATE 10-50m [3]
☒ NARROW 5-10m [2]
☒ VERY NARROW < 5m [1]
☐ NONE [0]

FLOOD PLAIN QUALITY

☐ FOREST, SWAMP [3]
☐ SHRUB OR OLD FIELD [2]
☒ RESIDENTIAL, PARK, NEW FIELD [1]
☐ FENCED PASTURE [1]
☐ OPEN PASTURE, ROWCROP [0]

☐ CONSERVATION TILLAGE [1]
☐ URBAN OR INDUSTRIAL [0]
☐ MINING / CONSTRUCTION [0]

Indicate predominant land use(s)
past 100m riparian.

Comments

Riparian
Maximum
10
35

5] POOL / GLIDE AND RIFFLE / RUN QUALITY

MAXIMUM DEPTH

Check ONE (ONLY!)

☐ > 1m [6]
☐ 0.7-<1m [4]
☒ 0.4-<0.7m [2]
☐ 0.2-<0.4m [1]
☐ < 0.2m [0]

CHANNEL WIDTH

Check ONE (Or 2 & average)

☒ POOL WIDTH > RIFFLE WIDTH [2]
☐ POOL WIDTH = RIFFLE WIDTH [1]
☐ POOL WIDTH < RIFFLE WIDTH [0]

CURRENT VELOCITY

Check ALL that apply

☐ TORRENTIAL [-1]
☐ VERY FAST [1]
☐ FAST [1]
☒ MODERATE [1]
☒ SLOW [1]
☐ INTERSTITIAL [-1]
☐ INTERMITTENT [-2]
☐ EDDIES [1]

Indicate for reach - pools and riffles.

Recreation Potential**Primary Contact****Secondary Contact**

(circle one and comment on back)

Comments

Pool /
Current
Maximum
12
6

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]**RIFFLE DEPTH**

☐ BEST AREAS > 10cm [2]
☒ BEST AREAS 5-10cm [1]
☐ BEST AREAS < 5cm [metric=0]

RUN DEPTH☐ MAXIMUM > 50cm [2]☒ MAXIMUM < 50cm [1]**RIFFLE / RUN SUBSTRATE**

☒ STABLE (e.g., Cobble, Boulder) [2]
☐ MOD. STABLE (e.g., Large Gravel) [1]
☐ UNSTABLE (e.g., Fine Gravel, Sand) [0]

RIFFLE / RUN EMBEDDEDNESS

☐ NONE [2]
☒ LOW [1]
☐ MODERATE [0]
☐ EXTENSIVE [-1]

Comments

Riffle /
Run
Maximum
8
56] GRADIENT (83.3 ft/mi)
DRAINAGE AREA
(0.06 mi²)

☐ VERY LOW - LOW [2-4]
☐ MODERATE [6-10]
☐ HIGH - VERY HIGH [10-6]

%POOL:

%GLIDE:

%RUN:

%RIFFLE:

Gradient
Maximum
10
4

AJ 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 / CTB
☐ SECCHI DEPTH

meters

CANOPY

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

CJ RECREATION

- AREA DEPTH
 POOL: ☐ > 100ft² ☐ > 3ft

BJ AESTHETICS

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

DJ 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
 ARMOURD / SLUMPS
 ISLANDS / SCOURD
 IMPOUNDED / DESICCATED
 FLOOD CONTROL / DRAINAGE

EJ 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 H₂O / TILE / H₂O TABLE
 ACID / MINE / QUARRY / FLOW
 NATURAL / WETLAND / STAGNANT
 PARK / GOLF / LAWN / HOME
 ATMOSPHERE / DATA PAUCITY

FJ MEASUREMENTS

- x width
 x depth
 max. depth
 x bankfull width
 bankfull x depth
 W/D ratio
 bankfull max. depth
 floodprone x² width
 entrench. ratio
 Legacy Tree:

Stream Drawing:

