Hydrologic Determination Field Data Sheet

Tennessee Division of Water Pollution Control, Version 1.5

Named Waterbody: Shaws Creek trib → Wolf River	Date/Time: 6/17/22
Assessors/Affiliation: Ginna McWhirter TDEC DWR	Project ID: N/A
Site Name/Description: Laura Cline Property	
Site Location: 7655 Hwy 194, Williston, TN 38076	
HUC (12 digit): 080102100303	Lat/Long: 35.134010 -89.489942
Previous Rainfall (7-days): 6/11/22 0.09"	
Precipitation this Season vs. Normal: abnormally wet elevated (average) low abnormally dry unknown Source of recent & seasonal precip data: antecedant precipitation tool	
Watershed Size: ~0.29 mi^2	County: Fayette
Soil Type(s) / Geology: Collins, Grenada,	Source: WSS
Surrounding Land Use: row crop	
Degree of historical alteration to natural channel morphology & hydrology (circle one & describe fully in Notes): Severe (Moderate) Slight Absent	

Primary Field Indicators Observed

Primary Indicators	NO	YES
1. Hydrologic feature exists solely due to a process discharge	X	WWC
2. Defined bed and bank absent, vegetation composed of upland and FACU species		WWC
3. Watercourse dry anytime during February through April 15th, under normal precipitation / groundwater conditions	N/A	WWC
4. Daily flow and precipitation records showing feature only flows in direct response to rainfall	N/A	WWC
5. Presence of multiple populations of obligate lotic organisms with ≥ 2 month aquatic phase		Stream
6. Presence of fish (except *Gambusia*)		Stream
7. Presence of naturally occurring ground water table connection	X	Stream
8. Flowing water in channel and 7 days since last precip >0.1" in local watershed	X	Stream
9. Evidence watercourse has been used as a supply of drinking water	X	Stream

June not enough data

NOTE: If any Primary Indicators 1-9 = "Yes", then no further investigation is necessary. However, assessors may choose to score secondary indicators as supporting evidence.

In the absence of a primary indicator, or other definitive evidence, complete the secondary indicator table on page 2 of this sheet, and provide score below.

Guidance for the interpretation and scoring of both the primary & secondary indicators is provided in *TDEC-WPC Guidance For Making Hydrologic Determinations, Version 1.5*

Overall Hydrologic Determination = 16.25

Secondary Indicator Score (if applicable) = WWC

Justification / Notes: row cropped area, from aerial imagery, channelized + altered riparian habitat/veg.
~~str~~ channel xing already present (3 small metal culverts)

2 minnows observed on South portion of channel - gambusia

Secondary Field Indicator Evaluation

A. **Geomorphology** (Subtotal = 7.5)	Absent	Weak	Moderate	Strong	
1. Continuous bed and bank	0	1	2	3	1.5
2. Sinuous channel *	0	1	2	3	.5
3. In-channel structure: riffle-pool sequences	0	1	2	3	1.5
4. Sorting of soil textures or other substrate	0	1	2	3	1.0
5. Active/relic floodplain	0	0.5	1	1.5	0
6. Depositional bars or benches	0	1	2	3	1.0
7. Braided channel	0	1	2	3	0
8. Recent alluvial deposits *	0	0.5	1	1.5	0
9. Natural levees	0	1	2	3	0
10. Headcuts	0	1	2	3	0
11. Grade controls	0	0.5	1	1.5	1.0
12. Natural valley or drainageway	0	0.5	1	1.5	1.0
13. At least second order channel on existing USGS or NRCS map	No = 0		Yes = 3		0

B. **Hydrology** (Subtotal = 3.75)	Absent	Weak	Moderate	Strong	
14. Subsurface flow/discharge into channel	0	1	2	3	0
15. Water in channel and >48 hours since sig. rain	0	1	2	3	1
16. Leaf litter in channel (January – September)	1.5	1	0.5	0	1
17. Sediment on plants or on debris	0	0.5	1	1.5	0.5
18. Organic debris lines or piles (wrack lines)	0	0.5	1	1.5	0.5
19. Hydric soils in channel bed or sides of channel	No = 0		Yes = 1.5		.75

C. **Biology** (Subtotal = 4) 5	Absent	Weak	Moderate	Strong	
20. Fibrous roots in channel bed [1]	3	2	1	0	1
21. Rooted plants in the thalweg [1]	3	2	1	0	1.5
22. Crayfish in stream (exclude in floodplain)	0	1	2	3	0
23. Bivalves/mussels	0	1	2	3	0
24. Amphibians	0	0.5	1	1.5	0.5
25. Macrobenthos (record type & abundance)	0	1	2	3	1
26. Filamentous algae; periphyton	0	1	2	3	1
27. Iron oxidizing bacteria/fungus	0	0.5	1	1.5	0
28.Wetland plants in channel bed [2]	0	0.5	1	1.5	0

[1] Focus is on the presence of terrestrial plants.

[2] Focus is on the presence of aquatic or wetland plants.

Total Points = 16.25

Under Normal Conditions, Watercourse is a Wet Weather Conveyance if Secondary Indicator Score < 19 points

7.5 + 3.75 + 4.5
16.25

Notes : North ~~western~~ side of channel: confluence w/ another channel + makes 1 upper area some veg growing in bed, elm, roses, trumpet vine, grass? virginia creeper, poison ivy, no evidence of hydric soil, small roots present throughout channel, some grade control d/s near confluence (tree roots) + more definition. near culvert, areas of spread out flow

+deepens (7-8' wide, 5' high)

South area channel widens out + has deeper standing water, saw + heard @ least 6 frogs, birch, roses, privet, elms, etc. water in pools @ least 1' deep, ends @ beyond property line, saw dragonflies water in pools tannic + not flowing, sand bottom, some bars/benches observed, small amnt of texture sating

> privet

some periphyton on leaves, found 2 minnows, dragonfly larvae

culvert appears to have altered the north side?

from end of S to N is about 800'