

Hydrologic Determination Field Data Sheet

Tennessee Division of Water Pollution Control, Version 1.5

Named Waterbody: <u>STREAM-1</u>		Date/Time: <u>6/21/2008</u> 1100
Assessors/Affiliation: <u>Nelson GOODMAN TDEC-DWR</u>		Project ID :
Site Name/Description: <u>308 Hwy 307 A</u>		
Site Location: <u>ATHENS TN</u>		
HUC (12 digit): <u>060200021101 - CATA CREEK UPPER</u>		Lat/Long: <u>35.46709</u>
Previous Rainfall (7-days): <u>.22</u>		<u>-84.54750</u>
Precipitation this Season vs. Normal : abnormally wet elevated <u>average</u> low abnormally dry unknown		
Source of recent & seasonal precip data :		
Watershed Size : <u>.11 mi²</u>	County: <u>McMinn</u>	
Soil Type(s) / Geology : <u> </u>		Source:
Surrounding Land Use : <u>Rural Ag / Residential</u>		
Degree of historical alteration to natural channel morphology & hydrology (circle one & describe fully in Notes) : Severe Moderate <u>Slight</u> Absent		

Primary Field Indicators Observed

Primary Indicators	NO	YES
1. Hydrologic feature exists solely due to a process discharge		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		WWC
4. Daily flow and precipitation records showing feature only flows in direct response to rainfall		WWC
5. Presence of multiple populations of obligate lotic organisms with ≥ 2 month aquatic phase		<u>Stream</u>
6. Presence of fish (except <i>Gambusia</i>)		Stream
7. Presence of naturally occurring ground water table connection		Stream
8. Flowing water in channel and 7 days since last precip >0.1" in local watershed		Stream
9. Evidence watercourse has been used as a supply of drinking water		Stream

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 = <u>STREAM</u>	
Secondary Indicator Score (if applicable) = <u>N/A</u>	<u>origin</u> <u>surf</u> <u>35.467296</u> <u>-84.547562</u>
Justification / Notes :	<u>PB</u> <u>ENT</u> <u>35.465921</u> <u>-84.541951</u>
<u>in upper most section of waterbody</u> <u>taxa of primary indicator # 5.</u> <u>- planorbidae, leptophlebiidae, philopotamidae, orthocentridae, heptageniidae</u> <u>pygmaeidae</u>	

Secondary Field Indicator Evaluation

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

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

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

1 Focus is on the presence of terrestrial plants.

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

Total Points = _____

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

Notes :

1. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$
 2. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$
 3. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$
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 9. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$
 10. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$