

STREAM HABITAT WALK

Stream Name: _____

County: _____ State: _____

Investigators: _____

Site (description): _____

Latitude: _____ Longitude: _____

Site or Map Number: _____

Date: _____ Time: _____

Weather in past 24 hours:

- ☐ Storm (heavy rain)
- ☐ Rain (steady rain)
- ☐ Showers (intermittent rain)
- ☐ Overcast
- ☐ Clear/Sunny

Weather now:

- ☐ Storm (heavy rain)
- ☐ Rain (steady rain)
- ☐ Showers (intermittent rain)
- ☐ Overcast
- ☐ Clear/Sunny

Sketch of site

On your sketch, note features that affect stream habitat, such as: riffles, runs, pools, ditches, wetlands, dams, riprap, outfalls, tributaries, landscape features, logging paths, vegetation, and roads.

PHYSICAL CHARACTERIZATION

In-Stream Characteristics

1. Check which stream habitats are present:

(You can check more than 1 habitat)

☐ Pool(s) ☐ Riffle(s) ☐ Run(s)

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2. Nature of particles in the stream bottom at site

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	None/Little	Some	Most
Silt/Clay/Mud	☐	☐	☐
Sand (up to 0.1" in diam.)	☐	☐	☐
Gravel (0.1 - 2" in diam.)	☐	☐	☐
Cobbles (2 - 10" in diam.)	☐	☐	☐
Boulders (over 10" in diam.)	☐	☐	☐
Bedrock (solid)	☐	☐	☐

3. Pick the category that best describes the extent to which gravel, cobbles, and boulders on the stream bottom are embedded (sunk) in silt, sand, or mud.

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☐ Somewhat/not embedded (0-25%) ☐ Mostly embedded (75%)
☐ Halfway embedded (50%) ☐ Completely embedded (100%)

4. Presence of logs or large woody debris in stream:

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☐ None ☐ Occasional ☐ Plentiful

5. Presence of naturally-occurring organic material (i.e., leaves and twigs, etc.) in stream:

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☐ None ☐ Occasional ☐ Plentiful

6. Water appearance:

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☐ Clear ☐ Light brown ☐ Orange
☐ Milky ☐ Dark brown ☐ Greenish
☐ Foamy ☐ Oily sheen ☐ Other _____
☐ Turbid

7. Water odor:

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☐ Sewage ☐ Fishy ☐ None
☐ Chlorine ☐ Rotten eggs ☐ Other _____

8. Water temperature:

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_____ °C or _____ °F

Streambank and Channel Characteristics

9. (a) Approximate depth of run(s):

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☐ < 1 ft ☐ 1-2 ft ☐ > 2 ft

(b) Approximate depth of pool(s):

☐ < 1 ft ☐ 1-2 ft ☐ > 2 ft

10. Approximate width of stream channel:

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_____ feet ☐ measured ☐ estimated

11. Stream velocity: _____ ft/sec.

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12. Looking upstream (100 yds.), pick the description that best fits the shape of the stream bank and the channel.

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(a) Stream bank:

Left		Right
☐	Vertical/undercut	☐
☐	Steeply sloping (> 30°)	☐
☐	Gradual/no slope (< 30°)	☐

(b) Extent of artificial bank modifications:

Left		Right
☐	Bank 0-25% covered	☐
☐	Bank 25-50% covered	☐
☐	Bank 50-75% covered	☐
☐	Bank 75-100% covered	☐

(c) Shape of the channel:

☐ Narrow, deep ☐ Wide, deep
☐ Narrow, shallow ☐ Wide, shallow

13. Looking upstream (100 yds.), describe the streamside cover. Check "1" if present, "2" if common

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(a) Along water's edge and stream bank only:

Left			Right	
1	2		1	2
☐	☐	Trees	☐	☐
☐	☐	Bushes, shrubs	☐	☐
☐	☐	Tall grasses, ferns, etc.	☐	☐
☐	☐	Lawn	☐	☐
☐	☐	Boulders/rocks	☐	☐
☐	☐	Gravel/sand	☐	☐
☐	☐	Bare soil	☐	☐
☐	☐	Pavement, structures	☐	☐

(b) From the top of the streambank out to 25 yards.

Left			Right	
1	2		1	2
☐	☐	Trees	☐	☐
☐	☐	Bushes, shrubs	☐	☐
☐	☐	Tall grasses, ferns, etc.	☐	☐
☐	☐	Lawn	☐	☐
☐	☐	Boulders/rocks	☐	☐
☐	☐	Gravel/sand	☐	☐
☐	☐	Bare soil	☐	☐
☐	☐	Pavement, structures	☐	☐

14. Pick the category that best describes the extent to which vegetation shades the stream at your site.

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☐ 0% ☐ 25% ☐ 50% ☐ 75% ☐ 100%

15. Looking upstream, note general conditions. Check "1" if present, "2" if severe problem is clearly

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Left			Right	
1	2	Stream Banks	1	2
☐	☐	Natural streamside plant cover degraded	☐	☐
☐	☐	Banks collapsed/eroded	☐	☐
☐	☐	Garbage/junk adjacent to the stream	☐	☐
☐	☐	Foam or sheen on bank	☐	☐
1	2	Stream Channel	1	2
☐	☐	Mud, silt, or sand in or entering the stream	☐	☐
☐	☐	Garbage/junk in the stream	☐	☐
1	2	Other	1	2
☐	☐	Yard waste on bank (grass, clippings, etc.)	☐	☐
☐	☐	Livestock in or with unrestricted access to stream	☐	☐
☐	☐	Actively discharging pipe(s)	☐	☐
☐	☐	Other pipe(s) entering the stream	☐	☐
☐	☐	Ditches entering the stream	☐	☐

Local Watershed Characteristics

(within about 1/4 mile of the site; adjacent and upstream)

16. Land uses in the local watershed can potentially have an impact on a stream. Check "1" if present, "2" if clearly having an impact on the stream.

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1	2	Residential
☐	☐	Single-family housing
☐	☐	Multifamily housing
☐	☐	Lawns
☐	☐	Commercial/institutional
1	2	Roads, etc.
☐	☐	Paved roads or bridges
☐	☐	Unpaved roads
1	2	Construction underway on:
☐	☐	Housing development
☐	☐	Commercial development
☐	☐	Road bridge construction/repair
1	2	Agricultural
☐	☐	Grazing land
☐	☐	Feeding lots or animal holding areas
☐	☐	Cropland
☐	☐	Inactive agricultural land/fields
1	2	Recreation
☐	☐	Power boating
☐	☐	Golfing
☐	☐	Camping
☐	☐	Swimming/fishing/canoeing
☐	☐	Hiking/paths
1	2	Other
☐	☐	Mining or gravel pits
☐	☐	Logging
☐	☐	Industry
☐	☐	Oil and gas drilling
☐	☐	Trash dump
☐	☐	Landfills

BIOLOGICAL CHARACTERIZATION

VISUAL BIOLOGICAL SURVEY

17. Wildlife in or around the stream? (Mark all that apply)

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☐ Amphibians ☐ Waterfowl ☐ Reptiles ☐ Mammals

18. Fish in the stream? (Mark all that apply)

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☐ No ☐ Yes, but rare ☐ Yes, abundant
☐ Small (1-2 in.) ☐ Medium (3-6 in.) ☐ Large (7 in. and above)

Are there any barriers to fish movement?

☐ Beaver dams ☐ Waterfalls > 1' ☐ None
☐ Dams ☐ Road barriers ☐ Other _____

19. Aquatic plants in the stream. (Mark all that apply)

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☐ None ☐ Occasional ☐ Plentiful
☐ Attached ☐ Free-floating
☐ Stream margin ☐ Pools ☐ Near riffle

20. Extent of algae in the stream. (Mark all that apply)

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(a) Are the submerged stones, twigs, or other material in the stream coated with a layer of algal "slime"?

☐ None ☐ Occasional ☐ Plentiful
☐ Light coating ☐ Heavy coating
☐ Brownish ☐ Greenish ☐ Other _____

(b) Are there any filamentous (string-like) algae?

☐ None ☐ Occasional ☐ Plentiful
☐ Brownish ☐ Greenish ☐ Other _____

(c) Are any detached "clumps" or "mats" of algae floating on the water's surface?

☐ None ☐ Occasional ☐ Plentiful
☐ Brownish ☐ Greenish ☐ Other _____

MACROINVERTEBRATE SURVEY (Optional)

21. If macroinvertebrates were collected from the stream bottom, which type of method/habitat was selected?

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☐ Rock-rubbing method: From cobbles and large stones selected from riffles.
☐ Stick-picking method: From woody objects in streams with sandy, silty bottoms.
☐ Leaf-pack sorting method: From submerged leaves in streams with either a rocky or sandy, silty bottom.

22. Are macroinvertebrates present?

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☐ No ☐ Yes, but rare ☐ Yes, abundant

23. If present, describe the types of macroinvertebrates found.

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(Mark all that apply)

Wormlike	☐ Occasional	☐ Plentiful
Snails/clamlike	☐ Occasional	☐ Plentiful
Insects	☐ Occasional	☐ Plentiful
Crayfish	☐ Occasional	☐ Plentiful

COMMENTS: (Note changes or potential problems such as spills, new construction, type of discharging pipes)