

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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sand (up to 0.1" in diam.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gravel (0.1 - 2" in diam.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cobbles (2 - 10" in diam.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boulders (over 10" in diam.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bedrock (solid)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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
<input type="checkbox"/>	Vertical/undercut	<input type="checkbox"/>
<input type="checkbox"/>	Steeply sloping (> 30°)	<input type="checkbox"/>
<input type="checkbox"/>	Gradual/no slope (< 30°)	<input type="checkbox"/>

(b) Extent of artificial bank modifications:

Left		Right
<input type="checkbox"/>	Bank 0-25% covered	<input type="checkbox"/>
<input type="checkbox"/>	Bank 25-50% covered	<input type="checkbox"/>
<input type="checkbox"/>	Bank 50-75% covered	<input type="checkbox"/>
<input type="checkbox"/>	Bank 75-100% covered	<input type="checkbox"/>

(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
<input type="checkbox"/>	<input type="checkbox"/>	Trees	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Bushes, shrubs	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Tall grasses, ferns, etc.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Lawn	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Boulders/rocks	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Gravel/sand	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Bare soil	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Pavement, structures	<input type="checkbox"/>	<input type="checkbox"/>

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

Left			Right	
1	2		1	2
<input type="checkbox"/>	<input type="checkbox"/>	Trees	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Bushes, shrubs	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Tall grasses, ferns, etc.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Lawn	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Boulders/rocks	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Gravel/sand	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Bare soil	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Pavement, structures	<input type="checkbox"/>	<input type="checkbox"/>

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

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
<input type="checkbox"/>	<input type="checkbox"/>	Single-family housing
<input type="checkbox"/>	<input type="checkbox"/>	Multifamily housing
<input type="checkbox"/>	<input type="checkbox"/>	Lawns
<input type="checkbox"/>	<input type="checkbox"/>	Commercial/institutional

1	2	Roads, etc.
<input type="checkbox"/>	<input type="checkbox"/>	Paved roads or bridges
<input type="checkbox"/>	<input type="checkbox"/>	Unpaved roads

1	2	Construction underway on:
<input type="checkbox"/>	<input type="checkbox"/>	Housing development
<input type="checkbox"/>	<input type="checkbox"/>	Commercial development
<input type="checkbox"/>	<input type="checkbox"/>	Road bridge construction/repair

1	2	Agricultural
<input type="checkbox"/>	<input type="checkbox"/>	Grazing land
<input type="checkbox"/>	<input type="checkbox"/>	Feeding lots or animal holding areas
<input type="checkbox"/>	<input type="checkbox"/>	Cropland
<input type="checkbox"/>	<input type="checkbox"/>	Inactive agricultural land/fields

1	2	Recreation
<input type="checkbox"/>	<input type="checkbox"/>	Power boating
<input type="checkbox"/>	<input type="checkbox"/>	Golfing
<input type="checkbox"/>	<input type="checkbox"/>	Camping
<input type="checkbox"/>	<input type="checkbox"/>	Swimming/fishing/canoeing
<input type="checkbox"/>	<input type="checkbox"/>	Hiking/paths

1	2	Other
<input type="checkbox"/>	<input type="checkbox"/>	Mining or gravel pits
<input type="checkbox"/>	<input type="checkbox"/>	Logging
<input type="checkbox"/>	<input type="checkbox"/>	Industry
<input type="checkbox"/>	<input type="checkbox"/>	Oil and gas drilling
<input type="checkbox"/>	<input type="checkbox"/>	Trash dump
<input type="checkbox"/>	<input type="checkbox"/>	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 | <input type="checkbox"/> Occasional | <input type="checkbox"/> Plentiful |
| Snails/clamlike | <input type="checkbox"/> Occasional | <input type="checkbox"/> Plentiful |
| Insects | <input type="checkbox"/> Occasional | <input type="checkbox"/> Plentiful |
| Crayfish | <input type="checkbox"/> Occasional | <input type="checkbox"/> Plentiful |

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