

# STREAMSIDE BIOSURVEY: 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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	Percent
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)	_____
<b>TOTAL</b>	<b>100%</b>

### 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. Streambed sinks beneath your feet in:

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No spots     A few spots     Many spots

### 5. Presence of logs or large woody debris in stream:

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None     Occasional     Plentiful

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

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None     Occasional     Plentiful

### 7. Water appearance:

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Clear     Turbid     Orange  
 Milky     Dark brown     Greenish  
 Foamy     Oily sheen     Other \_\_\_\_\_

### 8. Water odor:

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Sewage     Fishy     None  
 Chlorine     Rotten eggs     Other \_\_\_\_\_

### 9. Water temperature:

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\_\_\_\_\_ °C or \_\_\_\_\_ °F

## Streambank and Channel Characteristics

### 10. (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

### 11. Approximate width of stream channel:

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\_\_\_\_\_ feet     measured     estimated

### 12. Stream velocity: \_\_\_\_\_ ft/sec.

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### 13. 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

### 14. Looking upstream (100 yds.), describe the streamside cover

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

Left (Percent)		Right (Percent)
_____	Trees	_____
_____	Bushes, shrubs	_____
_____	Tall grasses, ferns, etc.	_____
_____	Lawn	_____
_____	Boulders/rocks	_____
_____	Gravel/sand	_____
_____	Bare soil	_____
_____	Pavement, structures	_____

TOTALS    100%

100%

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

Left (Percent)			Right (Percent)	
_____		Trees	_____	
_____		Bushes, shrubs	_____	
_____		Tall grasses, ferns, etc.	_____	
_____		Lawn	_____	
_____		Boulders/rocks	_____	
_____		Gravel/sand	_____	
_____		Bare soil	_____	
_____		Pavement, structures	_____	
<b>TOTALS</b>	<b>100%</b>		<b>100%</b>	

**15. 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%

**16. Looking upstream, note general conditions.**

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Check "1" if present, "2" if severe problem is clearly evident.

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

**Local Watershed Characteristics**

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

**17. 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

**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)

**19. Are there any barriers to fish movement?**

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- Beaver dams     Waterfalls (>1')     None  
 Dams             Road barriers     Other \_\_\_\_\_

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

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

**21. 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 \_\_\_\_\_

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