

## Streamkeeper Observation Form

Watershed:

Stream Name:

Stream Reach Start (upstream):

Stream Reach Stop (downstream):

Streamkeeper(s):

Reach Name, Description:

Date:

Time:

Weather day before observation:

Weather during observation:

- Storm (heavy rain)
- Rain (steady rain)
- Showers (intermittent rain)
- Overcast
- Partly Cloudy
- Clear/Sunny
- Windy

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### Stream Physical Characteristics

**1. Check which stream habitats are present:**

(check all that apply)

- Pool(s)    Riffle(s)    Run(s)    Concrete Chnl

**2. Nature of particles in stream bottom at site:**

	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 to 2" in diam.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cobbles (2 to 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:**

- Some/none (0-25%)    Mostly (75%)  
 Halfway (50%)    Completely (100%)

**4. Presence of logs or large wood debris in stream:**

- None    Occasional    Plentiful    Flood Hazard

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

- None    Occasional    Plentiful

**6. Water appearance:**

- Clear    Light brown    Orange  
 Milky    Dark brown    Greenish  
 Foamy    Oily sheen    Bubbles  
 Other \_\_\_\_\_

**7. Water odor:**

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

**8. Water temperature (optional):**

degrees Celsius \_\_\_\_\_ or degrees Fahrenheit \_\_\_\_\_  
or to your touch:  
 Cold    Cool    No diff.    Warm

**9. Air temperature (optional):**

degs. Celsius \_\_\_\_\_ or degs. Fahrenheit \_\_\_\_\_ or  
 Cold    Cool    Room Temp.    Warm    Hot

## Stream bank and Channel Characteristics

**10. (a) Approximate depth of run(s):**

< 1ft.  1-2 ft.  > 2ft.

**(b) Approximate depth of pool(s):**

< 1ft.  1-2 ft.  > 2ft.

**11. Approximate width of stream channel:**

\_\_\_\_\_ Feet  Measured  Estimated

**12. Stream velocity: \_\_\_\_\_ ft./sec. or**

Dry  Trickle  Avg.  Rapid  Flood

**13. Looking upstream (100 ft.), pick the description that best fits the shape of the stream and the channel.**

**(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 mod.:**

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 ft.), describe the streamside cover. Check “1” if present, “2” if common or abundant.**

**(a) Along water’s edge and stream bank:**

Left		Right	
1	2	1	2
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trees			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tall grasses, ferns, forbs			
<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"/>
Rounded 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"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rip rap or gabions			

**14. Looking upstream (100 ft.), describe the streamside cover. Check “1” if present, “2” if common or abundant.**

**(b) From top of stream bank out to 25 ft:**

Left		Right	
1	2	1	2
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trees			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tall grasses, ferns, forbs			
<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"/>
Rounded 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"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rip rap or gabions			

**15. Looking upstream (100 ft.), note general conditions. Check “1” if present, “2” if severe problem is clearly having an impact on stream.**

Left		Right	
1	2	1	2
<input type="checkbox"/>	<input type="checkbox"/>	<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 or junk adjacent to the stream			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Foam or oily sheen on the bank			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____			

1		1	
2	Stream Channel	2	Stream Channel
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mud, silt, sand in or entering the stream			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Garbage or junk in the stream			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trees growing in the center of stream			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Foam or oily sheen in the stream			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____			

1		1	
2	Other	2	Other
<input type="checkbox"/>	<input type="checkbox"/>	<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 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"/>	<input type="checkbox"/>	<input type="checkbox"/>
Swimming pool draining in to stream			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Car wash, soap, or oil in storm drain			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poaching, trout or salmon, harassment			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Homeless present or camping evidence			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fire, or evidence of recent fire or arson			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drug or alcohol abuse			

## Biological Characterization

### 16. Wildlife in or around the stream?

(approx. no. types of each present)

\_\_\_ Amphibians \_\_\_ Waterfowl \_\_\_ Reptiles  
\_\_\_ Mammals \_\_\_ Song Birds \_\_\_ Raptors  
\_\_\_ Crayfish \_\_\_ Insects

### 17(a). Fish in the stream? (all that apply)

No  Yes, but rare  Yes, abundant  
 Small (1"-2")  Med. (3"-6")  Large (>6")

### 17(b). Are there any potential barriers to fish movement?

None  Waterfalls > 1'  Dams  
 Road barriers  Other \_\_\_\_\_

### 18. Aquatic plants in the stream,

(mark all that apply)

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

### 19. Extent of algae in the stream,

(mark all that apply)

(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) 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 \_\_\_\_\_

### 20. Nonnative animals present

\_\_\_ Mitten crabs \_\_\_ Red fox \_\_\_ Feral cats  
\_\_\_ Dogs \_\_\_ Bass \_\_\_ Bullfrogs

### 21. Native, threatened and endangered animals

(approx. number of each)

\_\_\_ Steelhead / rainbow trout  
\_\_\_ CA red legged frog \_\_\_ Western pond turtles

### 22. Native animals, common

(approx. number of each)

\_\_\_ Raccoons \_\_\_ Possums \_\_\_ Skunks

### 23. Native animals, becoming less common

(approx. number of each)

\_\_\_ Wood duck \_\_\_ Dipper \_\_\_ CA quail  
\_\_\_ CA thrasher \_\_\_ Pacific tree frog

### 24. Invasive plants

Arundo (Giant Reed)  Cape Ivy  Eng. Ivy  
 Algerian Ivy  Fr. Broom  Pampas grass  
 Himalaya berry  Blue gum/Eucalyptus tree(s)  
 Acacia tree  Tree of Heaven  Pepperweed  
 Thistle (Italian, bull, etc.)  Poison hemlock  
 Fennel  
 New infestations (list plant) \_\_\_\_\_

**Land Use Assessment**

**25. Land uses near the stream can potentially have an impact on a stream, Check "1" if present, "2" if clearly having an impact on the stream. Look as far as you can see, both upstream and downstream, left bank and right bank. Where possible, indicate percent of each use covering your reach.**

**1 2 Residential (% of each covering reach)**

- Single-family housing \_\_\_\_\_
- Multi-family housing \_\_\_\_\_
- Lawns \_\_\_\_\_
- Playground or school \_\_\_\_\_
- Parking lot \_\_\_\_\_
- Well or gravity fed storage \_\_\_\_\_
- Other \_\_\_\_\_

**1 2 Commercial/Industrial (% ea. / reach)**

- Stores, restaurants \_\_\_\_\_
- Auto repair/gas station \_\_\_\_\_
- Factory/Power plant \_\_\_\_\_
- Sewage treatment facility \_\_\_\_\_
- Water treatment facility \_\_\_\_\_
- Landfill \_\_\_\_\_
- Junkyard \_\_\_\_\_
- Bus or taxi depot \_\_\_\_\_
- Sewage treatment facility \_\_\_\_\_
- Water treatment facility \_\_\_\_\_
- Other \_\_\_\_\_

**1 2 Open Space/Forest (% ea. / reach)**

- MROSD, POST, or Preserve \_\_\_\_\_
- Recreational park \_\_\_\_\_
- Other \_\_\_\_\_

**1 2 Recreation (% ea. / reach)**

- Golf course \_\_\_\_\_
- Hiking trails \_\_\_\_\_
- Other \_\_\_\_\_

**1 2 Agricultural (% ea. / reach)**

- Grazing land \_\_\_\_\_
- Cropland \_\_\_\_\_
- Animal feedlot or holding area \_\_\_\_\_
- Isolated farm \_\_\_\_\_
- Inactive or old field \_\_\_\_\_
- Other \_\_\_\_\_

**1 2 Other (% ea. / reach)**

- Gravel pits \_\_\_\_\_
- Tree-cutting, selective \_\_\_\_\_
- Tree-cutting, site clearance \_\_\_\_\_
- Well-drilling (water) \_\_\_\_\_
- Other \_\_\_\_\_