

**Action:** Record dimensions of the pipe or trench and its elevation above the stream bed. Describe the pollutant smell colour, appearance (oily film, sudsy, etc.) if the pipe is discharging actively. **DO NOT TOUCH IT!!** Describe whether the pipe is on the left or right bank (facing downstream).

### **Livestock Access**

**Background:** Livestock that have access to the stream can cause bank erosion, damage fish habitat, and contaminate the water. The most common situations are where livestock graze along unfenced parts of the stream and where livestock cross the stream at a trail crossing or watering ramp.

**Action:** Measure the affected length and width of the stream, and note whether the left or right bank (facing downstream) is affected. Estimate the number and type of livestock with access to the area.

### **Water Withdrawal**

**Background:** There may be an intake pipe or diversion ditch that draws water from the stream for agricultural, industrial, or domestic purposes. The pipe or ditch may be screened or unscreened. Screened pipes with openings larger than 2.5 mm and unscreened pipes allow juvenile fish to pass through, resulting in fish mortalities.

**Action: Record the dimensions of the intake structure, pipe, or diversion ditch. If possible, find out where the water goes (e.g., to irrigate a nearby field). Note whether the pipe is screened or unscreened. Measure the size of any mesh. Record whether the left or right bank (facing downstream) is affected.**

# Stream Location and Conditions

(use a new data sheet for each stream section surveyed)

## Module 1

Stream Name/Nearest Town:		Date:
Organization Name:		Watershed code
Contact Name:		Phone #
Crew Names:		Stream Segment #
		Stream Section #
		Length Surveyed

### Survey Start Point (when applicable)

Mapsheet number _____	Type _____	Scale _____
Start Point Location (distance from known stream landmark, directions to start)		
Time: _____	Weather	' clear ' shower (1-2.5 cm in 24 hr) ' snow ' overcast ' storm (>2.5 cm in 24 hr) ' rain on snow
Water turbidity (cm visibility) _____	Temperature °C (leave thermometer 2 min.) air _____ water _____	
Measurements taken every _____ m		
Bankfull Channel width _____ (m)	Average depth _____ (m)	
Wetted Channel width _____ (m)	Average depth _____ (m)	

### Survey End Point (when applicable)

Mapsheet number _____	Type _____	Scale _____
End Point Location (distance from known stream landmark)		
Time: _____	Weather	' clear ' shower (1-2.5 cm in 24 hr) ' snow ' overcast ' storm (>2.5 cm in 24 hr) ' rain on snow
Water turbidity (cm visibility) _____	Temperature °C (leave thermometer 2 min.) air _____ water _____	
Measurements taken every _____ m		
Bankfull Channel width _____ (m)	Average depth _____ (m)	
Wetted Channel width _____ (m)	Average depth _____ (m)	

(Start Point)      First and Last Measurements taken 0.1 m from streambank edge      (End Point)

Left Bank																				Right Bank
Wetted Depth																				Wetted Depth
Bankfull Depth																				Bankfull Depth

Left Bank																				Right Bank
Wetted Depth																				Wetted Depth
Bankfull Depth																				Bankfull Depth

Take measurements every 0.5m in streams less than 5m wide, every 1m in streams 5 to 15m

# Stream Reconnaissance Field Data Sheet

... Additional Feature Information

Module 1

Stream Name/Nearest Town:	Date
Organization Name:	Watershed code
Contact Name:	Phone #
Stream Segment #	
Stream Section #	

## Feature Information

Feature #	Photo #	m upstream of last feature	Feature Description and Size (see App. 3)	Stream-bank (L or R)	Adjacent Land Use *	Actions/Comments/ Water Quality Concerns

\* Adjacent Land Use Codes: Undisturbed, Agriculture, Forestry, Residential, Parks, Commercial, Industrial

Note whether feature is on the left or right bank (facing *downstream*)

# Stream Reconnaissance Field Data Sheet

## Feature Information con't

## Module 1

Feature #	Photo #	m upstream of last feature	Feature Description and Size (see App. 3)	Stream-bank (L or R)	Adjacent Land Use *	Actions/Comments/Water Quality Concerns

\* Adjacent Land Use Codes: Undisturbed, Agriculture, Forestry, Residential, Parks, Commercial, Industrial

General comments on this section of the stream

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**Identifying and Describing Features**

Note whether feature is on the left or right bank (facing *downstream*)

**Stream Feature Description Checklist****BANK EROSION**

*slumping bank, undercut, upslope slide, other*

- Measure length, height and slope.

**GARBAGE**

*commercial/industrial source, residential/recreational source, other*

- Measure length, type and quantity.

**SIDE CHANNEL**

*dry channel, flowing channel, other*

- Measure length, depth and width of wetted area. Take temperature readings.

**LACK OF RIPARIAN VEGETATION**

*human induced, natural phenomenon, other*

- Measure length, width and slope.

**WETLAND**

*bogs, marshes, swamp, pond, other*

- Measure length, depth and width. Take temperature readings.

**WATER BODY**

*Tributary, wetland, ditch, other*

- Measure bankfull and wetted channel widths and depths, (Optional: compass bearing 10m upstream of confluence, and 25m or at major bends. Measure gradient.)
- In water body - take temperature readings 2m upstream of confluence.
- In main stem - take temperature readings 2m upstream and 2m downstream of confluence.

**ENHANCEMENT**

*log/rock weir, fishway*

- Measure length and width, and height of structure to fish access, plunge pool depth.

**ENHANCEMENT (con't)**

*riparian planting, woody debris placement, spawning gravel placement*

- Measure length and width  
*incubation box/hatchery*
- Measure length, width and height  
*constructed pond/side channel*
- Measure length, width and depth.  
Take temperature.

*boulder cluster*

- Measure length and width and approximate size of boulders.

**ARTIFICIAL MODIFICATION**

*dam*

- Measure length, width and height of structure, and depth of plunge pool.  
*dredging, channelization, retaining wall, instream crossing, fence*

- Measure length and width.

*bridge*

- Measure length and width, height from substrate to bridge deck, depth of water.

*culvert*

- Measure height/width or diameter - height from substrate to bottom of structure - if flowing, temperature in flow. In main stem - 2m upstream and 2m downstream.

*rip-rap*

- Measure length, width, slope and approximate size of material.

*other*

- Measure length, width and height

## APPENDIX 3 (revised)

### OBSTRUCTION

#### *culvert*

- Measure height/width or diameter - height from substrate to bottom of structure, depth of water at base - if flowing, temperature in flow. In main stem - 2m upstream and 2m downstream.

#### *log jam*

- Measure length, width and vertical height from substrate to top of jam.

#### *dam*

- Measure length, width and vertical height from substrate to top, depth of water at base.

#### *beaver dam*

- Measure length, width and vertical height from substrate to top, depth of water at base.

#### *falls, cascade, canyon*

- Measure length, width and vertical height and slope, depth of water at base.

#### *fence*

- Measure length, vertical height, height from substrate to bottom of fence, depth of water at base.

#### *bridge*

- Measure length and width, height from substrate to bridge deck, depth of water.

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### DISCHARGE PIPE

#### *septic effluent*

- Measure height/width/diameter. Height from substrate to bottom of pipe, depth of water.
- DO NOT TOUCH!

#### *industrial outfall*

- Measure height/width/diameter. Height from substrate to bottom of pipe, depth of water.
- DO NOT TOUCH!

## Module 1

### DISCHARGE PIPE (con't)

#### *tile drain*

- Measure height/width/diameter. Height from substrate to bottom of pipe, depth of water. If discharging, take temperature in flow, then in main stem, 2m upstream and 2m downstream.

#### *storm drain*

- Measure height/width/diameter. Height from substrate to bottom of pipe, depth of water. If discharging, take temperature in flow, then in main stem, 2m upstream and 2m downstream.

#### *trench*

- Measure length/height/width.
- If discharging, take temperature in flow, then in main stem, 2m upstream and 2m downstream.

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### LIVESTOCK ACCESS

#### *streamside grazing*

#### *livestock crossing*

- Measure affected length and width of stream.

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### WATER WITHDRAWAL

#### *screened intake*

- Measure length and width of intake and mesh size.

#### *unscreened intake*

- Measure length and width of intake.
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