The Watershed Detective's
Road-Stream Crossing Assessment Data Sheet

Name: Date:

Location: Photo #'s:

Notes:

Average Channel Width

Measure the channel in three different locations upstream from your structure. Then take the average of those three measurements.

Measurement 1) _____

Measurement 2) _____

Measurement 3) _____

Average Width _____

Structure Data

Crossing Type: ☐ Bridge ☐ Culvert

Alignment: ☐ Flow-Aligned ☐ Skewed

Constriction: ☐ Severe ☐ Moderate ☐ Spans Channel

☐ Spans Channel and Banks

Crossing Condition: ☐ Okay ☐ Poor

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Inlet Data

Material: _____

Shape: _____

Width: _____ Height: _____

Water Width: _____ Water Depth: _____

Structure Length: _____ Notes: _____

Outlet Data

Material: _____

Shape: _____

Width: _____ Height: _____

Water Width: _____ Water Depth: _____

Outlet Drop: _____ (To Surface) _____(To Bed)

Notes: _____

Internal Condition

Sediment Coverage: _____% Type: _____

Matches Stream: ☐ Yes ☐ No

Water Depth: ☐ Deeper ☐ Shallower ☐ Same

Water Velocity: ☐ Faster ☐ Slower ☐ Same

Dry Passage: ☐ Yes ☐ No

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Average Channel Width: Walk upstream and take three measurements of your natural channel. Look for natural features that tell you where water flows most frequently (for example, the leaf litter line seen in the video).

Crossing Type: Two main crossing types are bridges and culverts. If you're not sure, remember that culverts are planted into the ground with material placed on top to bury them.

Alignment: Can the stream flow naturally into the crossing structure? If yes, then it is "Flow-Aligned". If the stream has to make a sharp turn, then it is "Skewed".

Constriction: Does the structure allow the stream to flow through without shrinking the size of the channel? If the width of the structure spans the channel or the channel and its banks, then you can select one of those options. If the width of the structure is less than half of your measured channel, then mark it as "Severe". If it is greater than half, but less than your channel measurement, then mark it as "Moderate".

Crossing Condition: How does your crossing structure look overall? Does it look pretty okay (select "Okay"), or is it falling apart (select "Poor")?

Structure Material: There are four main types of material that you will see. They are plastic, metal, concrete, and stacked rocks (less common). Record as "Combination" if you have more than one kind.

Inlet: Where the stream enters the structure.

Outlet: Where the stream exits the structure.

Width: Measured across the widest part of your structure.

Height: Measured at the tallest point of your structure.

Water Width and Depth: Measure the width and depth of the water right at the inlet and the outlet.

Outlet Drop: Does the water spill down into the stream or is the structure at stream level? If it spills out, measure the distance from the bottom of the culvert to the water surface and the distance to the stream bed.

Length: How long is your structure? Measure how much of the stream length is covered by it.

Sediment: Is there sediment at the bottom of the structure? If so, how much (0%, 25%, 50%, 75%, or 100%)? What kind is it? Does it match what you saw upstream?

Comparing Water Depth & Velocity: Is the water in the structure deeper, shallower, or the same depth as what you saw upstream? Is it flowing slower, faster, or the same as the natural channel?

Dry Passage: Can wildlife walk through here without getting wet? What kind of animal?

Remember!! Always have an adult with you before going near streams! Be safe and have fun!

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