**FISH PASSAGE INCIDENTAL REPORT (First Pass Data Sheet)** This form is intended to be used for rapid barrier inventorying and barrier data collection. It is not intended for barrier passage assessment and is not meant to replace any existing barrier assessment protocols.

# \* Please fill Section I and II even when no barriers found!

Send to: Anne Elston, CDFW, 830 S Street, Sacramento, CA 95814 or Anne.Elston@wildlife.ca.gov

I. GENERAL												
Surveyor(s):					<b>Date:</b> /			/	Time:	AM/PM		
Agency:									J			
Weather:	Sunny	W	Vater 🗆 Clear	Flow	V	Contin	nuous	Bank	□ Channe	el erosion		
					<b>Conditions:</b> □ Isolate			Conditions:	□ Scour			
	Raining					□ Dry	1		□ Rip/rap	)		
Water Temperature (°C):   An							nperatur	e (°C):				
II. LOCATION												
Latitude: Longitude:						Quad Name:						
Stream Name:						Tributary To:						
Barrier(s) Found?:  □ Yes □ No						Stream Segment Surveyed:						
<b>Bank Location</b> (looking downstream):  □ Left □ Right □ Both						Channel Type: 🗆 V 🗆 U						
Road Name:							Milepost:					
Photos Taken:  □ Inlet  □ Outlet  □ Other												
Photo Description/Numbers:												
Land Owner:							Structure Owner:					
III. STRUCTURE												
Structure Type:DiversionDamArizona crossing (ford)Description:								tion:				
□ Culvert □ Bridge □ Natural □ Other												
Passage Status:												
IV. FISH												
Salmonids Observed Downstream?       Yes       No       Salmonids Observed Upstream?       Yes       No												
V. DIVERSION												
<b>Diversion Type:</b> □ Slant pump □ Floodgate □ Oth												
□ Vertical pump □ Centrifugal pump □ Siphon						Pipe Size: $\Box < 1 \text{ ft}$ $\Box 1 - 2 \text{ ft}$ $\Box > 2 \text{ ft}$						
$\Box \text{ Submersible pump } \Box \text{ Pump other } \Box \text{ Weir } \text{ Screened? } \Box \text{ Yes } \Box \text{ No}$										No		
VI. DAM												
Dam Type:		□ Earth				Seasonal     Permanent						
		Other_			Passage Facility?  Ves  No							
VII. CULVERT												
Culvert Typ □ Box	pe:	Culvert Material:	Number of Barrels/Pipes:Culvert Diameter: $\Box \le 2$ ft $\Box \ge 2$ ft									
$\Box$ Circular			Metal									
□ Open-bottom arch					Culvert Height (ft): Outlet Drop Height: □ <				( )	0		
□ Pipe arch □ Log/wood Outlet Drop						-		$\Box 1 - 3$ ft	$\Box > 3$ t	t		
□ Other □ Other Weirs/Baffles? □ Yes □ No												
Abandoned/Unmaintained     Channel Width (ft):												
VIII. BRIDGE												
Bridge Type	e: $\Box$ Free sp	an 🛛	□ Instream structure	🗆 Acti	ve	Abando	oned	Apron?	$\Box$ Yes	□ No		
IX. NATURAL												
Natural Barrier Type: <ul> <li>Waterfall</li> <li>Grade</li> <li>Landslide</li> <li>Log jam</li> <li>Other</li> <li>Other</li></ul>												
Waterfall D	<b>Prop:</b> $\Box \leq 8 f$	t 🗆	> 8 ft									
			X. A	DDITI	ONAL 1	NOTES						
	e needs treatm											
What are specific treatment recommendations? (Please use other side if needed for additional notes).												

# INSTRUCTIONS TO FISH PASSAGE INCIDENTAL REPORT

#### I. GENERAL

Surveyor - Enter the names of people conducting the survey.

**Date/Time** - Enter the day's date (mm/dd/yy) and the time of the survey.

Agency - Enter the agency name.

Weather - Check the box that best describes weather conditions on the day of the survey.

Water Conditions

Clear - Free from pollution or cloudiness.

Turbid - Muddy or cloudy water.

# **Flow Conditions**

Continuous - Free flowing water.

Isolated pools - Pools are present but they are not connected by free flowing water.

**Dry** - No water at all.

### **Bank Conditions**

Channel erosion - Channel bank is eroded.

**Scour** - Severe bank erosion and unstable bank caused by the physical action of flowing water. **Rip rap** - Material, mostly rocks, placed on banks to improve the bank stabilization.

Water Temperature/Ambient Temperature – Enter the water and air temperature in the area of the survey.

#### **II. LOCATION**

Latitude/Longitude - North American Datum 1983.

Quad Name - U.S.G.S. 7.5 minute quadrangle name if known.

**Stream Name** - Enter the stream name as it appears on the 7.5 minute quadrangle map. If name not available, enter local name or '*unnamed*'.

Tributary To - Enter the name of the receiving stream, river lake or ocean.

Barrier(s) Found - Mark No if barrier(s) not found. If a barrier is found, please fill in the rest of the form.

**Stream Segment Surveyed** - Record the length of the surveyed stream segment or reach where no barriers found. **Bank Location** - Where in the stream the structure is located, looking downstream.

**Channel Type** 

V - For general description purposes, is the channel shaped like a V

 ${\bf U}$  - For general description purposes, is the channel shaped like a U, bank slopes more gradual than V channel

Road Name - Enter road name and/or number.

**Milepost** - Generally, both State and County roads have markers located every half mile indicating the road/highway number, county it is located in, and the postmile or kilopost location of the marker. For north/south roads, the markers start at 0.00 from the southern end and increase as you travel north. For west/east roads, the markers start at 0.00 from the western end and increase as you travel east.

**Photos Taken -** Mark when pictures of the inlet, outlet or other parts of a barrier were taken. , please provide the **Photos Description/Numbers -** Describe each picture orientation. Please provide photos with this form. **Land Owner -** May be private, public, tribal, or unknown-if known, put down owners name and contact info. **Structure Owner -** May be different from land owner- if known, put down owners name and contact info.

# **III. STRUCTURE**

#### Structure Type

**Diversion** - A man-made structure or installation for transferring water from a stream by a pipe, canal, well, or other conduit to another watercourse or to the land. Surface diversions fall into two general categories: pump and gravity.

**Dam** - A man-made barrier constructed across a stream and designed to control water flow or create a reservoir.

Arizona Crossing - A road crossing that allows the river to run over a road.

**Culvert** - A pipe that allows streams, rivers, or runoff to pass under a road.

Bridge - A structure conveying a road or pathway over a stream, river, or a depression.

**Natural** - A barrier that is not man-made, such as: waterfall, beaver dam, insufficient flow, landslide, velocity, etc.

Other - Anything that is not described in the above categories.

**Description** - Any additional significant details about the structure.

**Passage Status** - Based on your field observations describe the impact on adult and juvenile salmonid fish passage. (estimate to your best judgment).

## IV. FISH

**Salmonids Observed Downstream?** - Were salmonids observed in the creek below the barrier? **Salmonids Observed Upstream?** - Were salmonids observed above the barrier?

#### **V. DIVERSION**

### **Diversion Type**

Vertical - The pump is vertically oriented and pulls water straight up.

**Submersible** - The pump for diverting water is submerged under the water or bank and is not visible. **Slant** - Both the pump and intake pipe are angled at a slant up the river bank.

**Centrifugal** - Old style pump which has a similar visual appearance to a snail shell (spiral or circular). **Pump other** - Water diversion where type of pump used is unknown but use of a pump is certain.

**Floodgate** - Water diversion where water is diverted by gravity flow and controlled via a screwgate.

Siphon - Common in the Delta, not usually seen anywhere else.

**Weir** - Type of dam structure, usually spanning both banks, where flashboards are used to create head for the pump.

**Other** - Anything that is not described in the above categories.

**Pipe Size** - Inside diameter of the diversion intake or drain.

**Screened** - Fish screens are supposed to keep fish from being taken out of a stream or river by a water diversion. **Pump Running** - Check *Yes* if the diversion was running in the time of the survey.

#### VI. DAM

Dam Type - Specify the material the dam is made from.

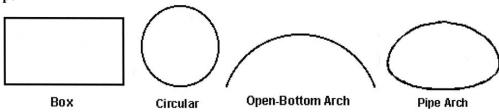
Dam Width/Dam Height - Provide the dam's dimensions in feet if possible.

Seasonal/Permanent - Is the dam operational all year long or seasonally?

Facility - Is there a fish ladder, natural fishway bypass, or some other structure in place to improve fish passage?

# VII. CULVERT

**Culvert Type** 



**Abandoned/Unmaintained** - Check if the culvert appears to be abandoned and/or not maintained. **Culvert Material** - Check the box that most accurately describes the culvert's construction material. Check multiple boxes if the culvert is composed of two or more materials.

**Metal** - Includes the Corrugated Metal (Steel) Pipe (CMP) = single sheet pipe of corrugated galvanized steel; Structural Steel Plate (SSP) = multiple plates of corrugated galvanized steel bolted together, and corrugated aluminium. Both the pump and intake pipe are angled at a slant up the river bank.

Plastic - Culvert of various types of high-impact plastics, usually with shallow corrugations.

**Concrete** - Most county and state roads box culverts. Some circular and arch pipes are made of concrete, generally no corrugations.

**Log/wood** - Mostly old log stringer bridges and Humboldt crossings, occasionally also box and old circular pipe.

Other - Explain if none of the materials accurately describes the culvert.

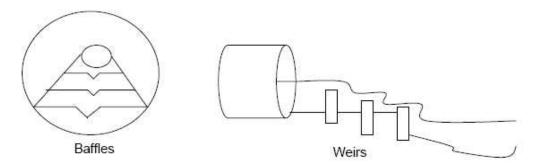
Number of Barrels/Pipes - If a culvert consists of numerous barrels or pipe, list the total number.

**Culvert Diameter** - Check whether inside culvert diameter is bigger or smaller than 2 ft. If multiple culverts, check the diameter of the largest one.

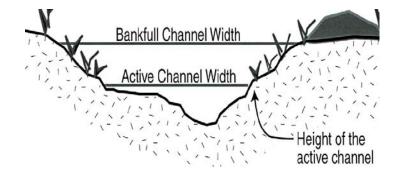
**Culvert Height/Width** - Provide the culvert dimensions. If multiple culverts, enter the size of the largest one. **Outlet Drop Height** - Measure the height at the center of the culvert outlet (e.g. downstream end of the culvert).

Fish Passage Incidental Report Instructions

**Weirs/Baffles -** These are generally structures that are added as a retrofit to a culvert (baffles), or placed in the stream (weirs) to reduce velocity or improve fish passage in some way.



**Channel Width** - The active channel width is identified by locating the height of annual scour along banks developed by annual fluctuations of stream flow.



# VIII. BRIDGE

#### Bridge Type

Free span - No part of the bridge is in the stream.

Instream structure - An abutment, pier, or some other part of the bridge is in the stream.

Active/Abandoned - Is the bridge still utilized for vehicular or pedestrian traffic, or is it abandoned?

**Apron** - A protective shield, usually made of concrete, to protect against erosion, may be around piers or abutments or span the entire creek.

#### **IX. NATURAL**

# Natural Barrier Type

Waterfall - A sudden, nearly vertical drop in a stream, as it flows over rock.

**Grade** - The topography of the streambed is too steep for fish to ascend. Specify details of species and lifestages the grade is to steep for, in the notes section, and/or estimate the slope.

Landslide - Movement of earth down a steep slope into a stream that blocks fish passage.

Log jam - Log debris in a stream such that it blocks fish passage.

Waterfall Drop - Check the appropriate box.

#### **X. ADDITIONAL NOTES**

Please provide any additional notes and comments that may help to describe the structure, to determine the need for detail fish passage assessment and needs for barrier remediation. Use other side of the form is needed. Mail or email filled form(s) to:

DFW Passage Assessment Database Project, 830 S Street, Sacramento, CA 95814, Anne.Elston@wildlife.ca.gov