

Appendix D

Culvert Barrier Assessment Forms

Barrier Evaluation Form - Single Culvert at Crossing

Location Information

Project Name: Mill Creek		SRFB Project #:	County: Chelan
HPA #:		Parcel #:	
GPS Location: Datum - WGS84 -decimal degrees		Latitude:	Longitude:
¼ Section:	Section:	Township:	Range: <input type="checkbox"/> East <input type="checkbox"/> West
Stream Name: Mill Creek		Tributary To: Peshastin Creek	WRIA #: 45
Driving Directions:			

Landowner Information

Landowner:		Mailing Address:	
City:	State:	Zip:	Phone: ()
Cell: ()	Fax: ()	Email:	
Landowner Agent:		Mailing Address:	
City:	State:	Zip:	Phone: ()
Cell: ()	Fax: ()	Email:	

Evaluator Information

Evaluator Name: Colin Forsyth		Affiliation: Bureau of Reclamation	
Mailing Address: 301 Yakima St., Room 319		City: Wenatchee	State: WA Zip: 98801
Phone: 509-703-8320	Fax:	Cell:	Email: cforsyth@usbr.gov

Barrier Information (measurements in meters)

Is the stream fish-bearing? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown		Species:	Date of Visit: 06/15/2011
Fish-bearing criteria: <input type="checkbox"/> Fish Observation <input type="checkbox"/> Stream Type <input type="checkbox"/> SASSI/Stream Catalog <input type="checkbox"/> Physical Criteria <input type="checkbox"/> Other:			
Stream flow: <input type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Unknown Source of information:			
Will this culvert be entered into the WDFW-FPDSI (formerly SSHEAR) database? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, Site ID #:			
Shape: BOX	Material: PCC	Apron: <input type="checkbox"/> None <input type="checkbox"/> Upstream <input type="checkbox"/> Downstream <input checked="" type="checkbox"/> Both	Span: 1.6m
Rise: 1.27m	Length: 14.55m	Water Depth in Culvert: 0.089m	Water Surface Drop: .635m
Drop Location: <input checked="" type="checkbox"/> Outlet <input type="checkbox"/> Inlet <input type="checkbox"/> Inside		Countersunk: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown	Culvert Slope(%): 2.99
Bankfull Width (outside influence of culvert): 2.67m		Culvert Span/Bankfull Width Ratio: 0.64	
Plunge Pool: Length (culvert to tail-out): 4.42m OHW width: 2.67m Max depth: 0.635m			Road fill DS: 1.20m Road width:
Fishway Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (if yes, describe in Comments)			Tide gate Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
Is this culvert a fish passage barrier? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Level B needed			
Problem with culvert: <input checked="" type="checkbox"/> WS drop <input checked="" type="checkbox"/> Slope <input type="checkbox"/> Velocity <input type="checkbox"/> Depth		Percent Passability: <input type="checkbox"/> 0% <input checked="" type="checkbox"/> 33% <input type="checkbox"/> 67% <input type="checkbox"/> 100%	
Habitat Quality: <input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Poor <input checked="" type="checkbox"/> Unknown			
Comments(Describe crossing condition, fish observations, habitat quality etc):			



Washington Department of Fish and Wildlife

Fish Passage & Diversion Screening Inventory Database Report Cover Sheet

The following report is extracted from the Washington Department of Fish and Wildlife's (WDFW) Fish Passage and Diversion Screening Inventory Database (FPDSI). WDFW makes every attempt to keep these reports in sync with FPDSI; however, the dynamic nature of the data and workflows associated with maintaining the database may result in short-term differences.

Users are encouraged to contact WDFW to discuss appropriate use of the data and how we can assist with fish passage barrier removal or inventory. Please visit the Fish Passage web site for contact information at: <https://wdfw.wa.gov/species-habitats/habitat-recovery/fish-passage/about>

Disclaimers:

- Data presented here represent a snapshot observation of conditions in a dynamic environment that is subject to change. Fish passage data are also collected from a variety of agencies and sources. Therefore, WDFW makes no guarantee concerning the data's content, accuracy, completeness, or the results obtained from use of the data. WDFW assumes no liability for the data represented here.
- These data are not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife.
- Note that some fish passage features, habitats or species may occur in areas not currently known to the WDFW Fish Passage division, and may not be reflected in this database. A lack of data does not necessarily indicate that a feature, habitat, or species are not present.
- Unauthorized attempts to alter or modify these data are strictly prohibited.
- Bankfull width measurements included in these reports should not be used for fish passage crossing design. They are solely for assessment purposes.
- The barrier status reported in this document is based on the swimming abilities of adult salmonids. Passabilities are a qualitative value, and should not be interpreted as a quantitative calculation. Please see page 1-4 of the Fish Passage Inventory, Assessment and Prioritization Manual for further clarification: <https://wdfw.wa.gov/publications/02061>
- EXIF data presented with Image Reports may be erroneous due to camera battery failures and resetting of camera clock functions.

Abbreviations:

Most abbreviations in this report are defined in the Quick Reference Tables of the Fish Passage Inventory, Assessment, and Prioritization Manual. Additional commonly used abbreviations are defined as follows:

NFB = no potential salmonid use, **BB** = both banks, **LB** = left bank looking downstream, **RB** = right bank looking downstream, **US** or **U/S** = upstream, **DS** or **D/S** = downstream, **WSDrop** = water surface drop, **BFW** = bankfull width, **OHW** = ordinary high water, **SLW** = scour line width, **CMP** = corrugated metal pipe, **Q_{fp}** = fish passage flow, **V&D** = Velocity and Depth, **ROW** = Right of Way

The FPDSI database often uses default values such as '-99.99' or '-999' to represent null values.

WDFW Fish Passage and Diversion Screening Inventory Database

Site Description Report

Site ID 040089

Project SRFBGRANT

Geographic Coordinates

Latitude (WGS 84): 47.511094188
Longitude (WGS 84): -120.63200245
East (HARN 83): 1,607,788.2
North (HARN 83): 794,244.4

General Location

Road Name: Mountain Home Ranch Rd
Mile Post: -999.99
County: Chelan
WDFW Region: 2

Waterbody

Stream: Mill Cr
Tributary To: Peshastin Cr
WRIA: 45.0245
River Mile: -999.99
Fish Use Potential: Yes
FUP Criteria: Biological

Owner

Type: County
Name: Chelan County

PI Species

- | | | |
|----------------------------------|---|--|
| <input type="checkbox"/> Sockeye | <input type="checkbox"/> Chinook | <input type="checkbox"/> Sea Run Cutthroat |
| <input type="checkbox"/> Pink | <input type="checkbox"/> Coho | <input checked="" type="checkbox"/> Resident Trout |
| <input type="checkbox"/> Chum | <input checked="" type="checkbox"/> Steelhead | <input checked="" type="checkbox"/> Bull Trout |

Associated Features

- | | | | |
|---|--------------------------------|--|------------------------------------|
| <input checked="" type="checkbox"/> Culvert | <input type="checkbox"/> Dam | <input type="checkbox"/> Natural Barrier | <input type="checkbox"/> Diversion |
| <input type="checkbox"/> Non-Culvert Xing | <input type="checkbox"/> Other | <input type="checkbox"/> Fishway | |

Location/Directions

Site Comments

Print Date: 4/15/2019

These data represent a snapshot of the Washington Department of Fish and Wildlife's current records. Due to the ongoing nature of assessment and inventory of these features, these data may not accurately represent conditions on the ground, and are subject to change.

WDFW Fish Passage and Diversion Screening Inventory Database

Level A Culvert Assessment Report

Site ID: **040089**
 Latitude: **47.511094188** Stream: **Mill Cr** WRIA: **45.0245**
 Longitude: **-120.63200245** Tributary To: **Peshastin Cr** Fish Use Potential: **Yes**

Data Source

Field Crew: **JP;CD**

Review Date: **7/26/2016**

Culvert Details

Level A Parameters

ID	Shape	Material	Span	Rise	Length	WDIC	Apron	WSDrop	Location	Countersunk	Backwater	Slope (%)
1.1	BOX	CPC	1.53	1.26	13.10	0.02	BE	0.65	Outlet	No	0	2.37

All dimensions in meters

Channel Description

Toe Width (m): **1.89**

Average Width (m): **3.28**

Culvert/Stream Width Ratio: **0.47**

Plunge Pool

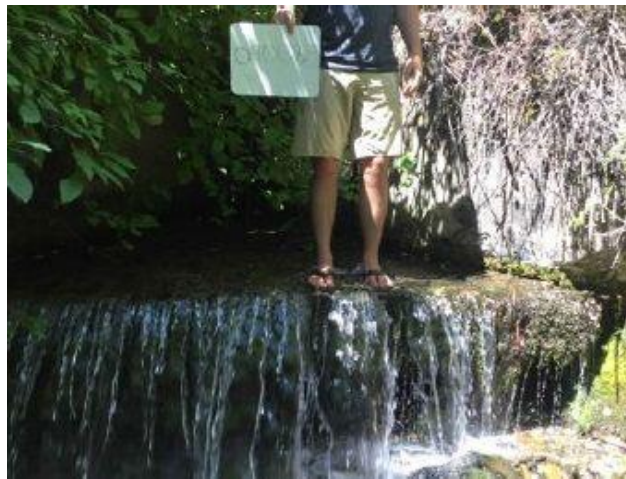
Length (m): **3.00**

Max Depth (m): **0.26**

OHW Width (m): **3.54**

Road

Fill Depth (m): **4.00**



Assessment Results

Barrier: **Yes** Passability (%): **33** Method: **Level A**
 Reason: **WS Drop** Fishway Present: **No** Recheck:

Comments

Potential Habitat Gain

Survey Type: **RHA** Spawning (sq m): **-999** Length (m): **-999**
 Significant Reach: **Unknown** Rearing (sq m): **-999** **PI Total**

Print Date: 4/15/2019

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WDFW Fish Passage and Diversion Screening Inventory Database

Habitat Survey Summary Report

Site ID: **040089**

Latitude: **47.511094188** Longitude: **-120.63200245** WRIA: **45.0245**

Stream: **Mill Cr** Tributary To: **Peshastin Cr** PI Total:

Survey Type

Spreadsheet File(s):

040089_RHA.xlsx

Downstream Survey

Date: Crew: Length (m):

Downstream Comments:

Upstream Survey

Date: Crew: Length (m):

Upstream Comments:

Potential Habitat Gain

Lineal (m):

Spawning Area (sq m):

Rearing Area (sq m):

Distribution

- ☐ Anadromous
☐ Resident Only
☐ Unknown

Gain Direction (Resident Only)

Potential Species Benefit

☐ Sockeye / Kokanee

☐ Chinook

☐ Searun Cutthroat

☐ Pink

☐ Coho

☒ Resident Trout

☐ Chum

☒ Steelhead

☒ Bull Trout

Print Date: 4/15/2019

These data represent a snapshot of the Washington Department of Fish and Wildlife's current records. Due to the ongoing nature of assessment and inventory of these features, these data may not accurately represent conditions on the ground, and are subject to change.