

Summary of 2016 Reconnaissance Fish Passage Surveys

During February and March of 2016, 179 Reconnaissance Fish Passage Surveys were conducted on state highways in Butte and Sacramento counties. 138 sites were surveyed on Highway 99 in Butte County, 24 sites were surveyed on Highway 99 in Sacramento County, and 17 sites were surveyed on Highway 104 in Sacramento County. The Reconnaissance Surveys were performed in accordance with the California Department of Transportation's (Caltrans') Reconnaissance Fish Passage Assessment Instructions and Procedures manual¹. 25 of the 179 sites (14%) were identified as requiring a Detailed Fish Passage Survey.

The primary objective of the Reconnaissance Survey is to determine whether any given highway-stream crossing may potentially be an anadromous fish-bearing stream based on characteristics of the stream and the crossing. The Reconnaissance Survey includes both field and office activities. Field activities include documenting whether a natural stream channel is present, whether the site is primarily used for conveying stormwater and/or is a concrete-lined floodway, and evaluating basic stream channel width and gradient criteria. In addition to documenting characteristics of the crossing and the stream channel at each survey site, aerial imagery also is reviewed and a literature review is conducted to identify streams that may currently support or historically supported anadromous fish, in order to support a determination on whether further surveying effort is required, and to assist in prioritization of future survey efforts.

Reconnaissance Survey sites that do not meet the basic criteria for potentially being an anadromous fish-bearing stream or are known to have not historically supported anadromous salmonids (e.g., due to a natural migration barrier downstream of the site) are identified as not needing a Detailed Survey, as defined in Caltrans' Detailed Fish Passage Assessment Data Collection Instructions and Procedures manual². Sites identified as needing a Detailed Survey require additional information to be collected during the Reconnaissance Survey, including information on: (1) land ownership upstream and downstream of the site (to the extent possible); (2) whether the site is accessible via the highway for conducting a Detailed Survey; (3) whether vegetation removal is required to conduct a Detailed Survey; and (4) whether the crossing is classified as a confined space. Up to four photographs are taken at each surveyed site, to the extent possible, including: (1) upstream of the crossing looking upstream; (2) upstream of the crossing looking downstream; (3) downstream of the crossing looking upstream; and (4) downstream of the crossing looking downstream.

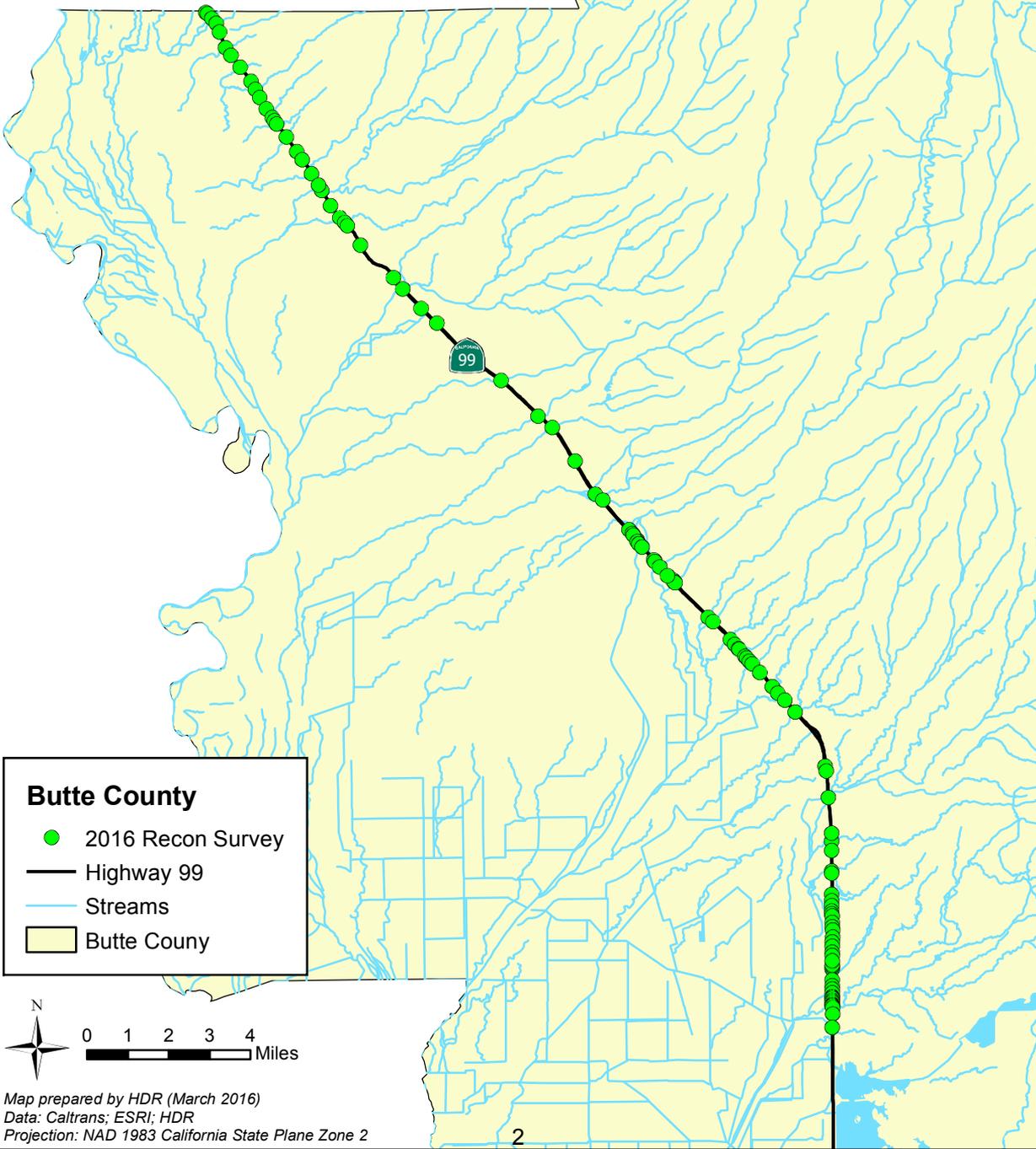
The results of the Reconnaissance Surveys performed during February and March of 2016 in Butte and Sacramento counties are summarized in this report by county, route and postmile. For each surveyed site, the information collected during the Reconnaissance Survey is displayed, in addition to basic hydrologic unit classifications for the site, the stream name (if available), whether the site historically supported anadromous salmonids (if known), and photographs of the site. If a determination was made that a site requires a Detailed Survey, additional information is displayed, including land ownership information, site accessibility for conducting a Detailed Survey, whether vegetation removal is needed to conduct a Detailed Survey, and whether the site may be a confined space.

Reconnaissance Surveys conducted in Butte County and in Sacramento County are shown on the following maps.

¹ California Department of Transportation (Caltrans). 2007. Reconnaissance Fish Passage Assessment Instructions and Procedures. Prepared by HDR Engineering, Inc.

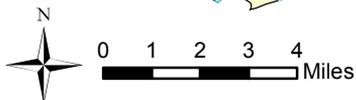
² California Department of Transportation (Caltrans). 2007. Detailed Fish Passage Assessment Data Collection Instructions and Procedures. Prepared by HDR Engineering, Inc.

2016 Reconnaissance Surveys Butte County, CA



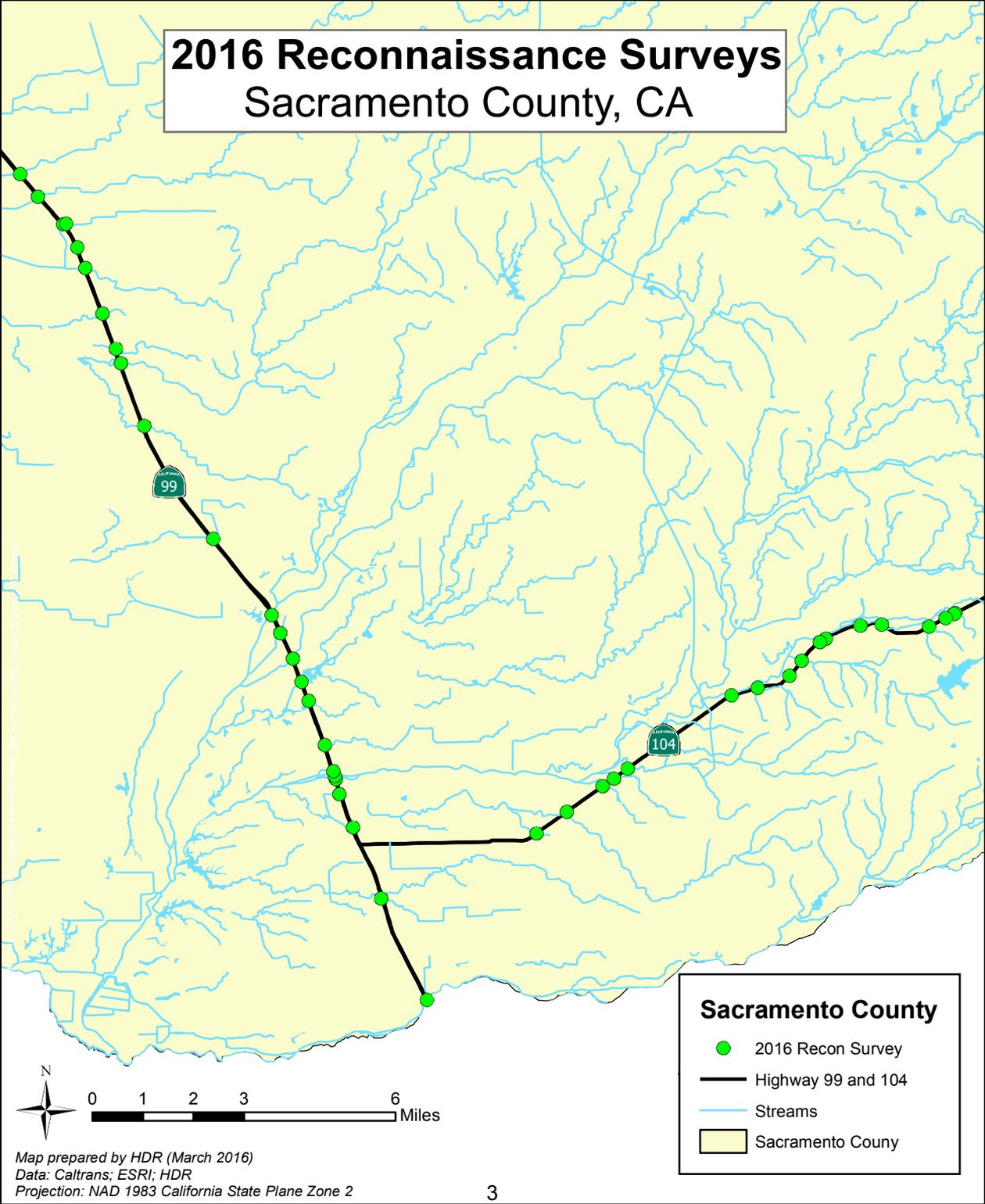
Butte County

- 2016 Recon Survey
- Highway 99
- Streams
- Butte County



Map prepared by HDR (March 2016)
Data: Caltrans; ESRI; HDR
Projection: NAD 1983 California State Plane Zone 2

2016 Reconnaissance Surveys Sacramento County, CA



Map prepared by HDR (March 2016)
Data: Caltrans; ESRI; HDR
Projection: NAD 1983 California State Plane Zone 2

RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 0.01

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **0.52**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **2.30**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 3.68

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 3.68

Access Information

Land Ownership:

Upstream	<input type="text" value="private"/>	Owner(s)	<input type="text" value="Agriculture and commercial properties"/>
Downstream	<input type="text" value="private"/>	Owner(s)	<input type="text" value="unknown"/>

Accessible from road?

Upstream?	<input type="text" value="Yes"/>	Limitations	<input type="text" value="Fenced"/>
Downstream?	<input type="text" value="Yes"/>	Limitations	<input type="text" value="Fenced"/>

Vegetation Removal Required?

Upstream?	<input type="text" value="No"/>	(If "Yes", comment and take photograph)
Photo ID	Comments	
Downstream?	<input type="text" value="Unknown"/>	(If "Yes", comment and take photograph)
Photo ID	Comments	

Maintenance Assistance Required?

Upstream?	<input type="text" value="No"/>	(If "Yes", comment and take photograph)
Photo ID	Comments	
Downstream?	<input type="text" value="Unknown"/>	(If "Yes", comment and take photograph)
Photo ID	Comments	

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.
DO NOT ENTER CULVERT

Is culvert diameter > 60"?	<input type="text" value="No"/>
Can you see all the way through the end of the culvert?	<input type="text" value="No"/>
Can you feel a breeze through the culvert?	<input type="text" value="No"/>

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream

N/A

Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **3.75**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
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Potential Fish Bearing Stream?

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Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 4.63

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **4.65**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

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ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 5.34

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 5.64

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **6.11**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 6.60

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **6.90**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 7.40

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **7.41**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 8.21

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 9.21

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **9.55**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **9.62**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream

N/A

Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 10.65

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:
Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 10.93

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:
Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 11.22

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:
Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **11.69**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **12.25**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



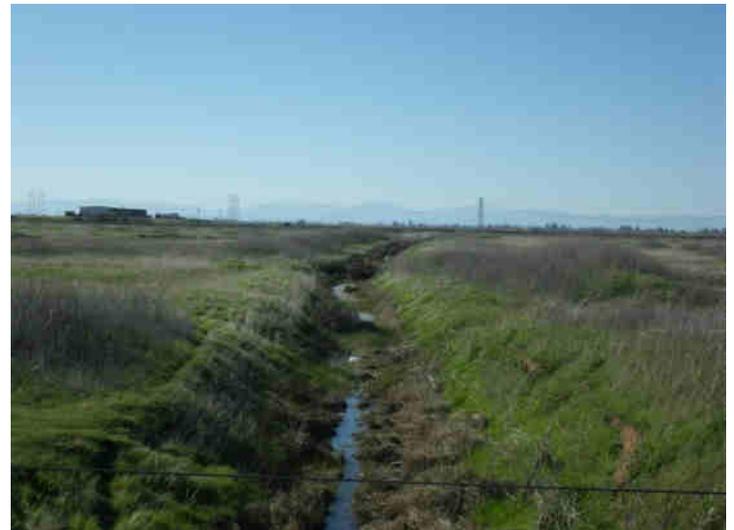
Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 12.83

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 13.25

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:
Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 13.89

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:
Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **13.95**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:
Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 14.03

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **14.30**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream

N/A

Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 14.48

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 14.74

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 14.98

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 15.27

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 15.41

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 15.47

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 15.49

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 15.51

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 15.57

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **15.61**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 15.67

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 15.69

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 15.71

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **15.80**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 15.89

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 15.97

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **16.09**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 16.38

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **16.43**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **16.46**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 16.57

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 16.68

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 16.77

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 16.91

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **17.03**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 17.16

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 17.33

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 17.41

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **17.51**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **17.67**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 17.71

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 17.78

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 17.91

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 18.06

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 18.20

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **18.60**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 18.80

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **19.30**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

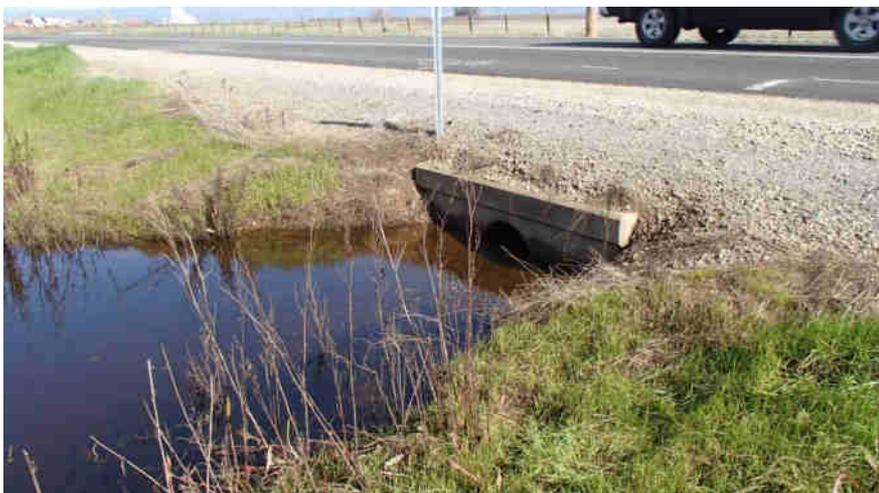
Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 19.51

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **19.58**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 19.72

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 19.72

Access Information

Land Ownership:

Upstream	<input type="text" value="private"/>	Owner(s)	<input type="text" value="North State Rendering Co. Inc."/>
Downstream	<input type="text" value="private"/>	Owner(s)	<input type="text" value="unknown agriculture"/>

Accessible from road?

Upstream?	<input type="text" value="Yes"/>	Limitations	<input type="text" value="Fencing"/>
Downstream?	<input type="text" value="Yes"/>	Limitations	<input type="text" value="Fencing"/>

Vegetation Removal Required?

Upstream?	<input type="text" value="No"/>	(If "Yes", comment and take photograph)
Photo ID	Comments	
Downstream?	<input type="text" value="No"/>	(If "Yes", comment and take photograph)
Photo ID	Comments	

Maintenance Assistance Required?

Upstream?	<input type="text" value="No"/>	(If "Yes", comment and take photograph)
Photo ID	Comments	
Downstream?	<input type="text" value="No"/>	(If "Yes", comment and take photograph)
Photo ID	Comments	

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.
DO NOT ENTER CULVERT

Is culvert diameter > 60"?	<input type="text" value="Yes"/>
Can you see all the way through the end of the culvert?	<input type="text" value="Yes"/>
Can you feel a breeze through the culvert?	<input type="text" value="Yes"/>

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 20.60

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID

General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **21.26**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream

N/A

Upstream Looking Downstream

N/A

Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 21.37

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream

N/A

Upstream Looking Downstream

N/A

Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 22.95

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID

General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **23.40**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream

N/A

Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 23.60

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 23.60

Access Information

Land Ownership:

Upstream Owner(s)
Downstream Owner(s)

Accessible from road?

Upstream? Limitations
Downstream? Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.
DO NOT ENTER CULVERT

Is culvert diameter > 60"?
Can you see all the way through the end of the culvert?
Can you feel a breeze through the culvert?

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **23.90**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream

N/A

Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 24.10

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 24.58

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 24.70

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 24.85

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 24.90

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 25.05

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 25.06

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **25.20**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream

N/A

Upstream Looking Downstream



Downstream Looking Upstream

N/A

Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 25.35

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID

General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 25.98

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **26.14**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID

General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 27.33

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 27.33

Access Information

Land Ownership:

Upstream	<input type="text" value="private"/>	Owner(s)	<input type="text" value="fenced agriculture"/>
Downstream	<input type="text" value="private"/>	Owner(s)	<input type="text" value="fenced agriculture"/>

Accessible from road?

Upstream?	<input type="text" value="Yes"/>	Limitations	<input type="text" value="Fence"/>
Downstream?	<input type="text" value="Yes"/>	Limitations	<input type="text" value="Fence"/>

Vegetation Removal Required?

Upstream?	<input type="text" value="No"/>	(If "Yes", comment and take photograph)
Photo ID	Comments	
Downstream?	<input type="text" value="No"/>	(If "Yes", comment and take photograph)
Photo ID	Comments	

Maintenance Assistance Required?

Upstream?	<input type="text" value="No"/>	(If "Yes", comment and take photograph)
Photo ID	Comments	
Downstream?	<input type="text" value="No"/>	(If "Yes", comment and take photograph)
Photo ID	Comments	

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.
DO NOT ENTER CULVERT

Is culvert diameter > 60"?	<input type="text" value="No"/>
Can you see all the way through the end of the culvert?	<input type="text" value="Yes"/>
Can you feel a breeze through the culvert?	<input type="text" value="Yes"/>

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 27.38

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 27.38

Access Information

Land Ownership:

Upstream Owner(s)
Downstream Owner(s)

Accessible from road?

Upstream? Limitations
Downstream? Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.
DO NOT ENTER CULVERT

Is culvert diameter > 60"?
Can you see all the way through the end of the culvert?
Can you feel a breeze through the culvert?

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **27.43**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 27.60

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream

N/A

Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 27.85

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 28.00

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream

N/A

Downstream Looking Downstream

N/A

RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 28.05

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream

N/A

Downstream Looking Downstream

N/A

RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 28.50

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream

N/A

Upstream Looking Downstream

N/A

Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 28.60

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream

N/A

Upstream Looking Downstream

N/A

Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 28.65

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream

N/A

Upstream Looking Downstream

N/A

Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **28.72**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID

General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream

N/A

Downstream Looking Downstream

N/A

RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 28.90

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **28.95**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 29.05

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 30.03

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream

N/A

Upstream Looking Downstream



Downstream Looking Upstream

N/A

Downstream Looking Downstream

N/A

RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 30.40

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream

N/A

Upstream Looking Downstream

N/A

Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **31.20**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream

N/A

Downstream Looking Downstream

N/A

RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 32.20

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID

General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 32.61

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID

General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 33.87

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **36.10**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 36.60

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream

N/A

Upstream Looking Downstream

N/A

Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 37.20

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID

General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **37.50**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 39.10

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 39.70

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 39.71

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID

General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 39.90

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 40.30

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 40.65

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID

General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 40.90

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 40.90

Access Information

Land Ownership:

Upstream Owner(s)
Downstream Owner(s)

Accessible from road?

Upstream? Limitations
Downstream? Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.
DO NOT ENTER CULVERT

Is culvert diameter > 60"?
Can you see all the way through the end of the culvert?
Can you feel a breeze through the culvert?

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 41.14

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 41.14

Access Information

Land Ownership:

Upstream Owner(s)
Downstream Owner(s)

Accessible from road?

Upstream? Limitations
Downstream? Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.
DO NOT ENTER CULVERT

Is culvert diameter > 60"?
Can you see all the way through the end of the culvert?
Can you feel a breeze through the culvert?

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 41.70

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 41.70

Access Information

Land Ownership:

Upstream Owner(s)
Downstream Owner(s)

Accessible from road?

Upstream? Limitations
Downstream? Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.
DO NOT ENTER CULVERT

Is culvert diameter > 60"?
Can you see all the way through the end of the culvert?
Can you feel a breeze through the culvert?

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **41.90**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **42.30**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 42.30

Access Information

Land Ownership:

Upstream Owner(s)
Downstream Owner(s)

Accessible from road?

Upstream? Limitations
Downstream? Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.
DO NOT ENTER CULVERT

Is culvert diameter > 60"?
Can you see all the way through the end of the culvert?
Can you feel a breeze through the culvert?

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 42.70

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 42.70

Access Information

Land Ownership:

Upstream Owner(s)
Downstream Owner(s)

Accessible from road?

Upstream? Limitations
Downstream? Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.
DO NOT ENTER CULVERT

Is culvert diameter > 60"?
Can you see all the way through the end of the culvert?
Can you feel a breeze through the culvert?

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 42.80

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



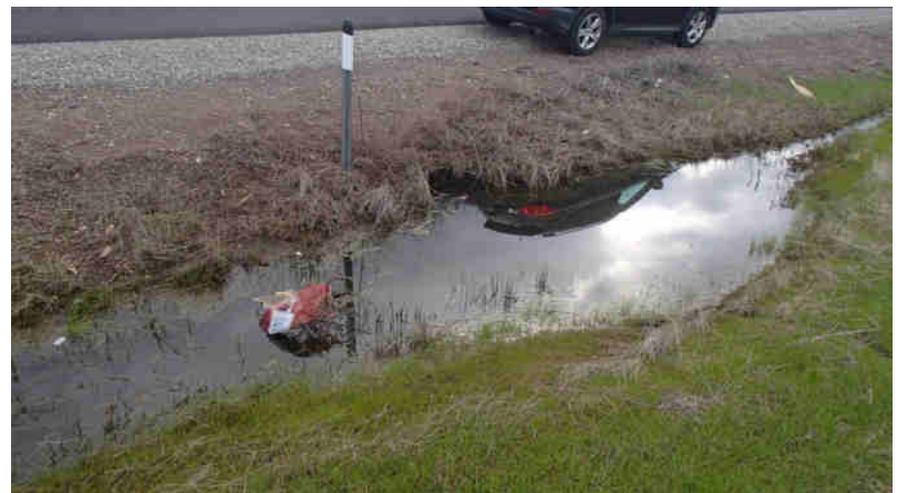
Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 42.90

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 42.90

Access Information

Land Ownership:

Upstream Owner(s)
Downstream Owner(s)

Accessible from road?

Upstream? Limitations
Downstream? Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.
DO NOT ENTER CULVERT

Is culvert diameter > 60"?
Can you see all the way through the end of the culvert?
Can you feel a breeze through the culvert?

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **43.10**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 43.33

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 43.33

Access Information

Land Ownership:

Upstream Owner(s)
Downstream Owner(s)

Accessible from road?

Upstream? Limitations
Downstream? Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.
DO NOT ENTER CULVERT

Is culvert diameter > 60"?
Can you see all the way through the end of the culvert?
Can you feel a breeze through the culvert?

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 43.40

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 43.64

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID

General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 43.64

Access Information

Land Ownership:

Upstream Owner(s)
Downstream Owner(s)

Accessible from road?

Upstream? Limitations
Downstream? Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.
DO NOT ENTER CULVERT

Is culvert diameter > 60"?
Can you see all the way through the end of the culvert?
Can you feel a breeze through the culvert?

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 43.80

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **44.30**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 44.90

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 44.90

Access Information

Land Ownership:

Upstream Owner(s)
Downstream Owner(s)

Accessible from road?

Upstream? Limitations
Downstream? Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____
Downstream? (If "Yes", comment and take photograph)
Photo ID _____ Comments _____

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.
DO NOT ENTER CULVERT

Is culvert diameter > 60"?
Can you see all the way through the end of the culvert?
Can you feel a breeze through the culvert?

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 44.92

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **45.50**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

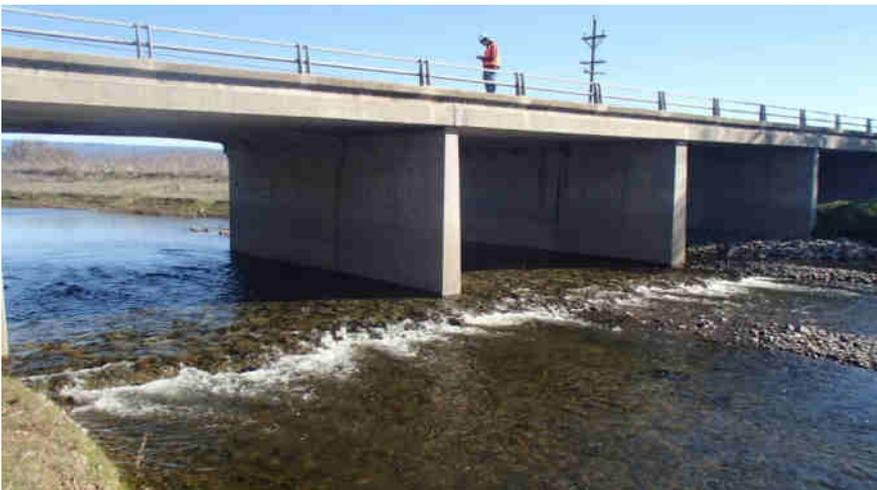
Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: BUT

Route: 99

PM: 45.72

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP _____ Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **45.80**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: **BUT**

Route: **99**

PM: **45.93**

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 0.13

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 2.36

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 3.90

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 3.90

Access Information

Land Ownership:

Upstream

Owner(s)

Downstream

Owner(s)

Accessible from road?

Upstream?

Limitations

Downstream?

Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID Comments

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID Comments

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.

DO NOT ENTER CULVERT

Is culvert diameter > 60"?

Can you see all the way through the end of the culvert?

Can you feel a breeze through the culvert?

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 4.60

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 4.91

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 4.98

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 5.06

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 5.60

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:
Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 6.54

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 6.96

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 7.45

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 8.00

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 8.40

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 10.60

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream

N/A

Downstream Looking Downstream

N/A

RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 13.00

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



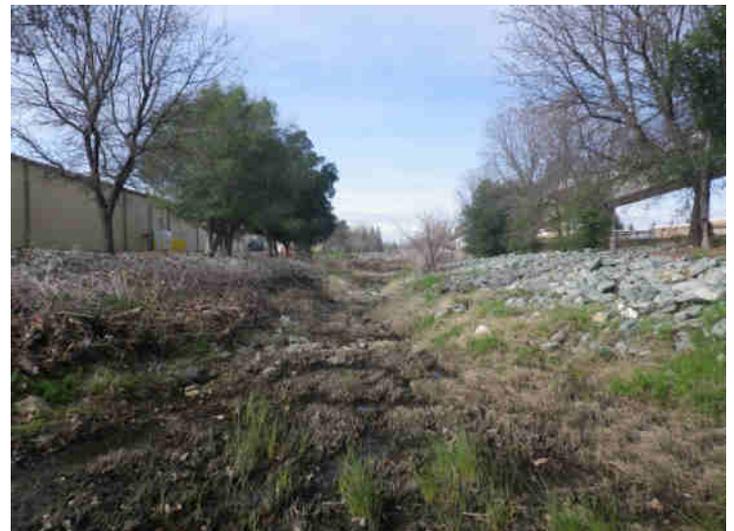
Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 14.32

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 14.63

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream

N/A

Downstream Looking Downstream

N/A

RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 15.38

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 16.36

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 16.36

Access Information

Land Ownership:

Upstream

Owner(s)

Downstream

Owner(s)

Accessible from road?

Upstream?

Limitations

Downstream?

Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID Comments

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID Comments

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.

DO NOT ENTER CULVERT

Is culvert diameter > 60"?

Can you see all the way through the end of the culvert?

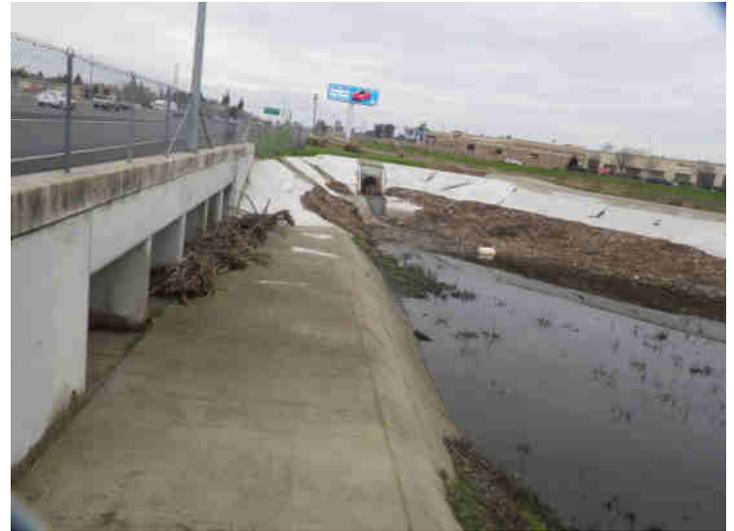
Can you feel a breeze through the culvert?

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 16.78

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream

N/A

Downstream Looking Downstream

N/A

RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 17.32

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 17.32

Access Information

Land Ownership:

Upstream

Owner(s)

Downstream

Owner(s)

Accessible from road?

Upstream?

Limitations

access via East Stockton and commercial complex near Triple C Uphostry and Boty Boot Camp

Downstream?

Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID Comments

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID Comments

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.

DO NOT ENTER CULVERT

Is culvert diameter > 60"?

Can you see all the way through the end of the culvert?

Can you feel a breeze through the culvert?

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 17.33

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 17.33

Access Information

Land Ownership:

Upstream

Owner(s)

Downstream

Owner(s)

Accessible from road?

Upstream?

Limitations

Downstream?

Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID Comments

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID Comments

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.

DO NOT ENTER CULVERT

Is culvert diameter > 60"?

Can you see all the way through the end of the culvert?

Can you feel a breeze through the culvert?

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 18.05

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 18.05

Access Information

Land Ownership:

Upstream

Owner(s)

Downstream

Owner(s)

Accessible from road?

Upstream?

Limitations

Downstream?

Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID Comments

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID Comments

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.

DO NOT ENTER CULVERT

Is culvert diameter > 60"?

Can you see all the way through the end of the culvert?

Can you feel a breeze through the culvert?

Report Date 03-15-2016

Upstream Looking Upstream

N/A

Upstream Looking Downstream

N/A

Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 18.64

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 99

PM: 18.64

Access Information

Land Ownership:

Upstream

Owner(s)

Downstream

Owner(s)

Accessible from road?

Upstream?

Limitations

Downstream?

Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID Comments

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID Comments

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.
DO NOT ENTER CULVERT

Is culvert diameter > 60"?

Can you see all the way through the end of the culvert?

Can you feel a breeze through the culvert?

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 3.56

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 4.30

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID

General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 5.18

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID

General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream

N/A

Downstream Looking Upstream

N/A

Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 5.44

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 5.78

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 8.30

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 8.30

Access Information

Land Ownership:

Upstream

Owner(s)

Downstream

Owner(s)

Accessible from road?

Upstream?

Limitations

Downstream?

Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID Comments

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID Comments

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.

DO NOT ENTER CULVERT

Is culvert diameter > 60"?

Can you see all the way through the end of the culvert?

Can you feel a breeze through the culvert?

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 8.84

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 9.70

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 9.94

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 9.94

Access Information

Land Ownership:

Upstream

Owner(s)

Downstream

Owner(s)

Accessible from road?

Upstream?

Limitations

Downstream?

Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID Comments

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID _____ Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID _____ Comments

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.

DO NOT ENTER CULVERT

Is culvert diameter > 60"?

Can you see all the way through the end of the culvert?

Can you feel a breeze through the culvert?

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 10.46

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 10.60

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 11.25

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 11.25

Access Information

Land Ownership:

Upstream Owner(s)

Downstream Owner(s)

Accessible from road?

Upstream? Limitations

Downstream? Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID Comments

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID Comments

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.

DO NOT ENTER CULVERT

Is culvert diameter > 60"?

Can you see all the way through the end of the culvert?

Can you feel a breeze through the culvert?

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 11.78

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 12.76

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 12.76

Access Information

Land Ownership:

Upstream

Owner(s)

Downstream

Owner(s)

Accessible from road?

Upstream?

Limitations

Downstream?

Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID Comments

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID Comments

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.

DO NOT ENTER CULVERT

Is culvert diameter > 60"?

Can you see all the way through the end of the culvert?

Can you feel a breeze through the culvert?

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 13.15

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 13.33

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream



RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 13.38

Survey Information

Date Time Agency Performing Survey
Data Recorder (24 hr. clock) Survey Team

Site Information

GPS Data

Longitude Latitude
GPS HDOP Loc. of GPS Point PM

Hydrologic Information

Stream Name Source:
Basin Quad Name (7.5')
USGS Hydrologic Unit CalWater Unit HA
CalWater Unit HU CalWater Unit HSA

Natural Stream Channel?

Is there a definable channel upstream of culvert?
Is the primary function for storm water runoff or road drainage?:
Is the waterway a concrete-lined flood control channel?

Potential Fish Bearing Stream?

Does the site contain an active channel width >2 feet?
Is the stream gradient < 20%?

Salmonid ESU/DPS

ESU (Chinook and Coho Salmon) or DPS (Steelhead)

Historic Anadromous Reach?

Has the stream reach upstream of the crossing supported an anadromous fish population?
Source

Crossing Type

Crossing Type ID
General Description:

Photos

3.1 Upstream Looking Upstream - Photo I
3.2 Upstream Looking Downstream - Photo I
3.3 Downstream Looking Upstream - Photo ID
3.4 Downstream Looking Downstream - Photo ID

Detailed Survey Required?

Detailed Survey Required?:

Report Date 03-15-2016

RECONNAISSANCE SURVEY INFORMATION

County: SAC

Route: 104

PM: 13.38

Access Information

Land Ownership:

Upstream

Owner(s)

Downstream

Owner(s)

Accessible from road?

Upstream?

Limitations

Downstream?

Limitations

Vegetation Removal Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID Comments

Maintenance Assistance Required?

Upstream? (If "Yes", comment and take photograph)

Photo ID Comments

Downstream? (If "Yes", comment and take photograph)

Photo ID Comments

Confined Space Assessment

If answer is "No" to any of the questions below, site must have confined spaces equipment for surveying.
DO NOT ENTER CULVERT

Is culvert diameter > 60"?

Can you see all the way through the end of the culvert?

Can you feel a breeze through the culvert?

Report Date 03-15-2016

Upstream Looking Upstream



Upstream Looking Downstream



Downstream Looking Upstream



Downstream Looking Downstream

