

## Fish Passage Site 20501800

**Coordinates (dec. deg.):** 62.17595°, -150.07674°

**Legal Description:** S024N004W18

**Region:** South Central

**Road Name:** Alaska Railroad

**Datum:** NAD83

**Quad Name / ITM:** Talkeetna A-1

**AWC Stream #:**

**Stream Name:** Sunshine Creek

**Elevation:**

**Site Comments:** ARR milepost # 216.29.

### Survey UPDATE-ARR08

**Survey Date:** Oct 04, 2013

**Project Supervisor:** Gillian O'Doherty, ADFG

**Observers:** Gillian O'Doherty

**Overall Fish Passage Rating:** **Green**

**Tidal:**

**Backwatered:**

**Step Pools:**

**Construction Year:** 2012

**Comments:** Culvert removed and replaced with a bridge and downstream channel restored.

### Culvert Measurements

No measurement data available.

### Stream Measurements

**Stream Substrates**    **Upstream**    **Downstream**

**Dominant:**

**Subdominant:**

**Stream Slope(deg.):**

**Stream Flow Stage:**

No stream width data available.

### Elevations

No elevation data available.

### Fish Sampling Efforts

No fish sampling occurred during this survey.

### Fish Observations

No fish observations occurred during this survey.

### Photos



Questions or comments about this report can be directed to [dfq.dsf.webmaster@alaska.gov](mailto:dfq.dsf.webmaster@alaska.gov)

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**Legal Description:** S024N004W18  
**Region:** South Central  
**Road Name:** Alaska Railroad

**Datum:** NAD83  
**Quad Name / ITM:** Talkeetna A-1  
**AWC Stream #:**  
**Stream Name:** Sunshine Creek

**Elevation:**

**Site Comments:** ARR milepost # 216.29.

### Survey [MSB10-ARR08](#)

**Survey Date:** Sep 28, 2010

**Project Supervisor:** Gillian O'Doherty, ADFG  
**Observers:** Mark Eisenman, Ben Histan

**Overall Fish Passage Rating:** **Red**

**Tidal:** No                      **Step Pools:** No  
**Backwatered:** No            **Construction Year:**

#### Site Observations:

1. Beaver Activity
2. Mechanical damage or joints parting
3. Compound gradient in pipe

**Comments:** Beaver grate at inlet; recent construction activity at outlet. Very high flow velocity in pipe; last 5ft of pipe steeper, max grade >1.79% over 5ft of pipe.

### Culvert Measurements

**ID:** 1    **Structure Type:** Circular pipe (Reinforced concrete)

**Fish Passage Rating:** **Red**

<b>Length(ft):</b> 54.6	<b>Inlet</b>	<b>Outlet</b>	<b>Backwatered?:</b> No
<b>Inlet Type:</b> Projecting	<b>Width(ft):</b> 5.0	5.0	<b>Baffles Present:</b> No
<b>Outlet Type:</b> Projecting	<b>Height(ft):</b> 5.0	5.0	<b>Embedded?:</b> No
<b>Corrugation Depth(in.):</b>	<b>Apron Length(ft):</b>		<b>Outfall Height:</b> 0.0
<b>Corrugation Width(in.):</b>	<b>Water Depth(ft):</b>	0.58	<b>Outfall Type:</b> At Stream Grade
<b>Condition Rating(1-5):</b> 2	<b>Rustline Height(ft):</b> 0.0		<b>Constriction Ratio:</b> 0.25
<b>Approach Angle:</b>	<b>Substrate Depth(ft):</b> 0.0	0.0	<b>Culvert Gradient:</b> 1.79%
<b>Sedimentation At Inlet:</b> Yes			<b>Max Slope:</b> 5.0
<b>Inlet Substrate:</b> None			<b>Max Slope Length:</b> 5.0
<b>Outlet Substrate:</b> None			

#### Culvert Observations:

1. Beaver Activity
2. Mechanical damage or joints parting
3. Compound gradient in pipe

### Stream Measurements

Stream Substrates	Upstream	Downstream
<b>Dominant:</b>	Silt/Clay	Silt/Clay
<b>Subdominant:</b>	Organic	Organic

**Stream Slope(deg.):**  
**Stream Flow Stage:** Medium

Stream Width Type	Distance From Crossing (ft)	Stream Width (ft)
Downstream ordinary high water	109.0	22.00
Downstream ordinary high water	165.0	21.50
Downstream ordinary high water	210.0	16.50

### Elevations

Locator ID	Culvert Number	River Distance (ft) <sup>1</sup>	Distance From Crossing (ft) <sup>2</sup>	Relative Elevation (ft)
Road Elev				99.40
D/S Tailcrest or 1st Thalweg		0.00		80.34
D/S Water Surface Elev		0.00		81.04
D/S Thalweg (bottom of outlet pool)		49.00		77.10
D/S Water Surface Elev ((TWS) turbulent)		56.00		80.99
D/S Water Surface Elev (turbulent)		57.00		80.77
Outlet Invert		57.00		80.19
Inlet Culvert Invert		111.60		81.17
Split into USWS and DSWS (ws @ inlet)		111.60		82.08
U/S Headwater		112.60		82.40

**Notes:**

1. River distance is measured continuously throughout the survey reach along the thalweg of the stream.
2. Measured from each end of the crossing along the thalweg of the stream.

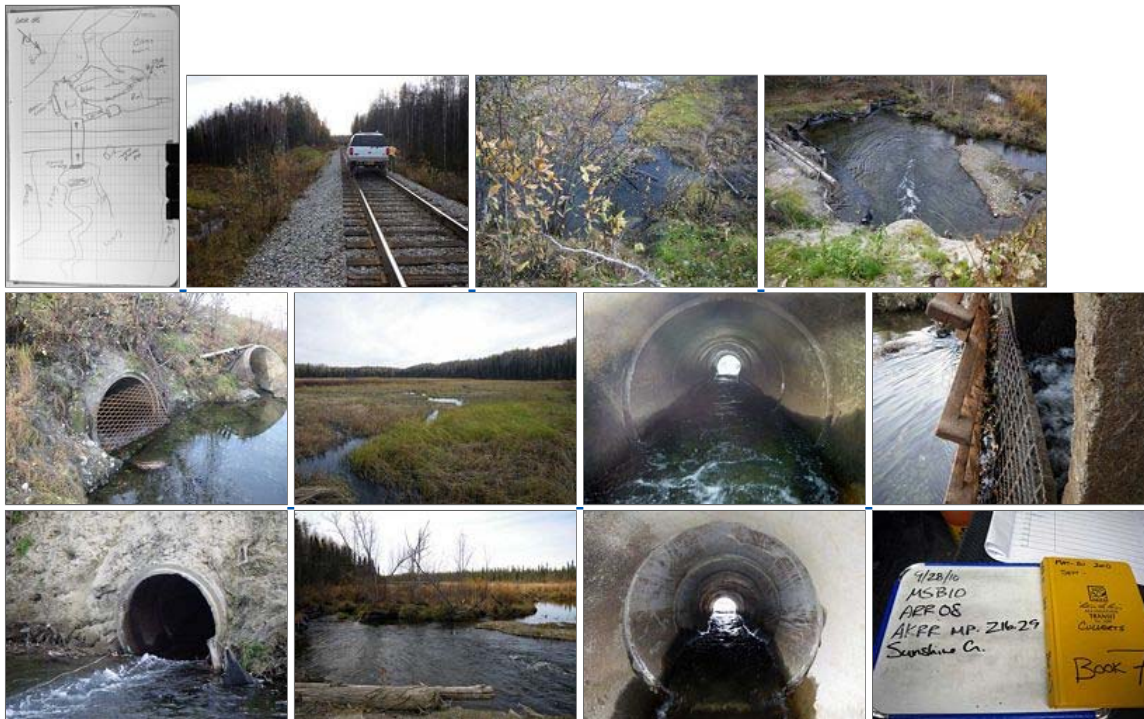
### Fish Sampling Efforts

No fish sampling occurred during this survey.

### Fish Observations

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### Photos



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