

STATE OF WASHINGTON  
**DEPARTMENT OF FISH & WILDLIFE**  
**LANDS AND RESTORATION SERVICES PROGRAM**  
Salmonid Screening, Habitat Enhancement &  
Restoration Division (SSHEAR)

**OFF-CHANNEL SITE INVENTORY DATA**

**General Information:**

<b>Region:</b> North Coast	<b>Observer(s):</b> Powell
<b>River System:</b> Sol Duc	<b>Date:</b> 4/9/01
<b>Site Identifier:</b> S-0346	<b>WRIA:</b> 20.0354
<b>River Mile Location:</b> 53.0 (WRIA catalog)	<b>RB/LB:</b> LB
<b>Local Name:</b> Goodman Creek	<b>Trib. to:</b> Sol Duc (20.0096)
<b>Legal Description:</b> SW¼ Sec 34 T30N R10W	<b>County:</b> Clallam
<b>Habitat Type:</b> Valley wall tributary	
<b>Landowner:</b> (X) Federal ( ) State ( ) County ( ) Other Government ( ) Private - National Forest	

**Directions to site:**

Starting at Forks (Tillicum Park) drive north on Highway 101 for 24.4 miles (mp 216) to FS 2918. Take a right on this road and follow it for 2.7 miles. There are three boulders at a road pull out to the right. If you reach the bridge, you went 0.3 miles too far. Park at the pull out. There is a defined trail to the river. Goodman Creek is across the river. The upper stretches of Goodman Creek can be accessed by traveling up the FS 2918 road for 3.7 miles. The road to the right is FS 2931. Follow this road uphill for 0.8 miles. There will be a road to the right that is ditched. The grade beyond the ditch is the old FS 100 road which parallels Goodman Creek.

**Site Overview:**

Goodman Creek is major tributary to the upper Sol Duc River. The entire channel length flows through commercial timber property, almost exclusively USFS. Many areas have been impacted by past intense timber harvest activities. Associated slides and failures have been attributed to the incised nature of this channel and unstable slopes. Some impacts have also been due to road failures. Over the years, this stream has had various migration blockages due to log jams. Presently, there is a large anadromous blocking jam at approximately river mile 1.4. Not only is this jam a fish passage issue but it is also impeding the downstream migration of gravel. Some information for this document has been obtained from the 1992 USFS survey notes and the 1995 Sol Duc Watershed Analysis report. This river has been broken into three reaches for descriptive characteristics.

Reach one is from the mouth to the first large blocking debris jam. This jam is at approximately river mile 1.4. The channel is 2 - 3% and incised in many areas. There is a moderate to good canopy closure of conifers and alder in much of this reach. Numerous old woody debris pieces and complexes form pools and trap gravel. Pool formation and gravel tailouts are associated with boulders in areas of this section. There are some very good spawning areas up to the log jam. The 1995 Sol Duc watershed analysis states that Goodman Creek has the highest winter steelhead spawning density of any medium sized tributary in the Quillayute River basin. There are two medium sized tributaries in this reach. Neither of them was surveyed. Conclusions from informal observations and conversations, these tributaries are primarily higher gradient and conducive to trout. Due to the entrenchment of this channel, there is limited high water refuge area for juveniles.

Reach two is from the jam at about river mile 1.4 to another large blocking jam at approximately river mile 2.7. Wood input is from bank failures and sloughing of the steep side slopes partially due to past harvest activity. Old woody debris forms pools and cover. The riparian area is a mixture of alder and conifer. The gradient is approximately 2%. The log jam at river mile 1.4 has a substantial amount of substrate material backed up behind it. Substrate accumulation was noted to 130 meters upstream. The log jam at river mile 2.7 has also been determined as an anadromous impasse. It is not as substantial as the lower jam. This reach appears to be impacted by past timber harvest activities.

Reach three was not surveyed for this inventory. Information for this reach has been obtained from various documents (see comments section). It is reported that fish habitat extends to river mile 6.6. The 1992 USFS survey was conducted to river mile 4.4. It was documented that above this point, it had been ravaged by wood debris flows and was unpassable to humans. This upper reach appears to have had major impacts from past timber harvest practices. It was reported that there was little to no riparian left after harvest resulting in a low canopy closure. Also, there were extensive bank and slope failures. The Sol Duc Watershed Analysis reports that the many mass wasting delivery sites to this channel will probably result in long term increases in fines and sediment. The gradient is approximately 3%, and the substrate was documented as primarily cobble and gravel. A road failure in March of 1999 near the headwaters of this stream had noticeably discharge large amounts fine material over a period of time. This took place during winter steelhead spawning. Resulting impacts were observed by WDFW staff.

**Habitat Information:**

**Water source:** Tributaries, runoff, springs

**Intermittent/year-around:**

- Year-around

**Estimated flows (cfs):** 10 +

**Water temperatures:** 4° C

**Adjacent stream temperature:** Did not take

**Other water observations:**

- Clear water

**Site area measurements:**  Indirect  Direct  Combination

Widths: Channel- 5 m - 8 m (ww) Ponds- NA Wetlands- NA

Depths: Channel- variable Ponds- NA Wetlands- NA

Total length surveyed: ~2.7 miles to the second anadromous barrier. Fish habitat has been documented to river mile 6.6 miles.

- Due to inaccessibility and time constraints, this survey was limited up to RM 2.7.

**Total existing habitat area (est.):** 28,510 m<sup>2</sup> (measured for this survey)

**Spawning Habitat conditions:**  None  Poor  Fair  Good  Excellent

**Describe spawning habitat:**

- Numerous areas of good gravel accumulation to the log jam at RM 1.4.

- It has been noted that log jam at RM 1.4 is affecting gravel recruitment downstream.

There was good spawning gravel below the jam. Presently, that area is primarily boulders.

- Gravel accumulation is typically associated with boulders, wood, and some bedrock areas.

- Between the two log jams, the substrate is a varied mix of cobble, boulder, gravel and bedrock. There are some areas of good spawning gravel.

- The lower stream reach supports some summer chinook spawning if flows are adequate.

- This stream has been documented as having a high winter steelhead spawning density.
- The 1995 Sol Duc Watershed Analysis reports that mass wasting delivery to this channel will probably result in redd scour and egg suffocation due to increases in fine sediment.

**Rearing habitat conditions:**  None  Poor  Fair  Good  Excellent

**Describe pond and other rearing habitat:**

- Old large woody debris offers cover. Woody debris and boulders form pool habitat.
- This stream is primarily incised and offers very little off-channel refuge.
- The riparian area is a mix of alder and conifers.
- There is better canopy closure between RM 0.0 to 1.4. Past logging has resulted in more open canopies between RM 1.4 to 2.7.
- Steep sloughing side slopes recruits large old woody debris left from logging, but also fine sediments.
- Summer rearing has been documented as good.

**Describe unaccessible habitat:**

- The log jams at RM 1.4 and 2.7 are presently considered impassable to anadromous fish.
- The channel upstream of RM 2.7 has been documented (1992 USFS survey notes) to be more impacted by past timber harvest activities. There were large quantities of old woody debris in stream, extensive bank and slope failures, and a low canopy closure. The average gradient is 3.3%.

**Describe wetland:**  Bog  Marsh  Scrub-shrub Wetland  Forested Wetland

- N/A

**Flooding potential:**  Low  Medium  High

- This river experience flushing flows in the winter.

**Fish Information:**

**Site entry condition to (Sol Duc River 20.0096):**  Poor  Fair  Good

- Open egress.

**Coho access and use:**

- Juvenile-  Unknown  None  Poor  Fair  Good
- Adult-  Unknown  None  Poor  Fair  Good
- Quileute Tribe has a coho spawner index to river mile 0.9.

**Other species access and use:**  Chum  Pink  Sockeye  Chinook  Trout

- Some summer chinook spawning has been documented in the lower reach.
- Steelhead spawner surveys by WDFW are conducted to river mile 2.7.

**Habitat Improvements:**

**Enhancement opportunities:**

- Manipulate the blocking log jams at river miles 1.4 and 2.7.

**Additional Comments:**

- Some information for this document has been obtained from the 1992 USFS (Sol Duc Ranger District) survey notes and the 1995 Sol Duc Watershed Analysis report.

**Attachments Available:**

**Contact respective SSHEAR habitat biologist for the following checked items:**

- |  |  |  |   |
|--|--|--|---|
| <input checked="" type="checkbox"/> Aerials          | <input checked="" type="checkbox"/> Sketch | <input checked="" type="checkbox"/> Maps   | <input type="checkbox"/> Culvert Report |
| <input checked="" type="checkbox"/> Other references | <input type="checkbox"/> Spawning surveys  | <input type="checkbox"/> Juvenile trapping | <input type="checkbox"/> Fishway Report |

RIVER: SOL DUC

TRIB: Goodman Creek - 20.0346  
AREA: S-L8  
SITE: S-0346  
WRIA: 20.0346  
NAMES: Goodman Creek  
DATE: 2/02



