

**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:

Region: North Coast	Observer(s): Powell
River System: Sol Duc	Date: 4/14/98 - 5/23/98
Site Identifier: S-0320	WRIA: 20.0320
River Mile Location: 28.8	RB/LB: LB
Local Name: Bockman Creek	Trib. to: 20.0096
Legal Description: NE¼ Sec01 T29N R13W	County: Clallam

Habitat Type: Lower valley wall tributary

Landowner: (X) Federal () State () County () Other Government (X) Private
- National Forest
- Bloedel Timber

Directions to site:

Starting at Forks (Tillicum Park), drive north on Highway 101 for 11.4 miles (mp 203) to Mary Clark Road. Take a right on this road and follow for 1 mile and there will be a road to the right. Take a right on this road (FS 2902). Follow this road for 1.35 miles. S-0320 is the second concrete bridge crossing after the junction of FS 2902 x FS 2903 roads. This is the mid reach of Bockman Creek.

Site Overview:

The majority of Bockman Creek and its tributaries flow through timber managed lands. Harvest activities have occurred during various times, and trees of all age classes are represented in this drainage. The riparian is a mix of alder and conifer. Some areas have higher concentrations of one or the other. In-channel, LWD amounts are moderate to less. During initial observations, two log jams in the lower reach were partial barriers and were holding back gravel. These jams have been modified and will be monitored. Bockman Creek has a dominant gravel substrate throughout most of channel length, ~ 3.75 miles. A few areas of higher sediment concentrations were observed, most notably, in the upper reach where the RMZ was harvested. This system has seven documented associated tributaries that coho may utilize during various life stages. The upper most two main tributaries have bedrock falls that would inhibit anadromous fish. The upper reach of Bockman Creek has been documented to drain from the west direction. This is in fact, an upper tributary of Shuwah Creek (20.0307). Bockman Creek terminates at the confluence of 20.0322 and 20.0323.

Habitat Information:

Water source: Tributaries and terrace runoff

Intermittent/year-around:
- Year around

Estimated flows (cfs): 10+

Water temperatures: 8.0° C

Adjacent stream temperature: 8.0° C (20.0096)

Other water observations:

Site area measurements: Indirect Direct Combination

Widths: Channel- 3 m - 5+ m Ponds- NA Wetlands- NA
Depths: Channel- varies Ponds- NA Wetlands- NA
Total length (includes ponds and wetlands): ~ 6530 m

Total existing habitat area (est.): 26,120+ m²

- Tributaries (not including 20.0322 or 20.0323) total existing habitat area (est.): 6145+ m²

Spawning Habitat conditions: None Poor Fair Good Excellent

Describe spawning habitat:

- There are two log jams in the lower reach that were partial barriers to upstream movement for several years. In 1998, these dams were manipulated to allow fish passage.
- Downstream of the largest jam (RM 0.8), the channel substrate was mostly cobble and boulders with pockets of gravel. This jam has been holding back gravel.
- Gravel was the dominant substrate from the log jams to near the upper reach.
- The upper reach was a mix of cobble and gravel.
- Various levels of sediment were observed. The prominent sediment area was in the upper reach where the RMZ was harvested.
- The Quileute Tribe conducts coho spawner surveys on this system.
- WDFW conducts steelhead surveys on this creek.

Rearing habitat conditions: None Poor Fair Good Excellent

Describe pond and other rearing habitat:

- LWD amounts were moderate to less.
- Some reaches had numerous pools and would provide good summer habitat.
- The RMZ is varying mix of alder and conifer.
- Lack of canopy and sediment concentration was noted in the upper reach where the channel was harvested to the banks.
- The mid reach also had an area of minimal canopy coverage.
- There were two notable channels associated to this stream that offer off-channel refuge.

Describe unaccessible habitat:

- The headwaters of the main channel are 20.0322 and 20.0323. Both of these channels have impassable bedrock falls at their egress.

Describe wetland: Bog Marsh Scrub-shrub Wetland Forested Wetland

Flooding potential: Low Medium High

Fish Information:

Site entry condition to (20.0096): Poor Fair Good

- Open egress into a straight stretch of the Sol Duc River.

Coho access and use:

- Juvenile- Unknown None Poor Fair Good
- Adult- Unknown None Poor Fair Good
- Log jams in the lower reach are limiting access at this time.
- The Quileute Tribe conducts spawner surveys from RM 0.0 to RM 4.0.

Other species access and use: Chum Pink Sockeye Chinook Trout

- Chinook, steelhead and resident trout have been documented as utilizing this stream.
- WDFW conducts steelhead spawner surveys on this channel.

Habitat Improvements:

Enhancement opportunities:

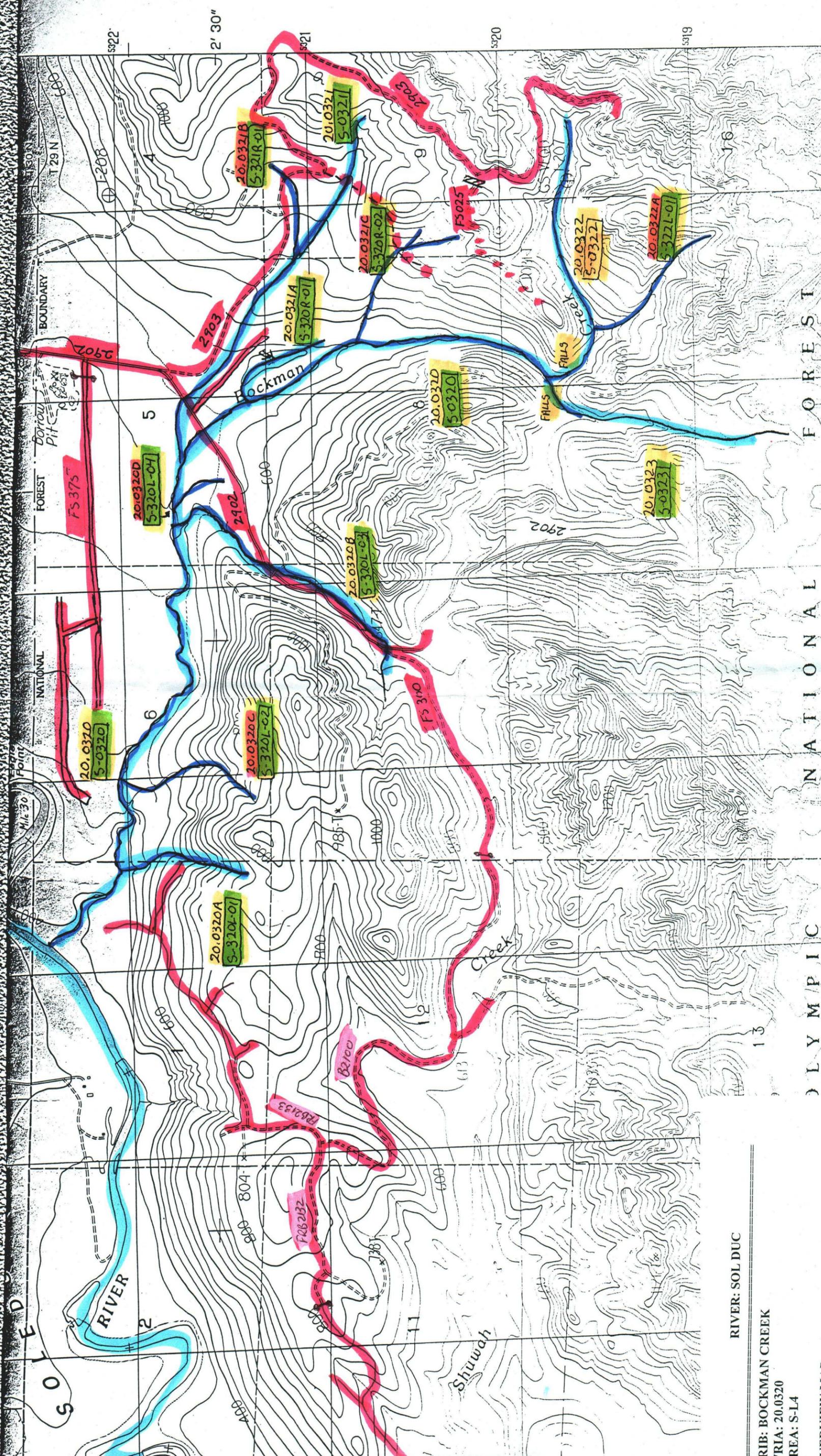
Additional Comments:

- The documented main headwater channel of Bockman Creek is actually a tributary (S-307R-11) of Shuwah Creek.
- The Forest Service (Sol Duc Ranger District) conducted a Level II Hankin and Reeves survey on Bockman Creek, in 1994.
- In the summer of 1998 and 1999 two lower reach log jams were manipulated by the Salmon Coalition for fish passage. The upper jam (~ RM 0.8) was the largest and it was holding back gravel.

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 |



SOLID RIVER

RIVER

BOCKMAN CREEK

SHUWAH CREEK

FILLS CREEK

BOUNDARY

DORROW PIT

FOREST

NATIONAL

OLYMPIC NATIONAL FOREST

RIVER: SOL DUC

TRIB: BOCKMAN CREEK

WRIA: 20.0320

AREA: S-L4

OVERVIEW MAP

1998

RIVER: SOL DUC RIVER

AREA: S-L4

AREA MAP

9/96

