

Spawning Habitat conditions: None Poor Fair Good Excellent

Describe spawning habitat:

- The spawning habitat is limited to patches of gravel which are mainly found downstream of the highway.
- The mid and upper reaches are mostly rock and boulder with pockets of gravel.
- This system appears to experience high, flushing flows.

Rearing habitat conditions: None Poor Fair Good Excellent

Describe pond and other rearing habitat:

- This is channel experiences flushing flows.
- The channel has cover of some LOD, overhang and brush, and a RMZ canopy of mostly conifer.
- The upper reach is a step profile with boulders and pools.

Describe unaccessible habitat:

- There is a concrete box culvert which the channel flows beneath the highway. The sheet flow through it would be a barrier much of the time.
- There is a private water intake near the water type break (that I determined is ~60 m upstream), and it is configured around a debris jam. This could be a possible barrier except at high flows.

Describe wetland: Bog Marsh Scrub-shrub Wetland Forested Wetland

Flooding potential: Low Medium High

Fish Information:

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

- The channel egresses upstream from a bend in the river. This is a boulder/rocky river reach with no eddy.

Coho access and use:

- Juvenile- Unknown None Poor Fair Good
- Adult- Unknown None Poor Fair Good
- This channel needs to be minnow trapped to varify fish usage.

Other species access and use: Chum Pink Sockeye Chinook Trout

- Resident trout may utilize this system.

Habitat Improvements:

Enhancement opportunities:

- Baffles in culvert.
- Maintain integrity of system.

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

NORTH COAST OFF CHANNEL SURVEY
SUBSEQUENT SITE EVALUATION FORM

River System: Sol Duc

Site No.: S-0344

Site Name: Heckel Creek

WRIA: 20.0344

DATE: 8-28-97

OBSERVER: Powell

We have had a dry spell for ~ 6 week and then ~ 2 inches of rain; the channel was dry at the highway crossing.

WDFW FISH PASSAGE REPORTING FORM

LEVEL I - Facility/Barrier Identification

(1) CHECK ONE: [X] Existing Fishway (includes baffled culverts)
[] Man-made Fish Passage Problem

(2) STREAM: Heckel Cr (3) WRIA#/RM: 20.0344/0.07mi (up Heckel Cr)

(4) TRIBUTARY TO: Sol Duc R (5) LEGAL(S,T,R): Sec 30 T30N R10W

(6) LATITUDE/LONGITUDE:

(7) MILEPOST/ROAD: Starting at Forks (Tillicum Park) drive north on Highway 101 for 23.25 miles to Heckel Road. The creek crosses the highway 0.1 miles further east from this road.

(8) DESCRIPTION OF FISHWAY, FACILITY:

(9) DESCRIPTION OF BARRIER: Box culvert set at a slant.

(10) OWNER: DOT

(11) FISH ACCESS UP TO BARRIER VERIFIED/PRIMARY SPECIES: Unknown

(12) HABITAT AVAILABLE ABOVE FISHWAY OR BARRIER: 0.64 mi to end of Type 3 waters.

(13) IDENTIFIED BY (agency/organization): WDFW - SSHEAR

(14) SUBMITTED BY/DATE OBSERVED: Powell Date: 2/15/97

(15) INVENTORY DESCRIPTOR: S-0344

LEVEL II - Culvert/Barrier Description

CULVERT:

(16) TYPE (Indicate number of each): [] concrete round
[1] concrete box
(17) LENGTH: ~60 ft [] smooth steel pipe
[] CMP - Round
(18) DIAMETER: 8 ft x 6 ft [] CMP - Arch or Ellipse
[] Other:

(19) WATER DEPTH: (20) SLOPE: (21) VELOCITY:

(22) OUTFALL DROP:

DAM:
(23) LENGTH: (24) HEIGHT:

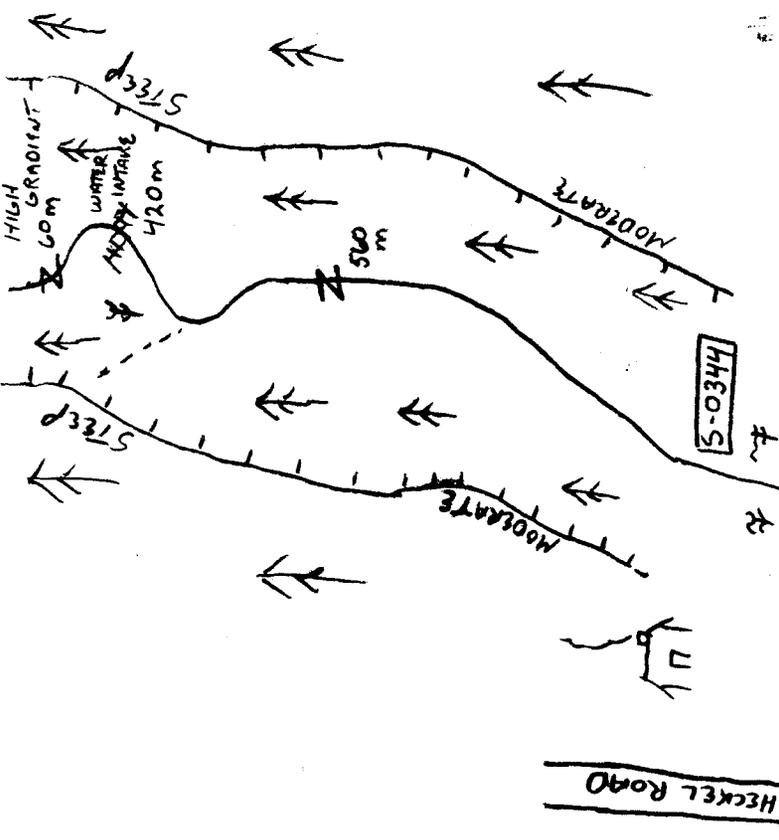
COMMENTS: This channel flows during the winter - fish usage is unknown. It is a definite barrier due to slope.

RIVER: SOL DUC

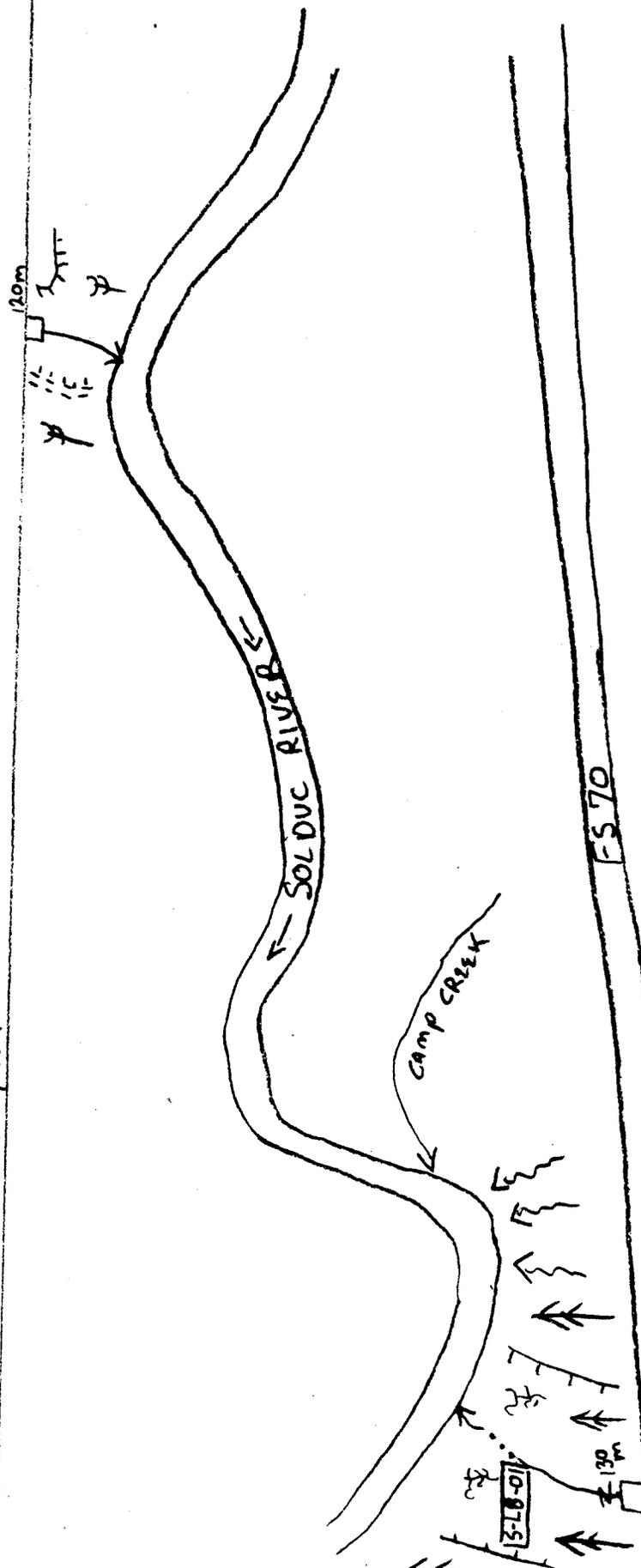
AREA: S-L8, S-R8
SITES: S-L8-01, S-0344
WRIA: 20.0341A, 20.0344
NAMES: Unnamed, Heckel Cr.

DATE: 2/97

NT ↑



Hwy 101



RIVER: SOL DUC

AREA: S-R8

AREA MAP

DATE: Spring/97

