

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> Nettnin
<b>River System:</b> Sol Duc	<b>Date:</b> 2/19/97
<b>Site Identifier:</b> S-312R-02	<b>WRIA:</b> 20.0312 B (P)
<b>River Mile Location:</b> 1.4	<b>RB/LB:</b> RB
<b>Local Name:</b> Loushin Cr.	<b>Trib. to:</b> Swanson Cr. (20.0312)
<b>Legal Description:</b> SW¼ Sec 09 T29N R13W	<b>County:</b> Clallam
<b>Habitat Type:</b> Lower valley wall tributary	
<b>Landowner:</b> <input type="checkbox"/> Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> County <input type="checkbox"/> Other Government <input checked="" type="checkbox"/> Private	
- Charles Loushin	
- Rayonier Timber Operations Company	
- Department of Natural Resources	

**Directions to site:**

Starting at Forks, drive north on highway 101 to MP 197.6. There is a gravel road off to the left just before a shake mill. Turn left onto the road and proceed about 0.3 mi to the second stream crossing. This is Loushin Cr.

**Site Overview:**

This third order stream sources on the southeast flank of Tye Ridge at an elevation of about 1000 ft. At the toe of the ridge, it flows through a ponded wetland where it intercepts several lower valley wall tributaries. It then flows down to an upper valley terrace where it merges with Swanson Creek at an elevation of about 380 ft. It drains approximately 200 acres of timberland, of which about half has been, or is in the process of being logged. There is one residence that gets their domestic water from the watershed. It supports spawning and has excellent rearing areas.

**Habitat Information:**

**Water source:** Springs, tributaries and surface runoff

**Intermittent/year-around:** Year-around, but some reaches are intermittent.

**Estimated flows (cfs):** Lower end:  $\approx 4 - 6$  Upper end:  $\frac{1}{2} - 1$

**Water temperatures:** Lower end:  $5.0^{\circ} \text{C}$  Upper end:  $3.5^{\circ} \text{C}$

**Adjacent stream temperature Swanson Creek (20.0312):**  $5.0^{\circ} \text{C}$

**Other water observations:**

- Water is slightly tannic.
- One domestic water supply.

**Site area measurements:**  Indirect  Direct  Combination

Widths: Channel- 1 - 2 m Pond- 1 - 5 m Wetland- 30 - 80 m

Depths: Channel- 15 - 20 cm Pond- 20 - 90 cm Wetland- 5 - 90 cm

Total length surveyed (includes ponds and wetlands)-  $\approx$  1500 m

- There are beaver ponds in the system but are not five times the stream width.

**Total existing habitat area (est.):** 3,900 m<sup>2</sup>

Spawning area: Mainstem: 100 m<sup>2</sup> Tribs: 100 m<sup>2</sup> Totals: 200 m<sup>2</sup>

Impounded area: Mainstem: 200 m<sup>2</sup> Tribs: 0 m<sup>2</sup> Totals: 200 m<sup>2</sup>

Other rearing area: Mainstem: 2,800 m<sup>2</sup> Tribs: 700 m<sup>2</sup> Totals: 3,500 m<sup>2</sup>

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

**Describe spawning habitat:**

- Overall the spawning habitat is only fair, because the gravel is in small pockets. The gravel, however is clean and the right size.
- The reach between Loushins' driveway and the T-1010 has most of the spawning habitat.

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

**Describe pond and other rearing habitat:**

- The pond is long and narrow with abrupt edges due to canary grass mats.
- It is about 1 m deep.
- Tannic water
- Cover is provided by stumps, woody debris and wetland vegetation.

**Describe unaccessible habitat:** NA

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

- This wet area combines several types of wetlands and surrounds an island of upland.
- The lower portion of the wetland is marsh. That portion that lies between the T-1010 and the island is scrub-shrub and the portion behind the island is wooded wetland.

**Flooding potential:**  Low  Medium  High

**Fish Information:**

**Site entry condition to (Swanson Creek 20.0312):**  Poor  Fair  Good

- At present the confluence is backwatered by a beaver dam.

**Coho access and use:**

Juvenile-  Unknown  None  Poor  Fair  Good

Adult-  Unknown  None  Poor  Fair  Good

- Juveniles have good access to the reach below Loushins' driveway, but no fish were observed and it was not minnow trapped.
- The culverts under the Loushin driveway are a juvenile passage barrier.
- The juvenile population in the middle reach is most likely born there.
- These same culverts are a problem for adults, due to the combination of plunge and size of culverts.
- Most of the spawning gravel is above these culverts.
- Adults do use this stream (personal communications with the landowner).
- On 3/5 - 3/6/97 two coho were caught in three minnow traps, that were set in the upper reach at the T-1010.

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

- Five rainbow and two cutthroat trout, plus 13 cottid and 39 salamanders were also caught.

**Habitat Improvements:**

**Enhancement opportunities:**

- Possible project type:
- Culvert replacement
  - Baffled culvert to control pond level
  - Gravel placement
  - Good equipment access

**Additional Comments:**

**Attachments Available:**

Contact respective SSHEAR habitat biologist for the following checked items:

- |                      |                      |                       |                    |
|----------------------|----------------------|-----------------------|--------------------|
| (X) Aerials          | (X) Sketch           | (X) Maps              | (X) Culvert Report |
| ( ) Other references | ( ) Spawning surveys | (X) Juvenile trapping | ( ) Fishway Report |

**MINNOW TRAPPING REPORT**

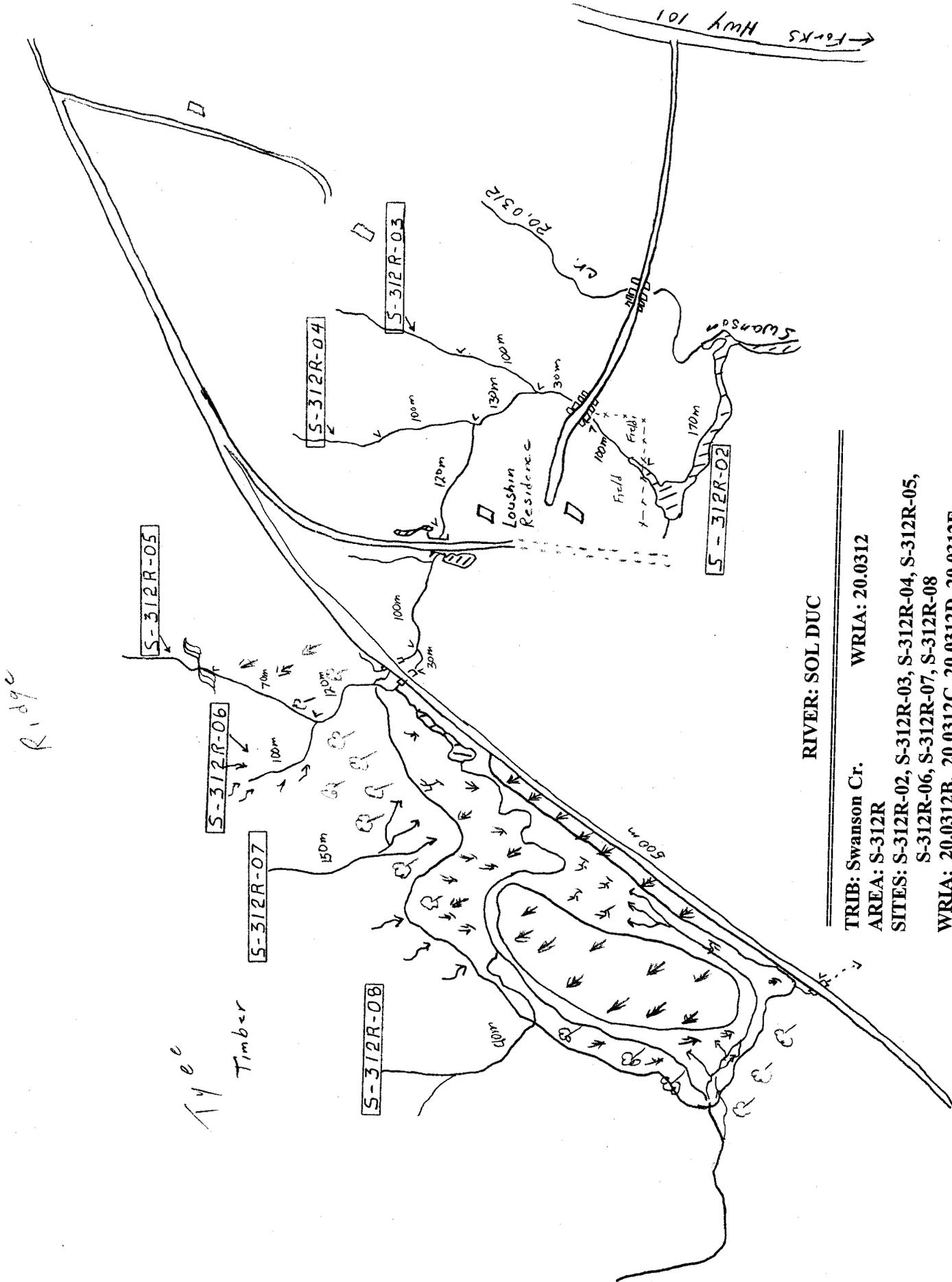
TRAP	DATE		DATE		CATCH		RBT	CUTT	COTTID
	SET	TEMP	PULLED	TEMP	COHO	MRK			
1	3/5	7.0°C	3/6	6.5°C	2	0	5	0	7
2	3/5	7.0°C	3/6	6.5°C	0	0	0	2	2
3	3/5	7.0°C	3/6	6.5°C	0	0	0	0	3
TOTALS:					2	0	5	2	12

**COMMENTS:**

- Trap 1 was placed 30 m below the culvert under the T-1010
- Trap 2 was placed just above the culvert under the T-1010. Seven salamanders were also captured.
- Trap 3 was placed in the pond above the T-1010. 27 salamanders were also captured.

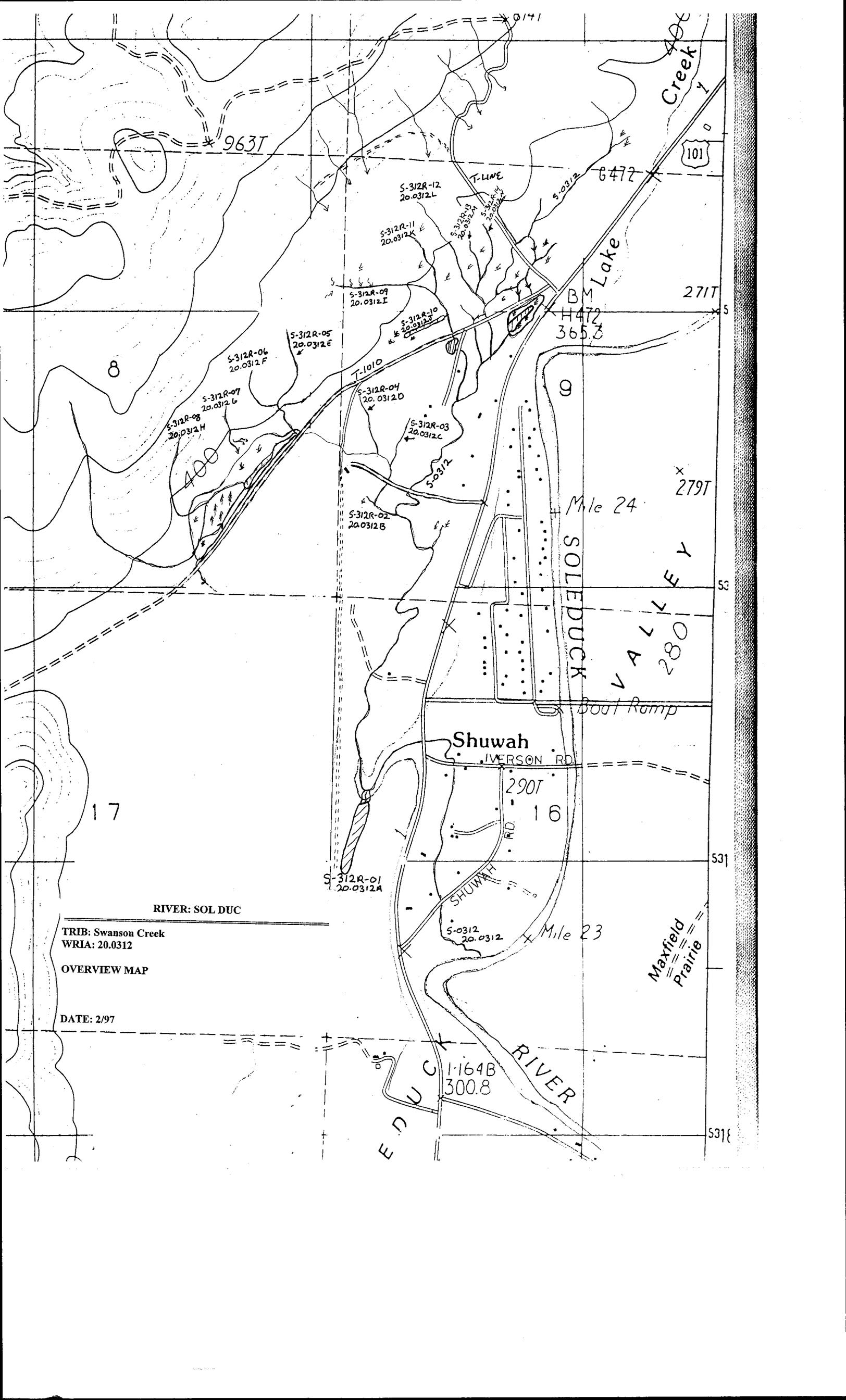






**RIVER: SOL DUC**

TRIB: Swanson Cr.      WRIA: 20.0312  
 AREA: S-312R  
 SITES: S-312R-02, S-312R-03, S-312R-04, S-312R-05,  
           S-312R-06, S-312R-07, S-312R-08  
 WRIA: 20.0312B, 20.0312C, 20.0312D, 20.0312E  
           20.0312F, 20.0312G, 20.0312H  
 NAMES: Loushin Cr, Loushin #2, Loushin #3, Unnamed  
           Unnamed, Unnamed, Unnamed  
 DATE: 3/97



RIVER: SOL DUC

TRIB: Swanson Creek  
WRIA: 20.0312

OVERVIEW MAP

DATE: 2/97

S-312R-01  
20.0312A

S-312R-12  
20.0312L

S-312R-11  
20.0312K

S-312R-09  
20.0312I

S-312R-10  
20.0312J

S-312R-05  
20.0312E

S-312R-06  
20.0312F

S-312R-07  
20.0312G

S-312R-08  
20.0312H

S-312R-04  
20.0312D

S-312R-03  
20.0312C

S-312R-02  
20.0312B

Shuwah

IVERSON RD

290T

16

S-0312  
20.0312

Mile 23

1-164B  
300.8

SOLE DUCK RIVER

SOLE DUCK RIVER

Maxfield  
Prairie

SOLE DUCK VALLEY

SOLE DUCK VALLEY

Mile 24

SOLE DUCK BOAT RAMP

SOLE DUCK LAKE

SOLE DUCK CREEK

271T

x 279T

53

531

531

963T

8

17

101

0141

T-LINE

T-1010

400

6472

H472  
365.0

280

# RIVER: SOLE DUCK RIVER

AREA: S-R3

AREA MAP

9/96

