



**Total existing habitat area (est.): 1,650 m<sup>2</sup>**

Spawning area:	00 m <sup>2</sup>	Tributaries:	00 m <sup>2</sup>	Total:	00 m <sup>2</sup>
Impounded area:	1000 m <sup>2</sup>	Tributaries:	00 m <sup>2</sup>	Total:	1,000 m <sup>2</sup>
Other rearing area:	300 m <sup>2</sup>	Tributaries:	350 m <sup>2</sup>	Total:	650 m <sup>2</sup>

**Spawning Habitat conditions:** (X) None ( ) Poor ( ) Fair ( ) Good ( ) Excellent

**Describe spawning habitat:**

- No gravel available.

**Rearing habitat conditions:** ( ) None ( ) Poor ( ) Fair ( ) Good (X) Excellent

**Describe pond and other rearing habitat:**

- The water in the pond is dark. The pond is lined with sedges and spirea. Stumps, logs and other woody debris all provide cover.
- The pond is somewhat H shaped and backed up against a forested wetland. There is fair shade along the edges. Some snags add to the complexity.
- The channel has some woody debris and could benefit from some more. Aquatic vegetation and skunk cabbage also provide some cover.
- A 40 - 60-year-old deciduous/conifer stand provides 90% shade coverage in the lower reach.
- The upper reach has a more open canopy due to marsh conditions. Deciduous trees and brush provide 50% canopy closure.
- The channel has a gradient of 2 - 4%.

**Describe unaccessible habitat:** NA

**Describe wetland:** ( ) Bog (X) Marsh (X) Scrub-shrub Wetland (X) Forested Wetland

- This channel drains about a quarter of a large wetland. This portion of the wetland is forested. The lower reach of the channel is 40 - 60 year old deciduous/conifer mix and the upper reach is predominantly brush and open marsh. It may form into a forested wetland in time.
- The overall dimensions of the wetland are approximately 700 m long and 300 m wide.
- This wetland complex is located in the middle reach of Johnson Creek. It is separated from the lower Johnson Creek/Rainey Creek wetland by a minor upland flat area. The saturation zones could very well be interconnected between the two creeks.
- Alder is the predominant shade provider with some conifer mixed in. The canopy closure has a variety of ranges: dense closures of 90 - 100% over the area drained by the smaller tributaries, moderate closure of 40 - 60% along the mainstem reaches, and a total lack of a canopy in the open marsh and beaver pond areas.
- The under story is dense to moderate and is composed of primarily salmonberry, interspersed with stink berry and vine maple.
- The forested wetland is the most dominant type of wetland in this complex.

**Flooding potential:** ( ) Low ( ) Medium (X) High

- The channel receives overbank storage from Johnson Creek. It does not appear to experience flushing flows.

**Fish Information:**

**Site entry condition to Johnson Creek (20.0326):** ( ) Poor ( ) Fair (X) Good

- The egress of this channel is the impounded area of the marsh along the mainstem of Johnson Creek.

**Coho access and use:**

Juvenile-  Unknown  None  Poor  Fair  Good

Adult-  Unknown  None  Poor  Fair  Good

- Numerous juveniles were observed during the survey.

- Coho spawning has been documented in the mainstem of Johnson Creek, below and above the wetland. There is no gravel in this channel.

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

- Trout were not identified during the survey. It is assumed that they use this channel.

- Trout were observed in the mainstem.

**Habitat Improvements:**

**Enhancement opportunities:**

Possible project type

- Tie this channel and one of its tributaries together with a more defined channel (trib loses flow a few meters before entering S-326R-07.

- Maintain the integrity of the channel and the overall wetland.

Equipment access: No

**Additional Comments:**

- The Quileute Nation has a spawner index on the reach of Johnson Creek below the wetland and one above the wetland.

- Johnson Creek had not been depicted correctly in the WRIA catalog. The associated numbering in relation to this channel is in error. The stream catalog does not show the lower reach of Johnson Creek. A supplemental number 20.0324C, was assigned to represent this creek. However, the catalog shows a left bank tributary (20.0326) to Rainey Creek at RM 1.2. This tributary is in fact, the upper reach of Johnson Creek. It is suggested that all of Johnson Creek be given the WRIA number 20.0326. This document reflects this change.

**Attachments Available:**

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

Aerials

Sketch

Maps

Culvert Report

Other references

Spawning surveys

Juvenile trapping

Fishway Report

**NORTH COAST OFF CHANNEL SURVEY**  
**SUBSEQUENT SITE EVALUATION FORM**

River System: Sol Duc

Site No.: S-326R-07  
Site Name: Liens' marsh  
WRIA: X

DATE: 1/23-1/24/01

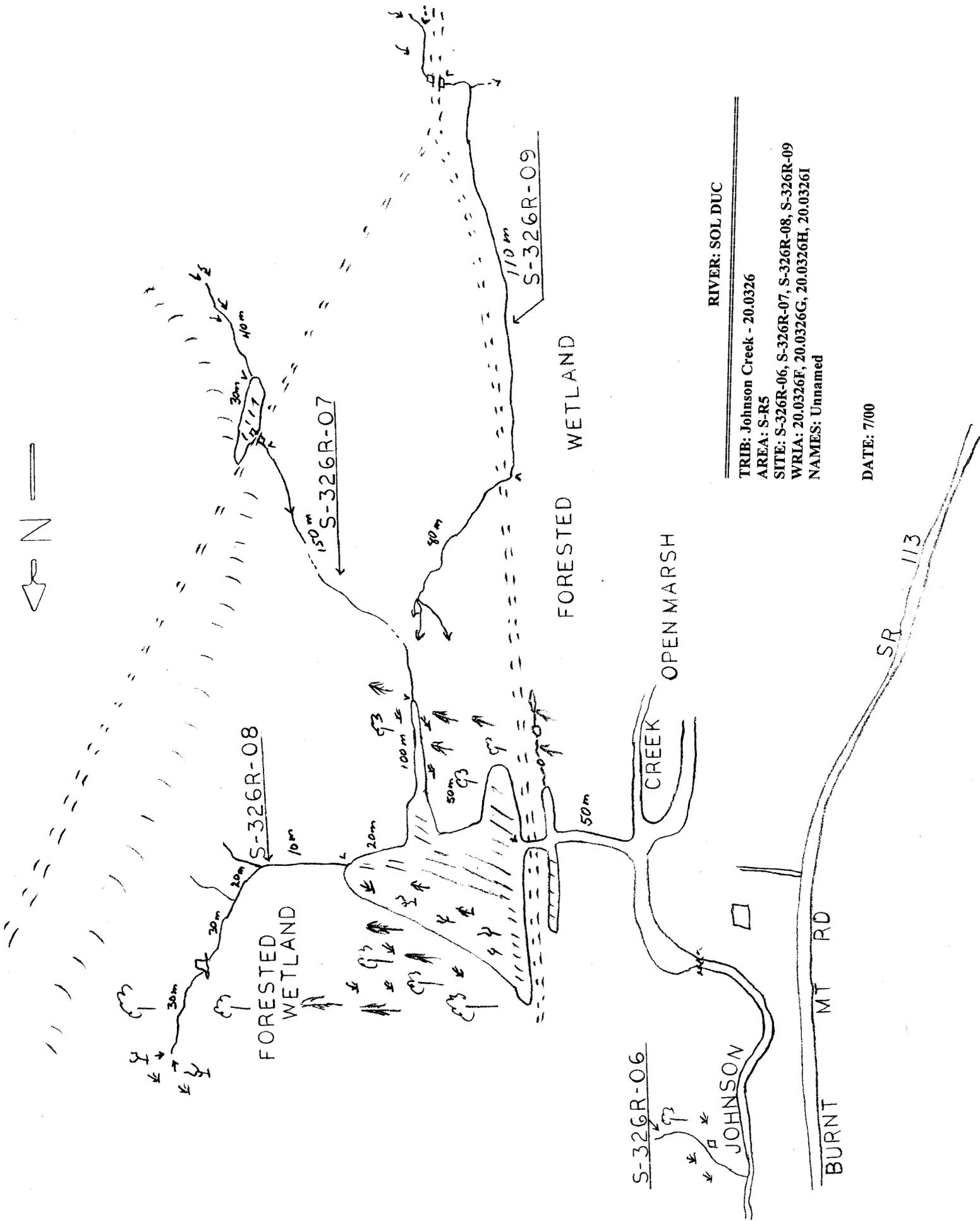
OBSERVER: Darrow

**MINNOW TRAPPING REPORT**

TRAP	DATE		DATE		COHO	CATCH			COTTID
	SET	TEMP	PULLED	TEMP		TROUT			
						RBT	CUTT	0+	
1	1/23	7.0°C	1/24	7.0°C	11	0	0	0	0
<b>TOTALS:</b>					11	0	0	0	0

**COMMENTS:**

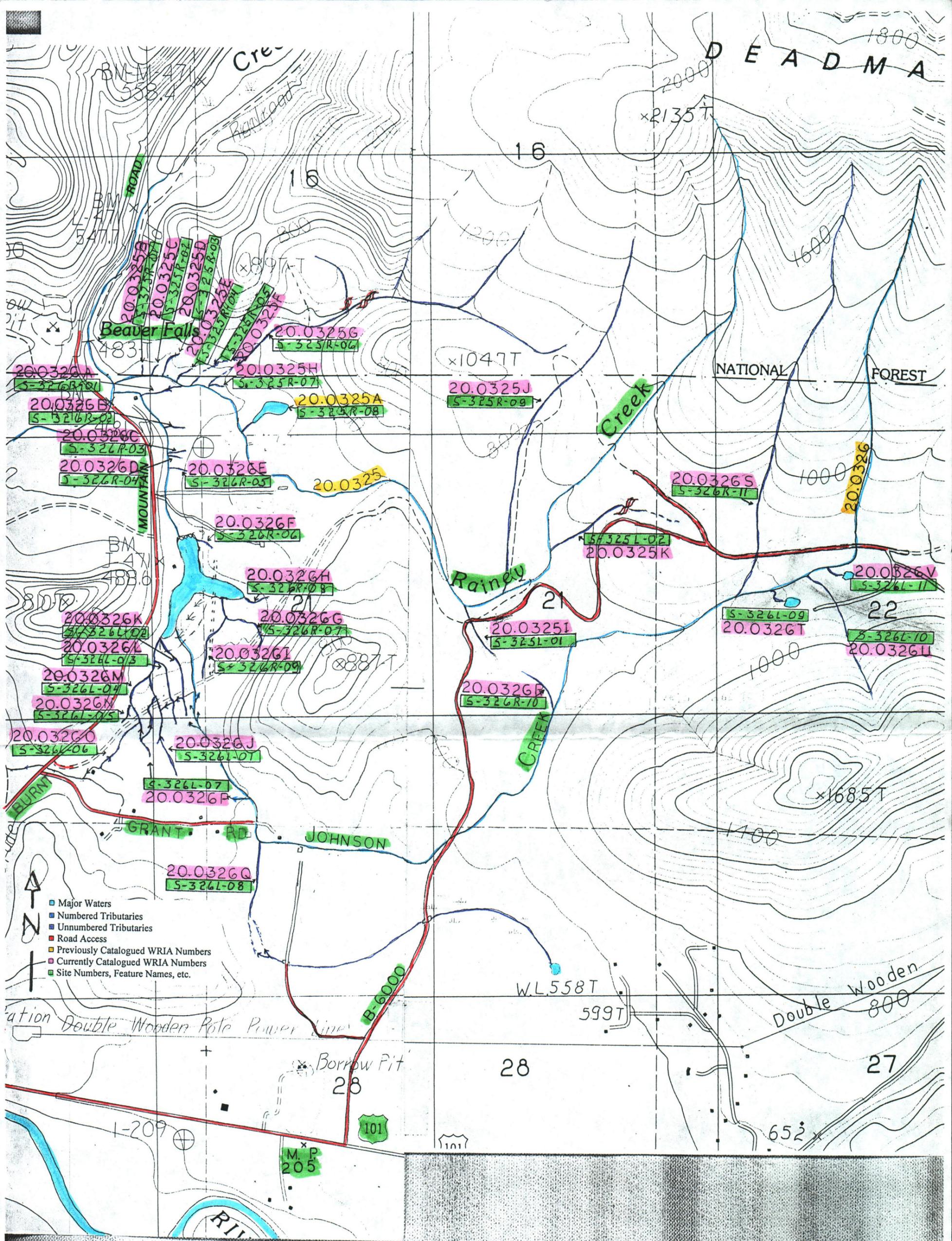
- Trap 1 was placed in pool at outlet of culvert. Fish ranged from 8 - 10 cm and in good shape.
- Trap was baited with salmon roe.



RIVER: SOL DUC

TRIB: Johnson Creek - 20.0326  
AREA: S-R5  
SITE: S-326R-06, S-326R-07, S-326R-08, S-326R-09  
WRIA: 20.0326F, 20.0326G, 20.0326H, 20.0326I  
NAMES: Unnamed

DATE: 7/00

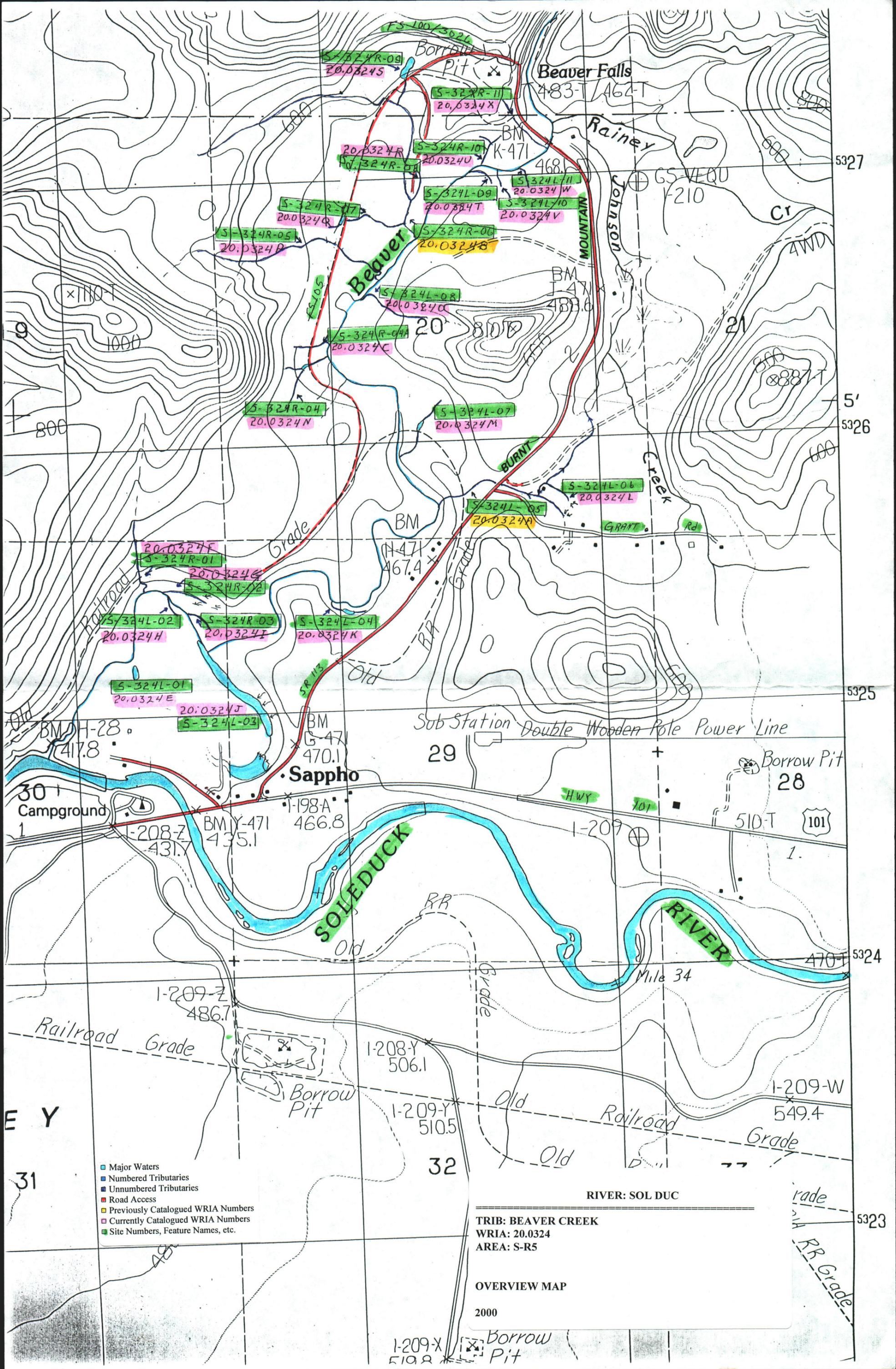


RIVER: SOL DUC

TRIB: JOHNSON CREEK & RAINEY CREEK  
 WRIA: 20.0326, 20.0325  
 AREA: S-R5

OVERVIEW MAP

2000



- Major Waters
- Numbered Tributaries
- Unnumbered Tributaries
- Road Access
- Previously Catalogued WRIA Numbers
- Currently Catalogued WRIA Numbers
- Site Numbers, Feature Names, etc.

RIVER: SOL DUC

TRIB: BEAVER CREEK  
 WRIA: 20.0324  
 AREA: S-R5

OVERVIEW MAP  
 2000

1-209-X  
 510.2  
 Borrow Pit