STATE OF WASHINGTON
DEPARTMENT OF FISH & WILDLIFE
HABITAT PROGRAM
Salmonid Screening, Habitat Enhancement & Restoration Division (SSHEAR)

OFF-CHANNEL SITE INVENTORY DATA

General Information:

Region: North Coast

Observer(s): Nettnin

River System: Sol Duc

Date: 4/4/96

Site Identifier: S-R1-03

WRIA: 20.0302C

River Mile Location: 11.4 (WRIA cat.)
- 12.3 by USGS map

RB/LB: RB

Local Name: Mystery Creek

Trib. to: 20.0096

Legal Description: SE¼ Sec 10 T28N R14W

County: Clallam

Habitat Type: Terrace tributary

Landowner: () Federal (X) State () County () Other Government (X) Private
- Egress is on RTOC
- Source is on DNR

Directions to site: Head north from Forks on Hwy 101. Turn left just beyond MP 193 (1.0 mi. north of Forks) onto the La Push Road. Proceed west on La Push Road for about 3.1 miles. Turn onto the Quillayute Prairie Road and proceed for 1.4 miles to a stream crossing. This is S-L1-03 (Mystery Creek, 20.0203C).

Site Overview: This third order stream and its tributaries drain about 121 hectares (300 acres) of timberland. About 30 hectares (80 acres) are left in timber and the rest are plantations ranging from 1 - 15 years old. One major tributary, four minor tributaries and numerous springs recruit water into Mystery Creek. At present this stream is home to a resident trout population and there is not an egress to the river. Habitat types include stream, pond, marsh and bog.

Habitat Information:

Water source: Springs, surface run off and lower valley wall tributaries.

Intermittent/year-around: Year-around

Estimated flows (cfs): Lower end: Dry Middle reach: 1.0 - 1.5 Upper end: 0.5 - 1.0

Water temperatures: Lower end: NA Middle reach: 10.0°C Upper end: 10.5°C
- On 4/14/96 the middle reach was 10.0°C

Adjacent stream temperature: 7.5°C (20.0096)

Other water observations:
- Tannic colored water

Site area measurements: () Indirect () Direct (X) Combination

Widths:	Channel- 1 - 3 m	Ponds- 5 - 80 m	Wetlands- 20 - 240 m
Depths:	Channel- 15 - 20 cm	Ponds- 0.7 - 1.2 m	Wetlands- 6 - 60 cm

Total length (includes ponds and wetlands): 2100 m

Total existing habitat area (est.): 3250 m^2

Spawning area: 50 m^2
Impounded area: 2900 m^2
Other rearing area: 300 m^2

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

Describe spawning habitat:

- The gravel is a suitable size for spawning but has some fines, and the number of riffles are limited.
- There are two places where gravel exist: The first is from the RTOC haul road upstream to an old RR grade; as the fill in the grade fails, it recruits gravel in this section. The other place is a 100 m reach between the upper end of the beaver activity and the bog.
- There was a possible redd in the lower area.

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

Describe pond and other rearing habitat:

- Eleven hundred meters of the channel are of an impounded nature.
- In all of the reaches, there is good cover created by aquatic vegetation and by woody debris. The debris is a result of blow down in the RMZ and from past logging.
- Stream side shade and cover are created by salmonberry, vine maple, stink current and sedges.
- Most of the channel does not have adequate shade; some of the RMZ is blown down and some of the reaches are naturally open due to the size and sparseness of the trees.

Describe unaccessible habitat:

- For anadromous fish, this entire system is unaccessible (see site entry conditions).
- Below the Quillayute Prairie Road, there are a number of beaver dams which force water out onto the forest floor. This area is flat and porous so the water goes subsurface.

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

- The bog at about 2,000 m is about 5 hectares (12 acres) in size.
- The bog is surrounded by a scrub-shrub wetland.
- Some of the species present are cranberry, spirea, sedges, spahgnum moss, Labrador tea, bog laurel.
- The water in the bog is very shallow and will not provide adequate depth for fish habitat.

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

- Located above the flood plain.

Fish Information:

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

- Egress is dry. If it were flowing, it would encounter ten meters of steep rise, then twenty meters of moderate rise, and then a two meter clay fall.

Coho access and use:

Juvenile- () Unknown (X) None () Poor () Fair () Good
Adult- () Unknown (X) None () Poor () Fair () Good

- See site entry conditions and description of unaccessible habitat.

Other species access and use: () Chum () Pink () Sockeye () Chinook (X) Trout
- Fish movement was observed, but no species ID could be made.
- On 3/9/92 there were five minnow traps placed in the stream above and below the culvert on the Quillayute Prairie Road. A total of 12 cutthroat trout, ranging from 15 - 25 cm were captured.
- Also two sculpins were captured.

Habitat Improvements:

Enhancement opportunities:

Possible project type: Beaver dam modification and culvert passage.
- Modify the beaver dams so the water will flow to the river.
- Modify the culvert at the lower road to pass fish if the can pass the natural barrier in the lower channel .
- Modify the culverts in the grade to pass fish and maintain the pond.

Equipment access: Yes

Additional Comments:
- I recommend that the barrier be left as is, or a least study the resident population to see what will be impacted.
- The pond above the old grade is created by a fill in the grade, which has two culvert pipes under it that have been plugged up by beaver activity.

Attachments Available:

Contact respective SSHEAR habitat biologist for the following checked items:

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

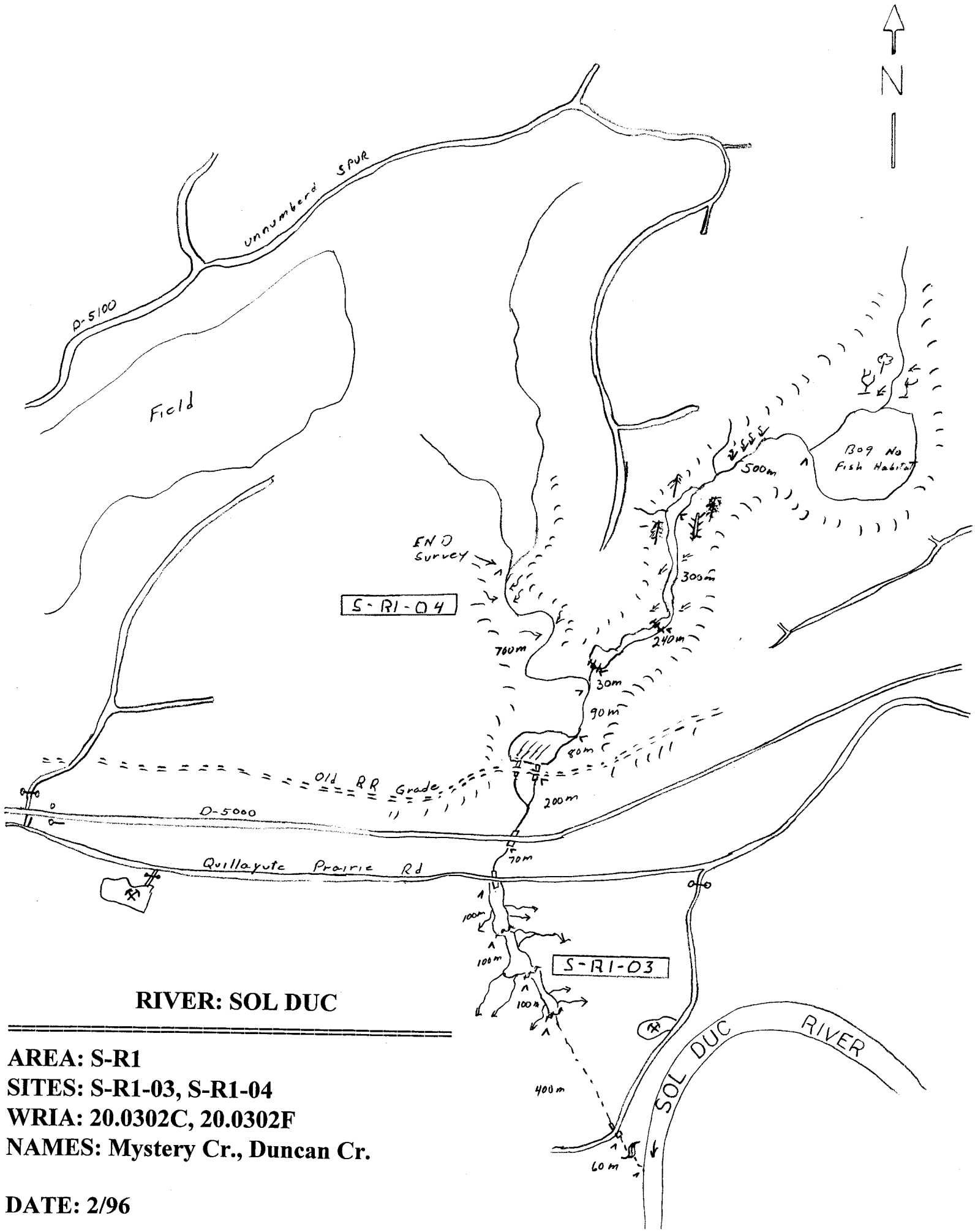
NORTH COAST OFF CHANNEL SURVEY
SUBSEQUENT SITE EVALUATION

River System: Sol Duc

Channel No.: S-R1-03
WRIA: 20.0302C
Local Name: Mystery Cr.

DATE: 3/9/92 King and Nettnin

This stream has been observed in the past to have a strong flow 3 - 5 cfs at the Quillayute county road and then be dry at the confluence with the Sol Duc R. Today we walked this reach and found that a series of beaver dams cause the creek to flow out into the adjoining plantation and go subsurface. During the survey several fish rose to strike sticks. Five minnow traps were set that night just above and below the culvert. They were fished the next morning and a total of 12 cutthroat trout, and 2 sculpins were caught. The trout ranged in length from about 6 - 10".



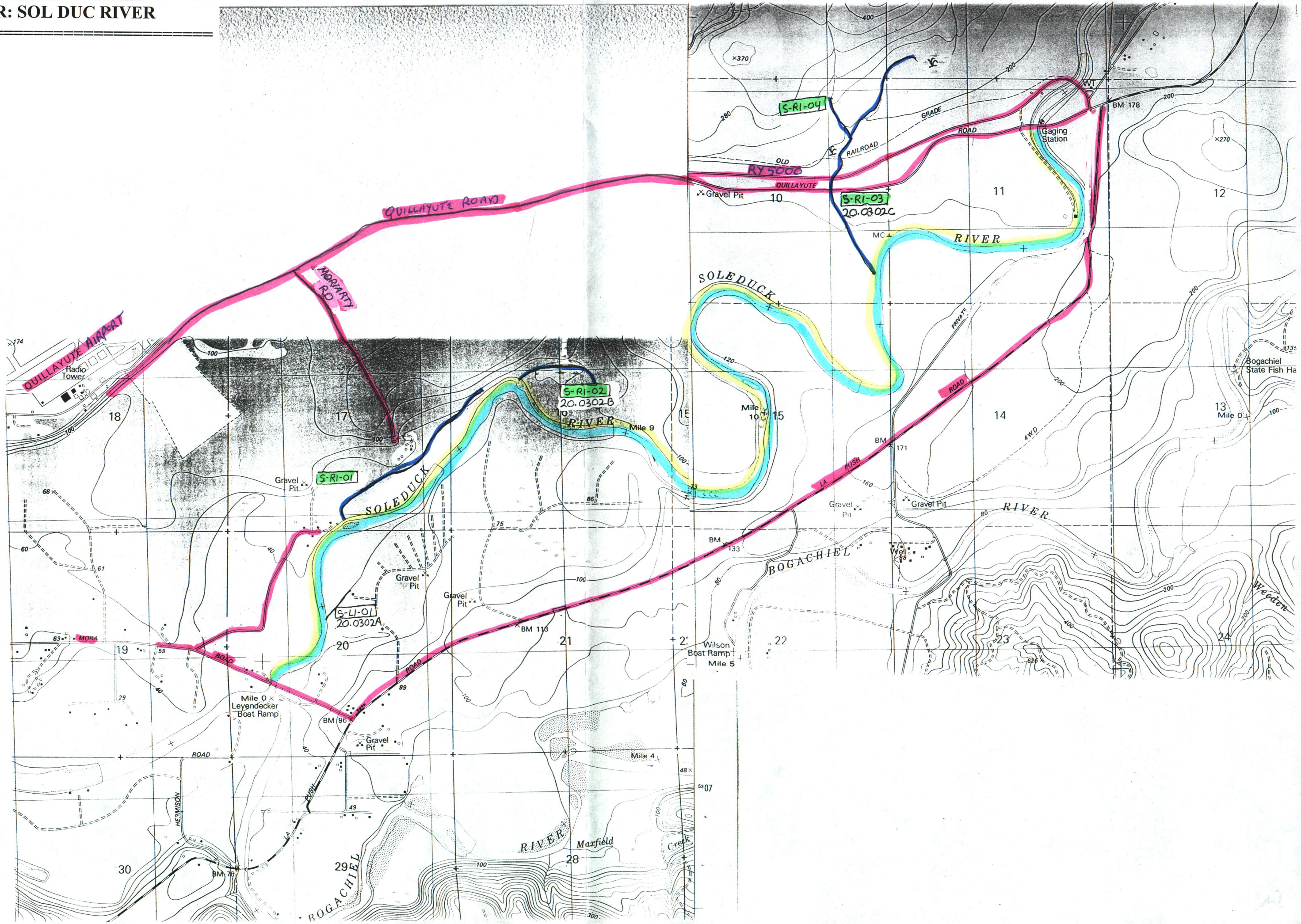
RIVER: SOL DUC

AREA: S-R1
SITES: S-R1-03, S-R1-04
WRIA: 20.0302C, 20.0302F
NAMES: Mystery Cr., Duncan Cr.

DATE: 2/96

RIVER: SOL DUC RIVER

AREA: S-R1

AREA MAP

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