

SITE INFORMATION

Site Identifier : SU4LB4 **Landowner Type :** Federal
Site Name : Seed Orchard Marsh **Landowner Name :** USFS
WRIA : 03.0710I **Address :**
Region : NS **Address2 :**
Trib to : Suiattle R **City :**
River Mile : 14.70 **State :**
River System : Suiattle R **Zipcode :**
Legal Description : NW1/4S16T32NR11E **Phone :**
County : Snohomish
Habitat Type : beaver pond

Directions :

Take FS road # 26 up the Suiattle river, turn right on FS #25 and follow to the Darrington Seed Orchard and turn left. the road will cross the creek below the marsh.

Area Overview :

Site is a large complex consisting of a large beaver marsh, a small surface stream, and two groundwater fed channels that all come together just above the road into the Darrington Seed Orchard. The site provides some limited spawning and excellent coho rearing habitat.

Field Survey Information

Date : 06/03/1996 **Observer :** Barkdull **Survey Type :** initial

HABITAT INFORMATION

Water Source: () Spring (x) Groundwater (x) Surface runoff

Flow: (x) Intermittent () Year-round

Estimated Flows (cfs): Lower end: 0.1
Upper end: 0

Water Temperature(C): Lower end: 10
Upper end: 10

Receiving Water Temperature (C): 10

Other Observations:

Site Area Measurements: () Indirect () Direct (x) Combination

Widths: Channel: 3 Ponds: Wetlands:

Depths: Channel: 0.3 Ponds: 1.0 Wetlands:

Total length (includes ponds and wetlands): 1,763

Total existing habitat area (est. m2): 20,866

Spawning area: Mainstem: 590 Tribs: 210 **Total:** 800

Impounded area: Mainstem: 17,286 Tribs: **Total:** 17,286

Other rearing area: Mainstem: 3,580 Tribs: **Total:** 3,580

Unaccessible habitat: Mainstem: Tribs: **Total:**

Spawning habitat conditions: None Poor Fair Good Excellent

Describe spawning habitat: Clean patch gravel of moderate size.

Rearing habitat conditions: None Poor Fair Good Excellent

Describe pond and other rearing habitat: Beaver pond is a mixed scrub-shrub wetland with a substantial portion of flooded forest. The most northerly forks are low gradient ground water fed channels with good cover, LOD, and a few small beaver dams. The surface stream entering the pond is a moderate gradient stream with few pools but good cover.

Describe unaccessible habitat:

Wetland type: Bog Marsh Scrub-shrub Forested

Describe: See above

Flooding potential: Low Medium High

Describe: Site was not flooded in 1990 or 1995 floods

FISH INFORMATION

Site entry condition: Poor Fair Good

Describe: Beaver dams may hinder access to the ponds

Coho access and use: Juvenile Unknown None Poor Fair Good
Adult Unknown None Poor Fair Good

Describe: The Skagit System trapped at the lower end of the whole system and caught from 600 to 1500 smolts annually. The culvert under the access road to Seed Orchard may have been a barrier to upstream migrating coho parr. Adults have observed up to forest service road #25

Other species access and use: Chum Pink Sockeye Chinook Trout

Describe: Trout have been trapped.

ENHANCEMENT OPPORTUNITIES: None

Project type:

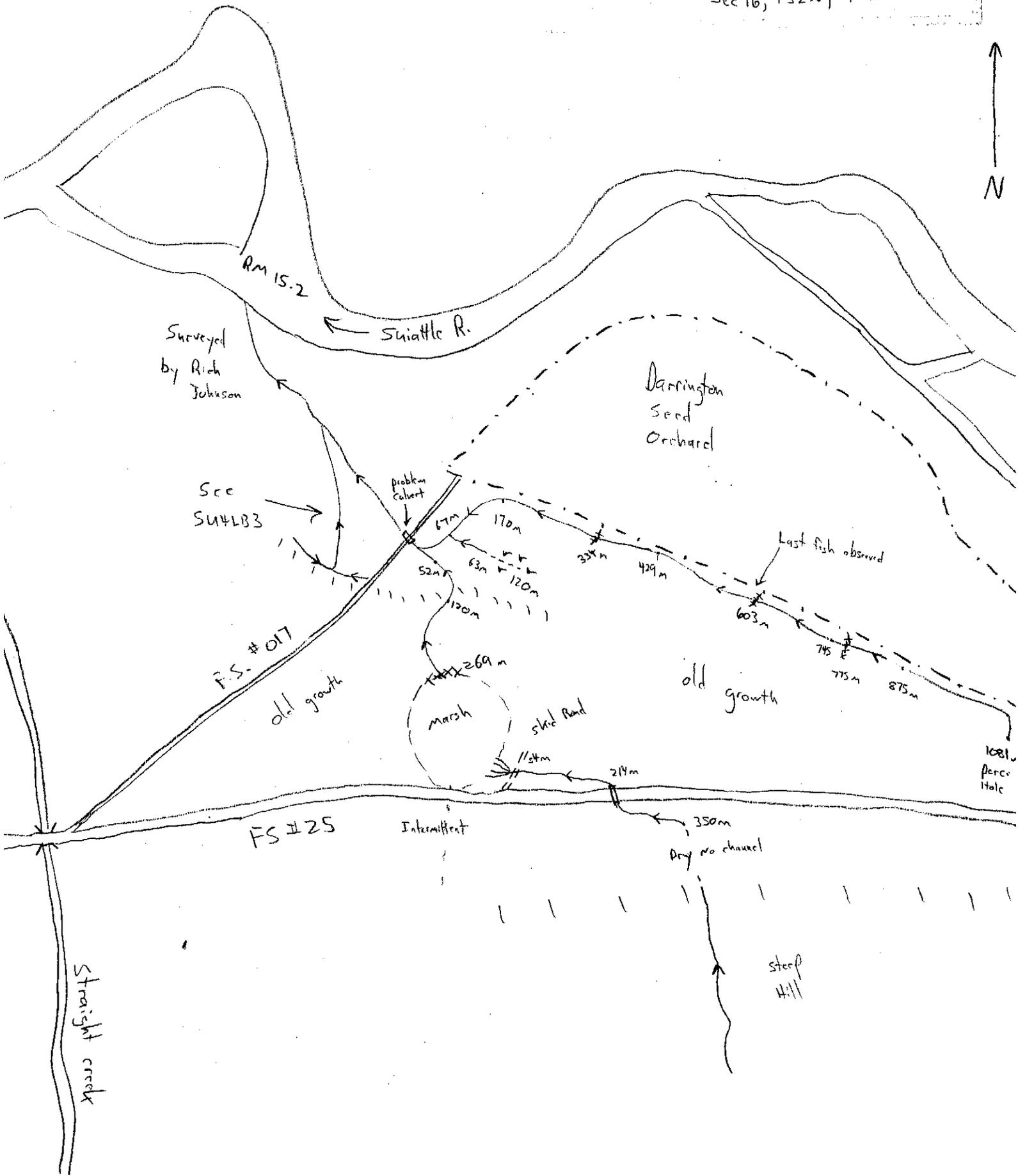
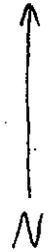
Equipment access:

ADDITIONAL COMMENTS: This site was surveyed by Rich Johnson and co. up to the Seed Orchard access road in 1984. See also SU4LB3. The culvert under the access road was upgraded in August of 1996 by the Skagit Regional Enhancement group.

ATTACHMENTS AVAILABLE

Aerials Sketch Maps Spawning Surveys Juvenile Trapping
 Other References

SU4LB1
Seed orchard creek
1" = 200'
B. Birkdall
Sec 16, T32N, R11E



31

32

33

34

5351

Creek

SKAGIT CO
SNOMISH CO

T. 33 N.

T. 32 N.

5350

17'30"

SUATTLE MOUNTAIN
Suattle Cemetery
SEVERE FLOODING

Creek

RIVER
SEVERE FLOODING

SUATTLE GUARD STATION 3.1 MI.

Mile X 15

Mile 16

5347

15

16

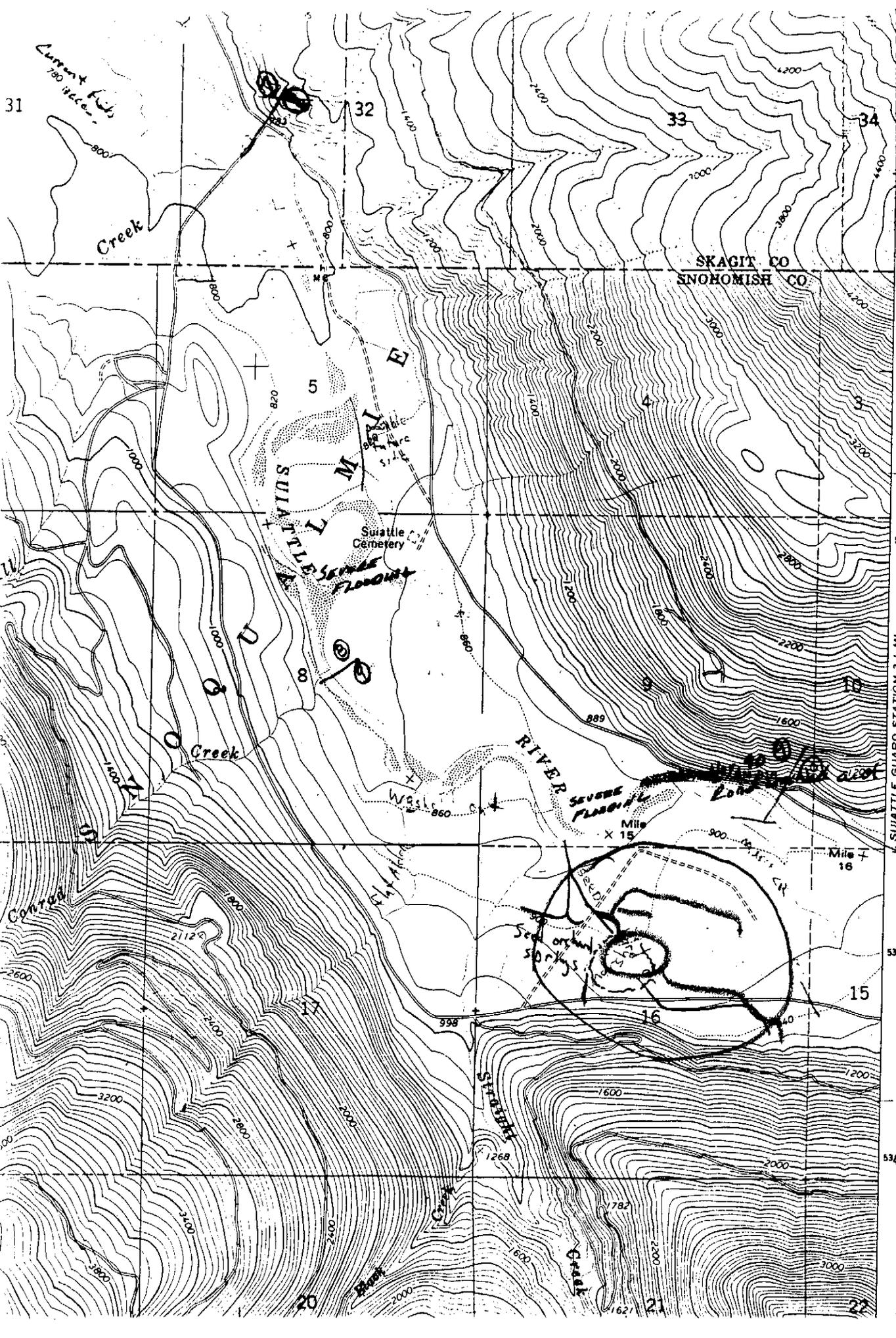
5346000m.N.

STREET

CR

21

22



SITE IDENTIFIER:SU4LB4
LOCAL NAME:Seed Orchard Marsh

NORTH SOUND OFF CHANNEL SITE INVENTORY DATA

RIVER:Suiattle SURVEY DATE:5/4/95 OBSERVER:B. Barkdull

WRIA:4.0710I RIVER MILE/BANK LOCATION:LB 14.7

LEGAL LOCATION DESCRIPTION: 1/4SECTION NW SEC.16 T.32N R.11E

CHANNEL TYPE: Marsh and surface stream

	RIVER	LOW END	UPPER END	O T H E R LOCATIONS
WATER TEMP:	.	62 f		
FLOW (CFS):		< 0.1 cfs		
WATER QUALITY:		Tannic		

SUBSTRATE TYPE/SPAWNING GRAVEL ABUNDANCE & CONDITION:

Some patches of gravel in channel above and below marsh, mud in the rest.

COVER/LOD: Very good

SITE DIMENSIONS: LENGTH:600' channel

WETTED AREA:186,000 ft² (from photos)

DEPTH:3' in pond

17286 m²

WATER SOURCE:Surface flow

FISH ACCESS/BLOCKAGES/CURRENT USE (BOTH ADULTS & JUV.):

Adults have been observed above the culvert, but the culvert may stop upstream movement of juveniles in fall

LANDOWNER: USFS

CHANNEL ENTRANCE CONDITIONS: good if the culvert was replaced

FACTORS LIMITING PRODUCTION: Lack of access by juveniles in fall,
lack of flow in summer.

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NORTH SOUND OFF CHANNEL SITE INVENTORY DATA

UP-OUTMIGRANT TRAPPING CAPABILITY/OPPORTUNITY/DIFFICULTIES:
Site has been trapped by SSC

BEAVER ACTIVITY: Lots of it.

HEAVY EQUIPMENT ACCESS: Good to culvert

DIRECTIONS TO SITE: Site is located just before the darrington seed
orchard off of FS 25

ENHANCEMENT OPPORTUNITIES AND COMMENT:

The lower end of Seed Orchard creek to the culvert was surveyed by
Johnson and Co. in 1984. The culvert under the forest service road
is probably a partial barrier to juvenile coho. The large marsh
above the road is dry in summer but would provide excellent
overwinter habitat if fish could negotiate the culvert and several
beaver dams. Because of this I think more evaluation of passage at
the culvert is needed.

6/5/96 Sand orchard cr. Park "B"

0.0 5.0 m mud bank

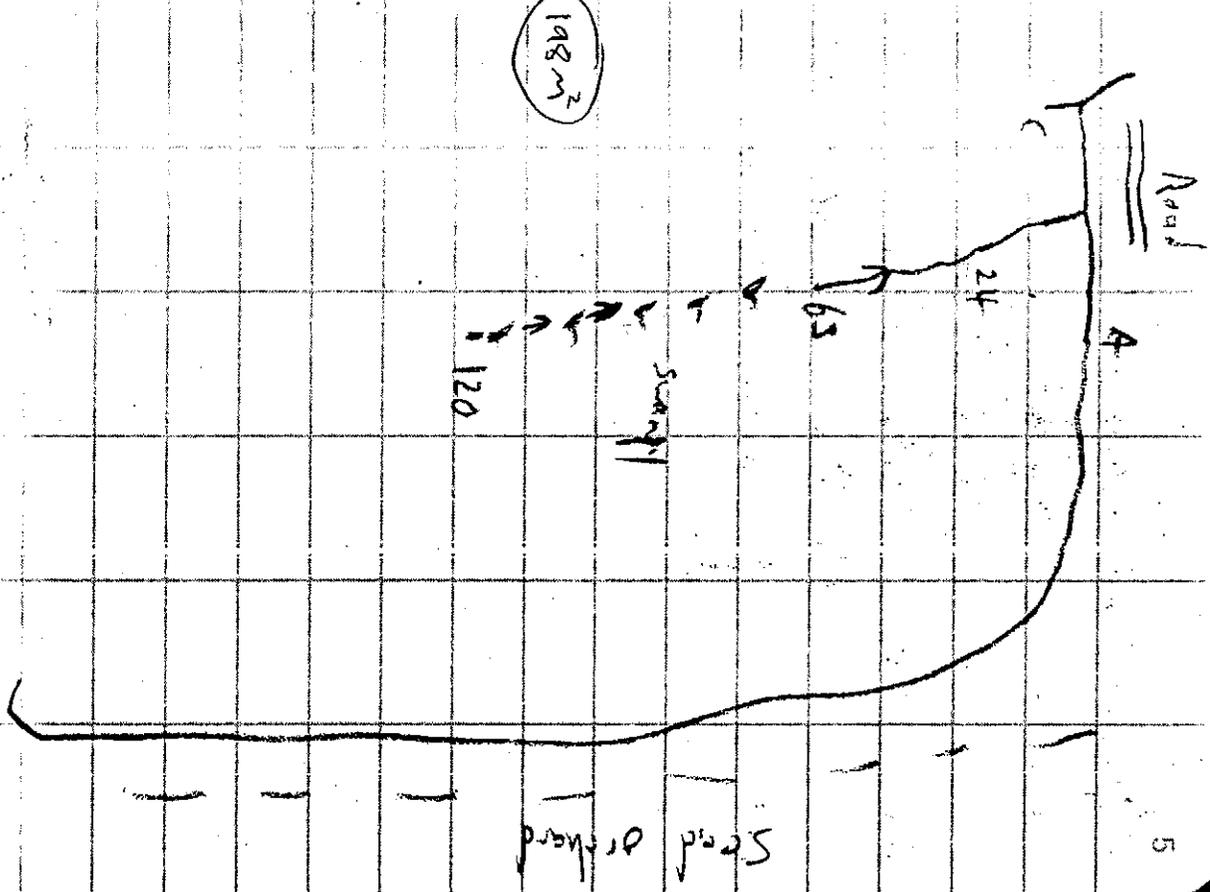
24.0 5.0 m Coldwater fish stream

63 2.0 end of fish stream? very

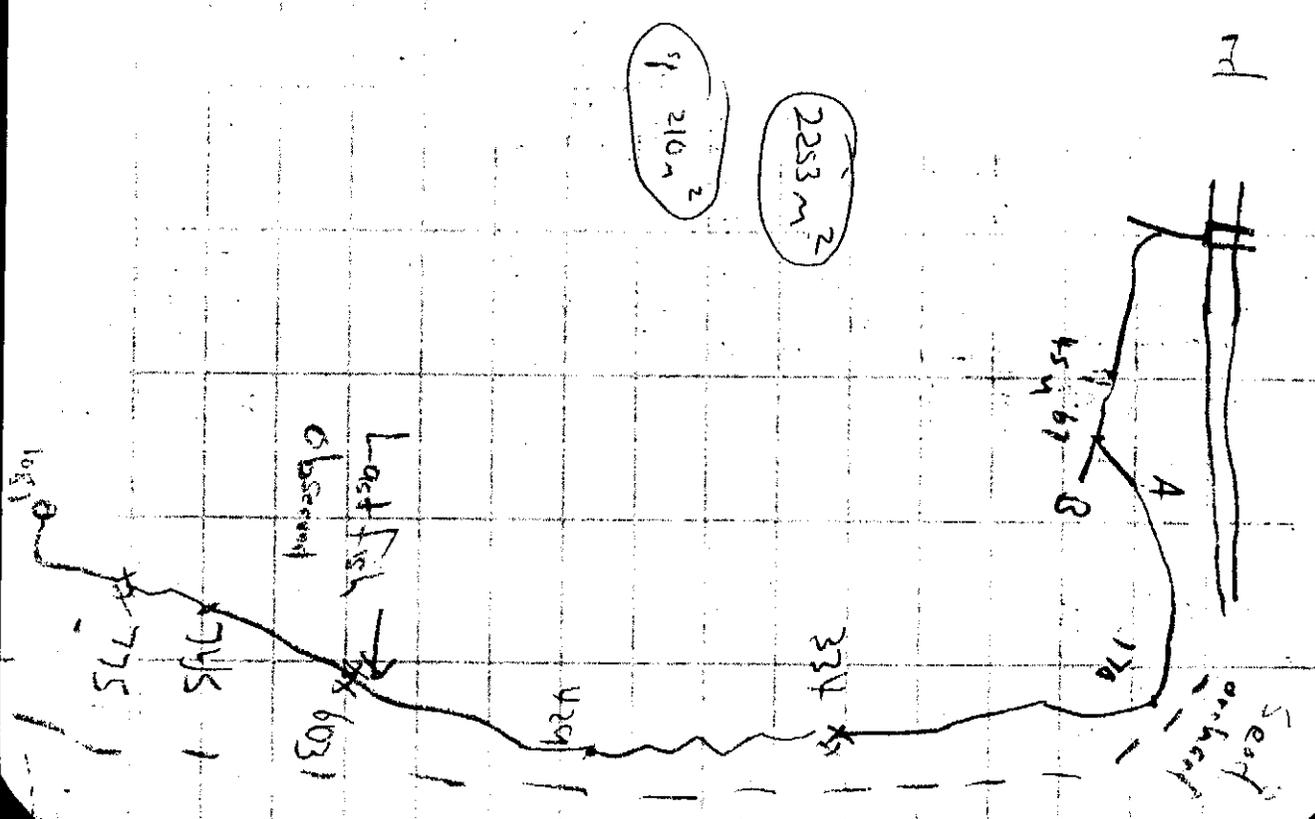
little flow over probably in winter

176 Swampy swale, end of stream

198 m²



613196	3.0	3.0	at calvert 30"
3.0	2.0		ch. sp. ts
450	2.0		Swampy low grade
670	4.8		Forks, AF
170	2.0		Cake observed in mod. str
334	7.8		5m brazer than bordering
			Edge of seed orchard.
429	3.0		Intrud ch. 2' deep
546	2.0		1.0 1/2 grade one patch of gr
603	3.0		at 2 brazer dam
715	3.0		Patch of large boulder
775	2.0		Brazer dam
875	2.0		Some sp. avail 10.5m
915	2.0		boulder w/ some sp. hab.
1067	1.0		Gravel, little str
1081	2.0		End, Air hole. no fish observed



6/15/96 Sand Orchard Creek Fork G. to pond

0.0 2.0 mud bottom

40. 1.0 mud bottom

52. 2.0 patch gravel, many obvious rocks 1.0%

92. 2.0 good gravel, many rocks, fish 1.0% gale

120 2.0 pillu gravel, ch. weed, 4.0% gale

147 2.0 patch gravel 3.0% many ch

269 3.0 pillu gravel, 2.0% fish to dam

Beaver dam appears possible especially at higher flows via secondary channels

530m²

35m²

