

SITE INFORMATION

Site Identifier : MA1LB1 **Landowner Type :** Private
Site Name : Mannser springs **Landowner Name :** Harvey Danielson
WRIA : 03.0339X **Address :** 751 Healy rd
Region : NS **Address2 :**
Trib to : Mannser Cr **City :** Sedro Wooley
River Mile : 1.60 **State :** Wa
River System : Mannser Cr **Zipcode :** 98284
Legal Description : SE1/4S9T35NR6E **Phone :** 360 826-3597
County : Skagit
Habitat Type :

Directions :

Take highway 20 past Hamilton, and turn left on the Hamilton Cemetary road, the road will come to a "T" stay to the right continuing on the Hamilton Cemetary road. In one mile take a left on the Healy road. The first house on th left belongs to Harvey Danielson.

Area Overview :

Site is a large, strong flowing wall-based channel with a small amount of good spawning gravel and extremely good rearing habitat. An abandoned road grade with an undersized pipe is a partial blockage to 1975 meters of rearing habitat at the upper end of the site.

Field Survey Information

Date : 02/04/1997 **Observer :** Barkdull **Survey Type :** initial

HABITAT INFORMATION

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

Flow: () Intermittent(x) Year-round

Estimated Flows (cfs): Lower end: 3.0 2.7 calculated at culvert
Upper end: 0

Water Temperature(C): Lower end: 9
Upper end: 9

Receiving Water Temperature (C): 6

Other Observations:

Site Area Measurements: () Indirect (x) Direct () Combination
Widths: Channel: 10 **Ponds:** **Wetlands:**
Depths: Channel: 0.3 **Ponds:** **Wetlands:**
Total length (includes ponds and wetlands): 410

Total existing habitat area (est. m2): 4283

Spawning area:	Mainstem: 48	Tribs:	Total: 48
Impounded area:	Mainstem:	Tribs:	Total:
Other rearing area:	Mainstem: 2260	Tribs:	Total: 2260

Unaccessible habitat: Mainstem: 1975 Tribs: Total: 1975

Spawning habitat conditions: None Poor Fair Good Excellent

Describe spawning habitat: Patch gravel in lower end where channel cuts through the alluvial fan.

Rearing habitat conditions: None Poor Fair Good Excellent

Describe pond and other rearing habitat: Low gradient, forested. swampy habitat with skunk cabbage, watercress and windfalls throughout.

Describe unaccessible habitat: Same as accessible habitat.

Wetland type: Bog Marsh Scrub-shrub Forested

Describe:

Flooding potential: Low Medium High

Describe: Flood water from the Skagit does not reach this high, some impact from Mannser creek mainly due to bedload.

FISH INFORMATION

Site entry condition: Poor Fair Good

Describe: No access problems except to area above the culvert.

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

Describe: Juveniles were observed on the day of the survey, redds were present in the lower end.

Other species access and use: Chum Pink Sockeye Chinook Trout

Describe: Cutthroat have access and have been trapped in large numbers from Mannser creek by both the S.S.C. and W.D.F.W.

ENHANCEMENT OPPORTUNITIES

Project type: Culvert and road fill removal.

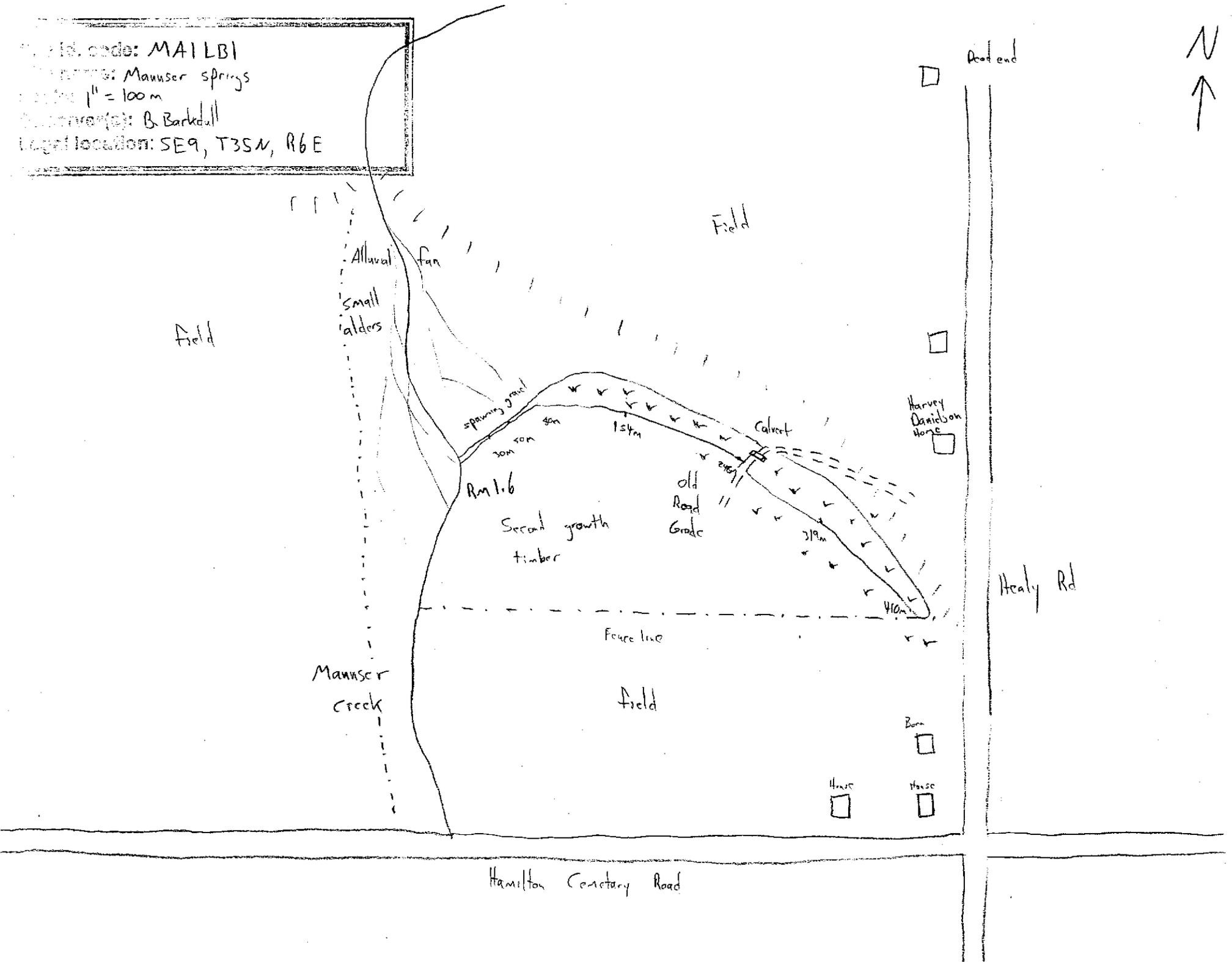
Equipment access: Good via the pasture

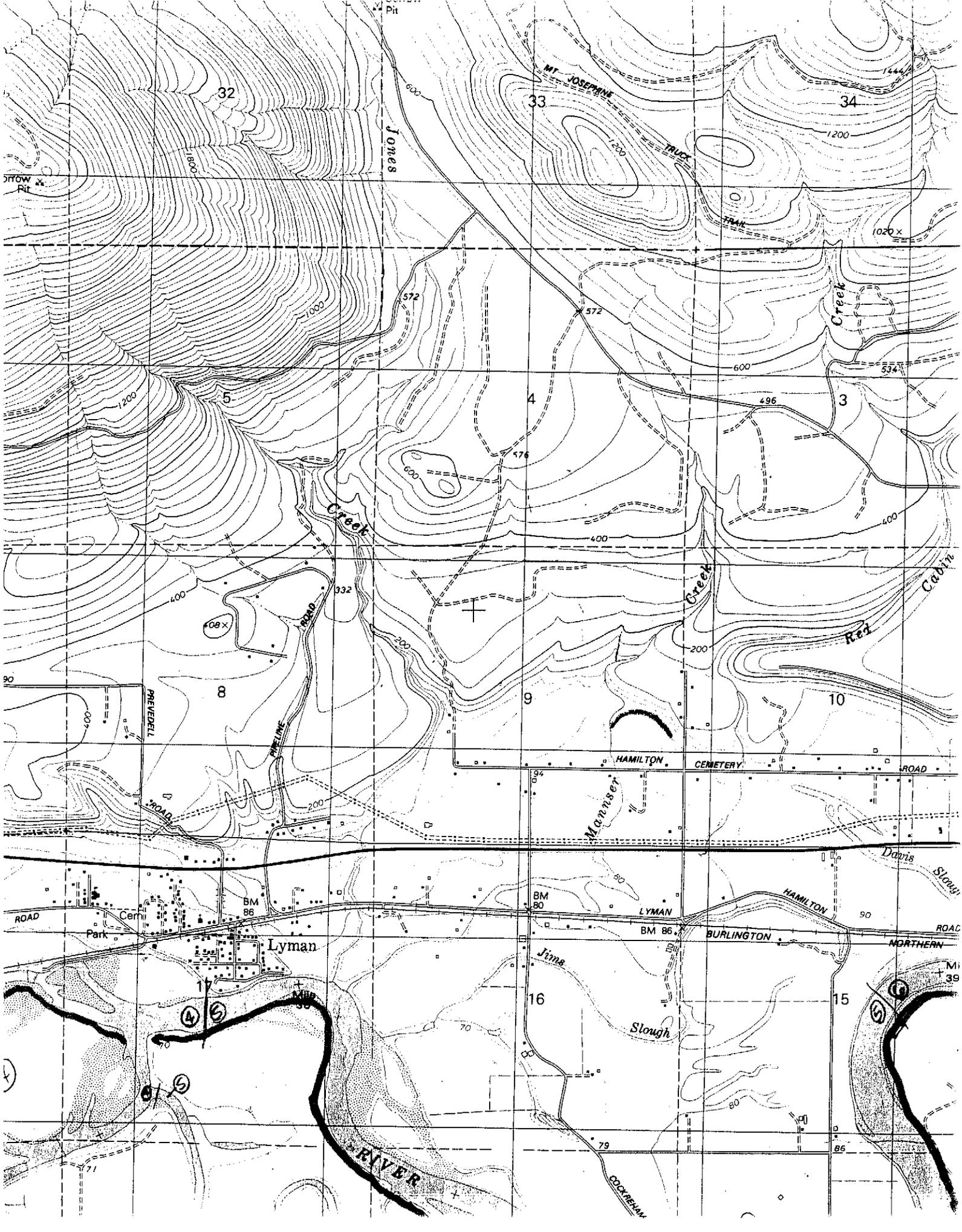
ADDITIONAL COMMENTS: There is a 12" culvert through an abandoned road fill that is apparently undersized because water was whirlpooling down into the inlet and boiling up at the outlet. There were no obstructions in the pipe. The road is no longer used and removing the pipe and a small amount of fill would be simple. The Mannser system has been juvenile trapped by both WDFW and the Skagit System Co-op and has shown to be a very productive system for both Coho and Cutthroat.

ATTACHMENTS AVAILABLE

Aerials Sketch Maps Spawning Surveys Juvenile Trapping
 Other References

Field code: MA1LBI
Location: Manser Springs
Scale: 1" = 100 m
Surveyor(s): B. Barkdull
Legal location: SE9, T35N, R6E



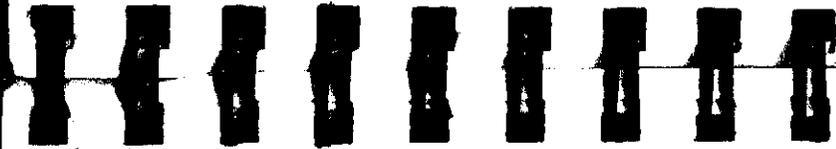


MAI LBI

Levee Culvert
OK.

SE9 T354, R6E

Rm 1.6 to Maunser



2/4/97 Spring to w/fork Maunser

6° warmer than Maunser 3.7 cfs

0.0 5.0 wide skunk cabbage, water cross

6.0 5.0 more of a channel, frequent
obvious beds

30 2.0 nice gravel, much ve

50 2.0 sand, channel widening

80 4.0 ave, channel no longitudinal
now swamp with flow

154 15.0 seeps all along hill

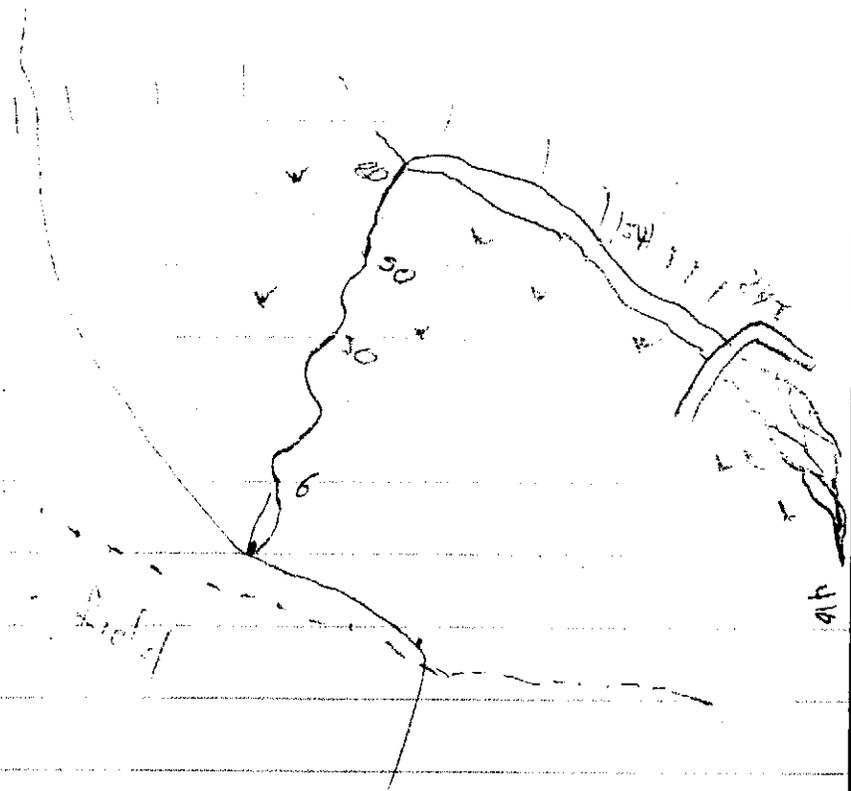
248 10.0 old Road 18" culvert in
water "whirlpool" in

319 30 wide, 15m of habitat

400 30 ave, 10m of habitat
good flow at this point, all
wall based seep.

2.7 cfs calculated at culvert

Total Area to collect = 2308 m² sp. = 42
" " above " = 1975 m²



2/4/97 Spring to w/fork
6" warmer than Mouse
0.0 S.O. wide skunk coll.

12/19/97 Millane cr. 0.3
below Co. line rd.
6 Redds, 1 mort cubs

12/20/97 Munser Trib 0.0-0.1
10 live, 1 mort, 65%

12/20/97 Munser
March to wet crossing
63 live, 2 mort, 75%

Above crossing 0.3
1 Redd