cc: Don Mueller
Harvey Olson
Fish & Game

Date: 11 Aug 78

Fish Stream Survey Report

Road Survey only
Units not checked to date

Camp EL CAPITAN
Road# South Devil Fish Bay
Station#
Stream Name(ID) 103-90-79
Unit# Units 48-1 48-2
RP#
Quad Map Petersburg A-4 + A-5
Section
Chick Map 16 of 55
Section 10 & 16

Fish Present Yes X No

	Yes	No
Above Road Crossing	X	
Below Road Crossing	X	
Within Unit Boundary	—	
Below Unit Boundary	—	

Species Present/Stage of Development Coho fry, Dolly Varden fry and Adult

Type of Fish Habitat 200' above and 200' below road

Salmon Spawning Area sq yds Describe
Salmon Rearing Area 610 sq yds Describe Good
Other Area sq yds Describe

Stream Sketch or Map: Attach supplement if necessary:
See Supplement

Method(s) used to determine presence of fish:

Date	#Fish	Approx Length	Gear	Length of Time Fished	Stream #
9-10 Aug 78	1 Dolly Varden	4.5"	Shocker	1 hr	1,2,3 & 4
	1 " "	4"			
	6 " "	3"			
	1 Coho	1½"			
"	2 D.V.	1½"			5 & Trib.
	18 D.V.	2"			
	1 DV	2½"			
	8 DV	3"			
	2 DV	3½"			
	4 DV	4"			
	1 DV	5"			

DATE	# Fish	Approx. Length	Gear	Time Fished	Stream #
9-10 Aug 78	3 Un identified		Slucker		5 strips cont'd
	6 Coho	2"			
	1 Coho	2½"			
	3 Coho	4"			
	1 D.V.	3"			6
	1 Coho	1½			
	1 Coho	2"			
	2 Coho	3"			
	6 Coho	1½"			7

Is future fish habitat enhancement possible? Yes_____ No X
If yes Describe:

Road ~~and Unit boundary~~/fish stream intersection(s) (As road is flagged)
Marked with aluminum metal tags Yes X No_____
Fish stream(s) flagged with blue stripe/tape (Orange at junction) Yes X No_____
Stream(s) traversed-If so attach traverse notes Yes_____ No X
Additional parameter information necessary, Yes_____ No X
If so attached completed fish stream parameter
Data form

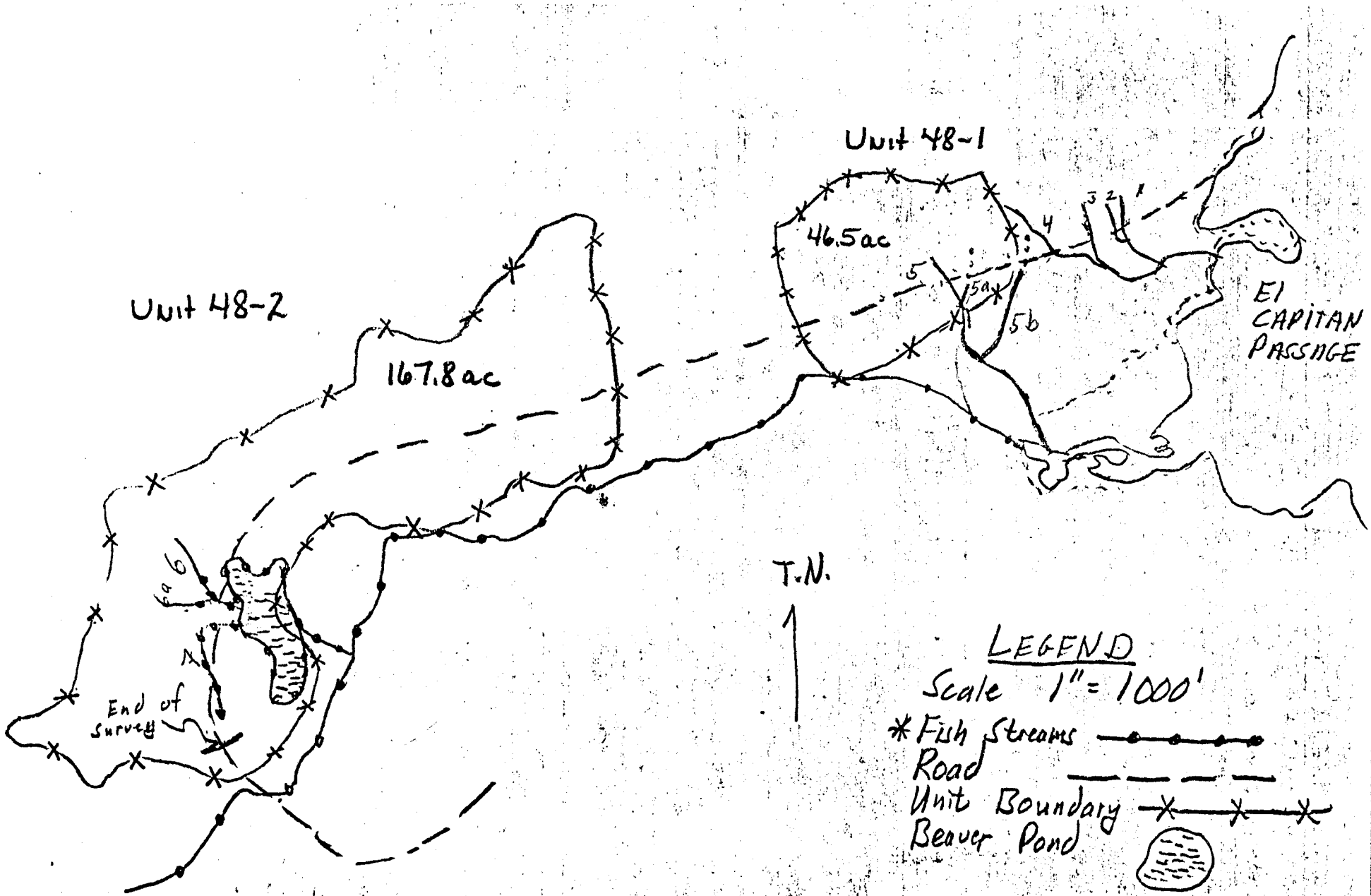
Pertinent Wildlife Information:
Some game trails -- tidal flats used by Canada Geese?

Comments: We learned that this road may be moved down the slope from its present location. If this is the case the new road line should be checked as there were several streams that had no fish where the present road crosses, but may have fish lower on the slope.

Survey Crew Members:	Signature	Date
	Steven D Hobbs	11 Aug 78
	Thomas M. Keating	August 11, 1978

Report Reviewed By Michael E Neary (Signature) Forester (Title) 8-14-78 (Date)

Note If Road location is moved down slope as recommended by the Soil Scientist, New Road location should be reserveyed for fish habitat
Recommendations:
- Fish-passage required concurrent with road building - on-off orange/white and blue/white flagged streams. Road building debris removal required within 48 hours of deposit on blue/white flagged streams - Debris removal required before purchase on orange/white flagged streams. Road crossings above fish habitat require culvert installation concurrent with roadbuilding to protect downstream fisheries Note recommended change to avoid double crossing on stream #7 - see attached note - Neary - Units Have Not Been Surveyed for Fish Habitat to date


Unit 48-1
46.5ac
Unit 48-2
167.8ac
El Capitan Passage
End of Survey
T.N.
LEGEND
Scale 1" = 1000'
* Fish Streams
Road
Unit Boundary
Beaver Pond
* Streams are not to Scale and locations are approximate.

Fish Stream Survey
South Devilfish Bay Road

Fish Stream #1 - 1'-2' wide mucky drainage, 6" - 12" deep, mud substrate. There are some good pools. We shocked one Dolly Varden 20' below centerline. No fish were found above the road. Marginal habitat above the road.

Flagged with Orange and White striped tape to limit of fish habitat above road and 200' below road. We placed an Aluminum tag on a tree 20' beyond stream.

Recommendations: Fish Passage if possible. Culverts should be placed concurrent with road building

Fish Stream #2 This stream enters F.S. #1 20' below road. It is 1'-2' wide, 6" - 12" dep, with mud substrate. 1 Dolly Varden was shocked 10' below centerline.

The road center line is the upper limit of fish habitat. Double flagged with Orange and white striped tape and placed an aluminum tag at the centerline. Flagged with orange & white below road.

Recommendations: No Fish Passage is required, however, A culvert should be placed concurrent with road building

Fish Stream #3 1'-2' wide, 3"-6" deep, with mud & gravel substrate. Fairly steep (15%) up-stream. Marginal habitat above the road. We shocked 1 Dolly Varden below the road. Flagged orange and white below road and tagged with an aluminum tag at the centerline

Recommendations: No fish passage required, but culverts should be installed concurrent with road building.

Fish Stream #4 1'-3' wide, rocks & mud substrate, 6"-12" deep. We shocked 3 Dolly Varden at the centerline and below. Fair to Good habitat 150' above the road. Above this it gets quite steep (35%)

Flagged with orange and white tape (double flagged at upper limit of fish habitat) and tagged with an aluminum tag at the centerline.

Recommendations: Recomend fish passage CONCURRENT with ROAD building.

Note: Streams 1, 2, 3, 4 all flow together and have coho in the lower end (just above Salt water) Below the road we shocked a total of 9 Dolly Varden and 1 coho.

Fish Stream #5 3'-4' wide, 2"-12" deep, gravel substrate. Very good habitat for at least 200' above road. We shocked 3 Dolly Varden above the road. We shocked 15 Dolly Varden Below the road. We also shocked 9 Coho fry starting 500' below road. Flagged w/ Orange/white flagging & tagged at centerline

Fish Stream #5a 1'-2' wide, 2"-4" deep rock & mud substrate. Fish habitat below the road. We shocked 2 Dolly Varden Downstream before it flows into stream #5

Fish Stream #5b 1'-2' wide, good flow, 1"-6" deep, rock and gravel substrate, fairly steep (13% 50' above centerline, 25% 100' up) No fish above road. 200' down stream from centerline we started shocking Dolly Varden (5 DV before it enters stream #5)

Recommendations: Stream 5 - Fish passage required concurrent with road building

Stream 5b - No Fish Passage Required, but culverts should be placed concurrent with building

Stream 5a - No fish Passage Required, but, culverts should be installed concurrent with building

Note: Flagged with Blue and white streamer to upper limit of coho habitat - then orange & white

Fish Stream # 6 3' wide, mud substrate 12" deep, nearly level. We shocked 12 Coho and 1 Dolly Varden. There is one tributary above the road 50' that is also rearing habitat. Flagged with Blue and White above and below present road location. This stream flows into a large beaver pond area that is very good rearing area. The road crosses the upper part of the beaver dams before it reaches the stream.

An Aluminum tag was placed at the centerline.

Recommendations: Fish passage is required. CONCURRENT with road building It would be best if the road could be moved uphill slightly to avoid the beaver pond area. This would also avoid a double crossing of stream # 7. Forty-eight hour debris Removal Required ON Stream 6

Fish Stream # 7 4' wide, 12" deep, gravel substrate. We shocked 6 coho at the centerline. This stream enters the beaver-dam complex 50' downstream. Flagged with Blue and white striped tape and tagged at centerline.

This stream is crossed again about 500' above 1st crossing.

Recommendation: Fish Passage Required.

Concurrent with road building. Road building debris removed required within 48 hours of deposit.

Note: If the road location is moved down the slope, some of the above streams would have to be treated differently – there would be more streams requiring fish passage.

Some streams not shown above, because they did not have fish near the road crossing, would possibly have fish lower on the slope where the gradient is less.