cc Gary Lybrand
Mike Pease
Fish & Game

Date: 9-6-79

DLS

Fish Stream Survey Report

STREAM #6

Camp Naukati

Stream Name(ID) 103-90-004

Road# Naukati-Whale Pass Tie Station# Unit# RP#

Quad Map Petersburg A-4 Section Chick Map Section

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 Dolly Varden adult
fry Coho fry

Type of Fish Habitat

Salmon Spawning Area sq yds Describe
Salmon Rearing Area X sq yds Describe
Other X Area sq yds Describe
Resident

Stream Sketch or Map: Attach supplement if necessary:

see supplement

Method(s) used to determine presence of fish: shocker

Date	#Fish	Approx Length	Gear	Length of Time Fished
9-6-79 STREAM #6	1 Dolly Varden	3 inches	shocker	30 min.
	2 Dolly Varden	3 inches		
	4 Dolly Varden	2 inches		
	9 Dolly Varden	1 inch		
	1 Coho smolt	4 inches		
	1 Coho	2 inches		
	1 Cutthroat	3 inches		
	1 Coho	1.5 inches		

Is future fish habitat enhancement possible? Yes _____ No ✓
If yes Describe:

Road and Unit boundary/fish stream intersection(s)
Marked with aluminum metal tags Yes ✓ No _____
Fish stream(s) flagged with ~~blue~~ orange stripe tape Yes ✓ No _____
Stream(s) traversed-If so attach traverse notes Yes _____ No _____
Additional parameter information necessary, Yes _____ No _____
If so attached completed fish stream parameter
Data form

Pertinent Wildlife Information:

Heavy Deer useage

Comments:

See supp

Pease Fish Bio may need to follow up on culvert installation to determine if baffled pipe successfully passes fish

Survey Crew Members: Signature Date

Jim McCullough Jim McCullough 9/14/79

Report Reviewed By Michael E. Navy Wildlife Bio 9-19-79
Signature Title Date

Recommendations: See attached pages for detailed write up. Habitat above proposed road crossing is not extensive (4+95) - however almost all of this is excellent resident spawning gravel (0+00 to 3+10). Do not believe the situation warrants bottomless arch pipe due to expense, design & installation problems. Recommend we try a baffled CMP despite gradient problems. Will give fish Bio opportunity for follow up. Lets

NAUKATI - WHALE PASS TIE
PUBLIC WORKS ROAD
9-6-79

STREAM # 6

STREAM # 6 was intensively surveyed to determine the economic feasibility of installing a fish culvert. The stream was traversed from the road upstream to the end of the habitat and from the mouth upstream to the road. The amount of spawning and rearing habitats were estimated along with substrate changes and bank stability.

The stream is approximately 3-4 feet wide 3-6 inches deep with 10-12 inch pools, overall. It flows West into a larger stream, located about 500 feet below the road-stream junction. Spawning Pink salmon were observed in this stream and Coho fry and smolt were shocked. Coho fry were also found in the lower reaches of stream # 6.

The Coho habitat extends from the mouth (0+00) to approximately 1+70 where the gradient is over 10%. Dolly Varden were also found within this area. It is possible that salmon spawn in this area but the habitat is marginal. However, the spawning habitat for resident fish is excellent with 50-90% gravel. The high water channel

is 3-4 feet wide and the main flow at this time is 1-2 feet wide. The entire stream was flagged Orange/White even though Coho were found in the lower portion.

Above 1+70 the gradient becomes steeper (15%) and there is a significant change in substrate. There is a high proportion of rocks with small stair-step falls and pools. The gravel is approximately 20% of the substrate composition and is located primarily in the pools. Several small (3/4"-1") Dolly Varden were shocked indicating primarily rearing habitat usage.

At station 2+45 there is a 2-3 foot falls above which there is 10-15 square yards of spawning gravel. Above this area the substrate is primarily Bedrock/Rock with 10-15% gravel in pools. The gradients get progressively steeper to below the road where there is a 2-3 foot falls. These falls do not present a barrier to resident fish. The end of this portion of the traverse is at 5+00 which is at the road crossing (PI 180+85). The upstream traverse begins at this point (PI 180+85) with 0+00.

Above the road from station 0+00 to approximately 1+30 the gradient averages about 5%. The substrate consists of 30-40% gravel with mossed rocks, indicating stability. This area is excellent resident spawning habitat. At ≈ 1+30 the stream goes under ground for 30-40 feet but this does not seem to hinder flow or fish passage.

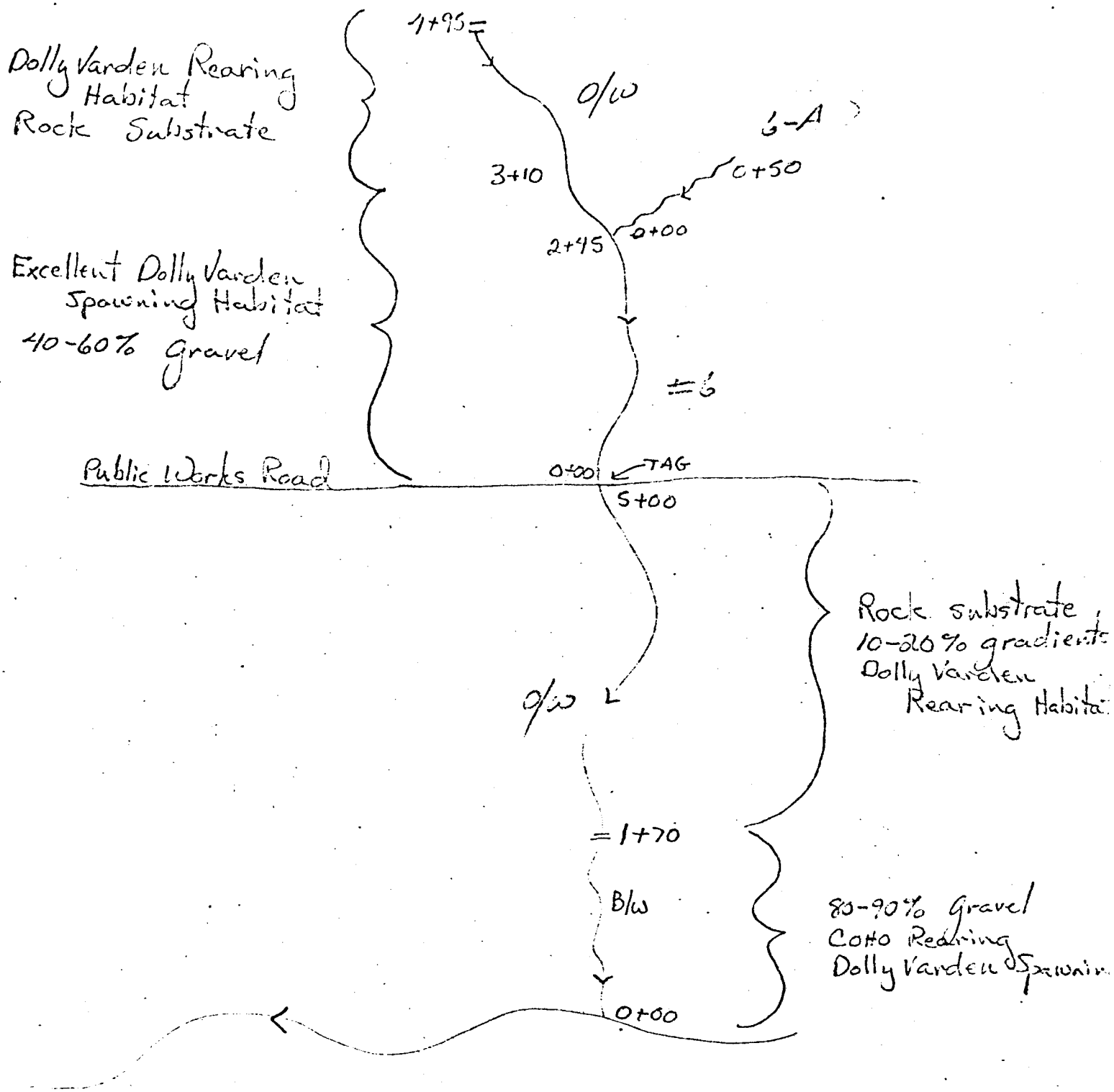
From station 1+60 to 3+10 the spawning gravel makes up over 60% of the substrate. The gradient is approximately 4%. This is ordinal spawning habitat.

Above 3+10 the substrate changes to Rocks 6-12 inches diameter, with about 10% gravel and sand. The gradients become steeper ranging from 10 to 15%. This is primarily rearing habitat. The traverse was completed at 4+95. The habitat becomes marginal at this point and no fish were shocked above this point. It was double flagged at station 4+95.

At station 2+45 there is a tributary, 6-A. This stream is 1-2 feet wide, 3-6 inches deep, with Mud/Sand/Organic substrate. There is 50 feet of habitat, with a gradient of 5% at a bearing of 148°. The side slopes were 7% and 5%, left, and right, [illegible]

is primarily rearing habitat.

The banks along the entire stream are very stable and there is alot of undercut banks which provide excellent habitat for fish. Above the road there is approximately 300' feet of excellent resident spawning habitat. Below the road there is approximately 200 feet of excellent resident spawning habitat and possibly some salmon spawning during higher water. Combined there is 500 feet of excellent resident spawning habitat in Stream #6. The remaining 500 feet is excellent rearing habitat for resident populations. Dolly Varden populations in this stream have access to the sea and some may be sea run.



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PUBLIC WORKS ROAD
STREAM #6

STREAM #6 Downstream From Road

UNIT TRAVERSE

SALE NAME Public Works Road UNIT

CREW Naukati - Whalepass Tie DATE 9-6-79

WEATHER Cloudy MAG TRUE N

PAGE 2 of 2

STA	SLOPE DIST.	% SLOPE	FS	BS	REMARKS
	MOUTH OF STREAM #6				
0+00					
	95	+5	66°	+1	+3
0+95					
	75	+11	96°	+3	+7
1+70	END	COHO HABITAT			
	75	+17	97°	+16	+23
2+45	Falls	2-3'			
	70	+13	93°	+16	+32
3+15					
	80	+20	133°	+33	+35
3+95					
	55	+29	109°	+27	+34
4+50					
	50	+21	108°	+23	+36
5+00	End at Road Xing				180+85
				+13	+27

GSA Jensen 1164