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WA-01-0050

TO: John Glynn

FROM: Shirley Prescott

SUBJECT: Oeser Cedar Co. 5/9/78
Discharge to Unnamed Creek (Tributary to Bellingham Bay)

DATE: August 11, 1978

State of Washington Department of Ecology

This is in response to your request for an evaluation of the effect of Oeser Cedar Company's discharge to unnamed creek (tributary to Bellingham Bay).

Four sampling sites were chosen: (1) above Oeser Cedar Company outfall, (2) at the end of the 50 foot long concrete culvert which picks up ground water from Oeser Cedar plus urban runoff, (3) at the end of the 36" corrugated pipe which collects urban runoff, and (4) at the creek mouth one-fourth mile downstream (Figure 1).

Most of the water coming out of the Oeser Cedar Co. outfall (90%±) was originating as ground water. The rest is urban runoff from above the Oeser Company.

The creek runs generally along the north side of a small, flat bottomed draw and collects water from springs on the sidehill as well as ground water which gives considerable dilution through this quarter-mile stretch.

Following are the analytical results for the grab samples:

	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Soil (Below confluence)	Soil (Unnamed creek)
pH	7.6	7.6	7.6	7.4		
Turbidity (NTU)	30	10	3	3		
Sp. Conductivity (umhos/cm)	197	260	252	293		
COD	430	46	19	19		
BOD (5 day)	37	7	< 2	2		
F. Coliform (Col./100 ml)	> 8000	4400 est.	6	2200		
NO_3-N (Filtered)	0.12	0.24	0.05	1.6		
NO_2-N (Filtered)	< .02	<.02	<.02	< .02		
NH_3-N (Unfiltered)	0.12	5.9	0.12	0.13		
O-PO_4-P (Filtered)	0.14	0.45	0.06	0.05		
Total Phos.-P (Unfiltered)	0.11	0.66	0.05	0.14		
Total Solids	223	150	148	202		
Total Non. Vol. Solids	118	106	110	142		
Total Suspended Solids	126	1	6	< 1		
Total Sus. Non Vol. Solids	52	2	4	< 1		
Chlorides	6	11	9	13		
T. Alkalinity (or $CaCo_3$)	74	100	95	100		
T. Oils	550*	2	< 1	2		
Color (color units)	71	71	42	21		
Pentachlorophenol	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenol	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

* Fatty type material

ECY 010-4

The high COD values at Station 1 indicate a high organic load coming in above Oeser Cedar. The urban runoff is undoubtedly picking up unknown quantities of animal wastes, lawn and garden fertilizers and possibly septic tank contamination. This may also have been the reason for the high coliform counts.

I have a question in my mind as to whether the nutrient samples for Stations 1 and 2 might have been switched as all other values would indicate the higher nutrient values reported for Station 2 should be for Station 1. All parameters tested indicate a decrease at all stations as a result of dilution.

The parameters of phenol and pentachlorophenol, which were your major concern, are below detection.

These results would indicate that the Oeser Cedar Company's effect on the receiving water is minimal.

SP:ee

cc: Central Files

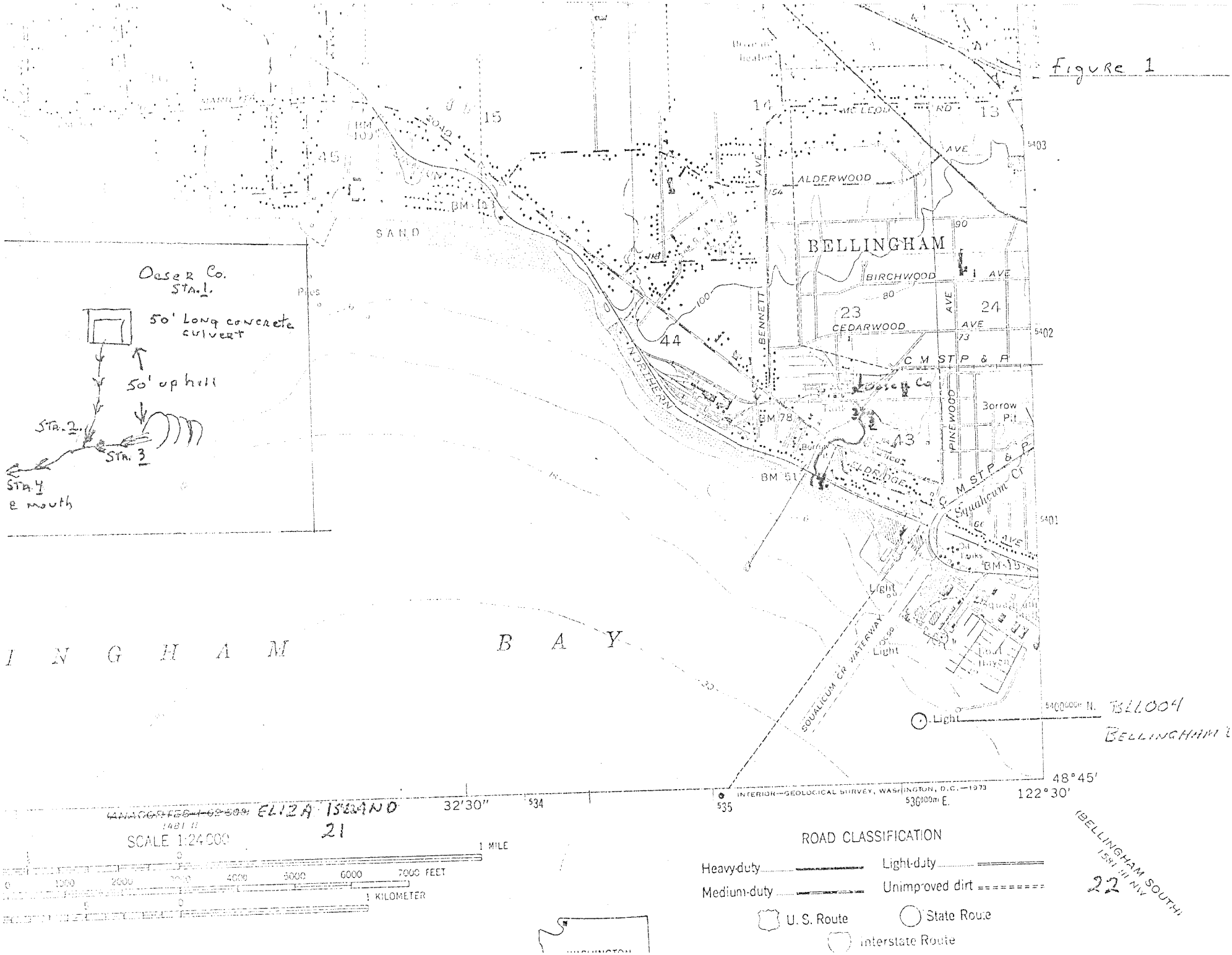
Figure 1
Oeser Co.
STA. 1.
50' Long concrete culvert
50' uphill
STA. 2.
STA. 3
STA. 4
& mouth
BELLINGHAM
ALDERWOOD
BIRCHWOOD
CEDARWOOD
AVE
C M ST P & P
Oeser Co
Borrow Pit
PINEWOOD
ELDRIDGE
Squalicum Cr
SQUALICUM CR WATERWAY
NORTHERN
BENNETT
SAND
BM 78
BM 51
BM 15
Light
I N G H A M B A Y
48°45'
122°30'
32'30"
INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D.C.—1973
ELIZA ISLAND
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SCALE 1:24 000
1 MILE
7000 FEET
1 KILOMETER
ROAD CLASSIFICATION
Heavy-duty
Light-duty
Medium-duty
Unimproved dirt
U. S. Route
State Route
Interstate Route
BELLINGHAM SOUTH
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