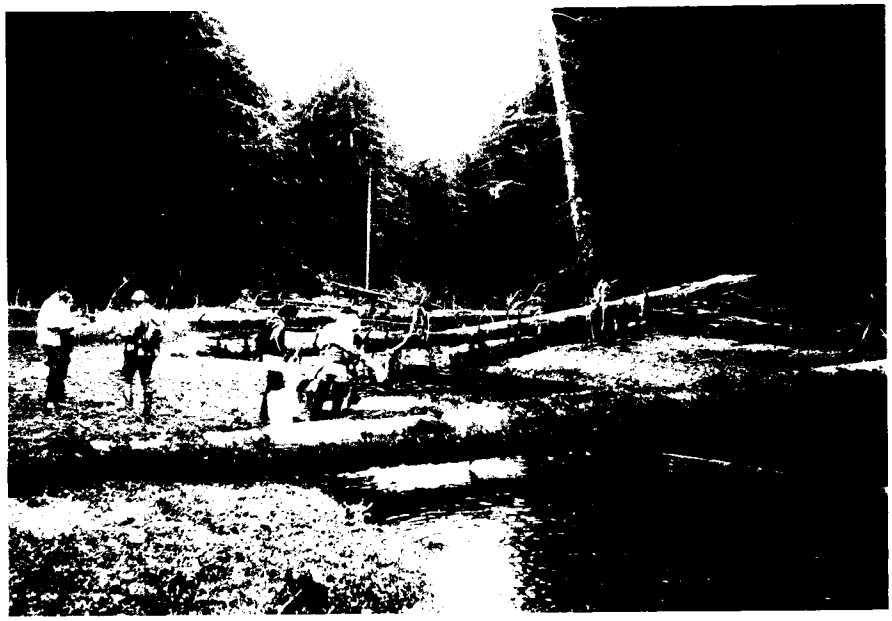
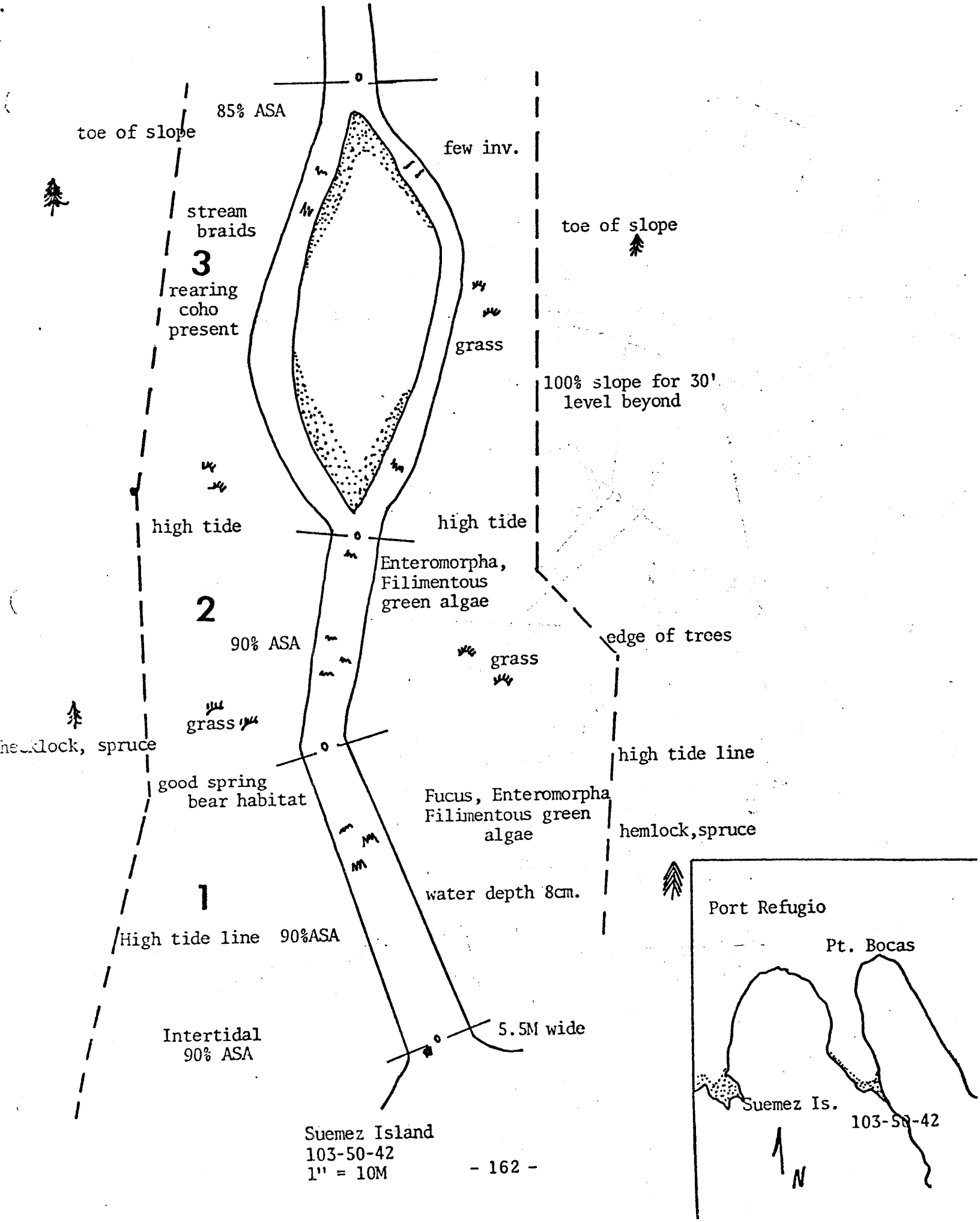
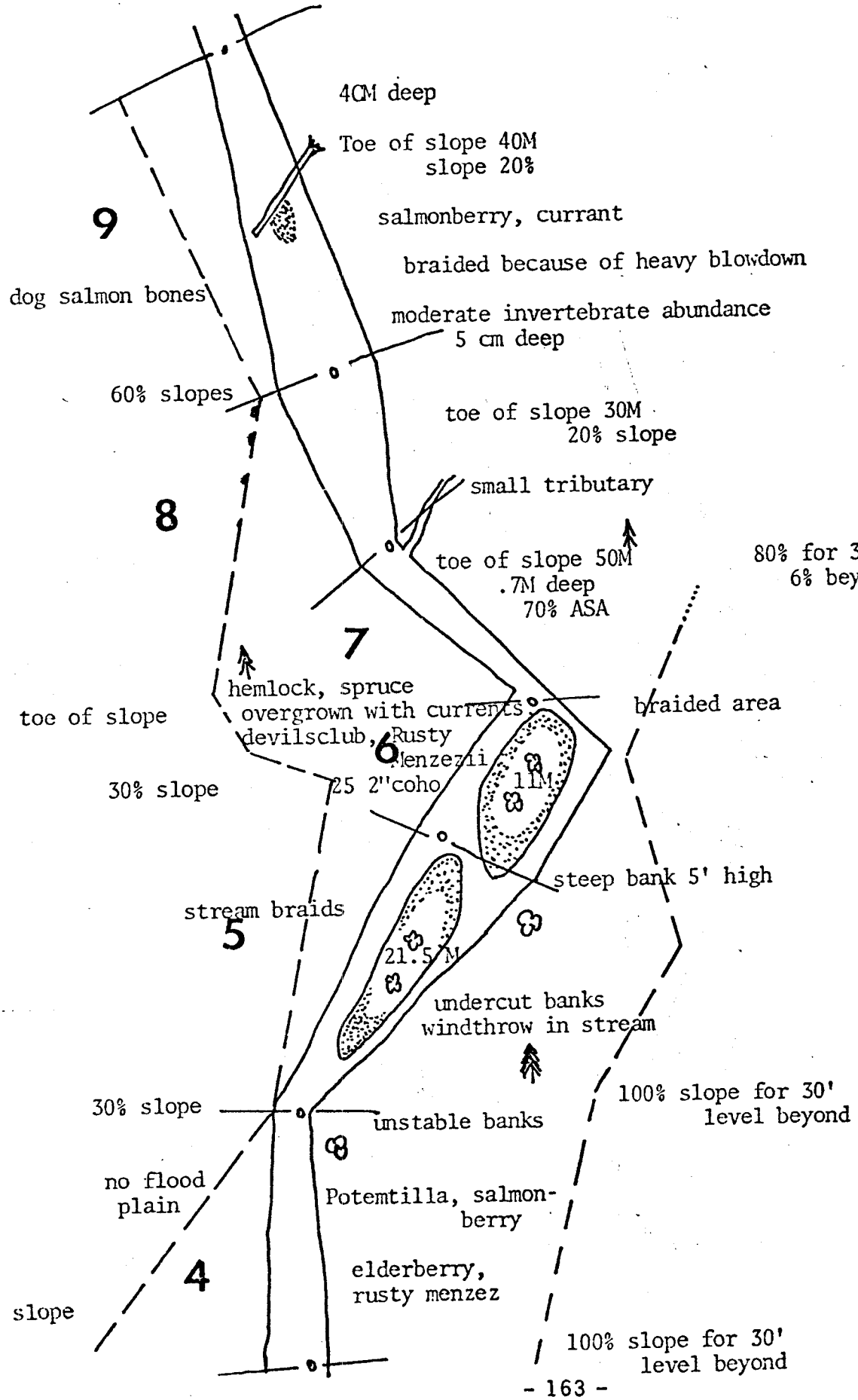
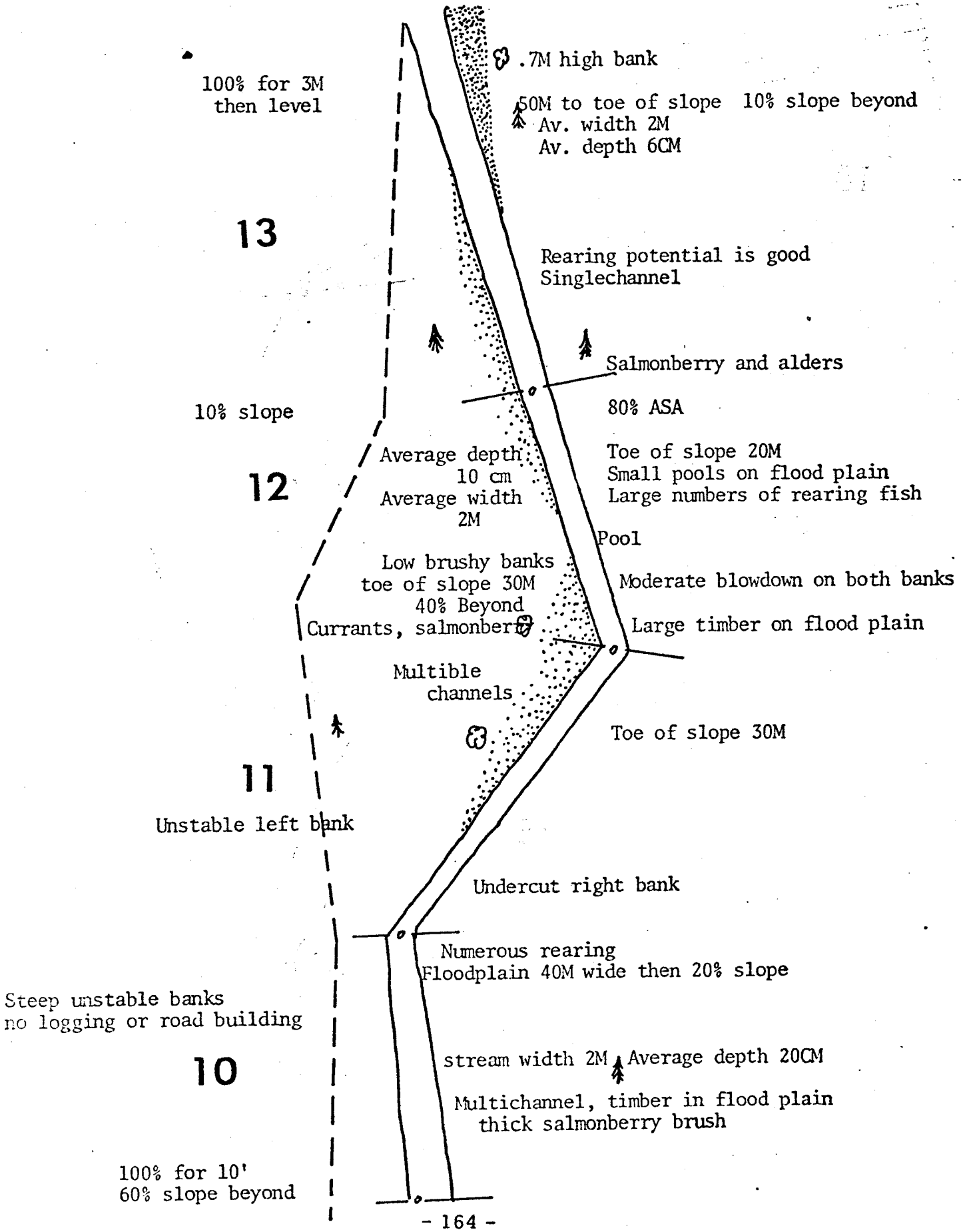


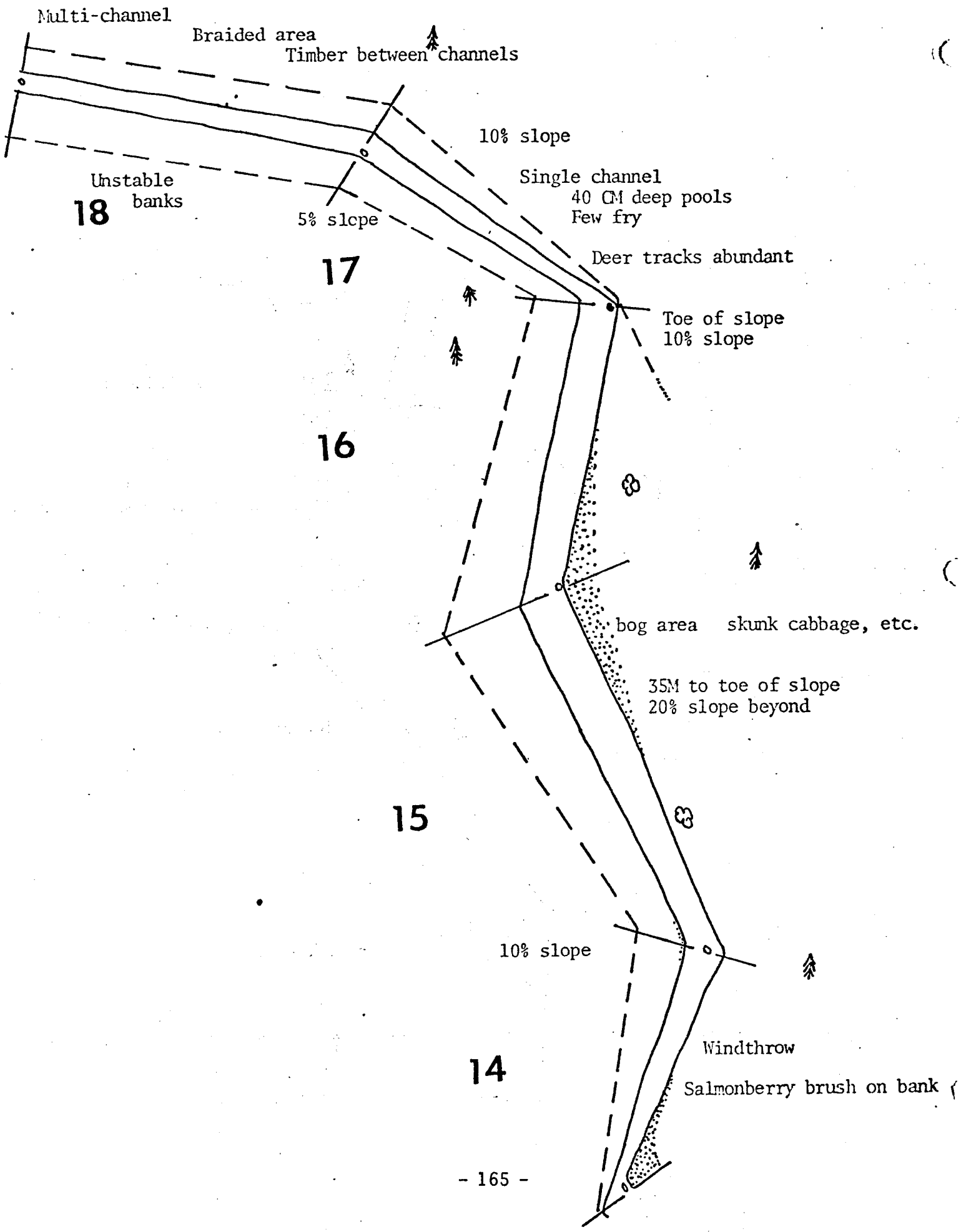
Intertidal area of stream 103-50-42

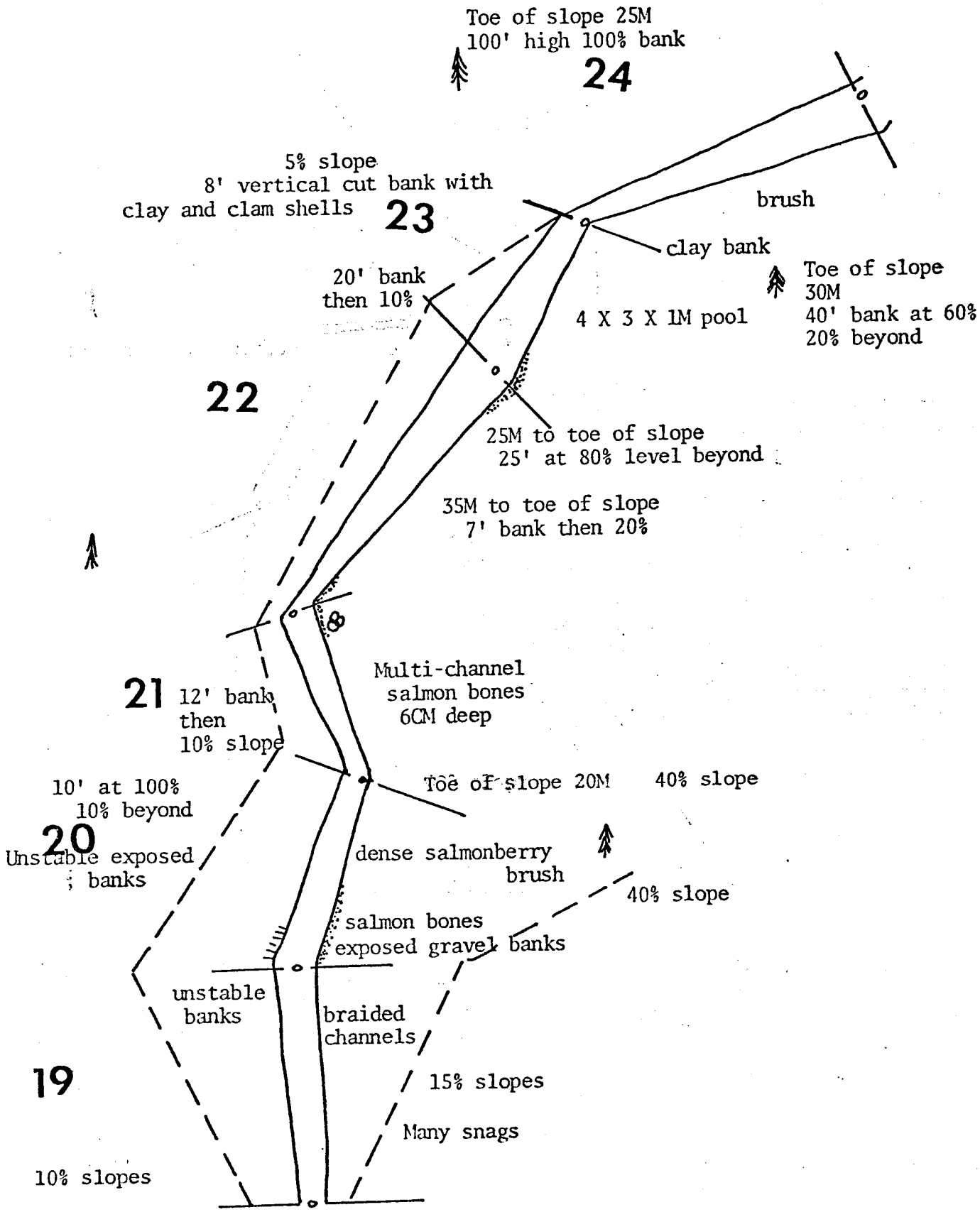
103-50-10420

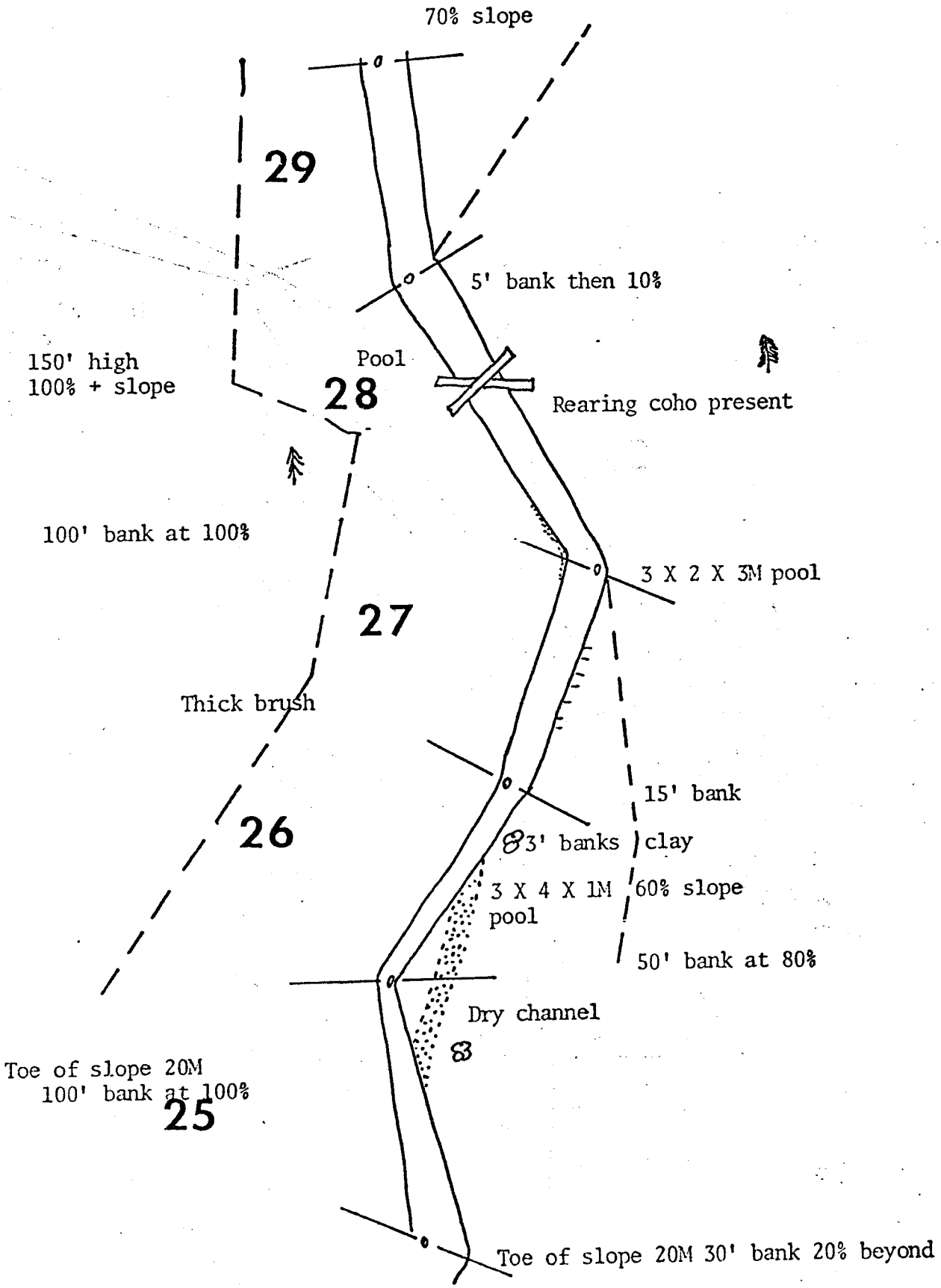

85% ASA
toe of slope
few inv.
stream braids
3
rearing coho present
toe of slope
grass
100% slope for 30' level beyond
high tide
high tide
Enteromorpha, Filimentous green algae
2
90% ASA
edge of trees
grass
grass
hemlock, spruce
high tide line
good spring bear habitat
Fucus, Enteromorpha Filimentous green algae
hemlock,spruce
1
water depth 8cm.
High tide line 90%ASA
Intertidal 90% ASA
5.5M wide
Suemez Island
103-50-42
1" = 10M
Port Refugio
Pt. Bocas
Suemez Is.
103-50-42
N


40M deep
Toe of slope 40M
slope 20%
9
salmonberry, currant
braided because of heavy blowdown
dog salmon bones
moderate invertebrate abundance
5 cm deep
60% slopes
toe of slope 30M
20% slope
small tributary
8
toe of slope 50M
.7M deep
70% ASA
80% for 30'
6% beyond
7
hemlock, spruce
overgrown with currents
toe of slope
braided area
devilsclub, Rusty
Menzezii
6
11M
30% slope
25 2"coho
steep bank 5' high
stream braids
5
21.5 M
undercut banks
windthrow in stream
100% slope for 30'
level beyond
30% slope
unstable banks
no flood
plain
Potemtilla, salmon-
berry
4
elderberry,
rusty menzez
3 slope
100% slope for 30'
level beyond

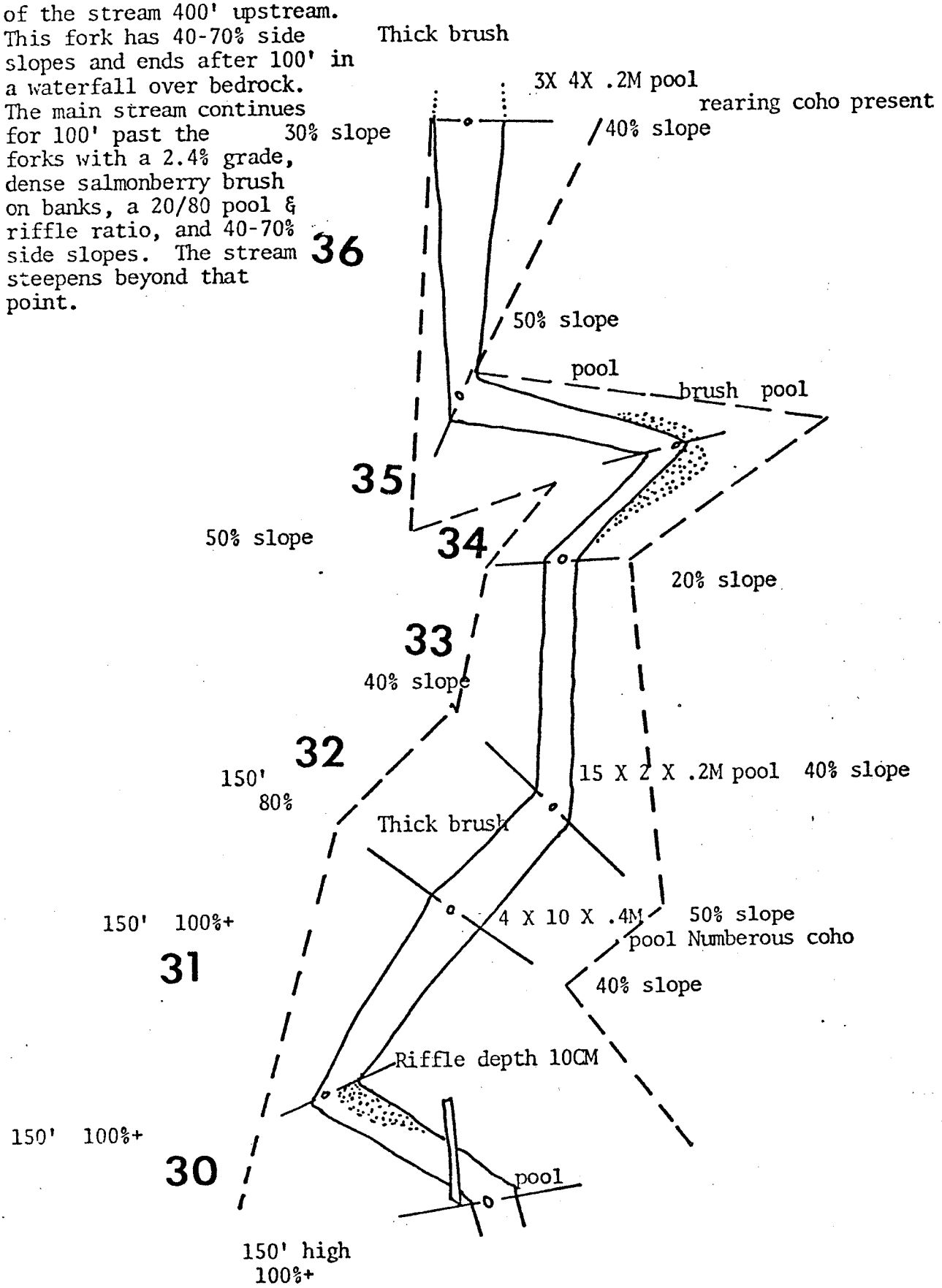

.7M high bank
100% for 3M
then level
50M to toe of slope 10% slope beyond
Av. width 2M
Av. depth 6CM
13
Rearing potential is good
Singlechannel
Salmonberry and alders
10% slope
80% ASA
Average depth
10 cm
Average width
2M
Toe of slope 20M
Small pools on flood plain
Large numbers of rearing fish
12
Pool
Low brushy banks
toe of slope 30M
40% Beyond
Currants, salmonberry
Moderate blowdown on both banks
Large timber on flood plain
Multible
channels
Toe of slope 30M
11
Unstable left bank
Undercut right bank
Numerous rearing
Floodplain 40M wide then 20% slope
Steep unstable banks
no logging or road building
10
stream width 2M
Average depth 20CM
Multichannel, timber in flood plain
thick salmonberry brush
100% for 10'
60% slope beyond


Multi-channel
Braided area
Timber between channels
10% slope
Single channel
40 CM deep pools
Few fry
Unstable banks
18
5% slope
17
Deer tracks abundant
Toe of slope
10% slope
16
bog area
skunk cabbage, etc.
35M to toe of slope
20% slope beyond
15
10% slope
Windthrow
14
Salmonberry brush on bank


Toe of slope 25M
100' high 100% bank
24
5% slope
8' vertical cut bank with
clay and clam shells
23
brush
clay bank
Toe of slope
30M
40' bank at 60%
20% beyond
20' bank
then 10%
4 X 3 X 1M pool
22
25M to toe of slope
25' at 80% level beyond
35M to toe of slope
7' bank then 20%
Multi-channel
salmon bones
6CM deep
21
12' bank
then
10% slope
10' at 100%
10% beyond
Toe of slope 20M
40% slope
20
Unstable exposed
banks
dense salmonberry
brush
40% slope
salmon bones
exposed gravel banks
unstable
banks
braided
channels
19
15% slopes
Many snags
10% slopes


70% slope
29
5' bank then 10%
150' high
100% + slope
Pool
28
Rearing coho present
100' bank at 100%
3 X 2 X 3M pool
27
Thick brush
15' bank
26
3' banks
clay
3 X 4 X 1M
pool
60% slope
50' bank at 80%
Dry channel
Toe of slope 20M
100' bank at 100%
25
Toe of slope 20M 30' bank 20% beyond

There is a fork to the right of the stream 400' upstream. This fork has 40-70% side slopes and ends after 100' in a waterfall over bedrock. The main stream continues for 100' past the forks with a 2.4% grade, dense salmonberry brush on banks, a 20/80 pool & riffle ratio, and 40-70% side slopes. The stream steepens beyond that point.



SECTION NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
LENGTH	27	18	39	17	21.5	11-	14	12.5	23	20	28	20	30	20	32	23	24
AV. WIDTH	4.5	4	4	3.5	4	4.5	3	5	5	2	2	2	2	2	1.5	1.5	2
ASA %	90	90	85	70	40	70	70	55	75	80	60	80	70	70	50	60	40
ASA METERS^2																	
STREAM GRADIENT	2	2	1	1	2	1	1	2	2	2	2	2	2	3	3	2	5
UPSTREAM MAGNETIC HEADING	93	123	114	110	138	148	72	91	92	95	136	84	86	155	116	143	75
% BEDROCK																	
% BOULDERS																	
% COBBLES	90	50	50	50		15	15	20	10	5	10	10	20	10	20	25	40
% GRAVEL	10	50	50	40	95	70	70	70	85	85	80	70	75	80	65	50	40
% SAND				10	5	15	15	10	5	10	10	18	5	10	15	25	20
% FINES												2					
POOL/RIFFLE RATIO (P/R)	0/100	0/100	10/90	100/0	50/50	70/30	70/30	10/90	30/70	10/90	40/60	70/30	30/70	30/70	30/70	70/30	20/80
SLOPE OF UPPER RT.BAN (ORIENTATION UPSTREAM																	
SLOPE OF UPPER LEFT BANK																	
DISTANCE FROM BEGINNING OF SURVEY TO END OF SECTION	27																
INVERTIBRATE CONCENTRATION	L	L	L	L	L	L	L	M·	M	M	H	H	H	H	H	M	L
COMMENTS														high fry abundance			few fry

STREAM NUMBER: 103-50-42

STREAM NUMBER: 103-50-42

SECTION NUMBER	19	20	21	22	23	12	22	18	16	15	25	15	29	30	31	32	33	34
LENGTH	28	17	15	13	23	12	22	18	16	15	25	15	15	14	16	10	17	12
AV. WIDTH	1	1.5	1.5	1	2	3	3	2.5	2	2	2	2	3	1.5	2	3	2	1.5
ASA %	50	50	40	40	40	50	80	80	30	30	30	30	30	80	80	20	50	30
ASA METERS^2																		
STREAM GRADIENT	5	5	6	5	2	2	2	2	3	3	4	1	3	3	2	1	1	1
UPSTREAM MAGNETIC HEADING	57	57	80	55	122	112	145	123	158	158	98	128	80	172	182	138	184	
% BEDROCK																		
% BOULDERS																		5
% COBBLES	30	30	50	50	50	30	20	60	70	70	75	50	50	50	50	50	40	40
% GRAVEL	50	50	50	50	40	20	70	20	25	25	20	40	40	40	45	35	40	30
% SAND	20	20			10	10	10	20	5	5	5	10	10	5	5	15	20	25
% FINES						40												
POOL/RIFFLE RATIO (P/R)	30/70	20/80	20/80	40/60	10/40	50/50	70/30	60/40	40/60	40/60	50/50	50/50	50/50	60/40	30/70	90/10	90/10	40/60
SLOPE OF UPPER RT. BANK (ORIENTATION UPSTREAM)																		
SLOPE OF UPPER LEFT BANK																		
DISTANCE FROM BEGINNING OF SURVEY TO END OF SECTION																		
INVERTIBRATE CONCENTRATION																		
COMMENTS			multi-channel		salmon bones						numerous rearing coho			numerous rearing coho	numerous rearing coho			

STREAM NUMBER: 103-50-42

SECTION NUMBER	55	56	7	8	9	0	1	2	43	44	45	46	47	48	49	50	51
LENGTH	16	19															
AV. WIDTH	3.5	3															
ASA %	50	30															
ASA METERS^2																	
STREAM GRADIENT	2	3															
UPSTREAM MAGNETIC HEADING	60	140															
% BEDROCK																	
% BOULDERS		10															
% COBBLES	40	50															
% GRAVEL	40	40															
% SAND	20																
% FINES																	
POOL/RIFFLE RATIO (P/R)	40/60	40/60															
SLOPE OF UPPER RT.BANK (ORIENTATION UPSTREAM																	
SLOPE OF UPPER LEFT BANK																	
DISTANCE FROM BEGINNING OF SURVEY TO END OF SECTION																	
INVERTIBRATE CONCENTRATION																	
COMMENTS																	

Name: East Arm Port Refugio
Latitude: 55° 16' 33" 34"
Longitude: 133° 16' 18" 07"
Geodetic Map No: Craig B-4 (16)
Location: 1.25 miles south of Pt. Bocas, east side of Suemez Island

Catalog No: 103-50-42
Former Stream No: 36E FRI

Work Area: Ketchikan
Watershed Length: 1 mile
Drainage Area: .72 square miles
Water Supply Type: runoff from steep sided low hill, thickly forested

Trails & Survey Routes: the streambed is relatively easy to walk at normal water levels, most of the banks are densely covered with brush

Aerial Survey Notes: the mouth and short intertidal portions only visible from the air.

Anchorage: near the mouth in the east arm of Port Refugio

Tide Stage when Surveyed: 1/2

RESOURCES

COMMERCIAL FISHERIES (species, escapement, timing, spawning area):
pinks, chum, and coho good rearing for coho
very few recorded escapements peak 2,500 pink 8/24/76
"good pink stream" Fisheries Research Institute stream survey
Spawning area: 1287 meters^2 (2814' X 8.2' X 60%) see map for areas
Schooling Areas: at mouth and in several small pools throughout stream

Spawning Areas: throughout length of survey

SHELLFISH POTENTIAL: low, small gravel flats at head of bay, dungeness crab present near stream mouth

SPORT FISHERIES: very low potential due to small size of stream

LAND USE (history, present, proposed): the stream is presently in a natural state

REHABILITATION POTENTIAL: none needed

SOILS: numerous hazard areas such as cut banks, braided areas through timber and extended floodplains that indicate the sensitivity of this stream

GAME RESOURCES (species, use, habitat): bear, deer, and wolves present in the area.

PEAK ESCAPEMENT RECORD

103-50-42 Port Refugio

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
7/31/49	100			
1960 through 1972				No survey
8/20/73	none seen	600		
8/29/74	1,000	none seen		
1975				No survey
8/24/76	2,500	none seen		
8/25/77	500	---		