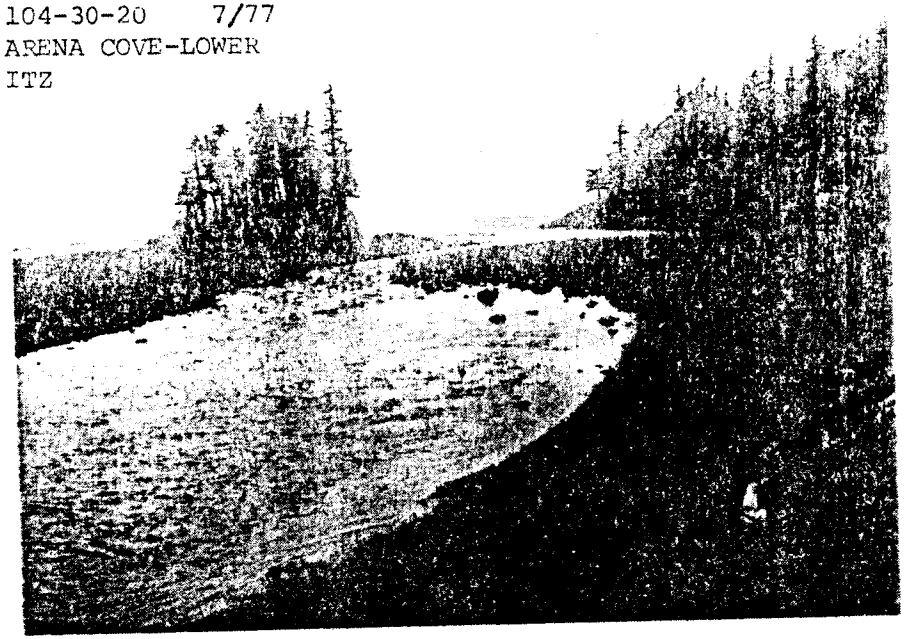
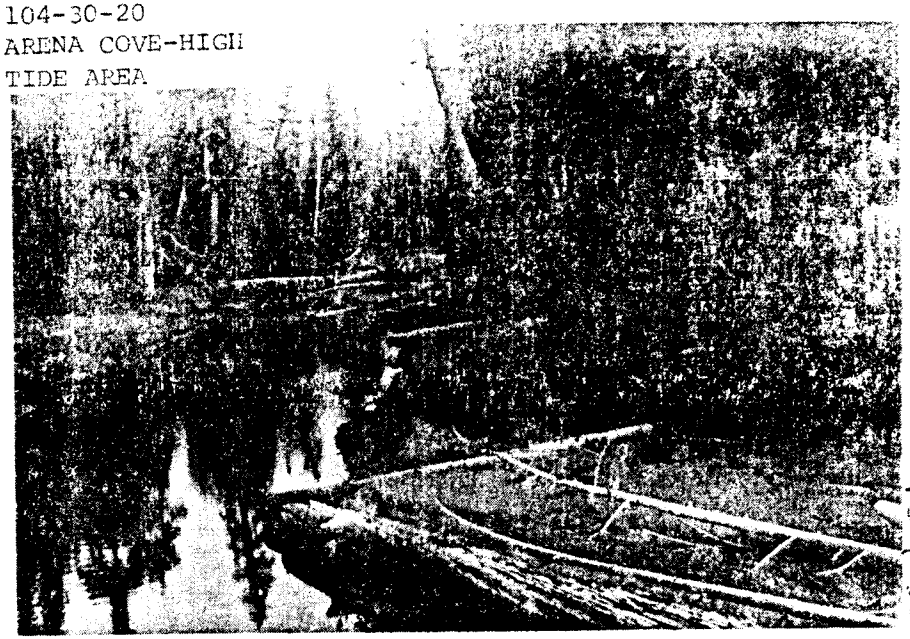
104-30-20 7/77
ARENA COVE-LOWER
ITZ



104-30-20
ARENA COVE-HIGH
TIDE AREA



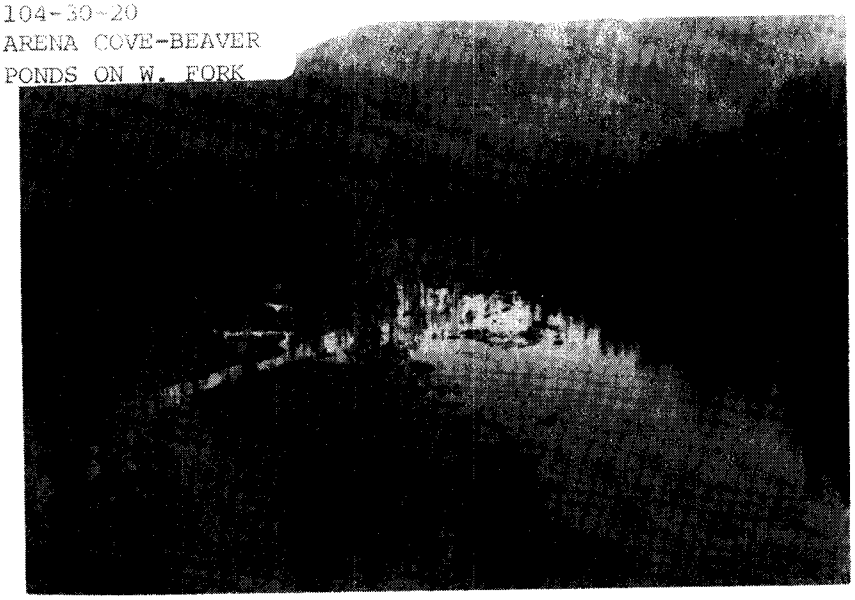
104-30-20 7/15/77
EAST FORK-1 mi FROM
FORKS

104-30-20 7/77
ARENA COVE-MIDWAY BE-
TWEEN BEACH AND FORKS

104-30-10200

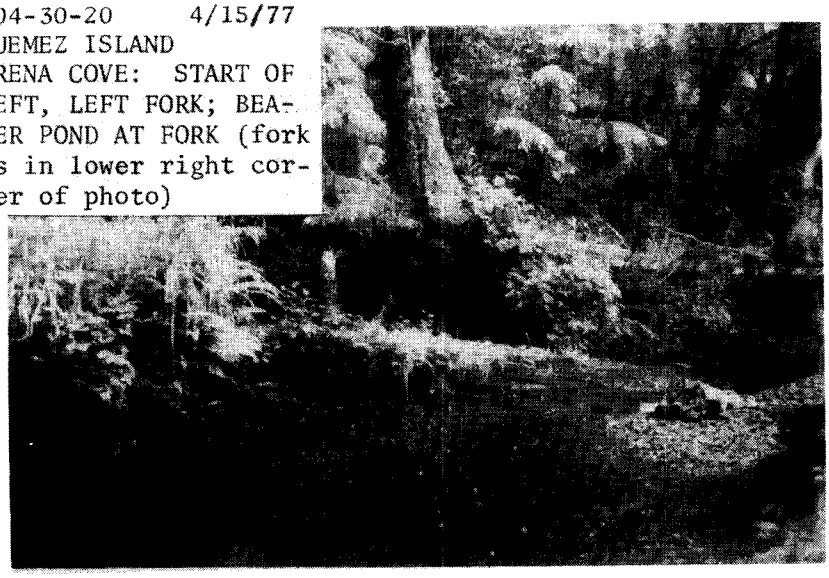
104-30-20

104-30-20
ARENA COVE-BEAVER
PONDS ON W. FORK



104-30-20 7/15/77
SUEMEZ ISLAND
ARENA COVE: START OF
LEFT, LEFT FORK (beaver pond at fork)

104-30-20 4/15/77
SUEMEZ ISLAND
ARENA COVE: START OF
LEFT, LEFT FORK; BEAVER POND AT FORK (fork is in lower right corner of photo)



104-30-1[illegible]-2006

104-30-20
7-15-77
Freitag

Water: 53°F
pH 7.0
Total ASA this section:
1138m^2

9

895'
271m

small tributary

pool

flood plain

8

813'
246m

banks muddy
unstable and eroded

7

39'

715'
217m

very braided
mud banks unstable

6

hemlock
spruce

undercut bank

617'
187m

98'

5

39'

braided

519'
157m

pool

N

green algae
on bottom

4

devilsclub
skunk cabbage

322'
98m

3

16' wide
flood plain

pool

bear and
wolf tracks

190'
58m

2

hemlock
spruce

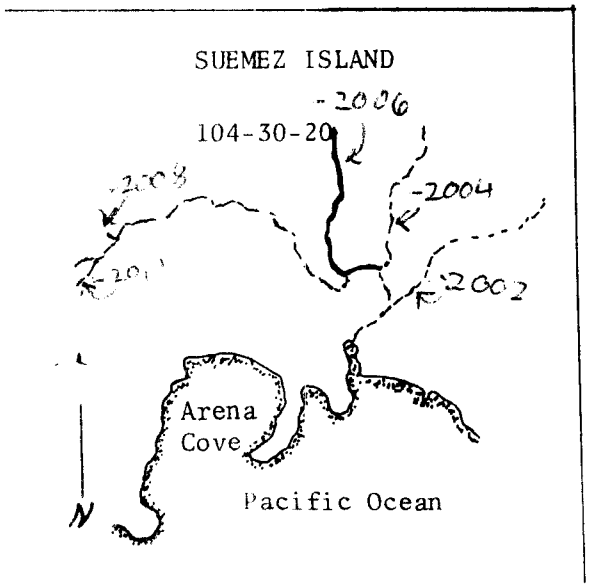
108'
33m

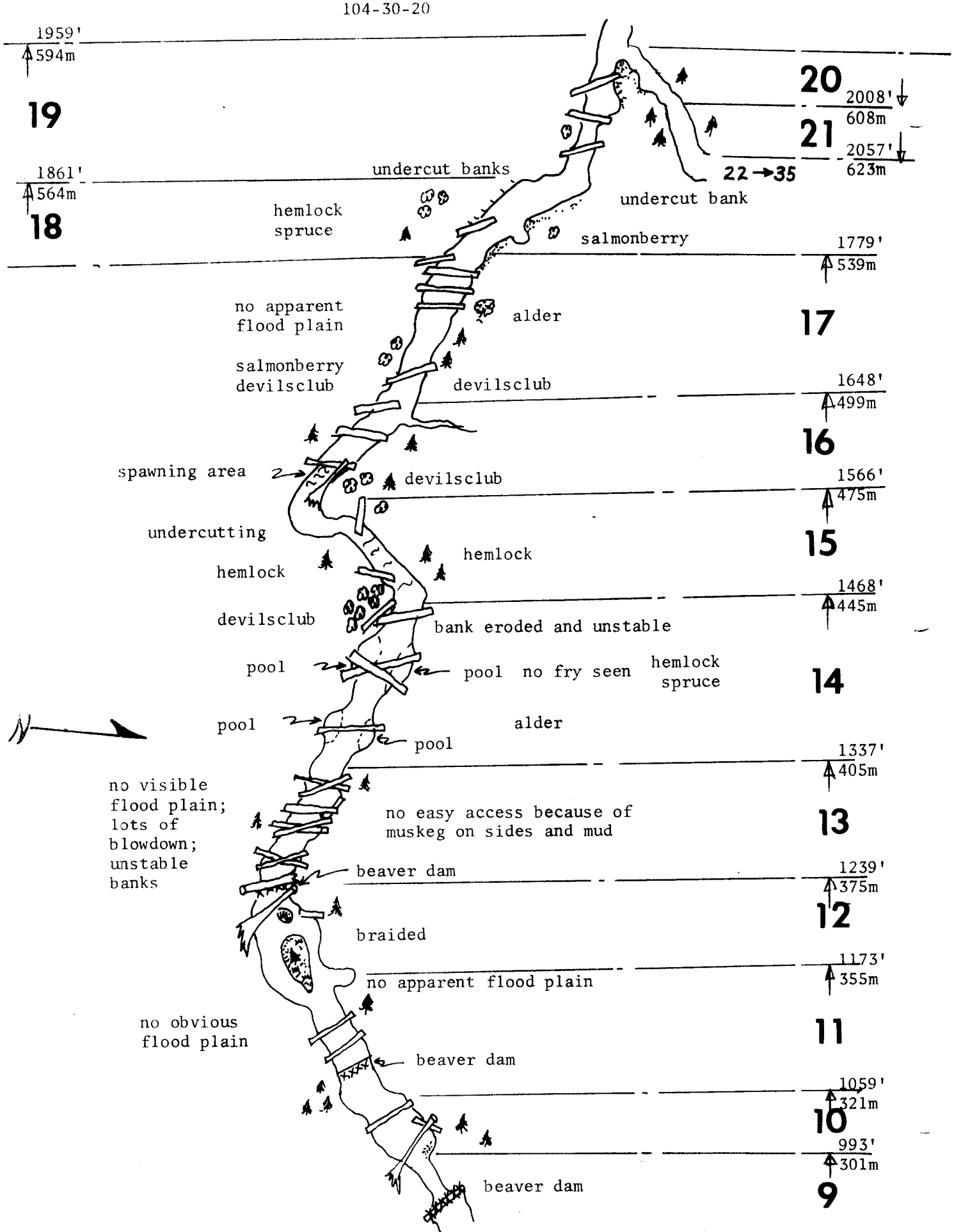
skunk cabbage
devilsclub
banks muddy & eroded

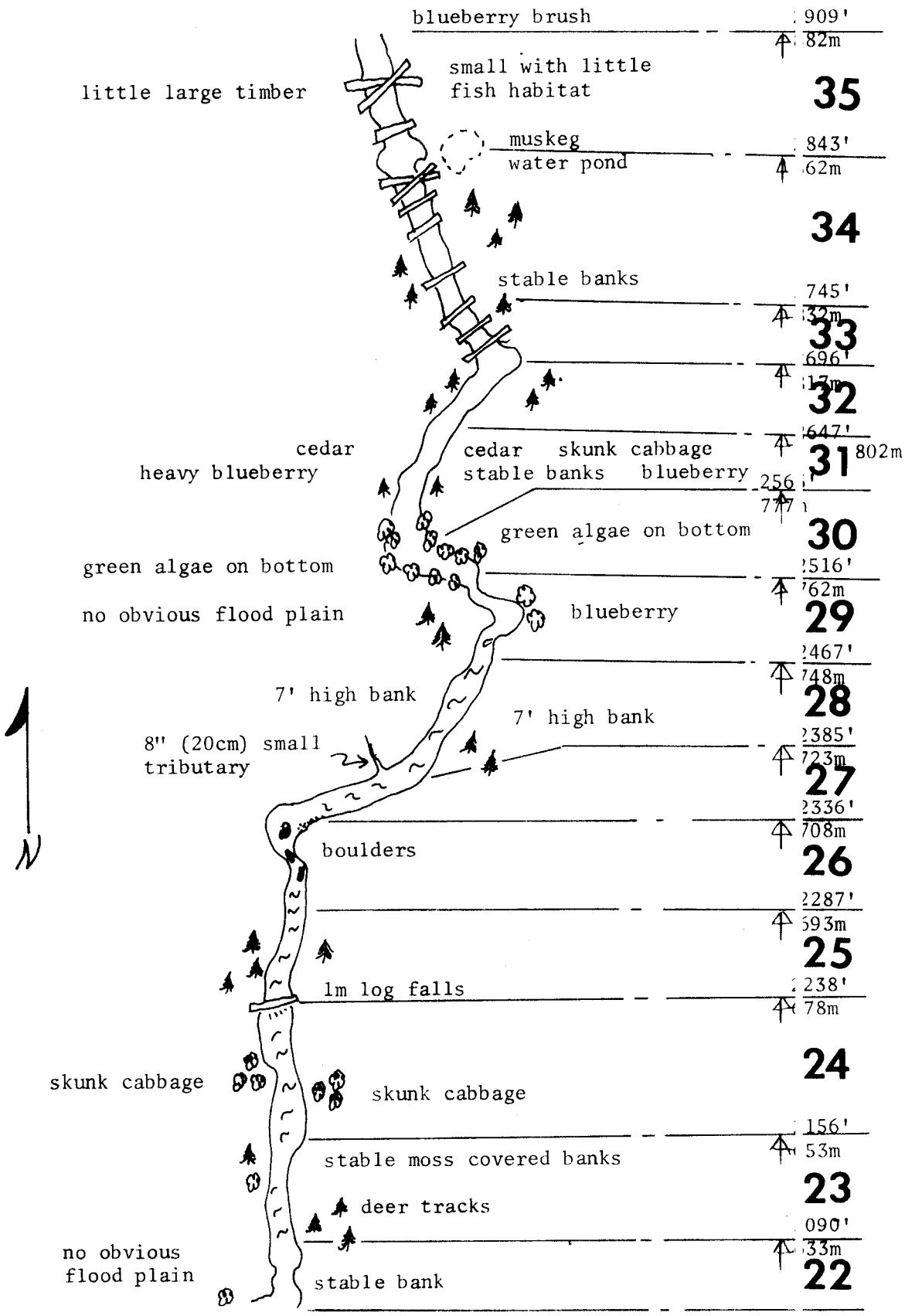
1

undercut
bank

pool




1959'
594m
19
1861'
564m
18
undercut banks
hemlock
spruce
20
2008'
608m
21
2057'
623m
22→35
undercut bank
salmonberry
1779'
539m
17
no apparent
flood plain
alder
salmonberry
devilsclub
devilsclub
1648'
499m
16
spawning area
devilsclub
1566'
475m
15
undercutting
hemlock
hemlock
1468'
445m
devilsclub
bank eroded and unstable
pool
pool
no fry seen
hemlock
spruce
14
pool
alder
pool
1337'
405m
13
no visible
flood plain;
lots of
blowdown;
unstable
banks
no easy access because of
muskeg on sides and mud
beaver dam
1239'
375m
12
braided
1173'
355m
no apparent flood plain
11
no obvious
flood plain
beaver dam
1059'
321m
10
993'
301m
beaver dam
9


blueberry brush
909'
82m
small with little
fish habitat
little large timber
35
muskeg
water pond
843'
62m
34
stable banks
745'
33
696'
32
647'
cedar
heavy blueberry
cedar
stable banks
skunk cabbage
blueberry
802m
31
green algae on bottom
30
green algae on bottom
2516'
762m
no obvious flood plain
blueberry
29
2467'
748m
7' high bank
28
7' high bank
8" (20cm) small
tributary
2385'
723m
27
2336'
708m
boulders
26
2287'
693m
25
1m log falls
238'
78m
24
skunk cabbage
skunk cabbage
156'
53m
stable moss covered banks
23
deer tracks
090'
33m
no obvious
flood plain
stable bank
22
N

STREAM NUMBER: 104-30-20

SECTION NUMBER	LENGTH	AV. WIDTH	ASA %	ASA METERS^2	STREAM GRADIENT	UPSTREAM MAGNETIC HEADING	% BEDROCK	% BOULDERS	% COBBLES	% GRAVEL	% SAND	% FINES	POOL/RIFFLE RATIO (P/R)	SLOPE OF UPPER RT. BANK (ORIENTATION UPSTREAM)	SLOPE OF UPPER LEFT BANK	INVERTIBRATE CONCENTRATION	DISTANCE FROM BEGINNING OF SURVEY TO END OF SECTION	COMMENTS
1	33m	6m	50		2°	293°	0	0	0	70	20	10	60:40	4°	12°	L	108'	
2	25m	6.5m	10		2°	324°	0	0	0	60	30	10	90:10	4°	50°	M	190'	
3	40m	10m	50		2°	241°	0	0	0	60	30	10	40:60	8°	60°	L	322'	
4	60m	10m	40		2°	241°	0	0	0	70	20	10	50:50	6°	50°	L	519'	
5	30m	8m	10		2°	229°	0	0	0	60	30	10	80:20	10°	30°	L	617'	
6	30m	8m	10		2°	255°	0	0	0	0	70	30	50:50	3°	45°	L	715'	
7	30m	10m	10		2°	255°	0	0	0	20	70	10	90:10	5°	60°	L	813'	
8	25m	10m	10		2°	215°	0	0	0	20	70	10	90:10	30°	50°	L	895'	
9	30m	20m	10		2°	228°	-	-	-	-	-	-	-	30°	10°	-	993'	too deep & muddy to get bottom comp.
10	20m	15m	10		2°	230°	-	-	-	-	-	-	-	3°	3°	-	1059'	"
11	35m	10m	10		2°	248°	-	-	-	-	-	-	-	3°	10°	-	1173'	"
12	20m	12m	0		2°	242°	-	-	-	-	-	-	90:10	3°	50°	L	1239'	"
13	30m	10m	0		2°	290°	0	0	0	0	10	20	90:10	30°	3°	L	1337'	
14	40m	6m	0		2°	291°	0	0	0	0	20	60	90:10	30°	15°	L	1468'	
15	30m	10m	20		2°	222°	0	0	0	0	50	40	70:30	2°	15°	L	1566'	
16	25m	10m	40		2°	308°	0	0	0	0	50	50	60:40	1°	50°	L	1648'	
17	40m	10m	10			293°	0	0	0	20	60	20	80:20	4°	10°	L	1779'	

STREAM NUMBER: 104-30 20

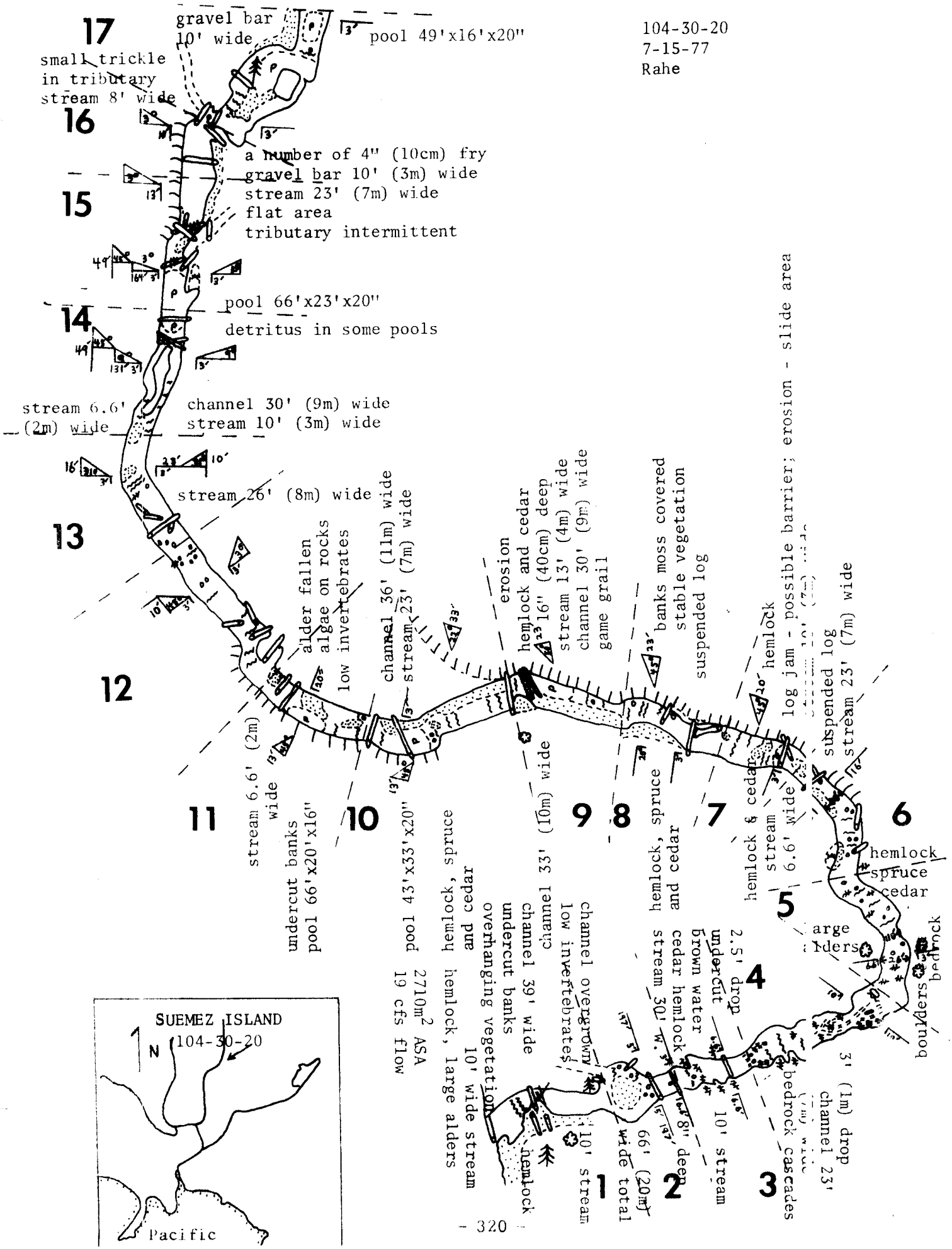
SECTION NUMBER	LENGTH	AV. WIDTH	ASA %	ASA METERS^2	STREAM GRADIENT	UPSTREAM MAGNETIC HEADING	% BEDROCK	% BOULDERS	% COBBLES	% GRAVEL	% SAND	% FINES	POOL/RIFFLE RATIO (P/R)	SLOPE OF UPPER RT. BANK (ORIENTATION UPSTREAM)	SLOPE OF UPPER LEFT BANK	INVERTIBRATE CONCENTRATION	DISTANCE FROM BEGINNING OF SURVEY TO END OF SECTION	COMMENTS
18	25m	4m	30		2°	320°	0	0	0	40	40	30	60:40	1°	10°	L	1861'	
19	30m	6m	30		2°	290°	0	0	0	0	60	0	60:40	2°	4°	L	1959'	
20	15m	1m	90		2°	46°	0	0	10	80	10	0	10:90	1°	10°	L	2008'	Sections 20 - 35 = Fork to North
21	15m	1m	10		2°	65°	0	0	60	30	10	0	60:40	1°	10°	L	2057'	
22	10m	1m	10		2°	06°	0	0	60	30	10	0	60:40	4°	10°	L	2090'	
23	20m	1m	50		2°	06°	0	0	5	70	15	10	20:80	4°	3°	L	2156'	
24	25m	1m	90		2°	04°	0	0	80	20	0	0	30:70	3°	10°	L	2238'	
25	15m	1.5m	10		2°	12°	0	0	0	50	40	10	70:30	2°	1°	L	2287'	
26	15m	1m	10		2°	331°	0	0	20	0	50	10	50:50	3°	6°	L	2336'	
27	15m	1m	10		2°	70°	0	0	20	10	50	50	50:50	3°	6°	L	2385'	
28	25m	1m	70		2°	38°	0	0	20	30	20	20	20:80	3°	5°	L	2467'	
29	15m	1.5m	30		2°	358°	0	0	10	30	30	20	20:80	4°	4°	L	2516'	
30	15m	1.5m	80		2°	283°	0	0	0	10	80	10	20:80	4°	20°	L	2565'	
31	25m	1m	10		2°	24°	0	0	0	20	50	30	80:20	5°	20°	L	2647'	
32	15m	1m	10		2°	40°	0	0	0	20	50	30	80:20	5°	15°	L	2696'	
33	15m	1m	10		2°	320°	0	0	0	20	50	30	80:20	2°	15°	L	2745'	
34	30m	1m	10		2°	344°	0	0	0	20	50	30	80:20	15°	10°	L	2843'	

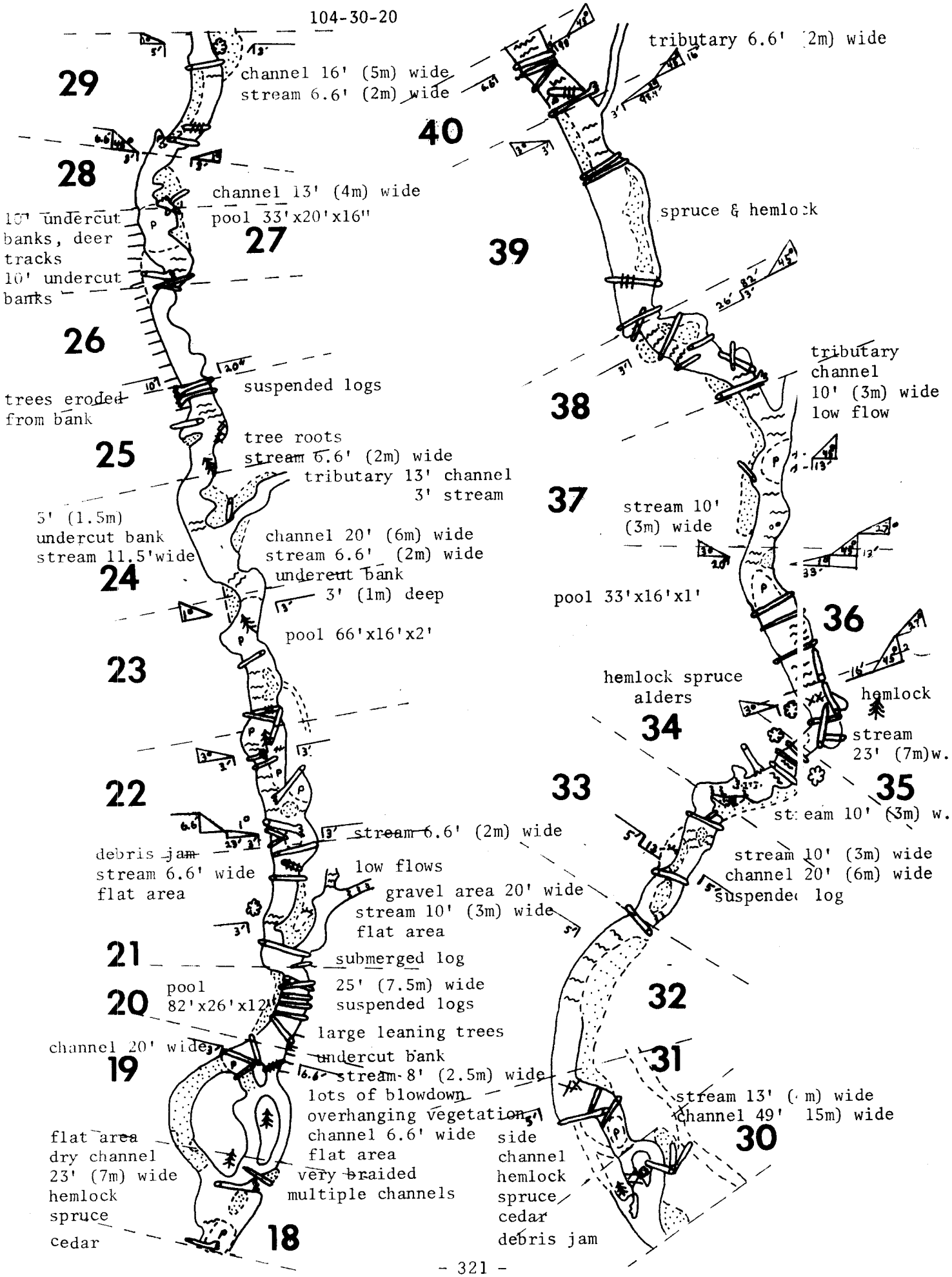
STREAM NUMBER:

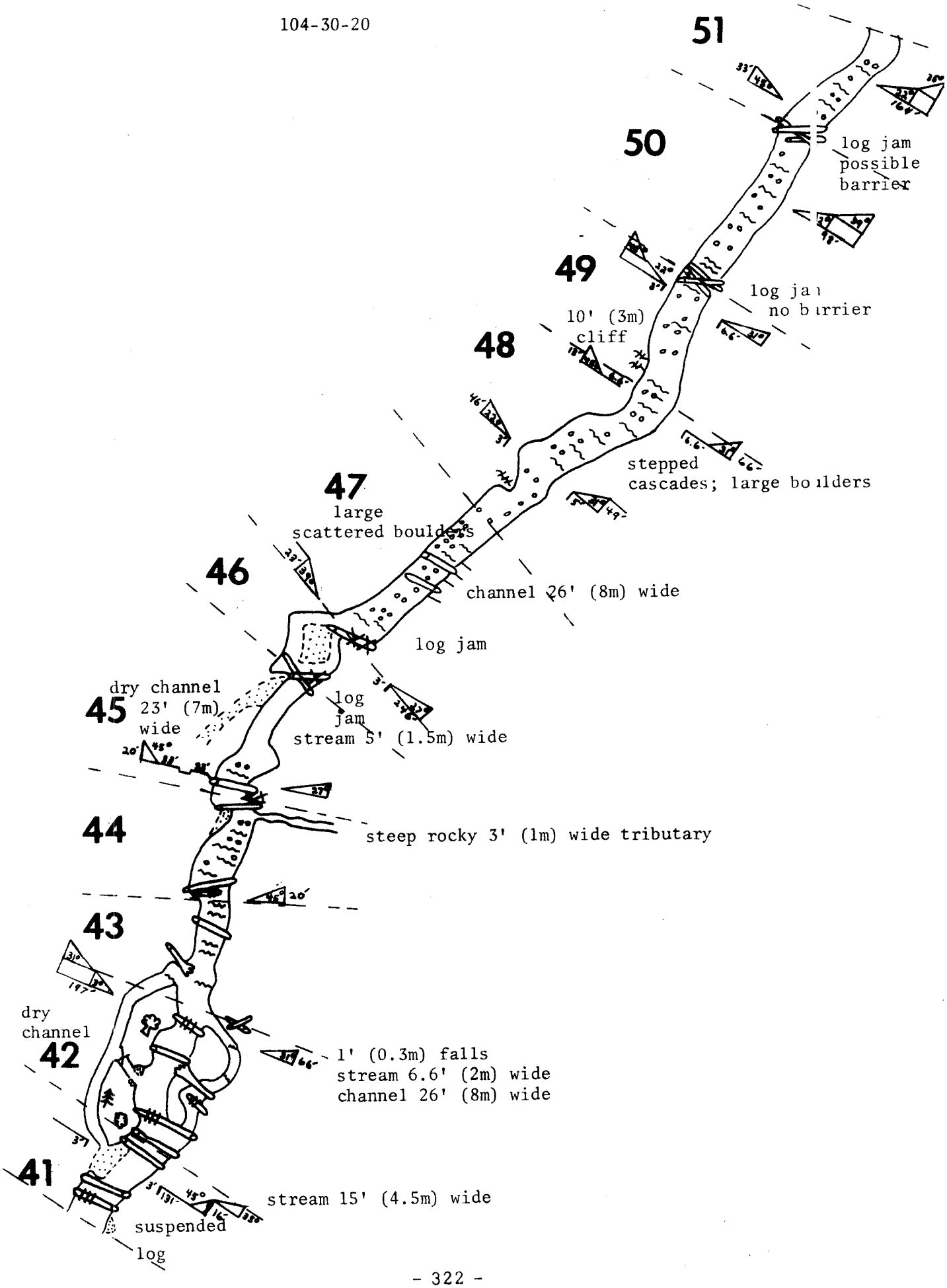
104-30-20

SECTION NUMBER	LENGTH	AV. WIDTH	ASA %	ASA METERS^2	STREAM GRADIENT	UPSTREAM MAGNETIC HEADING	% BEDROCK	% BOULDERS	% COBBLES	% GRAVEL	% SAND	% FINES	POOL/RIFFLE RATIO (P/R)	SLOPE OF UPPER RT. BANK (ORIENTATION UPSTREAM)	SLOPE OF UPPER LEFT BANK	INVERTIBRATE CONCENTRATION	DISTANCE FROM BEGINNING OF SURVEY TO END OF SECTION	COMMENTS
35	20m	1m	20		2°	344°	0	0	20	50	30	0	80:20	5°	10°	L	2909'	Fork = 1138m^2 total ASA
36																		
37																		
38																		
39																		
40																		
41																		
42																		
43																		
44																		
45																		
46																		
47																		
48																		
49																		
50																		
51																		

104-30-20
7-15-77
Rahe




29
channel 16' (5m) wide
stream 6.6' (2m) wide
28
channel 13' (4m) wide
pool 33'x20'x16"
10' undercut banks, deer tracks
10' undercut banks
27
26
suspended logs
trees eroded from bank
25
tree roots
stream 6.6' (2m) wide
tributary 13' channel
3' stream
5' (1.5m) undercut bank
stream 11.5'wide
24
channel 20' (6m) wide
stream 6.6' (2m) wide
undercut bank
3' (1m) deep
pool 66'x16'x2'
23
22
stream 6.6' (2m) wide
debris jam
stream 6.6' wide
flat area
low flows
gravel area 20' wide
stream 10' (3m) wide
flat area
21
submerged log
20
pool
82'x26'x12'
25' (7.5m) wide
suspended logs
large leaning trees
channel 20' wide
19
undercut bank
stream 8' (2.5m) wide
lots of blowdown
overhanging vegetation
channel 6.6' wide
flat area
very braided
multiple channels
flat area
dry channel
23' (7m) wide
hemlock
spruce
cedar
18
40
tributary 6.6' (2m) wide
39
spruce & hemlock
38
tributary
channel
10' (3m) wide
low flow
37
stream 10'
(3m) wide
pool 33'x16'x1'
36
hemlock spruce
alders
34
hemlock
stream
23' (7m)w.
33
35
stream 10' (3m) w.
stream 10' (3m) wide
channel 20' (6m) wide
suspended log
32
31
stream 13' (4m) wide
channel 49' (15m) wide
30
side
channel
hemlock
spruce
cedar
debris jam


51
50
log jam
possible
barrier
49
log jam
no barrier
10' (3m)
cliff
48
stepped
cascades; large boulders
47
large
scattered boulders
46
channel 26' (8m) wide
log jam
dry channel
23' (7m)
wide
45
log
jam
stream 5' (1.5m) wide
44
steep rocky 3' (1m) wide tributary
43
dry
channel
42
1' (0.3m) falls
stream 6.6' (2m) wide
channel 26' (8m) wide
41
stream 15' (4.5m) wide
suspended
log

STREAM NUMBER: 104-30-20

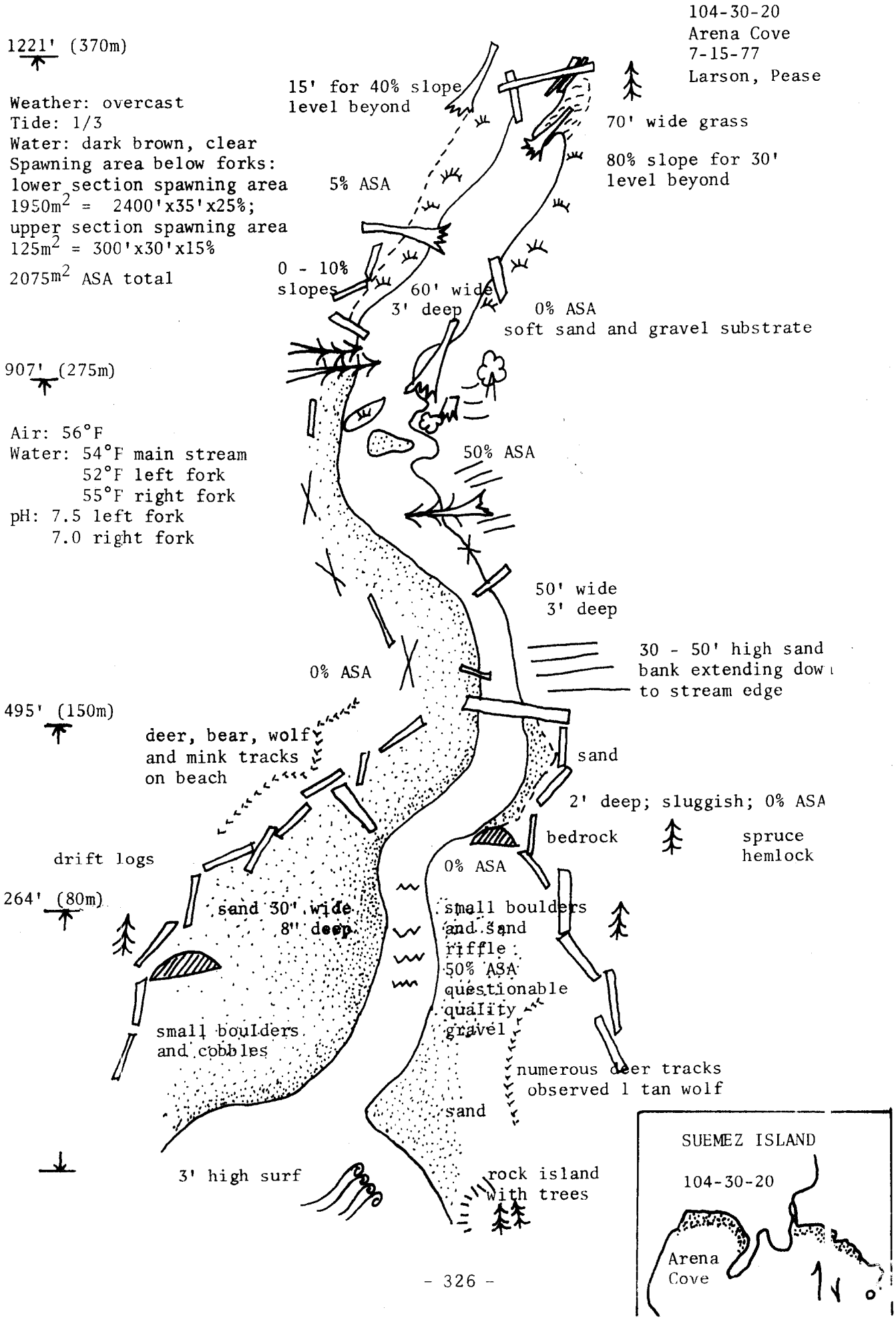
SECTION NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
LENGTH	47m	37m	37m	38m	39m	46m	40m	42m	37m	56m	42m	70m	37m	42m	35m	40m	60m
AV. WIDTH	5m	9m	6m	4m	6m	8m	7m	5m	4m	8m	6m	7m	7m	3.5m	7m	6m	5m
ASA %	80	20	10	0	10	60	50	60	20	70	25	30	30	70	10	10	15
ASA METERS^2	164	67	22	0	23	221	140	126	30	314	65	147	78	162	25	24	45
STREAM GRADIENT																	
UPSTREAM MAGNETIC HEADING																	
% BEDROCK	0	0	20	60	50	0	0	0	0	0	0	0	0	0	0	0	0
% BOULDERS	0	20	5	20	10	10	5	5	5	10	10	5	25	10	0	10	0
% COBBLES	30	40	50	15	25	70	65	60	65	50	60	50	50	40	40	60	50
% GRAVEL	60	30	25	5	15	20	30	35	30	40	30	35	25	40	40	30	50
% SAND	10	10	0	0	0	0	0	0	0	0	0	10	0	10	20	0	0
% FINES																	
POOL/RIFFLE RATIO (P/R)	30:70	60:40	60:40	20:80	20:80	20:80	50:50	30:70	80:20	30:70	70:30	70:30	40:60	30:70	85:15	90:10	80:20
SLOPE OF UPPER RT. BANK (ORIENTATION UPSTREAM)																	
SLOPE OF UPPER LEFT BANK																	
INVERTIBRATE CONCENTRATION																	
DISTANCE FROM BEGINNING OF SURVEY TO END OF SECTION	47m	84m	121m	159m	198m	244m	284m	326m	363m	419m	461m	531m	568m	610m	645m	685m	745m
COMMENTS																	

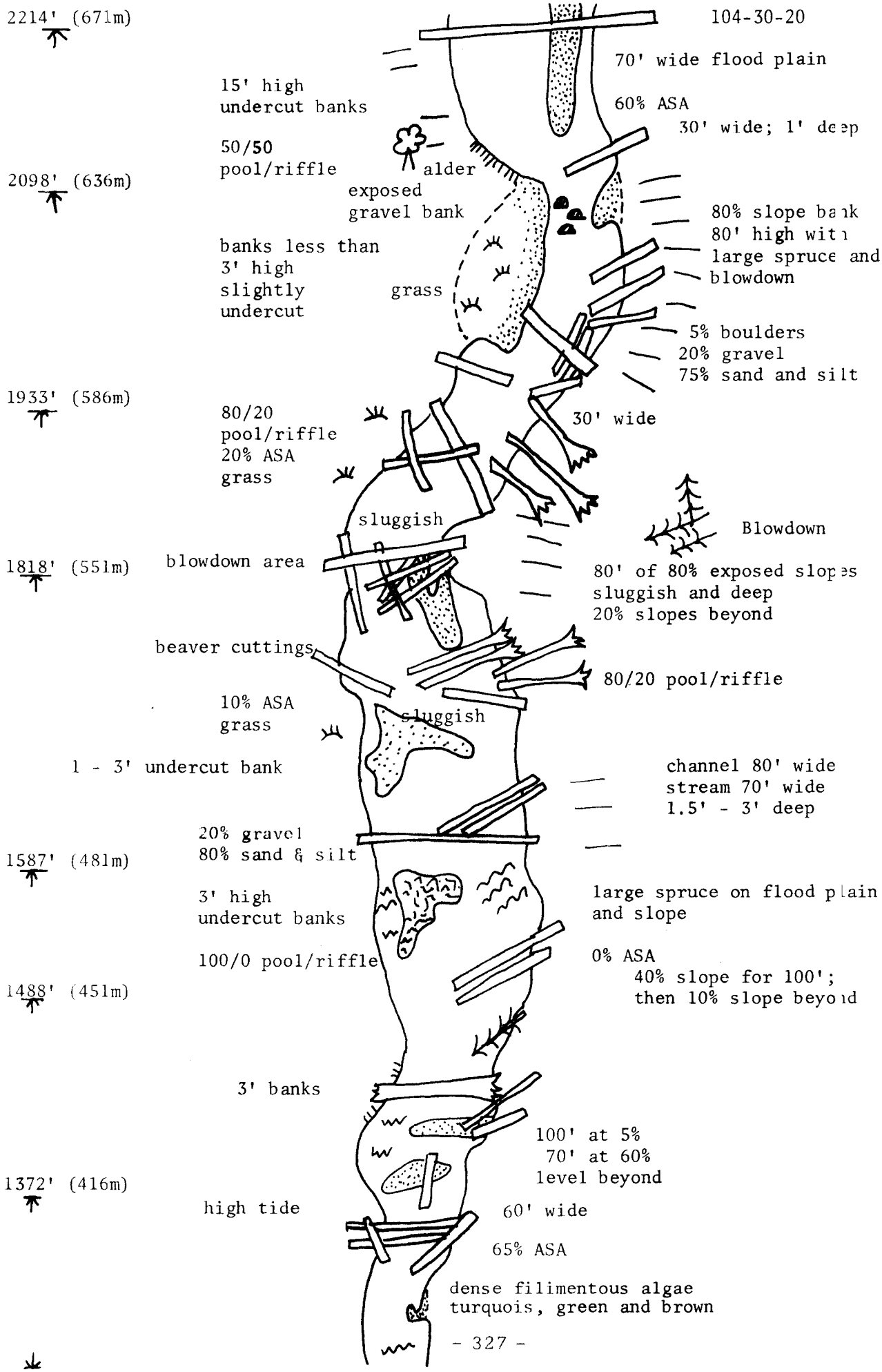
STREAM NUMBER: 104-30-20

SECTION NUMBER	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
LENGTH	29m	30m	37m	42m	23m	45m	30m	25m	22m	17m	17m	32m	23m	38m	34m	53m	16m
AV. WIDTH	5m	4m	5m	6m	7m	5m	4m	4m	3m	4m	4m	3m	3m	4.5m	2.5m	3.5m	2.5m
ASA %	30	50	10	50	30	50	40	50	20	60	5	30	25	40	70	30	35
ASA METERS^2	44	60	19	126	48	113	48	50	13	41	4	29	17	68	60	56	14
STREAM GRADIENT																	
UPSTREAM MAGNETIC HEADING																	
% BEDROCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% BOULDERS	0	0	0	0	0	0	0	0	25	0	0	5	10	5	10	5	15
% COBBLES	40	60	50	50	30	30	50	60	45	60	60	55	60	40	50	45	45
% GRAVEL	45	40	50	40	50	50	40	40	30	30	40	35	25	40	30	40	40
% SAND	15	0	0	10	20	20	10	0	0	10	0	5	5	15	10	10	0
% FINES																	
POOL/RIFFLE RATIO (P/R)	40:60	40:60	80:20	40:60	60:40	50:50	50:50	50:50	40:60	40:60	80:20	60:40	30:70	50:50	20:80	60:40	10:90
SLOPE OF UPPER RT. BANK (ORIENTATION UPSTREAM)																	
SLOPE OF UPPER LEFT BANK																	
INVERTIBRATE CONCENTRATION																	
DISTANCE FROM BEGINNING OF SURVEY TO END OF SECTION	774'	804'	841'	883'	906'	951'	981'	1006'	1028'	1045'	1062'	1094'	1117'	1155'	1189'	1242'	1258'
COMMENTS																	

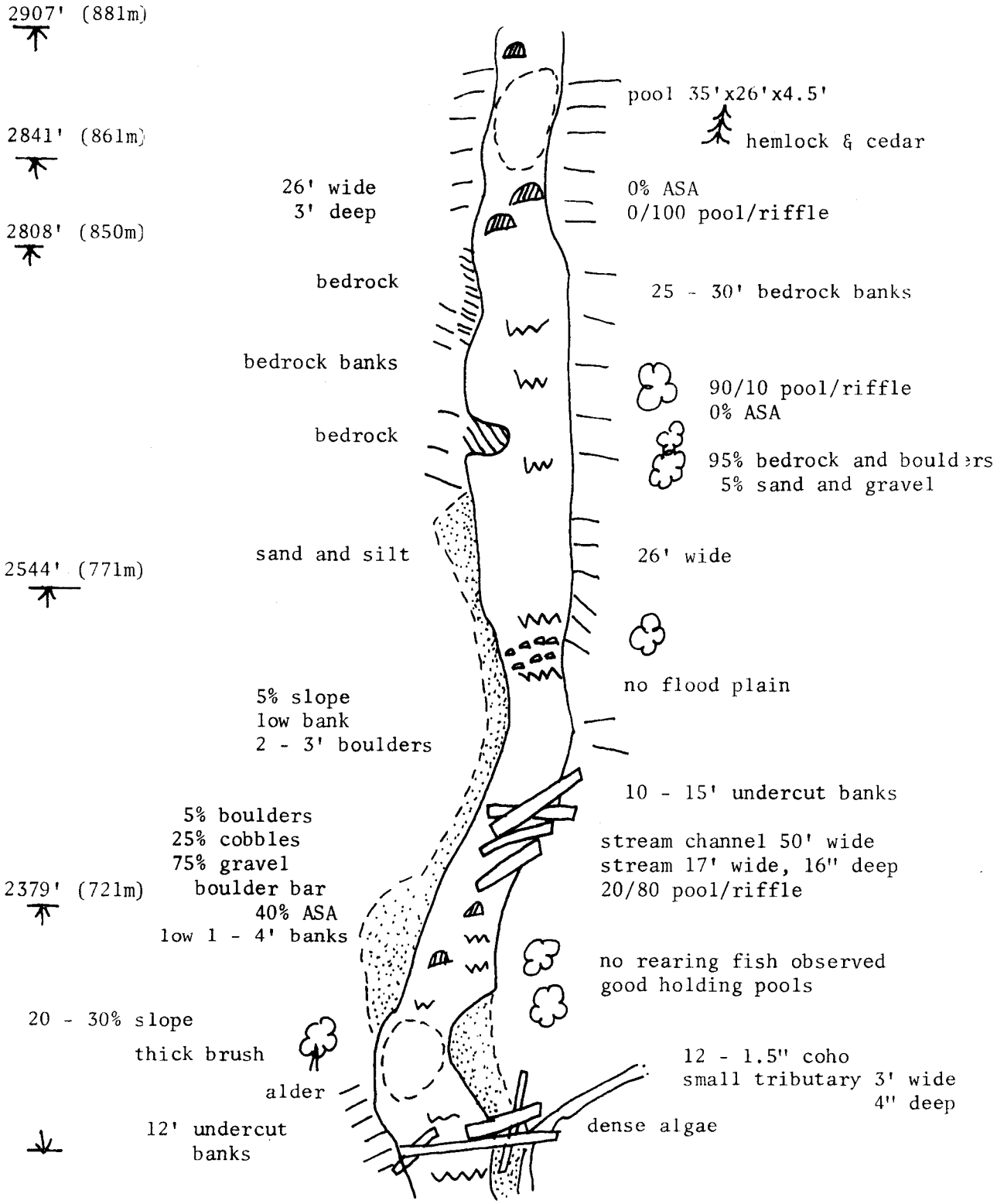
STREAM NUMBER: 104-31-20

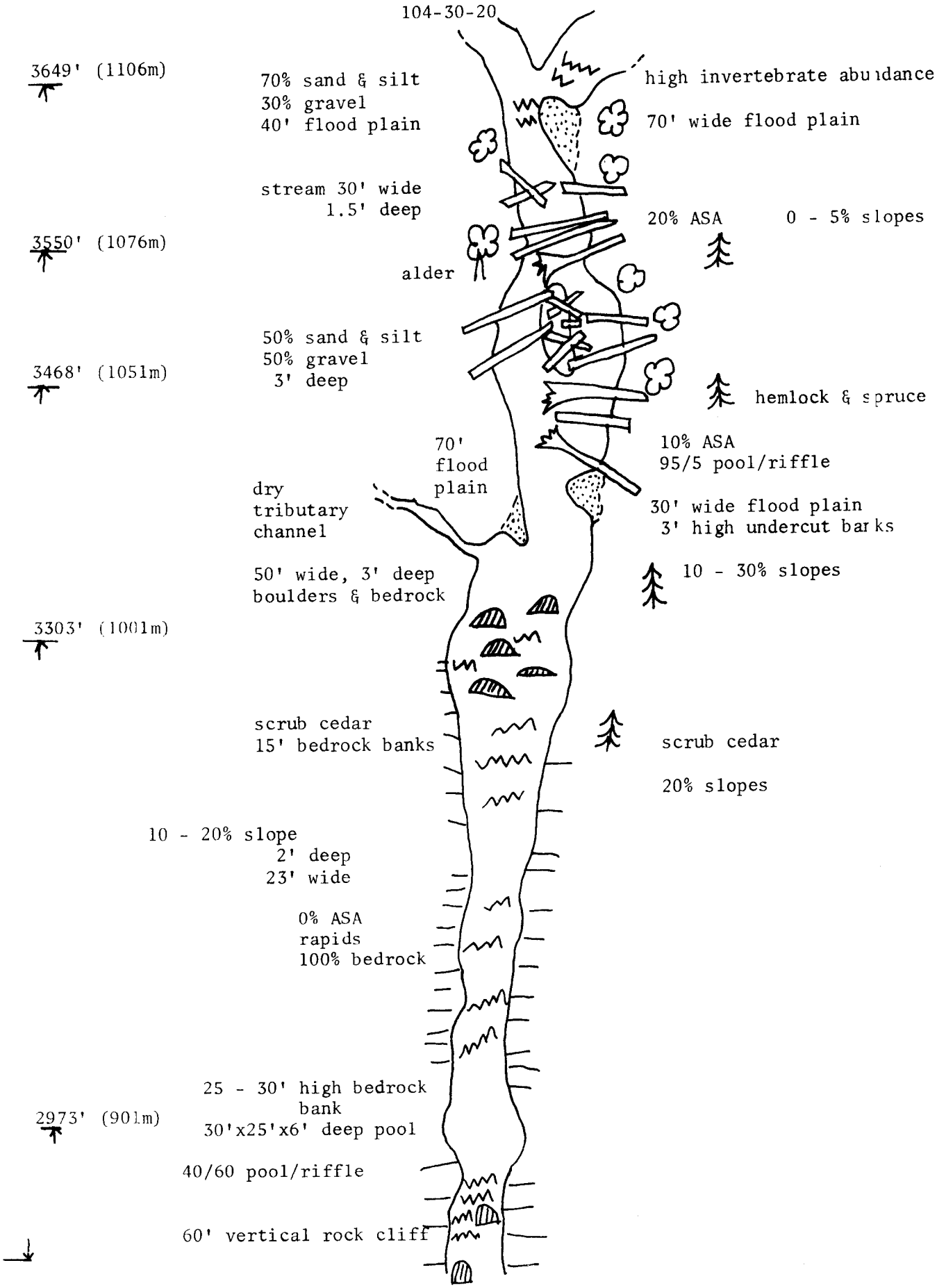
SECTION NUMBER	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51
LENGTH	15m	30m	45m	28m	65m	29m	26m	37m	27m	32m	32m	10m	66m	65m	65m	75m	44m
AV. WIDTH	5m	4m	5m	3m	4.5m	6m	4m	5m	3.5m	4m	2.5m	1.5m	7m	4m	3.5m	4m	4m
ASA %	10	30	10	10	20	20	10	10	5	0	0	0	10	0	0	0	0
ASA METERS^2	8	36	23	8	59	35	10	19	5	0	0	0	46	0	0	0	0
STREAM GRADIENT																	
UPSTREAM MAGNETIC HEADING																	
% BEDROCK	0	0	0	0	0	0	0	0	0	0	0	0	0	40	30	20	30
% BOULDERS	25	20	30	25	30	35	20	40	40	40	50	25	40	40	50	40	50
% COBBLES	65	70	40	60	30	35	75	30	30	50	35	65	40	20	20	40	20
% GRAVEL	10	10	20	15	30	20	5	30	30	10	15	10	10	0	0	0	0
% SAND	0	0	10	0	10	10	0	0	0	0	0	0	0	0	0	0	0
% FINES																	
POOL/RIFFLE RATIO (P/R)	70:30	40:60	60:40	50:50	30:70	20:80	30:70	40:60	40:60	10:90	30:70	85:15	20:80	30:70	40:60	50:50	30:70
SLOPE OF UPPER RT.BANK (ORIENTATION UPSTREAM)																	
SLOPE OF UPPER LEFT BANK																	
INVERTIBRATE CONCENTRATION																	
DISTANCE FROM BEGINNING OF SURVEY TO END OF SECTION	1273m	1303m	1348m	1376m	1441m	1470m	1496m	1533m	1560m	1592m	1624m	1634m	1700m	1765m	1830m	1905m	1949m
COMMENTS																	271 m^2 ASA thi fork


104-30-20
Arena Cove
7-15-77
Larson, Pease
1221' (370m)
Weather: overcast
Tide: 1/3
Water: dark brown, clear
Spawning area below forks:
lower section spawning area
1950m2 = 2400'x35'x25%;
upper section spawning area
125m2 = 300'x30'x15%
2075m2 ASA total
15' for 40% slope
level beyond
70' wide grass
80% slope for 30'
level beyond
5% ASA
0 - 10%
slopes
60' wide
3' deep
0% ASA
soft sand and gravel substrate
907' (275m)
Air: 56°F
Water: 54°F main stream
52°F left fork
55°F right fork
pH: 7.5 left fork
7.0 right fork
50% ASA
50' wide
3' deep
30 - 50' high sand
bank extending dow
to stream edge
0% ASA
495' (150m)
deer, bear, wolf
and mink tracks
on beach
sand
2' deep; sluggish; 0% ASA
bedrock
spruce
hemlock
drift logs
0% ASA
264' (80m)
sand 30' wide
8" deep
small boulders
and sand
riffle
50% ASA
questionable
quality
gravel
small boulders
and cobbles
numerous deer tracks
observed 1 tan wolf
sand
3' high surf
rock island
with trees
SUEMEZ ISLAND
104-30-20
Arena
Cove


2214' (671m)
104-30-20
70' wide flood plain
15' high
undercut banks
60% ASA
30' wide; 1' deep
50/50
pool/riffle
alder
2098' (636m)
exposed
gravel bank
80% slope bank
80' high with
large spruce and
blowdown
banks less than
3' high
slightly
undercut
grass
5% boulders
20% gravel
75% sand and silt
1933' (586m)
80/20
pool/riffle
20% ASA
grass
30' wide
sluggish
Blowdown
1818' (551m)
blowdown area
80' of 80% exposed slopes
sluggish and deep
20% slopes beyond
beaver cuttings
80/20 pool/riffle
10% ASA
grass
sluggish
1 - 3' undercut bank
channel 80' wide
stream 70' wide
1.5' - 3' deep
20% gravel
80% sand & silt
1587' (481m)
3' high
undercut banks
large spruce on flood plain
and slope
100/0 pool/riffle
0% ASA
40% slope for 100';
then 10% slope beyond
1488' (451m)
3' banks
100' at 5%
70' at 60%
level beyond
1372' (416m)
high tide
60' wide
65% ASA
dense filimentous algae
turquois, green and brown

104-30-20

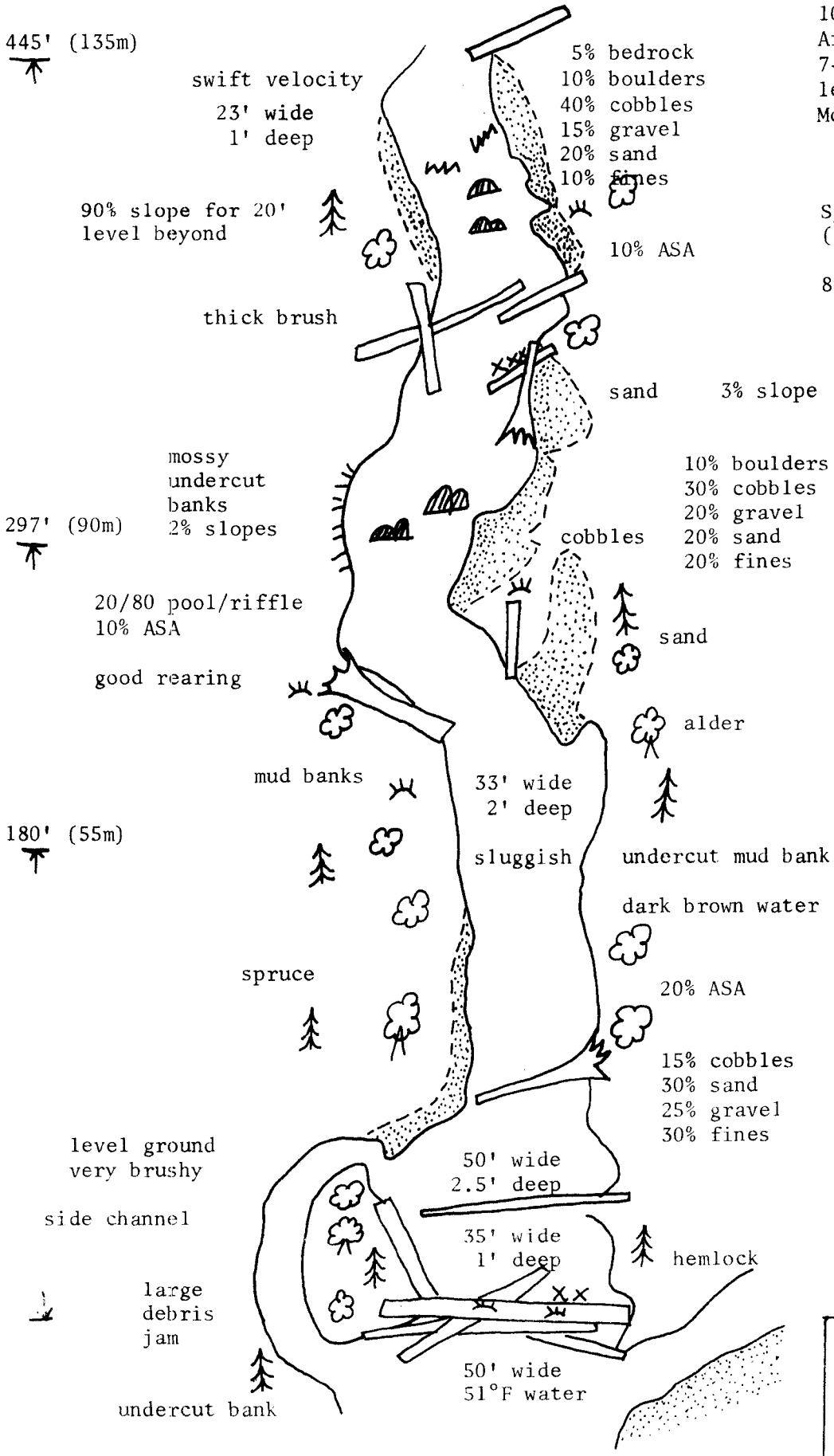

2907' (881m)
2841' (861m)
2808' (850m)
2544' (771m)
2379' (721m)
pool 35'x26'x4.5'
hemlock & cedar
26' wide
3' deep
0% ASA
0/100 pool/riffle
bedrock
25 - 30' bedrock banks
bedrock banks
90/10 pool/riffle
0% ASA
bedrock
95% bedrock and boulders
5% sand and gravel
sand and silt
26' wide
no flood plain
5% slope
low bank
2 - 3' boulders
10 - 15' undercut banks
5% boulders
25% cobbles
75% gravel
boulder bar
40% ASA
low 1 - 4' banks
stream channel 50' wide
stream 17' wide, 16" deep
20/80 pool/riffle
no rearing fish observed
good holding pools
20 - 30% slope
thick brush
alder
12 - 1.5" coho
small tributary 3' wide
4" deep
12' undercut
banks
dense algae

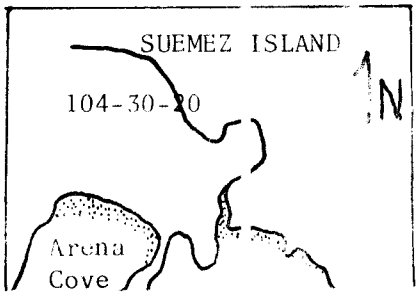

104-30-20
3649' (1106m)
70% sand & silt
30% gravel
40' flood plain
high invertebrate abundance
70' wide flood plain
stream 30' wide
1.5' deep
20% ASA
0 - 5% slopes
3550' (1076m)
alder
50% sand & silt
50% gravel
3' deep
3468' (1051m)
hemlock & spruce
70'
flood
plain
10% ASA
95/5 pool/riffle
dry
tributary
channel
30' wide flood plain
3' high undercut banks
50' wide, 3' deep
boulders & bedrock
10 - 30% slopes
3303' (1001m)
scrub cedar
15' bedrock banks
scrub cedar
20% slopes
10 - 20% slope
2' deep
23' wide
0% ASA
rapids
100% bedrock
25 - 30' high bedrock
bank
2973' (901m)
30'x25'x6' deep pool
40/60 pool/riffle
60' vertical rock cliff

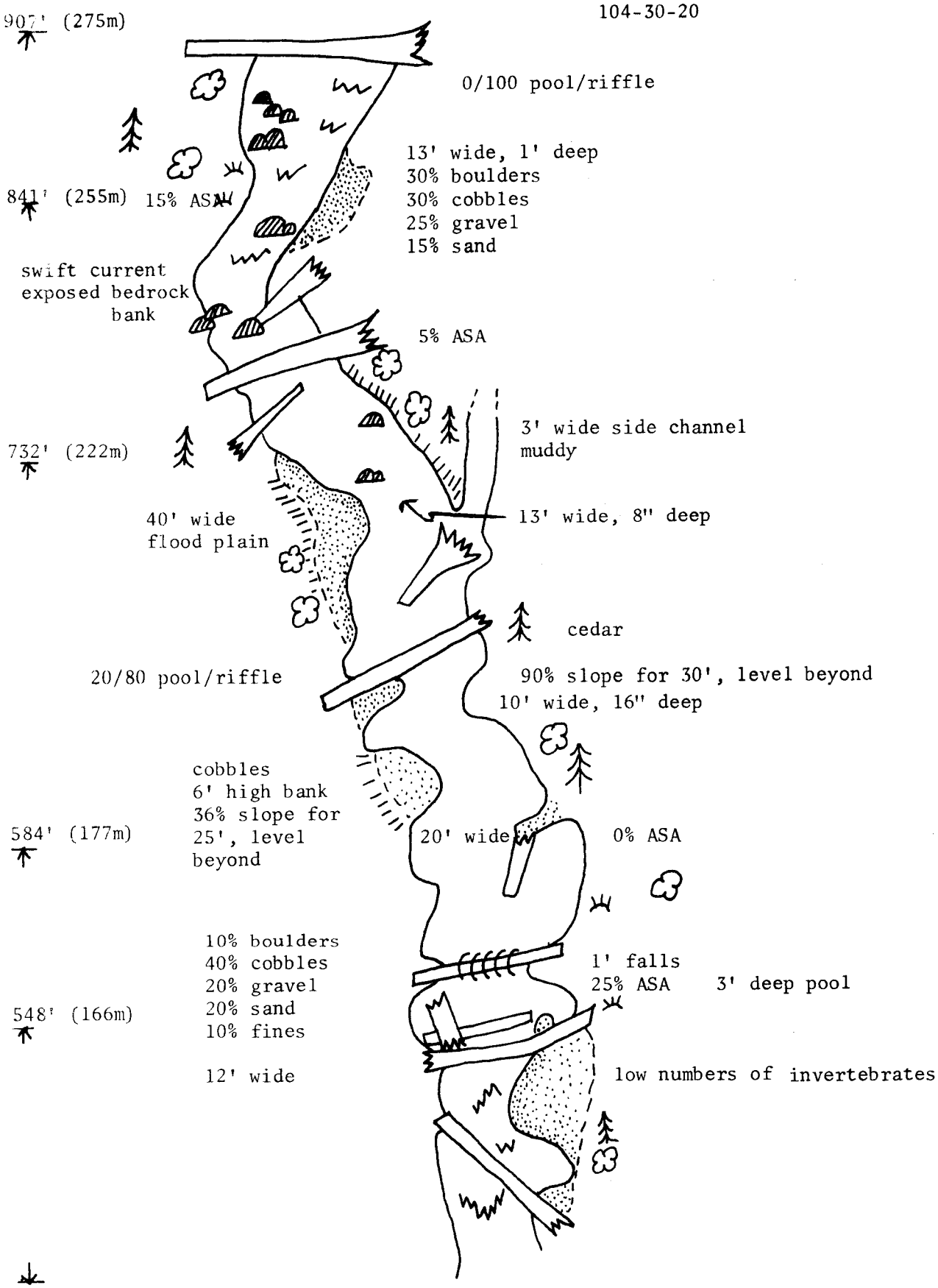
104-30-20
Arena Cove
7-15-77
left-left fork
McVey

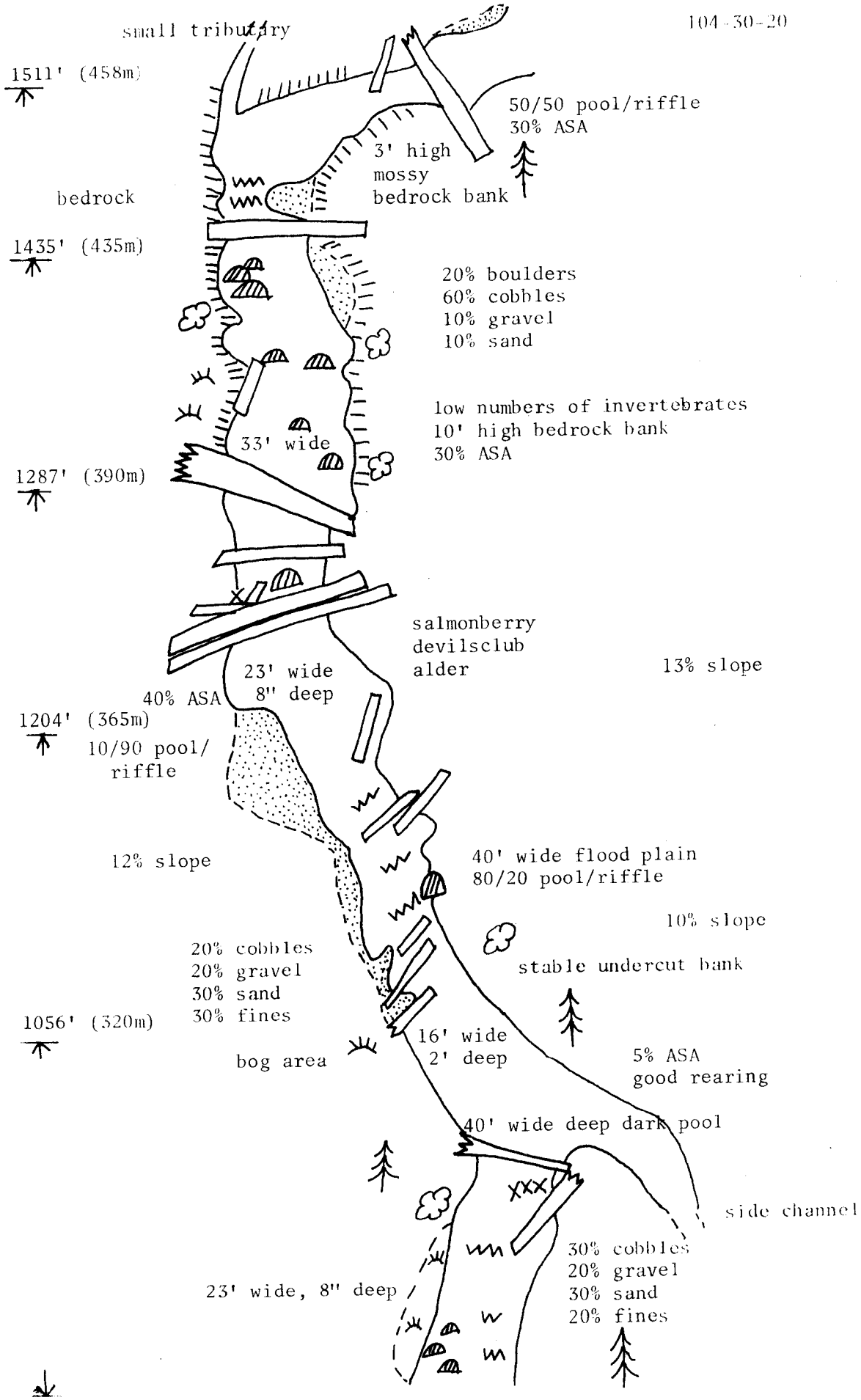
Spawning area =
(2500'x23'x15%) =

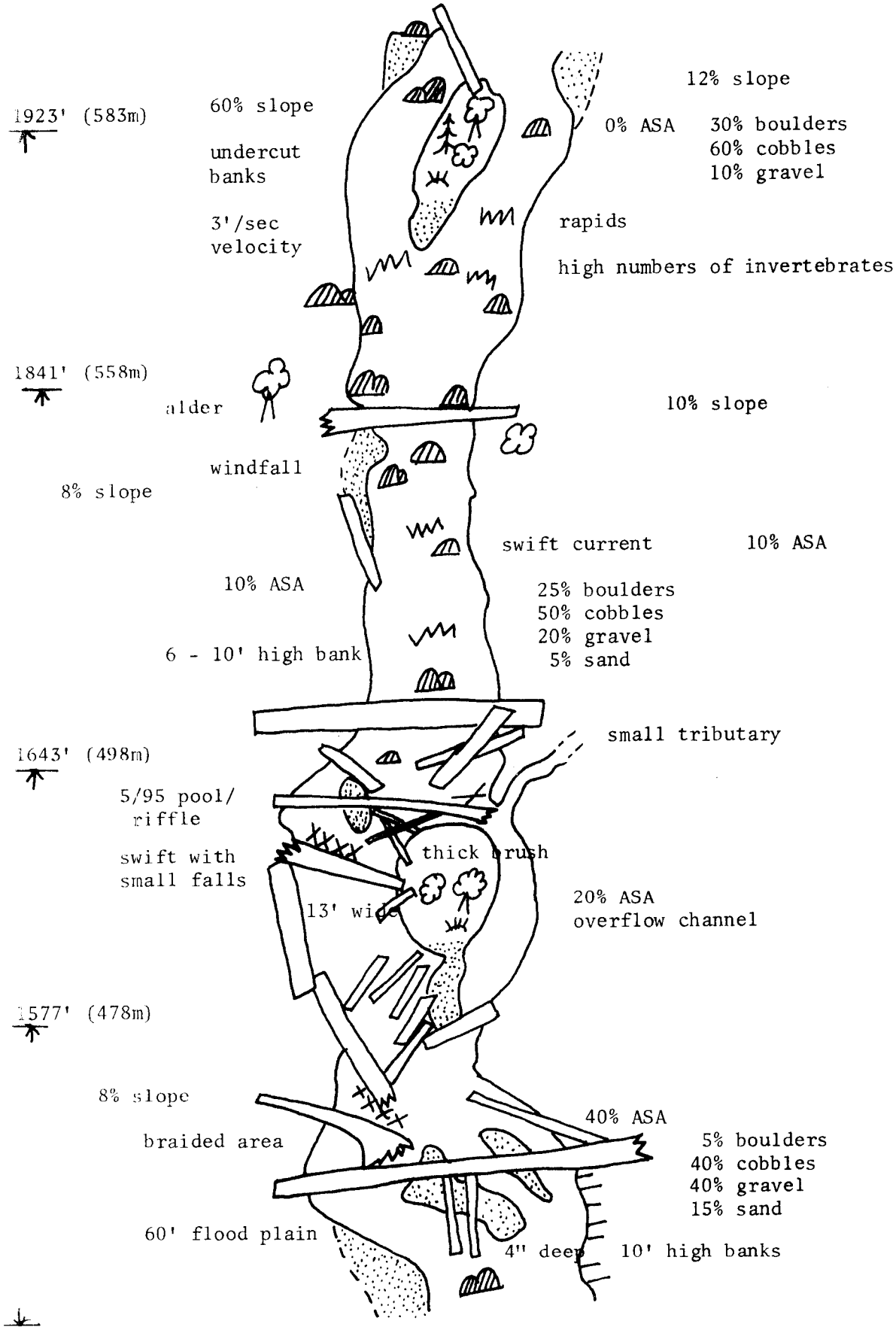
801m^2 ASA

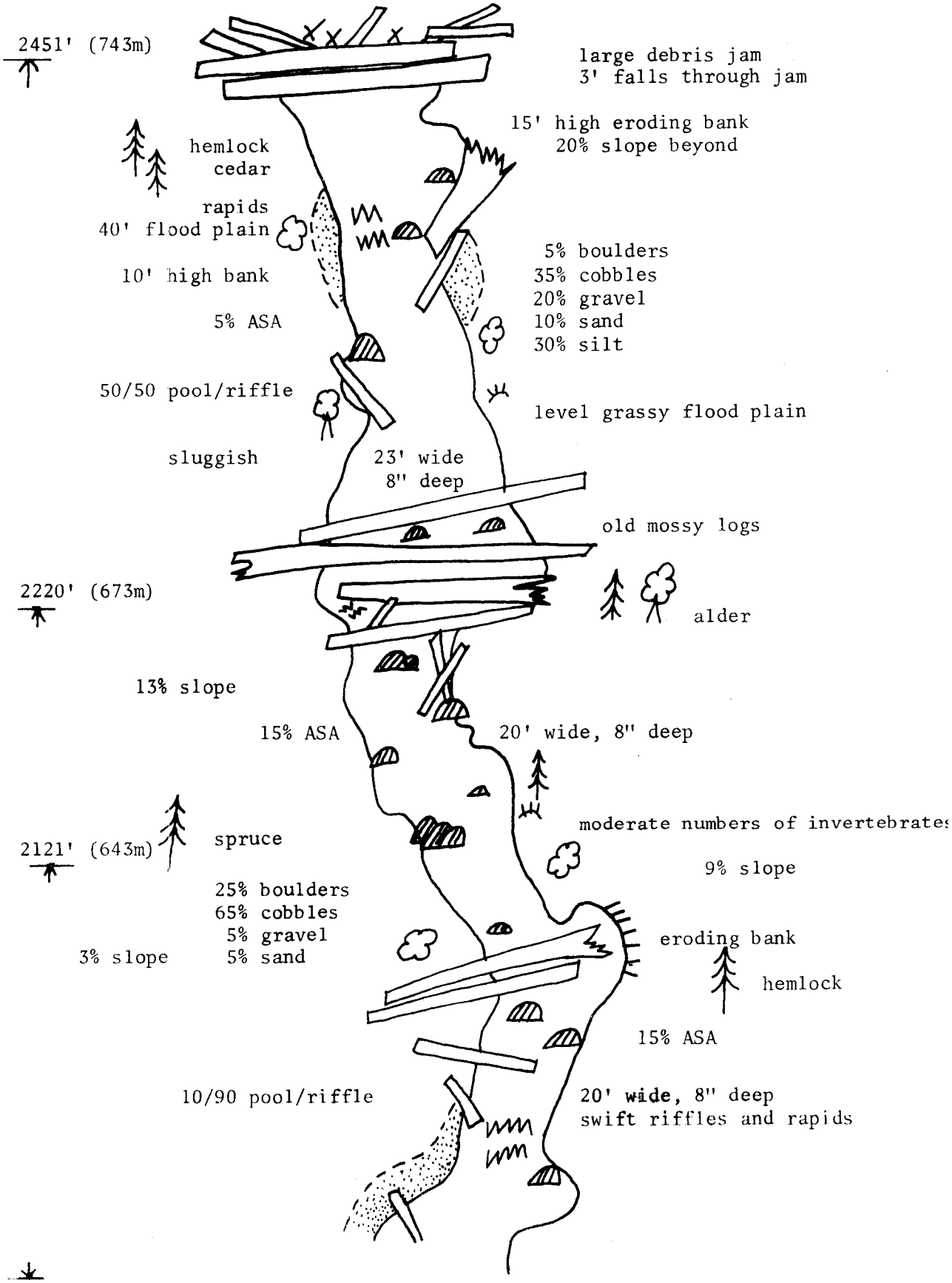




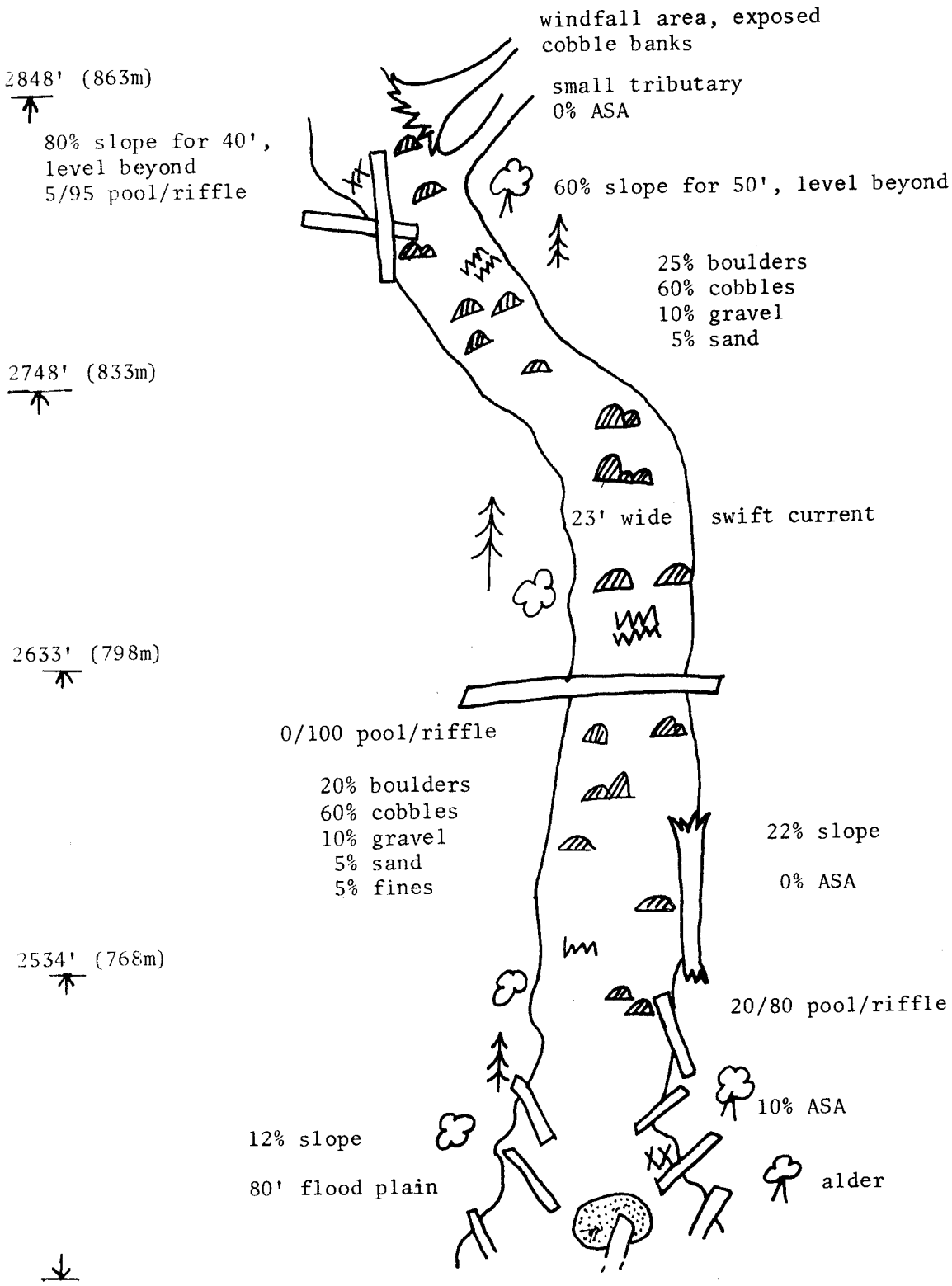

907' (275m)
0/100 pool/riffle
13' wide, 1' deep
30% boulders
30% cobbles
25% gravel
15% sand
841' (255m)
15% ASA
swift current
exposed bedrock
bank
5% ASA
3' wide side channel
muddy
732' (222m)
40' wide
flood plain
13' wide, 8" deep
cedar
20/80 pool/riffle
90% slope for 30', level beyond
10' wide, 16" deep
cobbles
6' high bank
36% slope for
25', level
beyond
584' (177m)
20' wide
0% ASA
10% boulders
40% cobbles
20% gravel
20% sand
10% fines
1' falls
25% ASA
3' deep pool
548' (166m)
12' wide
low numbers of invertebrates


104-30-20
small tributary
1511' (458m)
50/50 pool/riffle
30% ASA
3' high
mossy
bedrock bank
bedrock
1435' (435m)
20% boulders
60% cobbles
10% gravel
10% sand
low numbers of invertebrates
10' high bedrock bank
30% ASA
33' wide
1287' (390m)
salmonberry
devilsclub
alder
13% slope
23' wide
8" deep
40% ASA
1204' (365m)
10/90 pool/
riffle
12% slope
40' wide flood plain
80/20 pool/riffle
10% slope
20% cobbles
20% gravel
30% sand
30% fines
stable undercut bank
1056' (320m)
16' wide
2' deep
bog area
5% ASA
good rearing
40' wide deep dark pool
side channel
30% cobbles
20% gravel
30% sand
20% fines
23' wide, 8" deep


1923' (583m)
60% slope
undercut banks
3'/sec velocity
12% slope
0% ASA
30% boulders
60% cobbles
10% gravel
rapids
high numbers of invertebrates
1841' (558m)
alder
10% slope
windfall
8% slope
swift current
10% ASA
10% ASA
25% boulders
50% cobbles
20% gravel
5% sand
6 - 10' high bank
small tributary
1643' (498m)
5/95 pool/ riffle
swift with small falls
thick brush
13' wide
20% ASA
overflow channel
1577' (478m)
8% slope
40% ASA
braided area
5% boulders
40% cobbles
40% gravel
15% sand
60' flood plain
4" deep
10' high banks


2451' (743m)
large debris jam
3' falls through jam
15' high eroding bank
20% slope beyond
hemlock
cedar
rapids
40' flood plain
10' high bank
5% ASA
5% boulders
35% cobbles
20% gravel
10% sand
30% silt
50/50 pool/riffle
level grassy flood plain
sluggish
23' wide
8" deep
old mossy logs
2220' (673m)
alder
13% slope
15% ASA
20' wide, 8" deep
moderate numbers of invertebrates
2121' (643m)
spruce
9% slope
25% boulders
65% cobbles
5% gravel
5% sand
3% slope
eroding bank
hemlock
15% ASA
10/90 pool/riffle
20' wide, 8" deep
swift riffles and rapids

continues in similar manner for at least 200'; rapids and pools; steep slopes adjacent to stream, cobbles and boulders, very little spawning area observed, no rearing fish observed



104-30-10200

Name: Arena Cove
Latitude: 55°13'52"
Longitude: 133°22'~~05"~~ 07"
Geodetic Map No: Craig A5 - 35
Location: 2.1 miles NW of Lontana Point on Suemez Island

Catalog No: 104-30-20
Former Stream No: 36B FRI 202 ADFG

Work Area: Ketchikan
Watershed Length: 9.5 miles (6 forks)
Drainage Area: 7.75 sq miles
Water Supply Type: runoff from forest land with several muskegs, small pond and lakes

Trails & Survey Routes: Fairly easy walking in and along stream (1900m surveyed)

Aerial Survey Notes: water was very dark at time of survey; stream is wide and shallow enough to allow for aerial visibility for the lower 2500' including intertidal areas

Anchorage: near the stream mouth and access by water only on very good days; 3' surf at time of survey

Tide Stage when Surveyed: 1/3

RESOURCES

COMMERCIAL FISHERIES (species, escapement, timing, spawning area): Pink and chum salmon; coho fry - good rearing potential; Fisheries Research Institute stream survey c. 1950, "Small stream emptying on a protected beach to surf, good spawn area, pinks some chum."

Spawning area: $6724m^2$ = $2075m^2$ (main stream below forks) + $2710m^2$ (right fork + $1138m^2$ (lower section of left fork) + $801m^2$ (left, left fork)

Schooling Areas:

Spawning Areas: throughout length of survey

SHELLFISH POTENTIAL: dungeness crab shells on the beach, reportedly razor clams in the area

SPORT FISHERIES: no trout observed; area may support a modest population of Dolly Varden and cutthroat trout

LAND USE (history, present, proposed): currently in natural state; history of area is unknown

REHABILITATION POTENTIAL: none needed

SOILS: stability of the soil and substrate types varied; see map for particulars

GAME RESOURCES (species, use, habitat): deer, bear, wolves and mink one wolf and 2 deer observed on the beach