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Original

STAN SWARTZ
VON HELMUTH

FISH STREAM SURVEY

DATE: 7/1/81

CAMP Hawkati UNIT 42-18

STREAM CATALOGUE # 1,1A, 2 - 103-90-020 system #3 - uncatalogued ROAD 5755

QUAD MAP Craig D-4 T 69S R 79E SECT 12

CHICK MAP 27 of 55 T 69S R 79E SECT 11 & 12

SPECIES PRESENT	STAGE OF DEVELOPMENT
Rainbow	Juvenile & Adult
Cutthroat	Juvenile & Adult
Coho	Smolt & Fry (Hopper, McCullough, 1979)
Dolly Varden	Fry (Hopper, Kluthe, 1980)

TYPE OF FISH HABITAT

SALMON REARING	EXCELLENT	GOOD	FAIR	SQ YDS
SALMON SPAWNING	EXCELLENT	GOOD	FAIR	SQ YDS
RESIDENT REARING	EXCELLENT	GOOD	FAIR	SQ YDS
RESIDENT SPAWNING	EXCELLENT	GOOD	FAIR	SQ YDS

IS FUTURE FISH HABITAT ENHANCEMENT POSSIBLE? YES ____ NO ____

IF SO DESCRIBE:

	YES	NO
FISH PRESENT ABOVE ROAD CROSSING:		N/A
BELOW ROAD CROSSING:		N/A
WITHIN UNIT BOUNDARY:	X	
BELOW UNIT BOUNDARY:	X	

FISH STREAM(S) INTERSECTION(S) MARKED WITH METAL TAGS: ROAD ____ UNIT By Previous Survey

FISH STREAM(S) FLAGGED: BLUE/WHITE X ORANGE/WHITE X

FISH STREAMS TRAVERSED: YES ____ NO X

TRAVERSE NOTES ATTACHED: YES ____ NO X

IS ADDITIONAL PARAMETER INFORMATION NECESSARY? YES ____ NO X

IF SO DESCRIBE:

STREAM TEMP.:

METHODS USED TO DETERMINE PRESENCE OF FISH:

STREAM #	DATE	#FISH	SPECIES	LENGTH	GEAR	TIME

Determined by grevious survey. See: Hopper and McCullough. 1979. & Hopper and Kluthe. 1980. (NAMKATZ)

PERTINENT WILDLIFE INFORMATION: Area is heavely used by bears particularly around Long Lake and streams #1A & 2. Blueberry & Salmonberry crop excellent.
COMMENTS: Recommendations for stream #1 are not necessary because it is located so far from the unit. Stream #3 was mistakenly flagged blue/white. access by salmon may be possible after windthrow removal. Water quality prescriptions apply

SURVEY CREW MEMBERS: SIGNATURE [signature] DATE 7/6/81
Tom Hunnicutt
Jerry Kluthe

REPORT REVIEWED BY: Robert P. Metzger Fish Biol 7/8/81
SIGNATURE TITLE DATE

RECOMMENDATIONS:

Although stream #3 contains no fish at the present time, water quality protection is required and removal of all logging debris from the stream course is recommended to prevent further ~~deterioration~~ consolidation of downstream debris dams and speed up recovery of the potential habitat. The section of stream #3 requiring water quality was flagged B/W

Stream Discriptions

Stream #1 is a pond fed tributary to the Southern end of long Lake. It flows in a Northern direction at a 1-2% gradient over a gravel and mud substrate. This stream is 4 ft wide and 1 ft deep. Dominant stream side vegetation is grasses and berry bushes with trees becoming more prevalent as you approach stream #1's source.

Stream #1A is a tributary to stream #2. It flows in a Northwesterly direction at a 2-3% gradient over a Mud / sand / P-gravel / organic substrate. It is 2-3 feet wide, 4-6 inches deep with 10-12 inch pools. Stream side vegetation is predominantly grasses, berries and skunk cabbage with trees sparsley interspersed.

Stream #2 is a tributary to long Lake on its western side. It flows in an ~~ea~~ easterly direction at a 1-2% gradient over a mud and gravel substrate. Over much of its length it flows through a series of old beaver dams. One active dam, 150 ft from the lake, was observed. Streamside vegetation is predominately grasses and skunk cabbage.

Stream #3 flows in a southern direction until its confluence with the Tuxecan Narrows. It is located in the southwest corner of unit 42-18. The stream channel is 2-4 feet wide, 6-12 inches deep and flows at a 5-10% gradient

over a bedrock, gravel & moss substrate. Over much of its length stream #3 is choked with blow down and other logging debris from two previous operations in the area. Because of this blockage and low flows there are no fish in stream #3

Resident "sports" fish spawning and rearing
(Orange/White Ribbon)

UNIT # 42-18 STREAM(S)# 1A

The following fish stream protection prescriptions and recommendations apply:

TIMBER HARVEST

✓ 1. Directional falling or lining (to include jacking) of timber away from stream course.

✓ 2. Split the yarding or full suspension of timber over stream course.

✓ 3. No limbing or bucking of timber inadvertently felled into stream course (to include windthrow). Yard timber tree length if possible.

✓ 4. Remove debris introduced during timber harvest concurrent with yarding.

✓ 5. Windtrhow impacting stream course will be marked for "Leave" or "Take" timber.

____ a. timber marked with blue ribbon shoud be removed by yarding tree length from stream course if possible.

____ b. timber marked with yellow ribbon should be left in place or will require special considerations upon removal.

____ c. no bucking or limbing of timber occupying or suspended over stream course.

✓ d. removal of all windthrow and logging debris from stream course concurrent with yarding (to include rootwads that may enter stream course).

____ e. directional falling of standing timber away from stream course.

____ f. timing of timber harvest to avoid adverse impact to salmonid redds and/or preemergent fry. (Optimum time: approximately April 15 to August 15).

Additional comments:

Salmon Spawning and Rearing Streams
(Blue/White Ribbon)

UNIT # 42-18 STREAM(S)# #2

The following fish stream protection prescriptions and recommendations apply:

TIMBER HARVEST

✓ 1. Directional falling or lining (to include jacking) of timber away from stream course.

✓ 2. Split the yarding or full suspension of timber over the stream course.

✓ 3. No limbing or bucking of timber inadvertently felled into stream course (to include windthrow). Yard timber tree length prior to bucking and/or limbing.

✓ 4. Forty-eight hour removal of any debris introduced into stream course during timber harvest.

✓ 5. Windthrow impacting stream course will be marked for "Leave" and "Take" timber.

✓ a. timber marked with blue ribbon should be removed by yarding tree length from stream course if possible.

✓ b. timber marked with yellow ribbon should be left in place or will require special considerations upon removal.

✓ c. no bucking or limbing of timber occupying or suspended over stream course.

✓ d. removal of all windthrow and logging debris from stream course concurrent with yarding (to include root wads that may enter stream course).

✓ e. directional falling of standing timber away from stream course.

___ f. timing of timber harvest to avoid adverse impact to salmonid redds and/or pre-emergent fry. (Optimum time: approximately April 15 to August 15).

✓ 6. Hazard (leaning) trees along stream course should be marked by sale administrator and felled concurrent with yarding to prevent introduction into stream channel.

___ 7. Protect brush and understory vegetation along stream course of temperature sensitive streams during timber harvest.

Additional Comments: Stream #2 and its surrounding beaver dam complex is within crown height of trees along Northern 2v(1) boundry of unit 42-18

WATER QUALITY PROTECTION -- V-notches and/or unstable soils
(Orange/White Ribbon)

UNIT # 42-18
ROAD # _____

STREAM(S)# 3

The following fish stream protection prescriptions and recommendations apply:

✓ 1. Chunk clean to include rootwads.

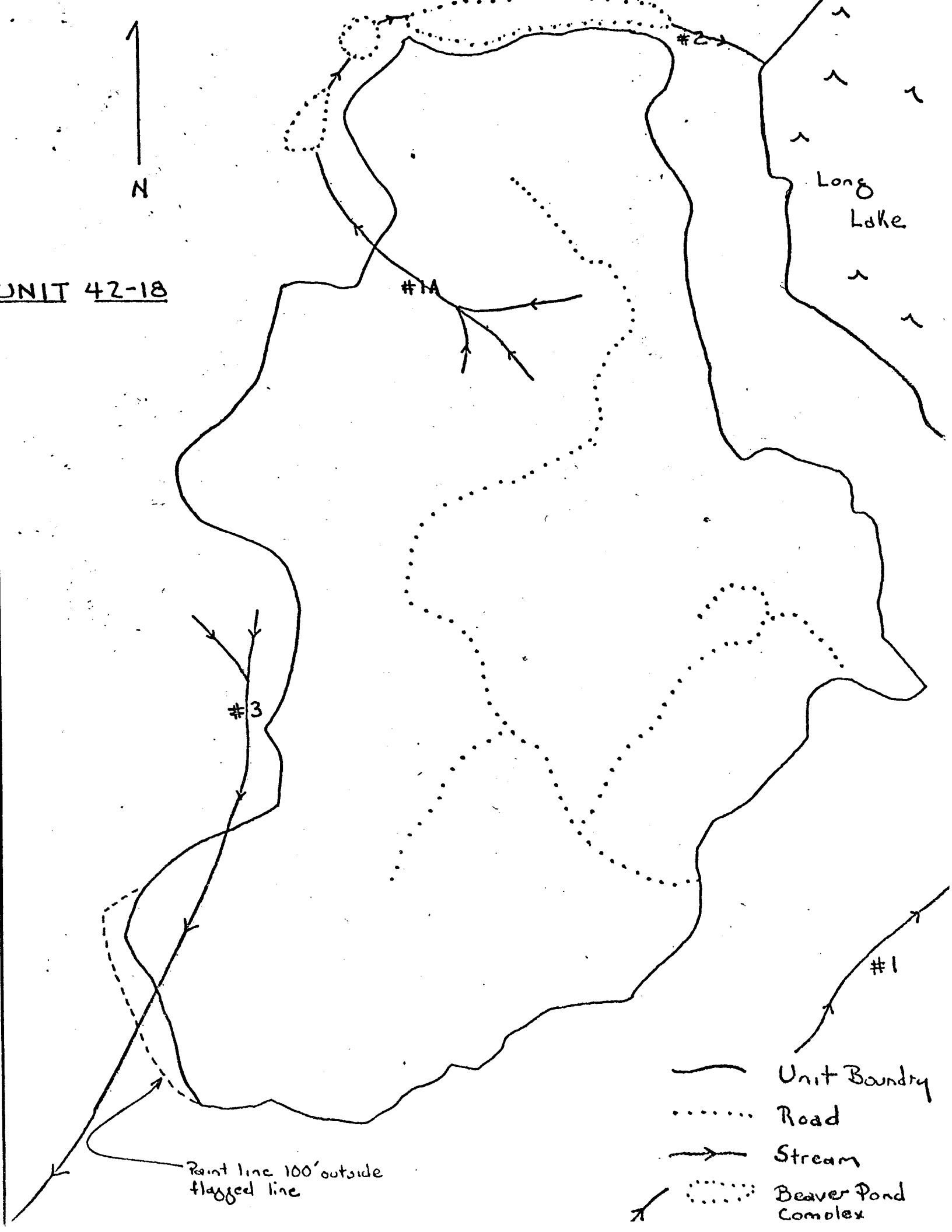
____ 2. Recommend input from soil scientists.

Additional Comments: If blow down is to be salvaged from the creek all materials (rootwads, limbs etc.) should be removed. The following water quality protection prescriptions and recommendations apply:

~~1) Directional falling or lining (to include jacking) of standing timber away from stream course~~

~~1) 2) No limbing or bucking of timber in stream channel.~~

1) Remove tree length if possible.


N
UNIT 42-18
#2
Long Lake
#1A
#3
#1
Unit Boundry
Road
Stream
Beaver Pond Complex
Paint line 100' outside flagged line