NPOW Hopper

Helmuth
Swartz

Believed to refer to #103-90-10280

ADFG FILE COPY

FISH STREAM S

IMENTAL

RH

NAUKATI

103-90-020

UNIT 42-15 ROAD 5612

5/22/82

ON 5/21/82, VON HELMUTH, RUSS STEWART AND I WALKED STREAMS #3, #4, AND #5 IN
* UNIT 42-15. STREAM #3 WAS FLAGGED BLUE/WHITE IN PREVIOUS SURVEY (42-15; NAUKATI; 10/21/80; A. KLUTHE/G. HOPPEL) AS COHO REARING HABITAT. WATER QUALITY PROTECTION RECOMMENDED UPSTREAM OF BOUNDARY FOR APPROX. 500 FT.
* ON STREAM #4, BLUE/WHITE WAS EXTENDED UPSTREAM FOR APPROX. 500 FT. TO JUST ABOVE 42-15-1 SPUR CROSSING. STR. WAS THEN FLAGGED ORANGE/WHITE ABOVE SPUR CROSSING TO UNIT'S NORTHERN BOUNDARY (FLAGGING RENEWED). STR. #4 IS LOCATED IN A STEEP V NOTCH WITH SOME WINDTHROW (STR. CHANNEL APPEARS TO BE BEDROCK CONTROLLED). RETAGGED ON UNIT'S SOUTHERN BOUNDARY AS OLD TAG WAS MISSING.
* ON STR. #5 ORANGE/WHITE FLAGGING WAS RENEWED TO END OF HABITAT. IN ADDITION, STR CHANNEL

WAS FLAGGED GREEN/WHITE FOR WATER QUALITY PROTECTION TO UNIT'S NORTHERN BOUNDARY (APPROX. 850 FT.). UPPER REACHES OF THIS STR. APPEARS TO HAVE SOIL PROBLEMS WHILE THE LOWER REACHES HAS BEEN CONSIDERBLY IMPACTED BY WINDTHROW. SEE MAP ATTACHED.

James D. Hunter
FISH. TECH.
N.P.O.W. RANGER DISTRICT

Robert Metzger 6/14/82
Fish Biol

TIMBER HARVEST - LONG TERM SALE

Salmon Spawning and Rearing Streams
(Blue/White Ribbon)

UNIT # 42-15 STREAM(S)# 1

ROAD # 5612 STATION # _____

The following fish stream protection prescriptions and recommendations apply: based upon quality of habitat, resistance to alteration, and fish habitat management unit objectives.

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

X 2. Split the yarding on the creek or full suspension of timber over the stream course.

X 3. No limbing of timber inadvertently felled into stream course (to include windthrow). Yard timber in lengths to maximize lift.

X 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 in lengths to maximize lift and minimize stream course disturbance.

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

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

____ d. Removal of all introduced 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.

____6. Time timber harvest within crown height of streamcourse to avoid adverse impact to salmonid redds and/or pre-emergent fry. (Optimum time for harvest: approximately April 15 to August 15). Operations outside of this time period will require a site assessment by fisheries personnel.

_X_7. Hazard (leaning) trees along stream course should be marked by sale administrator and felled concurrent with yarding.

_X_8. Protect brush, non-merchantable trees, and understory vegetation along stream course of temperature sensitive streams during timber harvest.

Additional Comments:

TIMBER HARVEST - LONG TERM SALE

Salmon Spawning and Rearing Streams
(Blue/White Ribbon)

UNIT # 42-13

ROAD # 5612

STREAM(S)# 4 (BLUE/WHITE RIBBON)

STATION # _____

The following fish stream protection prescriptions and recommendations apply: based upon quality of habitat, resistance to alteration, and fish habitat management unit objectives.

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

X 2. Split the yarding on the creek or full suspension of timber over the stream course.

X 3. No limbing of timber inadvertently felled into stream course (to include windthrow). Yard timber in lengths to maximize lift.

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

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

- X a. Timber marked with blue ribbon should be removed in lengths to maximize lift and minimize stream course disturbance.
- ___ b. Timber marked with yellow ribbon should be left in place or will require special considerations upon removal.
- X c. No limbing of timber occupying or suspended over stream course.
- X d. Removal of all introduced debris from stream course concurrent with yarding (to include root wads that may enter stream course).
- X e. Directional falling of standing timber away from stream course.

____6. Time timber harvest within crown height of streamcourse to avoid adverse impact to salmonid redds and/or pre-emergent fry. (Optimum time for harvest: approximately April 15 to August 15). Operations outside of this time period will require a site assessment by fisheries personnel.

_X_7. Hazard (leaning) trees along stream course should be marked by sale administrator and felled concurrent with yarding.

____8. Protect brush, non-merchantable trees, and understory vegetation along stream course of temperature sensitive streams during timber harvest.

Additional Comments: STR. #4 WAS FLAGGED BLUE/WHITE FOR APPROX. 500 FT. AND ORANGE/WHITE FOR APPROX. 600 FT. (SEE RESIDENT SPORTS FISH PRESCRIPTION FORM ATTACHED.

SECTION 5 - ALL MERCHANTABLE WINDTHROWS SHOULD BE REMOVED. TIMBER WAS NOT FLAGGED WITH BLUE RIBBON.

114v

TIMBER HARVEST - LONG TERM SALE

Resident Sport Fish Spawning and Rearing Streams
(Orange/White Ribbon)

UNIT # 42-15

ROAD # 5612

STREAM(S)# 4 (ORANGE/WHITE RIBBON)

STATION # _____

The following fish stream protection prescriptions and recommendations apply; based upon quality of habitat, resistance to alteration, and fish habitat management unit objectives.

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

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

X 3. No limbing of timber inadvertently felled into stream course (to include windthrow). Yard timber in lengths to maximize lift.

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

X 5. Yard timber impacting stream course same season as felled.

X 6. Windthrow impacting stream course will be marked for "Leave" or "Take" timber.

- X a. Timber marked with blue ribbon shoud be removed in lengths to maximize lift and minimize stream course disturbance.
- ___ b. Timber marked with yellow ribbon should be left in place or will require special considerations upon removal.
- X c. No limbing of timber occupying or suspended over stream course.
- X d. Removal of all introduced debris from stream course concurrent with yarding (to include rootwads that may enter stream course).
- X e. Directional falling of standing timber away from stream course.

_____7. Time timber harvest within crown height of streamcourse to avoid adverse impact to salmonid redds and/or preemergent fry. (Optimum time for harvest: approximately April 15 to August 15). Operations outside of ths time period will require a site assessment by fisheries personnel.

Additional comments: SECTION 6 - ALL MERCHANTABLE WINDTHROW SHOULD BE REMOVED - TIMBER WAS NOT FLAGGED WITH BLUE RIBBON.

114v

TIMBER HARVEST
LONG TERM SALE

"Non-Sports" Resident Fish Habitat and Water Quality Protection - Including V-notches and/or unstable soils (Green/White Ribbon)

UNIT # 42-15

ROAD # 5612

STREAM(S)# #3 AND #5

STATION # _____

The following fish stream protection prescriptions and recommendations apply: based upon resistance of habitat to alteration and fish habitat management unit objectives.

____ 1.) Directional falling (to include lining and jacking if necessary) of timber away from stream course.

____ 2.) Split the yarding on stream course or full suspension of timber over stream course.

____ 3.) Removal of all introduced debris (to include root wads that may enter stream course) from stream course concurrent with yarding.

X 4.) Yard timber impacting stream course same season as felled.

X 5.) Windthrow impacting stream course will be marked for "leave" and "take" timber.

a.) Timber marked with blue ribbon should be removed with lease possible disturbance to stream course.

b.) Timber marked with yellow ribbon should be left in place or will require special consideration upon removal.

X 6.) Chunk clean (removal of introduced debris 3 in. diameter or 6 ft. length or larger).

____ 7.) Avoid yarding up or down protected stream courses.

X 8.) Recommend input from Soil Scientist and/or Hydrologist.

Additional Comments: WINDTHROW ON STR. #5 WAS NOT FLAGGED BLUE OR YELLOW. ALL TIMBER IMPACTING STREAM COURSE SHOULD BE REMOVED TO PROTECT WATER QUALITY OF STREAM CHANNEL. SEE SECTION 5. STREAM CHANNEL SHOULD BE CHUNK CLEANED AFTER LOGGING OPERATIONS ON STR. #5.

114v

TIMBER HARVEST - LONG TERM SALE

Resident Sport Fish Spawning and Rearing Streams
(Orange/White Ribbon)

UNIT # 42-15 STREAM(S)# 6

ROAD # 5612 STATION # _____

The following fish stream protection prescriptions and recommendations apply; based upon quality of habitat, resistance to alteration, and fish habitat management unit objectives.

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

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

X 3. No limbing of timber inadvertently felled into stream course (to include windthrow). Yard timber in lengths to maximize lift.

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

X 5. Yard timber impacting stream course same season as felled.

X 6. Windthrow impacting stream course will be marked for "Leave" or "Take" timber.

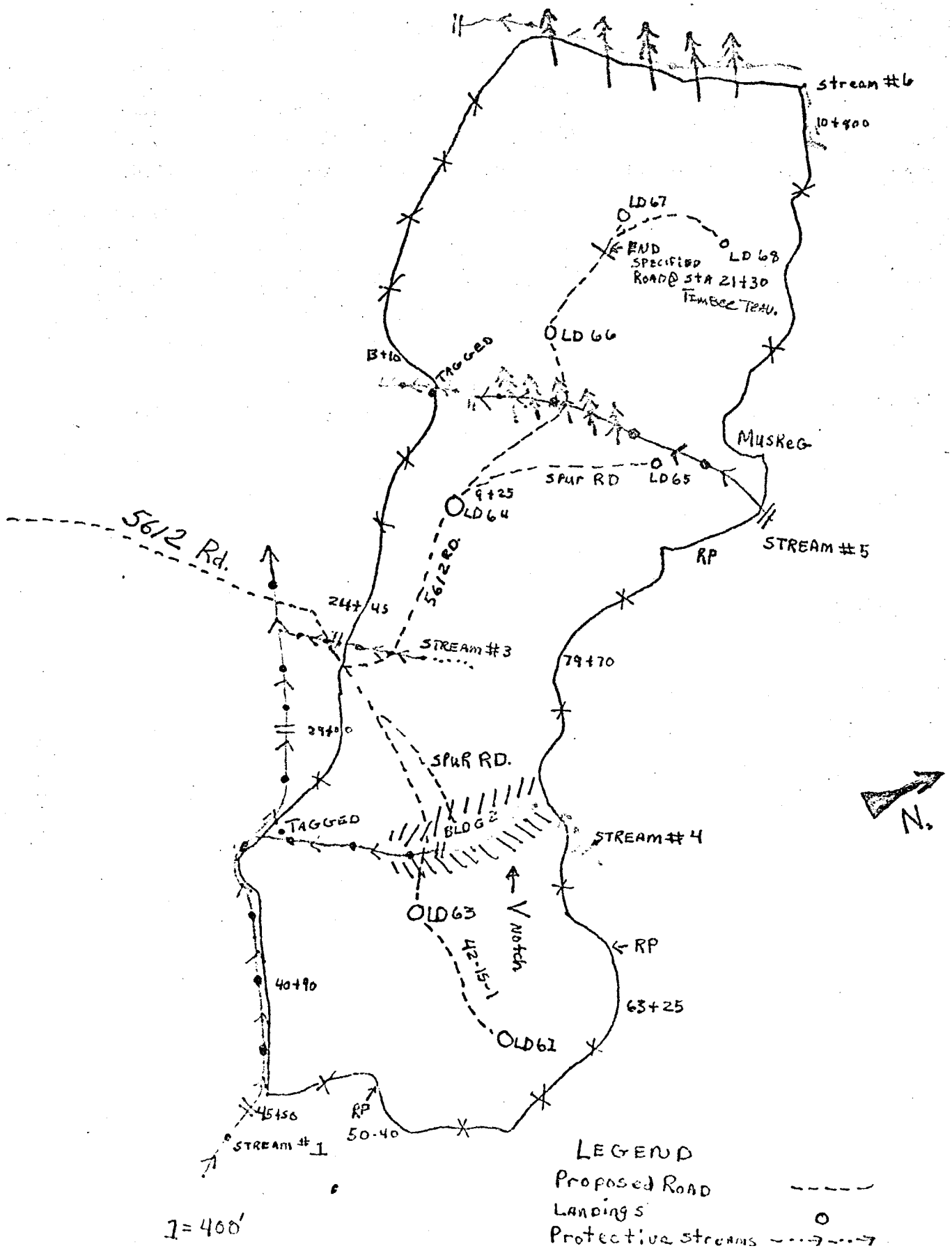
- X a. Timber marked with blue ribbon shoud be removed in lengths to maximize lift and minimize stream course disturbance.
- ___ b. Timber marked with yellow ribbon should be left in place or will require special considerations upon removal.
- X c. No limbing of timber occupying or suspended over stream course.
- X d. Removal of all introduced debris from stream course concurrent with yarding (to include rootwads that may enter stream course).
- X e. Directional falling of standing timber away from stream course.

X 7. Time timber harvest within crown height of streamcourse to avoid adverse impact to salmonid redds and/or preemergent fry. (Optimum time for harvest: approximately April 15 to August 15). Operations outside of ths time period will require a site assessment by fisheries personnel.

Additional comments: SECTION 6: ALL MERCHANTABLE TIMBER SHOULD BE REMOVED FROM STREAM COURSE. TIMBER WAS NOT FLAGGED WITH BLUE RIBBON.

114v

Naukati: Longterm
Unit 42-15
109 ACRES



STEVE HOAG
JOE THOMPSON
FILES
ADFG

Navy

FISH STREAM SURVEY

DATE: 10-21-80

CAMP Naukati UNIT 42-15

STREAM CATALOGUE # 103-90-020 SYS. ROAD 5612

QUAD MAP Craig D-4 T 69S R 80E SECT 5 & 6

CHICK MAP _____ T _____ R _____ SECT _____

SPECIES PRESENT	STAGE OF DEVELOPMENT
Coho	fry
Dolly Varden	fry
Cutthroat	fry

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 X
IF SO DESCRIBE:

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

FISH STREAM(S) INTERSECTION(S) MARKED WITH METAL TAGS: ROAD X UNIT X
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
#1	10-21-80	25	coho	2½"	observed	10 min
#3	10-21-80	2	Dolly Varden	1, 1½"	shocker	
	10-21-80	1	Cutthroat	1½		
#4	10-21-80	1	Coho	2½		
	10-21-80	2	Cutthroat	4"		
	10-21-80	2	Cutthroat	3"		
	10-21-80	1	Cutthroat	2"		
#5	10-21-80	2	Dolly Varden	2"		
	10-21-80	2	Dolly Varden	1"		
#6	10-21-80	2	Dolly Varden	2"		
	10-21-80	1	Dolly Varden	1"		
		1	Dolly Varden	12"		

PERTINENT WILDLIFE INFORMATION:

COMMENTS:

SURVEY CREW MEMBERS:	SIGNATURE	DATE
Al Kluthe	Al Kluthe	10-24-80
Glenna Hopper	Glenna Hopper	10-24-80

REPORT REVIEWED BY: [illegible] W.B. 10/[illegible]/80

SIGNATURE TITLE DATE

RECOMMENDATIONS: See attached report.

NOTE: RECOMMEND REMOVAL OF NEW BLOWDOWN FROM STREAMS #5 & #6

USDA-FOREST SERVICE

COMPUTATION SHEET

Subject: Unit 42-15

SHEET ..... OF .....

MADE BY .....

CHECKED BY ..... (Initial and date)

Stream #1

This stream is located on the southeast corner of the unit and follows the unit boundary for 900-1100 ft. It is 6-15' wide with 2-6" of water and pools to 24". The substrate consists of gravel with a few large cobbles. The stream has a gradient of 3% and has some old blowdown in its channel. Approximately 25 Coho fry were observed in the stream. This stream provides excellent spawning and rearing habitat for coho salmon. The stream was flagged B/W for 100 feet above the unit boundary at the end of survey - not the end of habitat.

Downstream the road into the unit crosses this stream at P.I. 22+39. Fish passage is required. At this point the stream is identified as stream #2 from a previous stream survey on 10/15/75.

Stream #3 P.I. 27+58

This stream is 2-3' wide, 6" deep with pools to 18". The substrate consists of gravel sand and silt. The stream gradient is 2-3% and was flagged B/W to the end of habitat approximately 150' above the road. The stream was flagged B/W 250' downstream to where it enters stream #1. Fish passage is required.

USDA-FOREST SERVICE

COMPUTATION SHEET

Subject: Unit 42-15

SHEET ..... OF .....

MADE BY .....

CHECKED BY ..... (Initial and date)

Stream #4 - V notch

This stream is 6'-8' wide with 8-10" of water and pools to 15". The substrate consists of cobble/rock and small pockets of gravel. The stream gradient is 5-7% at the lower unit boundary but increases to 25% near the upper unit boundary. Coho fry were shocked below the unit but within the unit only Cutthroat trout were shocked. The stream is flagged B/W below the unit and O/W through the unit to the end of habitat 100' above the upper unit boundary. Fish passage is required across the stream.

Stream #5

This stream is 2-4' wide with water 3-4" deep. The substrate consists of small to medium gravel and the gradient is 4-5% at the lower unit boundary. The stream was flagged O/W approximately 200' upstream from the lower unit boundary to the end of habitat. The stream contains alot of new and old blowdown above this point.

Stream #6

This stream borders the unit on the North and northwest and is 10-12' wide with 4-6" of water and pools to 18". The substrate consists of gravel with a few rock and cobbles interspersed. The stream gradient is 4-8%. The stream contains numerous blowdown

mit 42-15

before bucking or limbing or entire tree length.
Dolly Varden were shocked, possibly Sea Run, and the stream was flagged Orange/white

Recommendations:

① Fish passage required at all times.

② Culvert installation concurrent with rocking.

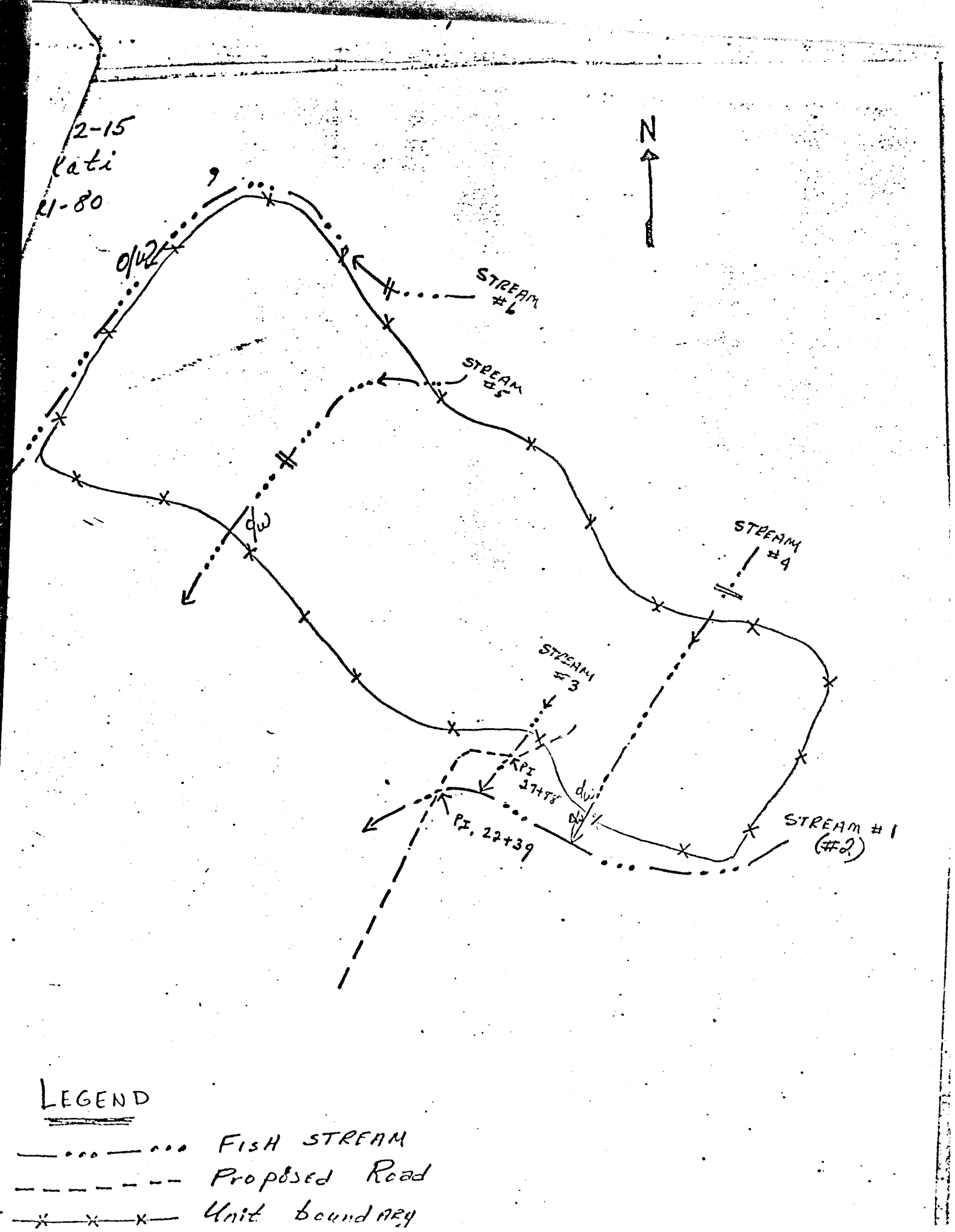
③ Directional falling away from streams.

④ Removal of all introduced debris within 48 hours on streams flagged B/W.

⑤ Removal of all recent blowdown debris and chunk clean concurrent with yarding on all O/W streams.

⑥ Split the yarding on stream # 4. to Avoid a soils erosion problem in this V-Notch.

7 Only one equipment crossing where roads cross stream.


2-15
lati
21-80
N
STREAM #6
STREAM #5
STREAM #4
STREAM #3
STREAM #1 (#2)
PI 27+88
PI, 22+39
LEGEND
FISH STREAM
Proposed Road
Unit boundary