

SITE NUMBER: D-R1-02
LOCAL NAME: W.F. Marsh Creek
WRIA: 20.0097B

NORTH COAST OFF CHANNEL SITE INVENTORY DATA

RIVER SYSTEM: Dickey **DATE:** 11/15/90 **OBSERVER:** Young

CHANNEL TYPE: A secondary, low gradient egress to Marsh Cr. (20.0098). May also act as an overflow channel of the river.

TRIBUTARY TO: Dickey River (20.0097)

SITE LOCATION: R.B. @ River Mile: 0.65 (WDF)

LEGAL DESCRIPTION: SE1/4 S15 T28N R15W

	<u>UPPER END</u>	<u>LOWER END</u>	<u>RIVER TEMP</u>
<u>WATER TEMP:</u>	N/A	9.5 C	9.0 C
<u>FLOW (CFS):</u>	0.5	2 - 3	

SUBSTRATE TYPE: Silt, mud and muck.

SITE SIZE: **Length-** 900 - 1000 m
 Width- Channel = 3 to 7 m. Surface = 1 to 7 m.
 Depth- Pooled area = 0.6 to 1.2 m. Avg = 15 to 45 cm.

WATER SOURCE: Most water appears to be diverted into the channel from tributary 20.0098 (Marsh Creek). Some seepage run off from the hills and clear cut area to the north. Possibly river overflow during periods of heavy flooding.

DIRECTIONS TO SITE: Head north from Forks on Hwy 101. Turn left just beyond mp 193 (1.0 mi. north of Forks) onto the La Push Rd. Proceed west on La Push Rd about 3.1 miles. Turn right onto the Quillayute Rd. and continue west for 4.0 mi. Turn right onto Mina Smith Rd. (at Quillayute Cemetery) and proceed north about 0.8 mi. Turn left, after crossing the Colby Creek Bridge, onto the 5000 line. Proceed west 1.2 mi. (crossing the Dickey River) then turn left onto the 5003 line. Continue south west on the 5003 about 4 miles. Turn left (south) onto a spur road just before the 5003 ends. Follow the spur to its end. The middle reach of channel D-R1-3 is located just beyond the end of the spur road.

FISH ACCESS AND CURRENT USE: Appears fish have access to the lower and middle reaches of the channel. A small beaver dam 650 m above the mouth may restrict upstream passage of juveniles. Good entrance conditions at the mouth. No fish were observed.

FLOODING POTENTIAL: Moderate. May flood once or twice each year during the largest floods. Doesn't appear to experience high velocity flooding.

LANDOWNER: Unknown at this time.

COMMENTS & RECOMMENDATIONS: D-R1-02 is a relatively long and wide, low gradient channel. It lies along the back edge of the first terrace above the active flood plain and runs parallel to the river. Presently it functions as a secondary egress for tributary 20.0098 (Marsh Creek) and also as a high flow, overflow channel of the river.

D-R1-02 originates in a shallow, grassy marsh situated along the right bank of Marsh Creek (20.0098). As Marsh Creek flows out of its own valley and onto the valley floor of the Dickey (i.e below the 5003 Rd) its channel becomes poorly defined and the water diverges into a wooded marsh land. At the southwest corner of this wooded marsh area is a open, shallow, grass-filled marsh. The majority of the water from Marsh Creek presently flows along the east side of the grassy marsh, over a 3 to 4 ft falls and into an incised channel with vertical banks. 50 m below the falls, the trib converges with channel D-R1-4 and

SITE NUMBER: D-R1-02

LOCAL NAME: W.F. Marsh Creek
WRIA: 20.0097B

NORTH COAST OFF CHANNEL SITE INVENTORY DATA

RIVER SYSTEM: Dickey

DATE: 11/15/90

OBSERVER: Young

COMMENTS & RECOMMENDATIONS: (Continued) empties into the river 50 m further downstream. A smaller volume of Marsh Creek water entering the shallow, grassy marsh flows to the west and utilizes D-R1-02 as an egress route.

Downstream of the grassy marsh, the channel of D-R1-02 becomes well defined. It maintains a straight course along the back edge of the uncut riparian strip. The channel parallels the river at a distance of 30 to 50 m. Its elevation appears to be at least 3 m above the present river level. A few depressions along the left bank of D-R1-02 indicate the river may, at times, over top the bank in this reach. Most of the water in this upper reach is pooled behind an old, small beaver dam located about 250 m below the grassy marsh. This water has good depth and a surface width up to 7m. Good cover is available from scattered LOD and the dark color of the water.

About 85 m below the small beaver dam, D-R1-02 emerges from the riparian strip and runs across a patch of clear cut ground. The right bank of the channel in this reach is some 6 to 8 ft high and nearly vertical in places. The left bank has a much more gentle slope. The channel widens and the water is quite shallow. Marsh grass is prevalent along this reach. A spur road off of the D-5003 (see directions to site) provides excellent access to the right bank of D-R1-02 near the upper end of this reach.

A few trickles of water were seen coming off the high right bank and cascading into D-R1-02 in the mid to upper reach. This water appears to run off the clear cut hillside to the north of the D-R1 area. It then accumulates in shallow, muddy, slash filled depressions in the flat, clear cut area between the toe of the hill and the channel. This water then appears to "seep" toward the channel.

About 200 m below the end of the spur road, D-R1-02 enters a mixed forest of mature conifer and alder. The channel maintains a fairly straight course through this patch of woods. In this reach the channel is wide and contains mostly deep, slow moving water and pool habitat. The water is dark in color and the substrate is fine silt and mud. The banks are moderately sloped and well vegetated with trees and brush.

About 250 to 300 m into the wooded area, D-R1-02 converges with channel D-R1-3 (see separate write up). A partially blown beaver dam, located just below the confluence of the two channels restricts the flow and appears to contribute to the long pool area upstream. The dam does not presently appear to restrict the upstream movement of juvenile salmonids. The mouth of D-R1-02 is about 100 m below the confluence of the two channels.

The lower 100 m reach of D-R1-02 seems to have unrestricted access for juvenile salmonids. The entire reach appears very susceptible to backwater flooding. The mouth of D-R1-02 is deeply incised, cutting through the 8 to 10 ft high river bank before entering the river on a flat gradient. The river at the mouth of D-R1-02 is deep and slow moving with a tidewater or slough-like character.

D-R1-02 appears to offer fair to good winter rearing habitat for coho. This habitat is probably already being utilized to some extent. Both low winter flows and the potential for flooding may be cause for concern. The channel appears to offer juvenile coho the best access to the excellent rearing areas found in the lower and middle reaches of tributary 20.0098. If desired, it should be possible to divert the entire flow of 20.0098 into D-R1-02. This would lengthen the lower end of the trib by 1000 m. Beaver in the area might even accomplish this task and divert the flow "naturally". Need to monitor this channel at different flows throughout the winter.

GPS: (decimal degrees, Datum WGS84): 11/27/02
upper project - N47.93091, W124.61823
channel egress - N47.92840, W124.62082

NORTH COAST OFF CHANNEL SURVEY
SUBSEQUENT SITE EVALUATION

River System: Dickey

Channel No.: D-R1-02
Site Name: W. F. Marsh Creek
WRIA: 20.0097B

DATE: 2/26/91

OBSERVER: Young

There has been more than 16 inches of rain so far in February. This observation was made at the end of a one week dry period. Flow in the channel was estimated to be between 0.1 and 0.2 cfs. The water temp was 7 C.

High water marks, shown by silt deposition, indicate the middle and lower reaches were inundated with flood water at some time during the Fall or Winter. This most likely occurred during the floods of late November 1990. Silt deposits on trees near the confluence of D-R1-02 and D-R1-03 indicate water was 5 or 6 feet over the top of the 6 to 8 ft high banks. It appears that the entire middle reach (i.e. near the end of the spur road) was cover with river water up to the high, right bank of the channel. Little evidence of flooding along the upper reach or into the shallow, grassy marsh.

DATE: 4/22/91

OBSERVER: Young/King

No rain for almost 2 weeks. Channel is still flowing. The questionable beaver dam in the middle reach looks like it could be a problem at times. The pond created by this beaver dam appears to be excellent rearing habitat. The flow to this part of the channel could be greatly reduced if the control point in the marsh happened to blow out. The control point was not real evident at the time of this survey. The marsh was flooded to at least a 12" depth and appears to offer excellent overwinter habitat. The marsh needs to be better defined and the perimeter surveyed to find out where the control point is and how hard it would be to solidify that point and/or raise it to push more water out the lower outlet. Tributary number 20.0098 needs to be better defined to make sure it continues to flow into the marsh and the culvert problem at the D-5003 road needs to be looked into.

Fish were seen above the road crossing on 20.0098 and at various points in D-R1-02. **Initial rating of this site for improvement potential was average.**

DATE: 5/1/91

OBSERVER: Nettnin/King

Very little rain in the past 3 weeks. Channel still had flow in the lower reaches and water was still flowing over the 5003 road where 20.0098 crosses. Water temp. was 56°F.

DATE: 1/7/92

OBSERVER: King/Gowen

Surveyed for project details. Water temps ranged from 3° to 4°C.

DATE: 3/17/92

OBSERVER: Darrow, King, Nettnin

There were four minnow traps baited with salmon roe and set above the road. 2 coho, 2 Cutthroat Trout, and 56 cottid captured.

NORTH COAST OFF CHANNEL SURVEY
SUBSEQUENT SITE EVALUATION

River System: Dickey

Channel No.: D-R1-02
 Site Name: W. F. Marsh Creek
 WRIA: 20.0097B

DATE: 9/2 - 9/21/92

OBSERVER: King, Nettnin

Three plank controls were installed about 400 m up from the river. These controls will create about 3000 square meters of new ponded habitat. These weirs are of a new design for long weirs. They are zig zag instead of straight.

Crew days: 10 (crew days based on a 10 man crew working 8 hrs/day).

MATERIALS LIST

LUMBER	2 X 12 rough cut cedar		140 lineal feet
	2 X 6 " " "		30 " "
HARDWARE	U-bolts 3/8 X 3 X 6 5/8		24
	3/8 nuts	48	
	3/8 flat washer		48
	3/8 bridge washer		48
	nails 20d box		20 lb
	1 1/2 aluminum pipe		130 lineal feet (from another project)
OTHERS	sand bags, plastic	50	
	fabric, geotextile		400 sq ft (from another project)

DATE: 12/21/92 - 12/22/92

OBSERVER: Darrow

The minnow traps were baited with salmon roe that was acquired at the Solduck Hatchery. This has been a dryer then normal fall.

MINNOW TRAPPING REPORT

TRAP	DATE SET	DATE PULLED	TEMP	TEMP	COHO	CATCH			COTTID
						RBT	CUTT	0+	
1	12/21	12/22			3	0	0	0	3
2	12/21	12/22			13	0	1	0	3
3	12/21	12/22			7	1	0	0	2
4	12/21	12/22			7	0	0	0	3
5	12/21	12/22			8	0	0	0	4
TOTALS:					38	1	1	0	15
Avg. L (mm)					92	90	145	N/A	N/A

DATE: 2/10/93

OBSERVER: King

Extremely high flows have occurred here from the heavy rain & snowmelt in late January. No visible damage was done. Water level was at least 4' higher than the weirs.

Need to modify logs placed below weirs to prevent plunge pool problems. Need to look at possibly raising the weirs by 6". Water temp. was 7°

NORTH COAST OFF CHANNEL SURVEY
SUBSEQUENT SITE EVALUATION

River System: Dickey

Channel No.: D-R1-02
Site Name: W. F. Marsh Cr.
WRIA: 20.0097B

DATE: Summer 1993

OBSERVER: Nettnin

Dave N. and DNR crew raised each weir 6 inches to pond more surface area.

DATE: 9/1/94

OBSERVER: Nettnin

Dug a channel below the lowest weir to accommodate the fry's approach to the upstream facing apex. There were fry stranded on shallow ground there last year. During higher flows there is more attraction to this apex rather than to the downstream facing apex.

While we were there, we cleaned off the beaver debris on the upper weir.

DATE: 10/18/94

OBSERVER: Darrow

No water yet. System dry at plank controls. Cleaned out around spillway cut-outs. No fish were observed.

DATE: 3/16/95

OBSERVER: Darrow

Lower weir controls unrestricted. Top control has an extensive beaver dam built on top of it. This dam increases depth another 2+ ft which results in a large impoundment of water behind it. There appears to be fish passage around it on left bank side during high flows. I opened a hole 4 x 3.5 ft. Site will need periodic visits. Dickey River erosion getting close to road. Observed a couple fish rising among grass clumps in ponded area.

DATE: 11/5/95

OBSERVER: Darrow

Opened up beaver dam at lowest plank control. Removed 90% of higher beaver dam, on top plank control. There is an old sod and sedge dam ~550 ft above upper plank control; opened a 6 ft wide hole there. Observed some cottids around upstream side of largest beaver dam. Also, observed some salmonids rising on upper end of pond area.

DATE: 4/3/96

OBSERVER: Darrow

Beaver activity is ongoing at this site. Removed debris from the various beaver dams. Observed some surface activity at upper pond.

DATE: 10/3/96

OBSERVER: Powell

Project was dry. No new beaver activity since spring cleanout. Removed a few additional sticks. All the controls looked fine.

DATE: 10/16/97

OBSERVER: Nettnin

- Beaver dam just above zig zag weir not blocking.
- Cleaned small amount of debris from low flow notch.
- Small leaks on ends of weirs, stopped some and may need to do some repair in summer.

DATE: 3/10/98

OBSERVER: Darrow

Cleared beaver debris from upper plank control. Beavers appeared to have been trapped out of this system. During high flows, water goes around the left bank end of the controls.

NORTH COAST OFF CHANNEL SURVEY
SUBSEQUENT SITE EVALUATION

River System: Dickey

Channel No.: D-R1-02
Site Name: W. F. Marsh Cr.
WRIA: 20.0097B

DATE: 5/5/99

OBSERVER: Nettnin

- Beaver dam just above zig zag weir not blocking, but removed part of it.
- Cleaned small amount of debris from low flow notch.
- Small leaks on the LB ends of weirs one and two.
- All of the present flow is piping under the RB end of the upper weir.
- Will need to do some repair in summer.

G.P.S. position for confluence with Dickey:
G.P.S. position for project:

East 990,346 ft. North 972,741 ft.
East 990,814 ft. North 973,803 ft.

DATE: 6/15/99

OBSERVER: Nettnin

The site was visited and a some maintenance performed. The leaks on all three weirs were repaired. Access to this site is now via the Mora road. Follow the RB of the Dickey River upstream to the confluence of D-R1-02. In the summer D-R1-01 is a dry depression and can be missed.

DATE: 4/25/00

OBSERVER: Darrow/Blore

A Clallam Conservation District employee hiked into this location to take GPS readings of the structures. He reported the following information: That the controls were okay. They had no blowouts or leaks around them. The usual small beaver dam was in place at the upper control. It was passable to juvenile fish. Rises were observed above the upper control.

DATE: 12/11/00

OBSERVER: Nettnin

The large beaver dam on the number 3 weir looks passable on the left bank end.

DATE: 3/14/01

OBSERVER: Nettnin

Beavers continue to be busy at this site. The upper weir has a beaver dam across it.

DATE: 6/7/01

OBSERVER: Nettnin

All weirs have beaver dams constructed on them. The dams are keeping the site watered. These beaver dams will have to be modified in the fall for the up migration.

DATE: 10/16/01

OBSERVER: Nettnin/Darrow

The beaver dam on the third weir was breached in two places. Another beaver dam near the egress was breached with numerous fingerlings observed directly downstream. The beaver dams on the other weirs were left in place and do not present a problem at this time.

DATE: 10/22/01

OBSERVER: Nettnin

The site was revisited. There was no new beaver activity on the third weir.

DATE: 5/9/02

OBSERVER: Nettnin

No new beaver activity in the project area. There was some recent activity on two dams downstream but they backwater the lower weir.

NORTH COAST OFF CHANNEL SURVEY
SUBSEQUENT SITE EVALUATION

River System: Dickey

Channel No.: D-R1-02
Site Name: W. F. Marsh Cr.
WRIA: 20.0097B

DATE: 11/27/02

OBSERVER: Nettnin

Found that the number 3 weir has a small leak on the right bank end. There is no new beaver activity.

GPS: (decimal degrees, Datum WGS84):

upper project - N47.93091, W124.61823
channel egress - N47.92840, W124.62082

DATE: 5/2/03

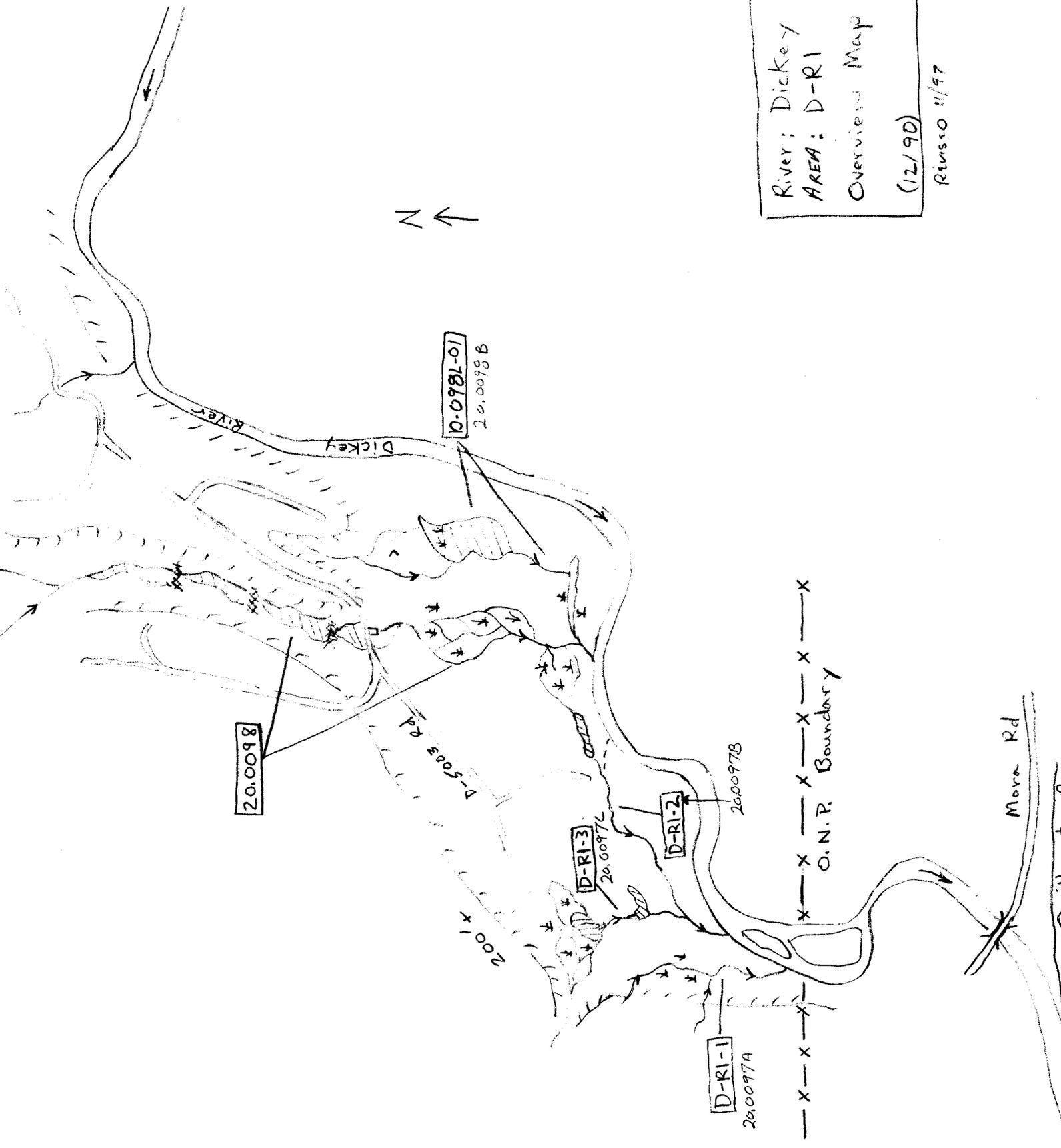
OBSERVER: Nettnin

There is just a small amount of older beaver debris at the upper dam. No new activity. Observed 0+ fry at the lower weir.

River: Dickey
AREA: D-RI
Overview Map
(12/90)

Revised 11/97

N ↑



River: Dickey
AREA: D-R1
AREA map

Date: 12/4/90

