**SITE NUMBER:** ED-R3-02
**LOCAL NAME:** Eagle Springs
**WRIA:** 20.0119B

## NORTH COAST OFF CHANNEL SITE INVENTORY DATA

**RIVER SYSTEM:** E. F. Dickey **DATE:** 3/14/91 **OBSERVER:** Nettnin

**CHANNEL TYPE:** Terrace Tributary & Riverine Ponds (wall-based)

**TRIBUTARY TO:** E. F. Dickey River (20.0110)

**SITE LOCATION:** R.B. @ R.M. 7.0 (U.S.G.S.)

**LEGAL DESCRIPTION:** NW1/4 S23 T29N R14W

| | UPPER END | LOWER END | RIVER TEMP |
|---|---|---|---|
| **WATER TEMP:** | 44 F | 45 F | 43 F |
| **FLOW (CFS):** | Seep springs | 0.1 - 0.2 | |

**SUBSTRATE TYPE:** Silt.

**SITE SIZE:** **Length-** 360 m (overall)
**Width-** Water surface = 0.5 - 1 m (excluding ponds)
Channel = 1 - 2 m (excluding ponds)
**Depth-** 5 - 10 cm Max. = 15 cm (excluding ponds)

**WATER SOURCE:** Seep springs.

**DIRECTIONS TO SITE:** Go north from Forks on Hwy 101 for 3.1 mi. Turn left (west) about 0.1 mi. beyond MP 195 onto the D-2000. Continue west on the D-2000 for 5.0 miles (crossing the E. F. Dickey bridge) and then turn right (east) onto the D-2400 (just beyond MP 5). Continue on the D-2400 about 2.1 mi. and then bear right onto an unnumbered spur road. Follow this spur road about 1.0 mi (about 9/10 mi take the left fork, and about 50-75 ft there is a right fork - trail is on the left hand side). As the road runs along the rim of the valley wall, a large, riverine pond surrounded by an stand of old growth conifers can be seen at the base of the wall (i.e. to the south of the road). This is the main pond of ED-R3-02.

**FISH ACCESS AND CURRENT USE:** Fish have good access into the egress channel of ED-R3-02. At present flows, a small beaver dam at the outlet of the pond is causing fish passage problems. This barrier is probably submerged by backwater flooding during the heaviest freshets of the year. No fish were observed on the day of this survey.

**FLOODING POTENTIAL:** Pond area appears to have been inundated by river backwater during the floods of last November. The pond area is surrounded on three sides by high to very high ground and appears well protected from destructive high velocity flooding.

**LANDOWNER:** Unknown at this time (probably ITT Rayonier).

**COMMENTS & RECOMMENDATIONS:** ED-R3-02 consists of a fairly large, "main pond" and a smaller upper pond; a short channel connecting the two ponds; and a short egress to the river. The entire system is situated in a small, bowl-shaped basin located on the inside of a long, hard bend in the river. 99% of the habitat found in ED-R3-02 is riverine pond (see pond data supplements).

(Continued on next page)

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## NORTH COAST OFF CHANNEL SITE INVENTORY DATA

**RIVER SYSTEM:** E. F. Dickey **DATE:** 3/14/91 **OBSERVER:** Nettnin

**COMMENTS & RECOMMENDATIONS:** (Continued)

The short (20 m long) egress channel of ED-R3-02 converges with the river at a very nice back eddy near the lower end of the long bend. A short distance above its mouth the egress comes very close to the river. The lower egress could get cut off if the river alters its course or if excess run off spills over this weak spot during heavy rains and erodes a new channel. Such a change could greatly diminish the quality of the entrance conditions.

At the head of the egress channel (i.e. outlet of the main pond) is a small (60 cm high) beaver dam. There is no plunge pool below this dam. At normal winter flows water appears to filter through the dam rather than flowing over it.

The water source for the ponds appears to be small springs seen along the base and side slopes of the bowl-shaped basin. Subsurface springs may also feed the ponds.

The small beaver dam at the outlet of the "main pond" should be replaced by a set of controls. This would provide a much more consistent fry accessibility to the pond at a wider variety of flow conditions. It appears that a small amount of work could greatly benefit the coho production of this site. No machine access but the needed improvements can probably be made with hand tools and an honor camp crew.

**RIVER SYSTEM:** E.F. Dickey
**SITE NUMBER:** ED-R3-02
**POND NAME:** Lower Eagle Pond
(Main Pond)

## POND DATA SUPPLEMENT

**DATE:** 3/14/91 **OBSERVER:** Nettnin

| | INLET | OUTLET |
|---|---|---|
| **WATER TEMPERATURE:** | 44 F | 45 F |

**POND SIZE:**

**LENGTH** - 140 m
**WIDTH** - 50 m
**EST. MAXIMUM DEPTH** - > 1 m

**WATER SOURCE:** Seep springs.

**FISH ACCESS & CURRENT USE:** A small beaver dam at the outlet of the pond appears to create a passage problem for juvenile upstream migrants, particularly on low and moderate flows. There isn't enough water at present to flow over the dam and allow passage. No fish were observed on the day of the survey.

**TYPE & AMOUNT OF IN POND COVER:** Wind thrown trees and sedge grass provide most of the in pond cover. Lots of deep open water.

**COMMENTS & RECOMMENDATIONS:** This relatively large, wall-based pond is the "main pond" of ED-R3-02. It has a much greater surface area and water volume than the upper pond. It appears, however, to have less cover per surface area than the upper pond. The deep, dark water of the lower pond may compensate for its lack of physical cover structures. A good buffer of old growth conifer and alder surrounds the pond and provides excellent shade.

The pond appears to have been inundated by backwater flooding during the big freshets of last November. Decided not to minnow trap the pond this year since it would not be possible to determine how or when the fish were able to enter the pond. Might want to try a Peterson estimate here next fall.

The small beaver dam at the outlet of the pond should be replaced by a set of controls that would allow fry access to the pond at a wider variety of flow conditions.

**GPS: (decimal degrees, Datum WGS84):**
channel egress - N48.00981, W124.6160

**RIVER SYSTEM:** E.F. Dickey
**SITE NUMBER:** ED-R3-02
**POND NAME:** Upper Eagle Pond

## POND DATA SUPPLEMENT

**DATE:** 3/14/91 **OBSERVER:** Nettnin

| | INLET | OUTLET |
|---|---|---|
| **WATER TEMPERATURE:** | 44 F | 45 F |

**POND SIZE:**

**LENGTH** - 180 m
**WIDTH** - 20 m
**EST. MAXIMUM DEPTH** - $\leq$ 1 m

**WATER SOURCE:** Seep springs.

**FISH ACCESS & CURRENT USE:** Up-migrating juvenile coho must get past the small beaver dam at the outlet of the "main pond". Once beyond this point they appear to have unrestricted access to the upper pond.

**TYPE & AMOUNT OF IN POND COVER:** There appear to be adequate amounts of large and small woody debris and aquatic vegetation to provide cover.

**COMMENTS & RECOMMENDATIONS:** The upper pond, like the "main pond", is wall-based. It is considerably shallower than the "main pond" with a maximum depth of 1 m or less. It has abundant cover from woody debris and aquatic vegetation. A good buffer of old growth conifer surrounds the pond and provides excellent shade.

The small beaver dam at the outlet of the lower pond should be replaced by a set of controls that would allow fry access to the pond at a wider variety of flow conditions.

**DATE:** 4/4/91 **OBSERVER:** Young/Nettnin

After about 3+ in of rain in 24-36 hours the out flow increased to about 0.5 cfs. The flow would allow downstream migrants to pass but upstream fish would not be able to pass the beaver dam. Observed a wake from a fish near the outlet.

**DATE:** 4/23/91 **OBSERVER:** Young/ King

Raining today after about a two week dry period. Egress channel was dry. Water level in the main pond was down about 4 to 6 inches from previous visit.

**DATE:** 4/24/91 **OBSERVER:** Nettnin

Checked the outlet and found it flowing about 30 gpm. About 1.5 inches of rain has fallen in the last 24 hrs.

ED-R3-02

**DATE:** 9/18/95 **OBSERVER:** Nettnin

- Replaced a beaver dam, that may have been a passage problem, with a plank weir.
- Widened and lessened the gradient of the channel.
- Materials used: 24 feet of 2 X 12
  12 feet of 2 x 6
  36 sq. Feet of geotextile material
  2 u-bolts, plus hardware
  2 T-posts

**DATE:** 2/21/96 **OBSERVER:** Darrow/Nettnin

The flow over the control was about 0.3 - 0.5 cfs. There was about 4.5 inches of rain prior to this observation. There appeared to be more water flowing and perking from the terrace wall along these ponds then what was flowing over the control.

**MINNOW TRAPPING REPORT**

| TRAP | DATE SET | TEMP | DATE PULLED | TEMP | CATCH COHO | TROUT RBT | TROUT CUTT | TROUT 0+ | COTTID |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2/21 | 5.5°C | 2/22 | 4.5°C | 0 | 0 | 0 | 0 | 13 |
| 2 | 2/21 | 5.5°C | 2/22 | 4.5°C | 0 | 0 | 0 | 0 | 10 |
| 3 | 2/21 | 5.5°C | 2/22 | 4.5°C | 0 | 0 | 0 | 0 | 4 |
| 4 | 2/21 | 5.5°C | 2/22 | 4.5°C | 0 | 0 | 0 | 0 | 0 |
| 5 | 2/21 | 5.5°C | 2/22 | 4.5°C | 0 | 0 | 0 | 0 | 0 |
| 6 | 2/21 | 5.5°C | 2/22 | 4.5°C | 0 | 0 | 0 | 0 | 4 |
| 7 | 2/21 | 5.5°C | 2/22 | 4.5°C | 0 | 0 | 0 | 0 | 1 |
| 8 | 2/21 | 5.5°C | 2/22 | 4.5°C | 0 | 0 | 0 | 0 | 1 |
| | | | | **TOTALS:** | 0 | 0 | 0 | 0 | 33 |

**COMMENTS:**
- Trap #1 was set 120 ft above the plank weir south side of island.
- Trap #2 was set 80 ft above #1, but on north side of island.
- Trap #3 was set about 120 ft above #2 on the north side of the island.
- Trap #4 was set about 80 ft from the end of pond on south side of the island.
- Trap #5 was set in the connecting channel between the two ponds.
- Trap #6 was set about 80 ft from the lower end of the upper pond.
- Trap #7 was set about 100 ft above trap #6.
- Trap #8 was set about 70 ft above trap #7.
- Cold temperatures may have had a bearing on that the fish were not feeding much.

**DATE:** 12/8/96 **OBSERVER:** Darrow

No blockages encountered. There was some beaver cuttings along the right river bank, adjacent to the pond. There were a few wind fallen, small alder limbs at control notch - I cleared these out. There is a whorl pattern in the sedges/grasses on the right bank corner of river, in front of the pond. It appears that during high events, there is a large clockwise whirlpool (there is a deep scour pool in this spot). Observed cottids in channel below plank control.

**DATE:** 5/13/97 **OBSERVER:** Darrow

Just a week without rain and outflow is meager, ~1/6CFS. Upper end has gained some additional debris from this past winter storms. There is only a trickle of water coming out of the pond and it is trickling under right bank notched plank control, which has some minor undermining - this will need to be repaired. Observed 0+ fry in the channel between notched control and confluence. Also observed scattered rises on pond.

20-R3-02

**DATE:** 8/14/97 **OBSERVER:** Nettnin

Repaired both ends to the weir where water was piping around.

**DATE:** 10/16/97 **OBSERVER:** Nettnin

- Stopped small leak on RB side of weir.
- Project looks ok.
- Observed a few fish rising.

**DATE:** 4/12/98 **OBSERVER:** Darrow

Alder windfall on right bank, next to plank control, has undermined and about 60% of the flow was routing this direction. Deepened notch on control to increase flow there. Observed rises in the pond. Fry were seen above and below the control.

**DATE:** 12/6/98 **OBSERVER:** Darrow

Camp crew blazed a new trail down to site. No barriers or obstructions encountered. Flow estimated at 1.0 cfs. Repairs to leaks at plank weir are holding. All water is going over control now. Several salmonids were observed in channel between control and confluence with river.

**DATE:** 4/18/99 **OBSERVER:** Darrow

Pond appears to be receding fast for the amount of precipitation we have had this spring. The out flow is meager (0.1 - 0.15 CFS). Water went subsurface in the last 20 feet to the river. Plank control has no leaks but there is a 10 inch drop at present flows. Observed fry between the control and subsurface reach. There were rises on the pond, above the outlet.

**DATE:** 12/8/99 **OBSERVER:** Nettnin

Removed a few sticks and debris that resulted from beaver activity. Project is in good condition. No fish were observed.

**DATE:** 4/1/00 **OBSERVER:** Nettnin

There are leaks around the left bank end of the control. Clay was packed into the hole and solved the problem.

**DATE:** 11/19/00 **OBSERVER:** Darrow

A dry/cold spell the past 1.5 weeks. Pond had some ice on it, and outflow was meager to the confluence. Control plank was functioning and there were no signs of leaks.

**DATE:** 3/11/01 **OBSERVER:** Darrow

Lower than normal precipitation this winter and early spring. River and pond are low. The pond needs to be about 6 to 7 inches higher to flow. Observed some rises. Trail is in good shape still.

CO-R3-02

**DATE:** 11/6/01 **OBSERVER:** Darrow

Light outflow at present time. The control is okay and no leaks were detected. Observed a few rises on the right bank of pond. Also saw a few fingerlings in the outflow channel, about half-way between the control and the egress. The trail into this site is difficult to negotiate due to pre-commercial thinning.

**DATE:** 6/1/02 **OBSERVER:** Darrow

Not much flow at this time. Observed some salmon fry on the periphery of corner pool at the egress into the river. There were some sporadic rises on the pond. The road into the trail head is also in need of some clearing.

**DATE:** 12/10/02 **OBSERVER:** Nettnin

Partial leak on the left bank end of the control. Made a temporary patch but will need some permanent work.

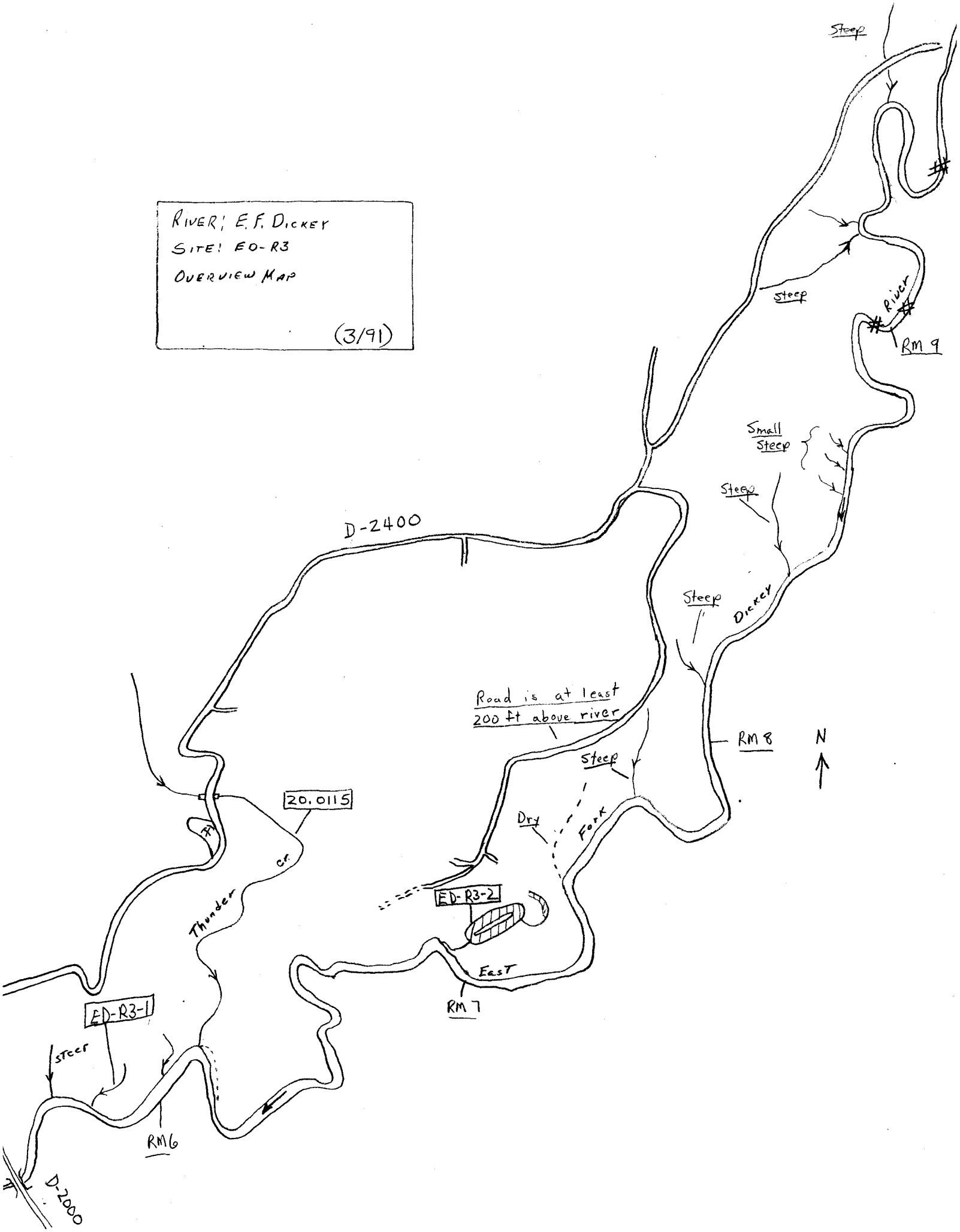
**GPS: (decimal degrees, Datum WGS84):**
channel egress - N48.00981, W124.6160

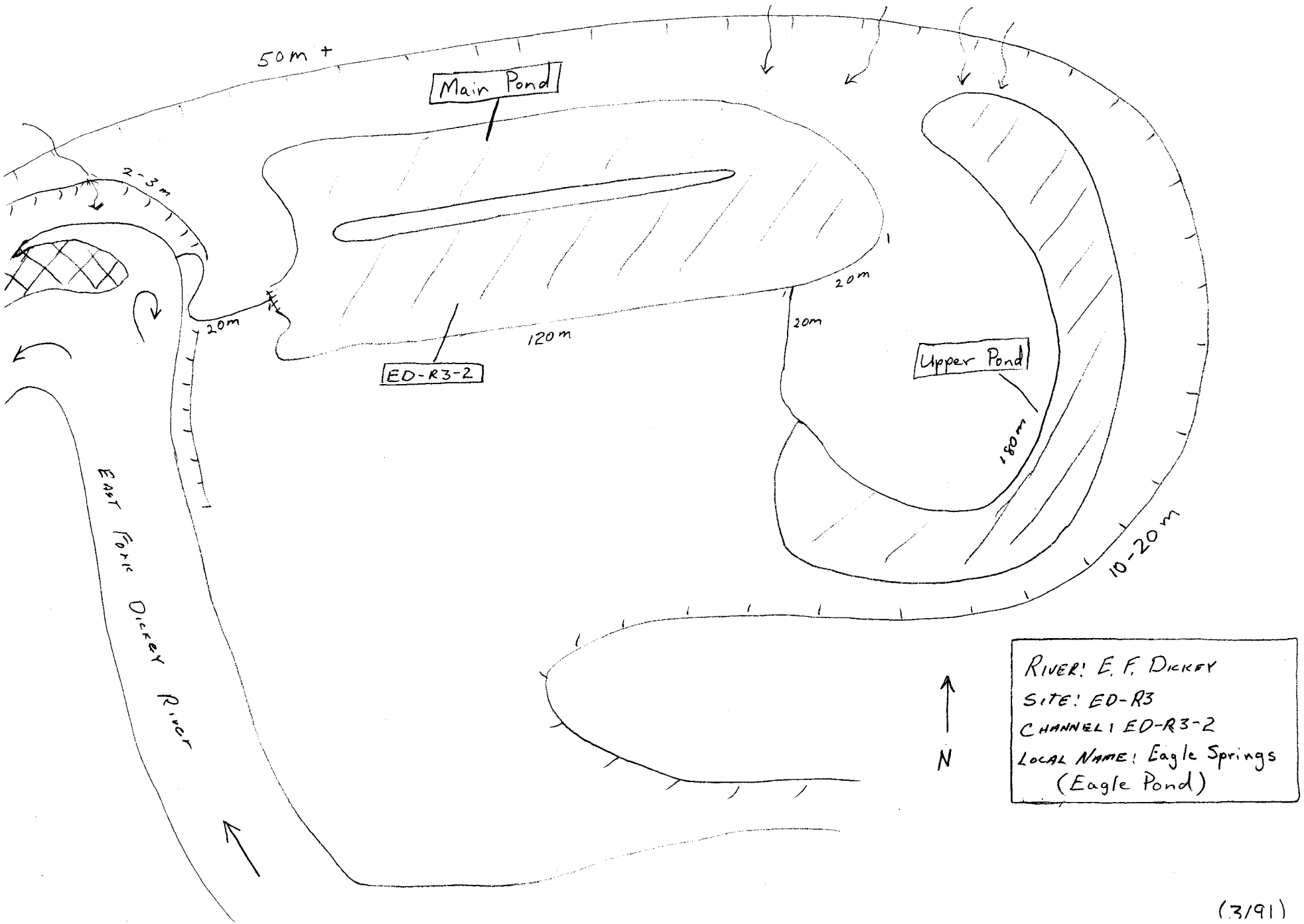
**DATE:** 5/2/03 **OBSERVER:** Nettnin

Very low flow. River is cutting on the bank at the egress which is developing a plunge. There were 0+ fry in the channel. A fish was observed at the pond outlet.

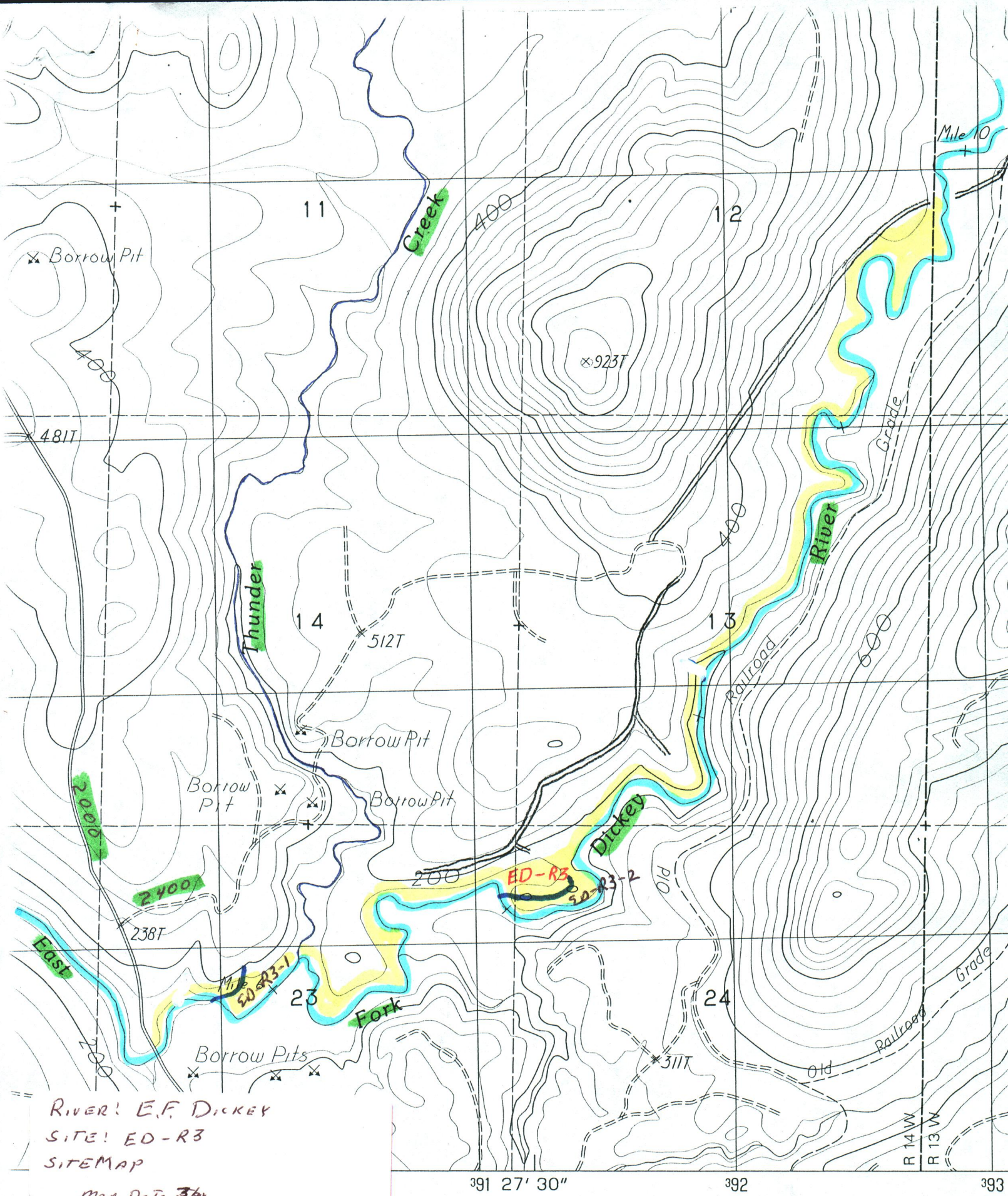
**DATE:** 10/15/03 **OBSERVER:** Nettnin

Decommissioned project. Removed drop structure to stream bed level. Added rubble and gravel mix to form roughened channel to prevent head cutting back to pond. Channel dry.


RIVER: E.F. DICKEY
SITE: ED-R3
OVERVIEW MAP
(3/91)
Steep
Steep
River
RM 9
Small Steep
Steep
D-2400
Steep
Dickey
Road is at least 200 ft above river
RM 8
N
Steep
20.0115
Dry
Fork
Thunder
cr.
ED-R3-2
East
RM 7
ED-R3-1
steep
RM6
D-2000


50m +
Main Pond
2-3m
20m
120m
ED-R3-2
20m
20m
Upper Pond
180m
10-20m
East Fork Dickey River
N
RIVER: E. F. DICKEY
SITE: ED-R3
CHANNEL: ED-R3-2
LOCAL NAME: Eagle Springs
(Eagle Pond)

(3/91)




RIVER: E.F. DICKEY
SITE: ED-R3
SITEMAP
Map Date 3/91

EOLOGICAL SURVEY
..... USGS, NOS/NOAA
I ..... 1977 AND 1978
D .....1984
ERT CONFORMAL CONIC
RCATOR .....ZONE 10
HINGTON NORTH ZONE

NORTH

SCALE 1:24 000

1 .5 0 KILOMETERS
1000 0 METERS
1 .5 0 MILES