

**ODFW AQUATIC INVENTORY PROJECT**  
**OREGON PLAN FOR SALMON & WATERSHEDS**  
**STREAM RESTORATION HABITAT REPORT**

STREAM: Edson Creek Upper (S-170)  
BASIN: Rogue River  
SURVEY TYPE: Post-Tx  
DATE: February 24, 2004  
SURVEY CREW: Michael Scheu, Jeremiah Bernier  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 10.2 km<sup>2</sup>  
USGS MAPS: Gold Beach  
ECOREGION: Coast Range Sitka Spruce

**GENERAL DESCRIPTION:**

The Edson Creek habitat survey extended 492 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 13.2 (range: 7.0-20.0). Land use for the reach was exclosure and light grazing. The average unit gradient was 2.1 percent. Scour pools (41%) and riffles (38%) dominated stream habitat. Gravel (66%) dominated stream substrate. Wood volume was very low at 1.5 m<sup>3</sup>/100m.

**COMMENTS:**

There were no potential barriers to upstream fish migration in the surveyed length.

The crew noted a few habitat structures during the survey.

REACH 1

T36S-R14W-S05SW

REACH 1

**Valley and Channel Summary**

Valley Characteristics (Percent Reach Length)

| <u>Narrow Valley Floor</u> |      | <u>Broad Valley Floor</u> |        |
|----------------------------|------|---------------------------|--------|
| Steep V-shape              | 0%   | Constraining Terraces     | 0%     |
| Moderate V-shape           | 0%   | Multiple Terraces         | 100%   |
| Open V-shape               | 0%   | Wide Floodplain           | 0%     |
| Valley Width Index         | 13.2 | VWI Range:                | 7 - 20 |

Channel Morphology (Percent Reach Length)

| <u>Constrained</u> |      | <u>Unconstrained</u> |    |
|--------------------|------|----------------------|----|
| Hillslope          | 0%   | Single Channel       | 0% |
| Bedrock            | 0%   | Multiple Channel     | 0% |
| Terrace            | 100% | Braided Channel      | 0% |
| Alt. Terrace/Hill  | 0%   |                      |    |
| Landuse            | 0%   |                      |    |

Channel Characteristics

| <u>Type</u> | <u>Length (m)</u> | <u>Area (m2)</u> | <u>Dry Units</u> |
|-------------|-------------------|------------------|------------------|
| Primary     | 492               | 1,313            | 0                |
| Secondary   | 16                | 13               | 1                |

Channel Dimensions (m)

| <u>Wetted</u> | <u>Active</u> | <u>Floodprone</u> n = 5 | <u>First Terrace</u> n = 5 |
|---------------|---------------|-------------------------|----------------------------|
| Width: 2.7    | Width: 4.6    | 6.0 ( 4.7 - 8 )         | 10.9 ( 9 - 14 )            |
| Depth: 0.43   | Height: 0.7   | 1.3 ( 1 - 1.6 )         | 2.5 ( 1.5 - 3 )            |

W:D ratio: 7.3  
Stream Flow Type: MF  
Avg. Unit Gradient: 2.1%

Entrenchment (ACW:FPW ratio): 1.3  
Water temp (°C): 9.0 - 9.0  
Habitat Units/100m: 10.2

**Riparian, Bank, and Wood Summary**

|                      | <u>Primary</u> | <u>Secondary</u> |
|----------------------|----------------|------------------|
| Land Use:            | EX             | LG               |
| Riparian Vegetation: | D3             | S                |

Bank Condition and Shade

| <u>Bank Status</u> | <u>Percent Reach Length</u> | <u>Shade (% of 180)</u> |
|--------------------|-----------------------------|-------------------------|
| Actively Eroding:  |                             | Reach avg:              |
| Undercut Banks:    |                             | Range: -                |

Large Wood Debris

|                             | <u>Total</u> | <u>Total / 100m</u> |
|-----------------------------|--------------|---------------------|
| All pieces (>=3m x 0.15m):  | 15           | 3.0                 |
| Volume (m <sup>3</sup> ):   | 7            | 1.5                 |
| Key pieces (>=10m x 0.60m): | 0            | 0.0                 |

OREGON DEPARTMENT OF FISH AND WILDLIFE

EDSON CREEK UPPER POST-TX (S-170)

HABITAT INVENTORY

Report Date: 6/16/2004

Survey Date:

2/24/2004

REACH 1

T36S-R14W-S05SW

REACH 1

HABITAT DETAIL

| Habitat Type        | Number<br>Units | Total<br>Length<br>(m) | Avg<br>Width<br>(m) | Avg<br>Depth<br>(m) | Total<br>Area<br>(m <sup>2</sup> ) | Large<br>Boulders<br>(#>0.5m) | Substrate<br>Percent Wetted Area |           |           |           |          |          |
|---------------------|-----------------|------------------------|---------------------|---------------------|------------------------------------|-------------------------------|----------------------------------|-----------|-----------|-----------|----------|----------|
|                     |                 |                        |                     |                     |                                    |                               | S/O                              | Snd       | Grvl      | Cbl       | Bldr     | Bdrk     |
| CASCADE/BOULDERS    | 1               | 3                      | 0.4                 | 0.05                | 1                                  | 0                             | 0                                | 50        | 50        | 0         | 0        | 0        |
| POOL-DAMMED         | 1               | 9                      | 2.0                 | 0.60                | 19                                 | 0                             | 0                                | 30        | 40        | 20        | 10       | 0        |
| POOL-LATERAL SCOUR  | 23              | 181                    | 2.8                 | 0.68                | 514                                | 0                             | 0                                | 20        | 68        | 10        | 3        | 0        |
| POOL-PLUNGE         | 1               | 5                      | 2.8                 | 0.50                | 13                                 | 0                             | 0                                | 20        | 55        | 5         | 20       | 0        |
| POOL-STRAIGHT SCOUR | 1               | 7                      | 1.9                 | 0.60                | 12                                 | 0                             | 0                                | 0         | 80        | 20        | 0        | 0        |
| PUDDLED UNIT        | 1               | 13                     | 0.9                 | 0.30                | 12                                 | 0                             | 0                                | 30        | 40        | 30        | 0        | 0        |
| RAPID/BOULDERS      | 4               | 60                     | 2.6                 | 0.23                | 163                                | 0                             | 0                                | 5         | 73        | 23        | 0        | 0        |
| RIFFLE              | 13              | 205                    | 2.4                 | 0.21                | 507                                | 0                             | 0                                | 8         | 70        | 17        | 5        | 0        |
| STEP/COBBLE         | 5               | 22                     | 3.4                 | 0.13                | 78                                 | 0                             | 0                                | 2         | 87        | 11        | 0        | 0        |
| STEP/STRUCTURE      | 2               | 3                      | 2.6                 | 0.20                | 8                                  | 0                             | 0                                | 0         | 0         | 0         | 100      | 0        |
| <b>Total:</b>       | <b>52</b>       | <b>508</b>             | <b>2.7</b>          | <b>0.43</b>         | <b>1,326</b>                       | <b>0</b>                      | <b>Avg: 0</b>                    | <b>14</b> | <b>66</b> | <b>13</b> | <b>7</b> | <b>0</b> |

HABITAT SUMMARY

| Habitat Group     | Number<br>Units | Total<br>Length<br>(m) | Avg<br>Width<br>(m) | Avg<br>Depth<br>(m) | Wetted Area       |         | Large Boulders |                          |
|-------------------|-----------------|------------------------|---------------------|---------------------|-------------------|---------|----------------|--------------------------|
|                   |                 |                        |                     |                     | (m <sup>2</sup> ) | Percent | Number         | (# / 100m <sup>2</sup> ) |
| Dammed & BW Pools | 1               | 9                      | 2.0                 | 0.60                | 19                | 1.42%   | 0              | 0.0                      |
| Scour Pools       | 25              | 192                    | 2.8                 | 0.67                | 539               | 40.65%  | 0              | 0.0                      |
| Glides            | 0               | 0                      |                     |                     | 0                 | 0.00%   | 0              | 0.0                      |
| Riffles           | 13              | 205                    | 2.4                 | 0.21                | 507               | 38.22%  | 0              | 0.0                      |
| Rapids            | 4               | 60                     | 2.6                 | 0.23                | 163               | 12.29%  | 0              | 0.0                      |
| Cascades          | 1               | 3                      | 0.4                 | 0.05                | 1                 | 0.09%   | 0              | 0.0                      |
| Step/Falls        | 7               | 25                     | 3.2                 | 0.15                | 85                | 6.44%   | 0              | 0.0                      |
| Dry               | 1               | 13                     | 0.9                 | 0.30                | 12                | 0.88%   | 0              | 0.0                      |
| Culverts          | 0               | 0                      |                     |                     | 0                 | 0.00%   | 0              | 0.0                      |

POOL SUMMARY

|                                       | Total | # / Km |    |
|---------------------------------------|-------|--------|----|
| All Pools:                            | 26    | 51.2   | 16 |
| Pools >=1m deep:                      | 1     | 2.0    |    |
| Complex pools (LWD pieces>=3):        | 0     | 0.0    |    |
| Pool frequency (channel widths/pool): | 4.2   |        |    |
| Residual pool depth (avg):            | 0.49  |        |    |

**STREAM SUMMARY**

**EDSON CREEK UPPER POST-TX (S-170)**

| Number<br>Units | Total<br>Length<br>(m) | Avg<br>Width<br>(m) | Avg<br>Depth<br>(m) | Total<br>Area<br>(m <sup>2</sup> ) | Substrate           |     |      |     |      |      | Large<br>Boulders<br>(#>0.5m) |
|-----------------|------------------------|---------------------|---------------------|------------------------------------|---------------------|-----|------|-----|------|------|-------------------------------|
|                 |                        |                     |                     |                                    | Percent Wetted Area |     |      |     |      |      |                               |
|                 |                        |                     |                     |                                    | S/O                 | Snd | Grvl | Cbl | Bldr | Bdrk |                               |
| 52              | 508                    | 2.7                 | 0.43                | 1,326                              | 0                   | 14  | 66   | 13  | 7    | 0    |                               |

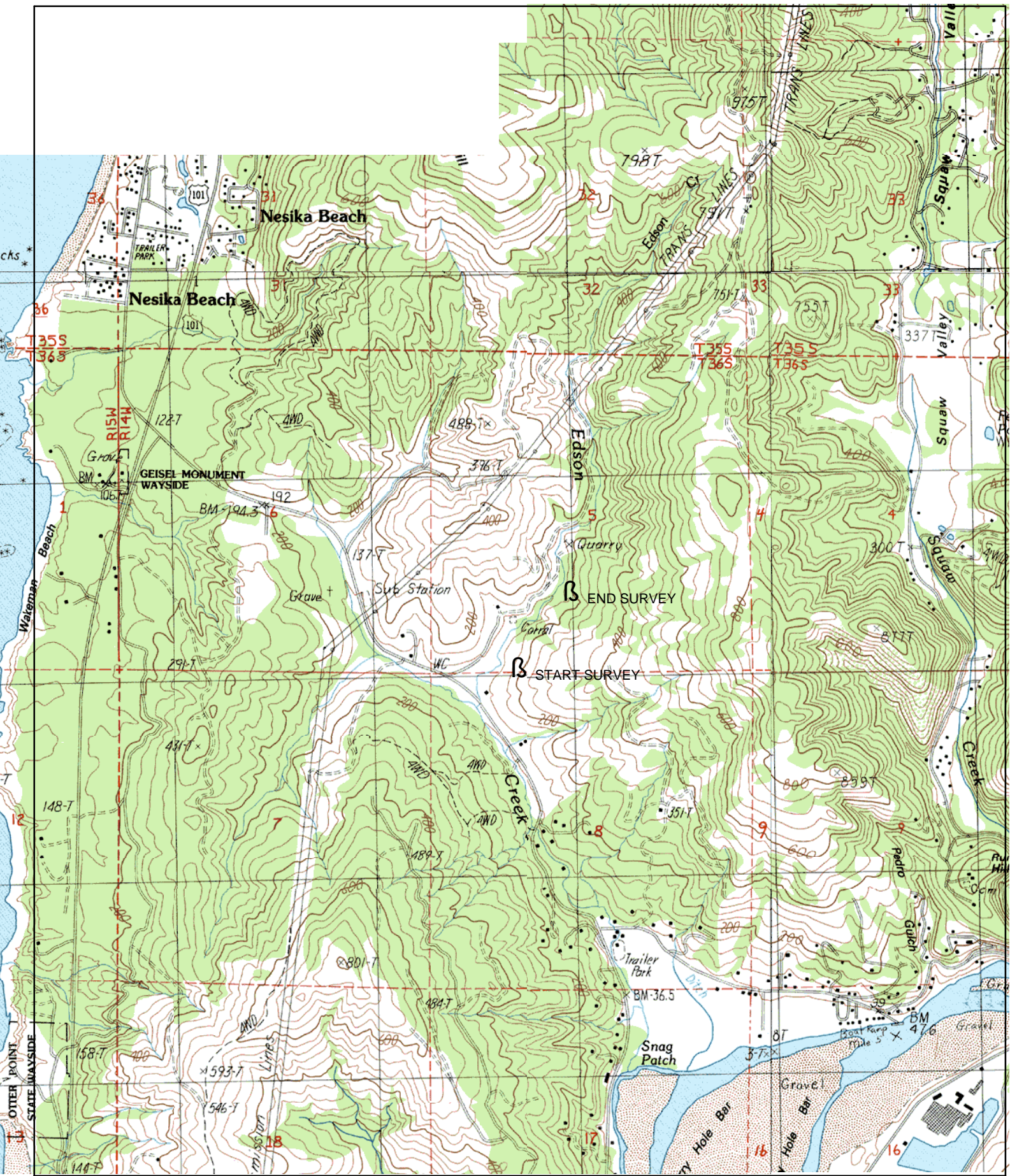
| Habitat Group     | Wetted Area       |         |
|-------------------|-------------------|---------|
|                   | (m <sup>2</sup> ) | Percent |
| Dammed & BW Pools | 19                | 1.42%   |
| Scour Pools       | 539               | 40.65%  |
| Glides            | 0                 | 0.00%   |
| Riffles           | 507               | 38.22%  |
| Rapids            | 163               | 12.29%  |
| Cascades          | 1                 | 0.09%   |
| Step/Falls        | 85                | 6.44%   |
| Dry               | 12                | 0.88%   |
| Culverts          | 0                 | 0.00%   |

# Comment Summary

## Oregon Plan Monitoring Sites 2002

MONITORING AREA: **5-SC**      SITE ID: **170**      EDSON CREEK UPPER POST-TX (S-1)

| UNIT# | TYPE | CHAN | DIST. (m) | COMMENTS  | NOTE ESTIMATOR  | NOTE NUMERATOR |
|-------|------|------|-----------|-----------|-----------------|----------------|
| 6     | RI   | 00   | 48.2      | CS/       |                 |                |
| 7     | LP   | 00   | 54.9      | CS/       |                 |                |
| 10    | LP   | 00   | 88.5      | CS/       |                 |                |
| 15    | RI   | 00   | 145.8     | CS/CS     |                 |                |
| 16    | LP   | 00   | 151.8     | /CS, SS   |                 |                |
| 17    | SC   | 00   | 155.1     | /SS       |                 |                |
| 18    | LP   | 00   | 165.1     | LA/, DJ   |                 |                |
| 19    | SC   | 00   | 169.6     | SS/       |                 |                |
| 20    | LP   | 00   | 178.7     | /SS, LA   |                 |                |
| 21    | RI   | 00   | 193.5     | /SS, LA   |                 |                |
| 22    | LP   | 00   | 198.4     | /CS       |                 |                |
| 23    | RI   | 00   | 225.1     | CS/LA     | CS/LA           |                |
| 24    | LP   | 00   | 231.2     | /LA       |                 |                |
| 25    | RI   | 00   | 250.2     | BC, CS/CS | PVT RD          |                |
| 26    | LP   | 00   | 257.5     | CS/       |                 |                |
| 27    | SS   | 00   | 258.9     | HS        | BLDRS           |                |
| 29    | SS   | 00   | 265       |           | BLDRS           |                |
| 31    | LP   | 01   | 283.7     | TJ/       | NOT ON MAP      |                |
| 32    | CB   | 11   | 283.7     |           | T=10C, ACW=1.5M |                |
| 38    | RB   | 00   | 345.6     | SD        | PUMP HOUSE      |                |
| 48    | SC   | 00   | 443       | /CS       |                 |                |



Name: GOLD BEACH  
 Date: 1/21/2004  
 Scale: 1 inch equals 2000 feet

Location: 10 385738 E 4704423 N  
 Caption: EDSON CREEK UPPER RESTORATION SITE - ROGUE BASIN