**ODFW AQUATIC INVENTORY PROJECT**

**OREGON PLAN FOR SALMON & WATERSHEDS**

**STREAM RESTORATION HABITAT REPORT**

| | |
|---|---|
| STREAM: | Elk Creek (MS-291) |
| BASIN: | Coquille River |
| SURVEY TYPE: | Post-Tx |
| DATE: | March 1, 2006 |
| SURVEY CREW: | Scott Venables, Seth Ring |
| REPORT PREPARED BY: | Paul Jacobsen |
| BASIN AREA: | 39.0 $km^3$ |
| USGS MAPS: | Remote |
| ECOREGION: | Coast Range Sedimentary |

GENERAL DESCRIPTION:

The Elk Creek habitat survey extended 762 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 8.4 (range: 6.0-10.0). Land use for the reach was mature (50-90 cm dbh) trees and timber harvest. The average unit gradient was 0.4 percent. Scour pools (90%) dominated stream habitat. Bedrock (50%) dominated stream substrate. Wood volume was very high at 52.8 $m^3$/100m.

COMMENTS:

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

The crew noted several habitat structures during the survey.

**OREGON DEPT OF FISH AND WILDLIFE** **ELK CREEK POST-TX (3-MS, 291)**

**HABITAT INVENTORY** Report Date: 12/6/2006 Survey Date: 3/1/2006

**REACH 1** **T28S-R11W-S27SW** **REACH 1**

## Valley and Channel Summary

Valley Characteristics (Percent Reach Length)

| Narrow Valley Floor | | Broad Valley Floor | |
|---|---|---|---|
| Steep V-shape | 0% | Constraining Terraces | 0% |
| Moderate V-shape | 0% | Multiple Terraces | 100% |
| Open V-shape | 0% | Wide Floodplain | 0% |

Valley Width Index 8.4 VWI Range: 6 - 10

Channel Morphology (Percent Reach Length)

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

Channel Characteristics

| Type | Length (m) | Area (m2) | Dry Units |
|---|---|---|---|
| Primary Channel | 762 | 9,443 | 0 |
| Secondary Channel | 0 | 0 | 0 |
| Off-Channel Units | 22 | 29 | 0 |

Channel Dimensions (m)

| Wetted | | Active | | Floodprone *n* = 5 | First Terrace *n* = 5 |
|---|---|---|---|---|---|
| Width: | 9.1 | Width: | 14.0 | 18.5 ( 16.3 - 21.9 ) | 22.0 ( 19.4 - 24.8 ) |
| Depth: | 0.60 | Height: | 0.9 | 1.9 ( 1.7 - 2.1 ) | 3.6 ( 2.9 - 4.7 ) |

W:D ratio: 14.9
Entrenchment (ACW:FPW ratio): 1.3
Stream Flow Type: MF
Habitat Units/100m (total channel length): 2.7
Average Unit Gradient: 0.4%
Habitat Units/100m (primary channel length): 2.8
Water temperature (°C): 7.5 - 7.5

## Riparian, Bank, and Wood Summary

| | Primary | Secondary |
|---|---|---|
| Land Use: | MT | TH |
| Riparian Vegetation: | D30 | C30 |

Bank Condition and Shade

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

Large Wood Debris

| | Total | Total / 100m primary channel |
|---|---|---|
| All pieces (>=3m x 0.15m): | 169 | 22.2 |
| Volume ($m^3$): | 402 | 52.8 |
| Key pieces (>=12m x 0.60m): | 27 | 3.5 |

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**HABITAT INVENTORY** Report Date: 12/6/2006 Survey Date: 3/1/2006

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**HABITAT DETAIL**

| Habitat Type | Number Units | Total Length (m) | Avg Width (m) | Avg Depth (m) | Total Area ($m^2$) | Large Boulders (#>0.5m) | Substrate Percent Wetted Area S/O | Snd | Grvl | Cbl | Bldr | Bdrk |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CASCADE/BEDROCK | 1 | 3 | 0.4 | 0.10 | 1 | 0 | 10 | 0 | 5 | 0 | 0 | 85 |
| POOL-BACKWATER | 1 | 8 | 2.3 | 0.30 | 19 | 0 | 60 | 40 | 0 | 0 | 0 | 0 |
| POOL-LATERAL SCOUR | 8 | 657 | 12.5 | 1.23 | 8,304 | 0 | 24 | 31 | 21 | 2 | 5 | 18 |
| POOL-PLUNGE | 2 | 18 | 6.3 | 0.45 | 192 | 0 | 0 | 0 | 5 | 0 | 8 | 88 |
| RAPID/BEDROCK | 2 | 50 | 11.2 | 0.25 | 536 | 0 | 0 | 3 | 3 | 0 | 5 | 90 |
| RAPID/BOULDERS | 1 | 8 | 14.2 | 0.40 | 111 | 0 | 5 | 5 | 5 | 0 | 30 | 55 |
| RIFFLE W/ POCKETS | 1 | 30 | 9.6 | 0.40 | 288 | 0 | 5 | 5 | 10 | 15 | 5 | 60 |
| STEP/BEAVER DAM | 1 | 1 | 16.2 | 0.05 | 10 | 0 | 40 | 25 | 25 | 0 | 0 | 10 |
| STEP/BEDROCK | 3 | 9 | 0.9 | 0.02 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |
| STEP/LOG | 1 | 0 | 11.6 | 0.10 | 4 | 0 | 30 | 0 | 0 | 0 | 20 | 50 |
| **Total:** | 21 | 784 | 9.1 | 0.60 | 9,472 | 0 | **Avg:** 16 | 15 | 11 | 2 | 6 | 50 |

**HABITAT SUMMARY**

| Habitat Group | Number Units | Total Length (m) | Avg Width (m) | Avg Depth (m) | Wetted Area ($m^2$) | Wetted Area Percent | Large Boulders Number | Large Boulders (# / $100m^2$) |
|---|---|---|---|---|---|---|---|---|
| Dammed & BW Pools | 1 | 8 | 2.3 | 0.30 | 19 | 0.20% | 0 | 0.0 |
| Scour Pools | 10 | 675 | 11.3 | 1.08 | 8,496 | 89.69% | 0 | 0.0 |
| Glides | 0 | 0 | | | 0 | 0.00% | 0 | 0.0 |
| Riffles | 1 | 30 | 9.6 | 0.40 | 288 | 3.04% | 0 | 0.0 |
| Rapids | 3 | 58 | 12.2 | 0.30 | 647 | 6.83% | 0 | 0.0 |
| Cascades | 1 | 3 | 0.4 | 0.10 | 1 | 0.01% | 0 | 0.0 |
| Step/Falls | 5 | 10 | 6.1 | 0.04 | 22 | 0.23% | 0 | 0.0 |
| Dry | 0 | 0 | | | 0 | 0.00% | 0 | 0.0 |
| Culverts | 0 | 0 | | | 0 | 0.00% | 0 | 0.0 |

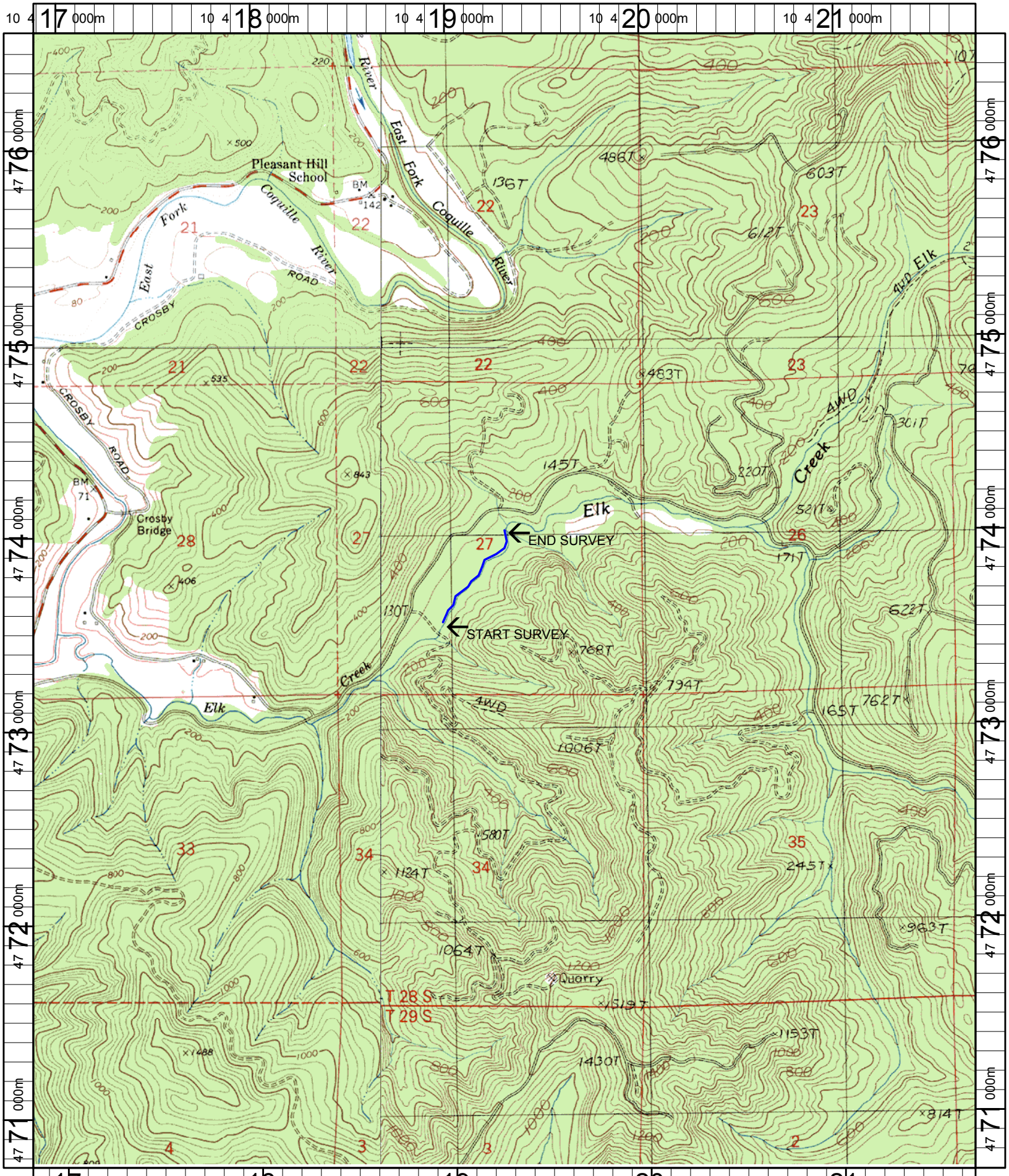
**POOL SUMMARY**

| | Total | Total of all Channel Lengths # / Km | Primary Channel Length # / Km |
|---|---|---|---|
| All Pools: | 11 | 14.0 | 14.4 |
| Pools >=1m deep: | 6 | 7.7 | 7.9 |
| Complex pools (LWD pieces>=3): | 7 | 8.9 | 9.2 |
| Pool frequency (channel widths/pool): | 5.1 | | |
| Residual pool depth (avg): | 0.84 | | |

# Comment Summary
# Restoration Monitoring Sites 2006

**MONITORING AREA:** **3-MS** **SITE ID:** **291** **ELK CREEK POST-TX**

| UNIT# | TYPE | CHAN | DIST. (m) | COMMENTS | NOTE ESTIMATOR | NOTE NUMERATOR |
|---|---|---|---|---|---|---|
| 1 | RP | 01 | 30 | TJ/ | T = 7.5 @ 9am | |
| 2 | CR | 11 | 30 | | T = 6.0, ACW = 1.4 | |
| 5 | PP | 00 | 76.4 | HS | LOGS AND BOULDERS | |
| 6 | SL | 00 | 76.75 | | H = 0.4 | |
| 7 | LP | 00 | 202.85 | HS x 2 | /SS x 2 | |
| 8 | LP | 01 | 224.65 | TJ/ | | |
| 9 | SR | 11 | 224.65 | | H = 2.4, ACW = 1.2, T = 6.5 | |
| 10 | LP | 00 | 274.55 | HS | | |
| 11 | RR | 00 | 294.25 | SS/ | | |
| 12 | LP | 01 | 365.05 | HS x 2 | SS/TJ | |
| 13 | SR | 11 | 365.05 | | T = 8.0, ACW = 1.0 | |
| 16 | LP | 01 | 576.15 | HS, /TJ | | |
| 17 | SR | 11 | 576.15 | | H = 3.9, T = 8.5, ACW = 1.4 | |
| 18 | LP | 00 | 622.95 | HS, /SS | STEELHEAD | |
| 19 | SD | 00 | 623.55 | HS, DJ, BD | | |




Name: DORA
Date: 1/6/2005
Scale: 1 inch equals 2000 feet

Location: 10 419276 E 4773652 N
Caption: ELK CREEK RESTORATION SITE - COQUILLE BASIN