**ODFW AQUATIC INVENTORY PROJECT**

**OREGON PLAN FOR SALMON & WATERSHEDS**

**STREAM RESTORATION HABITAT REPORT**

| | |
|---|---|
| STREAM: | Foster Creek (L86) |
| BASIN: | Clackamas River |
| SURVEY TYPE: | Pre-Tx |
| DATE: | February 27, 2002 |
| SURVEY CREW: | Loren Stucker, Russ Macal |
| REPORT PREPARED BY: | Paul Jacobsen |
| BASIN AREA: | 9.0 $km^2$ |
| USGS MAPS: | Redland |
| ECOREGION: | Willamette Valley Foothills |

GENERAL DESCRIPTION:

The Foster Creek habitat survey extended 751 meters. The channel was unconstrained in a broad valley floor. The average valley width index was 14.2 (range: 10.0-20.0). Land uses for the reach were heavy grazing and rural residential. The average unit gradient was 0.7 percent. Riffles (57%) and scour pools (26%) dominated stream habitat. Gravel (59%), cobble (18%) and silt/organics (18%) dominated stream substrate. Wood volume was low at 0.5 $m^3$/100m.

COMMENTS:

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

**OREGON DEPARTMENT OF FISH AND WILDLIFE** **FOSTER CREEK PRE-TX (L-86)**

**HABITAT INVENTORY** Report Date: 11/15/2013 Survey Date: 2/27/2002

REACH **T2S-R3E-S43SE** REACH

## 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 14.2 VWI Range: 10 - 20

Channel Morphology (Percent Reach Length)

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

Channel Characteristics

| Type | Length (m) | Area (m2) | Dry Units |
|---|---|---|---|
| Primary | 751 | 1,804 | 0 |
| Secondary | 123 | 224 | 1 |

Channel Dimensions (m)

| Wetted | | Active | | Floodprone *n* = 6 | | First Terrace *n* = 6 | |
|---|---|---|---|---|---|---|---|
| Width: | 2.4 | Width: | 3.2 | 4.5 | ( 3 - 6 ) | 5.2 | ( 3.1 - 7.9 ) |
| Depth: | 0.25 | Height: | 0.4 | 0.7 | ( 0.6 - 1 ) | 0.8 | ( 0.7 - 1.1 ) |

W:D ratio: 9.4
Stream Flow Type: MF
Average Unit Gradient: 0.7%
Water temperature (°C): 4.0 - 4.0

Entrenchment (ACW:FPW ratio): 1.4
Habitat Units/100m (total channel length): 4.6
Habitat Units/100m (primary channel length): 5.3

## Riparian, Bank, and Wood Summary

| | Primary | Secondary |
|---|---|---|
| Land Use: | HG | RR |
| Riparian Vegetation: | S | D15 |

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): | 10 | 1.3 |
| Volume ($m^3$): | 4 | 0.5 |
| Key pieces (>=12m x 0.60m): | 0 | 0.0 |

**OREGON DEPARTMENT OF FISH AND WILDLIFE** **FOSTER CREEK PRE-TX (L-86)**

**HABITAT INVENTORY** Report Date: 11/15/2013 Survey Date: 2/27/2002

REACH **T2S-R3E-S43SE** REACH

## 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DRY UNIT | 1 | 61 | 2.0 | 0.00 | 122 | 0 | 75 | 5 | 15 | 5 | 0 | 0 |
| GLIDE | 3 | 66 | 3.4 | 0.25 | 223 | 0 | 15 | 5 | 62 | 18 | 0 | 0 |
| POOL-LATERAL SCOUR | 15 | 191 | 2.9 | 0.36 | 537 | 0 | 17 | 4 | 63 | 17 | 0 | 0 |
| RIFFLE | 21 | 555 | 2.0 | 0.19 | 1,147 | 0 | 17 | 5 | 59 | 19 | 0 | 0 |
| **Total:** | 40 | 874 | 2.4 | 0.25 | 2,029 | 0 | **Avg:** 18 | 5 | 59 | 18 | 0 | 0 |

## 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 | 0 | 0 | | | 0 | 0.00% | 0 | 0.0 |
| Scour Pools | 15 | 191 | 2.9 | 0.36 | 537 | 26.46% | 0 | 0.0 |
| Glides | 3 | 66 | 3.4 | 0.25 | 223 | 10.98% | 0 | 0.0 |
| Riffles | 21 | 555 | 2.0 | 0.19 | 1,147 | 56.54% | 0 | 0.0 |
| Rapids | 0 | 0 | | | 0 | 0.00% | 0 | 0.0 |
| Cascades | 0 | 0 | | | 0 | 0.00% | 0 | 0.0 |
| Step/Falls | 0 | 0 | | | 0 | 0.00% | 0 | 0.0 |
| Dry | 1 | 61 | 2.0 | 0.00 | 122 | 6.01% | 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: | 15 | 17.2 | 20.0 |
| Pools >=1m deep: | 0 | 0.0 | 0.0 |
| Complex pools (LWD pieces>=3): | 0 | 0.0 | 0.0 |
| Pool frequency (channel widths/pool): | 18.2 | | |
| Residual pool depth (avg): | 0.16 | | |

# Comment Summary

# Oregon Plan Monitoring Sites 2002

**MONITORING AREA:** **7-L** **SITE ID:** **86** **FOSTER CREEK PRE-TX (L-86)**

| UNIT# | TYPE | CHAN | DIST. (m) | COMMENTS | NOTES |
|---|---|---|---|---|---|
| 1 | RI | 00 | 18.2 | FC | START AT FC |
| 2 | LP | 00 | 24.7 | | GENERALLY HEAVILY GRAZED |
| 6 | LP | 00 | 74.3 | | QUESTIONABLE POOLS |
| 10 | LP | 00 | 158.8 | | CATTLE CROSSING THRU WATER |
| 11 | RI | 00 | 201.9 | RF | CUT LOGS FOR HS ON BANK |
| 17 | RI | 01 | 321.4 | | TRIB FLOW = 3% |
| 23 | LP | 00 | 406.6 | /SS | |
| 31 | LP | 00 | 581.5 | | HEAVY CATTLE CROSSING |
| 32 | RI | 00 | 608.8 | FC | |
| 33 | LP | 01 | 620.8 | | FENCED FROM CATTLE |
| 40 | LP | 00 | 750.9 | | END AT FC BEFORE CC |