

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

STREAM: Fall Creek Tributary A (MS162)  
BASIN: Coos River  
SURVEY TYPE: Pre-Tx  
DATE: February 5, 2002  
SURVEY CREW: Sara Meguffy, Sarah Schuster  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 6.8 km<sup>2</sup>  
USGS MAPS: Tioga  
ECOREGION: Coast Range Sedimentary

**GENERAL DESCRIPTION:**

The Fall Creek Tributary A habitat survey extended 519 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 4.2 (range: 1.5 – 10.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 1.7 percent. Riffles (44%) and scour pools (33%) dominated stream habitat. Sand (31%) and gravel (28%) dominated stream substrate. Wood volume was low at 12.4 m<sup>3</sup>/100m.

**COMMENTS:**

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

The crew noted two habitat structures plus several debris jams and landslides during the survey.

REACH

**T25S-R10W-S25SE**

REACH

**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     | 100%     |
| Moderate V-shape           | 0%  | Multiple Terraces         | 0%       |
| Open V-shape               | 0%  | Wide Floodplain           | 0%       |
| Valley Width Index         | 4.2 | VWI Range:                | 1.5 - 10 |

Channel Morphology (Percent Reach Length)

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

Channel Characteristics

| <u>Type</u> | <u>Length (m)</u> | <u>Area (m2)</u> | <u>Dry Units</u> |
|-------------|-------------------|------------------|------------------|
| Primary     | 519               | 2,923            | 0                |
| Secondary   | 37                | 114              | 0                |

Channel Dimensions (m)

| <u>Wetted</u> | <u>Active</u> | <u>Floodprone</u> n = 5 | <u>First Terrace</u> n = 3 |
|---------------|---------------|-------------------------|----------------------------|
| Width: 4.7    | Width: 7.7    | 11.4 ( 7.4 - 13.2 )     | 14.6 ( 11.4 - 17.2 )       |
| Depth: 0.51   | Height: 0.7   | 1.4 ( 1.3 - 1.8 )       | 2.4 ( 2.1 - 3 )            |

W:D ratio: 11.2  
Stream Flow Type: MF  
Average Unit Gradient: 1.7%  
Water temperature (°C): 7.0 - 7.0

Entrenchment (ACW:FPW ratio): 1.5  
Habitat Units/100m (total channel length): 10.2  
Habitat Units/100m (primary channel length): 11.0

**Riparian, Bank, and Wood Summary**

|                      | <u>Primary</u> | <u>Secondary</u> |
|----------------------|----------------|------------------|
| Land Use:            | ST             |                  |
| Riparian Vegetation: | D15            | G                |

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 primary channel</u> |
|-----------------------------|--------------|-------------------------------------|
| All pieces (>=3m x 0.15m):  | 117          | 22.5                                |
| Volume (m <sup>3</sup> ):   | 64           | 12.4                                |
| Key pieces (>=12m x 0.60m): | 0            | 0.0                                 |

OREGON DEPARTMENT OF FISH AND WILDLIFE

FALL CR TRIB A PRE-TX (MS-162)

HABITAT INVENTORY

Report Date: 11/15/2013

Survey Date:

2/5/2002

| REACH               |                 | T25S-R10W-S25SE        |                     |                     |                                    |                               | REACH                            |           |           |           |           |          |
|---------------------|-----------------|------------------------|---------------------|---------------------|------------------------------------|-------------------------------|----------------------------------|-----------|-----------|-----------|-----------|----------|
| 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               | 5                      | 2.8                 | 0.35                | 13                                 | 0                             | 14                               | 29        | 19        | 19        | 19        | 0        |
| CULVERT CROSSING    | 1               | 22                     | 3.8                 | 0.20                | 83                                 | 0                             | 5                                | 20        | 25        | 45        | 5         | 0        |
| POOL-BACKWATER      | 3               | 12                     | 2.2                 | 0.53                | 26                                 | 0                             | 20                               | 57        | 18        | 3         | 2         | 0        |
| POOL-DAMMED         | 5               | 44                     | 5.6                 | 0.88                | 261                                | 0                             | 19                               | 49        | 18        | 10        | 5         | 0        |
| POOL-LATERAL SCOUR  | 8               | 108                    | 5.9                 | 0.90                | 644                                | 0                             | 16                               | 37        | 25        | 8         | 9         | 4        |
| POOL-PLUNGE         | 8               | 42                     | 4.4                 | 0.81                | 192                                | 0                             | 11                               | 27        | 29        | 15        | 16        | 3        |
| POOL-STRAIGHT SCOUR | 3               | 32                     | 5.2                 | 0.76                | 164                                | 0                             | 18                               | 32        | 25        | 8         | 3         | 14       |
| RAPID/BEDROCK       | 1               | 29                     | 5.3                 | 0.25                | 154                                | 0                             | 5                                | 15        | 10        | 5         | 5         | 60       |
| RAPID/BOULDERS      | 1               | 14                     | 6.8                 | 0.35                | 94                                 | 0                             | 10                               | 30        | 25        | 15        | 20        | 0        |
| RIFFLE              | 13              | 232                    | 5.1                 | 0.31                | 1,337                              | 0                             | 7                                | 24        | 43        | 19        | 6         | 2        |
| STEP/BOULDERS       | 1               | 1                      | 2.5                 | 0.10                | 3                                  | 0                             | 9                                | 27        | 14        | 14        | 36        | 0        |
| STEP/COBBLE         | 1               | 2                      | 2.5                 | 0.15                | 5                                  | 0                             | 5                                | 21        | 68        | 5         | 0         | 0        |
| STEP/LOG            | 9               | 11                     | 4.3                 | 0.14                | 55                                 | 0                             | 14                               | 33        | 22        | 15        | 15        | 1        |
| STEP/STRUCTURE      | 2               | 2                      | 3.1                 | 0.05                | 7                                  | 0                             | 5                                | 10        | 10        | 15        | 60        | 0        |
| <b>Total:</b>       | <b>57</b>       | <b>556</b>             | <b>4.7</b>          | <b>0.51</b>         | <b>3,036</b>                       | <b>0</b>                      | <b>Avg: 12</b>                   | <b>31</b> | <b>28</b> | <b>14</b> | <b>11</b> | <b>3</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 | 8               | 56                     | 4.3                 | 0.75                | 287               | 9.45%   | 0              | 0.0                      |
| Scour Pools       | 19              | 183                    | 5.1                 | 0.84                | 999               | 32.91%  | 0              | 0.0                      |
| Glides            | 0               | 0                      |                     |                     | 0                 | 0.00%   | 0              | 0.0                      |
| Riffles           | 13              | 232                    | 5.1                 | 0.31                | 1,337             | 44.02%  | 0              | 0.0                      |
| Rapids            | 2               | 43                     | 6.1                 | 0.30                | 248               | 8.15%   | 0              | 0.0                      |
| Cascades          | 1               | 5                      | 2.8                 | 0.35                | 13                | 0.43%   | 0              | 0.0                      |
| Step/Falls        | 13              | 17                     | 3.8                 | 0.12                | 70                | 2.31%   | 0              | 0.0                      |
| Dry               | 0               | 0                      |                     |                     | 0                 | 0.00%   | 0              | 0.0                      |
| Culverts          | 1               | 22                     | 3.8                 | 0.20                | 83                | 2.73%   | 0              | 0.0                      |

| POOL SUMMARY                          |              |  |  |
|---------------------------------------|--------------|--|--|
|                                       | <u>Total</u> | <u>Total of all Channel Lengths<br/># / Km</u> | <u>Primary Channel Length<br/># / Km</u> |
| All Pools:                            | 27           | 48.5   | 52.0                                     |
| Pools >=1m deep:                      | 8            | 14.4   | 15.4                                     |
| Complex pools (LWD pieces>=3):        | 4            | 7.2  | 7.7                                      |
| Pool frequency (channel widths/pool): | 2.7          |  |  |
| Residual pool depth (avg):            | 0.55         |  |  |

# Comment Summary

## Oregon Plan Monitoring Sites 2002

MONITORING AREA: **3-MS**      SITE ID: **162**      FALL CR TRIB A PRE-TX (MS-162)

| UNIT# | TYPE | CHAN | DIST. (m) | COMMENTS  | NOTES                 |
|-------|------|------|-----------|-----------|-----------------------|
| 5     | SL   | 00   | 61.5      | DJ        | WOOD JAM, H = .7      |
| 6     | DP   | 00   | 70.5      | /LI       | EROSION               |
| 11    | RI   | 00   | 177.2     | SS/       |                       |
| 13    | RI   | 01   | 203.7     | TJ/       |                       |
| 16    | SS   | 11   | 203.7     | HS        | H = .35, BOULDERS     |
| 18    | SS   | 11   | 203.7     | HS        | H = .3, BOULDERS      |
| 19    | RI   | 11   | 203.7     | CS/CS     | END AT CC             |
| 20    | RI   | 00   | 219.3     | CS/       | T = 6.5               |
| 21    | CC   | 00   | 241.1     | CC, CS/CS | 2.2 x 3.4, NO STEP    |
| 22    | RI   | 00   | 250.2     | CS/CS     | BOULDERS              |
| 23    | SP   | 00   | 264.4     |           | CABLE IN WATER, ROAD/ |
| 26    | SL   | 00   | 276.1     |           | H = .3                |
| 28    | SL   | 00   | 292.9     |           | H = .55               |
| 30    | SL   | 00   | 297.9     |           | H = .4                |
| 31    | LP   | 00   | 313       | WL        | ELK TRACKS            |
| 32    | SL   | 00   | 314.4     |           | H = .35               |
| 35    | SB   | 00   | 348.6     |           | H = .35               |
| 36    | RB   | 00   | 362.4     | DJ, /LA   |                       |
| 37    | PP   | 01   | 368.3     | DJ, /LA   |                       |
| 38    | BW   | 10   | 368.3     | /LA       |                       |
| 39    | CB   | 00   | 373       | /LI       |                       |

# Comment Summary

## Oregon Plan Monitoring Sites 2002

MONITORING AREA: 3-MS SITE ID: 162 FALL CR TRIB A PRE-TX (MS-162)

| UNIT# | TYPE | CHAN | DIST. (m) | COMMENTS | NOTES                        |
|-------|------|------|-----------|----------|------------------------------|
| 40    | DP   | 00   | 380.3     | /LI, /SS | LOTS OF WOODY DEBRIS         |
| 41    | SL   | 00   | 381.3     |          | H = .35                      |
| 45    | PP   | 00   | 419.6     |          | MYRTLEWOOD PROMINENT         |
| 46    | SL   | 00   | 420.5     |          | H = .25                      |
| 51    | LP   | 00   | 469.5     | DJ       | WOODY DEBRIS SEPARATES POOLS |
| 52    | LP   | 00   | 488.6     | DJ       |                              |
| 53    | SL   | 00   | 491.2     |          | H = .9                       |
| 56    | SL   | 00   | 512.25    |          | H = .3                       |
| 57    | DP   | 00   | 519.05    |          | /END SIGN                    |