

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

STREAM: Lobster Creek (MC-374)
BASIN: Alsea River
SURVEY TYPE: Post-Tx
DATE: March 4, 2008
SURVEY CREW: Sharon Tippery, Matt Weeber
REPORT PREPARED BY: Sharon Tippery
BASIN AREA: 25.4 km²
USGS MAPS: Digger Mountain
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Lobster Creek habitat survey extended 1,633 meters. The channel was constrained by multiple terraces in a broad valley floor. The average valley width index was 5.9 (range: 4-9). Land use for the reach was large growth timber (30-50cm dbh) and second growth timber (15-30cm dbh). The average unit gradient was 0.7 percent. Scour pools (59%) and riffles (27%) dominated stream habitat. Gravel (40%), sand (24%) and cobble (22%) dominated stream substrate. Wood volume was 49.0m³/100m.

COMMENTS:

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

The crew noted several habitat structures and five debris jams during the survey.

Beaver activity, Coho fry, several redds, rough-skinned newts, a song sparrow, an American dipper, a duck, and fish carcass were observed during the survey.

**OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY**

**LOBSTER CREEK
GCG: 2-MC SITE ID: 374**

Survey Date: 3/4/2008

Report Date: 5/8/2008

T15S-R08W-S15SE

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 | 5.9 | VWI Range: | 4 - 9 |

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 | 1,633 | 16,626 | 0 |
| Secondary | 295 | 1,182 | 2 |

Channel Dimensions (m)

| <u>Wetted</u> | <u>Active</u> | <u>Floodprone</u> n = 7 | <u>First Terrace</u> n = 6 |
|---------------|---------------|-------------------------|----------------------------|
| Width: 8.5 | Width: 14.6 | 25.6 (12.3 - 64) | 24.3 (17.4 - 34) |
| Depth: 0.75 | Height: 0.9 | 1.7 (1.6 - 1.8) | 2.1 (1.9 - 2.3) |

W:D ratio: 17.3

Stream Flow Type: MF

Average Unit Gradient: 0.7%

Water temperature (°C): 5.0 - 5.0

Entrenchment (ACW:FPW ratio): 1.7

Habitat Units/100m (total channel length): 3.9

Habitat Units/100m (primary channel length): 4.6

Riparian, Bank, and Wood Summary

| | <u>Primary</u> | <u>Secondary</u> |
|----------------------|----------------|------------------|
| Land Use: | LT | ST |
| Riparian Vegetation: | D30 | 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 primary channel</u> |
|-----------------------------|--------------|-------------------------------------|
| All pieces (>=3m x 0.15m): | 324 | 19.8 |
| Volume (m ³): | 801 | 49.0 |
| Key pieces (>=12m x 0.60m): | 54 | 3.3 |

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REACH 1

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/BOULDERS | 1 | 8 | 0.5 | 0.10 | 4 | 0 | 10 | 19 | 29 | 43 | 0 | 0 |
| DRY CHANNEL | 1 | 15 | 1.8 | 0.00 | 27 | 0 | 0 | 10 | 70 | 20 | 0 | 0 |
| GLIDE | 1 | 21 | 7.0 | 0.60 | 147 | 0 | 0 | 5 | 30 | 30 | 35 | 0 |
| POOL-BACKWATER | 10 | 129 | 5.6 | 0.76 | 774 | 0 | 20 | 70 | 9 | 1 | 0 | 0 |
| POOL-ISOLATED | 5 | 47 | 3.0 | 0.39 | 190 | 0 | 39 | 53 | 7 | 2 | 0 | 0 |
| POOL-LATERAL SCOUR | 27 | 983 | 10.5 | 1.29 | 10,658 | 0 | 2 | 19 | 51 | 21 | 5 | 3 |
| PUDDLED UNIT | 1 | 40 | 1.7 | 0.50 | 68 | 0 | 20 | 70 | 10 | 0 | 0 | 0 |
| RAPID/BOULDERS | 1 | 37 | 10.0 | 0.60 | 374 | 0 | 0 | 5 | 20 | 30 | 45 | 0 |
| RIFFLE | 18 | 595 | 8.8 | 0.40 | 4,970 | 0 | 1 | 10 | 52 | 32 | 5 | 1 |
| STEP/BEDROCK | 1 | 1 | 0.7 | 0.15 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |
| STEP/COBBLE | 9 | 53 | 11.3 | 0.29 | 597 | 0 | 0 | 2 | 49 | 44 | 5 | 2 |
| Total: | 75 | 1,929 | 8.5 | 0.75 | 17,808 | 0 | Avg: 6 | 24 | 40 | 22 | 5 | 3 |

HABITAT SUMMARY

| Habitat Group | Number Units | Total Length (m) | Avg Width (m) | Avg Depth (m) | Wetted Area | | Large Boulders | |
|-------------------|-----------------|------------------------|---------------------|---------------------|-------------------|---------|----------------|--------------------------|
| | | | | | (m ²) | Percent | Number | (# / 100m ²) |
| Dammed & BW Pools | 15 | 176 | 4.7 | 0.63 | 963 | 5.41% | 0 | 0.0 |
| Scour Pools | 27 | 983 | 10.5 | 1.29 | 10,658 | 59.85% | 0 | 0.0 |
| Glides | 1 | 21 | 7.0 | 0.60 | 147 | 0.83% | 0 | 0.0 |
| Riffles | 18 | 595 | 8.8 | 0.40 | 4,970 | 27.91% | 0 | 0.0 |
| Rapids | 1 | 37 | 10.0 | 0.60 | 374 | 2.10% | 0 | 0.0 |
| Cascades | 1 | 8 | 0.5 | 0.10 | 4 | 0.02% | 0 | 0.0 |
| Step/Falls | 10 | 54 | 10.2 | 0.28 | 597 | 3.35% | 0 | 0.0 |
| Dry | 2 | 55 | 1.8 | 0.25 | 95 | 0.53% | 0 | 0.0 |
| Culverts | 0 | 0 | | | 0 | 0.00% | 0 | 0.0 |

POOL SUMMARY

| | Total of all Channel Lengths | | Primary Channel Length |
|---------------------------------------|------------------------------|---------------|------------------------|
| | <u>Total</u> | <u># / Km</u> | <u># / Km</u> |
| All Pools: | 42 | 21.8 | 25.7 |
| Pools >=1m deep: | 25 | 13.0 | 15.3 |
| Complex pools (LWD pieces>=3): | 23 | 11.9 | 14.1 |
| Pool frequency (channel widths/pool): | 3.1 | | |
| Residual pool depth (avg): | 0.89 | | |

COMMENT SUMMARY

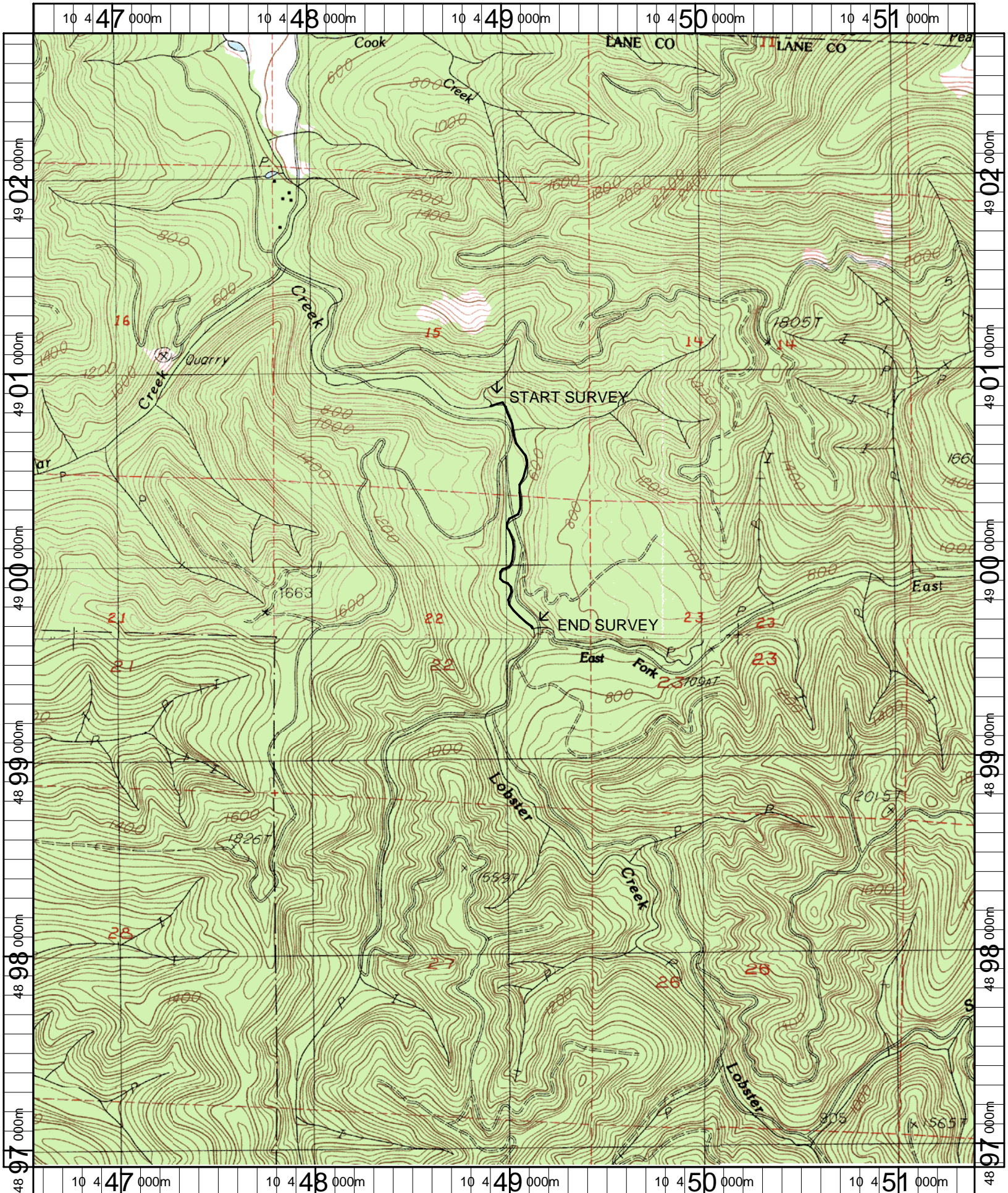
MONITORING AREA: 2-MC SITE ID: 374 STREAM: LOBSTER CREEK

| UNIT# | TYPE | CHAN | DIST. (m) | COMMENTS | NOTES |
|-------|------|------|-----------|-----------|---------------------------------------|
| 3 | LP | 00 | 124.4 | | REDD -MARKED BY SGS |
| 4 | RI | 01 | 157.9 | HS | LOGS |
| 5 | BW | 10 | 157.9 | | UNDER HS LOGS |
| 11 | LP | 01 | 312.7 | HS,DJ,SS/ | LOGS, 10-15 COHO FRY |
| 12 | IP | 10 | 312.7 | AM,SS/ | ROUGH-SKINNED NEWT, COHO FRY |
| 13 | LP | 00 | 356.7 | | LUMPED 2 SMALL POOLS |
| 15 | LP | 00 | 409.7 | | 2 REDDS -MARKED BY SGS |
| 16 | RI | 01 | 419.7 | TJ/ | |
| 17 | DC | 11 | 419.7 | | ACW=1.8M |
| 18 | LP | 01 | 440.7 | HS | LOGS |
| 19 | BW | 10 | 440.7 | DJ,HS | LOGS |
| 22 | LP | 00 | 497.7 | HS | LOGS |
| 26 | RI | 02 | 560.7 | BV | CHEWED STICKS, DEN IN BANK/ |
| 27 | LP | 02 | 560.7 | AM | ROUGH-SKINNED NEWTS, LOTS OF COHO FRY |
| 28 | BW | 10 | 560.7 | AM | ROUGH-SKINNED NEWTS |
| 31 | LP | 01 | 608.2 | HS | LOGS |
| 33 | BW | 10 | 608.2 | BV | LOTS OF COHO FRY, CHEWED STICKS |
| 36 | IP | 10 | 634.2 | | COHO FRY |
| 42 | LP | 01 | 769.6 | HS | LOGS |
| 43 | IP | 10 | 769.6 | | COHO FRY |
| 45 | LP | 00 | 801.1 | HS | LOGS, REDD |
| 46 | RI | 00 | 865.1 | BV | CHEWED STICKS & ROOTS, 2 REDDS |

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| UNIT# | TYPE | CHAN | DIST. (m) | COMMENTS | NOTES |
|-------|------|------|-----------|------------|---|
| 47 | LP | 00 | 942.1 | BC,CS/CS | 3 REDDS -MARKED BY SGS, LOBSTER CREEK ROAD, CS=BOULDERS |
| 49 | RI | 00 | 1018.6 | WL | AMERICAN DIPPER, SONG SPARROW |
| 53 | LP | 00 | 1127.6 | HS,DJ | LOGS |
| 55 | LP | 00 | 1200.6 | HS,DJ,BV | LOGS, CHEWED STICKS |
| 61 | LP | 01 | 1249.8 | /TJ,HS,BV | LOGS, CHEWED STICKS |
| 62 | SR | 11 | 1249.8 | | WATERFALL |
| 63 | RI | 00 | 1284.8 | BV | CHEWED STICKS |
| 64 | LP | 00 | 1326.8 | HS,BV | LOGS, CHEWED STICKS |
| 65 | LP | 00 | 1353.3 | HS | LOGS |
| 68 | LP | 01 | 1412.3 | CS/ | BOULDERS |
| 69 | BW | 10 | 1412.3 | DJ,BV | CHEWED STICKS |
| 70 | IP | 10 | 1412.3 | /TJ | |
| 71 | CB | 11 | 1412.3 | | ACW=0.7M |
| 72 | RI | 00 | 1449.3 | CE/,HS,CS/ | LOGS, CARCASS |
| 73 | LP | 00 | 1497.3 | BV | BEAVER DEN IN RIGHT BANK |
| 74 | RI | 00 | 1533.3 | BV | BEAVER TRACKS & CHEWED TREES |
| 75 | LP | 00 | 1549.8 | HS,DJ,WL | LOGS, DUCK |



Name: DIGGER MT (OR)
 Date: 4/25/2007
 Scale: 1 inch equals 2000 feet

Location: 10 0448992 E 4899816 N
 Caption: LOBSTER CREEK RESTORATION SITE - LOBSTER BASIN