

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

STREAM: North Slough Creek (MS-294)
BASIN: Coos River
SURVEY TYPE: Reference
DATE: February 14, 2005
SURVEY CREW: Jennifer Schmitt, Neil Jensen
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 28.4 km²
USGS MAPS: Lakeside
ECOREGION: Coast Range Coastal Lowlands

GENERAL DESCRIPTION:

The North Slough Creek habitat survey extended 661 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 4.3 (range: 2.3-7.0). Land use for the reach was young (3-15 cm dbh) trees and timber harvest. The average unit gradient was 3.4 percent. Riffles (41%) and cascades (36%) dominated stream habitat. Sand (35%) and gravel (30%) dominated stream substrate. Wood volume was low at 13.3 m³/100m.

COMMENTS:

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

REACH 1 T24S-R12W-S08NE 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 | 100% |
| Moderate V-shape | 0% | Multiple Terraces | 0% |
| Open V-shape | 0% | Wide Floodplain | 0% |
| Valley Width Index | 4.3 | VWI Range: | 2.3 - 7 |

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 Channel | 661 | 1,426 | 0 |
| Secondary Channel | 0 | 0 | 0 |
| Off-Channel Units | 39 | 44 | 0 |

Channel Dimensions (m)

| <u>Wetted</u> | <u>Active</u> | <u>Floodprone</u> n = 6 | <u>First Terrace</u> n = 5 |
|---------------|---------------|-------------------------|----------------------------|
| Width: 2.1 | Width: 3.3 | 9.2 (4.7 - 25.7) | 10.4 (5.1 - 27.2) |
| Depth: 0.20 | Height: 0.4 | 0.8 (0.7 - 0.9) | 1.2 (0.8 - 2.3) |

W:D ratio: 8.5 Entrenchment (ACW:FPW ratio): 2.7
 Stream Flow Type: MF Habitat Units/100m (total channel length): 7.7
 Average Unit Gradient: 3.4% Habitat Units/100m (primary channel length): 8.2
 Water temperature (°C): 5.0 - 5.0

Riparian, Bank, and Wood Summary

| | <u>Primary</u> | <u>Secondary</u> |
|----------------------|----------------|------------------|
| Land Use: | YT | TH |
| 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): | 96 | 14.5 |
| Volume (m ³): | 88 | 13.3 |
| Key pieces (>=12m x 0.60m): | 4 | 0.6 |

OREGON DEPT OF FISH AND WILDLIFE NORTH SLOUGH CREEK REFERENCE (3-MS, 294)

HABITAT INVENTORY

Report Date: 11/29/2005

Survey Date:

2/14/2005

| REACH 1 | | T24S-R12W-S08NE | | | | | 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/BEDROCK | 6 | 135 | 2.1 | 0.08 | 293 | 0 | 0 | 2 | 4 | 7 | 9 | 78 |
| CASCADE/BOULDERS | 9 | 128 | 1.7 | 0.12 | 235 | 0 | 5 | 23 | 40 | 19 | 6 | 7 |
| POOL-BACKWATER | 1 | 2 | 1.5 | 0.40 | 3 | 0 | 97 | 3 | 0 | 0 | 0 | 0 |
| POOL-LATERAL SCOUR | 13 | 113 | 2.3 | 0.36 | 248 | 0 | 20 | 60 | 11 | 4 | 1 | 4 |
| POOL-PLUNGE | 2 | 10 | 2.9 | 0.43 | 30 | 0 | 3 | 72 | 15 | 8 | 3 | 0 |
| RAPID/BEDROCK | 2 | 17 | 1.7 | 0.18 | 29 | 0 | 0 | 13 | 4 | 3 | 3 | 78 |
| RAPID/BOULDERS | 1 | 12 | 2.7 | 0.15 | 32 | 0 | 0 | 10 | 70 | 20 | 0 | 0 |
| RIFFLE | 10 | 177 | 2.0 | 0.12 | 362 | 0 | 2 | 25 | 61 | 9 | 1 | 3 |
| RIFFLE W/ POCKETS | 6 | 102 | 2.4 | 0.21 | 235 | 0 | 2 | 18 | 60 | 10 | 6 | 6 |
| STEP/LOG | 4 | 3 | 1.8 | 0.04 | 4 | 0 | 0 | 87 | 10 | 3 | 0 | 0 |
| Total: | 54 | 700 | 2.1 | 0.20 | 1,470 | 0 | Avg: 8 | 35 | 30 | 8 | 3 | 15 |

| 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 | 1 | 2 | 1.5 | 0.40 | 3 | 0.20% | 0 | 0.0 | |
| Scour Pools | 15 | 124 | 2.4 | 0.37 | 278 | 18.89% | 0 | 0.0 | |
| Glides | 0 | 0 | | | 0 | 0.00% | 0 | 0.0 | |
| Riffles | 16 | 279 | 2.1 | 0.16 | 597 | 40.60% | 0 | 0.0 | |
| Rapids | 3 | 29 | 2.0 | 0.17 | 61 | 4.13% | 0 | 0.0 | |
| Cascades | 15 | 263 | 1.8 | 0.11 | 528 | 35.94% | 0 | 0.0 | |
| Step/Falls | 4 | 3 | 1.8 | 0.04 | 4 | 0.24% | 0 | 0.0 | |
| Dry | 0 | 0 | | | 0 | 0.00% | 0 | 0.0 | |
| Culverts | 0 | 0 | | | 0 | 0.00% | 0 | 0.0 | |

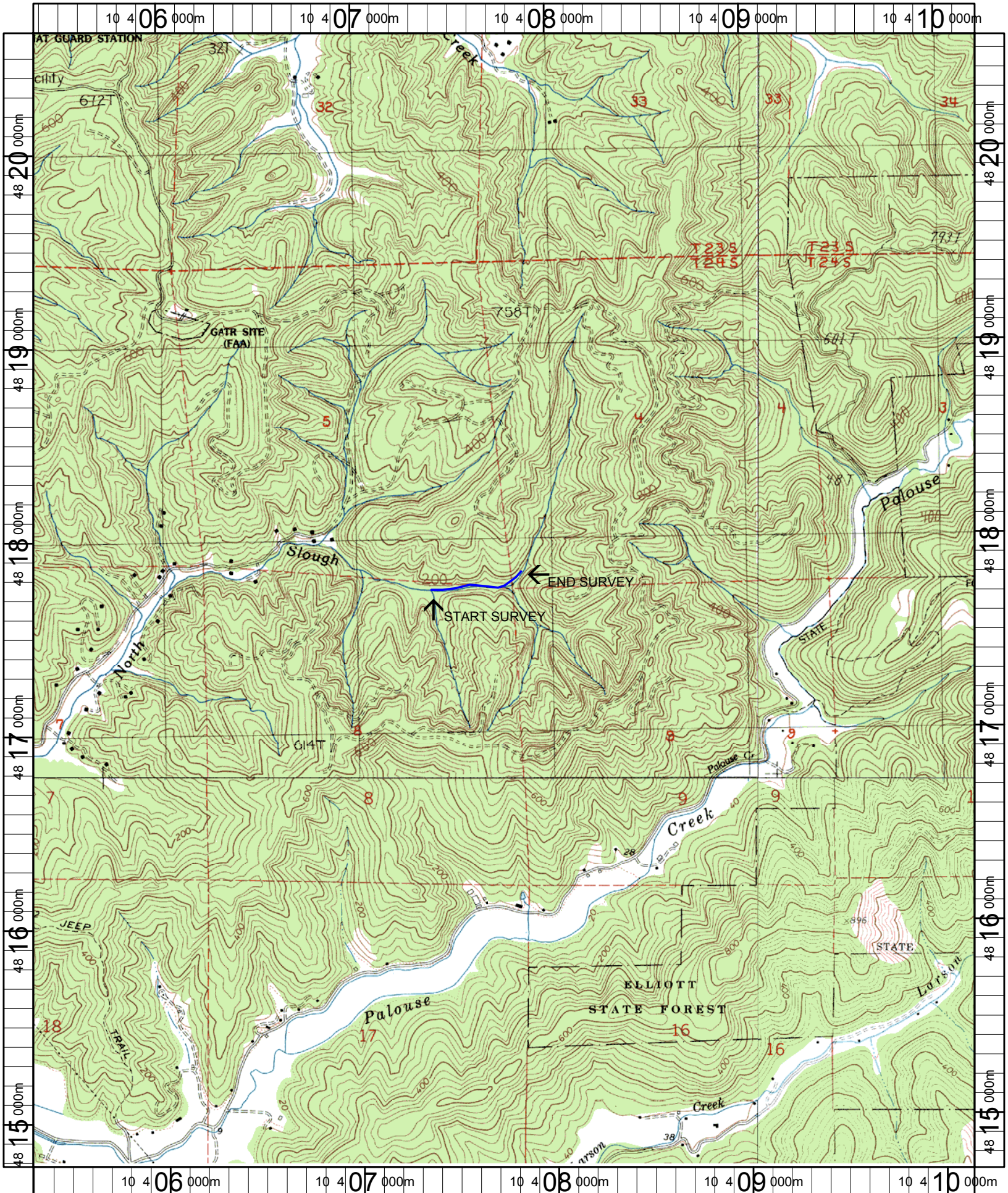
| POOL SUMMARY | | | |
|---------------------------------------|------------------------------|---------------|------------------------|
| | Total of all Channel Lengths | | Primary Channel Length |
| | <u>Total</u> | <u># / Km</u> | <u># / Km</u> |
| All Pools: | 16 | 22.9 | 24.2 |
| Pools >=1m deep: | 0 | 0.0 | 0.0 |
| Complex pools (LWD pieces>=3): | 3 | 4.3 | 4.5 |
| Pool frequency (channel widths/pool): | 13.3 | | |
| Residual pool depth (avg): | 0.25 | | |

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **3-MS** SITE ID: **294** NORTH SLOUGH CREEK REFERENC

| UNIT# | TYPE | CHAN | DIST. (m) | COMMENTS | NOTE ESTIMATOR | NOTE NUMERATOR |
|-------|------|------|-----------|----------|----------------|----------------|
| 2 | LP | 00 | 21.2 | /SS | | |
| 9 | LP | 01 | 96.4 | /TJ, WL | DEER | |
| 12 | LP | 00 | 113.4 | WL | DEER | |
| 14 | LP | 00 | 147.2 | /SS | | |
| 20 | CB | 00 | 207.9 | WL | DEER | |
| 21 | LP | 00 | 223.1 | WL | DEER | |
| 25 | RB | 01 | 268.5 | TJ/ | | |
| 31 | RI | 00 | 361.8 | BV | | |
| 32 | CB | 00 | 391 | WL | BEAVER, DEER | |
| 34 | CR | 01 | 428.8 | TJ/ | | |
| 37 | RP | 00 | 460.5 | BV | | |
| 41 | SL | 00 | 489 | | H = .28 | |
| 42 | PP | 00 | 494.7 | /SS | | |
| 43 | SL | 00 | 494.9 | | H = .25 | |
| 44 | RI | 00 | 513.8 | SS/ | | |
| 49 | CR | 01 | 607.4 | TJ/ | | |
| 51 | SL | 00 | 607.8 | | H = .45 | |
| 52 | CR | 00 | 640.6 | SS/ | | |
| 53 | CB | 00 | 658.8 | BV | | |
| 54 | SL | 00 | 660.75 | | H = .7 | |



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

Location: 10 407755 E 4817675 N
 Caption: NORTH SLOUGH CREEK REFERENCE SITE - COOS BASIN