

REACH 1

T9S-R8N-S7

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 avg: 9.8 range: 8.0-12.0

Channel Morphology (Percent Reach Length)

| <u>Constrained</u> | | <u>Unconstrained</u> | |
|--------------------|---|----------------------|-----|
| Hillslope | 0 | Single Channel | 100 |
| Bedrock | 0 | Multiple Channel | 0 |
| Terrace | 0 | 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 | 434 | 2,156 | 0 |
| Secondary | 40 | 200 | 0 |

Channel Dimensions (m)

| <u>Wetted</u> | | <u>Active</u> | | <u>Floodprone</u> | <u>First Terrace</u> |
|---------------|------|---------------|------|-------------------|----------------------|
| Width | 4.2 | Width | 8.2 | 12.9 | 41.9 |
| Depth | 0.67 | Height | 0.5 | 0.9 | 1.3 |
| | | W:D ratio | 18.4 | Entrenchment | 1.6 |

Stream Flow Type: LF Water Temp: 14.0-14.0°C
 Avg. Unit Gradient: 1.0% Habitat Units/100m: 6.1

Riparian, Bank, and Wood Summary

| | <u>Primary</u> | <u>Secondary</u> |
|----------------------|----------------|------------------|
| Land Use: | YT | |
| Riparian Vegetation: | D30 | S |

Bank Condition and Shade

| <u>Bank Status</u> | <u>Percent Reach Length</u> | <u>Shade (% of 180)</u> |
|--------------------|-----------------------------|-------------------------|
| Actively Eroding | 5% | Reach avg: 78% |
| Undercut Banks | 10% | Range: 53-100 |

Large Woody Debris

| | <u>Total</u> | <u>Total/100m</u> |
|--------------------------|--------------|-------------------|
| All pieces (>3m x 0.15m) | 137 | 31.6 |
| Volume (m ³) | 149 | 34.3 |
| Key pieces (>10m x 0.6m) | 10 | 2.3 |

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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 | Cbbl | Bldr | Bdrk |
| POOL-ALCOVE | 1 | 29 | 5.6 | 0.70 | 162 | 0 | 100 | 0 | 0 | 0 | 0 | 0 |
| POOL-BACKWATER | 2 | 11 | 3.2 | 0.50 | 37 | 0 | 100 | 0 | 0 | 0 | 0 | 0 |
| POOL-DAMMED | 1 | 21 | 5.1 | 0.90 | 106 | 0 | 80 | 15 | 5 | 0 | 0 | 0 |
| POOL-LATERAL SCOUR | 15 | 326 | 5.4 | 1.05 | 1,829 | 0 | 65 | 20 | 15 | 0 | 0 | 0 |
| RIFFLE | 5 | 60 | 2.7 | 0.11 | 164 | 5 | 2 | 29 | 70 | 0 | 0 | 0 |
| STEP/COBBLE | 5 | 28 | 2.1 | 0.07 | 58 | 0 | 0 | 6 | 94 | 0 | 0 | 0 |
| Total: | 29 | 473 | 4.2 | 0.67 | 2,356 | 5 | Avg:47 | 17 | 36 | 0 | 0 | 0 |

HABITAT SUMMARY

| Habitat Group | No. Units | Total Length (m) | Avg Width (m) | Avg Depth (m) | Wetted Area (m ²) | Percent | Large Boulders Number | Boulders #/100m ² |
|-------------------|--------------|------------------------|---------------------|---------------------|----------------------------------|---------|--------------------------|---------------------------------|
| Dammed & BW Pools | 4 | 60 | 4.3 | 0.65 | 306 | 12.98 | 0 | 0.0 |
| Scour Pools | 15 | 326 | 5.4 | 1.05 | 1,829 | 77.62 | 0 | 0.0 |
| Glides | 0 | 0 | - | - | 0 | 0.00 | 0 | 0.0 |
| Riffles | 5 | 60 | 2.7 | 0.11 | 164 | 6.94 | 5 | 3.1 |
| Rapids | 0 | 0 | - | - | 0 | 0.00 | 0 | 0.0 |
| Cascades | 0 | 0 | - | - | 0 | 0.00 | 0 | 0.0 |
| Step/Falls | 5 | 28 | 2.1 | 0.07 | 58 | 2.46 | 0 | 0.0 |
| Dry | 0 | 0 | - | - | 0 | 0.00 | 0 | 0.0 |

POOL SUMMARY

| | | |
|---------------------------------------|--------------|-------------|
| All Pools | <u>Total</u> | <u>#/Km</u> |
| | 19 | 40.1 |
| Pools ≥1m deep: | 11 | 23.2 |
| Complex pools (LWD pieces ≥3): | 17 | 35.9 |
| Pool Frequency (channel widths/pool): | 3.0 | |
| Residual pool depth (avg) | 0.46m | |

STREAM SUMMARY

FOURTH OF JULY CK (POST SUM 99)

| Number Units | Total Length (m) | Avg Width (m) | Avg Depth (m) | Total Area (m ²) | Substrate Percent Wetted Area | | | | | Total Large Boulder | |
|-----------------|------------------------|---------------------|---------------------|------------------------------------|----------------------------------|------|------|------|------|---------------------------|------|
| | | | | | S/O | Sand | Grvl | Cbbl | Bldr | | Bdrk |
| 29 | 473 | 4.2 | 0.67 | 2,356 | 47 | 17 | 36 | 0 | 0 | 0 | 5 |

Wetted Area

| Habitat Group | (m ²) | Percent |
|-----------------|-------------------|---------|
| Scour Pool | 1,829 | 77.6 |
| Backwater Pools | 306 | 13.0 |
| Glide | 0 | 0.0 |
| Riffle | 164 | 6.9 |
| Rapid | 0 | 0.0 |
| Cascade | 0 | 0.0 |
| Step | 58 | 2.5 |
| Dry | 0 | 0.0 |

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RIPARIAN ZONE VEGETATION SUMMARY

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Summary of Riparian Zone (0-30m) (2 transects)

| | |
|---------------------------------|-------|
| Total hardwoods/1000 ft | 2,042 |
| Total conifers/1000 ft | 0 |
| Total conifers >20" dbh/1000 ft | 0 |
| Total conifers >35" dbh/1000 ft | 0 |

Average number of trees in a 5-meter wide band

| Diameter class (cm) | Zone 1 0-10 meters | | Zone 2 10-20 meters | | Zone 3 20-30 meters | | Zones 1-3 0-30 meters | |
|-------------------------|-----------------------|----------|------------------------|----------|------------------------|----------|--------------------------|----------|
| | Conifer | Hardwood | Conifer | Hardwood | Conifer | Hardwood | Conifer | Hardwood |
| 3-15cm | 0.0 | 10.0 | 0.0 | 6.5 | 0.0 | 3.0 | 0.0 | 19.5 |
| 15-30cm | 0.0 | 1.0 | 0.0 | 0.5 | 0.0 | 3.5 | 0.0 | 5.0 |
| 30-50cm | 0.0 | 1.5 | 0.0 | 2.5 | 0.0 | 4.0 | 0.0 | 8.0 |
| 50-90cm | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 1.0 |
| >90cm | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total/100m ² | 0.0 | 12.5 | 0.0 | 10.5 | 0.0 | 10.5 | 0.0 | 11.2 |

Canopy closure and ground cover

| | Zone 1 0-10 meters | | Zone 2 10-20 meters | | Zone 3 20-30 meters | |
|------------------|-----------------------|--|------------------------|--|------------------------|--|
| | (%) | | (%) | | (%) | |
| Canopy closure | 63 | | 79 | | 55 | |
| Shrub cover | 64 | | 75 | | 73 | |
| Grass/forb cover | 16 | | 25 | | 28 | |

Predominant landform in each zone

| | Zone 1 0-10 meters | | Zone 2 10-20 meters | | Zone 3 20-30 meters | |
|-------------------|-----------------------|--|------------------------|--|------------------------|--|
| | | | | | | |
| Hillslope | 0 | | 0 | | 0 | |
| High terrace | 75 | | 100 | | 100 | |
| Low terrace | 0 | | 0 | | 0 | |
| Floodplain | 0 | | 0 | | 0 | |
| Wetland/meadow | 0 | | 0 | | 0 | |
| Stream channel | 0 | | 0 | | 0 | |
| Roadbed/Railroad | 0 | | 0 | | 0 | |
| Riprap | 0 | | 0 | | 0 | |
| Surface slope (%) | 19 | | 0 | | 0 | |

Summary of Riparian Zone (0-30m) for all reaches (2 transects)

Summary of riparian zone (0-100ft) extrapolated to 1,000 feet along stream

| | |
|---------------------------------|-------|
| Total hardwoods/1000 ft | 2,042 |
| Total conifers/1000 ft | |
| Total conifers >20" dbh/1000 ft | 0 |

Average number of trees in a 5-meter wide band

| <u>Diameter</u> <u>class (cm)</u> | <u>Zones 1-3</u> | |
|--------------------------------------|------------------|-----------------|
| | <u>Conifer</u> | <u>Hardwood</u> |
| 3-15cm | 0.0 | 19.5 |
| 15-30cm | 0.0 | 5.0 |
| 30-50cm | 0.0 | 8.0 |
| 50-90cm | 0.0 | 1.0 |
| >90cm | 0.0 | 0.0 |

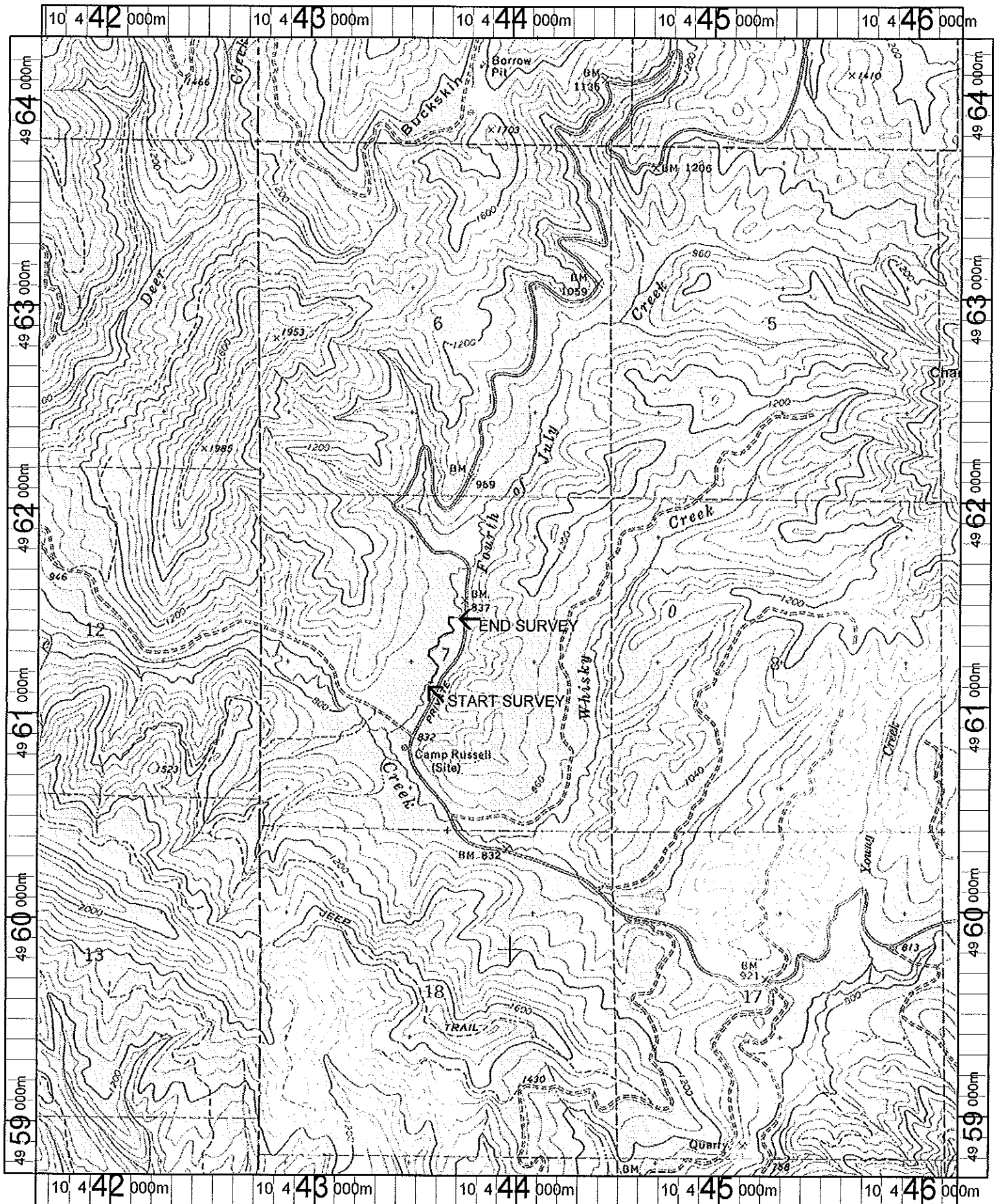
RIPARIAN ZONE VEGETATION

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VEGETATION DETAIL

| Unit | Side | Zone | Surface | Slope | Cover (percent) | | | | Diameter class (cm) | | | | | Notes |
|------|------|------|---------|-------|-----------------|-------|-------|----------|---------------------|-------|-------|-------|-----|-------|
| | | | | | Canopy | Shrub | Grass | | 3-15 | 15-30 | 30-50 | 50-90 | >90 | |
| 9 | LF | 3 | HT | 0.0 | 50 | 70 | 30 | Conifer | 0 | 0 | 0 | 0 | 0 | |
| | | | | | | | | Hardwood | 4 | 2 | 0 | 0 | 0 | |
| 9 | LF | 2 | HT | 0.0 | 60 | 70 | 30 | Conifer | 0 | 0 | 0 | 0 | 0 | |
| | | | | | | | | Hardwood | 1 | 0 | 0 | 2 | 0 | |
| 9 | LF | 1 | 0 | 75.0 | 80 | 20 | 0 | Conifer | 0 | 0 | 0 | 0 | 0 | |
| | | | | | | | | Hardwood | 2 | 0 | 0 | 0 | 0 | |
| 9 | RT | 1 | HT | 0.0 | 10 | 70 | 30 | Conifer | 0 | 0 | 0 | 0 | 0 | |
| | | | | | | | | Hardwood | 2 | 0 | 0 | 0 | 0 | |
| 9 | RT | 2 | HT | 0.0 | 90 | 85 | 15 | Conifer | 0 | 0 | 0 | 0 | 0 | |
| | | | | | | | | Hardwood | 2 | 0 | 0 | 0 | 0 | |
| 9 | RT | 3 | HT | 0.0 | 0 | 100 | 0 | Conifer | 0 | 0 | 0 | 0 | 0 | |
| | | | | | | | | Hardwood | 0 | 0 | 0 | 0 | 0 | |
| 18 | LF | 1 | HT | 0.0 | 85 | 90 | 10 | Conifer | 0 | 0 | 0 | 0 | 0 | |
| | | | | | | | | Hardwood | 9 | 1 | 1 | 0 | 0 | |
| 18 | LF | 2 | HT | 0.0 | 80 | 85 | 15 | Conifer | 0 | 0 | 0 | 0 | 0 | |
| | | | | | | | | Hardwood | 5 | 1 | 2 | 0 | 0 | |
| 18 | LF | 3 | HT | 0.0 | 80 | 80 | 20 | Conifer | 0 | 0 | 0 | 0 | 0 | |
| | | | | | | | | Hardwood | 0 | 3 | 4 | 0 | 0 | |
| 18 | RT | 1 | HT | 0.0 | 75 | 75 | 25 | Conifer | 0 | 0 | 0 | 0 | 0 | |
| | | | | | | | | Hardwood | 7 | 1 | 2 | 0 | 0 | |
| 18 | RT | 2 | HT | 0.0 | 85 | 60 | 40 | Conifer | 0 | 0 | 0 | 0 | 0 | |
| | | | | | | | | Hardwood | 5 | 0 | 3 | 0 | 0 | |
| 18 | RT | 3 | HT | 0.0 | 90 | 40 | 60 | Conifer | 0 | 0 | 0 | 0 | 0 | |
| | | | | | | | | Hardwood | 2 | 2 | 4 | 0 | 0 | |



Name: VALSETZ
 Date: 4/24/100
 Scale: 1 inch equals 2000 feet

Location: 10 443829 E 4961493 N
 Caption: FOURTH OF JULY CREEK
 RESTORATION SITE
 ODFW 1999