

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

STREAM: Yellow Creek (U-262)
BASIN: Umpqua River
SURVEY TYPE: Post-Tx
DATE: March 15, 2006
SURVEY CREW: Scott Venables, Seth Ring
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 54.1 km³
USGS MAPS: Tyee Mountain, Yellow Butte
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Yellow Creek habitat survey extended 5,661 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 5.6 (range: 1.5-20.0). Land use for the reach was second growth (15-30 cm dbh) and mature (50-90 cm dbh) trees. The average unit gradient was 1.3 percent. Scour pools (58%) dominated stream habitat. There was no dominant substrate type. Wood volume was low at 11.5 m³/100m.

COMMENTS:

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

The crew noted several habitat structures during the survey.

REACH 1

T24S-R07W-S37SW

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	5.6	VWI Range:	1.5 - 20

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 Channel	5,661	62,057	0
Secondary Channel	284	834	3
Off-Channel Units	288	397	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 15	<u>First Terrace</u> n = 15
Width: 9.1	Width: 15.7	21.6 (11.9 - 36.4)	25.2 (14.9 - 41.2)
Depth: 0.56	Height: 0.9	1.8 (1.5 - 2)	2.7 (2 - 4.1)

W:D ratio: 17.5
 Stream Flow Type: MF
 Average Unit Gradient: 1.3%
 Water temperature (°C): 7.5 - 7.5

Entrenchment (ACW:FPW ratio): 1.4
 Habitat Units/100m (total channel length): 4.1
 Habitat Units/100m (primary channel length): 4.5

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	MT
Riparian Vegetation:	D15	D30

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):	462	8.2
Volume (m ³):	649	11.5
Key pieces (>=12m x 0.60m):	30	0.5

OREGON DEPT OF FISH AND WILDLIFE

YELLOW CREEK POST-TX (4-UJP, 262)

HABITAT INVENTORY

Report Date: 12/6/2006

Survey Date:

3/15/2006

REACH 1		T24S-R07W-S37SW					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	14	290	9.5	0.32	3,080	0	4	7	7	7	8	66
CASCADE/BOULDERS	20	396	7.0	0.25	3,923	0	3	14	28	21	23	10
DRY CHANNEL	1	54	0.0	0.00	0	0	0	40	40	10	10	0
POOL-ALCOVE	1	8	2.4	0.70	20	0	20	30	40	10	0	0
POOL-BACKWATER	3	25	3.4	0.42	75	0	43	10	0	0	0	47
POOL-ISOLATED	5	45	1.7	0.27	76	0	57	14	25	2	2	0
POOL-LATERAL SCOUR	124	3,467	10.2	0.86	36,630	0	9	18	17	18	14	24
POOL-PLUNGE	6	34	3.9	0.45	287	0	3	15	42	18	6	17
PUDDLED UNIT	2	39	2.8	0.28	107	0	33	15	18	18	3	15
RAPID/BEDROCK	8	402	10.6	0.36	4,271	0	1	7	5	11	9	68
RAPID/BOULDERS	23	742	9.2	0.34	7,541	0	2	10	24	32	25	9
RIFFLE	19	557	9.1	0.26	5,496	0	2	12	35	26	10	16
RIFFLE W/ POCKETS	1	24	9.8	0.30	231	0	0	5	0	5	5	85
STEP/BEDROCK	19	108	9.8	0.16	1,147	0	0	1	1	1	4	94
STEP/BOULDERS	8	29	6.1	0.17	274	0	0	3	28	33	37	0
STEP/COBBLE	2	14	7.5	0.20	129	0	0	5	30	63	3	0
Total:	256	6,233	9.1	0.56	63,288	0	Avg: 7	14	19	18	14	28

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	9	78	2.3	0.37	171	0.27%	0	0.0
Scour Pools	130	3,502	9.9	0.84	36,917	58.33%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	20	580	9.2	0.26	5,727	9.05%	0	0.0
Rapids	31	1,144	9.6	0.35	11,811	18.66%	0	0.0
Cascades	34	686	8.0	0.28	7,003	11.07%	0	0.0
Step/Falls	29	150	8.6	0.17	1,551	2.45%	0	0.0
Dry	3	93	1.8	0.18	107	0.17%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY

	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	139	22.3	24.6
Pools >=1m deep:	34	5.5	6.0
Complex pools (LWD pieces>=3):	35	5.6	6.2
Pool frequency (channel widths/pool):	2.9		
Residual pool depth (avg):	0.59		

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: **4-UMP** SITE ID: **262** **YELLOW CREEK POST-TX**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	00	29.3		CT-MT,D15,D30,RR, T=7.5C	1030A
2	CR	00	42.7	CS	BC=HWY 138	
5	SR	00	82.9	SS/		
6	CR	01	101.6	/TJ		
7	CB	11	101.6		ACW=0.80M, T=9.5C	AT 11:00AM
8	LP	00	162.6	SS/	OLD BRIDGE/ROAD CROSSING	
9	LP	00	180.2	HS	BOULDERS	
10	CR	00	210.1	HS	BOULDERS	
12	LP	00	265.9	HS	BOULDERS + LOGS	
13	SR	00	275.7	HS	BOULDERS	
15	SR	00	298.7	H=0.50M		
18	SR	00	358.4	H=0.40M		
20	LP	00	408.2	/SS, HS	BOULDERS	
21	LP	00	418.4		CT-MT,ST-RR,D30-D15	
22	CR	00	445	SS/, HS	BOULDERS	
25	LP	00	528.2	HS	BOULDERS	
26	RR	01	545.8	TJ/, HS	LOGS + BOULDERS	
27	CB	11	545.8		ACW=0.65M, T=10.0C	AT 12:25PM
30	CR	00	621.8	CS, HS	BOULDERS	
31	LP	00	634.8	CS		
32	CB	00	656.1	/SS, HS	BOULDERS	

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: 4-UMP SITE ID: 262 YELLOW CREEK POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
33	LP	00	691.9	HS		BOULDERS
34	SB	00	692.7			H=0.90M
35	LP	00	713	/SS		
39	LP	01	839.4	/TJ		
40	RI	11	839.4	/SS		ACW=1.20M, T=7.5C AT 14:15
42	AL	10	914.3			CT-MT,D15-D30,RR-ST
43	LP	00	968.5			2 PHOTS OF OLD CHEVY IN STREAM
44	LP	01	1061.5	/SS, /TJ		
45	CB	11	1061.5	CE		ACW=1.40M, T=8.5C AT 14:45
47	LP	01	1103	SC/		
48	LP	02	1103			ACW=2.80M
49	IP	10	1103			NEWTS
50	LP	01	1152.2			5 REDDS
51	RI	11	1152.2			ACW=1.80M, T=8.0C AT 15:20
53	CR	11	1199.7			ACW=1.60M, T=9.5C AT 15:50
54	LP	00	1256.9			AIP-RIP FLAG
55	RI	00	1274.3			US-MT, MT-ST,D30-D15
56	LP	00	1325.5	CS		
63	RI	02	1493			CT-MV,D15-D30,ST-MT
66	SC	02	1493			H=0.55M
67	LP	00	1579.2	/SS		

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: 4-UMP SITE ID: 262 YELLOW CREEK POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
68	RB	01	1654.2	SC/		
71	LP	02	1654.2	SS/		
72	LP	01	1703.4	SC/		
78	LP	00	1755.7		SALMON SPAWNING SURVEY SIGN	
80	CR	00	1868.3		SITE#1 SIGN WITH FLAGGING	
81	RB	00	1917	HS		
82	LP	01	1976.2	CS,/TJ	CT-MT,MT-ST,D30-D15	
83	SB	11	1976.2		H=0.80M	
84	PP	11	1976.2		ACW=1.40M	
85	SB	11	1976.2	CE	H=1.10M	
86	RR	00	2031.9	SC/		
90	DC	02	2119.8		ACW=2.6, ALMOST A FLOOD CHANNE	
91	LP	01	2134.5	/TJ		
92	CB	11	2134.5		ACW=4.6M, T=7.0C AT 10:40	
94	LP	00	2156.4	CS		
95	RI	00	2177.2		CT-MT,D15-D30,MT-MT	
96	LP	01	2202.9	/TJ		
97	CB	11	2202.9		ACW=1.2M, T=7.5C AT 11:00	
103	RB	00	2356.2	HS	LOGS+BOULDERS, SITE#5 SIGN/FLA	
109	LP	01	2458	TJ/		
110	SB	11	2458		H=1.2M, ACW=2.6M, T=7C AT 1130	

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: **4-UMP** SITE ID: **262** **YELLOW CREEK POST-TX**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
112	RR	00	2486.8	SS/		
115	RB	01	2601.5	/TJ	RED,WHITE,BLUE FLAG, SITE#7 SI	
116	CB	11	2601.5		ACW=0.70M, T=9.0C AT 11:50	
117	LP	00	2623.7		CT-MT, ST-MT,D15-S	
118	RB	00	2648.4		AQI FLAG 7/05/05 UNIT 133	
120	LP	00	2685.6		RED,WHITE,BLUE FLAG, SITE#9 SI	
122	SR	00	2710.9		H=0.35M	
123	LP	01	2732.8	/TJ		
124	CB	11	2732.8		ACW=0.90M, T=8.5C AT 12:30	
125	SR	00	2742.6		H=0.45M	
129	SR	00	2815.5		H=0.80M	
134	RI	01	2979	/TJ		
135	SB	11	2979		H=0.75M	
136	PP	11	2979		ACW=1.8M, T=7.0C AT 13:00	
137	SR	11	2979	CE	H=1.0M	
140	RR	01	3059.2	TJ/, BC,CS	SALMON SPAWNING SURVEY SIGN	
141	CB	11	3059.2		ACW=4.6M, T=7.0C AT 13:25	
142	LP	00	3076.3		RED/WHITE/BLUE FLAG, SITE#10	
144	RI	00	3117.5	/SS	CT-MT,D15-D30,ST-MT	
146	SR	01	3134.6		H=0.65M	
147	IP	10	3134.6		RED,WHITE,BLUE FLAG, SITE#11	

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: **4-UMP** SITE ID: **262** **YELLOW CREEK POST-TX**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
149	SR	00	3149.1		H=0.30M	
152	SR	00	3217.6		H=0.6M AQI FLAG UNIT165 7/5/05	
153	LP	00	3247.8		RED,WHITE,BLUE FLAG, SITE #12	
155	LP	00	3283.4	/SS		
158	SR	00	3306.5		H=0.55M	
160	LP	00	3352.4		RED,WHITE,BLUE FLAG SITE #13	
162	LP	00	3432.4	HS	2 LOGS, R,W,B FLAG SITE #14	
166	SR	00	3515.3		H=0.40M	
167	LP	00	3531.5		CT-MV, D15-D30, MT-ST	
168	SR	00	3537.6		H=0.40M	
171	LP	00	3614.2	SS/		
172	RB	01	3715.6	/SS,/SS/TJ	R,W,B FLAG SITES #15, 16	
173	CB	11	3715.6		ACW=3.6M, T=8.0C AT 16:00	
177	LP	00	3783.3	/SS		
180	RR	00	3961.7	/SS, HS	BOULDERS	
181	LP	00	3975.2	DJ, HS	LOGS + BOULDERS, 2 PHOTOS	
182	LP	01	4000.8	SC/	CT-MV, D15-D30,ST	
183	RB	01	4010.5	DJ, /SS,HS	LOGS	
185	SR	00	4060.1		H=0.30M	
188	SB	02	4060.1		H=0.60M	
189	CB	00	4089.8		T=7.0C AT 9:00	

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: **4-UMP** SITE ID: **262** **YELLOW CREEK POST-TX**

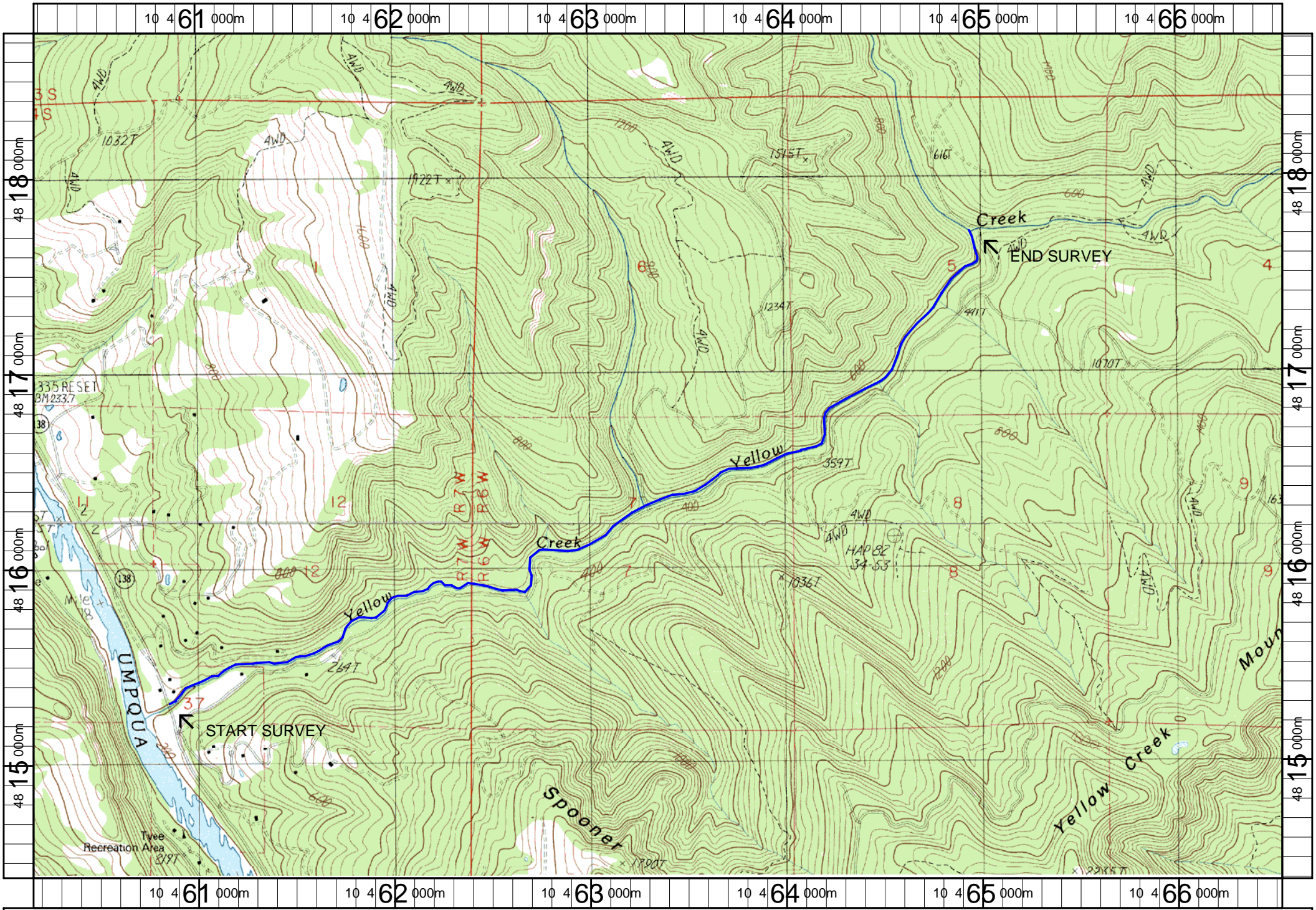
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
191	CB	00	4150.3	DJ		
195	RB	00	4303		PHOTO	
199	LP	00	4382.4		CT-MV, D15-D30,MT	
200	LP	00	4411.5	/SS		
206	SB	00	4571		H=0.80M	
207	LP	01	4622.2	/TJ		
208	CR	11	4622.2		ACW=2.5M, T=7.5C AT 10:30	
209	RI	01	4650.3	/SC		
211	RI	02	4650.3		ACW=7.0M	
215	LP	00	4816.5		R,W,B FLAG SITE #17 SIGN	
217	LP	00	4883.2	/SS	CT-OV,D15-C50,MT-ST	
218	SB	00	4895.1		RED, WHITE, BLUE FLAG	
219	LP	00	4916.5	SS/,, SS/		
221	LP	01	4999.4	/TJ		
222	RB	11	4999.4		FISH<2", T=7.5C AT 11:45	
223	CR	11	4999.4		ACW=4.6M	
224	RI	01	5024.9	SC/		
226	LP	01	5043.1	DJ		
227	LP	01	5121.9	TJ/		
228	LP	02	5121.9	SS/		
229	RB	11	5121.9		ACW=1.70M, T=7.0C AT 12:05	

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: **4-UMP** SITE ID: **262** **YELLOW CREEK POST-TX**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
232	LP	00	5195.2	DJ	CT-MT,C50-D15,MT-ST	
233	RB	01	5217		SALMON SURVEY SPAWNING SIGN	
234	CB	11	5217		ACW=2.3M, T=-8.0C AT 12:30	
244	SR	01	5427.9	SC/	H=0.9M	
245	LP	01	5472.1	/TJ		
246	PD	02	5472.1		ACW=6.0M	
247	SR	11	5472.1		H=2.4M, ACW=1.2M,T=8.5C AT1345	
251	LP	00	5557.9		AQI FLAG UNIT 300 5773M RIP	
256	LP	00	5661.2	TJ/	BEAR CK, SALMON SPAWNING SIGN	



Name: TYEE MT (OR)
 Date: 2/15/2007
 Scale: 1 inch equals 2000 feet

Location: 10 0463352 E 4816569 N
 Caption: YELLOW CREEK RESTORATION SITE - UMPQUA BASIN