

**ODFW AQUATIC INVENTORY PROJECT
RESTORATION MONITORING
STREAM HABITAT REPORT**

STREAM: ELK CREEK PHASE 3
 GCG: 3-MS
 SITE ID: 402
 BASIN: MILLACOMA
 TREATMENT DATE: 2008
 SURVEY DATE: 8/9/2011
 SURVEY CREW: Eric Bailey and Sara DeRischebourg
 USGS MAPS: ELK PEAK
 ECOREGION: Mid-Coastal Sedimentary
 REPORT PREPARED BY: Lora Tennant

REACH: 1 LOCATION: T23S-R10W-S07NW

SURVEY DESCRIPTION:

Channel morphology: Constrained alternately by high terraces and hillslopes

Dominant landuse(s): Large timber (30-50 cm dbh)

Dominant riparian vegetation: Mixed conifer/deciduous: size class 30-50cm dbh

Primary channel length (meters) and area (m²): 3,256 : 20,112

Secondary channel length (meters) and area (m²): 179 : 485

VWI average: 6.3 VWI Range: 1 - 12 Average Gradient: 1.8%

Pieces LWD per 100m: 10.4 Wood Volume (m³) per 100m: 11.9

Percent pools: 70% Complex pools (LWD pieces>=3): 14 Pools >=1m deep: 8

<u>Percent substrate (avg):</u>	<u>Silt / organics</u>	<u>Sand</u>	<u>Gravel</u>	<u>Cobble</u>	<u>Boulder</u>	<u>Bedrock</u>
All units	1	11	20	10	8	50
Pool units	2	15	22	9	8	45
Fast water units	0	7	22	12	11	49

SURVEY COMMENTS:

This is a post-treatment (boulders and wood) restoration survey. The crew observed wildlife trails and tracks, beaver activity, salamanders, and juvenile salmonids. Numerous wood and boulder habitat structures and a fish ladder were also noted.

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

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GCG: 3-MS SITE ID: 402**

Survey Date: 8/9/2011

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T23S-R10W-S07NW

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	6.3	VWI Range:	1 - 12

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	3,256	20,112	0
Secondary	179	485	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> <i>n</i> = 9	<u>First Terrace</u> <i>n</i> = 9
Width: 5.6	Width: 10.9	13.9 (10.4 - 18.3)	19.7 (14 - 28.4)
Depth: 0.32	Height: 0.5	1.0 (0.8 - 1.2)	1.9 (1.4 - 2.3)

W:D ratio: 22.0

Stream Flow Type: LF

Average Unit Gradient: 1.8%

Water temperature (°C): 13.4 - 13.4

Entrenchment (ACW:FPW ratio): 1.3

Habitat Units/100m (total channel length): 6.5

Habitat Units/100m (primary channel length): 6.9

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	ST
Riparian Vegetation:	M30	G

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	2%	Reach avg: 79%
Undercut Banks:	5%	Range: 50 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	338	10.4
Volume (m ³):	386	11.9
Key pieces (>=12m x 0.60m):	40	1.2

HABITAT INVENTORY

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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	Cbl	Bldr	Bdrk
CASCADE/BEDROCK	7	181	2.9	0.23	613	58	0	5	6	7	8	74
POOL-BACKWATER	9	70	2.5	0.21	161	20	5	21	29	8	4	34
POOL-DAMMED	5	152	6.1	0.54	1,133	49	4	22	20	10	7	37
POOL-ISOLATED	10	47	1.4	0.14	65	13	8	31	12	7	8	35
POOL-LATERAL SCOUR	67	1,623	6.6	0.56	10,743	956	2	15	23	9	8	44
POOL-PLUNGE	7	47	12.0	0.72	644	88	2	14	18	16	10	40
POOL-STRAIGHT SCOUR	13	222	9.0	0.63	1,987	61	1	12	23	6	4	54
RAPID/BEDROCK	22	297	5.0	0.14	1,432	184	0	5	7	5	5	78
RAPID/BOULDERS	4	75	3.7	0.16	268	185	1	5	8	23	35	27
RIFFLE	12	195	4.2	0.12	799	38	0	9	54	6	2	28
RIFFLE W/ POCKETS	15	306	5.3	0.20	1,612	753	0	9	27	26	21	17
STEP/BEDROCK	38	125	5.1	0.11	649	28	0	4	5	2	2	86
STEP/COBBLE	11	45	4.9	0.07	207	125	0	8	41	30	12	9
STEP/STRUCTURE	4	50	6.8	0.29	285	77	0	6	22	14	51	8
Total:	224	3,434	5.6	0.32	20,598	2,635	Avg: 1	11	20	10	8	50

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	24	268	2.8	0.25	1,359	6.60%	82	6.0
Scour Pools	87	1,892	7.4	0.58	13,374	64.93%	1,105	8.3
Glides	0	0			0	0.00%	0	0.0
Riffles	27	501	4.8	0.16	2,411	11.70%	791	32.8
Rapids	26	372	4.8	0.14	1,699	8.25%	369	21.7
Cascades	7	181	2.9	0.23	613	2.98%	58	9.5
Step/Falls	53	220	5.2	0.11	1,141	5.54%	230	20.2
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

OREGON DEPT OF FISH AND WILDLIFE
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POOL SUMMARY

	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	111	32.3	34.1
Pools >=1m deep:	8	2.3	2.5
Complex pools (LWD pieces>=3):	14	4.1	4.3
Pool frequency (channel widths/pool):	2.8		
Residual pool depth (avg):	0.49		

Survey Date 8/8/2011

RIPARIAN ZONE
VEGETATION SUMMARY

REACH 1

Report Date: 6/8/2012

Summary of Riparian Zone (0-30m) 7 transects

Total hardwoods/1000	662
Total conifers/1000 ft	270
Total conifers >20" dbh/1000 f	96
Total conifers >35" dbh/1000 f	61

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	0.3	0.0	1.3	0.0	0.7	0.0	2.3
15-30cm	0.0	2.1	0.3	2.6	0.9	1.0	1.1	5.7
30-50cm	0.3	0.9	0.4	1.3	1.0	0.6	1.7	2.7
50-90cm	0.1	0.1	0.3	0.0	0.1	0.0	0.6	0.1
>90cm	0.1	0.0	0.3	0.0	0.6	0.0	1.0	0.0
Total/100m2	0.6	3.4	1.3	5.1	2.6	2.3	1.5	3.6

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	63		66		62	
Shrub cover	30		21		25	
Grass/forb cover	63		73		69	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	43		64		57	
High terrace	50		36		36	
Low terrace	0		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	7		0		7	
Riprap	0		0		0	
Surface slope (%)	28		42		39	

Summary of Riparian Zone (0-30m) for all reaches**7 transects****Summary of riparian zone (0-100 feet) extrapolated to 1,000 feet along stream**

Total hardwoods/1000	662
Total conifers/1000 ft	270
Total conifers >20" dbh/1000 f	96
Total conifers >35" dbh/1000 f	61

Average number of trees in a 5-m wide band

Diameter class (cm)	Zones 1-3 <u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	0.0	2.3
15-30cm	1.1	5.7
30-50cm	1.7	2.7
50-90cm	0.6	0.1
>90cm	1.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1				Reach 1											
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
23	LF	1	HS	62	35	60	40	Conifer							
								Hardwood							
23	LF	2	HS	30	80	10	90	Conifer					ANIMAL TUNNELS		
								Hardwood							
23	LF	3	HT	0	80	10	90	Conifer							
								Hardwood							
23	RT	1	HS	80	50	0	90	Conifer					10% BARE GROUND		
								Hardwood							
23	RT	2	HS	80	50	0	90	Conifer					1 10% COMPOST AND		
								Hardwood							
23	RT	3	HS	80	70	0	90	Conifer					2		
								Hardwood							
51	LF	1	HT	0	80	20	80	Conifer					TRANSITION SLOPE 35%		
								Hardwood							
51	LF	2	HS	85	75	0	100	Conifer							
								Hardwood							
51	LF	3	HS	85	50	10	90	Conifer							
								Hardwood							
51	RT	1	HT	0	80	10	90	Conifer					TRANSITION SLOPE 30%		
								Hardwood							
51	RT	2	HT	0	75	10	90	Conifer							
								Hardwood							
51	RT	3	HT	0	80	5	95	Conifer							
								Hardwood							
77	LF	1	HT	0	65	20	80	Conifer					TRANSITION SLOPE 33%		
								Hardwood							
77	LF	2	HT	0	70	30	70	Conifer					FRESH ANIMAL BURROWS		
								Hardwood							
77	LF	3	HT	0	70	40	60	Conifer							
								Hardwood							
77	RT	1	RB	0	20	10	10	Conifer					80% RB, RD SFR 9000, 85% SLOPE 70% BEDROCK		
								Hardwood							
77	RT	2	HS	85	0	10	20	Conifer							
								Hardwood							
77	RT	3	HS	85	40	30	70	Conifer							
								Hardwood							
99	LF	1	HT	0	75	0	100	Conifer					TRANSITION SLOPE 28%, BURROWS		
								Hardwood							
99	LF	2	HS	48	70	0	100	Conifer							
								Hardwood							

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
99	LF	3	HS	34	80	0	100	Conifer		1	5				
								Hardwood			1				
99	RT	1	HT	0	50	30	70	Conifer			2				TRANSITION SLOPE 10%
								Hardwood							
99	RT	2	HT	0	50	60	40	Conifer							
								Hardwood			2				
99	RT	3	HS	65	70	50	50	Conifer							PART OF ZONE IS RB
								Hardwood		2	3				
122	LF	1	HT	0	80	5	95	Conifer					1		TRANSITION SLOPE 29%
								Hardwood		1					
122	LF	2	HT	0	85	5	95	Conifer				1	1		
								Hardwood	5	1					
122	LF	3	HT	0	70	5	95	Conifer							
								Hardwood	2						
122	RT	1	HS	70	75	50	50	Conifer							
								Hardwood			3				
122	RT	2	HS	70	80	5	95	Conifer							
								Hardwood			3				
122	RT	3	HS	70	50	5	95	Conifer							PART OF ZONE IS RB
								Hardwood							
171	LF	1	HS	52	70	20	80	Conifer						1	
								Hardwood							
171	LF	2	HS	55	60	5	95	Conifer						1	
								Hardwood	1						
171	LF	3	HS	60	70	5	95	Conifer			1			2	
								Hardwood							
171	RT	1	HS	47	85	10	90	Conifer							
								Hardwood	2	2					
171	RT	2	HS	70	80	0	100	Conifer							
								Hardwood			3	1			
171	RT	3	RB	0	20	0	30	Conifer			1				70% GRAVEL, RD SFR 9000
								Hardwood							
209	LF	1	HS	80	75	95	5	Conifer							
								Hardwood							
209	LF	2	HS	65	75	95	5	Conifer							
								Hardwood		5	1				
209	LF	3	HS	65	70	95	5	Conifer					1		
								Hardwood							
209	RT	1	HT	0	40	95	5	Conifer							TRANSTION SLOPE 30%
								Hardwood			1	1			

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

Unit	Side	Zone	Surface	Slope	Cover (percent)			Notes	Diameter class (cm)					
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90	
209	RT	2	HT	0	80	70	30	Conifer						
								Hardwood		2	2			
209	RT	3	HT	0	50	95	5	Conifer						
								Hardwood						

OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

OREGON PLAN MONITORING SITE
SURVEY DATE: 8/9/2011

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 402 STREAM: ELK CREEK PHASE 3

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	1	RP	00	5		CA/CT, D30/S, LT/ST, UTM:424749/4825922
1	2	SR	00	11.5		STEP HEIGHT=0.4
1	3	LP	00	24.5		
1	4	RB	00	37.7		SS
1	5	LP	01	64.7	BV SS/ CE	BENCH #1
1	6	RR	02	64.7	BV	CE 6.0 M ABOVE STREAM, JUV FISH
1	7	SP	00	69.1		
1	8	RR	00	78.6	BV	
1	9	SP	00	122.2	BV HS WL	BV DEBRIS
1	10	RI	00	128.2	WL	WL - ELK TRAIL AND TRACKS
1	11	BW	10	128.2	WL	
1	12	LP	01	218.7	HS WL	

COMMENT SUMMARY

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REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	13	BW	10	218.7	WL	
1	14	IP	10	218.7		
1	15	RI	00	225.1	SS	WL - ELK TRAIL AND TRACKS
1	16	LP	00	260.1	SS DJ HS	HS, BV LOGS AND DEBRIS
1	17	RI	00	299.3		
1	20	LP	00	345.8	WL	
1	22	SC	00	367.3		STEP HEIGHT=0.3
1	23	LP	00	383.3	SS	CH/MV, M30/S, LT/ST, UTM:424582/4826185, BENCH #2
1	27	SP	00	410.8	SS	
1	29	LP	00	437.8	AM	AM-SALAMANDER
1	30	CR	01	506.8	BV WL	
1	31	IP	10	506.8		

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 402 STREAM: ELK CREEK PHASE 3

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	32	LP	00	541.8	BV HS	BV-DEBRIS, HS-LOGS
1	33	RI	01	590.8	BV WL	BV-DEBRIS, WL-TRAIL
1	35	SR	00	592.8	HS	HS-LOGS AND BOULDERS, BENCH #3
1	36	RI	00	601	BV WL HS	HS-LOGS
1	37	DP	00	679	BV HS	BV-FRESH FELLED TREES/DEBRIS
1	38	SR	00	682	BV SS	
1	39	LP	00	704.4	BV SS	BV-DEBRIS
1	40	SR	00	705.9	WL	
1	41	SP	00	730.5	WL	
1	43	LP	00	751.4	BV BC	
1	44	SR	00	754.4		SHADE-UNDER BRIDGE
1	46	SR	00	776.6	BV	

OREGON DEPT OF FISH AND WILDLIFE
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OREGON PLAN MONITORING SITE
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REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	51	LP	00	816.2		CT/CT, M30/G, MT/ST, UTM:424471/4826111, RIP #2
1	57	RP	00	879.1		BENCH #4
1	61	CR	00	937.3	SS	
1	62	LP	00	953.3	BV	BV-STICKS AND DEBRIS
1	64	RR	00	973.3	HS	HS-LOGS
1	65	LP	00	989.3	HS BV	
1	67	LP	01	1055.9	BV	
1	69	BW	10	1055.9	BV	
1	70	SR	00	1060.9		STEP HEIGHT=0.1
1	72	SR	00	1069.8		STEP HEIGHT=0.1
1	74	SR	00	1081		STEP HEIGHT=0.45
1	75	LP	00	1102	BV	

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REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	77	LP	00	1132.7	CE	CA/CT, D30/G, MT/ST, UTM:424327/4825795, BENCH #5, /C ROAD DRAINAGE
1	78	SC	00	1139.9	BV	STEP HEIGHT=.4
1	79	LP	00	1199.9	BV WL	
1	81	SP	00	1220.2	BV	
1	82	SC	00	1221.3		STEP HEIGHT=0.15
1	83	LP	00	1260.3	BV HS	HS-LOGS AND BOULDERS
1	84	RP	01	1288.9	HS	HS-BOULDERS
1	85	IP	10	1288.9	HS	HS-BOULDERS
1	86	LP	00	1354.9		
1	90	RI	01	1412.6		
1	92	SR	00	1414.3		STEP HEIGHT=0.35
1	93	LP	00	1440.4		BENCH#6

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REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	94	CR	00	1463.4	WL	
1	95	LP	00	1469.8	BV	BV-STICKS AND DEBRIS
1	96	SR	00	1472.9		STEP HEIGHT=0.05
1	97	LP	00	1517.1		
1	99	LP	00	1558.4	BV	CA/MT, M30/G, MT/ST, UTM:424513/4825605, RIP #4
1	102	SC	00	1594.8		STEP HEIGHT=0.25
1	103	LP	00	1634.1	WL	
1	104	RI	01	1661.7	HS	
1	106	LP	01	1696.3		
1	107	BW	10	1696.3	SS	BENCH #7
1	109	RP	00	1747.4	BV	
1	110	LP	00	1761.7	WL	

COMMENT SUMMARY

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REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	111	SC	00	1768.2		STEP HEIGHT=0.6
1	112	LP	00	1790.4		
1	114	LP	00	1849.5	SS HS	HS-LOGS
1	117	SR	00	1869.2		STEP HEIGHT=0.3
1	119	SR	00	1888.6		STEP HEIGHT=0.4
1	121	SR	00	1900.8		STEP HEIGHT=0.05
1	122	LP	00	1924.5		CA/CT, M30/G, LT/ST, UTM:424484/4825466, RIP #5
1	124	LP	00	1973.4		
1	126	LP	00	1991.4		
1	131	RR	00	2021.8	DJ HS	HS-LOGS, DJ-DEBRIS
1	132	DP	00	2027.8	HS	HS-LOGS
1	133	SR	00	2030.8		STEP HEIGHT=0.35

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REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	134	SP	00	2038.8		BENCH #8
1	136	LP	00	2066.9	WL	
1	139	SR	00	2111.5		STEP HEIGHT=0.45
1	140	LP	00	2146.7	BV HS	HS-LOGS, BV-DEBRIS
1	141	SR	00	2149.7		STEP HEIGHT=0.5
1	142	LP	00	2165.9	WL	
1	143	SR	00	2168	WL	STEP HEIGHT=0.1
1	145	SR	00	2174.9		STEP HEIGHT=0.15
1	147	RP	00	2223.7	WL	
1	149	SR	00	2228.2		STEP HEIGHT=0.5
1	151	SR	00	2244.8		STEP HEIGHT=0.5
1	153	RR	00	2301.9	CE	

COMMENT SUMMARY

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REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	154	LP	00	2321.9	DJ HS	HS-LOGS, DJ-DEBRIS
1	155	SC	01	2323.1	TJ/	TJ/, BENCH #9, STEP HEIGHT=0.15
1	156	RI	11	2323.1		ACW=1.4, TEMP=11
1	161	BW	10	2396.5		
1	162	RP	00	2417.6	HS	HS-BOULDERS AND LOGS
1	164	SR	00	2433.7		STEP HEIGHT=0.3
1	165	RP	01	2467.7	HS	HS-BOULDERS AND LOGS
1	166	IP	10	2467.7	WL	
1	167	SP	00	2476.6	HS	HS-BOULDERS
1	168	SS	00	2479.6	HS	HS-BOULDERS
1	169	DP	00	2497.7	HS	HEIGHT=1.4
1	170	CR	00	2513.6	HS	HS-BOULDERS

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 402 STREAM: ELK CREEK PHASE 3

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	171	LP	00	2537.6	HS	CH/MV, C90/G, LT/ST, UTM:424492/4825032, RIP #6
1	172	RB	00	2558.8	HS	
1	173	LP	00	2571.4	DJ	DJ-LOGS, BOULDERS, AND DEBRIS
1	175	SC	00	2581		STEP HEIGHT=0.65
1	177	SR	00	2590		STEP HEIGHT=0.9
1	179	SR	00	2601.3		STEP HEIGHT=0.65
1	181	SR	00	2625.2		BENCH #10, STEP HEIGHT=0.8
1	183	IP	10	2641.7	BV	
1	184	LP	00	2658.8		GRAVEL BAR IN MIDDLE OF POOL
1	188	PP	00	2712.7		
1	189	CR	01	2748.9		HEIGHT OF CR=6.7M
1	190	SS	02	2748.9		FISH LADDER (PHOTO)

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 402 STREAM: ELK CREEK PHASE 3

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	191	DP	00	2797.5		
1	195	SS	00	2833.8	BV HS	HS-LOGS AND BOULDERS
1	196	LP	00	2867.3	BV HS	HS-LOGS AND BOULDERS
1	197	RR	00	2887.6	BV	SS
1	198	RP	00	2913.6	WL	
1	199	LP	00	2967.7	BV	
1	200	SR	00	2969.7	WL	STEP HEIGHT=0.2
1	202	RP	00	3012	WL	
1	205	SR	00	3069.8		STEP HEIGHT=0.5
1	206	LP	00	3095.1		CA/CT, D30/S, LT/ST, UTM:424567/4824486, RIP #7
1	207	SR	00	3097.4		STEP HEIGHT=0.1
1	208	RP	01	3124.4	WL TJ/	TJ/

OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

OREGON PLAN MONITORING SITE
SURVEY DATE: 8/9/2011

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 402 STREAM: ELK CREEK PHASE 3

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	209	RR	11	3124.4		ACW=3.2, TEMP=12
1	210	SR	11	3124.4		STEP HEIGHT=0.8
1	211	BW	10	3124.4	WL	
1	212	SR	00	3125.6		STEP HEIGHT=0.25
1	214	SR	00	3132.1		STEP HEIGHT=0.25
1	216	SR	00	3138.5		STEP HEIGHT=0.35
1	217	LP	00	3149.1		
1	218	RR	00	3158.1		
1	219	LP	00	3168.1	BV	
1	220	RB	00	3184.2		BENCH #11
1	221	LP	00	3208.6	SS	SS
1	222	SC	00	3212.6		STEP HEIGHT=0.3

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 402 STREAM: ELK CREEK PHASE 3

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	223	RR	00	3251.6		
1	224	SS	00	3255.6	BV	CH/MV, D30/S, LT/ST, UTM:424453/4824508, HS-BOULDER HEIGHT=0.6