

REACH 1

T23S-R11W-S12NE

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	100%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index 1.4		VWI Range: 1 - 2	

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	100%	Single Channel	0%
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	537	2,336	0
Secondary	34	39	1

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	4.0	Width	9.3	14.2	14.5
Depth	0.29	Height	0.6	1.3	2.2
		W:D ratio	14.9	Entrenchment	1.6
Stream Flow Type:	MF	Water temp (C): 15.0 - 15.0			
Avg. Unit Gradient:	2.6%	Habitat Units/100m: 5.2			

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	TH	MT
Riparian Vegetation:	D15	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	3%	Reach avg: 82%
Undercut Banks:	0%	Range: 47 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m</u>
All pieces (>=3m x 0.15m):	43	8.0
Volume (m ³):	97	18.1
Key pieces (>=10m x 0.60m):	6	1.1

OREGON DEPARTMENT OF FISH AND WILDLIFE

KNIFE CREEK LOWER PRE-TX (MS-161)

HABITAT INVENTORY

Report Date: 3/17/03

Survey Date:

7/2/02

REACH 1		T23S-R11W-S12NE					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	1	19	1.5	0.20	28	1	0	0	0	0	0	100	
CASCADE/BOULDERS	1	10	0.5	0.02	5	1	0	7	40	40	13	0	
DRY CHANNEL	1	19	1.3	0.00	25	0	6	11	33	17	0	33	
POOL-BACKWATER	1	5	1.8	0.20	9	1	0	5	21	21	0	53	
POOL-DAMMED	1	8	5.0	0.50	40	0	5	5	0	0	0	90	
POOL-LATERAL SCOUR	8	106	4.9	0.57	523	49	4	9	26	11	6	44	
RAPID/BEDROCK	7	224	4.0	0.16	900	54	0	1	5	7	6	81	
RAPID/BOULDERS	6	144	4.7	0.20	678	114	0	5	29	35	19	12	
RIFFLE	1	31	5.0	0.15	153	9	5	10	19	14	5	48	
STEP/BOULDERS	1	6	2.5	0.15	15	8	0	0	10	30	60	0	
Total:	28	571	4.0	0.29	2,376	237	Avg	2	5	19	17	47	

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	2	13	3.4	0.35	49	2.06%	1	2.0
Scour Pools	8	106	4.9	0.57	523	22.03%	49	9.4
Glides	0	0			0	0.00%	0	0.0
Riffles	1	31	5.0	0.15	153	6.42%	9	5.9
Rapids	13	368	4.3	0.18	1,578	66.42%	168	10.6
Cascades	2	28	1.0	0.11	33	1.38%	2	6.1
Step/Falls	1	6	2.5	0.15	15	0.62%	8	54.2
Dry	1	19	1.3	0.00	25	1.06%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY		
	<u>Total</u>	<u># / Km</u>
All Pools:	10	18.6
Pools >=1m deep:	0	0.0
Complex pools (LWD pieces>=3):	2	3.7
Pool frequency (channel widths/pool):	6.2	
Residual pool depth (avg):	0.42	

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1 **REACH 1**

Summary of Riparian Zone (0-30m) 3 transects

Total hardwoods/1000	894
Total conifers/1000 ft	163
Total conifers >20" dbh/1000 ft	41
Total conifers >35" dbh/1000 ft	0

Average number of trees in a 5-meter wide band

Diameter class (cm)	Zone 1		Zone 2		Zone 3		Zones 1-3	
	0-10 meters		10 - 20 meters		20 - 30 meters		0-30 meters	
	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	0.3	3.0	0.0	3.3	0.0	1.3	0.3	7.7
15-30cm	0.3	0.0	0.0	2.3	1.0	2.7	1.3	5.0
30-50cm	0.0	0.0	0.3	0.3	0.0	0.0	0.3	0.3
50-90cm	0.3	1.3	0.3	0.3	0.0	0.0	0.7	1.7
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	1.0	4.3	0.7	6.3	1.0	4.0	0.9	4.9

Canopy closure and ground cover

	Zone 1		Zone 2		Zone 3	
	0-10 meters		10 - 20 meters		20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	85		89		90	
Shrub cover	41		36		33	
Grass/forb cover	49		50		62	

Predominant landform in each zone

	Zone 1		Zone 2		Zone 3	
	0-10 meters		10 - 20 meters		20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	83		100		50	
High terrace	17		0		0	
Low terrace	0		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		50	
Riprap	0		0		0	
Surface slope (%)	49		56		23	

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

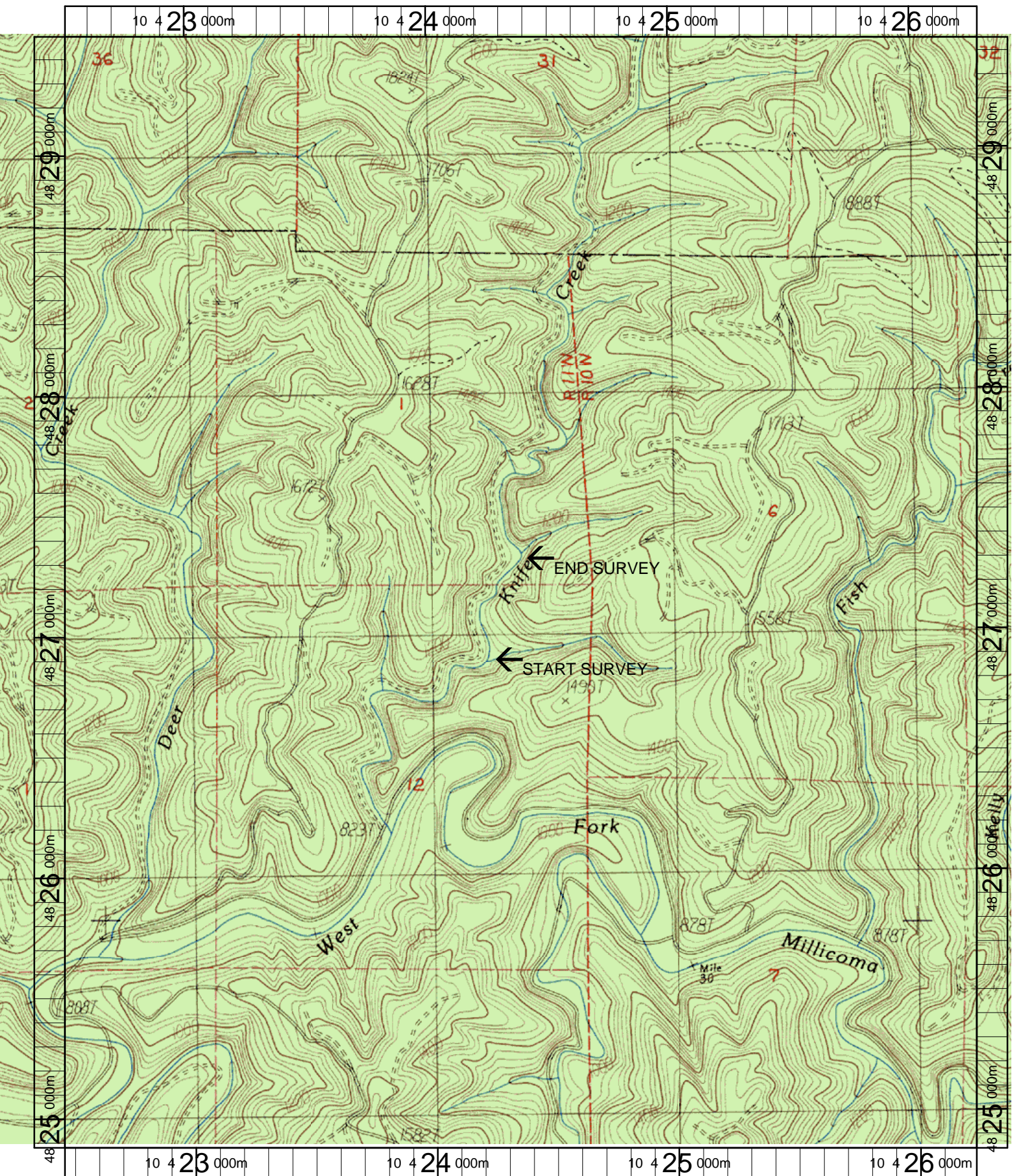
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
9	LF	1	HS	60	95	35	65	Conifer							BOTTOM OF U9
								Hardwood	5						
9	LF	2	HS	90	95	30	70	Conifer							
								Hardwood	2	2					
9	LF	3	RB	0	95	15	85	Conifer							
								Hardwood	2						
9	RT	1	HT	0	90	25	75	Conifer							
								Hardwood					4		
9	RT	2	HS	45	95	5	90	Conifer							
								Hardwood			1	1			
9	RT	3	HS	55	95	70	30	Conifer		1					
								Hardwood							
12	LF	1	HS	70	100	15	75	Conifer							
								Hardwood	1						
12	LF	2	HS	70	95	5	90	Conifer							
								Hardwood	7	3					
12	LF	3	RB	0	95	15	85	Conifer							
								Hardwood	1	5					
12	RT	1	HS	45	50	80	20	Conifer							EST. DUE TO BRUSH
								Hardwood							
12	RT	2	HS	45	65	85	15	Conifer							
								Hardwood		1					
12	RT	3	HS	50	85	60	25	Conifer							
								Hardwood	1	2					
20	LF	1	HS	50	85	80	20	Conifer	1						EST. LEFT SIDE
								Hardwood	3						
20	LF	2	HS	60	90	90	10	Conifer							
								Hardwood	1	1					
20	LF	3	RB	0	85	35	60	Conifer							
								Hardwood		1					
20	RT	1	HS	70	90	10	40	Conifer		1			1		RAN OUT RIGHT
								Hardwood							
20	RT	2	HS	25	95	0	25	Conifer				1	1		
								Hardwood							
20	RT	3	HS	30	85	0	85	Conifer			2				
								Hardwood							

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 3-MS SITE ID: 161 KNIFE CREEK LOWER PRE-TX (MS-1)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RB	00	21.3			START @ /TJ
2	LP	00	32.3			COHO FRY (20-25)
3	RB	00	58.6		SNAILS	
4	LP	00	67.9	/SS	LOW T	T=15C
5	CR	00	86.6	/SS		
9	LP	00	165.2			RIP @ BOTTOM
12	LP	00	272.3		SPN SRVY SN/	REDD @ TAILOUT
13	RR	00	300.9	HS	CONSTRAINED HS	RIP @ BOTTOM OF 12
14	RB	01	311.6	/TJ		NOT ON MAP
15	CB	11	311.6		ACW=1.3 T=14.5C	
22	DP	00	379.3		BOTTOM	
24	RB	00	436.4			BEGIN /CLEAR CUT
25	RR	00	468.1	HS		
26	RI	00	498.6	HS		COHO FRY
28	LP	00	537.2		END	END BELOW TJ



Name: ELK PEAK
 Date: 3/20/2003
 Scale: 1 inch equals 1666 feet

Location: 10 424365 E 4827171 N
 Caption: KNIFE CREEK LOWER RESTORATION SITE - MILLICOMA BASIN