

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

STREAM: ROCK CREEK
 GCG: 5-SC
 SITE ID: 462
 BASIN: ROGUE
 TREATMENT DATE: 2012
 SURVEY DATE: 6/24/2013
 SURVEY CREW: BRENT PRIZ, DAVID JONES
 USGS MAPS: SKELETON MOUNTAIN
 ECOREGION: Oak Savannah Foothills
 REPORT PREPARED BY: Lora Tennant

REACH: 1 LOCATION: T33S-R03W-S34SW

SURVEY DESCRIPTION:

Channel morphology: Constrained by hillslopes
 Dominant landuse(s): Second growth timber (15-30 cm dbh)
 Dominant riparian vegetation: Deciduous trees: size class 15-30cm dbh
 Primary channel length (meters) and area (m²): 697 : 3,594
 Secondary channel length (meters) and area (m²) 41 : 62
 VWI average: 2.4 VWI Range: 1.2 - 6.5 Average Gradient: 2.4%
 Pieces LWD per 100m: 10.9 Wood Volume (m³) per 100m: 11.3
 Percent pools: 42% Complex pools (LWD pieces>=3): 8 Pools >=1m deep: 1
Percent substrate (avg): Silt / organics Sand Gravel Cobble Boulder Bedrock
 All units 5 19 14 11 9 42
 Pool units 6 31 11 6 6 40
 Fast water units 4 13 18 17 8 39

SURVEY COMMENTS:

This is a post-treatment habitat and snorkel survey at a large wood restoration treatment site. Habitat structures were noted throughout the survey. Most of the habitat logs were along the stream margins. Adult salmon carcasses had been placed in the stream. Juvenile coho were observed throughout the survey.

Survey Date: 6/24/2013

Report Date: 4/22/2014 T33S-R03W-S34SW

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	2.4	VWI Range:	1.2 - 6.5

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	697	3,594	0
Secondary	41	62	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 1
Width: 4.5	Width: 6.6	9.2 (7.2 - 11.3)	21.7 (21.7 - 21.7)
Depth: 0.34	Height: 0.3	0.6 (0.6 - 0.7)	1.9 (1.9 - 1.9)

W:D ratio: 21.3

Stream Flow Type: MF

Average Unit Gradient: 2.4%

Water temperature (°C): 12.0 - 12.0

Entrenchment (ACW:FPW ratio): 1.4

Habitat Units/100m (total channel length): 7.9

Habitat Units/100m (primary channel length): 8.3

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	LT
Riparian Vegetation:	D15	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	0%	Reach avg: 71%
Undercut Banks:	2%	Range: 31 - 97

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	76	10.9
Volume (m ³):	79	11.3
Key pieces (>=12m x 0.60m):	3	0.4

Survey Date: 6/24/2013

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T33S-R03W-S34SW

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	14	3.1	0.15	43	0	0	5	5	0	0	90
CASCADE/BOULDERS	1	19	5.4	0.35	103	15	5	10	15	35	25	10
POOL-ISOLATED	3	4	1.2	0.20	5	0	10	30	0	0	0	60
POOL-LATERAL SCOUR	19	285	5.2	0.59	1,531	60	6	32	12	6	6	38
POOL-PLUNGE	1	7	3.0	0.70	21	4	5	5	5	5	5	75
RAPID/BEDROCK	9	100	4.6	0.24	491	44	3	9	10	9	7	63
RAPID/BOULDERS	7	134	4.7	0.20	568	56	4	13	23	32	13	14
RIFFLE	10	156	5.0	0.22	813	50	5	18	25	15	6	33
STEP/BEDROCK	4	17	4.6	0.18	79	3	0	3	3	1	1	93
STEP/BOULDERS	2	2	1.5	0.13	3	10	0	5	5	8	80	3
STEP/COBBLE	1	1	0.5	0.20	0	0	5	25	60	10	0	0
Total:	58	738	4.5	0.34	3,656	242	Avg: 5	19	14	11	9	42

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	3	4	1.2	0.20	5	0.12%	0	0.0
Scour Pools	20	292	5.1	0.60	1,552	42.44%	64	4.1
Glides	0	0			0	0.00%	0	0.0
Riffles	10	156	5.0	0.22	813	22.23%	50	6.2
Rapids	16	234	4.6	0.22	1,059	28.96%	100	9.4
Cascades	2	33	4.3	0.25	146	3.99%	15	10.3
Step/Falls	7	20	3.1	0.17	83	2.26%	13	15.7
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

ROCK CREEK
GCG: 5-SC SITE ID: 462

Survey Date: 6/24/2013

Report Date: 4/22/2014

T33S-R03W-S34SW

REACH 1

POOL SUMMARY

	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	23	31.1	33.0
Pools >=1m deep:	1	1.4	1.4
Complex pools (LWD pieces>=3):	8	10.8	11.5
Pool frequency (channel widths/pool):	4.9		
Residual pool depth (avg):	0.41		

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

**ROCK CREEK
GCG: 5-SC SITE ID: 462**

**Survey Date: 6/24/2013
Report Date: 4/22/2014**

**RIPARIAN ZONE
VEGETATION SUMMARY**

REACH 1

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

Total hardwoods/1000 ft	914
Total conifers/1000 ft	833
Total conifers >20" dbh/1000 ft	20
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	1.7	3.0	2.7	1.3	3.3	4.0	7.7	8.3
15-30cm	0.0	6.3	1.0	0.0	2.0	0.3	3.0	6.7
30-50cm	0.3	0.0	1.0	0.0	1.3	0.0	2.7	0.0
50-90cm	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m ²	2.0	9.3	4.7	1.3	7.0	4.3	4.6	5.0

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	55		42		44	
Shrub cover	36		32		34	
Grass/forb cover	48		43		39	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	83		83		67	
High terrace	17		17		17	
Low terrace	0		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		17	
Riprap	0		0		0	
Surface slope (%)	33		30		27	

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

3 transects

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

Total hardwoods/1000 ft	914
Total conifers/1000 ft	833
Total conifers >20" dbh/1000 ft	20
Total conifers >35" dbh/1000 ft	0

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	7.7	8.3
15-30cm	3.0	6.7
30-50cm	2.7	0.0
50-90cm	0.3	0.0
>90cm	0.0	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		
13	LF	1	HT	36	10	25	50	Conifer							DUFF=25, TRANSITIONA L SLOPE DUFF=5
								Hardwood							
13	LF	2	HT	5	0	0	95	Conifer	1						
								Hardwood							
13	LF	3	HT	3	0	0	90	Conifer							DUFF=10
								Hardwood							
13	RT	1	HS	25	80	75	15	Conifer							DUFF=10
								Hardwood		3					
13	RT	2	HS	7	35	30	30	Conifer				1			DUFF=5
								Hardwood							
13	RT	3	HS	15	65	75	5	Conifer			2	1			DUFF=10
								Hardwood							
22	LF	1	HS	23	60	20	65	Conifer	3						DUFF=15
								Hardwood	1	1					
22	LF	2	HS	18	10	80	10	Conifer							DUFF=10
								Hardwood							
22	LF	3	HS	22	65	75	10	Conifer	7	1					DUFF=15, ENDS @ OLD LOGGING RD
								Hardwood	10	1					
22	RT	1	HS	18	70	50	30	Conifer	1						DUFF=20
								Hardwood	4	10					
22	RT	2	HS	36	80	20	50	Conifer	3			2			DUFF=30
								Hardwood							
22	RT	3	HS	19	75	10	60	Conifer	3		2	1			DUFF=30
								Hardwood							
32	LF	1	HS	39	85	40	50	Conifer	1			1			DUFF=10
								Hardwood	1	2					
32	LF	2	HS	42	70	30	65	Conifer	4	1					DUFF=5, 3M OLD ROADBED DUFF=5
								Hardwood	2						
32	LF	3	HS	64	50	30	65	Conifer			2	1			
								Hardwood	2						
32	RT	1	HS	57	25	5	80	Conifer							ROCK=15
								Hardwood	3	3					
32	RT	2	HS	70	55	30	10	Conifer			2				DUFF=60, 10=ROADBED
								Hardwood	2						
32	RT	3	RB	38	10	15	5	Conifer				1			RB IS PAVEMENT, DIRT=10,
								Hardwood							

OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

RESTORATION MONITORING SITE
SURVEY DATE: 6/24/2013

COMMENT SUMMARY

MONITORING AREA: 5-SC SITE ID: 462 STREAM: ROCK CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	1	RR	00	6		MANMADE LOG DAM, CARCASSES, START OF SURVEY, 495806/4722296
1	2	RI	00	22.5	BC	WF EVANS CR RD
1	3	LP	00	31.8	BC,HS	WF EVANS CR RD,LOGS
1	10	LP	00	94	HS	HS LOG
1	12	RR	00	124.2	HS	3 LOGS
1	13	LP	00	133.9		MET & RIP
1	15	LP	00	152.4	HS	2 LOGS
1	16	RI	00	175.3	HS	3 LOGS
1	17	SB	00	176.3		H=0.35
1	18	RI	00	187.8		DEEP POCKET=0.45
1	19	LP	00	202.8	HS	LOGS, JUV SALMONID
1	21	LP	00	223.6	HS	LOG
1	22	RR	00	242	WL	DEER TRAIL & TRACKS
1	23	LP	00	253	HS	LOG
1	25	RI	00	297	HS	LOG
1	29	LP	00	347.3		PLACED FISH CARCASSES
1	30	RR	00	356.3	WL	TERRESTRIAL SNAIL
1	31	LP	00	364.3	WL	COYOTE OR FOX SCAT ON LOG
1	33	LP	00	400.3	WL	SIGNAL CRAYFISH
1	34	SR	00	401.7		H=0.4
1	35	RR	00	409.7		REARING SIGN #9533
1	37	SR	00	421.5	PN	495749/4722667
1	41	RB	01	470.7	HS	LOG
1	42	SB	02	470.7		H=0.45, 02 FLOW NEARLY SUBSURFACE

COMMENT SUMMARY

MONITORING AREA: 5-SC SITE ID: 462 STREAM: ROCK CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	44	LP	02	470.7	WL	DEER TRACKS, JUV COHO
1	46	SC	00	471.58	HS;DJ	WATER FLOWS UNDER HS LOG
1	47	LP	00	503.58	HS	LOGS
1	48	RI	01	511.58		POCKET=0.5M DEEP
1	52	RI	00	573.38	HS	LOG
1	53	LP	00	591.38		JUV SALMONIDS
1	55	LP	00	616.18	HS	LOGS BOTH SIDES
1	57	RB	00	666.18	HS	LOGS
1	58	RB	00	697.18		END SURVEY, 495679/4733789

OREGON DEPT OF FISH AND WILDLIFE
RESTORATION MONITORING SNORKEL SURVEY SUMMARY

Stream: ROCK CREEK

Survey Date: 6/24/2013

GCG: 5-SC Site ID: 462

Location: T33S-R03W-S34SW

Report Date: 4/22/2014

Start UTM E: 495806

End UTM E: 495679

Stream Flow: MF

Start UTM N: 4722296

End UTM N: 4722789

Water Temperature: 12

Reach Notes: CREW OBSERVED PLACED ADULT SALMON CARCASSES.

Num	<u>Pool Information</u>						<u>Fish Information</u>								Note
	Type	Vis	Length(m)	Width(m)	Depth(m)	CO	CT	ST	CH	TR	RSS	D	Other		
3	LP	3	9.3	3.8	0.5					Yes	No	No			
5	LP	3	6.1	4.3	0.4					No	No	No			
7	LP	3	5.1	3.6	0.7					Yes	No	No			
10	LP	2	24	4.6	0.65	5				Yes	No	No		POOR VIS DUE TO UNDERCUT	
11	LP	3	17.9	5.8	0.6					Yes	No	No			
13	LP	3	9.7	4.1	0.4	4				Yes	No	No	1 COT		
15	LP	3	12.5	4.9	0.55	27				No	No	No	1 COT	ALL AGE 1 COHO	
19	LP	3	15	8.5	1.25	31				Yes	No	No	1 COT	END 6/25/13	
21	LP	3	14.8	5.3	0.6	9				Yes	No	No	1 COT	BEGIN 6/26/13	
23	LP	3	11	6	0.6	34				Yes	No	No	4 COT		
27	LP	3	10	5.7	0.55	38				Yes	No	No	2 COT	INVASIVE CRAYFISH-RINGED	
29	LP	3	18	5.5	0.7	14				Yes	No	No	1 COT		
31	LP	3	8	5.3	0.5	4				No	No	No	1 COT		
33	LP	3	26	5.6	0.75	16				No	No	No	3 COT		
36	PP	3	7	3	0.7	16	2			Yes	No	No			
44	LP	2	12	2.2	0.2	2				Yes	No	No			
47	LP	3	32	6.1	0.6	27				Yes	No	No	1 COT		
51	LP	3	16	5.8	0.5	4				Yes	No	No			

Vis=Visibility (0-3): 0=poorest, 3=best. Visibility may be influenced by either habitat complexity or water clarity.

CO = Coho; CT = cutthroat ≥90mm; ST = steelhead ≥90mm; CH = Chinook; TR = trout ≤90mm; RSS = reddsider shiner; D = dace; COT = sculpin

OREGON DEPT OF FISH AND WILDLIFE
RESTORATION MONITORING SNORKEL SURVEY SUMMARY

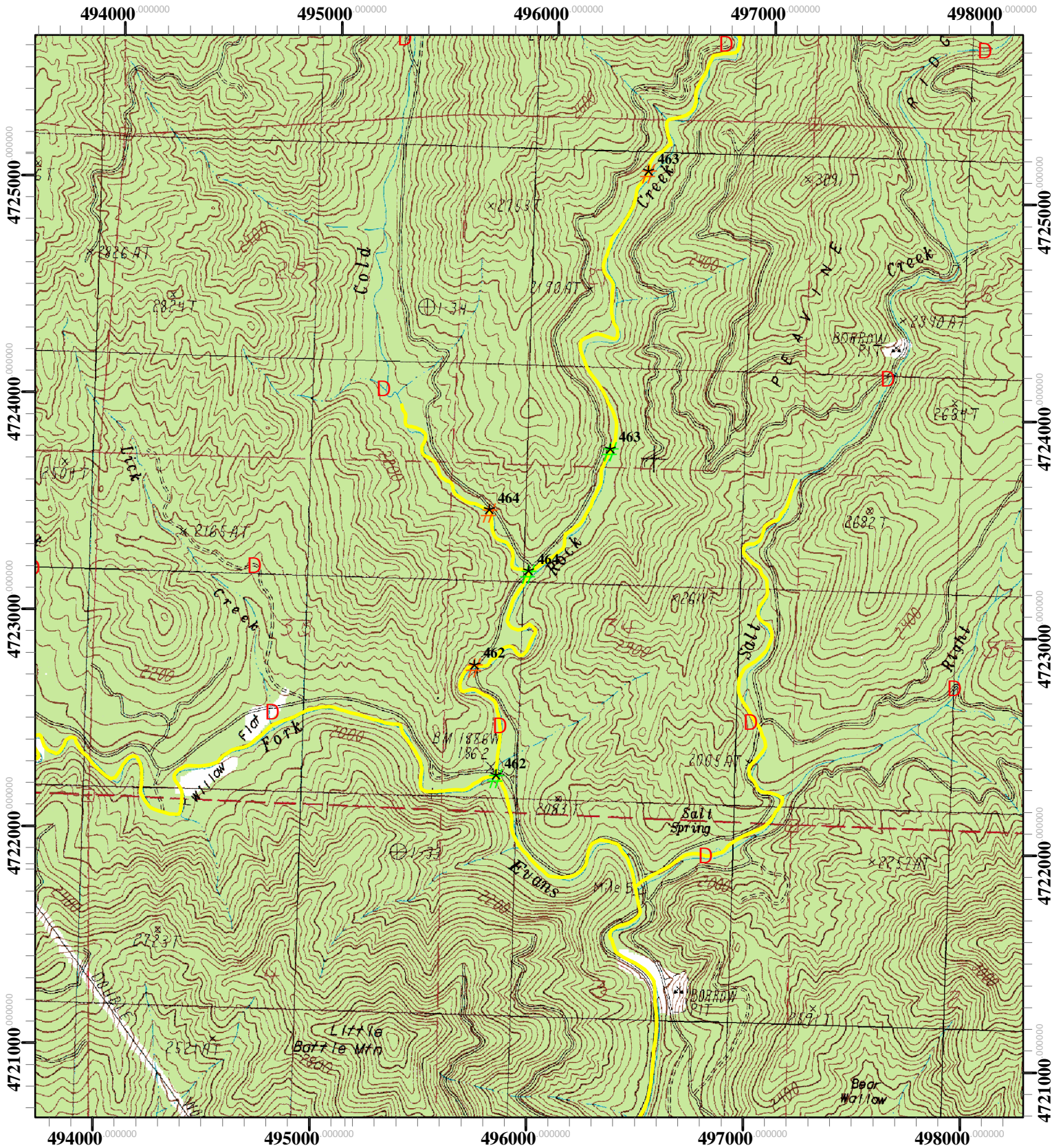
Stream: ROCK CREEK	Survey Date: 6/24/2013
GCG: 5-SC Site ID: 462 Location: T33S-R03W-S34SW	Report Date: 4/22/2014
Start UTM E: 495806 End UTM E: 495679	Stream Flow: MF
Start UTM N: 4722296 End UTM N: 4722789	Water Temperature: 12

Reach Notes: CREW OBSERVED PLACED ADULT SALMON CARCASSES.

<u>Pool Information</u>							<u>Fish Information</u>							
Num	Type	Vis	Length(m)	Width(m)	Depth(m)	CO	CT	ST	CH	TR	RSS	D	Other	Note
53	LP	3	18	6.3	0.55	2		2		Yes	No	No		
55	LP	3	19.5	4.7	0.7	27				Yes	No	No		1 COHO= 1+

Vis=Visibility (0-3): 0=poorest, 3=best. Visibility may be influenced by either habitat complexity or water clarity.

CO = Coho; CT = cutthroat ≥90mm; ST = steelhead ≥90mm; CH = Chinook; TR = trout ≤90mm; RSS = redbside shiner; D = dace; COT = sculpin



Site Number: 462
 Stream: Rock Cr
 T33S R03W S34
 County: Jackson
 Quad: Skeleton Mountain

- ✱ Restoration Start
- ✱ Restoration End
- D Potential Barrier
- Spawning Survey Segments

