

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

STREAM: BIG CREEK  
 GCG: 3-MS  
 SITE ID: 452  
 BASIN: COQUILLE  
 TREATMENT DATE: 2011  
 SURVEY DATE: 4/26/2011  
 SURVEY CREW: Frank Drake and Matt Strickland  
 USGS MAPS: REMOTE  
 ECOREGION: Mid-Coastal Sedimentary  
 REPORT PREPARED BY: Matt Strickland / Charles Stein

REACH: 1 LOCATION: T29S-R10W-S06SW

**SURVEY DESCRIPTION:**

Channel morphology: Unconstrained - predominantly single channel

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 (m<sup>2</sup>): 1,615 : 16,350

Secondary channel length (meters) and area (m<sup>2</sup>): 94 : 336

VWI average: 5.3 VWI Range: 2 - 8 Average Gradient: 1.4%

Pieces LWD per 100m: 12.8 Wood Volume (m<sup>3</sup>) per 100m: 11.4

Percent pools: 42% Complex pools (LWD pieces>=3): 9 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	6	22	35	17	5	15
Pool units	5	30	30	14	5	15
Fast water units	0	13	44	22	6	16

**SURVEY COMMENTS:**

This is a pre treatment restoration survey. The crew noted observing several winter steelhead redds and juvenile coho salmon throughout the survey. Beaver activity consisting of fresh chewed sticks was noted. The crew also noted a large debris jam approximately 500 meters from the start of the survey. Evidence of wildlife included deer and elk tracks and a rough skinned newt.

Survey Date: 4/26/2011

Report Date: 9/14/2011

T29S-R10W-S06SW

REACH 1

**Valley and Channel Summary**

Valley Characteristics (Percent Reach Length)

Narrow Valley Floor		Broad Valley Floor	
Steep V-shape	0%	Constraining Terraces	0%
Moderate V-shape	0%	Multiple Terraces	100%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	5.3	VWI Range:	2 - 8

Channel Morphology (Percent Reach Length)

Constrained		Unconstrained	
Hillslope	0%	Single Channel	100%
Bedrock	0%	Multiple Channel	0%
Terrace	0%	Braided Channel	0%
Alt. Terrace/Hill	0%		
Landuse	0%		

Channel Characteristics

Type	Length (m)	Area (m <sup>2</sup> )	Dry Units
Primary	1,615	16,350	0
Secondary	94	336	0

Channel Dimensions (m)

Wetted	Active	Floodprone <i>n</i> = 6	First Terrace <i>n</i> = 1
Width: 8.6	Width: 11.1	44.0 ( 12.7 - 73 )	13.6 ( 13.6 - 13.6 )
Depth: 0.54	Height: 0.7	1.3 ( 1.3 - 1.4 )	1.8 ( 1.75 - 1.75 )

W:D ratio: 16.9

Stream Flow Type: MF

Average Unit Gradient: 1.4%

Water temperature (°C): 10.0 - 10.0

Entrenchment (ACW:FPW ratio): 3.9

Habitat Units/100m (total channel length): 3.5

Habitat Units/100m (primary channel length): 3.7

**Riparian, Bank, and Wood Summary**

	Primary	Secondary
Land Use:	ST	LT
Riparian Vegetation:	D15	S

Bank Condition and Shade

Bank Status	Percent Reach Length	Shade (% of 180)
Actively Eroding:	11%	Reach avg: 93%
Undercut Banks:	5%	Range: 67 - 100

Large Wood Debris

	Total	Total / 100m primary channel
All pieces (>=3m x 0.15m):	207	12.8
Volume (m <sup>3</sup> ):	184	11.4
Key pieces (>=12m x 0.60m):	6	0.4

HABITAT INVENTORY

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T29S-R10W-S06SW

REACH 1

HABITAT DETAIL

Habitat Type	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m <sup>2</sup> )	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BEDROCK	2	65	11.8	0.30	766	1	0	5	3	3	3	88
CASCADE/BOULDERS	3	9	1.0	0.07	9	0	0	10	58	30	2	0
GLIDE	1	35	9.1	0.45	316	0	5	20	55	15	5	0
POOL-ALCOVE	1	4	1.5	0.20	6	0	90	10	0	0	0	0
POOL-BACKWATER	2	11	2.8	0.45	30	0	15	70	3	5	0	8
POOL-DAMMED	1	54	10.9	1.20	586	0	15	60	10	5	0	10
POOL-ISOLATED	3	20	1.7	0.22	35	0	30	28	18	3	0	20
POOL-LATERAL SCOUR	20	592	10.5	1.01	6,145	12	5	29	32	15	5	14
POOL-STRAIGHT SCOUR	1	17	12.8	0.60	221	2	5	35	5	5	5	45
RAPID/BEDROCK	1	37	9.1	0.35	340	7	0	10	5	24	10	52
RAPID/BOULDERS	2	76	8.5	0.30	680	7	0	15	30	20	8	28
RIFFLE	14	553	8.3	0.26	5,316	14	0	14	49	24	6	8
RIFFLE W/ POCKETS	4	216	9.2	0.36	2,001	3	1	19	51	18	6	5
STEP/BEDROCK	1	4	10.1	0.30	40	0	0	0	0	0	0	100
STEP/COBBLE	3	15	11.5	0.27	170	1	0	13	43	35	8	0
STEP/LOG	1	3	9.4	0.20	24	0	0	15	65	20	0	0
<b>Total:</b>	<b>60</b>	<b>1,709</b>	<b>8.6</b>	<b>0.54</b>	<b>16,686</b>	<b>47</b>	<b>Avg: 6</b>	<b>22</b>	<b>35</b>	<b>17</b>	<b>5</b>	<b>15</b>

HABITAT SUMMARY

Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders	
					(m <sup>2</sup> )	Percent	Number	(# / 100m <sup>2</sup> )
Dammed & BW Pools	7	89	3.3	0.42	658	3.94%	0	0.0
Scour Pools	21	609	10.6	0.99	6,366	38.15%	14	0.2
Glides	1	35	9.1	0.45	316	1.89%	0	0.0
Riffles	18	768	8.5	0.28	7,317	43.85%	17	0.2
Rapids	3	113	8.7	0.32	1,020	6.11%	14	1.4
Cascades	5	74	5.3	0.16	775	4.64%	1	0.1
Step/Falls	5	22	10.8	0.26	234	1.40%	1	0.4
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

BIG CREEK  
GCG: 3-MS SITE ID: 452

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Survey Date: 4/26/2011

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T29S-R10W-S06SW

REACH 1

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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:	28	16.4	17.3
Pools >=1m deep:	8	4.7	5.0
Complex pools (LWD pieces>=3):	9	5.3	5.6
Pool frequency (channel widths/pool):	5.5		
Residual pool depth (avg):	0.66		

Survey Date 4/26/2011

RIPARIAN ZONE  
VEGETATION SUMMARY

REACH 1

Report Date: 9/14/2011

Summary of Riparian Zone (0-30m) 4 transects

Total hardwoods/1000	335
Total conifers/1000 ft	107
Total conifers >20" dbh/1000 f	30
Total conifers >35" dbh/1000 f	15

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	0.3	0.5	0.3	0.3	0.3	0.8	0.8	1.5
15-30cm	0.0	0.5	0.3	2.0	0.0	0.8	0.3	3.3
30-50cm	0.3	0.3	0.0	0.5	0.0	0.0	0.3	0.8
50-90cm	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0
>90cm	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0
Total/100m2	0.8	1.3	0.5	2.8	0.5	1.5	0.6	1.8

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	48		63		64	
Shrub cover	36		31		34	
Grass/forb cover	48		59		61	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	13		38		50	
High terrace	25		25		13	
Low terrace	63		38		38	
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		25		38	

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

**4 transects**

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

Total hardwoods/1000	335
Total conifers/1000 ft	107
Total conifers >20" dbh/1000 f	30
Total conifers >35" dbh/1000 f	15

**Average number of trees in a 5-m wide band**

<u>Diameter</u> <u>class (cm)</u>	<u>Zones 1-3</u> <u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	0.8	1.5
15-30cm	0.3	3.3
30-50cm	0.3	0.8
50-90cm	0.3	0.0
>90cm	0.3	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	0	45	80	15								Conifer Hardwood	5% BARE GROUND
13	LF	2	HT	0	85	30	60								Conifer Hardwood	10% EXPOSED SOIL
13	LF	3	HS	65	90	5	90			1					Conifer Hardwood	5% EXPOSED SOIL
13	RT	1	HT	0	85	10	85		1			1		1	Conifer Hardwood	5% EXPOSED SOIL
13	RT	2	HT	0	70	10	85		1	1					Conifer Hardwood	5% EXPOSED SOIL
13	RT	3	HT	0	70	30	60		1						Conifer Hardwood	10% EXPOSED SOIL
27	LF	1	LT	0	20	10	90								Conifer Hardwood	OLD BEAVER COMPLEX?
27	LF	2	LT	0	25	50	50		1						Conifer Hardwood	HIMALAYAN BLACKBERRY
27	LF	3	LT	0	30	60	40								Conifer Hardwood	HIMALAYAN BLACKBERRY
27	RT	1	LT	0	90	15	25								Conifer Hardwood	60% EXPOSED SOIL
27	RT	2	HS	50	90	15	80								Conifer Hardwood	5% EXPOSED SOIL
27	RT	3	HS	45	85	15	80		1	5		2			Conifer Hardwood	5% EXPOSED SOIL
37	LF	1	LT	0	55	60	35								Conifer Hardwood	5% EXPOSED SOIL
37	LF	2	LT	0	80	45	20								Conifer Hardwood	35% EXPOSED SOIL
37	LF	3	LT	0	55	75	25								Conifer Hardwood	
37	RT	1	LT	0	40	40	50								Conifer Hardwood	10% EXPOSED SOIL
37	RT	2	HS	20	80	20	85								Conifer Hardwood	OLD "CAT" ROAD.
37	RT	3	HS	60	85	10	80								Conifer Hardwood	10% EXPOSED SOIL
45	LF	1	HS	150	15	5	50								Conifer Hardwood	45% BEDROCK
45	LF	2	HS	130	15	10	60								Conifer Hardwood	30% BEDROCK

**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		
45	LF	3	HS	130	20	5	85	Conifer							10% BEDROCK
								Hardwood							
45	RT	1	LT	0	35	70	30	Conifer							
								Hardwood	1	1					
45	RT	2	LT	0	60	70	30	Conifer							
								Hardwood							
45	RT	3	LT	0	75	70	30	Conifer						1	C90 IS ALMOST DEAD SNAG
								Hardwood							



OREGON DEPT OF FISH AND WILDLIFE  
HABITAT INVENTORY

OREGON PLAN MONITORING SITE  
SURVEY DATE: 4/26/2011

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 452 STREAM: BIG CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	1	RP	00	64.3		423304E 4768981N START SIGN R ALDER (30-50) APPROX UPSTREAM FROM BRIDGE.
1	5	RI	01	179.6	/TJ	/TJ
1	6	RI	11	179.6		ACW=1.7 TEMP 10C
1	7	LP	01	229.3	DJ, WL	DEER TRACKS
1	8	BW	10	229.3	WL	JUVENILE COHO THROUGHOUT
1	10	IP	10	243	WL	JUVENILE COHO THROUGHOUT
1	11	LP	00	294.4	SS/,DJ,LA/	DEER AND ELK TRACKS. JUVENILE COHO THROUGHOUT
1	13	RP	01	399.9	WL	STW REDDS. GAME TRAIL, ELK TRACKS
1	14	RI	02	399.9	WL, DJ	ELK TRACKS
1	15	LP	01	416.3	TJ/, LA/	
1	16	CB	11	416.3		ACW=11.1 TEMP 10C
1	22	LP	01	559	DJ, SS/	MASSIVE DJ, PHOTOS 384-385

OREGON DEPT OF FISH AND WILDLIFE  
HABITAT INVENTORY

OREGON PLAN MONITORING SITE  
SURVEY DATE: 4/26/2011

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 452 STREAM: BIG CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	24	SL	00	561.5	DJ	SAME DEBRIS JAM AS ABOVE
1	28	AL	10	624.3	AM	RSN
1	29	RP	00	670	WL	STW REDD. DEER TRACKS
1	30	LP	00	732.5	/SS	
1	33	LP	00	825.1	WL	STW REDDS. STW REDDS
1	37	LP	00	916.4	WL	DEER TRACKS
1	38	RI	00	957.3	SS/	
1	40	RI	00	1107.8	WL	ELK/DEER TRACKS
1	41	LP	00	1143.4	/SS, WL	JUVENILE COHO
1	42	RB	01	1197.3	LS/	
1	43	BW	10	1197.3	WL	JUVENILE COHO
1	45	LP	00	1232.8	BV	FRESH CHEWED SALMONBERRY STICKS

OREGON DEPT OF FISH AND WILDLIFE  
HABITAT INVENTORY

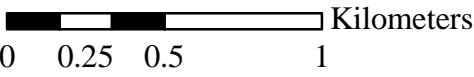
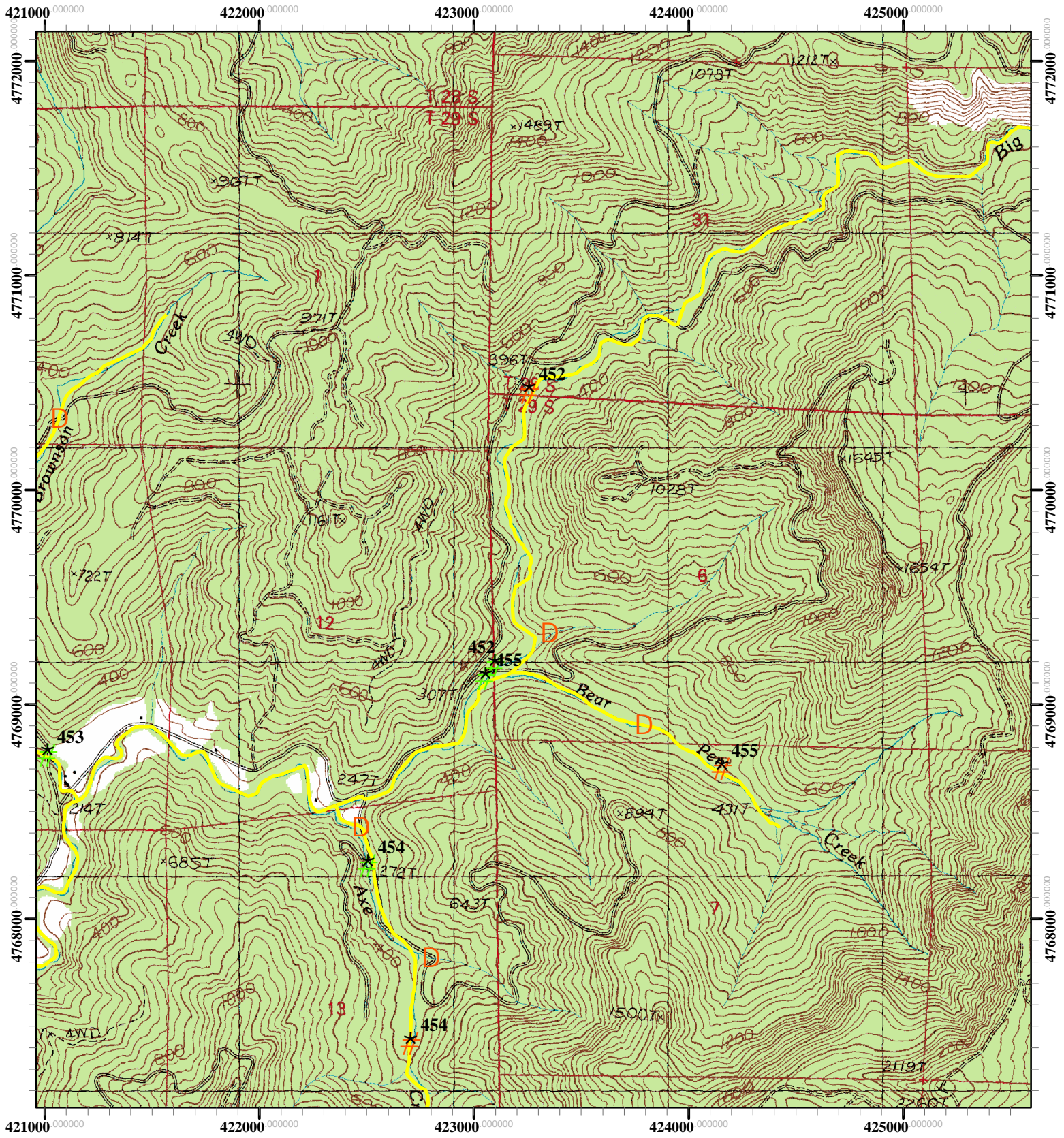
OREGON PLAN MONITORING SITE  
SURVEY DATE: 4/26/2011

COMMENT SUMMARY





MONITORING AREA: 3-MS SITE ID: 452 STREAM: BIG CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	47	LP	00	1257.8	BV	OLD CHEWED STICKS
1	49	RI	01	1359.5	TJ/	
1	50	CB	11	1359.5		ACW=2.1 TEMP 10.5C. "11"
1	51	CB	12	1359.5		ACW=0.6 TEMP 10.5C. "12"
1	52	CR	00	1411.6	/SS	
1	56	RI	01	1515.1	LA/	
1	57	IP	10	1515.1	WL	LOT OF JUVENILE COHO
1	58	LP	00	1537.3	DJ	
1	59	RI	00	1586.6	LA/	
1	60	LP	00	1614.9	DJ	END SIGN L MYRTLE (15-30). END OF SURVEY ~20 METE DOWNSTREAM OF SMALL LEFT BANK TJ.





Restoration Site ID: 452  
 Stream: Big Creek  
 T29S- R10W - S06  
 USGS Map: Remote  
 Basin: Coquille

-  Proposed Pre-Tx REST Start Point
-  Proposed Pre-Tx REST End Point
-  Potential Barrier
-  Spawning Survey Segments

