

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

STREAM: SOUTH FORK BEAR CREEK
 GCG: 2-MC
 SITE ID: 383
 BASIN: SIUSLAW
 TREATMENT DATE: 2008
 SURVEY DATE: 1/13/2009
 SURVEY CREW: Sharon Tippery / Miles Johnson
 USGS MAPS: WINDY PEAK
 ECOREGION: Mid-Coastal Sedimentary
 REPORT PREPARED BY: Matt Strickland / Sharon Tippery / Charles Stein

REACH: 1 LOCATION: T16S-R08W-S30SW

SURVEY DESCRIPTION:

Channel morphology: Constrained by high terraces
 Dominant landuse(s): Young forest trees (3-15 cm dbh)
 Dominant riparian vegetation: Deciduous trees: size class 15-30cm dbh
 Primary channel length (meters) and area (m²): 1,188 : 5,473
 Secondary channel length (meters) and area (m²) 279 : 461
 VWI average: 12.4 VWI Range: 7 - 17 Average Gradient: 1.0%
 Pieces LWD per 100m: 17.5 Wood Volume (m³) per 100m: 22.8
 Percent pools: 56% Complex pools (LWD pieces>=3): 22 Pools >=1m deep: 2
 Percent substrate (avg):

	<u>Silt / organics</u>	<u>Sand</u>	<u>Gravel</u>	<u>Cobble</u>	<u>Boulder</u>	<u>Bedrock</u>
All units	7	31	39	18	1	4
Pool units	4	36	38	15	1	6
Fast water units	2	12	53	30	1	2

SURVEY COMMENTS:

The South Fork Bear Creek survey is a post-treatment, restoration site. The crew noted habitat structures consisting of placed logs and juvenile salmonids throughout the entire survey reach. They also noted observing live adult spawning coho salmon and a fall Chinook carcass. Evidence of wildlife included recent beaver activity, rough skinned newts, and raccoon tracks. There were no potential barriers to upstream fish migration observed within the survey reach.

Survey Date: 1/13/2009

Report Date: 2/16/2010

T16S-R08W-S30SW

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	12.4	VWI Range:	7 - 17

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	1,188	5,473	0
Secondary	279	461	6

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 3.8	Width: 6.3	9.6 (8.2 - 13)	11.9 (9 - 15)
Depth: 0.46	Height: 0.4	0.8 (0.7 - 0.8)	1.0 (0.8 - 1.4)

W:D ratio: 16.6

Stream Flow Type: MF

Average Unit Gradient: 1.0%

Water temperature (°C): 7.0 - 7.0

Entrenchment (ACW:FPW ratio): 1.6

Habitat Units/100m (total channel length): 8.5

Habitat Units/100m (primary channel length): 10.5

Riparian, Bank, and Wood Summary

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

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):	208	17.5
Volume (m ³):	271	22.8
Key pieces (>=12m x 0.60m):	2	0.2

Survey Date: 1/13/2009

Report Date: 2/16/2010

T16S-R08W-S30SW

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
DRY CHANNEL	2	55	1.2	0.00	60	0	23	70	8	0	0	0
DRY UNIT	2	7	1.3	0.00	9	0	23	70	8	0	0	0
POOL-BACKWATER	9	67	2.0	0.39	139	0	26	60	11	3	0	0
POOL-DAMMED	1	20	4.0	0.60	78	0	10	60	20	10	0	0
POOL-ISOLATED	3	8	1.6	0.23	12	0	42	39	19	0	0	0
POOL-LATERAL SCOUR	57	663	4.4	0.71	3,002	0	5	36	38	15	1	5
POOL-PLUNGE	3	21	4.7	1.00	110	0	0	27	38	19	0	16
POOL-STRAIGHT SCOUR	3	24	4.2	0.78	104	0	2	40	38	20	0	0
PUDDLED UNIT	2	22	1.2	0.23	29	0	27	40	31	2	0	0
RAPID/BOULDERS	1	7	4.2	0.30	27	0	0	11	53	32	0	5
RIFFLE	31	551	4.0	0.16	2,256	0	2	12	53	30	1	2
STEP/COBBLE	7	25	4.1	0.16	99	0	0	5	56	39	1	0
STEP/LOG	4	2	3.6	0.10	8	0	3	36	33	6	0	22
Total:	125	1,468	3.8	0.46	5,933	0	Avg: 7	31	39	18	1	4

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	13	94	2.1	0.37	229	3.87%	0	0.0
Scour Pools	63	707	4.4	0.72	3,216	54.21%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	31	551	4.0	0.16	2,256	38.02%	0	0.0
Rapids	1	7	4.2	0.30	27	0.46%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	11	27	3.9	0.14	107	1.81%	0	0.0
Dry	6	83	1.2	0.08	97	1.64%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

SOUTH FORK BEAR CREEK
GCG: 2-MC SITE ID: 383

Survey Date: 1/13/2009

Report Date: 2/16/2010

T16S-R08W-S30SW

REACH 1

POOL SUMMARY

	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	76	51.8	64.0
Pools >=1m deep:	12	8.2	10.1
Complex pools (LWD pieces>=3):	22	15.0	18.5
Pool frequency (channel widths/pool):	3.1		
Residual pool depth (avg):	0.54		

OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

OREGON PLAN MONITORING SITE
SURVEY DATE: 1/13/2009

COMMENT SUMMARY

MONITORING AREA: 2-MC SITE ID: 383 STREAM: SOUTH FORK BEAR CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	1	LP	00	18.5	WL	RACCOON TRACKS
1	2	RI	00	36.5		CT/CT-D15/S-YT/ST
1	3	LP	01	47.5	HS	LOGS, CHINOOK CARCASS
1	5	BW	10	47.5	AM	ROUGH-SKINNED NEWT
1	6	SC	00	51.5		H=0.15M
1	8	LP	01	76	HS	LOG
1	15	SL	00	100		H=0.40M
1	17	LP	01	127		COHO CARCASS
1	27	LP	00	234	HS,DJ	LOGS
1	31	RI	00	266.5		CT/MT-D15/S-YT/ST
1	33	RI	00	314	HS	LOGS
1	35	SC	00	327.5		H=0.10M
1	40	PD	02	367		ACW=3.0M
1	44	LP	01	415.5	HS	LOGS
1	46	LP	00	424	BV	CHEWED STICK
1	48	LP	01	474		CARCASS
1	49	BW	10	474	HS	LOGS
1	51	SC	01	484		H=0.10M
1	52	LP	01	493.7		LOTS OF EROSION ON LEFT BANK
1	56	LP	02	516.7	BV	
1	57	LP	03	516.7	BV	
1	61	LP	00	534.7		CT/MT-D15/S-YT/ST
1	64	SL	00	560.7	HS	H=1.1M, LOGS
1	66	BW	10	580.2	BV	
1	67	BW	10	580.2	BV	

OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

OREGON PLAN MONITORING SITE
SURVEY DATE: 1/13/2009

COMMENT SUMMARY

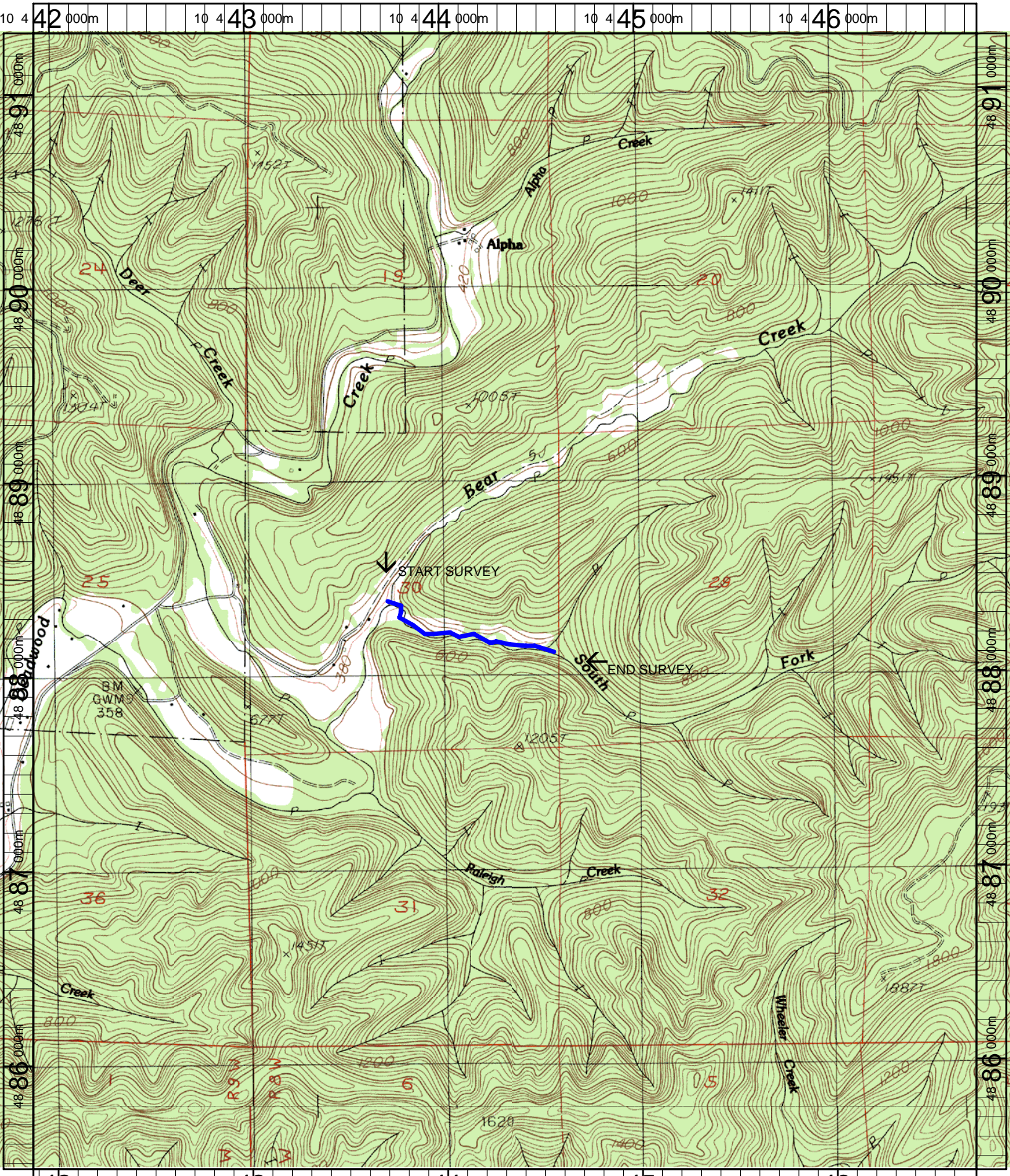
MONITORING AREA: 2-MC SITE ID: 383 STREAM: SOUTH FORK BEAR CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	68	IP	10	580.2	BV	
1	70	SP	01	601.7	BV,HS,DJ	LOGS
1	79	LP	00	659.3	HS	LOGS
1	82	LP	01	717.3	HS	LOGS
1	83	RI	01	742.8	BV	CHEWED STICKS, BEAVER TRACKS
1	84	BW	10	742.8		SMALL FRY
1	85	RI	02	742.8	/SS	
1	87	LP	00	758.8	HS	LOGS, CT/MT-D15/S-YT/ST
1	89	LP	00	797.8		CARCASS
1	90	LP	00	807.8		LOGGING CABLE
1	96	LP	00	869.5	HS	LOGS
1	97	RI	01	895	HS,DJ	LOGS
1	98	BW	10	895		UNDER HS LOGS ON RIGHT
1	100	SC	00	903		H=0.10M
1	101	LP	00	916.5		TROUT, FRY
1	103	LP	00	991.2	/SS	(1) ADULT SPAWNING COHO
1	104	RI	00	1008.9	/SS	
1	108	SL	00	1050.4	HS	LOGS, H=0.20M
1	111	SC	00	1089.4		H=0.10M
1	114	LP	00	1131.7	DJ	CARCASS
1	117	BW	10	1151.7		FRY
1	120	LP	01	1170.4	TJ	(1) ADULT SPAWNING COHO
1	121	PP	11	1170.4		T=8.5C
1	122	SL	11	1170.4		H=0.30M
1	123	LP	11	1170.4		ACW=1.70M

COMMENT SUMMARY

MONITORING AREA: 2-MC SITE ID: 383 STREAM: SOUTH FORK BEAR CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	124	RI	00	1177.4		T=7C
1	125	LP	00	1188.4		CT/MT-D15/S-YT/ST



Name: WINDY PEAK
 Date: 12/11/2007
 Scale: 1 inch equals 2000 feet

Location: 10 444311 E 4888377 N
 Caption: SOUTH FORK BEAR CREEK RESTORATION SITE - SIUSLAW BASIN

South Fork Bear Creek (MC-383) 2009 Winter Habitat Survey Photographs



Downstream view near the start of the survey.
Survey was conducted when stream was near bank full.



Downstream view of stream and secondary channels.



Upstream view of a step over a log.



Upstream view of previous large wood placement within lateral pool.



Salmon carcass.