

**ODFW AQUATIC INVENTORY PROJECT**  
**OREGON PLAN FOR SALMON & WATERSHEDS**  
**STREAM RESTORATION HABITAT REPORT**

STREAM: South Fork Little Nestucca River (N113)  
BASIN: Nestucca River  
SURVEY TYPE: Post-Tx  
DATE: March 5, 2002  
SURVEY CREW: Sean Allen, Rachel Werner  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 16.4 km<sup>2</sup>  
USGS MAPS: Dolph  
ECOREGION: Coast Range Volcanic

**GENERAL DESCRIPTION:**

The South Fork Little Nestucca River habitat survey extended 478 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 2.3 (range: 2.0 – 3.5). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 2.1 percent. Scour pools (50%) and riffles (28%) dominated stream habitat. Gravel (32%) and bedrock (23%) dominated stream substrate. Wood volume was low at 6.3 m<sup>3</sup>/100m.

**COMMENTS:**

There were no potential barriers to upstream fish migration in the surveyed length.

The crew noted several habitat structures during the survey.

REACH

**T5S-R10W-S36SW**

REACH

**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	2.3	VWI Range:	2 - 3.5

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	478	3,993	0
Secondary	119	479	1

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 1
Width: 7.1	Width: 12.8	28.1 ( 17.6 - 58.8 )	60.0 ( 60 - 60 )
Depth: 0.57	Height: 0.7	1.4 ( 1.4 - 1.5 )	2.1 ( 2.05 - 2.05 )

W:D ratio: 17.7  
Stream Flow Type: MF  
Average Unit Gradient: 2.1%  
Water temperature (°C): 7.0 - 7.0

Entrenchment (ACW:FPW ratio): 2.1  
Habitat Units/100m (total channel length): 5.2  
Habitat Units/100m (primary channel length): 6.5

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	D30	P

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):	47	9.8
Volume (m <sup>3</sup> ):	30	6.3
Key pieces (>=12m x 0.60m):	0	0.0

OREGON DEPARTMENT OF FISH AND WILDLIFE

SF LITTLE NESTUCCA POST (N113)

HABITAT INVENTORY

Report Date: 11/15/2013

Survey Date:

3/5/2002

REACH		T5S-R10W-S36SW						REACH					
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	
DRY UNIT	1	3	1.5	0.00	5	0	0	15	55	20	10	0	
POOL-ALCOVE	1	32	5.3	0.70	169	0	30	70	0	0	0	0	
POOL-BACKWATER	1	5	5.5	0.60	28	0	10	20	20	30	15	5	
POOL-ISOLATED	2	17	2.0	0.58	34	0	15	25	38	15	3	5	
POOL-LATERAL SCOUR	9	183	7.4	0.92	1,334	0	5	19	38	15	11	13	
POOL-PLUNGE	1	9	13.0	1.00	113	0	1	9	75	5	0	10	
POOL-STRAIGHT SCOUR	3	89	8.8	1.18	787	0	2	10	22	17	7	43	
RAPID/BEDROCK	4	86	6.4	0.20	601	0	0	11	3	3	5	77	
RAPID/BOULDERS	1	19	7.3	0.30	137	0	0	0	35	50	10	5	
RIFFLE	5	139	8.8	0.23	1,238	0	1	8	45	24	7	15	
RIFFLE W/ POCKETS	1	16	1.3	0.10	21	0	30	50	20	0	0	0	
STEP/LOG	2	1	9.5	0.10	6	0	4	28	31	6	0	31	
<b>Total:</b>	<b>31</b>	<b>597</b>	<b>7.1</b>	<b>0.57</b>	<b>4,473</b>	<b>0</b>	<b>Avg: 5</b>	<b>18</b>	<b>32</b>	<b>15</b>	<b>7</b>	<b>23</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	4	54	3.7	0.61	231	5.16%	0	0.0
Scour Pools	13	280	8.1	0.98	2,235	49.96%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	6	155	7.6	0.21	1,259	28.14%	0	0.0
Rapids	5	105	6.6	0.22	738	16.51%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	2	1	9.5	0.10	6	0.13%	0	0.0
Dry	1	3	1.5	0.00	5	0.10%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	17	28.5	35.6
Pools >=1m deep:	5	8.4	10.5
Complex pools (LWD pieces>=3):	5	8.4	10.5
Pool frequency (channel widths/pool):	2.7		
Residual pool depth (avg):	0.80		

# Comment Summary

## Oregon Plan Monitoring Sites 2002

MONITORING AREA: 1-NC      SITE ID: 113      SF LITTLE NESTUCCA POST (N113)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	SP	01	25.1	/TJ, BC	CS/CS
2	RR	11	25.1	HS	
5	IP	10	94.5		JUVENILE STEELHEAD?
6	SL	00	94.8	HS	H = .45, LWD
10	SL	01	119.4	HS	H = .4
11	LP	01	157	HS	
14	LP	04	186.8	HS	
15	LP	01	206.3	HS	
19	RI	01	236.2	HS	
21	LP	00	248.3	HS	
26	RR	00	347.8	HS	
31	RI	00	478	HS	OLD BC