

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

STREAM: South Fork Little Nestucca River (N112)  
BASIN: Nestucca River  
SURVEY TYPE: Reference  
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 662 meters. The channel was unconstrained in a broad valley floor. The average valley width index was 3.9 (range: 2.0 – 6.5). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 2.2 percent. Riffles (53%) and scour pools (26%) dominated stream habitat. Gravel (30%) and bedrock (22%) 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 evidence of beaver activity during the survey.

REACH

**T5S-R10W-S36SE**

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	0%	Multiple Terraces	100%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	3.9	VWI Range:	2 - 6.5

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	100%
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	662	5,343	0
Secondary	217	892	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 3
Width: 6.4	Width: 11.1	34.1 ( 18.8 - 52 )	37.3 ( 26 - 53 )
Depth: 0.43	Height: 0.7	1.5 ( 1.4 - 1.6 )	1.6 ( 1.45 - 1.8 )

W:D ratio: 15.0  
 Stream Flow Type: MF  
 Average Unit Gradient: 2.2%  
 Water temperature (°C): 7.0 - 7.0

Entrenchment (ACW:FPW ratio): 3.3  
 Habitat Units/100m (total channel length): 5.3  
 Habitat Units/100m (primary channel length): 7.1

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	M3	M15

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):	33	5.0
Volume (m <sup>3</sup> ):	42	6.3
Key pieces (>=12m x 0.60m):	3	0.5

OREGON DEPARTMENT OF FISH AND WILDLIFE

SF LITTLE NESTUCCA REF (N112)

HABITAT INVENTORY

Report Date: 11/15/2013

Survey Date:

3/5/2002

REACH		T5S-R10W-S36SE					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	
POOL-ALCOVE	1	22	3.0	0.50	65	0	5	15	20	30	15	15	
POOL-BACKWATER	1	3	1.5	0.30	5	0	0	56	44	0	0	0	
POOL-BEAVER DAM	1	24	7.7	1.00	185	0	30	70	0	0	0	0	
POOL-ISOLATED	1	4	2.8	0.50	10	0	30	70	0	0	0	0	
POOL-LATERAL SCOUR	9	183	6.9	1.01	1,258	0	3	13	39	16	8	22	
POOL-PLUNGE	3	14	7.5	0.87	122	0	4	19	39	15	14	10	
POOL-STRAIGHT SCOUR	1	24	11.0	0.90	263	0	0	10	40	10	0	40	
RAPID/BEDROCK	2	48	9.9	0.18	477	0	0	3	8	3	3	84	
RAPID/BOULDERS	2	62	7.9	0.23	487	0	0	1	15	30	18	38	
RIFFLE	18	486	6.3	0.21	3,319	0	2	12	30	22	8	26	
STEP/BEAVER DAM	3	3	6.7	0.07	21	0	13	40	25	13	8	0	
STEP/BOULDERS	1	1	4.6	0.20	5	0	0	0	20	30	50	0	
STEP/COBBLE	1	4	1.0	0.10	4	0	0	10	60	30	0	0	
STEP/LOG	3	2	5.5	0.10	15	0	3	24	40	17	8	8	
<b>Total:</b>	<b>47</b>	<b>879</b>	<b>6.4</b>	<b>0.43</b>	<b>6,235</b>	<b>0</b>	<b>Avg: 4</b>	<b>17</b>	<b>30</b>	<b>18</b>	<b>9</b>	<b>22</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	52	3.8	0.58	264	4.24%	0	0.0	
Scour Pools	13	220	7.4	0.97	1,643	26.34%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	18	486	6.3	0.21	3,319	53.23%	0	0.0	
Rapids	4	110	8.9	0.20	964	15.46%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	8	10	5.3	0.10	45	0.72%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	<u>Total</u>	<u>Total of all Channel Lengths</u> # / Km	<u>Primary Channel Length</u> # / Km
All Pools:	17	19.3	25.7
Pools >=1m deep:	7	8.0	10.6
Complex pools (LWD pieces>=3):	4	4.6	6.0
Pool frequency (channel widths/pool):	4.7		
Residual pool depth (avg):	0.82		

# Comment Summary

## Oregon Plan Monitoring Sites 2002

MONITORING AREA: 1-NC      SITE ID: 112      SF LITTLE NESTUCCA REF (N112)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
3	RR	00	69.4	BV	
5	RI	00	132.3	BV	
8	SP	01	218.2	BV, TJ/	
12	RI	01	312.3	/TJ	
14	LP	01	325.9		TRIB CONFLUENCE
15	SC	11	325.9		H = .6
20	LP	01	433.5	SS/	
21	SB	01	434.5		H = .3
25	LP	01	508.2	SS/	
29	SL	01	585.7		H = .65
31	SD	02	585.7		H = .45
33	SD	02	585.7		H = .5
35	SL	02	585.7		H = .6
42	IP	10	608.7		SALAMANDER EGGS