ODFW AQUATIC INVENTORY PROJECT

STREAM REPORT

STREAM: Childers Creek

BASIN: Calapooia River Basin

DATES: October 4 - 11, 2006

SURVEY CREW: Sharon Tippery, LaNoah Babcock

REPORT PREPARED BY: Brian Bangs

STREAM ORDER: 2 BASIN AREA: 10.714km^2 FIRST ORDER TRIBUTARIES: 5

USGS MAPS: Crawfordsville

ECOREGION: Willamette Valley Plain / Foothills

HUC NUMBER: 17090003 LLID: 1228179443081

GENERAL DESCRIPTION:

The Childers Creek habitat survey began at its confluence with Brush Creek and extended 4475 meters to the headwaters. Young timber (3-15cm dbh) and second growth timber (15-30cm dbh) were the dominant land use types. Scour pools and riffles were the dominant instream habitat types. Gravel and cobble were the dominant substrate types. Wood volume for the creek was moderate. The trees found most frequently in the riparian zone were 3-15cm dbh hardwoods, although conifers from 3-over 90cm dbh and hardwoods 3-90cm dbh were recorded.

REACH DESCRIPTIONS:

Reach 1: (T14S-R01W-S33SW) Length 2094 meters. Reach 1 began at the confluence with Brush Creek and extended to the beginning of a recent timber harvest. The channel was constrained by hillslopes in a moderate v-shaped valley. The average valley width index was 2.9 (range: 1-9). The crew recorded valley width index information at locations which skewed the overall average for the reach (at a tributary junction for example). Although the average valley width index is greater than 2.5, the reach is still constrained by hillslopes. Land uses for the reach were young timber (3-15cm dbh) and second growth timber (15-30cm dbh). The average unit gradient was 3.1 percent. Stream habitat was dominated by scour pools (44%) and riffles (30%). Stream substrate was a mix of cobble (32%), gravel (26%) and fine sediment (23%). Wood volume was 15.2m^3/100m. The trees found most frequently in the riparian zone were 3-30cm dbh hardwoods (based on 5 riparian transects).

Reach 2: (T14S-R01W-S34SW) Length 417 meters. Reach 2 began at a recent timber harvest and extended to a change in land use. The channel was constrained by hillslopes in a moderate v-shaped valley. The average valley width index

was 1.7 (range: 1.3-2). Land uses for the reach were timber harvest and secondary growth timber (15-30cm dbh). The average unit gradient was 1.9 percent. Stream habitat was dominated by scour pools (49%) and riffles (47%). Gravel (29%), cobble (24%) and bedrock (23%) were the primary stream substrates. Wood volume was 13m^3/100m. The trees found most frequently in the riparian zone were 3-30cm dbh hardwoods based on (1 riparian transect).

Reach 3: (T14S-R01W-S34SW) Length 857 meters. Reach 3 began at a land use change to second growth timber (15-30cm dbh) and extended to a land use change of young timber (3-15cm dbh). The channel was constrained by hillslopes in a moderate v-shaped valley. The average valley width index was 3.4 (range: 1.5-8). The crew recorded valley width index information at locations which skewed the overall average for the reach (at a tributary junction for example). Although the average valley width index is greater than 2.5, the reach is still constrained by hillslopes. Land uses for the reach were second growth timber (15-30cm dbh) and large timber (30-50cm dbh). The average unit gradient was 4.3 percent. Stream habitat was dominated by riffles (60%) and scour pools (25%). Gravel (28%), bedrock (23%) and cobble (25%) were the primary stream substrates. Wood volume was 32.3m^3/100m. The trees found most frequently in the riparian zone were 50-90cm dbh conifers (based on 2 riparian transects).

Reach 4: (T15S-R01W-S02NW) Length 1107 meters to headwaters. Reach 4 began at a land use change to young timber (3-15cm dbh). The channel was constrained by hillslopes in a moderate v-shaped valley. The average valley width index was 3.3 (range: 1.3-6). The crew recorded valley width index information at locations which skewed the overall average for the reach (at a tributary junction for example). Although the average valley width index is greater than 2.5, the reach is still constrained by hillslopes. Land uses for the reach were young timber (3-15cm dbh) and second growth timber (15-30cm dbh). The average unit gradient was 7.7 percent. Stream habitat was dominated by rapids (52%) and riffles (21%). Stream substrate was dominated by gravel (29%) and cobble (27%). The percentage of fines in riffles was high (25%). Wood volume was 48.3m^3/100m. The trees found most frequently in the riparian zone were 3-15cm dbh hardwoods (based on 4 riparian transects).

COMMENTS:

The crew observed fish through unit 280 (3523 meters); however, the upper fish distribution was not determined.

Elk, crayfish, raccoon, deer, sculpin, trout and other unknown fish were identified within the surveyed stream.

Beaver activity was observed in all the surveyed reaches.

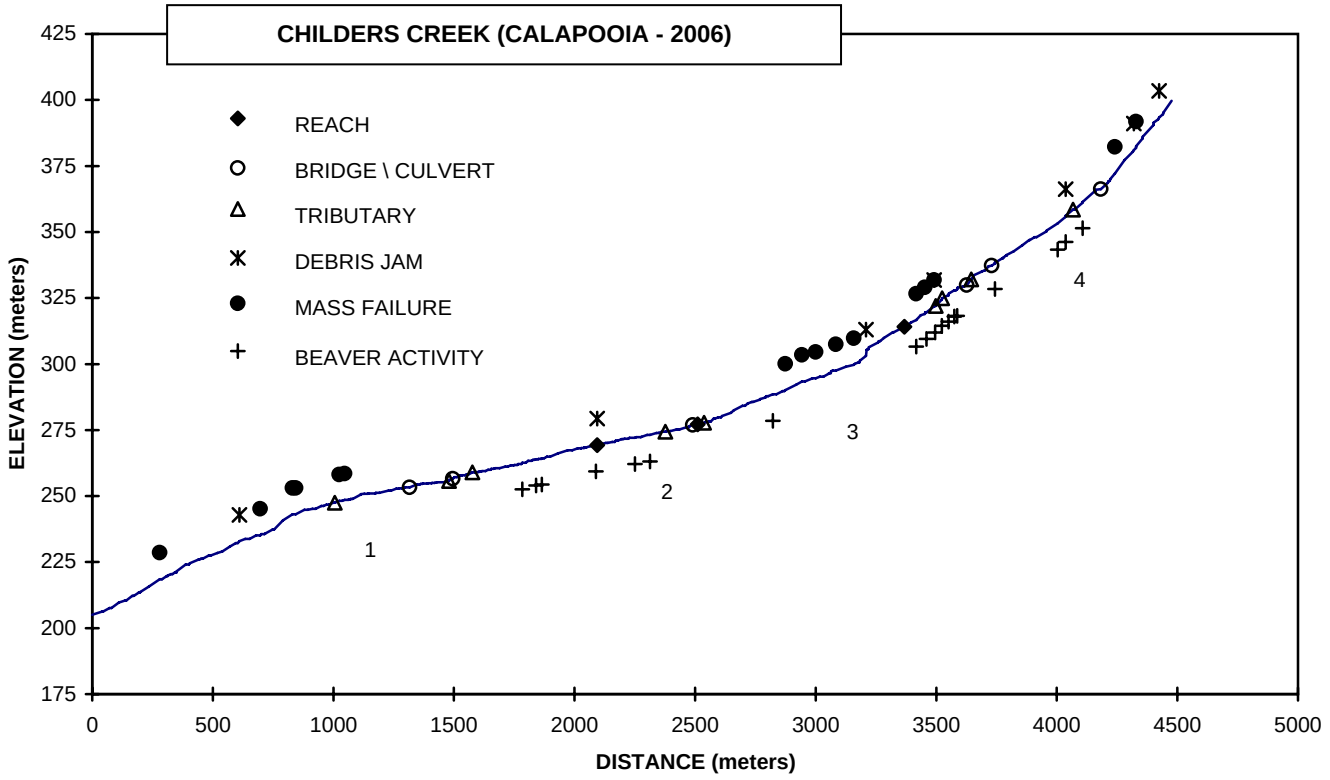
Reach 4 had several high steps that were identified as possible barriers to upstream fish migration. These steps started at unit 333 (4213 meters) and continued to the end of the surveyed portion of stream and ranged in heights from 0.8 to 1.3 meters.

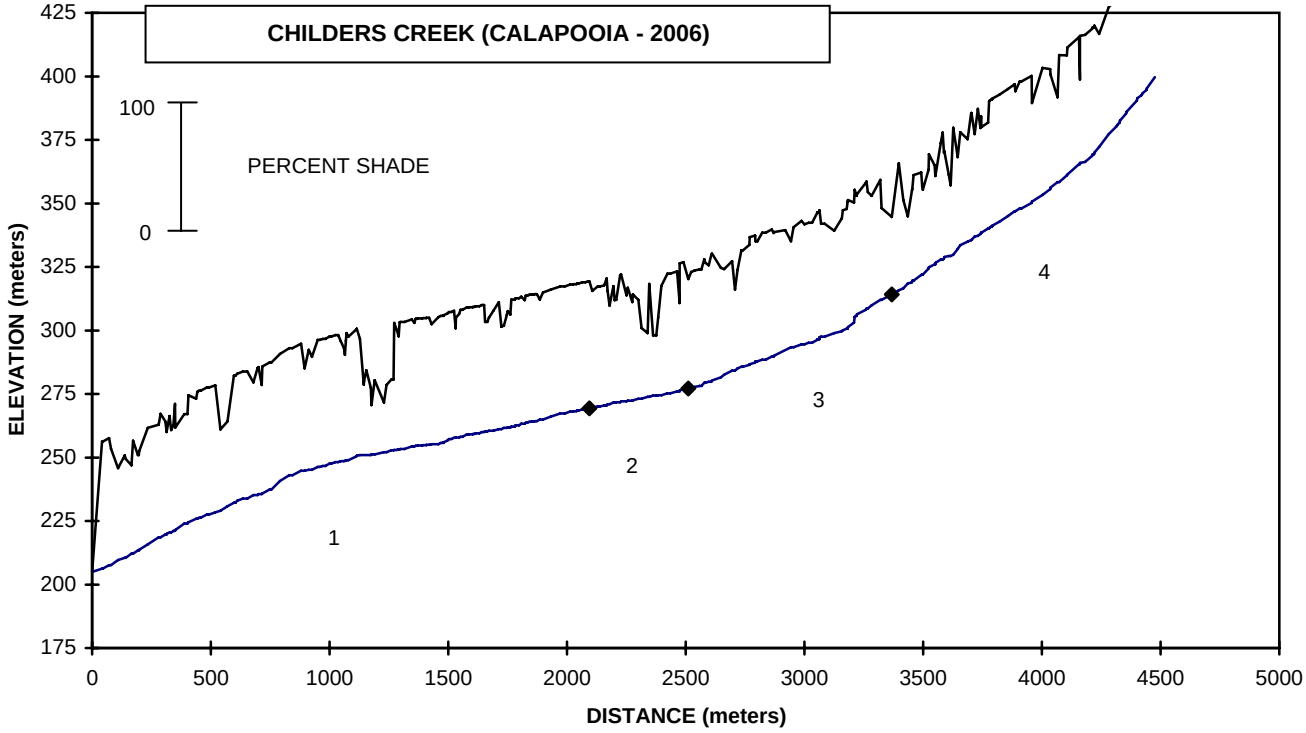
Culverts were observed at units 101 (1316 meters), 118 (1496 meters), 208 (2491 meters), 292 (3627 meters), 301 (3730 meters), and 331 (4182 meters). Culverts heights that may impede fish movement were at unit 118 (0.35 meters high), unit 208 (0.4 meters high) and unit 331 (0.8 meters high).

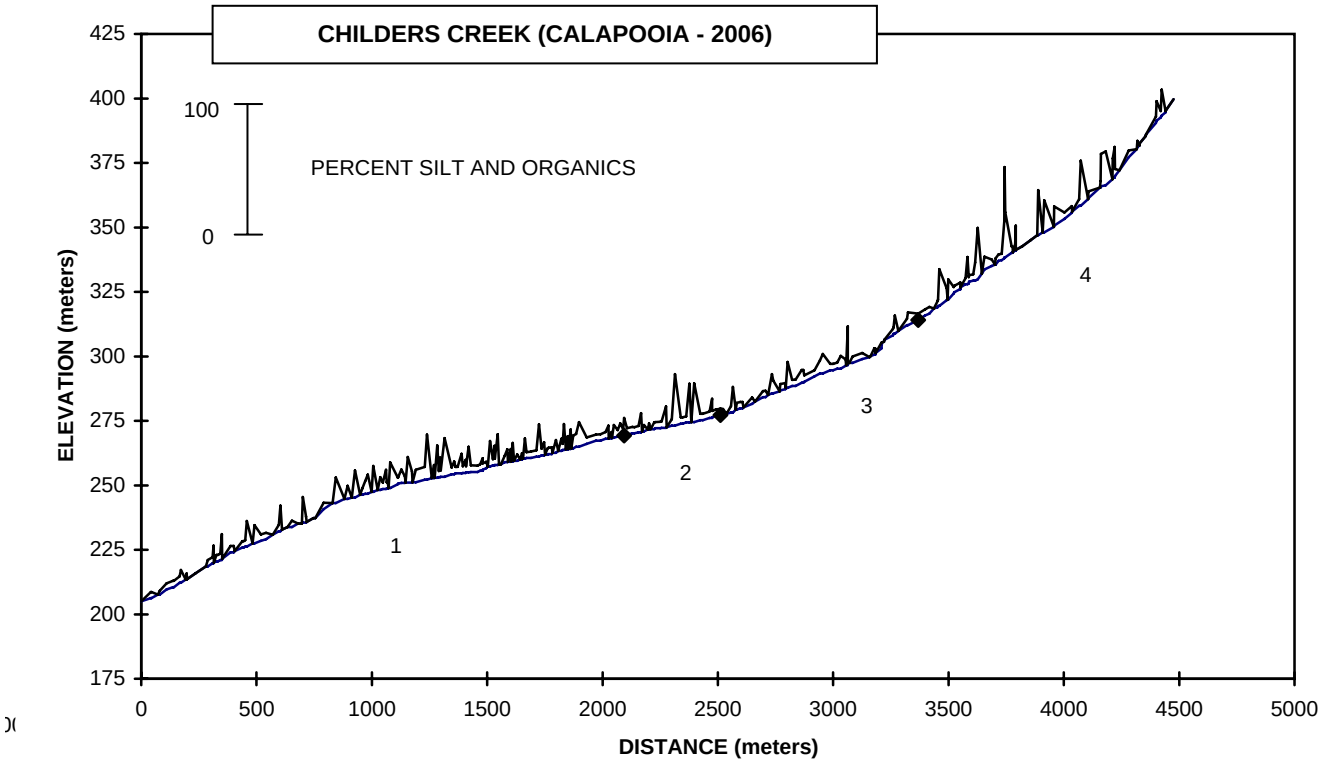
A number of active mass failures were identified in reaches 1, 3 and 4.

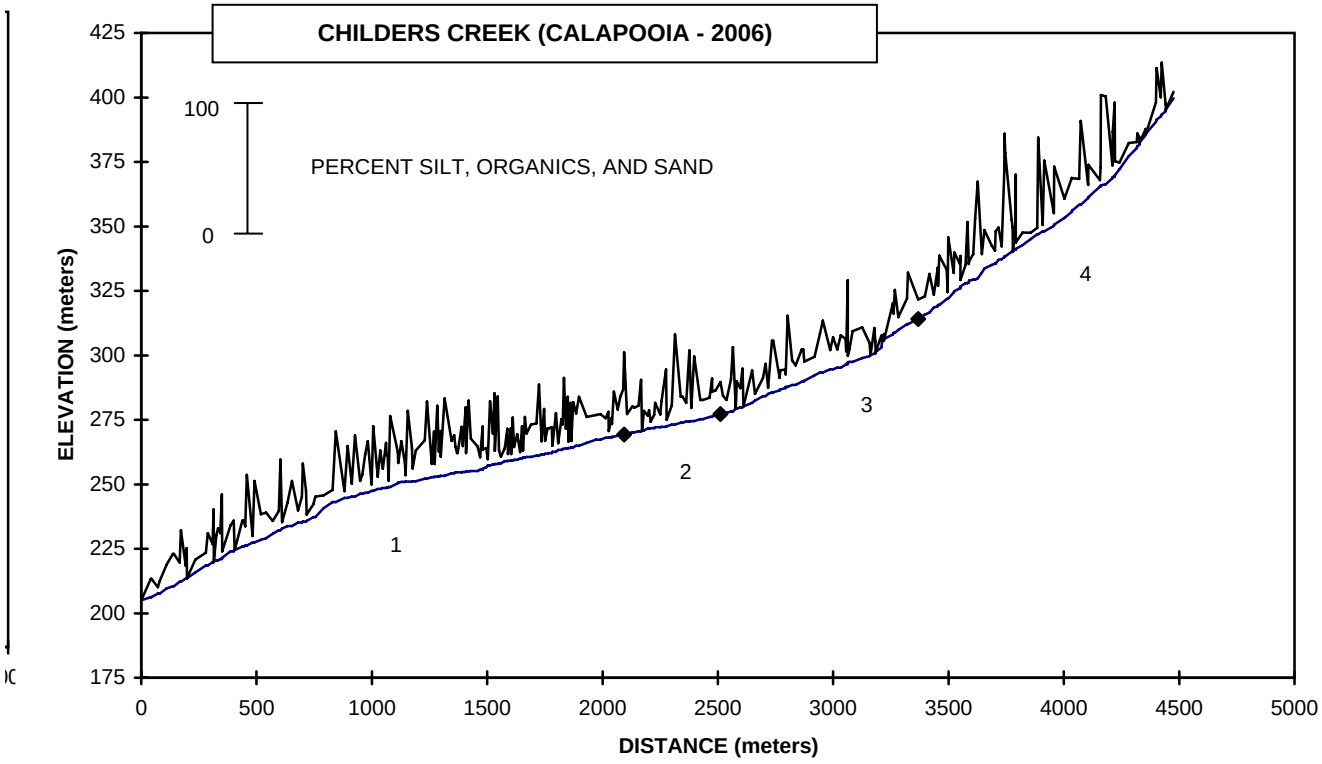
A road ford was observed at unit 127 (1576 meters).

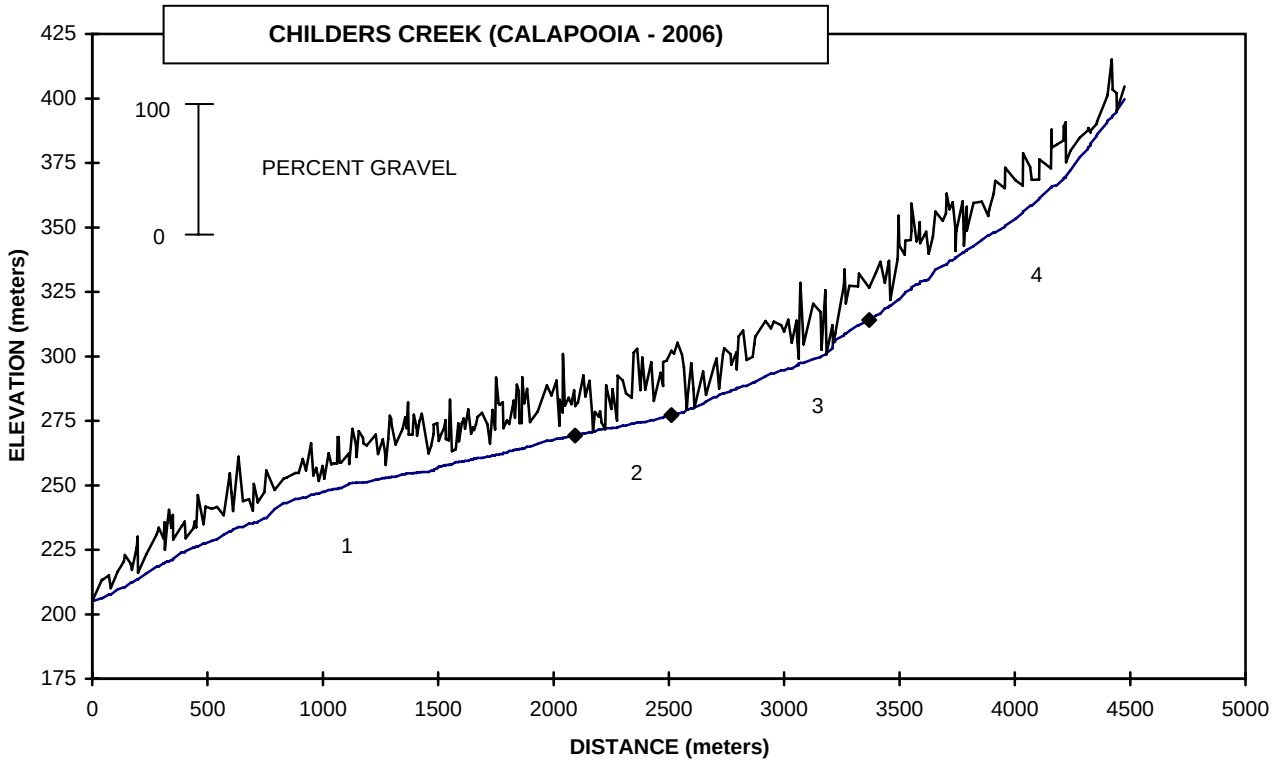
Typically a reach with a valley width index over 2.5 is considered to be a broad valley type. In this survey the crew recorded valley width information at areas which skewed the average width for the reach (at a tributary for example). The valley form for reaches 1, 3 and 4 are still typical of a hillslope constrained system, even if the average valley width index is greater than 2.5.

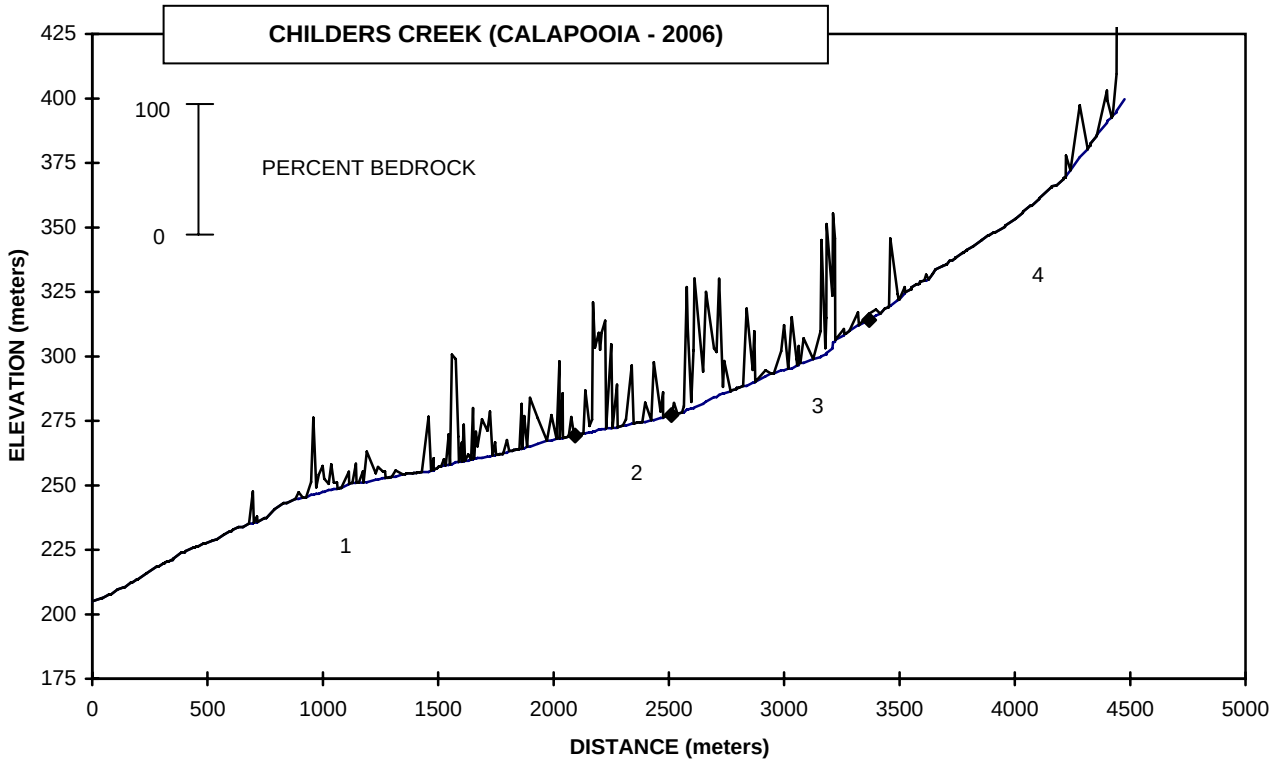

CHILDERS CREEK (CALAPOOIA - 2006)
REACH
BRIDGE \ CULVERT
TRIBUTARY
DEBRIS JAM
MASS FAILURE
BEAVER ACTIVITY
ELEVATION (meters)
DISTANCE (meters)
1
2
3
4

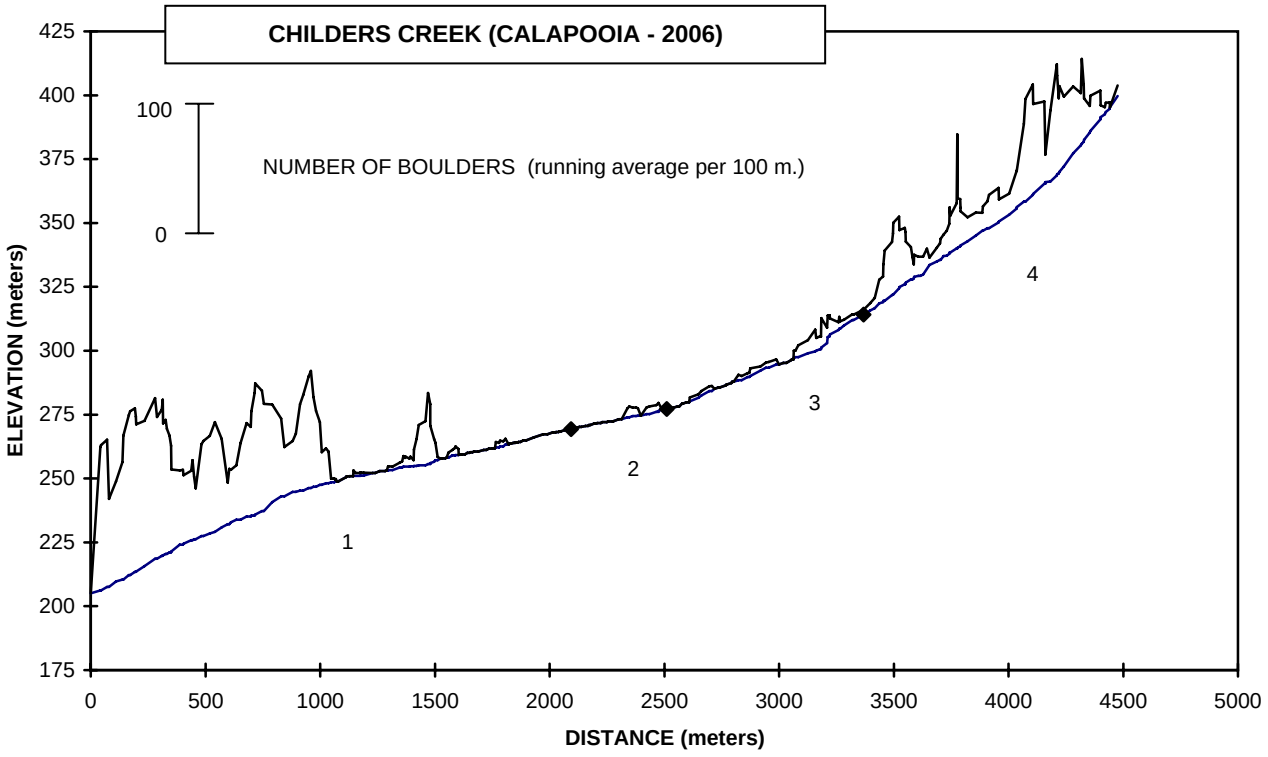

CHILDERS CREEK (CALAPOOIA - 2006)
100
0
PERCENT SHADE
ELEVATION (meters)
DISTANCE (meters)
1
2
3
4

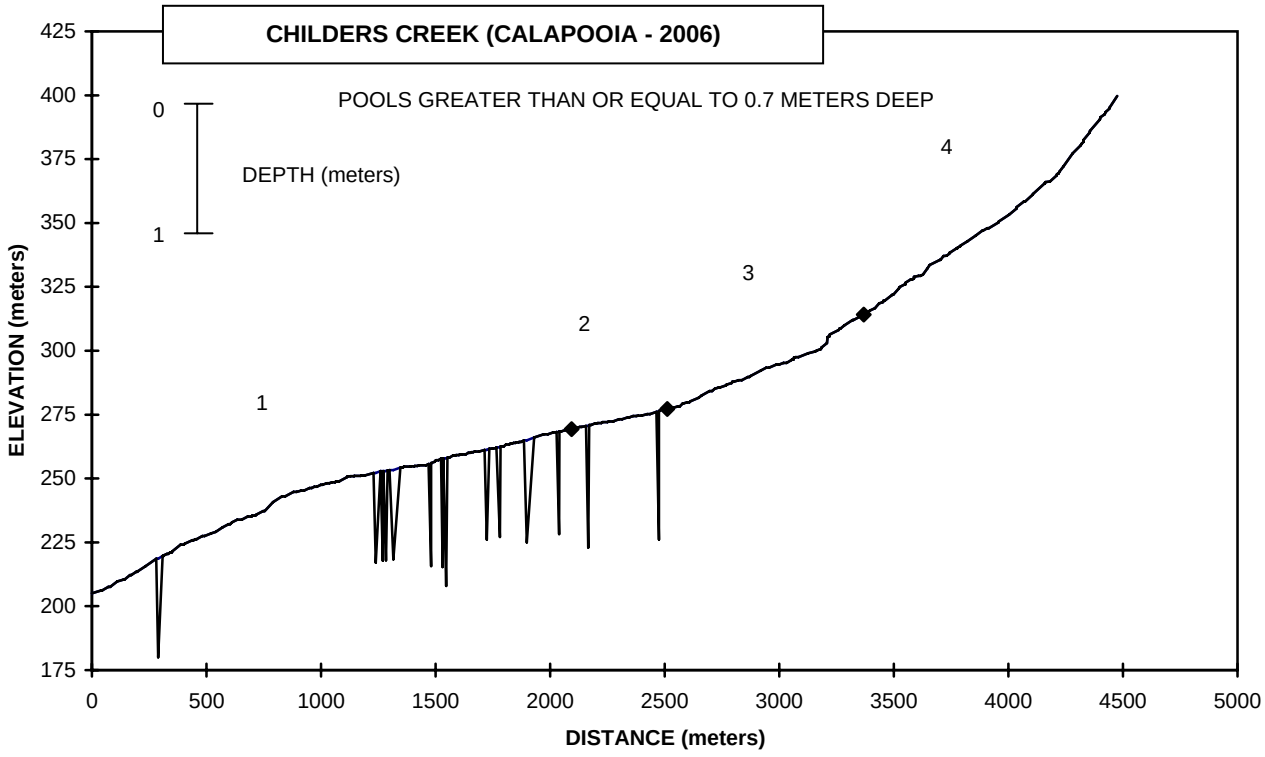

CHILDERS CREEK (CALAPOOIA - 2006)
100
0
PERCENT SILT AND ORGANICS
ELEVATION (meters)
425
400
375
350
325
300
275
250
225
200
175
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
DISTANCE (meters)
1
2
3
4

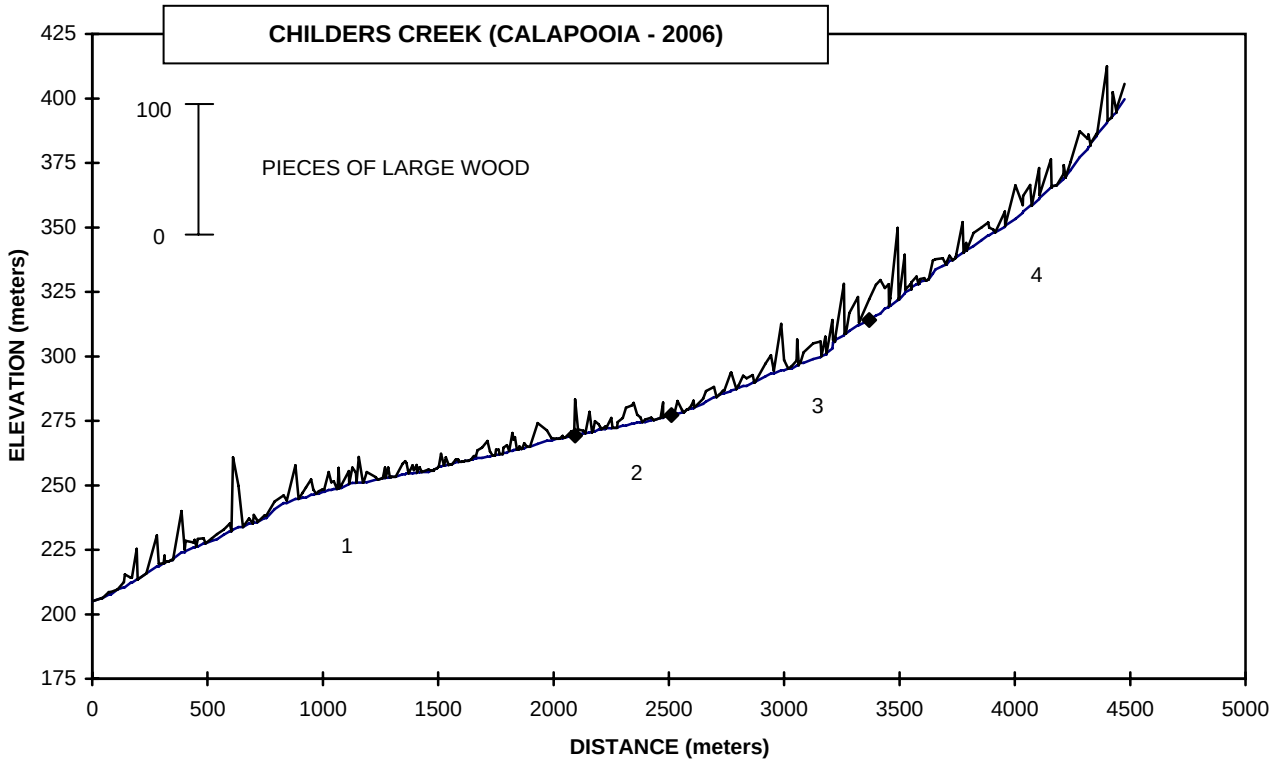

CHILDERS CREEK (CALAPOOIA - 2006)
100
0
PERCENT SILT, ORGANICS, AND SAND
ELEVATION (meters)
425
400
375
350
325
300
275
250
225
200
175
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
DISTANCE (meters)
1
2
3
4

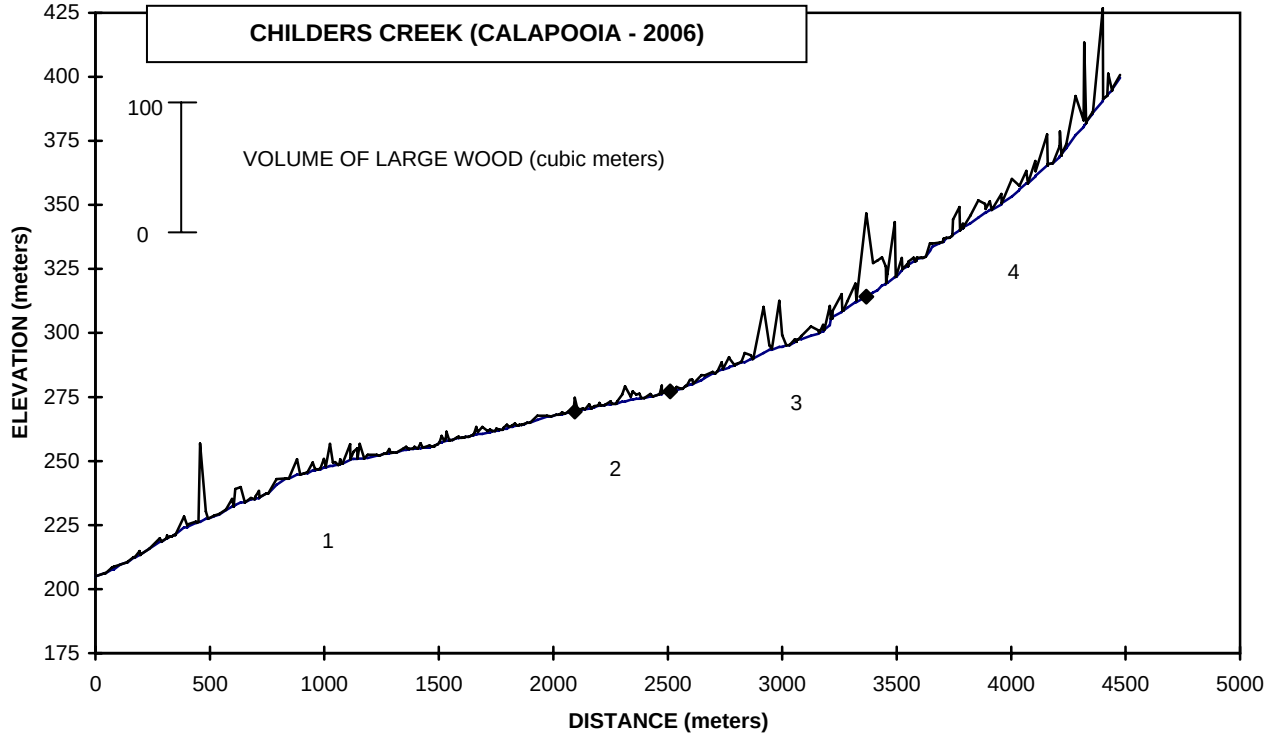

CHILDERS CREEK (CALAPOOIA - 2006)
100
0
PERCENT GRAVEL
ELEVATION (meters)
425
400
375
350
325
300
275
250
225
200
175
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
DISTANCE (meters)
1
2
3
4

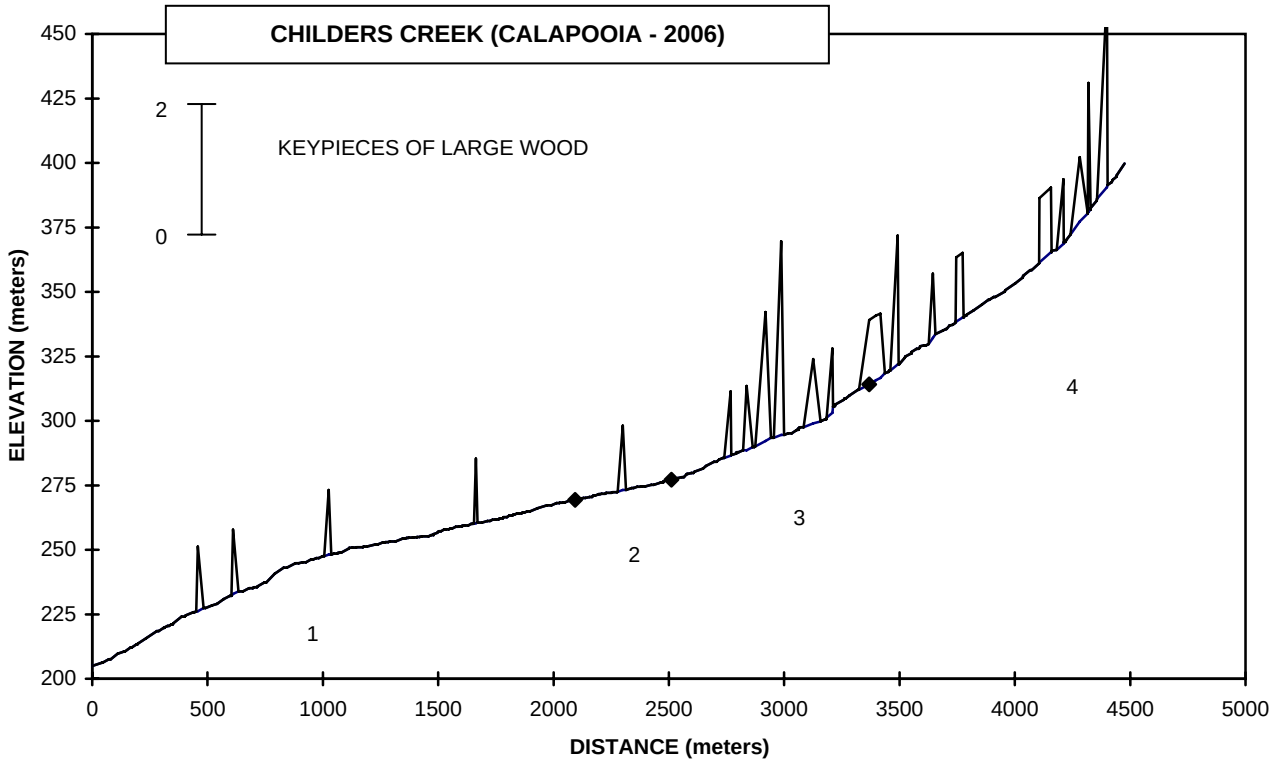

CHILDERS CREEK (CALAPOOIA - 2006)
100
0
PERCENT BEDROCK
ELEVATION (meters)
425
400
375
350
325
300
275
250
225
200
175
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
DISTANCE (meters)
1
2
3
4


CHILDERS CREEK (CALAPOOIA - 2006)
100
0
NUMBER OF BOULDERS (running average per 100 m.)
ELEVATION (meters)
425
400
375
350
325
300
275
250
225
200
175
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
DISTANCE (meters)
1
2
3
4


CHILDERS CREEK (CALAPOOIA - 2006)
POOLS GREATER THAN OR EQUAL TO 0.7 METERS DEEP
0
1
DEPTH (meters)
ELEVATION (meters)
425
400
375
350
325
300
275
250
225
200
175
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
DISTANCE (meters)
1
2
3
4


CHILDERS CREEK (CALAPOOIA - 2006)
100
0
PIECES OF LARGE WOOD
ELEVATION (meters)
425
400
375
350
325
300
275
250
225
200
175
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
DISTANCE (meters)
1
2
3
4


CHILDERS CREEK (CALAPOOIA - 2006)
100
0
VOLUME OF LARGE WOOD (cubic meters)
ELEVATION (meters)
425
400
375
350
325
300
275
250
225
200
175
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
DISTANCE (meters)
1
2
3
4


CHILDERS CREEK (CALAPOOIA - 2006)
KEYPIECES OF LARGE WOOD
2
0
ELEVATION (meters)
DISTANCE (meters)
450
425
400
375
350
325
300
275
250
225
200
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
1
2
3
4

OREGON DEPARTMENT OF FISH AND WILDLIFE **CHILDERS CREEK**

HABITAT INVENTORY Report Date: 12/27/2006 Survey Date: 10/4/2006

REACH 1 **T14S-R01W-S33SW** **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	100%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%

Valley Width Index 2.9 VWI Range: 1 - 9

Channel Morphology (Percent Reach Length)

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

Channel Characteristics

Type	Length (m)	Area (m2)	Dry Units
Primary	2,094	7,263	0
Secondary	176	427	2

Channel Dimensions (m)

Wetted		Active		Floodprone *n* = 16		First Terrace *n* = 5	
Width:	3.3	Width:	6.6	10.3	(5.8 - 15.8)	17.1	(15.3 - 18.8)
Depth:	0.29	Height:	0.5	0.9	(0.8 - 1)	1.2	(0.9 - 1.3)

W:D ratio: 14.3
Entrenchment (ACW:FPW ratio): 1.6
Stream Flow Type: LF
Habitat Units/100m (total channel length): 7.8
Average Unit Gradient: 3.1%
Habitat Units/100m (primary channel length): 8.5
Water temperature (°C): 8.0 - 8.5

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

Bank Status	Percent Reach Length	Shade (% of 180)
Actively Eroding:	11%	Reach avg: 92%
Undercut Banks:	7%	Range: 39 - 100

Large Wood Debris

	Total	Total / 100m primary channel
All pieces (>=3m x 0.15m):	343	16.4
Volume (m^3):	319	15.2
Key pieces (>=12m x 0.60m):	4	0.2

OREGON DEPARTMENT OF FISH AND WILDLIFE **CHILDERS CREEK**

HABITAT INVENTORY Report Date: 12/27/2006 Survey Date: 10/5/2006

REACH 2 **T14S-R01W-S34SW** **REACH 2**

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	100%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%

Valley Width Index 1.7 VWI Range: 1.3 - 2

Channel Morphology (Percent Reach Length)

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

Channel Characteristics

Type	Length (m)	Area (m2)	Dry Units
Primary	417	1,249	0
Secondary	8	4	0

Channel Dimensions (m)

Wetted		Active		Floodprone *n* = 2		First Terrace *n* = 0	
Width:	3.0	Width:	5.8	7.2	(7 - 7.3)	(-)	
Depth:	0.28	Height:	0.5	1.0	(1 - 1)	(-)	

W:D ratio: 11.5
Entrenchment (ACW:FPW ratio): 1.3
Stream Flow Type: LF
Habitat Units/100m (total channel length): 7.5
Average Unit Gradient: 1.9%
Habitat Units/100m (primary channel length): 7.7
Water temperature (°C): 10.0 - 10.0

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

Bank Status	Percent Reach Length	Shade (% of 180)
Actively Eroding:	25%	Reach avg: 82%
Undercut Banks:	8%	Range: 47 - 100

Large Wood Debris

	Total	Total / 100m primary channel
All pieces (>=3m x 0.15m):	63	15.1
Volume (m^3):	54	13.0
Key pieces (>=12m x 0.60m):	1	0.2

REACH 3 **T14S-R01W-S34SW** **REACH 3**

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	100%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%

Valley Width Index 3.4 VWI Range: 1.5 - 8

Channel Morphology (Percent Reach Length)

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

Channel Characteristics

Type	Length (m)	Area (m2)	Dry Units
Primary	857	1,640	0
Secondary	61	68	1

Channel Dimensions (m)

Wetted		Active		Floodprone *n* = 6		First Terrace *n* = 1	
Width:	1.9	Width:	6.4	11.6	(9 - 17.5)	23.0	(23 - 23)
Depth:	0.21	Height:	0.5	0.9	(0.8 - 1)	1.0	(1 - 1)

W:D ratio: 14.2
Stream Flow Type: LF
Average Unit Gradient: 4.3%
Water temperature (°C): 10.0 - 10.0

Entrenchment (ACW:FPW ratio): 1.8
Habitat Units/100m (total channel length): 6.5
Habitat Units/100m (primary channel length): 7.0

Riparian, Bank, and Wood Summary

	Primary	Secondary
Land Use:	ST	LT
Riparian Vegetation:	C30	S

Bank Condition and Shade

Bank Status	Percent Reach Length	Shade (% of 180)
Actively Eroding:	23%	Reach avg: 91%
Undercut Banks:	7%	Range: 61 - 100

Large Wood Debris

	Total	Total / 100m primary channel
All pieces (>=3m x 0.15m):	179	20.9
Volume (m^3):	277	32.3
Key pieces (>=12m x 0.60m):	10	1.2

REACH 4 **T15S-R01W-S02NW** **REACH 4**

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	100%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%

Valley Width Index 3.3 VWI Range: 1.3 - 6

Channel Morphology (Percent Reach Length)

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

Channel Characteristics

Type	Length (m)	Area (m2)	Dry Units
Primary	1,107	1,165	0
Secondary	35	40	1

Channel Dimensions (m)

Wetted		Active		Floodprone *n* = 9		First Terrace *n* = 2	
Width:	1.2	Width:	3.4	7.1	(3.1 - 18.8)	9.5	(7.8 - 11.1)
Depth:	0.14	Height:	0.4	0.8	(0.6 - 1)	0.9	(0.8 - 0.9)

W:D ratio: 8.2
Stream Flow Type: LF
Average Unit Gradient: 7.7%
Water temperature (°C): 6.5 - 6.5

Entrenchment (ACW:FPW ratio): 2.3
Habitat Units/100m (total channel length): 7.1
Habitat Units/100m (primary channel length): 7.3

Riparian, Bank, and Wood Summary

	Primary	Secondary
Land Use:	YT	ST
Riparian Vegetation:	C50	S

Bank Condition and Shade

Bank Status	Percent Reach Length	Shade (% of 180)
Actively Eroding:	32%	Reach avg: 91%
Undercut Banks:	8%	Range: 53 - 100

Large Wood Debris

	Total	Total / 100m primary channel
All pieces (>=3m x 0.15m):	278	25.1
Volume (m^3):	535	48.3
Key pieces (>=12m x 0.60m):	16	1.4

OREGON DEPARTMENT OF FISH AND WILDLIFE **CHILDERS CREEK**

HABITAT INVENTORY Report Date: 12/27/2006 Survey Date: 10/4/2006

REACH 1 **T14S-R01W-S33SE** **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
CULVERT CROSSING	1	16	0.5	0.05	8	4		5	10	35	45	5	0
DRY CHANNEL	1	24	1.3	0.01	30	0		0	10	10	75	5	0
POOL-BACKWATER	1	6	5.0	0.80	31	0		10	5	5	24	57	0
POOL-ISOLATED	1	3	2.5	0.35	8	0		0	10	20	40	30	0
POOL-LATERAL SCOUR	71	767	4.2	0.49	3,163	152		12	23	27	19	8	11
POOL-STRAIGHT SCOUR	6	61	3.5	0.58	225	18		10	17	18	20	16	19
PUDDLED UNIT	1	16	2.4	0.03	39	0		0	5	25	70	0	0
RAPID/BEDROCK	1	17	3.9	0.05	66	0		5	5	10	0	0	80
RAPID/BOULDERS	18	461	3.2	0.19	1,543	499		2	10	19	38	32	0
RIFFLE	39	693	2.8	0.14	2,011	199		4	16	32	35	11	2
RIFFLE W/ POCKETS	3	105	2.9	0.20	309	12		7	17	25	33	10	8
STEP/BOULDERS	5	10	2.2	0.11	26	32		0	4	12	24	55	4
STEP/COBBLE	28	91	2.6	0.08	233	0		2	9	29	58	2	0
STEP/STRUCTURE	1	0	0.4	0.05	0	4		5	10	35	45	5	0
Total:	177	2,270	3.3	0.29	7,690	920	**Avg:**	7	16	26	32	12	6

HABITAT SUMMARY

Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m^2)	Percent	Large Boulders Number	(# / $100m^2$)
Dammed & BW Pools	2	10	3.8	0.58	39	0.51%	0	0.0
Scour Pools	77	828	4.1	0.50	3,387	44.05%	170	5.0
Glides	0	0			0	0.00%	0	0.0
Riffles	42	798	2.8	0.14	2,319	30.16%	211	9.1
Rapids	19	478	3.3	0.18	1,609	20.92%	499	31.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	34	101	2.5	0.09	258	3.36%	36	13.9
Dry	2	40	1.8	0.02	69	0.90%	0	0.0
Culverts	1	16	0.5	0.05	8	0.10%	4	52.1

POOL SUMMARY

	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	79	34.8	37.7
Pools >=1m deep:	1	0.4	0.5
Complex pools (LWD pieces>=3):	22	9.7	10.5
Pool frequency (channel widths/pool):	4.3		
Residual pool depth (avg):	0.41		

OREGON DEPARTMENT OF FISH AND WILDLIFE **CHILDERS CREEK**

HABITAT INVENTORY Report Date: 12/27/2006 Survey Date: 10/5/2006

REACH 2 **T14S-R01W-S34SW** **REACH 2**

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
CULVERT CROSSING	1	16	1.1	0.10	17	0		5	14	43	29	10	0
POOL-LATERAL SCOUR	12	149	3.8	0.49	534	0		14	16	20	15	0	35
POOL-PLUNGE	1	11	7.2	1.00	77	0		15	15	25	20	5	20
RIFFLE	12	207	2.4	0.10	523	5		4	12	36	28	3	17
RIFFLE W/ POCKETS	1	23	2.7	0.30	61	0		5	10	35	50	0	0
STEP/BEDROCK	1	4	3.3	0.07	13	0		0	0	0	0	0	100
STEP/COBBLE	3	14	2.0	0.10	28	0		3	11	34	44	7	0
STEP/STRUCTURE	1	0	0.9	0.10	0	4		5	14	43	29	10	0
Total:	32	424	3.0	0.28	1,253	9	**Avg:**	8	14	29	24	2	23

HABITAT SUMMARY

Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m^2)	Wetted Area Percent	Large Boulders Number	Large Boulders (# / $100m^2$)
Dammed & BW Pools	0	0			0	0.00%	0	0.0
Scour Pools	13	160	4.0	0.53	611	48.74%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	13	230	2.4	0.12	584	46.58%	5	0.9
Rapids	0	0			0	0.00%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	5	18	2.0	0.09	42	3.32%	4	9.6
Dry	0	0			0	0.00%	0	0.0
Culverts	1	16	1.1	0.10	17	1.36%	0	0.0

POOL SUMMARY

	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	13	30.6	31.2
Pools >=1m deep:	1	2.4	2.4
Complex pools (LWD pieces>=3):	5	11.8	12.0
Pool frequency (channel widths/pool):	5.7		
Residual pool depth (avg):	0.44		

OREGON DEPARTMENT OF FISH AND WILDLIFE **CHILDERS CREEK**

HABITAT INVENTORY Report Date: 12/27/2006 Survey Date: 10/5/2006

REACH 3 **T14S-R01W-S34SW** **REACH 3**

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
POOL-ISOLATED	1	2	1.6	0.55	4	0		43	38	14	5	0	0
POOL-LATERAL SCOUR	17	153	2.8	0.37	433	3		11	21	26	15	2	25
PUDDLED UNIT	1	16	1.4	0.03	23	0		10	35	40	10	5	0
RAPID/BEDROCK	4	60	2.4	0.14	159	0		1	4	7	9	1	78
RAPID/BOULDERS	1	16	1.3	0.10	22	3		0	10	35	45	10	0
RIFFLE	23	557	1.7	0.16	887	21		5	14	36	30	4	10
RIFFLE W/ POCKETS	2	86	1.7	0.20	145	0		5	14	43	33	2	2
STEP/BEDROCK	4	13	1.0	0.12	15	0		0	0	1	1	0	98
STEP/BOULDERS	1	1	0.4	0.10	1	5		0	0	5	10	85	0
STEP/COBBLE	6	14	1.4	0.07	21	3		3	9	26	62	1	0
Total:	60	918	1.9	0.21	1,708	35	**Avg:**	6	14	28	25	4	23

HABITAT SUMMARY

Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m^2)	Wetted Area Percent	Large Boulders Number	Large Boulders (# / $100m^2$)
Dammed & BW Pools	1	2	1.6	0.55	4	0.22%	0	0.0
Scour Pools	17	153	2.8	0.37	433	25.34%	3	0.7
Glides	0	0			0	0.00%	0	0.0
Riffles	25	642	1.7	0.16	1,032	60.44%	21	2.0
Rapids	5	77	2.2	0.13	181	10.58%	3	1.7
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	11	28	1.2	0.09	36	2.10%	8	22.3
Dry	1	16	1.4	0.03	23	1.32%	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:	18	19.6	21.0
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	4	4.4	4.7
Pool frequency (channel widths/pool):	7.9		
Residual pool depth (avg):	0.29		

OREGON DEPARTMENT OF FISH AND WILDLIFE **CHILDERS CREEK**

HABITAT INVENTORY Report Date: 12/27/2006 Survey Date: 10/10/2006

REACH 4 **T15S-R01W-S02NW** **REACH 4**

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	2	73	0.9	0.07	65	16		3	5	13	15	10	55
CASCADE/BOULDERS	4	97	0.6	0.10	62	44		1	6	14	33	39	6
CULVERT CROSSING	3	48	0.4	0.07	18	4		24	27	32	15	2	0
POOL-ISOLATED	1	2	1.9	0.20	3	0		60	30	10	0	0	0
POOL-LATERAL SCOUR	12	54	2.7	0.37	135	14		20	28	31	12	4	5
POOL-PLUNGE	1	3	1.9	0.55	7	2		5	10	45	25	15	0
PUDDLED UNIT	1	9	0.4	0.03	4	0		40	30	15	15	0	0
RAPID/BOULDERS	24	613	1.0	0.11	630	195		4	12	28	39	15	2
RIFFLE	13	211	1.2	0.13	258	31		8	17	41	28	6	0
STEP/BEDROCK	1	2	0.5	0.05	1	0		0	0	0	0	0	100
STEP/BOULDERS	5	8	0.4	0.06	4	24		1	2	11	27	59	0
STEP/COBBLE	5	7	0.8	0.07	5	0		6	16	43	34	1	0
STEP/LOG	8	15	0.6	0.05	13	21		21	21	24	21	9	4
STEP/STRUCTURE	1	0	0.2	0.01	0	0		25	45	30	0	0	0
Total:	81	1,143	1.2	0.14	1,204	351	**Avg:**	10	17	29	27	13	5

HABITAT SUMMARY

Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m^2)	Wetted Area Percent	Large Boulders Number	Large Boulders (# / $100m^2$)
Dammed & BW Pools	1	2	1.9	0.20	3	0.29%	0	0.0
Scour Pools	13	57	2.6	0.38	141	11.73%	16	11.3
Glides	0	0			0	0.00%	0	0.0
Riffles	13	211	1.2	0.13	258	21.45%	31	12.0
Rapids	24	613	1.0	0.11	630	52.29%	195	31.0
Cascades	6	170	0.7	0.09	127	10.53%	60	47.3
Step/Falls	20	32	0.6	0.06	23	1.92%	45	194.9
Dry	1	9	0.4	0.03	4	0.29%	0	0.0
Culverts	3	48	0.4	0.07	18	1.50%	4	22.2

POOL SUMMARY

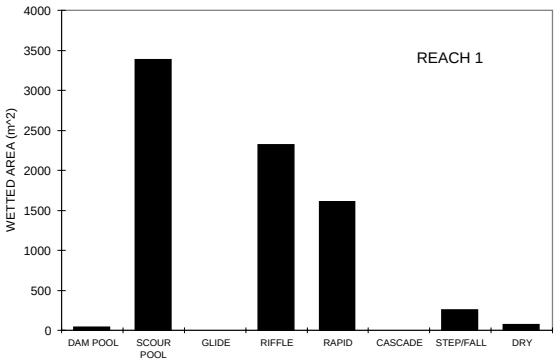
	Total of all Channel Lengths		Primary Channel Length	
	Total	# / Km		# / Km
All Pools:	14	12.3		12.6
Pools >=1m deep:	0	0.0		0.0
Complex pools (LWD pieces>=3):	2	1.8		1.8
Pool frequency (channel widths/pool):	23.8			
Residual pool depth (avg):	0.31			

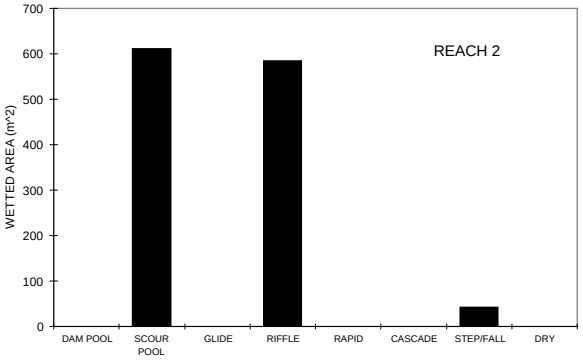
STREAM SUMMARY **CHILDERS CREEK**

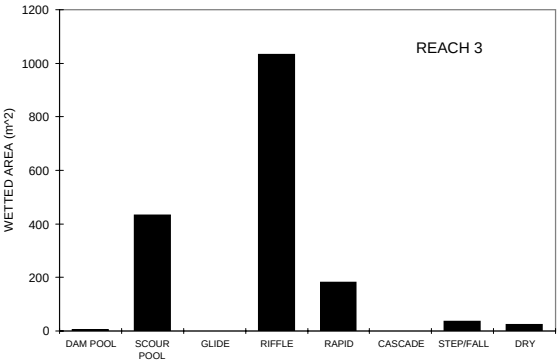
Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m^2)	Substrate Percent Wetted Area S/O	Snd	Grvl	Cbl	Bldr	Bdrk	Large Boulders (#>0.5m)
350	4,755	2.6	0.24	11,855	8	16	27	29	10	10	1,315

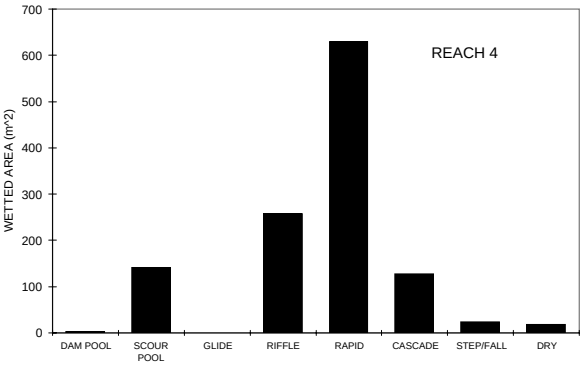
Habitat Group	Wetted Area (m^2)	Percent
Dammed & BW Pools	47	0.39%
Scour Pools	4,572	38.57%
Glides	0	0.00%
Riffles	4,193	35.37%
Rapids	2,420	20.41%
Cascades	127	1.07%
Step/Falls	359	3.03%
Dry	95	0.80%
Culverts	43	0.36%
Unsurveyed	0	0.00%

CHILDERS CREEK: HABITAT DISTRIBUTION









OREGON DEPARTMENT OF FISH AND WILDLIFE **CHILDERS CREEK**

HABITAT INVENTORY Report Date: 12/27/2006 Survey Date: 10/4/2006

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1 **REACH 1**

Summary of Riparian Zone (0-30m) 5 transects

Total hardwoods/1000	963
Total conifers/1000 ft	756
Total conifers >20" dbh/1000 ft	61
Total conifers >35" dbh/1000 ft	12

Average number of trees in a 5-meter wide band

Diameter	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters		Zones 1-3 0-30 meters	
class (cm)	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	0.4	5.4	1.8	1.8	3.4	1.2	5.6	8.4
15-30cm	0.4	2.4	1.2	3.2	1.8	1.0	3.4	6.6
30-50cm	0.4	0.4	1.0	0.2	1.0	0.2	2.4	0.8
50-90cm	0.0	0.0	0.6	0.0	0.2	0.0	0.8	0.0
>90cm	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Total/100m2	1.4	8.2	4.6	5.2	6.4	2.4	4.1	5.3

Canopy closure and ground cover

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Canopy closure	57	54	42
Shrub cover	42	29	38
Grass/forb cover	43	38	45

Predominant landform in each zone

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Hillslope	90	70	90
High terrace	10	10	10
Low terrace	0	0	0
Floodplain	0	0	0
Wetland/meadow	0	0	0
Stream channel	0	0	0
Roadbed/Railroad	0	20	0
Riprap	0	0	0
Surface slope (%)	29	18	22

OREGON DEPARTMENT OF FISH AND WILDLIFE **CHILDERS CREEK**

HABITAT INVENTORY Report Date: 12/27/2006 Survey Date: 10/5/2006

RIPARIAN ZONE VEGETATION SUMMARY

REACH 2 **REACH 2**

Summary of Riparian Zone (0-30m) 1 transects

Total hardwoods/1000	305
Total conifers/1000 ft	305
Total conifers >20" dbh/1000 ft	122
Total conifers >35" dbh/1000 ft	61

Average number of trees in a 5-meter wide band

Diameter	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters		Zones 1-3 0-30 meters	
class (cm)	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	1.0	3.0	0.0	0.0	0.0	0.0	1.0	3.0
15-30cm	0.0	2.0	1.0	0.0	0.0	0.0	1.0	2.0
30-50cm	0.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0
50-90cm	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
>90cm	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Total/100m2	3.0	5.0	2.0	0.0	0.0	0.0	1.7	1.7

Canopy closure and ground cover

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Canopy closure	25	13	0
Shrub cover	38	18	0
Grass/forb cover	15	8	0

Predominant landform in each zone

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Hillslope	100	100	50
High terrace	0	0	0
Low terrace	0	0	0
Floodplain	0	0	0
Wetland/meadow	0	0	0
Stream channel	0	0	0
Roadbed/Railroad	0	0	50
Riprap	0	0	0
Surface slope (%)	33	19	8

OREGON DEPARTMENT OF FISH AND WILDLIFE **CHILDERS CREEK**

HABITAT INVENTORY Report Date: 12/27/2006 Survey Date: 10/5/2006

RIPARIAN ZONE VEGETATION SUMMARY

REACH 3 **REACH 3**

Summary of Riparian Zone (0-30m) 2 transects

Total hardwoods/1000	579
Total conifers/1000 ft	945
Total conifers >20" dbh/1000 ft	549
Total conifers >35" dbh/1000 ft	122

Average number of trees in a 5-meter wide band

Diameter	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters		Zones 1-3 0-30 meters	
class (cm)	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	0.0	1.0	1.0	3.0	1.5	0.0	2.5	4.0
15-30cm	0.0	1.5	0.0	0.0	1.0	0.0	1.0	1.5
30-50cm	0.5	1.0	1.0	0.0	1.5	0.5	3.0	1.5
50-90cm	1.5	0.5	2.0	1.5	3.5	0.5	7.0	2.5
>90cm	0.5	0.0	0.5	0.0	1.0	0.0	2.0	0.0
Total/100m2	2.5	4.0	4.5	4.5	8.5	1.0	5.2	3.2

Canopy closure and ground cover

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Canopy closure	78	81	83
Shrub cover	39	23	25
Grass/forb cover	30	34	33

Predominant landform in each zone

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Hillslope	75	75	75
High terrace	0	25	25
Low terrace	25	0	0
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 (%)	33	31	28

OREGON DEPARTMENT OF FISH AND WILDLIFE **CHILDERS CREEK**

HABITAT INVENTORY Report Date: 12/27/2006 Survey Date: 10/10/2006

RIPARIAN ZONE VEGETATION SUMMARY

REACH 4 **REACH 4**

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

Total hardwoods/1000	853
Total conifers/1000 ft	152
Total conifers >20" dbh/1000 ft	91
Total conifers >35" dbh/1000 ft	46

Average number of trees in a 5-meter wide band

Diameter	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters		Zones 1-3 0-30 meters	
class (cm)	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	0.0	2.8	0.0	5.0	0.0	2.3	0.0	10.0
15-30cm	0.0	0.8	0.0	0.0	0.0	1.0	0.0	1.8
30-50cm	0.8	1.3	0.0	0.3	0.3	0.3	1.0	1.8
50-90cm	0.0	0.3	0.8	0.0	0.0	0.3	0.8	0.5
>90cm	0.5	0.0	0.0	0.0	0.3	0.0	0.8	0.0
Total/100m2	1.3	5.0	0.8	5.3	0.5	3.8	0.8	4.7

Canopy closure and ground cover

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Canopy closure	63	54	43
Shrub cover	54	61	34
Grass/forb cover	37	24	21

Predominant landform in each zone

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Hillslope	88	88	100
High terrace	13	0	0
Low terrace	0	0	0
Floodplain	0	0	0
Wetland/meadow	0	0	0
Stream channel	0	0	0
Roadbed/Railroad	0	13	0
Riprap	0	0	0
Surface slope (%)	39	31	29

OREGON DEPARTMENT OF FISH AND WILDLIFE **CHILDERS CREEK**

HABITAT INVENTORY - RIPARIAN SURVEY 10/4/2006

Summary of Riparian Zone (0-30m) for all reaches **12 transects**

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

Total hardwoods/1000	808
Total conifers/1000 ft	549
Total conifers >20" dbh/1000 ft	157
Total conifers >35" dbh/1000 ft	46

Average number of trees in a 5-m wide band

Diameter class (cm)	Zones 1-3 0-30 meters Conifer	Hardwood
3-15cm	2.8	7.8
15-30cm	1.7	3.8
30-50cm	1.9	1.2
50-90cm	1.8	0.6
>90cm	0.8	0.0

OREGON DEPARTMENT OF FISH AND WILDLIFE CHILDERS CREEK

HABITAT INVENTORY Report Date: 12/27/2006 Survey Date: 10/4/2006

RIPARIAN ZONE VEGETATION

Reach 1 Reach 1

Unit	Side	Zone	Surface	Slope	Cover (percent) Canopy	Shrub	Grass		Diameter class (cm) 3-15	15-30	30-50	50-90	>90	Notes
30	LF	1	HS	20	85	70	15	**Conifer**						0514998, 4905759
								Hardwood	5	2				
30	LF	2	HS	12	80	60	30	**Conifer**	7					
								Hardwood		2				
30	LF	3	HS	15	65	60	40	**Conifer**	10					
								Hardwood						
30	RT	1	HS	40	75	15	75	**Conifer**						
								Hardwood	4	2				
30	RT	2	HS	45	80	10	85	**Conifer**						
								Hardwood			1			
30	RT	3	HS	27	30	30	60	**Conifer**						
								Hardwood						
60	LF	1	HS	25	65	60	30	**Conifer**						0515284, 4905853
								Hardwood	6					
60	LF	2	HS	30	40	75	20	**Conifer**						
								Hardwood	2					
60	LF	3	HS	20	35	80	20	**Conifer**	5					
								Hardwood						
60	RT	1	HS	35	80	20	55	**Conifer**						
								Hardwood	1	3				
60	RT	2	HS	41	85	15	40	**Conifer**			1			
								Hardwood	2	11				
60	RT	3	HS	20	70	10	35	**Conifer**				1		
								Hardwood	1	3				
90	LF	1	HS	45	0	10	75	**Conifer**						0515655, 4905706
								Hardwood						
90	LF	2	RB	0	0	0	20	**Conifer**						
								Hardwood						
90	LF	3	HS	85	0	20	45	**Conifer**						
								Hardwood	2					
90	RT	1	HS	25	5	30	60	**Conifer**						
								Hardwood	2					
90	RT	2	HS	20	20	45	50	**Conifer**						
								Hardwood	1	1				
90	RT	3	HS	17	25	35	65	**Conifer**						
								Hardwood			1			
120	LF	1	HS	40	20	60	20	**Conifer**	2	2	1			
								Hardwood	1					

120	LF	2	RB	4	0	0	0	**Conifer**						ROAD IS 14-1-34
								Hardwood						
120	LF	3	HS	12	0	60	30	**Conifer**						ROAD HAS FRESH GRAVEL
								Hardwood	1					
120	RT	1	HS	25	80	30	20	**Conifer**					1	ALSO FP
								Hardwood	5	2				
120	RT	2	HS	20	70	20	15	**Conifer**				3		
								Hardwood		2				
120	RT	3	HS	17	30	15	40	**Conifer**		2	2			ALSO RB
								Hardwood		2				
150	LF	1	HS	20	85	35	65	**Conifer**			1			0516000, 4905384
								Hardwood	1	2				
150	LF	2	HS	5	85	5	85	**Conifer**	2	3	4			
								Hardwood						
150	LF	3	HS	7	90	20	70	**Conifer**	2		3			
								Hardwood	2					
150	RT	1	HT	10	75	90	10	**Conifer**						TRANS TERRACE
								Hardwood	2	1	2			
150	RT	2	HT	5	80	60	35	**Conifer**		3				TRANS TERRACE
								Hardwood	4					
150	RT	3	HT	4	70	45	40	**Conifer**		7				ALSO RB, TRANS
								Hardwood						

RIPARIAN ZONE VEGETATION

Reach 2 Reach 2

					Cover (percent)				Diameter class (cm)					
Unit	Side	Zone	Surface	Slope	Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90	Notes
180	LF	1	HS	25	45	70	30	**Conifer**	1				1	0516259, 4905154
								Hardwood	1	2				
180	LF	2	HS	23	25	35	15	**Conifer**		1	1			HALF OF ZONE CLEARCUT
								Hardwood						
180	LF	3	RB	3	0	0	0	**Conifer**	0					CLEARCUT
								Hardwood						
180	RT	1	HS	40	5	5	0	**Conifer**				1		
								Hardwood	2					
180	RT	2	HS	15	0	0	0	**Conifer**						CLEARCUT
								Hardwood						
180	RT	3	HS	12	0	0	0	**Conifer**						CLEARCUT
								Hardwood						

RIPARIAN ZONE VEGETATION

Reach 3 Reach 3

					Cover (percent)				Diameter class (cm)					
Unit	Side	Zone	Surface	Slope	Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90	Notes
210	LF	1	HS	45	85	40	55	**Conifer**					1	0516598, 4905036
								Hardwood	2	2		1		
210	LF	2	HS	20	70	35	60	**Conifer**				1	1	
								Hardwood	2					
210	LF	3	HS	17	75	20	40	**Conifer**				2		
								Hardwood						
210	RT	1	LT	3	45	95	10	**Conifer**				1		
								Hardwood			1			
210	RT	2	HT	7	75	30	20	**Conifer**				3		
								Hardwood						
210	RT	3	HT	5	80	40	30	**Conifer**			1	2		
								Hardwood						
240	LF	1	HS	13	90	10	30	**Conifer**			1	1		0516989, 4905177
								Hardwood		1	1			
240	LF	2	HS	22	90	15	40	**Conifer**	2					
								Hardwood				3		
240	LF	3	HS	24	85	15	45	**Conifer**	3	2	1	2	2	
								Hardwood						
240	RT	1	HS	70	90	10	25	**Conifer**				1		
								Hardwood						
240	RT	2	HS	75	90	10	15	**Conifer**			2			
								Hardwood	4					
240	RT	3	HS	67	90	25	15	**Conifer**			1	1		ROAD BED, CLEARCUT ABOVE
								Hardwood			1	1		

RIPARIAN ZONE VEGETATION

Reach 4 Reach 4

					Cover (percent)				Diameter class (cm)					
Unit	Side	Zone	Surface	Slope	Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90	Notes
270	LF	1	HS	33	75	100	0	**Conifer**						SM VINEMAPLE
								Hardwood						
270	LF	2	HS	35	80	90	5	**Conifer**						
								Hardwood						
270	LF	3	HS	37	80	95	5	**Conifer**						
								Hardwood						
270	RT	1	HS	20	75	40	55	**Conifer**			2			0517372, 4905071
								Hardwood						
270	RT	2	HS	22	80	75	20	**Conifer**						
								Hardwood						
270	RT	3	HS	23	65	85	5	**Conifer**						
								Hardwood						
300	LF	1	HS	35	45	30	60	**Conifer**						0517667, 4904985
								Hardwood		3	1			
300	LF	2	RB	0	0	0	0	**Conifer**						CHILDERS CR RD
								Hardwood						
300	LF	3	HS	23	55	15	50	**Conifer**	0					
								Hardwood	4	4	1			
300	RT	1	HT	12	75	80	20	**Conifer**			1		1	TRANS TERRACE
								Hardwood						
300	RT	2	HS	13	75	90	10	**Conifer**				1		
								Hardwood						
300	RT	3	HS	30	0	0	0	**Conifer**			1			CLEARCUT
								Hardwood				1		
330	LF	1	HS	45	25	85	10	**Conifer**						0518027, 4905143
								Hardwood						
330	LF	2	HS	50	5	90	15	**Conifer**						
								Hardwood			1			
330	LF	3	HS	5	0	5	10	**Conifer**						ALSO RB
								Hardwood						
330	RT	1	HS	25	35	85	15	**Conifer**						
								Hardwood			4	1		
330	RT	2	HS	27	30	80	20	**Conifer**						
								Hardwood	1					
330	RT	3	HS	20	5	0	0	**Conifer**						ALSO RB
								Hardwood						
350	LF	1	HS	70	85	5	90	**Conifer**						0518283, 4905319
								Hardwood	8					

350	LF	2	HS	70	85	25	70	**Conifer**				
								Hardwood	15			
350	LF	3	HS	65	75	30	65	**Conifer**				
								Hardwood	5			
350	RT	1	HS	75	90	5	45	**Conifer**				1
								Hardwood	3			
350	RT	2	HS	30	75	40	55	**Conifer**			2	
								Hardwood	4			
350	RT	3	HS	25	60	45	35	**Conifer**				1
								Hardwood				

CHILDERS CREEK (CALAPOOIA - 2006)

REACH	UNIT#	TYPE	CHAN	DIST.(m)	COMMENTS	NOTE_ESTIMATOR	NOTE_NUMERATOR
1	1	RI	00	41	BC	BC - BRUSH CR ROAD	0514580, 4905886, T=8 C @ 0910
1	2	SP	00	45		START = 0514580, 4905886	UNK FRY, BL/WHITE FLAGGING
1	3	RB	00	71		YT, ST, D15, S	
1	10	RB	00	192		CH-MV, D15, S, YT, ST	ACW = 8 M, SOME POCKETS = .4 M
1	12	SB	00	198		H = .25 M	H = .25 M, YT/
1	13	RB	00	234	WL		TRAIL
1	14	RB	00	280	WL, /LI		NEWT
1	18	SB	00	315	WL	H = .3 M	TRAILS, H = .3 M, PARTLY SL
1	20	LP	01	332		CH-MV, D15, S, YT, ST	
1	23	SB	01	351		H = .5 M	H = .5 M
1	24	RB	01	388	WL		TRAIL
1	25	DC	02				ACW = 1.7 M, DJ CAUSED 02
1	28	RP	00	439			ORANGE SLUG, MAX POCKETS .5 M
1	30	RB	00	451	WL	CH-MV, D15, S, YT, ST	SALAMANDER W/ GOLD BACK
1	31	LP	00	457			PLETHODONT DUNNI?
1	36	RB	00	570	WL		TRAILS
1	39	SC	01	611	DJ		LOG JAM HOLDING LOTS OF COBBLE
1	40	RI	01	634		CH-MV, D15, S, YT, ST	
1	47	IP	10				BW IS BTWN U 39 AND U 46
1	55	LP	00	697	/LA		
1	58	SB	00	718	WL		SCULPIN
1	59	RB	00	747			POCKETS = .45 M
1	60	LP	00	754		CH-MV, D15, S, YT, ST	
1	62	RB	00	830	LA/		HILLSLOPE ERODING
1	63	LP	00	844	EA/		
1	66	RI	00	913	EA/		
1	67	LP	00	926			UNK FISH, D FIR MIXED W/ ALDER
1	69	LP	00	959	WL		CRAWDAD
1	70	RI	00	971		CH-MV, D15, S, ST, LT	TIRE
1	71	LP	00	982			TROUT
1	73	LP	01	1006	/TJ	/TJ	0515523, 4905821
1	74	RI	11			T = 9 C, ACW = 1 M	T = 9 C AT 1345
1	75	RI	00	1025	LA/, WL	TJ = 0515523, 4905821	DEER TRACKS
1	76	LP	00	1037	WL		TRAIL
1	77	RI	00	1047	/EI		
1	79	SC	00	1065			SCARP
1	80	LP	00	1069	WL	CA-CT, D15, S, ST	TRAILS
1	83	RI	00	1113			UNK FISH
1	90	SC	00	1176	WL	CH-MV, D15, S, ST	TRACKS
1	91	LP	00	1190		POWERLINE XING	POWERLINES CROSSING
1	92	RP	00	1229	WL		DEER TRAIL, POCKETS .4 M DEEP
1	93	LP	00	1239		4" TROUT	4 UNK FISH 2 - 3"
1	94	RI	00	1260			FISH
1	96	SC	00	1272	WL		TRAILS
1	100	SC	00	1298		CA-CT, D15, S, ST, LT	
1	101	LP	00	1316	CC	CC, 3.5 X 2.5 METAL	2.4X3.3M METAL CULV W/ BLDRS
1	102	RI	00	1346		T = 7.5 C AT 0855	LP GOES THROUGH CULV
1	103	LP	00	1357			T = 7.5 C
1	105	LP	00	1370			TIRE
1	107	LP	00	1389			SCULPIN
1	109	LP	00	1407		0515834, 4905662	EXPOSED ROOTS, TIRE
1	110	SC	00	1409		CT-CT, D15, S, ST, LT	
1	111	LP	00	1420			MORE ALDERS
1	112	RI	00	1429			TRASH
1	115	LP	01	1480	TJ/	UNNAMED TJ/ ON MAP`	

CHILDERS CREEK (CALAPOOIA - 2006)

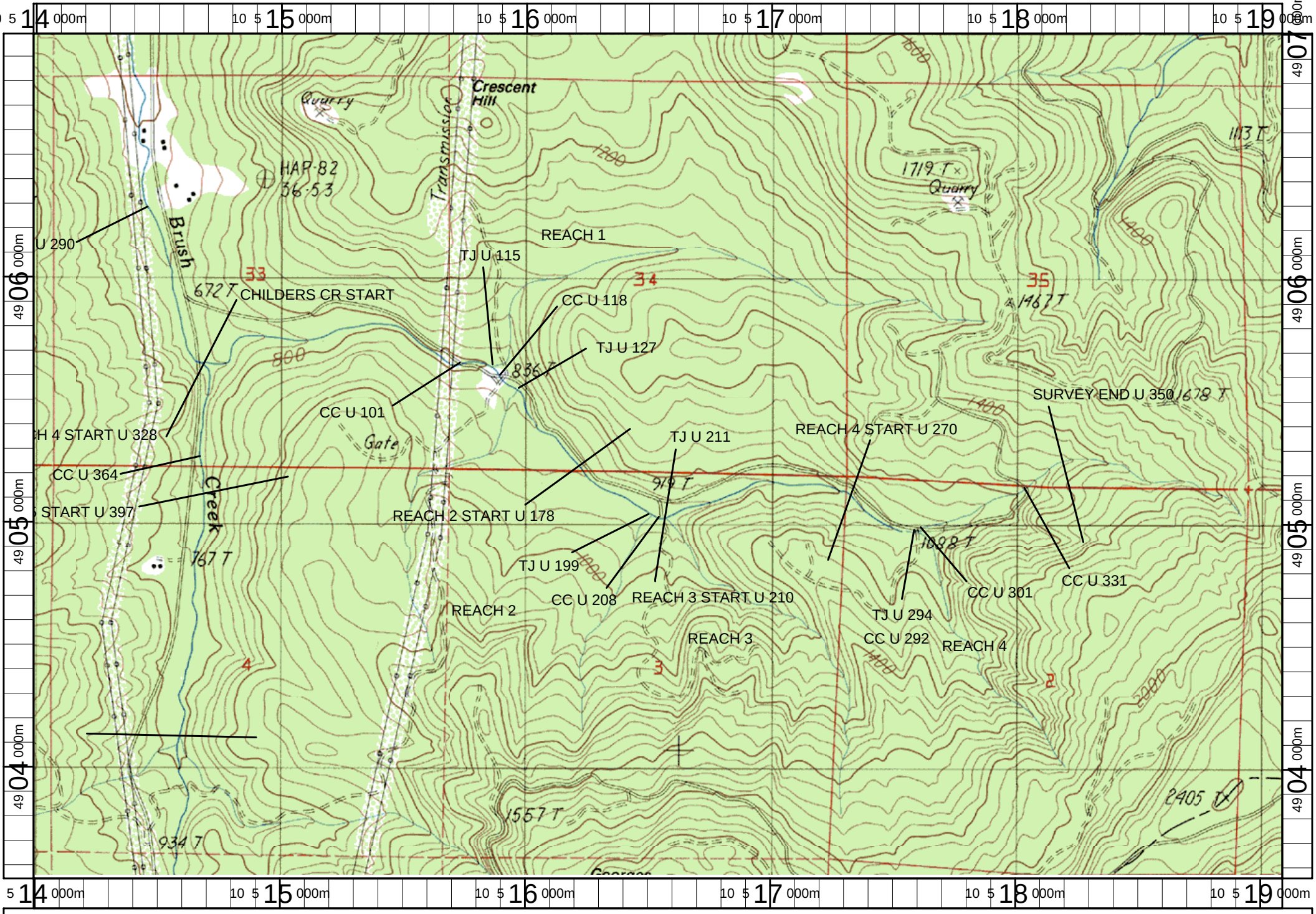
REACH	UNIT#	TYPE	CHAN	DIST.(m)	COMMENTS	NOTE_ESTIMATOR	NOTE_NUMERATOR
1	116	RB	11			T = 7 C ACW = 2.3 M	T = 7 C
1	117	SS	00	1480		CC H = .35 M, 1.85X1.8 M METAL	H = .35 M
1	118	CC	00	1496	CC		1.85 X 1.8 M METAL CULVERT
1	119	RB	00	1502	WL		TRAIL, NO SUBSTRATE IN CULV
1	120	LP	00	1512		CH-MV, D15, S, ST, LT	H20 RUNS UNDER CULV, BLDRS
1	126	LP	00	1559			UNK FISH
1	127	RR	01	1576	RF, /TJ	/TJ ON MAP, UNNAMED	
1	128	RI	11			T = 7.5 C, ACW = 1.1 M	T = 7.5 C AT 1026
1	130	SC	00	1589		CH-MV, D30, S, ST, LT	
1	131	LP	00	1602	WL		TRAIL
1	132	SC	00	1604	WL		TRAIL
1	139	LP	00	1664			CONCRETE BOX 1.8 X 1.8 X 1.8 M
1	140	RI	00	1671	SS/	CH-MV, D30, S, ST, LT	
1	145	LP	00	1747	WL		DEER TRACKS
1	150	SC	00	1783	BV	CA-CT, D30, S, ST, LT	BV IS OLD
1	157	RI	00	1841	BV		BV IS OLD
1	158	LP	00	1849	WL		TRAIL
1	160	LP	00	1862		CA-CT, D30, S, ST, LT	
1	161	SC	00	1865	BV		
1	164	SP	00	1898	WL		TRAIL
1	166	RI	00	1972			SOME POCKETS .5 M DEEP
1	170	SC	00	2027		CH-MV, D30, S, ST, LT	ACW = .6 M
1	171	LP	00	2039			TROUT?
1	175	LP	00	2077			FISH
1	176	RI	00	2089	BV		FRESH CUT STICKS
1	177	LP	00	2094	DJ	CLEARCUT - BOTH SIDES	CLEARCUT STARTS ON BOTH SIDES
2	178	RI	00	2106		051622, 4905184	T = 10 C AT 1250
2	180	LP	00	2138	/SS	CH-MV, D15, S, TH, ST	
2	181	RI	00	2156		VERY THIN RIP ON RT	
2	182	LP	00	2167			SCULPIN
2	190	LP	00	2250	BV	CH-MV, D15, S, TH, ST	
2	195	LP	00	2314	WL, BV	NO RIP ON RT	COUGAR TRACKS
2	196	RI	00	2339	/SS		
2	199	LP	01	2376	/TJ	/TJ ON MAP, UNNAMED	/CLEARCUT
2	200	RI	11			ACW = 2 M, T = 10 C	T = 10 AT 1400, ACW = 2 M
2	201	RI	00	2384		TRIB = 0516447, 4905050	0516447, 4905050
2	202	LP	00	2398		CT-CT, D15, S, TH, ST	
2	204	LP	00	2435			RIP BEGINS AGAIN, TROUT
2	207	SS	00	2475		H = .4 M	H = .4 M, WATER MAY BE FLOWING
2	208	CC	00	2491	CC		UNDER CULVERT, NO SUBSTRATE
2	209	RI	00	2511			2 X 1.8 M, UPSTREAM END BEING
3	210	LP	00	2523		CA-CT, C30, S, ST, LT	LIFTED UP BY SEDIMENT
3	211	RI	01	2538	/TJ	516598, 4905036	T = 5 C
3	212	RI	11			ACW = 2.4 M, T = 5 C	T = 5 C, 0516621, 4905057
3	213	RI	00	2558		TRIB = 0516621, 4905057	
3	214	LP	00	2565		U 211 = T = 5 C AT 0900	
3	216	LP	00	2582			FISH
3	220	RI	00	2648	WL	CH-MV, C30, S, ST, LT	TRAIL
3	222	RI	00	2696			POCKET .45 M
3	223	LP	00	2707	WL		TRAILS
3	230	SC	01	2794			SOME SUBSURFACE FLOW
3	232	LP	00	2802		CH-MV, C30, S, ST, LT	
3	233	RI	00	2822	BV, WL		TRAILS
3	234	LP	00	2837			FISH
3	235	RI	00	2863	WL		LARGE TRAILS

CHILDERS CREEK (CALAPOOIA - 2006)

REACH	UNIT#	TYPE	CHAN	DIST.(m)	COMMENTS	NOTE_ESTIMATOR	NOTE_NUMERATOR
3	236	LP	00	2871	WL		TRAILS
3	237	SC	00	2874	/LI		
3	238	RP	01	2919			FISH, POCKETS .4 M DEEP
3	240	RI	00	2943	/LA	CH-MV, C30, S, ST, LT	/CLEARCUT, WIND BLOWN TREES
3	241	LP	00	2955	WL		TRACKS
3	243	LP	00	3000	LA/		
3	249	SC	00	3064		H = .7 M	H = .7 M, SOME SUBSURFACE FLOW
3	250	RI	00	3071		CH-MV, C50, S, ST, LT	
3	251	LP	00	3084	LA/		
3	252	RP	00	3125			SOME POCKETS .4 M DEEP
3	253	RI	00	3158	WL, /LA		TRAILS, ELK TRACKS
3	257	SR	00	3184		H = .6 M	H = .6 M
3	258	RR	00	3209	DJ		
3	259	SR	00	3212		H = 2.2 M	H = 2.2 M, POCKETS .8 M DEEP
3	260	RI	00	3220		CH-MV, C50, S, LT, ST	
3	261	SB	00	3221		H = .6 M	H = .6 M
3	262	RI	01	3259	WL		RACOON TRACKS, FISH
3	264	SC	00	3262		H = .5 M	H = .5 M, SUBSURFACE FLOW
3	265	LP	00	3267	/SS, WL		TRAILS
3	267	RI	00	3320	/SS		
4	270	RI	00	3397		CH-MV, C50, S, YT, LT	
4	271	RI	00	3417	LA/, BV		
4	272	RB	00	3436	BV		
4	273	RI	00	3453	/LS		
4	274	SC	00	3454		H = .6 M	H = .6 M
4	275	LP	00	3460	BV		FISH
4	276	RB	00	3492	LA/, BV,DJ		ANIMAL DEN
4	277	RI	00	3496	BV, SS/		TROUT FRY
4	278	LP	01	3499	TJ/, BV	TJ/ 0517498, 4905037	0517498, 4905037
4	279	PD	11		BV	ACW = 2.1 M, T = 7.5 C	T = 7.5 C
4	280	RB	00	3523	BV	CH-MV, C50, S, YT, LT	FISH
4	281	SC	01	3525	BV, /TJ	H = .5 M, /TJ	H = .5 M
4	282	RI	11		BV	T = 7.5 C, ACW = 1.6 M	T = 7.5 C
4	284	LP	00	3551	BV	WILLOW AND YT	
4	285	SC	00	3552	BV	H = .7 M	H = .7 M
4	286	RI	00	3574	BV		
4	287	LP	00	3582	BV		
4	288	RI	00	3587	BV		
4	289	SC	00	3589	BV	H = .7 M	H = .7, CBL BACKED UP BY LOGS
4	290	RI	00	3607		CH-MV, C30, S, YT, ST	AND STICKS
4	292	CC	00	3627	CC	1.5 X 1.5 M METAL CULV	1.5 X 1.5 M CULV, NO BLDRS
4	293	RB	01	3645	TJ/	/TJ ON MAP, UNNAMED	
4	294	SL	11			H = .75 M, T = 8 C	H = .75 M, T = 8 C
4	295	RI	11		WL	ACW = 4.3 M, 0517631, 4904918	0517631, 4904918, COUGAR TRACK
4	297	RI	00	3688		/CLEARCUT	
4	300	RB	00	3717		CT-CT, C30, S, YT, TH	
4	301	CC	00	3730	CC	2.7 X 1.4 M CULV METAL	2.7 M X 1.4M, SUBSTRATE FILLED
4	302	RB	00	3742		CULV SURROUNDED BY BLDRS	CULV SURROUNDED BY BLDRS
4	303	SL	00	3744	BV	H = .7 M	H = .7 M
4	307	SB	00	3778		H = .4 M	H = .4 M
4	309	LP	00	3791	WL	CA-CT, D30, S, YT, ST	DEER, ELK TRACKS
4	310	SB	00	3791		H = .8 M	H = .4 M
4	319	SC	00	3958		H = .7 M	H = .7 M, YT/ CLEARCUT
4	320	RB	00	4003	BV	CH-MV, D15, S, YT, ST	
4	321	RB	00	4035	BV		

CHILDERS CREEK (CALAPOOIA - 2006)

REACH	UNIT#	TYPE	CHAN	DIST.(m)	COMMENTS	NOTE_ESTIMATOR	NOTE_NUMERATOR
4	322	SL	00	4036	DJ, BV	H = .85 M	H= .85 M, SOME SUBSURFACE FLOW
4	323	RB	01	4067	SS/,/TJ,WL	/TJ	ELK
4	324	RB	11		WL	T = 7.5 C, ACW = 1.2 M	ELK
4	325	LP	00	4073		TRIB = 0517936, 4905074	
4	326	RB	00	4105	BV		
4	327	SL	00	4107	BV	H = .55 M	H= .55 M, SOME SUBSURFACE FLOW
4	329	PP	00	4160		CH-MV, D15, S, YT, ST	
4	330	SS	00	4160		H = .8 M, 0518027, 4905143	H = .8 M, .8 X .7 M,
4	331	CC	00	4182	CC	.9 X .9 M METAL CULVERT	CULV CAVING IN FROM ROAD BED
4	333	SL	00	4213	PN	H = .8 M	H = .8 M
4	334	RI	00	4220	WL		CRAWDAD
4	335	SL	00	4221	PN	H = .95 M	H = .95 M
4	336	CB	00	4241	/LA		
4	338	RB	00	4316	WL		ELK TRACKS
4	339	SB	00	4319	PN, DJ	H = 1 M	H = 1 M
4	340	CB	00	4328	/LA	CH-SV, D15, G, YT, LT	
4	341	SB	00	4329	PN	H = 1 M	H = 1 M
4	342	CB	00	4355	WL		RACCOON TRACKS
4	343	SB	00	4357	PN	H = 1 M	H = 1 M
4	344	CB	00	4400	/SS, /SS		
4	345	SL	00	4402	DJ, PN	H = 1.3 M	H = 1.3 M
4	347	SL	00	4424	DJ, PN	H = 1.2 M	H = 1.2 M
4	348	RB	00	4441		END = 0518283, 4905319	
4	349	SR	00	4442	PN	H = 1 M	H = 1 M
4	350	CR	00	4475	WL	CH-SV, D15, G, YT, LT	TRAILS



Name: CRAWFORDSVILLE (OR)
Date: 12/27/2006
Scale: 1 inch equals 1600 feet

Location: 10 0516538 E 4905274 N
Caption: CHILDERS CREEK (CALAPOOIA - SUMMER 2006) STREAM HABITAT SURVEY

Childers Creek (Calapooia)

Summer 2006

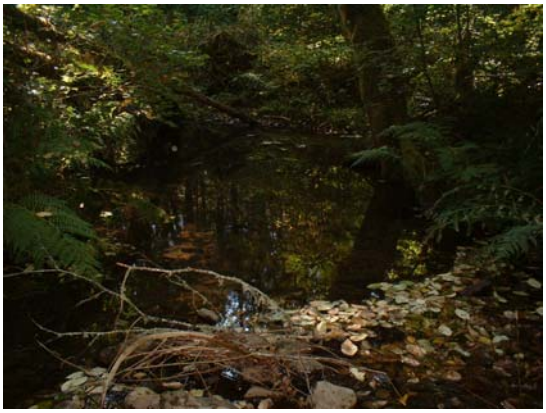
Reach 1 – Unit 60

Reach 1 – Unit 90

Reach 1 – Unit 90

Reach 1 – Unit 118
Culvert Crossing

Reach 1 – Unit 150



Reach 1 – Unit 150

Childers Creek (Calapooia)

Summer 2006

Reach 2 – Unit 178

Right bank clearcut

Reach 2 – Unit 208

Culvert – The end is crushed

Reach 3 – Unit 210

Reach 4 – Unit 270

Reach 4 – Unit 330

Culvert Crossing

Reach 4 – Unit 350