

Castellini Creek Tables Graphs Map
Assessment Completed 2001
Page 1 of 20

APPENDIX B: TABLES

Table 1 - Summary of Riffle, Flatwater, and Pool Habitat Types

Stream Name: Castellini Creek

LLID:

1229063384338

Drainage:

Russian River - Lower

Survey Dates: 7/5/2001 to 7/5/2001

Confluence Location:

Quad: CAMP MEEKER

Legal Description:

T07NR10WS25

Latitude: 38:26:02.0N

Longitude: 122:54:23.0W

Habitat Units	Units Fully Measured	Habitat Type	Habitat Occurrence (%)	Mean Length (ft.)	Total Length (ft.)	Total Length (%)	Mean Width (ft.)	Mean Depth (ft.)	Mean Max Depth (ft.)	Mean Area (sq.ft.)	Estimated Total Area (sq.ft.)	Mean Volume (cu.ft.)	Estimated Total Volume (cu.ft.)	Mean Residual Pool Vol (cu.ft.)	Mean Shelter Rating
15	0	DRY	27.8	130	1951.5	47.4									
21	6	FLATWATER	38.9	86	1803.8	43.8	3.7	0.4	0.8	326	6852	153	2684		5
18	18	POOL	33.3	20	358.3	8.7	5.4	0.9	1.7	109	1958	99	1582	92	31
Total Units	Total Units Fully Measured				Total Length (ft.)					Total Area (sq.ft.)			Total Volume (cu.ft.)		
54	24				4113.6					8811			4267		

Table 2 - Summary of Habitat Types and Measured Parameters

Stream Name: Castellini Creek

LLID:

1229063384338 Drainage: Russian River - Lower

Survey Dates: 7/5/2001 to 7/5/2001

Confluence Location: Quad: CAMP MEEKER

Legal Description: T07NR10WS25

Latitude: 38:26:02.0N

Longitude: 122:54:23.0W

Habitat Units	Units Fully Measured	Habitat Type	Habitat Occurrence (%)	Mean Length (ft.)	Total Length (ft.)	Total Length (%)	Mean Width (ft.)	Mean Depth (ft.)	Max Depth (ft.)	Mean Area (sq.ft.)	Estimated Total Area (sq.ft.)	Mean Volume (cu.ft.)	Estimated Total Volume (cu.ft.)	Mean Residual Pool Vol (cu.ft.)	Mean Shelter Rating	Mean Canopy (%)
4	1	GLD	7.4	64	256	6.2	5	0.6	0.9	232	926	139	556		0	100
7	2	RUN	13.0	88	619	15.1	3	0.4	1	318	2227	192	672		8	100
10	3	SRN	18.5	93	929	22.6	4	0.4	1	363	3634	145	1454		5	99
5	5	MCP	9.3	19	93	2.3	5	0.8	2.5	92	461	82	409	78	30	100
1	1	CRP	1.9	45	45	1.1	7	0.8	1.6	312	312	281	281	250	5	100
2	2	LSL	3.7	20	39	1.0	5	1.8	2.7	76	152	96	192	88	118	100
3	3	LSR	5.6	27	82	2.0	5	0.6	2	152	456	109	326	99	10	100
7	7	PLP	13.0	14	100	2.4	6	0.8	2.5	82	577	75	375	73	19	100
15	0	DRY	27.8	130	1952	47.4										100

Total Units	Total Units Fully Measured	Total Length (ft.)	Total Area (sq.ft.)	Total Volume (cu.ft.)
54	24	4113.6	8745	4263

Table 3 - Summary of Pool Types

Stream Name: Castellini Creek

LLID:

1229063384338

Drainage: Russian River - Lower

Survey Dates: 7/5/2001 to 7/5/2001

Confluence Location: Quad: CAMP MEEKER

Legal Description: T07NR10WS25

Latitude: 38:26:02.0N

Longitude: 122:54:23.0W

Habitat Units	Units Fully Measured	Habitat Type	Habitat Occurrence (%)	Mean Length (ft.)	Total Length (ft.)	Total Length (%)	Mean Width (ft.)	Mean Residual Depth (ft.)	Mean Area (sq.ft.)	Estimated Total Area (sq.ft.)	Mean Residual Pool Vol (cu.ft.)	Estimated Total Resid.Vol. (cu.ft.)	Mean Shelter Rating
5	5	MAIN	28	19	93	26	5.0	0.8	92	461	78	389	30
13	13	SCOUR	72	20	266	74	5.6	0.9	115	1498	99	1087	31
Total Units	Total Units Fully Measured				Total Length (ft.)				Total Area (sq.ft.)		Total Volume (cu.ft.)		
18	18				358.3				1958		1476		

Table 4 - Summary of Maximum Residual Pool Depths By Pool Habitat Types

Stream Name: Castellini Creek

LLID:

1229063384338

Drainage: Russian River - Lower

Survey Dates: 7/5/2001 to 7/5/2001

Confluence Location:

Quad: CAMP MEEKER

Legal Description:

T07NR10WS25

Latitude: 38:26:02.0N

Longitude: 122:54:23.0W

Habitat Units	Habitat Type	Habitat Occurrence (%)	< 1 Foot Maximum Residual Depth	< 1 Foot Percent Occurrence	1 < 2 Feet Maximum Residual Depth	1 < 2 Feet Percent Occurrence	2 < 3 Feet Maximum Residual Depth	2 < 3 Feet Percent Occurrence	3 < 4 Feet Maximum Residual Depth	3 < 4 Feet Percent Occurrence	>= 4 Feet Maximum Residual Depth	>= 4 Feet Percent Occurrence
5	MCP	29	0	0	4	80	1	20	0	0	0	0
1	CRP	6	0	0	1	100	0	0	0	0	0	0
2	LSL	12	0	0	1	50	1	50	0	0	0	0
3	LSR	18	0	0	2	67	1	33	0	0	0	0
6	PLP	35	0	0	5	83	1	17	0	0	0	0

Total Units

	Total < 1 Foot Max Resid. Depth	Total < 1 Foot % Occurrence	Total 1 < 2 Foot Max Resid. Depth	Total 1 < 2 Foot % Occurrence	Total 2 < 3 Foot Max Resid. Depth	Total 2 < 3 Foot % Occurrence	Total 3 < 4 Foot Max Resid. Depth	Total 3 < 4 Foot % Occurrence	Total >= 4 Foot Max Resid. Depth	Total >= 4 Foot % Occurrence
17	0	0	13	76	4	24	0	0	0	0

Mean Maximum Residual Pool Depth (ft.): 1.7

Table 5 - Summary of Mean Percent Cover By Habitat Type

Stream Name: Castellini Creek
 LLID: 1229063384338
 Drainage: Russian River - Lower
 Survey Dates: 7/5/2001 to 7/5/2001
 Dry Units: 15
 Confluence Location: Quad: CAMP MEEKER
 Legal Description: T07NR10WS25
 Latitude: 38:26:02.0N
 Longitude: 122:54:23.0W

Habitat Units	Units Fully Measured	Habitat Type	Mean % Undercut Banks	Mean % SWD	Mean % LWD	Mean % Root Mass	Mean % Terr. Vegetation	Mean % Aquatic Vegetation	Mean % White Water	Mean % Boulders	Mean % Bedrock Ledges
0	0	TOTAL RIFFLE									
4	1	GLD	0	100	0	0	0	0	0	0	0
7	2	RUN	0	55	0	0	0	0	0	45	0
10	3	SRN	0	33	0	0	7	0	0	60	0
21	6	TOTAL FLAT	0	52	0	0	3	0	0	45	0
5	5	MCP	12	20	0	48	0	0	0	20	0
1	1	CRP	20	20	0	60	0	0	0	0	0
2	2	LSL	25	30	45	0	0	0	0	0	0
3	3	LSR	33	0	0	67	0	0	0	0	0
7	7	PLP	16	1	0	16	0	0	0	68	0
18	18	TOTAL POOL	19	10	5	34	0	0	0	32	0
54	24	TOTAL	14	21	4	25	1	0	0	35	0

Table 6 - Summary of Dominant Substrates By Habitat Type

Stream Name: Castellini Creek LLID: 1229063384338 Drainage: Russian River - Lower
 Survey Dates: 7/5/2001 to 7/5/2001 Dry Units: 15
 Confluence Location: Quad: CAMP MEEKER Legal Description: T07NR10WS25 Latitude: 38:26:02.0N Longitude: 122:54:23.0W

Habitat Units	Units Fully Measured	Habitat Type	% Total Silt/Clay Dominant	% Total Sand Dominant	% Total Gravel Dominant	% Total Small Cobble Dominant	% Total Large Cobble Dominant	% Total Boulder Dominant	% Total Bedrock Dominant
4	1	GLD	0	0	100	0	0	0	0
7	2	RUN	0	0	50	0	50	0	0
10	4	SRN	0	0	0	25	25	50	0
5	2	MCP	50	0	0	0	50	0	0
1	0	CRP	0	0	0	0	0	0	0
2	0	LSL	0	0	0	0	0	0	0
3	2	LSR	0	100	0	0	0	0	0
7	4	PLP	0	75	25	0	0	0	0

Table 7 - Summary of Mean Percent Canopy for Entire Stream

Stream Name: Castellini Creek LLID: 1229063384338 Drainage: Russian River - Lower
 Survey Dates: 7/5/2001 to 7/5/2001
 Confluence Location: Quad: CAMP MEEKER Legal Description: T07NR10WS25 Latitude: 38:26:02.0N Longitude: 122:54:23.0W

Mean Percent Canopy	Mean Percent Conifer	Mean Percent Hardwood	Mean Percent Open Units	Mean Right Bank % Cover	Mean Left Bank % Cover
100	70	23	0	60	62

Note: Mean percent conifer and hardwood for the entire reach are means of canopy components from units with canopy values greater than zero.

Open units represent habitat units with zero canopy cover.

Table 9 - Mean Percentage of Dominant Substrate and Vegetation

Stream Name: Castellini Creek LLID: 1229063384338 Drainage: Russian River - Lower
 Survey Dates: 7/5/2001 to 7/5/2001
 Confluence Location: Quad: CAMP MEEKER Legal Description: T07NR10WS25 Latitude: 38:26:02.0N Longitude: 122:54:23.0W

Mean Percentage of Dominant Stream Bank Substrate

Dominant Class of Substrate	Number of Units Right Bank	Number of Units Left Bank	Total Mean Percent (%)
Bedrock	0	0	0.0
Boulder	0	1	3.3
Cobble / Gravel	0	0	0.0
Sand / Silt / Clay	15	14	96.7

Mean Percentage of Dominant Stream Bank Vegetation

Dominant Class of Vegetation	Number of Units Right Bank	Number of Units Left Bank	Total Mean Percent (%)
Grass	0	0	0.0
Brush	6	4	33.3
Hardwood Trees	2	2	13.3
Coniferous Trees	6	8	46.7
No Vegetation	0	0	0.0

Total Stream Cobble Embeddedness Values: 2

Table 10 - Mean Percent of Shelter Cover Types For Entire Stream

StreamName: Castellini Creek

LLID:

1229063384338

Drainage: Russian River - Lower

Survey Dates: 7/5/2001 to 7/5/2001

Confluence Location: Quad: CAMP MEEKER

Legal Description: T07NR10WS25

Latitude: 38:26:02.0N

Longitude: 122:54:23.0W

	Riffles	Flatwater	Pools
UNDERCUT BANKS (%)		0	19
SMALL WOODY DEBRIS (%)		52	10
LARGE WOODY DEBRIS (%)		0	5
ROOT MASS (%)		0	34
TERRESTRIAL VEGETATION (%)		3	0
AQUATIC VEGETATION (%)		0	0
WHITewater (%)		0	0
BOULDERS (%)		45	32
BEDROCK LEDGES (%)		0	0

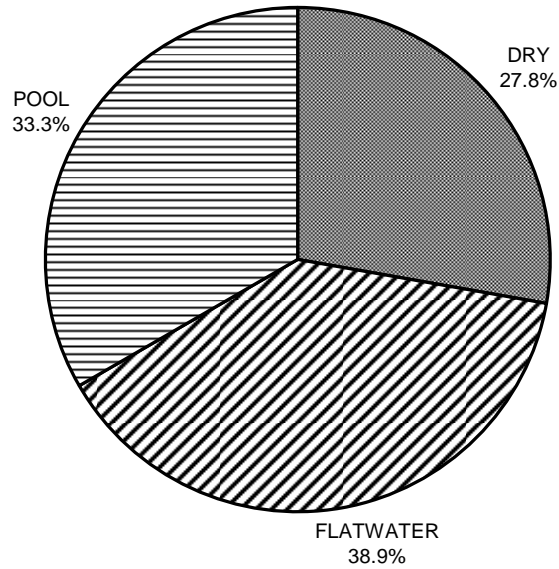
Summary of Fish Habitat Elements By Stream Reach

STREAM REACH: 3

Channel Type: A2	Canopy Density (%): 99.6	Pools by Stream Length (%): 7.5
Reach Length (ft.): 1134.8	Coniferous Component (%): 93.1	Pool Frequency (%): 30.0
Riffle/Flatwater Mean Width (ft.): 3.5	Hardwood Component (%): 6.9	Residual Pool Depth (%):
BFW:	Dominant Bank Vegetation: Coniferous Trees	< 2 Feet Deep: 100.0
Range (ft.): to	Vegetative Cover (%): 73.1	2 to 2.9 Feet Deep: 0.0
Mean (ft.):	Dominant Shelter: Boulders	3 to 3.9 Feet Deep: 0.0
Std. Dev.:	Dominant Bank Substrate Type: Sand/Silt/Clay	>= 4 Feet Deep: 0.0
Base Flow (cfs): 0	Occurrence of LWD (%): 0.0	Mean Max Residual Pool Depth (ft.): 1.34
Water (F): 54 - 54 Air (F): 68 - 70	LWD per 100 ft.:	Mean Pool Shelter Rating: 17
Dry Channel (ft.): 196.7	Riffles:	
	Pools:	
	Flat:	
Pool Tail Substrate (%): Silt/Clay: Sand: Gravel: Sm Cobble: Lg Cobble: Boulder: Bedrock:		
Embeddedness Values (%): 1. 40.0 2. 40.0 3. 20.0 4. 0.0 5. 0.0		

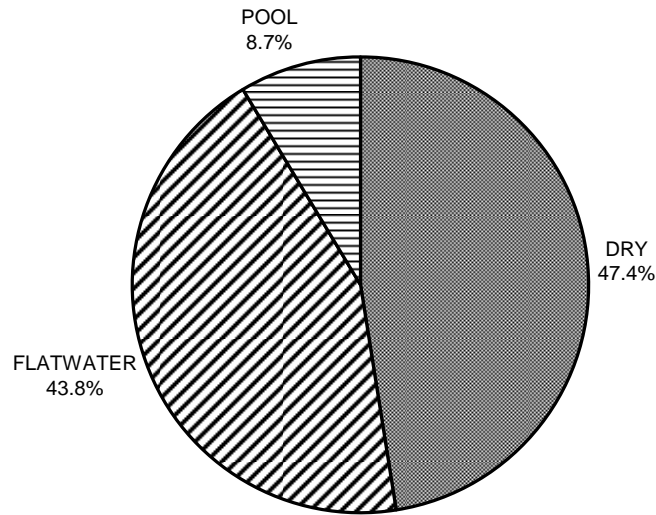
APPENDIX D: GRAPHS

**CASTELLINI CREEK 2001
LEVEL II HABITAT TYPES BY PERCENT OCCURRENCE**



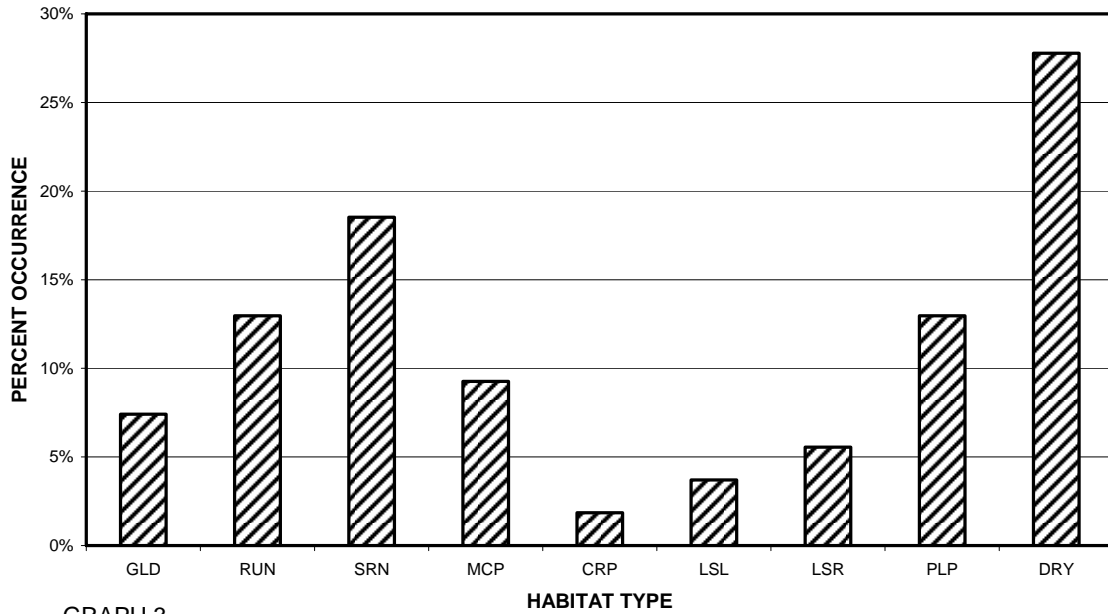
GRAPH 1

**CASTELLINI CREEK 2001
LEVEL II HABITAT TYPES BY PERCENT TOTAL LENGTH**



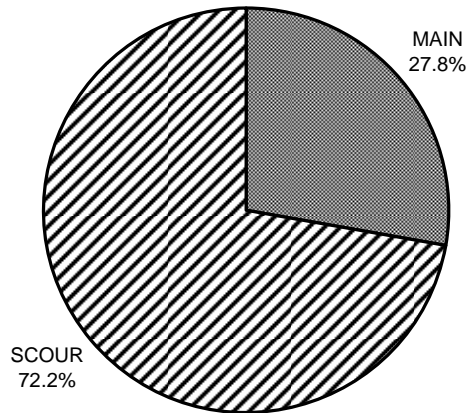
GRAPH 2

**CASTELLINI CREEK 2001
LEVEL IV HABITAT TYPES BY PERCENT OCCURRENCE**



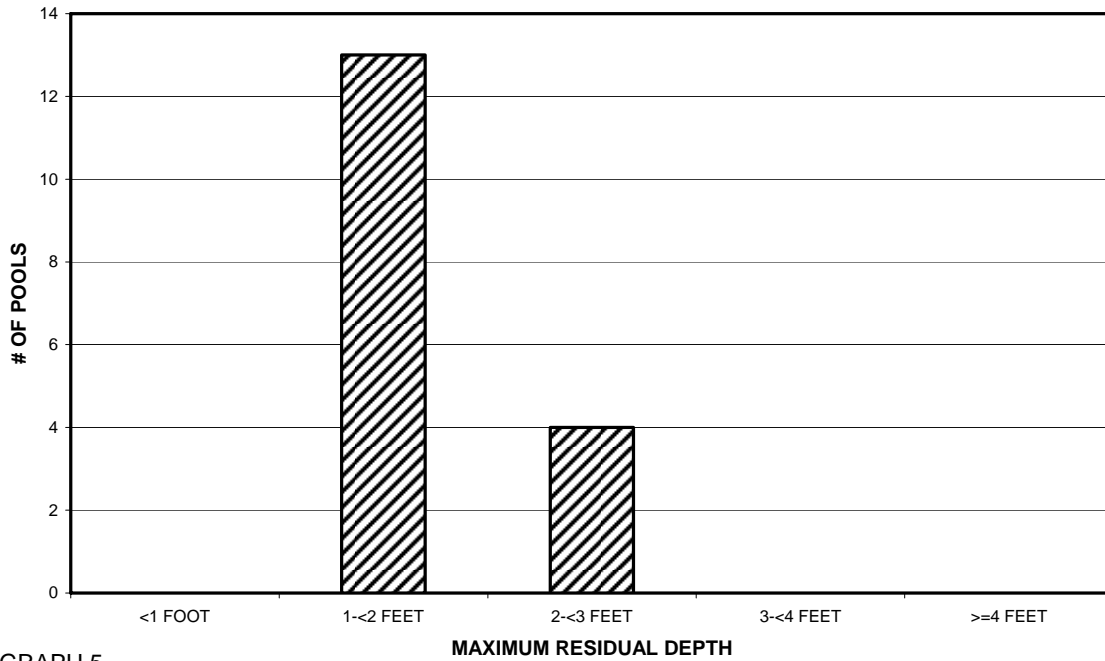
GRAPH 3

**CASTELLINI CREEK 2001
LEVEL I POOL TYPES BY PERCENT OCCURRENCE**



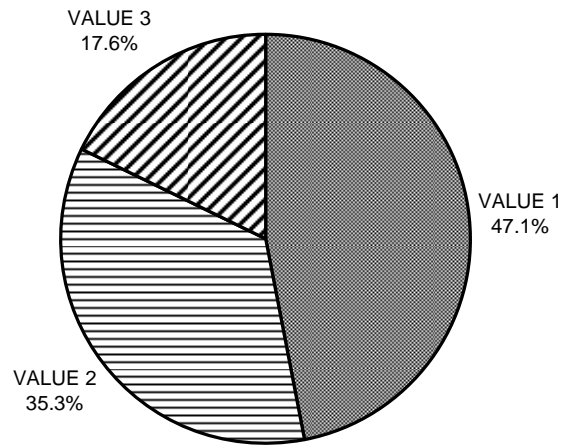
GRAPH 4

**CASTELLINI CREEK 2001
MAXIMUM DEPTH IN POOLS**



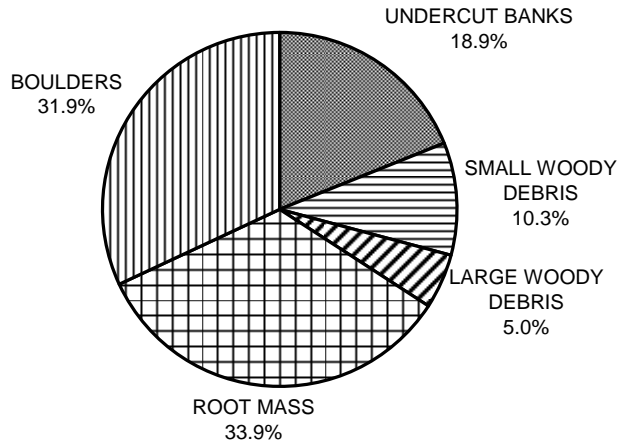
GRAPH 5

**CASTELLINI CREEK 2001
PERCENT EMBEDDEDNESS**



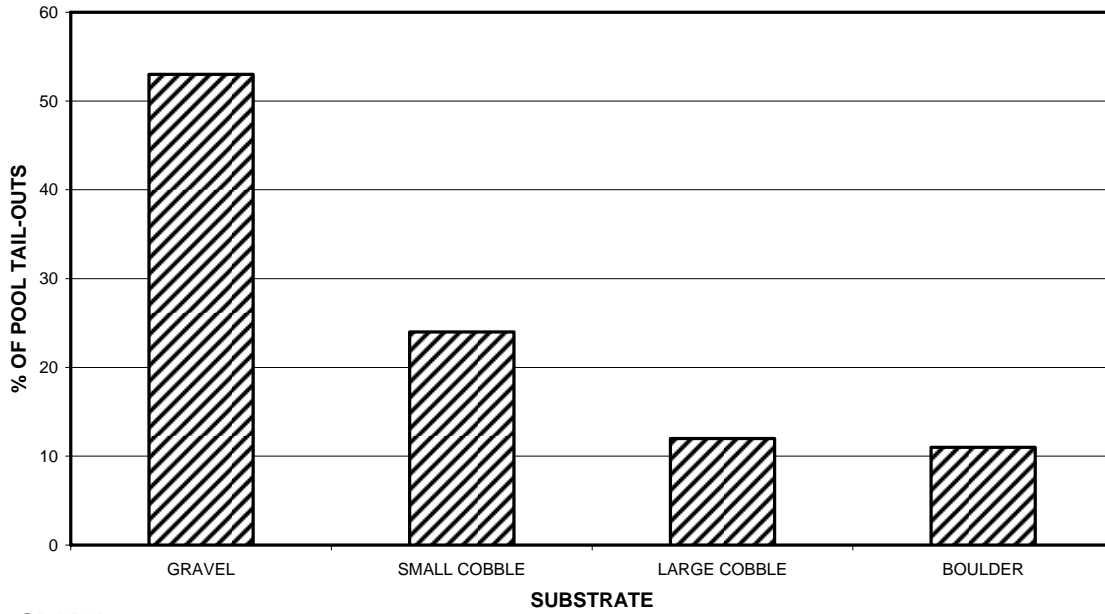
GRAPH 6

**CASTELLINI CREEK 2001
MEAN PERCENT COVER TYPES IN POOLS**



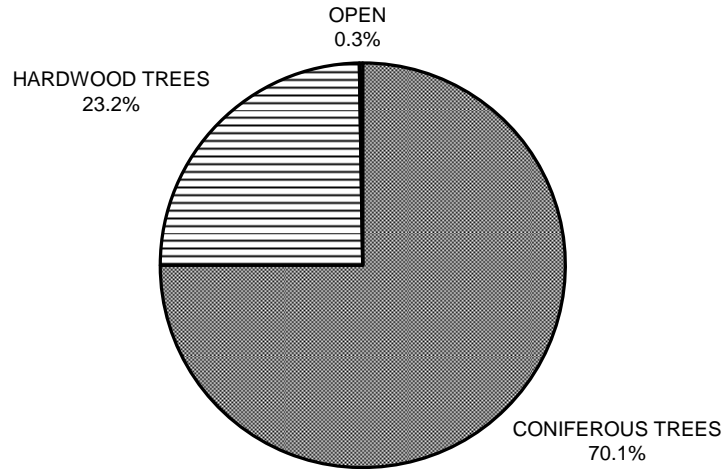
GRAPH 7

**CASTELLINI CREEK 2001
SUBSTRATE COMPOSITION IN POOL TAIL-OUTS**



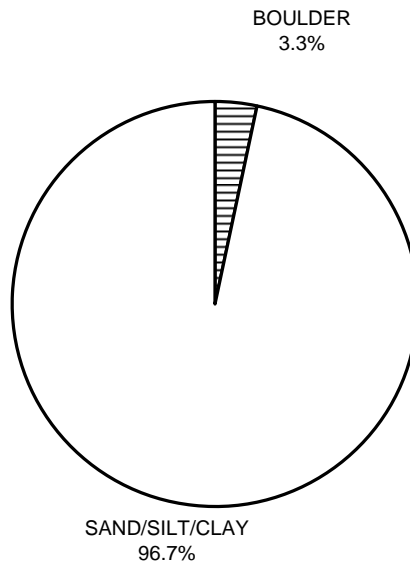
GRAPH 8

**CASTELLINI CREEK 2001
MEAN PERCENT CANOPY**



GRAPH 9

**CASTELLINI CREEK 2001
DOMINANT BANK COMPOSITION IN SURVEY REACH**



GRAPH 10

**CASTELLINI CREEK 2001
DOMINANT BANK COMPOSITION IN SURVEY REACH**



Hydrologic Sub-Areas covered by the watershed:

Tributary to Green Valley Creek
Tributary to Russian River
Tributary to

Name: Castellini Creek **LLId: (1:24k)** 1229063384338 **County:** Sonoma
Location: **T:** 7N **R:** 9W **S:** 19 **Latitude:** 38.4337958557797 **Longitude** 122.906349801505

Hydrologic Boundary Delineation: Watershed boundaries were delineated using the Watershed Point tool in ArcHydro, running under ArcMap 8.3 (ArcInfo version). A 1:24k stream network was "burned" into the underlying DEM to enforce hydrologic routing.

Aerial Photos (Source): For Mendocino County watersheds, 1993 USGS DOQQs are available in the Teale Albers, NAD27 projection. For Sonoma County watersheds, 2000 County-created orthophotos in the State Plane, NAD83 projection are also available.

Stream Order: 1	Total Length: 0.79 Miles	Note: Length is for the USGS blue-line 1:24,000 stream.
Note: Stream order is by Strahler method, recorded in CDF-NCWAP "nhydro1" 1:24k streams layer.	1.27 Km	

Drainage Area:	142 Hectares
	350 Acres
	0.54 sq. mi.

Elevations:	Mouth: 151 feet
	Headwaters: 705 feet
	Note: Headwaters elevation is the highest elevation found in the watershed.

Lakes in Watershed: Number: 0 Surface area: 0 sq. mi.
 Note: Source for lakes data is the USGS-DFG 1:100k lakes layer "lakes.shp"

Fish Species (as indicated by historical salmonid streams layer created by Bob Coey): None

Ownership, for the watershed, in acres (and % of total watershed):

Federal:	State:	Local:	Private:
0.0 acres	0.0	0.0	350.0
0.00 %	0.00 %	0.00 %	100.00 %

Note: Source for ownership data is 2002 DFG-CCR "ccr_public_lands.shp" GIS layer.

Major Land Uses in the Watershed, in acres (and % of total watershed)

Mixed hardwood/conifer:	Hardwood:	Conifer:	Agriculture:	Urban:
130.96 acres	0.00	88.33	115.21	0.00
37.5 %	0.0 %	25.3 %	32.9 %	0.0 %
Shrub:	Herbaceous:	Barren/rock:	Water:	
14.67	0.00	0.00	0.00	
4.2 %	0.0 %	0.0 %	0.0 %	

Note: Land use areas were calculated using the 1994 CDF-USFS "Calveg" GIS layer.

USGS 7.5' Topographic Quads completely or partially in the watershed:

Quad Name	USGS Code
CAMP MEEKER	38122D8

Endangered/Threatened/Sensitive Species: (California Natural Diversity Database, May 5, 2003 version)

Scientific Name	Common Name
Arctostaphylos bakeri ssp. bakeri	Baker's manzanita
Syncaris pacifica	California freshwater shrimp
Erigeron angustatus	narrow-leaved daisy
Alopecurus aequalis var. sonomensis	Sonoma alopecurus

Hydrologic Sub-Areas covered by the watershed

Hydrologic Sub-Area Name:	ID code (RBUAS)	Hydrologic Area Name	% of watershed in this HSA
Guerneville	111411	Lower Russian River	100