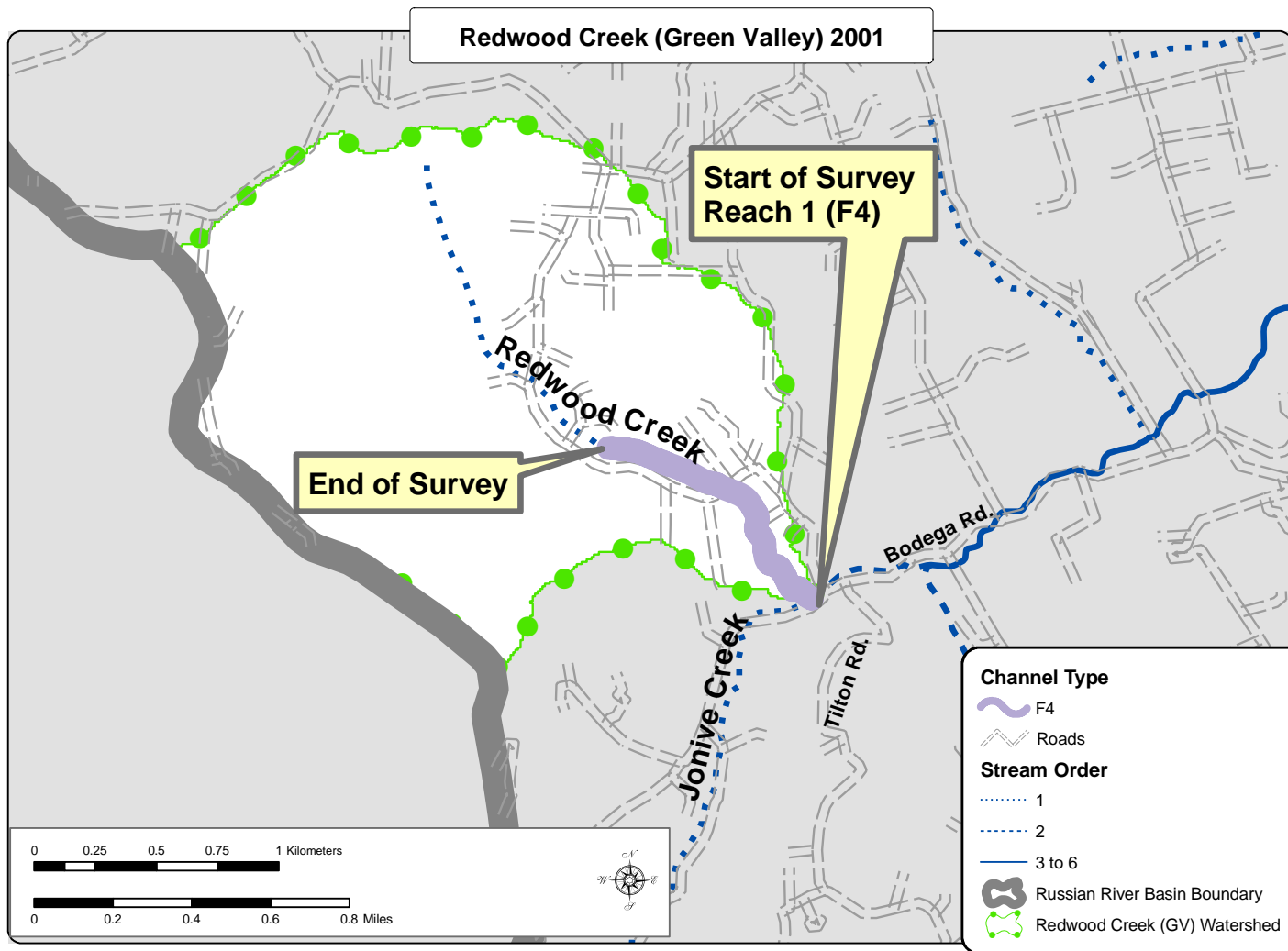


APPENDIX A: MAP



L:\mondo3\data\stream-maps\RedwoodCreekGV2001.mxd

Prepared by: Celeste Dodge and Colin Brooks, April 4, 2005

APPENDIX B: TABLES

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

Stream Name: Redwood Creek

LLID:

1228847383898

Drainage:

Russian River - Lower

Survey Dates: 7/10/2001 to 7/11/2001

Confluence Location:

Quad: CAMP MEEKER

Legal Description:

T000R000S00

Latitude: 38:23:23.0N

Longitude: 122:53:05.0W

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
3	0	DRY	3.8	17	51	0.6									
28	7	FLATWATER	35.4	150	4206	53.5	7.2	0.5	0.9	433	12113	216	6050		18
3	0	NOSURVEY	3.8	472	1417	18.0									
30	30	POOL	38.0	35	1042	13.2	14.7	1.4	3.2	522	15660	787	22034	724	44
15	3	RIFFLE	19.0	77	1151	14.6	4.5	0.2	0.5	209	3140	42	628		10
Total Units	Total Units Fully Measured			Total Length (ft.)						Total Area (sq.ft.)			Total Volume (cu.ft.)		
79	40			7867						30913			28712		

Table 2 - Summary of Habitat Types and Measured Parameters

Stream Name:

1228847383898

Redwood Creek

LLID:

Drainage:

Russian River - Lower

Survey Dates: 7/10/2001 to 7/11/2001

Confluence Location:

Quad: CAMP MEEKER

Legal Description:

T000R000S00

Latitude: 38:23:23.0N

Longitude: 122:53:05.0W

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 (%)
10	2	LGR	12.7	57	568	7.2	4	0.2	0.4	148	1477	30	295		10	88
5	1	BRS	6.3	117	583	7.4	5	0.2	0.8	333	1663	67	333			90
7	3	GLD	8.9	41	290	3.7	11	0.5	0.9	341	2385	187	1308		40	94
21	4	RUN	26.6	186	3916	49.8	5	0.4	1.2	502	10532	238	4999		10	94
18	18	MCP	22.8	30	546	6.9	18	1.5	24.9	543	9765	771	12330	707	37	92
1	1	CCP	1.3	13	13	0.2	10	0.9	1.2	130	130	130	130	117		95
2	2	CRP	2.5	14	27	0.3	10	1.2	2.5	130	260	185	369	172	20	93
8	8	LSR	10.1	40	319	4.1	9	1.2	3.7	380	3039	534	4273	477	67	97
1	1	DPL	1.3	137	137	1.7	18	1.9	3.3	2466	2466	4932	4932	4685	20	95
3	0	DRY	3.8	17	51	0.6										
3	0	NS	3.8	472	1417	18.0										
Total Units	Total Units Fully Measured				Total Length (ft.)					Total Area (sq.ft.)			Total Volume (cu.ft.)			
79	40				7867					31717			28969			

Table 3 - Summary of Pool Types

Stream Name: Redwood Creek
 LLID: 1228847383898
 Drainage: Russian River - Lower
 Survey Dates: 7/10/2001 to 7/11/2001
 Confluence Location: Quad: CAMP MEEKER
 Legal Description: T000R000S00
 Latitude: 38:23:23.0N
 Longitude: 122:53:05.0W

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
19	19	MAIN	63	29	559	54	17.4	1.5	521	9895	673	11435	37
10	10	SCOUR	33	35	346	33	9.4	1.2	330	3299	416	4158	61
1	1	BACKWATER	3	137	137	13	18.0	1.9	2466	2466	4685	4685	20
Total Units	Total Units Fully Measured				Total Length (ft.)					Total Area (sq.ft.)		Total Volume (cu.ft.)	
30	30				1042					15660		20278	

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

Stream Name: Redwood Creek

LLID:

1228847383898

Drainage: Russian River - Lower

Survey Dates: 7/10/2001 to 7/11/2001

Confluence Location:

Quad: CAMP MEEKER

Legal Description:

T000R000S00

Latitude: 38:23:23.0N

Longitude: 122:53:05.0W

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
18	MCP	60	1	6	6	33	4	22	4	22	3	17
1	CCP	3	0	0	1	100	0	0	0	0	0	0
2	CRP	7	0	0	1	50	1	50	0	0	0	0
8	LSR	27	0	0	2	25	4	50	2	25	0	0
1	DPL	3	0	0	0	0	0	0	1	100	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
30	1	3	10	33	9	30	7	23	3	10
Mean Maximum Residual Pool Depth (ft.):	3.2									

Table 5 - Summary of Mean Percent Cover By Habitat Type

Stream Name: Redwood Creek LLID: 1228847383898 Drainage: Russian River - Lower
 Survey Dates: 7/10/2001 to 7/11/2001 Dry Units: 3
 Confluence Location: Quad: CAMP MEEKER Legal Description: T000R000S00 Latitude: 38:23:23.0N Longitude: 122:53:05.0W

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
10	1	LGR	0	0	0	0	100	0	0	0	0
5	0	BRS									
15	1	TOTAL RIFFLE	0	0	0	0	100	0	0	0	0
7	1	GLD	5	0	0	0	0	95	0	0	0
21	3	RUN	42	0	0	42	17	0	0	0	0
28	4	TOTAL FLAT	33	0	0	31	13	24	0	0	0
18	16	MCP	58	3	6	1	9	0	3	8	14
1	0	CCP									
2	1	CRP	80	0	0	0	20	0	0	0	0
8	7	LSR	63	11	11	0	7	7	0	0	0
1	1	DPL	80	0	0	0	20	0	0	0	0
30	25	TOTAL POOL	61	5	7	0	9	2	2	5	9
3	0	NS									
79	30	TOTAL	55	4	6	5	13	5	2	4	7

Table 6 – Summary of Dominant Substrates By Habitat Type

Stream Name: Redwood Creek LLID: 1228847383898 Drainage: Russian River - Lower
 Survey Dates: 7/10/2001 to 7/11/2001 Dry Units: 3
 Confluence Location: Quad: CAMP MEEKER Legal Description: T000R000S00 Latitude: 38:23:23.0N Longitude: 122:53:05.0W

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
10	2	LGR	0	0	100	0	0	0	0
5	1	BRS	0	0	0	0	0	0	100
7	3	GLD	33	0	67	0	0	0	0
21	5	RUN	20	20	40	0	20	0	0
18	1	MCP	0	0	100	0	0	0	0
1	1	CCP	0	100	0	0	0	0	0
2	1	CRP	0	0	0	100	0	0	0
8	3	LSR	0	100	0	0	0	0	0
1	1	DPL	0	100	0	0	0	0	0

Table 7 - Summary of Mean Percent Canopy for Entire Stream

Stream Name: Redwood Creek
 LLID: 1228847383898
 Drainage: Russian River - Lower
 Survey Dates: 7/10/2001 to 7/11/2001
 Confluence Location: Quad: CAMP MEEKER
 Legal Description: T000R000S00
 Latitude: 38:23:23.0N
 Longitude: 122:53:05.0W

Mean Percent Canopy	Mean Percent Conifer	Mean Percent Hardwood	Mean Percent Open Units	Mean Right Bank % Cover	Mean Left Bank % Cover
93	65	35	0	77	70

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: Redwood Creek LLID: 1228847383898 Drainage: Russian River - Lower
 Survey Dates: 7/10/2001 to 7/11/2001
 Confluence Location: Quad: CAMP MEEKER Legal Description: T000R000S00 Latitude: 38:23:23.0N Longitude: 122:53:05.0W

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	0	0.0
Cobble / Gravel	0	0	0.0
Sand / Silt / Clay	16	16	100.0

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	1	3.1
Brush	5	9	43.8
Hardwood Trees	5	2	21.9
Coniferous Trees	6	4	31.3
No Vegetation	0	0	0.0

Total Stream Cobble Embeddedness Values: 1

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

StreamName: Redwood Creek LLID: 1228847383898 Drainage: Russian River - Lower
 Survey Dates: 7/10/2001 to 7/11/2001
 Confluence Location: Quad: CAMP MEEKER Legal Description: T000R000S00 Latitude: 38:23:23.0N Longitude: 122:53:05.0W

	Riffles	Flatwater	Pools
UNDERCUT BANKS (%)	0	33	61
SMALL WOODY DEBRIS (%)	0	0	5
LARGE WOODY DEBRIS (%)	0	0	7
ROOT MASS (%)	0	31	0
TERRESTRIAL VEGETATION (%)	100	13	9
AQUATIC VEGETATION (%)	0	24	2
WHITEWATER (%)	0	0	2
BOULDERS (%)	0	0	5
BEDROCK LEDGES (%)	0	0	9

APPENDIX C

Table 8 - Fish Habitat Inventory Data Summary

Stream Name: Redwood Creek LLID: 1228847383898 Drainage: Russian River - Lower

Survey Dates: 7/10/2001 to 7/11/2001 Survey Length (ft.): 7867 Main Channel (ft.): 7867 Side Channel (ft.): 0

Confluence Location: Quad: CAMP MEEKER Legal Description: T000R000S00 Latitude: 38:23:23.0N Longitude: 122:53:05.0W

Summary of Fish Habitat Elements By Stream Reach

STREAM REACH: 1

Channel Type: F4 Canopy Density (%): 92.7 Pools by Stream Length (%): 13.2

Reach Length (ft.): 7867 Coniferous Component (%): 65.0 Pool Frequency (%): 38.0

Riffle/Flatwater Mean Width 6.4 Hardwood Component (%): 35.0 Residual Pool Depth (%):

BFW: Dominant Bank Vegetation: Brush < 2 Feet Deep: 37

Range (ft.): to Vegetative Cover (%): 73.4 2 to 2.9 Feet Deep: 30

Mean (ft.): Dominant Shelter: Undercut Banks 3 to 3.9 Feet Deep: 23

Std. Dev.: Dominant Bank Substrate Type: >= 4 Feet Deep: 10

Base Flow (cfs.): 0.0 Occurrence of LWD (%): 5 Mean Max Residual Pool Depth (ft.): 3.2

Water (F): 55 - 59 Air (F): 55 - 62 LWD per 100 ft.: Mean Pool Shelter Rating: 44

Dry Channel (ft): 51 Riffles:

Pools:

Flat:

Pool Tail Substrate (%): Silt/Clay Sand: Gravel: Sm Cobble: Lg Cobble: Boulder: Bedrock:

Embeddedness Values (%): 1. 74.1 2. 14.8 3. 3.7 4. 4. 7.4 5. 0.0

