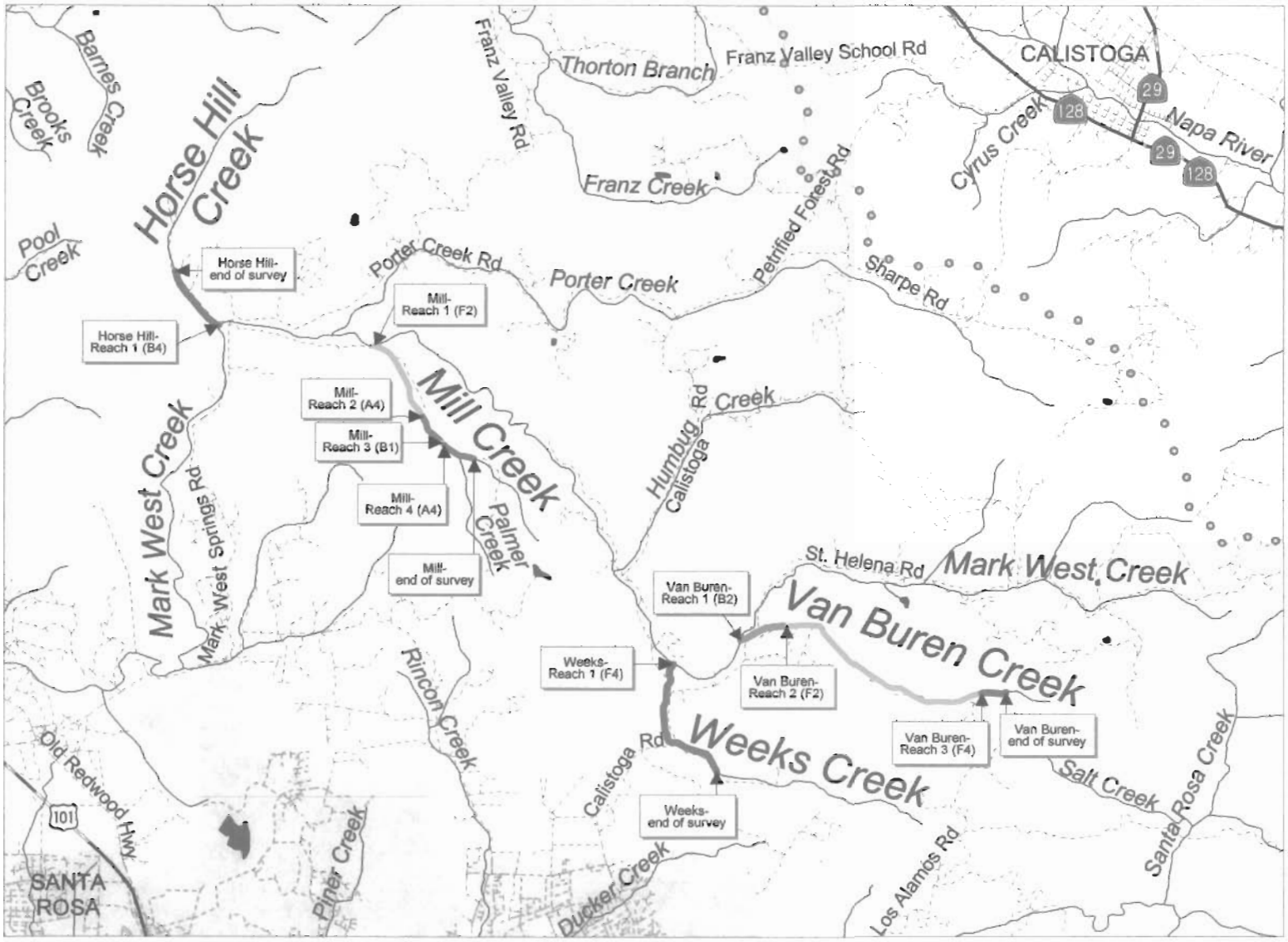
Mark West Tributaries-
Horse Hill Creek, Mill Creek, Weeks Creek, Van Buren Creek



N

Russian River basin boundary
Streams
Channel types
1
2
3
4
5
Waterbodies
Roads
Santa Rosa city limits (2000)

1 0 1 2 3 Miles

1 0 1 2 3 4 5 Kilometers

Scale = 1:85,000

Central Coast Region
Department of Fish and Game

February 22, 2001
I:/mondo3/data/stream-projects/markwesttribs.apr

Horse Hill Creek

Drainage: Mark West Creek, Russian River

Table 1 - SUMMARY OF RIFFLE, FLATWATER, AND POOL HABITAT TYPES

Survey Dates: 07/24/97

Confluence Location: QUAD: Mark West Sprgs LEGAL DESCRIPTION: T08NR08WS11 LATITUDE: 38°32'58" LONGITUDE: 122°43'17"

HABITAT UNITS	UNITS FULLY MEASURED	HABITAT TYPE	HABITAT PERCENT OCCURRENCE	MEAN LENGTH (ft.)	TOTAL LENGTH (ft.)	PERCENT TOTAL LENGTH	MEAN WIDTH (ft.)	MEAN 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
1	1	POOL	20	34	34	1	7.5	0.4	216	216	86	86	0	10
4	0	DRY	80	709	2837	99	0.0	0.0	0	0	0	0	0	0

TOTAL UNITS	TOTAL UNITS	TOTAL LENGTH (ft.)	TOTAL AREA (sq. ft.)	TOTAL VOL. (cu. ft.)
5	1	2871	216	86

Horse Hill Creek

Drainage: Mark West Creek, Russian River

Table 2 - SUMMARY OF HABITAT TYPES AND MEASURED PARAMETERS

Survey Dates: 07/24/97

Confluence Location: QUAD: Mark West Sprgs LEGAL DESCRIPTION: T08NR08WS11 LATITUDE: 38°32'58" LONGITUDE: 122°43'17"

HABITAT UNITS #	UNITS FULLY MEASURED	HABITAT TYPE	HABITAT OCCURRENCE %	MEAN LENGTH ft.	TOTAL LENGTH ft.	TOTAL LENGTH %	MEAN WIDTH ft.	MEAN DEPTH ft.	MAXIMUM DEPTH ft.	MEAN AREA sq.ft.	TOTAL AREA EST. sq.ft.	MEAN VOLUME cu.ft.	TOTAL VOLUME EST. cu.ft.	MEAN RESIDUAL POOL VOL cu.ft.	MEAN SHELTER RATING	MEAN CANOPY %
1	1	LSR	20	34	34	1	8	0.4	0.7	216	216	86	86	0	10	85
4	0	DRY	80	709	2837	99	0	0.0	0.0	0	0	0	0	0	0	30

TOTAL UNITS	TOTAL UNITS	LENGTH (ft.)	AREA (sq.ft)	TOTAL VOL. (cu.ft)
5	1	2871	216	86

Horse Hill Creek

Drainage: Mark West Creek, Russian River

Table 3 - SUMMARY OF POOL TYPES

Survey Dates: 07/24/97

Confluence Location: QUAD: Mark West Sprgs LEGAL DESCRIPTION: T08NR08WS11 LATITUDE: 38°32'58" LONGITUDE: 122°43'17"

HABITAT UNITS	UNITS FULLY MEASURED	HABITAT TYPE	HABITAT PERCENT OCCURRENCE	MEAN LENGTH (ft.)	TOTAL LENGTH (ft.)	PERCENT TOTAL LENGTH	MEAN WIDTH (ft.)	MEAN DEPTH (ft.)	MEAN AREA (sq.ft.)	TOTAL AREA EST. (sq.ft.)	MEAN VOLUME (cu.ft.)	TOTAL VOLUME EST. (cu.ft.)	MEAN RESIDUAL POOL VOL. (cu.ft.)	MEAN SHELTER RATING
1	1	SCOUR	100	34	34	100	7.5	0.4	216	216	86	86	0	10

TOTAL UNITS	TOTAL UNITS	TOTAL LENGTH (ft.)	TOTAL AREA (sq.ft.)	TOTAL VOL. (cu.ft.)
1	1	34	216	86

Horse Hill Creek

Drainage: Mark West Creek, Russian River

Table 4 - SUMMARY OF MAXIMUM POOL DEPTHS BY POOL HABITAT TYPES

Survey Dates: 07/24/97

Confluence Location: QUAD: Mark West Sprgs LEGAL DESCRIPTION: T08NR08WS11 LATITUDE: 38°32'58" LONGITUDE: 122°43'17"

UNITS MAX DPTH MEASURED	HABITAT TYPE	HABITAT PERCENT OCCURRENCE	<1 FOOT MAXIMUM DEPTH	<1 FOOT PERCENT OCCURRENCE	1-<2 FT. MAXIMUM DEPTH	1-<2 FOOT PERCENT OCCURRENCE	2-<3 FT. MAXIMUM DEPTH	2-<3 FOOT PERCENT OCCURRENCE	3-<4 FT. MAXIMUM DEPTH	3-<4 FOOT PERCENT OCCURRENCE	>=4 FEET MAXIMUM DEPTH	>=4 FEET PERCENT OCCURRENCE
1	LSR	100	1	100	0	0	0	0	0	0	0	0

TOTAL UNITS
1

Horse Hill Creek

Drainage: Mark West Creek, Russian River

Table 5 - Summary of Shelter by Habitat Type

Survey Dates: 07/24/97

Confluence Location: QUAD: Mark West Sprgs LEGAL DESCRIPTION: T08NR08WS11 LATITUDE: 38°32'58" LONGITUDE: 122°43'17"

	UNITS MEASURED	UNITS SHELTER MEASURED	HABITAT TYPE	% TOTAL UNDERCUT BANKS	% TOTAL SWD	% TOTAL LWD	% TOTAL ROOT MASS	% TOTAL TERR. VEGETATION	% TOTAL AQUATIC VEGETATION	% TOTAL WHITE WATER	% TOTAL BOULDERS	% TOTAL BEDROCK LEDGES
	1	1	LSR	0	0	0	100	0	0	0	0	0
	4	0	DRY	0	0	0	0	0	0	0	0	0
ALL HABITAT TYPES	5	1		0	0	0	100	0	0	0	0	0
POOLS ONLY	1	1		0	0	0	100	0	0	0	0	0

Horse Hill Creek

Drainage: Mark West Creek, Russian River

Table 6 - SUMMARY OF DOMINANT SUBSTRATES BY HABITAT TYPE

Survey Dates: 07/24/97

Confluence Location: QUAD: Mark West Sprgs LEGAL DESCRIPTION: T08NR08WS11 LATITUDE: 38°32'58" LONGITUDE: 122°43'17"

TOTAL HABITAT UNITS	UNITS SUBSTRATE MEASURED	HABITAT TYPE	% TOTAL SILT/CLAY DOMINANT	% TOTAL SAND DOMINANT	% TOTAL GRAVEL DOMINANT	% TOTAL SM COBBLE DOMINANT	% TOTAL LG COBBLE DOMINANT	% TOTAL BOULDER DOMINANT	% TOTAL BEDROCK DOMINANT
1	1	LSR	0	0	0	0	100	0	0
0	0	DRY	0	0	0	0	0	0	0

Horse Hill Creek

APPENDIX A. Summary of Mean Percent Vegetative Cover for Entire Stream

Mean Percent Canopy	Mean Percent Evergreen	Mean Percent Deciduous	Mean Right bank % Cover	Mean Left Bank % Cover
57.50	55.00	45.00	95.00	80.00

APPENDIX B.

Mean Percentage of Dominant Substrate

Dominant Class of Substrate	Number Units Right Bank	Number Units Left Bank	Percent Total Units
Bedrock	0	0	0
Boulder	0	0	0
Cobble/Gravel	0	0	0
Silt/clay	1	1	100

Mean Percentage of Dominant Vegetation

Dominant Class of Vegetation	Number Units Right Bank	Number Units Left Bank	Percent Total Units
Grass	0	0	0
Brush	1	0	50
Deciduous Trees	0	1	50
Evergreen Trees	0	0	0
No Vegetation	0	0	0

APPENDIX C. FISH HABITAT INVENTORY DATA SUMMARY

STREAM NAME: Horse Hill Creek
SAMPLE DATES:
SURVEY LENGTH:
MAIN CHANNEL: 2871 ft. SIDE CHANNEL: 0 ft.
LOCATION OF STREAM MOUTH:
USGS Quad Map: Mark West Sprgs Latitude: 38°32'58"
Legal Description: T08NR08WS11 Longitude: 122°43'17"

SUMMARY OF FISH HABITAT ELEMENTS BY STREAM REACH

STREAM REACH 1 (Units 1-5)

Channel Type: B4	Mean Canopy Density: 58%
Main Channel Length: 2871 ft.	Evergreen Component: 55%
Side Channel Length: 0 ft.	Deciduous Component: 45%
Riffle/Flatwater Mean Width: 0.0 ft.	Pools by Stream Length: 1%
Pool Mean Depth: 0.4 ft.	Pools >=2 ft. Deep: 0%
Base Flow: 0.0 cfs	Pools >=3 ft. Deep: 0%
Water: -°F Air: 89-89°F	Mean Pool Shelter Rtn: 10
Dom. Bank Veg.: Brush	Dom. Shelter: Root masses
Bank Vegetative Cover: 88%	Occurrence of LOD: 0%
Dom. Bank Substrate: Silt/Clay/Sand	Dry Channel: 2837 ft.

Embeddness Value: 1. 0% 2. 0% 3. 100% 4. 0% 5. 0%