

6/2001

HABITAT INVENTORY DATA SHEET

1. Date 06/30/04

2. Stream Name & Segment

Empire Gulch Spring

3. Observers

J.R. Simms

4. Legal T

R

Sect

Subject

5. Field Office

TFO

6. Water/Air Temp

°C/

°C

7. Time

12:00

8. Vis. Depth

ft

N ^o	Habitat	3 Dominant Substrates	Length	Width	xD	Max-D	Area-W	Size-W	D-Os	Os%	OVHC	Sub-V	FLT-V	Emerg-V	UC-Bank*	Bdrck	Bank
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Edge	Stab
																25	26
		Side Spring wet main channel "dry"							from crossing			upstream		492 feet			
1	Marsh	Mud	192.9	3.2	0.1	0.2			POFR	80	NA			576			
2	MCP	Mud	16.7	11.6	0.4	0.5			SAGD	100			110	42			
3	Marsh	Mud	Dry						SAGD	90							
4	MCP	Mud	21.2	6.9	0.3	0.6			SAGD	35			147	15			
5	Marsh	Mud	33.3	9.0	0.2	0.4			SAGD	20				297			
6	RUN	GR MUD	18.3	4.5	0.1	0.2			POFR	80			75				
7	MCP	GR MUD	80.5	3.2	0.3	0.4	9.0	MED	SAGD	65			240	34			
8	MCP	GR MUD	78.2	4.5	0.7	1.1	5.6	MED	willow	85			351	36			
9	Marsh	MUD	36.1	4.0	0.3	1.0			willow	5			140				
10	MCP	MUD GR	232	6.0	0.6	1.2	12	MED	willow	95			136	25			
11	Marsh	MUD	42.7	4.0	0.3	0.4			willow	65			168				
12	MCP	MUD	6.7	6.0	0.9	1.2			SAGD	95			36				
13	Marsh	MUD	69.0	5.0	0.2	0.3			willow	T				345			
14	MCP	GR MUD	117.2	9.7	1.9	4.2	106	MED	SAGD	70	20		1062	116	10		
15	Marsh	GR SA MUD	27.5	3.5	0.4	0.7				T				94			

Vegetation: Bidens, Aster, grass, Cottonwood, willow, Typha, Scirpus, Eleocharis, Rabbit Ears, Common, Veronica

Notes: Habitat #1 varied in width from 0.7' to 6.5'. Habitat #10 wide flat run (slide?)

Bank stability very high 100% vegetated. Gravel is mostly "pea" sized.

All Gravel of "small" category 2-16 mm.

1.19
4.13
1.17

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Subject _____ 5. Field Office _____ 6. Water/Air Temp _____ °C/ _____ °C 7. Time 2:30 8. Vis. Depth _____ ft

No	Habitat	3 Dominant Substrates			Length	Width	X - D	Max-D	Area-	Size-	D-Os	Os%	OVHC	Sub-V	FLT-V	Emerg-V	UC-Bank	Bdrck	Bank
9	10	11			12	13	14	15	Wood	Wood	18	19	20	21	22	23	24	Edge	Stab
									16	17								25	26
16	MCP	GR	SA		15.1	15.1	1.1	1.8	18	SM	new willow	90	18	⊖	225 ^{small}	⊖	⊖	⊖	
17	MCP	GR	SA	MUD	52.7	9.7	7.5	4.0	⊖	⊖	willow	30	⊖	⊖	500 ^{small}	⊖	⊖	⊖	

Vegetation: _____
 Notes: Observed several hundred longhorn caddis in upper pools. Duck weed makes observations tough! Setting would be even tougher!

1. Self explanatory
2. Self explanatory
3. Self explanatory
4. Legal for the segment being monitored
5. Self explanatory
6. Record water temperature and Air temperature
7. Record time temperatures were taken
8. Record maximum depth of visibility in pool habitats - a (+) sign means that the visibility was greater than the maximum depths encountered
9. Record the number of the habitat (start at land mark - e.g. tributary)
10. Record habitat type. There are about 25 habitat types that can be used (see McCain et al 1989 Fish Habitat Relationships, Bulletin USFS, or AFS 19)
11. Primary Substrate
Secondary Substrate
Tertiary Substrate (use only if >10% of the total)
12. Mean length
13. Mean width
14. Mean depth
15. Maximum Depth
16. Area of woody cover
17. Size of woody cover; small (< 1"), Medium (= 1-6"), Large (> 6")
18. Dominant overstory types, list up to 2 plants or bedrock ledge
19. Estimate of overstory coverage directly above the water surface(e.g. 10%, 20%, 60%, 90%)
20. Record area of overhanging cover (that <3' above the waters surface)
21. Record area of submergent vegetation
22. Record area of floating vegetation
23. Record area of emergent vegetation
24. Record distance of undercut bank cover
25. Record distance of bedrock ledge cover
26. Record percent alteration (table 2) and percent stable (table 3)

Take field notes at every opportunity including drawing of stream reach

Substrate Particle Size Table – adapted from Wentworth			
Particle	Abbreviation	Millimeters	Inches
Bed Rock	BR		
Large Boulder	LB	>1,024	>40
Small Boulder	SB	256-1,024	10-40
Rubble	RU	128-256	5-10
Cobble	CO	64-128	2.5-5
Large Gravel	LGR	16-64	0.5-2.5
Small Gravel	SGR	2-16	< 0.5
Sand	SA	0.062-2.0	--
Mud (silt/clay)	MU	<0.062	--

0
-25
-4
-3

**PACIFIC SOUTHWEST REGION
HABITAT TYPING FIELD GUIDE
USDA—USFS**

- | | |
|--|---|
| 0 DRY—Dry Channel | 12 LSP—Lateral Scour Pool
(Bedrock Formed) |
| 1 LGR—Low Gradient Riffle | 13 DPL—Dammed Pool |
| 2 HGR—High Gradient Riffle | 14 GLD—Glides |
| 3 CAS—Cascade | 15 RUN—Run |
| 4 SCP—Secondary Channel Pool | 16 SRN—Step Run |
| 5 BWP—Backwater Pool
(Boulder Formed) | 17 MCP—Mid-Channel Pool |
| 6 BWP—Backwater Pool
(Root Wad Formed) | 18 EGW—Edgewater |
| 7 BWP—Backwater Pool (Log Formed) | 19 CCP—Channel Confluence Pool |
| 8 TRC—Trench/Chute | 20 LSP—Lateral Scour Pool
(Boulder Formed) |
| 9 PLP—Plunge Pool | 21 POW—Pocket Water |
| 10 LSP—Lateral Scour Pool (Log Formed) | 22 CRP—Corner Pool |
| 11 LSP—Lateral Scour Pool
(Root Wad Formed) | 23 STP—Step Pool |
| | 24 BRS—Bedrock Sheet |

25 FLR - Flooded Riffle
26 SCSF - Sand/Gravel
Sheet Flow

RIFFLES

RUNS

POOLS

