



**COUNTY OF SAN MATEO**

**WATERSHED PROTECTION PROGRAM**

**VOLUME 1**

**MAINTENANCE STANDARDS**

Developed by:

County of San Mateo  
Department of Public Works

April 14, 2004

*This page intentionally left blank.*

# TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
<b>1 Introduction</b>	1
<b>2 Definitions</b>	2
<b>3 Program Review</b>	5
<b>4 How to Use This Manual</b>	6
<b>5 Discretion</b>	7
<b>6 Maintenance Zones</b>	8
<b>7 Prevention and Conservation</b>	9
Minimization and Avoidance	
Permits and Reporting	
<b>8 Maintenance Activities</b>	11
<u>Winter Activities</u>	
8.1 Bank Stabilization	12
8.2 Slide Debris	15
8.3 Berms	17
8.4 Large Woody Debris Management/Removal	19
8.5 Road Closures	21
8.6 Snow and Ice Control	23
<u>Routine Maintenance</u>	
Roads	
8.7 Paved Road Surfaces	25
8.8 Unpaved Road Surfaces	28
8.9 Trails	30
8.10 Street Sweeping	32
8.11 Shoulders and Turnouts	34
8.12 Bridges	36

## TABLE OF CONTENTS (continued)

Drainage Systems		
8.13	Cleaning Storm Drainage Facilities	38
8.14	Drainage Facility Installation, Repair & Replacement	40
8.15	Stream Crossings	43
8.16	Ditches and Swales	46
8.17	Watercourses and Streams	49
8.18	Flood Control Facilities	51
Slopes		
8.19	Erosion Control	53
8.20	Slope Stabilization	55
8.21	Vegetation Management	57
8.22	Concrete	66
8.23	Sewers	69
8.24	Water Systems	71
8.25	Recycling and Disposal	73
8.26	Stormwater Pollution Prevention For Maintenance Activities	76
<b>9</b>	<b>Conservation Outcomes</b>	
9.1	Introduction	
9.2	Erosion and Sedimentation Processes and Controls	80
9.3	Water Quality, Velocity and Erosive Forces	81
9.4	Air Quality	83
9.5	Habitat Protection	84
9.6	Soil Conservation	85
9.7	Vegetation Preservation/Enhancement	86
9.8	Recycling	87
9.9	Safety	88
<b>10</b>	<b>Best Management Practices (BMPs)</b>	
10.1	Asphalt Berm	91
10.2	Brush Layering	92
10.3	Brush Packing	95
10.4	Clean Water Bypass	98
10.5	Cofferdam	99
10.6	Coir Fabric/Netting	100
10.7	Concrete Washout	103
10.8	Containment	104
10.9	Curb Inlet Sediment Barrier	105
10.10	Diversion Berm	107

## TABLE OF CONTENTS (continued)

10.11	Energy Dissipater/Flume	108
10.12	Equipment Maintenance and Fueling	112
10.13	Erosion Control Blankets & Mats	113
10.14	Hand Seeding	117
10.15	Hydroseeding	119
10.16	Large Woody Debris	121
10.17	Live Pole Drain	122
10.18	Live Staking	124
10.19	Mulching	127
10.20	Rip Rap	128
10.21	Rock Slope Protection	131
10.22	Rolling Dip	132
10.23	Sand Bags/Rock Socks	135
10.24	Silt Fence	137
10.25	Stormwater Separation Systems	139
10.26	Straw Log, Straw Roll, Coir Log	140
10.27	Streambank Stabilization	143
10.28	Surface Roughening	145
10.29	Timing of Work	148
10.30	Traffic Control	149
10.31	Vegetative Buffer	150
10.32	Vegetable-based Equipment Oil	151
10.33	Wattles/Fascines	152

## Appendices

Appendix A	Coastal Zone Map
Appendix B	Water Resources Maps
Appendix C	Interim DPW Debris Storage Locations
Appendix D	Endangered Species Information
Appendix E	Maintenance Notification Form (Form RM-E01)
Appendix F	Training and Reporting
Appendix G	San Mateo County Sewer Spill Response Plan

*This page intentionally left blank.*