

## Executive Summary

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<b>ES.1</b>	Overview of Storm Water Management Plan	pg. ES-1
<b>ES.2</b>	Program Management	pg. ES-1
<b>ES.3</b>	Program Development and Implementation	pg. ES-1
<b>ES.4</b>	Proposed Storm Water Management Program	pg. ES-2
	<b>4.1</b> Public Education and Outreach	pg. ES-2
	<b>4.2</b> Public Participation and Involvement	pg. ES-2
	<b>4.3</b> Illicit Discharge Detection and Elimination	pg. ES-2
	<b>4.4</b> Construction Site Runoff Control	pg. ES-2
	<b>4.5</b> Post Construction Runoff Control	pg. ES-3
	<b>4.6</b> Pollution Prevention / Good Housekeeping	pg. ES-3
<b>ES.5</b>	Monitoring, Program Evaluation and Reporting	pg. ES-3

## Overview of Storm Water Management Plan Section 1

---

<b>1.1</b>	Overview	pg. 1-1
<b>1.2</b>	Storm Water Regulations that Apply to El Dorado County	pg. 1-1
<b>1.3</b>	Storm Water Quality Issues	pg. 1-2
<b>1.4</b>	Western El Dorado County Facilities and Coverage of SWMP	pg. 1-3
	<b>1.4.1</b> Facilities and Coverage	pg. 1-3
	<b>1.4.2</b> Emergency Response	pg. 1-3
<b>1.5</b>	Relationship Between the Permit and the SWMP	pg. 1-3
<b>1.6</b>	Organization of this SWMP	pg. 1-4

## Program Management Section 2

---

<b>2.1</b>	Overview	pg. 2-1
<b>2.2</b>	Intra-Departmental Coordination	pg. 2-1
	<b>2.2.1</b> Department Responsibilities	pg. 2-1
	<b>2.2.1.1</b> Department of Transportation	pg. 2-2
	<b>2.2.1.2</b> Planning Department	pg. 2-2
	<b>2.2.1.3</b> Department of Environmental Management	pg. 2-2
	<b>2.2.1.4</b> Building Department	pg. 2-2
	<b>2.2.1.5</b> General Services Department	pg. 2-2
	<b>2.2.1.6</b> Agriculture Department	pg. 2-3
	<b>2.2.2</b> Storm Water Advisory Committee (SWAC)	pg. 2-3
	<b>2.2.3</b> Storm Water Coordinator Responsibilities	pg. 2-3
<b>2.3</b>	Coordination with Design and Construction Activities	pg. 2-4
<b>2.4</b>	Coordination with Municipal Operations	pg. 2-7

<b>2.5</b>	Coordination with Other MS4 Permittees	pg. 2-8
<b>2.5.1</b>	General Coordination Meetings	pg. 2-9
<b>2.6</b>	Coordination with RWQCB	pg. 2-9
<b>2.7</b>	Coordination the Public	pg. 2-10
<b>2.7.1</b>	Routine Public Coordination	pg. 2-10
<b>2.8</b>	Legal Authority	pg. 2-10
<b>2.9</b>	Coordination with County Leaseholders	pg. 2-14
<b>2.10</b>	Coordination with Resource Conservation Districts	pg. 2-15
<b>2.10.1</b>	Watershed Planning	pg. 2-15

---

## Program Development and Implementation

## Section 3

---

<b>3.1</b>	Overview	pg. 3-1
<b>3.2</b>	Development and Adoption of Practices	pg. 3-1
<b>3.2.1</b>	Overview	pg. 3-1
<b>3.2.2</b>	Step 1 – Research and/or Watershed Planning	pg. 3-2
<b>3.2.3</b>	Step 2 – Evaluation of Candidate Practices (Including Re-Evaluation of Current Practices)	pg. 3-2
<b>3.2.4</b>	Step 3 – Approval of Practices	pg. 3-3
<b>3.3</b>	Public Review / Adoption Process	pg. 3-3
<b>3.4</b>	Program Implementation	pg. 3-3
<b>3.4.1</b>	Public Education and Outreach	pg. 3-4
<b>3.4.2</b>	Public Participation and Involvement	pg. 3-4
<b>3.4.3</b>	Illicit Discharge Detection and Elimination	pg. 3-4
<b>3.4.3.1</b>	Construction Sites	pg. 3-4
<b>3.4.3.1.1</b>	County Improvement Projects	pg. 3-4
<b>3.4.3.1.2</b>	Development / Re-development Projects	pg. 3-5
<b>3.4.3.2</b>	Municipal Operations	pg. 3-5
<b>3.4.3.3</b>	Non-County Property	pg. 3-5
<b>3.4.4</b>	Construction Site Runoff Control	pg. 3-6
<b>3.4.4.1</b>	County Improvement Projects	pg. 3-6
<b>3.4.4.2</b>	Development / Re-development Projects	pg. 3-7
<b>3.4.5</b>	Post-Construction Runoff Control	pg. 3-7
<b>3.4.6</b>	Pollution Prevention / Good Housekeeping	pg. 3-8
<b>3.4.6.1</b>	County Property	pg. 3-8
<b>3.4.6.2</b>	Non-County Property	pg. 3-8
<b>3.5</b>	BMPs	pg. 3-8

---

## Proposed Storm Water Management Program Section 4

---

<b>4.0</b>	Overview	pg. 4-1
<b>4.1</b>	Public Education and Outreach	pg. 4-1
<b>4.2</b>	Public Participation and Involvement	pg. 4-1
<b>4.3</b>	Illicit Discharge Detection and Elimination	pg. 4-1
<b>4.4</b>	Construction Runoff Control	pg. 4-2
<b>4.5</b>	Post Construction Runoff Control	pg. 4-2
<b>4.6</b>	Pollution Prevention / Good Housekeeping	pg. 4-2
<b>4.1</b>	<b>Public Education and Outreach Program</b>	
<b>4.1.1</b>	Overview	pg. 4.1-1
<b>4.1.2</b>	Outreach to Private Project Planning and Design Teams and Construction Contractors	pg. 4.1-1
<b>4.1.2.1</b>	Informational Exchange Sessions With Contractors	pg. 4.1-2
<b>4.1.3</b>	Public Education and Outreach Program	pg. 4.1-2
<b>4.1.3.1</b>	Resource Conservation District – Watershed Planning	pg. 4.1-3
<b>4.1.3.2</b>	Informational Sheets	pg. 4.1-4
<b>4.1.3.3</b>	Web Site	pg. 4.1-4
<b>4.1.3.4</b>	Storm Drain Stenciling	pg. 4.1-4
<b>4.1.3.5</b>	Technical Workshops	pg. 4.1-5
<b>4.1.4</b>	SWMP Public Review Process	pg. 4.1-5
<b>4.1.5</b>	BMP Program Summary	pg. 4.1-5
<b>4.2</b>	<b>Public Participation and Involvement</b>	
<b>4.2.1</b>	Overview	pg. 4.2-1
<b>4.2.2</b>	SWMP Public Review Process	pg. 4.2-1
<b>4.2.2.1</b>	SWMP Approval	pg. 4.2-1
<b>4.2.2.2</b>	SWMP Update	pg. 4.2-1
<b>4.2.3</b>	Public Participation and Involvement	pg. 4.2-1
<b>4.2.3.1</b>	Resource Conservation District – Watershed Planning	pg. 4.2-2
<b>4.2.3.2</b>	Informational Sheets	pg. 4.2-3
<b>4.2.3.3</b>	Web Site	pg. 4.2-3
<b>4.2.3.4</b>	Storm Drain Stenciling	pg. 4.2-3
<b>4.2.3.5</b>	Technical Workshops	pg. 4.2-4
<b>4.2.3.6</b>	Coordination with Volunteer Organizations	pg. 4.2-4
<b>4.2.4</b>	BMP Program Summary	pg. 4.2-5
<b>4.3</b>	<b>Illicit Discharge Detection and Elimination</b>	
<b>4.3.1</b>	Overview	pg. 4.3-1
<b>4.3.2</b>	Storm Drain Outfall Identification	pg. 4.3-1
<b>4.3.3</b>	County Ordinances	pg. 4.3-1
<b>4.3.3.1</b>	Prohibition of Non-Storm Water Discharges	pg. 4.3-1

4.3.3.1.1	Grading, Erosion & Sediment Control Ordinance	pg. 4.3-2
4.3.3.1.2	Subdivision Design and Improvement Ordinance	pg. 4.3-2
4.3.3.1.3	Solid Waste Management Ordinance	pg. 4.3-2
4.3.3.1.4	Vehicle Abandonment Ordinance	pg. 4.3-2
4.3.3.1.5	Liquid Waste Management Ordinance	pg. 4.3-3
4.3.3.1.6	Hazardous Material Management Ordinance	pg. 4.3-3
4.3.3.1.7	Dust Abatement Ordinance	pg. 4.3-3
4.3.3.1.8	Bear Resistant Garbage Can Ordinance	pg. 4.3-3
4.3.3.1.9	Construction Demolition & Debris Recycling Ordinance	pg. 4.3-3
4.3.4	Detection and Response Plan	pg. 4.3-3
4.3.4.1	Project Construction	pg. 4.3-4
4.3.4.1.1	Permit Exempt and Conditionally Exempt Non-Storm Water Discharges	pg. 4.3-4
4.3.4.1.2	Non-Permitted Exempt and Conditionally Exempt Non-Storm Water Discharges	pg. 4.3-5
4.3.4.2	Municipal Operations	pg. 4.3-6
4.3.4.2.1	Permitted Exempt and Conditionally Exempt Non-Storm Water Discharges	pg. 4.3-6
4.3.4.2.2	Non-Permitted Non-Storm Water Discharges	pg. 4.3-7
4.3.4.2.3	Responsible Parties	pg. 4.3-8
4.3.4.3	Non-County Properties	pg. 4.3-8
4.3.4.3.1	Food Facilities	pg. 4.3-9
4.3.4.3.2	Liquid Waste	pg. 4.3-9
4.3.4.3.3	Recreational Health	pg. 4.3-10
4.3.4.3.4	Small Water Systems	pg. 4.3-10
4.3.4.3.5	Public Complaints	pg. 4.3-10
4.3.4.3.6	Hazardous Waste	pg. 4.3-11
4.3.4.3.7	Household Hazardous Waste	pg. 4.3-12
4.3.4.3.8	Spills	pg. 4.3-14
4.3.4.3.9	Marina Outreach	pg. 4.3-15
4.3.4.3.10	Medical Waste	pg. 4.3-15
4.3.4.3.11	Used Oil	pg. 4.3-16
4.3.4.3.12	Universal Wastes	pg. 4.3-16
4.3.4.3.13	Collection / Disposal	pg. 4.3-16
4.3.4.3.14	Recycling	pg. 4.3-16
4.3.4.3.15	Enforcement	pg. 4.3-17

4.3.4.3.16	Litter Abatement	pg. 4.3-17
4.3.4.3.17	Garbage Cans/Bears	pg. 4.3-17
4.3.4.3.18	Construction Demolition & Debris Recycling	pg. 4.3-17
4.3.4.3.19	Material Recovery Facility	pg. 4.3-18
4.3.4.4	Leaseholder Review and Inspections	pg. 4.3-18
4.3.4.5	Facility Pollution Prevention Plans	pg. 4.3-18
4.3.5	Public Communication	pg. 4.3-19
4.3.5.1	Public Outreach	pg. 4.3-19
4.3.5.2	Informational Exchange with Contractors	pg. 4.3-20
4.3.5.3	Resource Conservation Districts	pg. 4.3-21
4.3.6	Program Evaluation	pg. 4.3-21
4.3.6.1	Self Audit	pg. 4.3-21
4.3.6.2	Departmental Review	pg. 4.3-22
4.3.6.3	Storm Water Advisory Committee	pg. 4.3-22
4.3.7	BMP Program Summary	pg. 4.3-23
<b>4.4</b>	<b>Construction Site Runoff Control</b>	
4.4.1	Overview	pg. 4.4-1
4.4.2	General Program	pg. 4.4-2
4.4.3	County Development Standards	pg. 4.4-3
4.4.3.1	Grading, Erosion and Sediment Control Ordinance	pg. 4.4-3
4.4.3.2	Design and Improvement Standards Manual	pg. 4.4-5
4.4.3.3	Drainage Manual	pg. 4.4-5
4.4.4	General Construction Site Practices	pg. 4.4-7
4.4.5	Minimum Construction Site Practices	pg. 4.4-12
4.4.5.1	Scheduling	pg. 4.4-12
4.4.5.2	Preservation of Existing Vegetation	pg. 4.4-13
4.4.5.3	Storm Water Run-On and Concentrated Flows	pg. 4.4-13
4.4.5.4	Stockpile Management	pg. 4.4-13
4.4.5.5	Sediment Tracking Control	pg. 4.4-14
4.4.5.6	Wind Erosion Control	pg. 4.4-14
4.4.5.7	Non-Storm Water Management	pg. 4.4-14
4.4.5.8	Disturbed Soil Area Management	pg. 4.4-15
4.4.5.8.1	Definitions	pg. 4.4-16
4.4.5.8.2	DSA Protection by Soil Stabilization, Sediment Barriers and Basins/Traps	pg. 4.4-18
4.4.6	Inspection Procedures	pg. 4.4-22
4.4.6.1	Construction Site Inspection Procedures	pg. 4.4-22
4.4.6.2	Responsible Parties	pg. 4.4-25
4.4.6.2.2	County Improvement Projects	pg. 4.4-25
4.4.6.2.3	Development/Re-development	

	Projects	pg. 4.4-25
4.4.6.3	Permitted Exempt and Conditionally Exempt Non-Storm Water Discharges	pg. 4.4-26
4.4.7	County Ordinances	pg. 4.4-27
4.4.7.1	Dust Abatement Ordinance	pg. 4.4-28
4.4.7.2	Grading, Erosion and Sediment Control Ordinance	pg. 4.4-28
4.4.7.3	Subdivision Design and Improvement Ordinance	pg. 4.4-28
4.4.8	Public Communications	pg. 4.4-28
4.4.8.1	Public Review	pg. 4.4-28
4.4.8.2	Web Site	pg. 4.4-29
4.4.8.3	Information Exchange with Contractors	pg. 4.4-29
4.4.9	BMP Program Summary	pg. 4.4-30
<b>4.5</b>	<b>Post Construction Runoff Control</b>	
4.5.1	Overview	pg. 4.5-1
4.5.2	Current Program	pg. 4.5-1
4.5.2.1	Grading, Erosion and Sediment Control Ordinance	pg. 4.5-2
4.5.2.2	Design and Improvement Standards Manual	pg. 4.5-4
4.5.2.3	Drainage Manual	pg. 4.5-4
4.5.3	Standard Storm Water Mitigation Plan	pg. 4.5-6
4.5.4	BMP Program Summary	pg. 4.2-11
<b>4.6</b>	<b>Pollution Prevention / Good Housekeeping</b>	
4.6.1	Overview	pg. 4.6-1
4.6.2	Maintenance Practices	pg. 4.6-2
4.6.2.1	Maintenance Work Areas and BMP Identification	pg. 4.6-2
4.6.2.2	Pavement and Bridge Maintenance Work Activities	pg. 4.6-4
4.6.2.3	Slopes/Drainage/Vegetation Work Activities	pg. 4.6-4
4.6.2.4	Storm Water Drainage Facilities Inspection and Cleaning Program	pg. 4.6-4
4.6.2.5	Illicit Connection / Illegal Discharge (IC/ID)	pg. 4.6-4
4.6.2.6	Litter and Debris Cleanup	pg. 4.6-5
4.6.2.7	Landscape Maintenance	pg. 4.6-5
4.6.2.8	Maintenance of Treatment Devices	pg. 4.6-6
4.6.2.9	Snow and Ice Control	pg. 4.6-6
4.6.2.10	Management and Support	pg. 4.6-6
4.6.2.11	Scheduling and Planning	pg. 4.6-7
4.6.2.12	Sediment Control	pg. 4.6-8
4.6.2.13	Waste Management	pg. 4.6-8
4.6.2.14	Spill Prevention and Control	pg. 4.6-9
4.6.2.15	Solid Waste Management	pg. 4.6-11
4.6.2.16	Hazardous Waste Management	pg. 4.6-12
4.6.2.17	Contaminated Soil Management	pg. 4.6-13

4.6.2.18	Sanitary/Septic Waste Management	pg. 4.6-13
4.6.2.19	Liquid Waste Management	pg. 4.6-14
4.6.2.20	Concrete Waste Management	pg. 4.6-15
4.6.3	Materials Handling	pg. 4.6-16
4.6.3.1	Materials Delivery and Storage	pg. 4.6-17
4.6.3.2	Material Use	pg. 4.6-18
4.6.4	Vehicle and Equipment Operations	pg. 4.6-19
4.6.4.1	Vehicle and Equipment Fueling	pg. 4.6-19
4.6.4.2	Vehicle and Equipment Maintenance	pg. 4.6-21
4.6.5	Paving Operations Procedures	pg. 4.6-23
4.6.6	Water Conservation Practices	pg. 4.6-23
4.6.7	Water / Irrigation	pg. 4.6-23
4.6.8	Safer Alternative Products	pg. 4.6-24
4.6.9	Drainage Facilities	pg. 4.6-25
4.6.10	Illicit Connection Detection, Reporting and Removal	pg. 4.6-25
4.6.11	Illegal Discharge Control	pg. 4.6-26
4.6.12	Litter and Debris Removal	pg. 4.6-27
4.6.12.1	Litter and Debris	pg. 4.6-27
4.6.12.2	Anti-Liter Signs	pg. 4.6-27
4.6.13	Chemical Vegetation Control	pg. 4.6-28
4.6.14	Vegetated Slope Inspection	pg. 4.6-29
4.6.15	Snow Removal and De-Icing Agents	pg. 4.6-29
4.6.16	Storm Water Dewatering Operations	pg. 4.6-31
4.6.17	Sweeping	pg. 4.6-31
4.6.18	Maintenance Facility Housekeeping Practices	pg. 4.6-32
4.6.19	Non-Storm Water Discharges	pg. 4.6-34
4.6.19.1	County Maintenance Non-Storm Water Discharges	pg. 4.6-34
4.6.19.2	Spills	pg. 4.6-35
4.6.19.3	Exempt and Conditionally Exempt Non-Storm Water Discharges	pg. 4.6-36
4.6.20	Maintenance of Treatment Devices	pg. 4.6-38
4.6.21	Facility Pollution Prevention Plans	pg. 4.6-39
4.6.22	Employee Training Program	pg. 4.6-40
4.6.22.1	Storm Water Training	pg. 4.6-41
4.6.22.2	Training Frequency	pg. 4.6-42
4.6.22.3	On-The-Job Training	pg. 4.6-43
4.6.22.4	Educational Reminders	pg. 4.6-43
4.6.23	BMP Program Summary	pg. 4.6-44

## Monitoring, Program Evaluation and Reporting Section 5

<b>5.1</b>	<b>Overview</b>	pg. 5-1
<b>5.2</b>	<b>Monitoring and Research</b>	pg. 5.1
<b>5.3</b>	<b>Program Evaluation, Oversight, and Assistance</b>	pg. 5-2
<b>5.4</b>	<b>Performance Monitoring</b>	pg. 5-3
<b>5.4.1</b>	General	pg. 5-3
<b>5.4.2</b>	Project Planning and Design	pg. 5-4
<b>5.4.3</b>	Project Construction	pg. 5-5
<b>5.5</b>	<b>Self-Audit</b>	pg. 5-7
<b>5.6</b>	<b>Annual Report</b>	pg. 5-7
<b>5.6.1</b>	Revised SWMP	pg. 5-8
<b>5.6.2</b>	Analysis of the Adequacy of Legal Authority	pg. 5-8
<b>5.6.3</b>	Report on the Storm Sewer System Mapping	pg. 5-8
<b>5.7</b>	<b>Non-Compliance Reporting</b>	pg. 5-9

## LIST OF APPENDICES

<b>A</b>	Western El Dorado County Facilities	pg. A-1
<b>B</b>	BMP Guidelines From Others	pg. B-1
<b>C</b>	Abbreviations, Acronyms and Definitions of Terms	pg. C-1

## Western El Dorado County Facilities Appendix A

<b>A.1</b>	Western El Dorado County Facilities	pg. A-1
<b>A.1.1</b>	General Facilities	pg. A-1
<b>A.1.2</b>	County Maintained Roads	pg. A-1
<b>A.1.3</b>	Other Permitted Properties	pg. A-1
<b>A.1.4</b>	Leased Properties	pg. A-1

## BMP Guidelines From Others Appendix B

<b>B.1</b>	BMP Guidelines From Others	pg. B-1
<b>B.1.1</b>	Overview	pg. B-1



## Abbreviations, Acronyms and Definition of Terms

## Appendix C

<b>C.1</b>	Abbreviations	pg. C-1
<b>C.2</b>	Acronyms	pg. C-1
<b>C.3</b>	Definition of Terms	pg. C-3

1    **ES.1 OVERVIEW OF STORM WATER MANAGEMENT PLAN**

2            This Storm Water Management Plan (SWMP) describes a program to reduce the  
3            discharge of pollutants associated with the storm water drainage systems that serve  
4            Western El Dorado County. It identifies how the County will comply with the provisions  
5            of the National Pollutant Discharge Elimination System (NPDES) permit proposed by the  
6            California State Water Resources Control Board (SWRCB).

7            This SWMP addresses the primary program elements of all County activities, including:

- 8                    • How the County manages the planning, design and construction of projects  
9                    carried out directly by the County and under permits issued by the County;  
10                    and
- 11                    • How the County maintains facilities owned and operated by the County and  
12                    activities carried out by others on properties owned by the County.

13            This SWMP also addresses its responsibilities for implementing the applicable storm  
14            water management practices as well as training, public education & outreach, monitoring,  
15            program evaluation, and reporting activities.

16    **ES.2 PROGRAM MANAGEMENT**

17            Section 2, Program Management, addresses the organization and responsibilities for  
18            overall Permit compliance and storm water management program implementation within  
19            the County.

20            This section also identifies how the County will coordinate storm water management  
21            with others, including municipalities, the Regional Water Quality Control Board  
22            (RWQCB), and the public.

23            Section 2 also documents that the County has adequate legal authority as required by the  
24            federal storm water regulations to manage storm water discharges occurring from  
25            County-owned and maintained facilities and roadways. Additionally, the County has  
26            adequate legal authority to regulate discharges from private properties and from  
27            development and re-development activities being carried out under permits issued by the  
28            County.

29    **ES.3 PROGRAM DEVELOPMENT AND IMPLEMENTATION**

30            The County is required to identify and implement storm water management practices to  
31            minimize discharges of pollutants. This section identifies the developmental strategies  
32            and the process of implementation of practices as well as the public review process for  
33            the storm water program.

34    **ES.4 PROPOSED STORM WATER MANAGEMENT PROGRAM**

35            Section 4 more specifically describes each element of the storm water management  
36            program and the practices used to meet each of the six (6) minimum required control  
37            measures of the Permit, which are as follows:

- 38            • Section 4.1    Public Education and Outreach
- 39            • Section 4.2    Public Involvement and Participation
- 40            • Section 4.3    Illicit Discharge Detection and Elimination
- 41            • Section 4.4    Construction Site Runoff Control
- 42            • Section 4.5    Post Construction Runoff Control
- 43            • Section 4.6    Pollution Prevention / Good Housekeeping

44

45            **4.1    Public Education and Outreach**

46            The County will implement a public education program that informs the  
47            community of the impacts of storm water and contributions they may make to  
48            reduce pollutants in storm water runoff. The County will target public  
49            employees, public schools, public libraries, developers, contractors, homeowners,  
50            business owners, boaters, and the remaining public as part of this Public  
51            Education and Outreach Program.

52            **4.2    Public Participation and Involvement**

53            The County will implement a public participation and involvement program that  
54            notifies the community of public hearings to consider the impacts of storm water  
55            and contributions they may make to reduce pollutants in storm water runoff.

56            **4.3    Illicit Discharge Detection and Elimination**

57            This section describes specifically how the County will comply with Permit  
58            requirements by incorporating illicit discharge detection and elimination, into the  
59            overall storm water management program. The County will achieve compliance  
60            by identifying storm drain outfalls, through enforcing County ordinances,  
61            implementing a detection and response plan and through public communications,  
62            and finally, through program evaluation and analysis.

63            **4.4    Construction Site Runoff Control**

64            The County will comply with Permit requirements by incorporating construction  
65            site runoff control requirements that apply to both construction proposed to be  
66            undertaken directly by the County and construction proposed to be permitted by  
67            the County and undertaken by others. This will be achieved through development

68                    and implementation of the County’s Development Standards (Grading, Erosion  
69                    and Sediment Control Ordinance, the Design and Improvement Standards Manual  
70                    and the Drainage Manual), general construction site practices, minimum  
71                    construction site practices, inspections and enforcement, County ordinances, an  
72                    employee training program, and through public communications.

73                    4.5      **Post Construction Runoff Control**

74                    The County will implement a long-term post-construction program that protect  
75                    water quality and control runoff flow, to be incorporated into development and  
76                    significant redevelopment projects. The County will comply with permit  
77                    requirements by incorporating existing County Development Standards to  
78                    minimize the discharge of pollutants of development and redevelopment projects.  
79                    Revisions to the County Development Standards shall be developed and  
80                    implemented as well the development of storm water treatment practices.

81                    4.6      **Pollution Prevention / Good Housekeeping**

82                    While carrying out maintenance operations, the County’s maintenance personnel  
83                    will be instructed to be alert to, and report, all potential illicit connections or  
84                    illegal discharges. These will be reported to the County’s Storm Water  
85                    Coordinator, who will appropriately pursue, in cooperation with the involved  
86                    County Departments, removal / cleanup operations. The County will provide  
87                    education and training to ensure that all of its employees have the knowledge and  
88                    skills necessary to perform their functions effectively and efficiently. The County  
89                    provides employee-training programs with curricula and materials tailored to  
90                    specific topics and personnel levels.

91      **ES.5    MONITORING, PROGRAM EVALUATION AND REPORTING**

92                    The County’s Monitoring, Program Evaluation and Reporting Program (Section5) is  
93                    intended to gather information on problem pollutants, the performance of storm water  
94                    controls in addressing these pollutants, and periodically report program progress and  
95                    updates to the Regional Board.

96                    The County’s overall strategy for protecting receiving waters involves the use of  
97                    effective storm water management practices and a process of continuous program  
98                    improvement and refinement. As part of its storm water management program, the  
99                    County regularly reviews its activities, inspects its facilities, oversees and guides its  
100                    personnel and conducts focused studies to obtain information that supports responsible  
101                    management and allocation of the resources available to implement storm water quality  
102                    efforts.

103                    The primary mechanism for accomplishing program evaluation and ensuring that front  
104                    line personnel have adequate assistance to be successful is the program oversight by the  
105                    County’s managers. Such oversight includes observing and evaluating project planning,

106 design and construction personnel as they implement the requirements of the SWMP on  
107 new projects and maintenance personnel as they conduct maintenance activities.

108 In addition to day-to-day supervision by managers, the County's Storm Water  
109 Coordinator will conduct focused follow-up checks, or "self-audits", on a regular basis.  
110 The goal of the self-audits is to evaluate the efficiency and effectiveness of the activities  
111 outlined in the SWMP; to provide a sound basis for re-directing or refining such  
112 activities; to recommend ways to revise or refine the SWMP, as needed; and to assess  
113 compliance with Permit and program requirements.

114 The County's reporting requirements include preparing the Annual Report and reporting  
115 instances of noncompliance with the SWMP. Along with addressing the specific Permit  
116 reporting requirements, these reports will summarize oversight and self-audit results and  
117 the results from any monitoring or research carried out by the County

118 Instances of noncompliance involve non-permitted non-storm water discharges or  
119 discharges that may significantly endanger health or the environment. Such discharges  
120 from operations of existing facilities or construction sites are required to be reported to  
121 the RWQCB.

**1 1.1 OVERVIEW**

2 This Storm Water Management Plan (SWMP) was developed by El Dorado County for  
3 the purpose of describing the minimum procedures and practices the County uses to  
4 reduce the discharge of pollutants in effluent from storm drainage systems owned or  
5 operated by the County. This Small Municipal Separate Storm Sewer System (MS4)  
6 General Permit approved April 30, 2003, by the California State Water Resources  
7 Control Board (SWRCB) is herein referred to as the Permit. The County will evaluate  
8 the need for revision of the SWMP at least annually.

9 This SWMP addresses storm water pollution control related to project planning, design,  
10 construction and maintenance activities throughout the unincorporated area of Western El  
11 Dorado County (that portion of El Dorado County within the jurisdiction of the Central  
12 Valley Regional Water Quality Control Board, excluding the Tahoe Basin). In addition,  
13 this SWMP addresses assignment of responsibilities within the County for implementing  
14 storm water management procedures and practices as well as training, public education  
15 and outreach, monitoring and research, program evaluation, and reporting activities.

16 Introductory information contained in this section is outlined as follows:

- 17 • Section 1.2 Storm Water Regulations that Apply to the County;
- 18 • Section 1.3 Storm Water Quality Issues;
- 19 • Section 1.4 Western El Dorado County Facilities and Coverage of SWMP;
- 20 • Section 1.5 Relationship between the Permit and this SWMP; and
- 21 • Section 1.6 Contents and Organization of this SWMP.

22 This document is intended to govern the County's storm water management activities  
23 within Western El Dorado County, including the Headington Road Maintenance Facility,  
24 which here-to-for was covered under the California General Industrial Storm Water  
25 Permit. However, the County's Airports and Landfill will continue to be covered under  
26 the General Industrial Permit and an individually issued site permit, respectively.

**27 1.2 STORM WATER REGULATIONS THAT APPLY TO EL DORADO COUNTY**

28 Federal environmental regulations based on the Clean Water Act (CWA) have evolved to  
29 require the control of pollutants from MS4s, construction sites and industrial activities.  
30 Discharges from such sources were brought under the NPDES permit process by the  
31 1987 CWA amendments and the subsequent 1990 and 1999 promulgation of storm water  
32 regulations by the U.S. Environmental Protection Agency (EPA). In California, the EPA

33 has delegated administration of the federal NPDES program to the SWRCB and the nine  
34 Regional Water Quality Control Boards (RWQCBs). The SWRCB has issued statewide  
35 general NPDES storm water permits for designated types of construction and industrial  
36 activities, and has adopted a statewide permit applicable to all small municipalities,  
37 including Western El Dorado County.

38 The 1999 Federal Regulations require that NPDES storm water permits be issued for  
39 discharges from small MS4s, or municipal separate storm sewer systems. Such systems  
40 mean “a conveyance or system of conveyances (including roads with drainage systems,  
41 municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm  
42 drains): (i) owned or operated by a state, city, town, borough, county....”. The County,  
43 as the owner and operator of an MS4, is subject to an NPDES MS4 permit.

44 Furthermore, Federal Regulations require that all parties discharging storm water  
45 associated with construction activity, including clearing, grading and excavation  
46 activities, obtain an NPDES Permit. Currently, small construction projects, that is, those  
47 that disturb less than 1 acre of total land area and that are not part of a larger common  
48 plan of development, are exempted from NPDES Permit requirements.

49 The Permit and this SWMP provide a framework for consistent, effective and efficient  
50 implementation of storm water management practices in all of the unincorporated area of  
51 Western El Dorado County.

52

### 53 1.3 STORM WATER QUALITY ISSUES

54 Studies throughout the State have shown that pollutant concentrations in storm water  
55 runoff from the facilities similar to those owned by El Dorado County will frequently  
56 exceed the applicable water quality standards [numeric water quality objective (WQO)  
57 values]. These water quality standards are prescribed in various plans approved by the  
58 SWRCB and EPA, including the Ocean Plan, the Basin Plan, and the California Toxics  
59 Rule (CTR).

60 As more data becomes available, both within El Dorado County and elsewhere, the  
61 County will be in a better position to assess the actual or threatened impacts that runoff  
62 from storm drainage systems owned or operated by the County may have on local  
63 receiving water quality. This data will be used for a variety of water quality issues,  
64 including determining if County’s runoff causes or contributes to exceedances of water  
65 quality standards, development of total maximum daily loadings (TMDLs), and  
66 watershed planning. This information will also be used to aid the County in refining its  
67 program.

### 68 1.4 WESTERN EL DORADO COUNTY FACILITIES AND COVERAGE OF SWMP

69

#### 70 1.4.1 Facilities and Coverage

71 This SWMP describes the procedures and practices used to reduce the discharge

72 of pollutants from storm water drainage systems owned or operated by the  
73 County.

74 The specific County owned or operated facilities addressed by the SWMP are  
75 identified in Appendix A. In various areas of the unincorporated areas of Western  
76 El Dorado County, waters of the United States or waters of the State pass through,  
77 over or under the County's property and facilities. Those waters may contain  
78 pollutants at the point at which they enter the County's property and facilities. In  
79 those circumstances; and except as otherwise noted in Section 2.8, Legal  
80 Authority; and Section 4.4, Design / Construction Runoff Control; and Section  
81 4.6, Pollution Prevention and Good Housekeeping; the County will be responsible  
82 only for pollutants contributed to such waters which are discharged from its point  
83 sources and not for the pollutants present in those waters when they entered the  
84 County's properties.

#### 85 1.4.2 Emergency Response

86 Throughout the year conditions may arise that require the County to conduct  
87 emergency activities to protect public health, safety and property. Conditions  
88 during the emergency activities may result in the County not implementing  
89 elements of the SWMP. Such incidents are not considered noncompliance in  
90 accordance with the Federal Code of Regulations 40 CFR Section 122.41 (n)(1)  
91 through (4) which addresses upsets, such as emergency response for public safety.  
92 Upset means an exceptional incident in which there is unintentional and  
93 temporary noncompliance with technology based permit effluent limitations  
94 because of factors beyond the reasonable control of the permittee. An upset does  
95 not include noncompliance to the extent caused by operational error, improperly  
96 designed treatment facilities, inadequate treatment facilities, lack of preventive  
97 maintenance, or careless or improper operation. An upset constitutes an  
98 affirmative defense to an action brought for noncompliance with such technology  
99 based permit effluent limitations provided certain requirements are met [see 40  
100 CFR Section 122.41(n)(3)].

### 101 1.5 RELATIONSHIP BETWEEN THE PERMIT AND THE SWMP

102 An important purpose of the SWMP and the County's Storm Water Management  
103 Program is to ensure that those who direct and perform activities that may affect the  
104 quality of storm water system discharges are aware of their respective roles and  
105 responsibilities.

106 The goal of the County is to incorporate the practices identified in this and subsequent  
107 SWMPs into the day-to-day operations and management carried out by County  
108 personnel, and parties under permit to the County.



109 Many of the practices are described in general terms, thus allowing the County flexibility  
110 to make necessary modifications to expand or improve upon the detailed procedures  
111 within the framework of the SWMP. The SWMP also encourages the County to use  
112 innovative approaches for implementing practices presented in the SWMP and  
113 implementing new practices not yet addressed in this SWMP.

## 114 1.6 ORGANIZATION OF THIS SWMP

115 The remainder of this document, including the Appendices, describes the essential  
116 program elements of the County's storm water program.

- 117 • Section 2: PROGRAM MANAGEMENT describes the organization and  
118 responsibilities for overall Permit compliance and program implementation within  
119 the County. Section 2 also describes coordination with other permittees and  
120 agencies and the legal authority of the County.
- 121 • Section 3: PROGRAM DEVELOPMENT AND IMPLEMENTATION  
122 describes the process of identifying, evaluating and selecting, and implementing  
123 the program practices.
- 124 • Section 4: PROPOSED STORM WATER MANAGEMENT PROGRAM  
125 describes the storm water pollution management practices with each of the six (6)  
126 mandated program areas, which are as follows:
  - 127 • Section 4.1 Public Education and Outreach
  - 128 • Section 4.2 Public Participation and Involvement
  - 129 • Section 4.3 Illicit Discharge Detection and Elimination
  - 130 • Section 4.4 Construction Site Runoff Control
  - 131 • Section 4.5 Post Construction Runoff Control
  - 132 • Section 4.6 Pollution Prevention / Good Housekeeping
- 133 • Section 5: MONITORING, PROGRAM EVALUATION AND REPORTING  
134 describes the Monitoring, Program Evaluation and Reporting Program used to  
135 better define the discharges from specific types of the County's facilities and the  
136 applied research activities used to develop the information and insight needed to  
137 refine the County's storm water management program over time. This Section  
138 also describes the methods the County uses to evaluate the overall effectiveness  
139 of its storm water management program and provide reports, including  
140 noncompliance reporting, to the RWQCB.
- 141 • APPENDICES: A-C

# SECTION 1

## *Overview of Storm Water Management Plan*

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- 142                   • Appendix A provides a description of each of the County's properties,  
143                   including lease properties, for which coverage is sought with this SWMP,  
144                   including a list of the County's maintained roads.
- 145                   • Appendix B describes supplemental guidelines referenced in the SWMP.
- 146                   • Appendix C provides abbreviations, acronyms and definitions of terms  
147                   used in the SWMP.

**1 2.1 OVERVIEW**

2 The goal of the SWMP is to protect the water quality in the streams, rivers and lakes in  
3 Western El Dorado County. The regulatory requirements for this SWMP are set forth in  
4 the State of California NPDES General Permits for Storm Water Discharges Associated  
5 with Construction Activity and Small Municipal Separate Storm Sewer Systems (MS4s).  
6 The County's goal is to ensure that pollutants in discharges from storm drain systems  
7 owned or operated by the County are reduced to the maximum extent practicable.

8 This section describes the organizational structure of the County with regard to storm  
9 water program management and the program basics. This section is organized as follows:

- 10 • Section 2.2 Intra-Departmental Coordination
- 11 • Section 2.3 Coordination with Design and Construction Activities
- 12 • Section 2.4 Coordination with Municipal Operations
- 13 • Section 2.5 Coordination with other MS4 Permittees
- 14 • Section 2.6 Coordination with the RWQCB
- 15 • Section 2.7 Coordination with the Public
- 16 • Section 2.8 Legal Authority
- 17 • Section 2.9 Coordination with County Leaseholders
- 18 • Section 2.10 Coordination with Resource Conservation Districts

**19 2.2 INTRA-DEPARTMENTAL COORDINATION**

20 The Board of Supervisors is the policy and budget setting authority for the County. Under  
21 the Board, the Departments of Transportation, General Services, Agriculture, Planning,  
22 Building and Environmental Management each play a key role in implementing the  
23 County's storm water management program. The Department Heads for each of these  
24 Departments report to the Board of Supervisors. The County's organizational chart is  
25 available at <http://co.el-dorado.ca.us/org.html>.

**26 2.2.1 Department Responsibilities**

27 Each of the key Departments has the primary responsibility for day-to-day  
28 implementation of the SWMP. Line responsibility for implementation lies with  
29 each Department.

30 The County's lead Department for managing the storm water program is the  
31 Department of Transportation. The County's Storm Water Coordinator is  
32 appointed by the Department Head from within this Department.

33 Individual Department and personnel responsibilities for implementation and  
34 enforcement are additionally addressed within Sections 4.4 and 4.6, respectively  
35 for the County's design/construction and maintenance programs.

#### 36 2.2.1.1. Department of Transportation

37 The Department of Transportation (DOT) is responsible for implementing  
38 and/or overseeing all improvements and maintenance activities  
39 undertaken on County roads. Further, DOT is responsible for  
40 administering the County's Grading, Erosion and Sediment Control  
41 Ordinance (County Code Chapter 15.14) regulating grading on private  
42 property.

#### 43 2.2.1.2. Planning Department

44 The Planning Department is responsible for coordinating the review and  
45 approval processes for all proposed land development / redevelopment.

#### 46 2.2.1.3. Department of Environmental Management

47 Environmental Management is responsible for administering the County's  
48 Solid Waste Management Ordinance (County Code Chapter 8.42) and the  
49 Asbestos and Dust Protection Ordinance (County Code Chapter 8.44).  
50 Additionally, the Department is responsible for conducting restaurant  
51 inspections, managing the County's solids-hazardous waste / used tire /  
52 waste oil programs, overseeing the County's marina bilge waste  
53 management program, managing the County's vector control program,  
54 and management of the County's separately permitted waste treatment  
55 plants.

#### 56 2.2.1.4. Building Department

57 The Building Department is responsible for administering the building  
58 permit program, including management of grading associated with the  
59 construction of individual, single family homes

#### 60 2.2.1.5. General Services Department

61 The General Services Department is responsible for implementing and/or  
62 overseeing all improvements and maintenance activities undertaken on  
63 County facilities or property other than County roads. Additionally,

64 General Services is responsible for overseeing all leases of County  
65 properties.

66 2.2.1.6. Agriculture Department

67 The Department of Agriculture is responsible for implementing the  
68 County's pesticide / herbicide management program.

69 2.2.2 Storm Water Advisory Committee (SWAC)

70 During 2003/2004, the County established a County-wide SWAC to assist the  
71 County Storm Water Coordinator. This team meets at least annually and has  
72 representatives from each of the key responsible Departments (Planning, Building,  
73 Transportation, Environmental Management, Agriculture and General Services).  
74 SWAC meetings will be facilitated by the County's Storm Water Coordinator.

75 2.2.3 Storm Water Coordinator Responsibilities

76 In general, the County's Storm Water Coordinator is responsible for preparing and  
77 updating this SWMP, approving storm water treatment practices, maintaining close  
78 communication with the RWQCB, overseeing and coordinating implementation of  
79 the SWMP, monitoring the program and annually evaluating the program and  
80 reporting to the RWQCB. Specific responsibilities include:

- 81 1. **Regulatory Coordination:** Coordinates overall storm water management  
82 program compliance with the RWQCB. In addition, assists the Departments in  
83 coordinating storm water compliance with the RWQCB.
- 84 2. **Development and Updating of SWMP:** Coordinates the ongoing development  
85 of the SWMP in conformance with the requirements of the Permit. This  
86 includes compliance monitoring and identifying area-specific storm water  
87 management needs with the County. The Coordinator also updates the SWMP  
88 annually required in the Permit.
- 89 3. **Evaluation and Approval of the County's Program and Site Specific**  
90 **Permanent, Structural Treatment Practices:** The Coordinator maintains  
91 close contact with others within the storm water field and keeps abreast on  
92 monitoring and research carried out by parties within the County and  
93 elsewhere. The Coordinator evaluates, and after consulting with the County's  
94 Storm Water Advisory Committee (as defined in 2.2.2), recommends approval  
95 of the County's program of practices. The Coordinator approves site-specific  
96 permanent, structural treatment practices.
- 97 4. **Water Quality Research and Planning:** The Coordinator oversees County  
98 research activities to assess potential practices, investigates water quality issues,

- 99 and is the County's lead in participating / coordinating watershed planning  
100 processes focused on water quality improvement.
- 101 5. **Coordination with Departments and Externals:** In consultation with the  
102 various involved Department's, the Coordinator provides general guidance  
103 regarding compliance with the Permit. This guidance includes providing  
104 information on the Permit requirements, SWMP implementation, storm water  
105 practices, compliance schedules, reporting formats, legal authorities, budgeting  
106 assistance and other information needed to effectively implement the Permit  
107 and the SWMP requirements. In addition, the Coordinator provides feedback to  
108 the Departments regarding the status of the County's overall compliance with  
109 the Permit.
- 110 6. **Monitoring:** The Coordinator oversees monitoring related to storm water  
111 quality management to advance the state of knowledge regarding water quality  
112 issues and to provide direction for making program improvements.
- 113 7. **Program Evaluation:** The Coordinator annually assesses of the overall  
114 effectiveness of the County's SWMP.
- 115 8. **Reporting:** The Coordinator oversees preparation of the Annual Report.
- 116 9. **Training:** The Coordinator monitors the training activities carried out by the  
117 various Departments to assure adequacy and accuracy of the training programs.
- 118 10. **Database:** The Coordinator maintains a database of all required permanent,  
119 structural treatment practices installed as part of all County and non-County  
120 construction projects.

### 121 2.3 COORDINATION WITH DESIGN AND CONSTRUCTION ACTIVITIES

122 Construction activities within the County are carried out directly by County forces, by  
123 contractors and by third parties undertaking utility improvement and as part of land  
124 development/re-development activities permitted by the County.

125 Construction activities are carried out by the County Departments, Building, and General  
126 Services and Transportation. In each case, the Department Director has the responsibility for  
127 overall direction of the work carried out directly by county forces within their respective  
128 Departments, through a hired contractor, or in the case of the Director of Transportation, by  
129 third parties under permit to the Department.

130 Land development / re-development activities which involve grading on private property are  
131 subject to being permitted (Grading Permits) by the Director of Transportation, as are land

132 development / re-development and utility related construction activities within the County  
133 rights-of-ways (Encroachment Permits).

134 Whenever the Director of Transportation determines that any grading on private property  
135 constitutes a condition which could adversely affect the water quality of any water body or  
136 watercourse, the owner of the property upon which the condition is located, or other person or  
137 agent in control of said property, upon receipt of notice in writing from the Director of  
138 Transportation shall, within the period specified therein, obtain a grading permit and conform  
139 to the conditions of said permit. These permit conditions will include adherence to the  
140 County's Grading, Erosion and Sediment Control ordinance; the County's Design and  
141 Improvement Standards Manual; and the County's Drainage Manual as applicable,  
142 collectively referred to as the "County Development Standards", or other standards adopted  
143 by the County.

144 No person shall perform any grading work within the right-of-way of a public road or street,  
145 or within a public easement under the jurisdiction of the County of El Dorado, without prior  
146 approval of the Director of Transportation. Said approval (encroachment permit) will be  
147 conditioned with adherence to the County Development Standards. The following positions  
148 within the County are responsible for implementing the Design and Construction Storm Water  
149 Management Program:

150 **Directors of Transportation, Building and General Services:** The department heads are  
151 responsible for the implementation of the policies, procedures, personnel and equipment  
152 within their respective Departments. This includes ensuring compliance with all elements of  
153 the SWMP and applicable storm water permits. All construction projects are subject to the  
154 statutory requirements for environmental and public reviews and environmental permitting.

155 **Director of Environmental Management Department:** The County's Air Pollution Control  
156 Officer (APCO) is within the Environmental Management Department. Under the direction  
157 of the Department Manager, the APCO enforces the dust abatement rules within the County.

158 **Director of the Planning Department:** The Planning Director is responsible for land use  
159 planning, establishing general development standards, and reviewing applications for  
160 proposed land development projects. These processes are subject to the statutory  
161 requirements for environmental and public reviews and environmental permitting.

162 **County Storm Water Coordinator:** The Coordinator is appointed by the Director of  
163 Transportation and will be responsible for maintaining the SWMP; reporting as required to  
164 the RWQCB; approving site specific, permanent, storm water structural treatment practices,  
165 and generally overseeing and evaluating the design and construction storm water management  
166 program.

167 **Project Manager / Project Engineer:** The PM/PE is the County's representative charged  
168 with directly overseeing the planning and design of proposed construction activities, or

169 overseeing the planning and design of construction activities proposed to be carried out by  
170 others in accordance with permit conditions which the PM/PE would establish.

171 A PM/PE could involve employees of various classifications, depending on the Department  
172 and the project.

173 On County projects subject to SWPPP requirements, the PM/PE is responsible for filing an  
174 NOI with the RWQCB.

175 **Construction Manager / Resident Engineer:** The CM/RE is the County's representative  
176 charged with directly overseeing construction activities, administering construction contracts,  
177 or overseeing construction activities carried out by others involving grading or encroachment  
178 permits. The CM/RE is responsible for ensuring that storm water controls are implemented  
179 on construction sites. In the case of permitted or contracted construction activities, the  
180 CM/RE may impose sanctions if the permittee or contractor fails to take appropriate actions to  
181 correct deficiencies.

182 A CM/RE could involve employees of various classifications, depending on the Department  
183 and the project.

184 On County projects subject to SWPPP requirements, the CM/RE will ensure that the NOI is  
185 appropriately filed with the RWQCB; and the SWPPP is prepared and in the CM's/RE's  
186 possession prior to the commencement of soil disturbing activities or other activities with a  
187 potential for resulting in non-storm water discharges.

188 On non-County projects, the CM/RE will ensure that, as applicable, a grading permit has been  
189 obtained before the commencement of soil-disturbing activities or other activities with a  
190 potential for resulting in non-storm water discharges. The CM/RE will periodically inspect  
191 the construction site for proper installation and maintenance of practices in accordance with  
192 SWPPP and/or Grading Ordinance requirements.

193 On County projects subject to SWPPP requirements, the CM/RE will ensure that the County  
194 forces (when the construction is by County forces) or the contractor(s) are: practicing self-  
195 monitoring; conducting the required inspections; maintaining the required records; and filing  
196 the annual certification of compliance. On these projects, the CM/RE is responsible for filing  
197 the NOT upon completion of the project.

198 Additional duties of the CM/RE include: inspecting for, reporting, and, under certain  
199 circumstances, directing the cleanup and/or removal of illegally dumped material, spills or  
200 discharges through illicit connections within the limits of the construction site; and,  
201 forwarding noncompliance reports to the County's Storm Water Coordinator.

202 **Contractor:** The contractor is responsible for carrying out the contract per the plans and  
203 specifications. County contracts require the contractor to develop and implement elements of  
204 the construction program subject to the review and approval of the CM/RE.



205 On County projects subject to SWPPP requirements, the contractor's activities include:  
206 preparing, amending and updating the SWPPP; implementing the SWPPP; inspecting and  
207 maintaining the construction site practices; completing and filing the annual certification;  
208 discharge monitoring as appropriate; and maintaining site records.

209 **Permittee:** The permittee is responsible for carrying out the County's Grading Permit  
210 conditions. The permit requires a permittee to develop and implement elements of the  
211 construction site storm water management program subject to the review and approval of the  
212 County's CM/RE.

213 For projects requiring a SWPPP, the permittee's responsibilities include: filing the NOI;  
214 preparing, amending and updating the SWPPP; implementing the SWPPP; inspecting and  
215 maintaining the construction site temporary practices; completing and filing the annual  
216 certification and NOT; discharge monitoring as appropriate; and maintaining site records.

## 217 2.4 COORDINATION WITH MUNICIPAL OPERATIONS

218 The County Department of General Services is responsible for the care and upkeep of the  
219 County's parks and general government facilities. The County Department of Transportation  
220 is responsible for the care and upkeep of County Roads. The County Agriculture Department  
221 oversees the chemical vegetation control program for weed abatement and fire zone  
222 maintenance purposes carried out by others. The County Environmental Management  
223 Department carries out the litter management and debris removal and abatement program.

224 Maintenance functions performed by all four Departments have the potential for affecting  
225 storm water and receiving water quality. Maintenance activities are most regularly performed  
226 directly by County forces or directly managed personnel, however on occasion the  
227 Departments will hire a contractor to perform these activities.

228 The Maintenance Storm Water Management Program describes:

- 229 • The program to implement practices as part of the ongoing maintenance activities.
- 230 • The program to implement maintenance Practices at highway-related properties and at  
231 general government facilities.
- 232 • The activities to manage potential storm water pollution from: accidental spills, illicit  
233 connections, illegal discharges and illegal dumping activities.

234 The following positions are responsible for implementing the Maintenance Storm Water  
235 Management Program:

236 **Directors of Transportation, General Services, Agriculture and Environmental**  
237 **Management Departments:** The department heads are responsible for the implementation of

238 the policies, procedures, personnel and equipment within their respective Departments. This  
239 includes ensuring compliance with all elements of the SWMP and applicable storm water  
240 permits.

241 **County Storm Water Coordinator:** The Director of Transportation shall appoint an  
242 appropriately qualified coordinator. This person will be responsible for maintaining the  
243 SWMP, reporting as required to the RWQCB, and generally overseeing and evaluating the  
244 maintenance storm water management program.

245 **Maintenance Manager (MM):** Within each responsible Department a MM is designated as  
246 the County's representative charged with directly overseeing assigned maintenance activities  
247 or administering maintenance contracts to carry out these activities. The MM is responsible  
248 for ensuring that the maintenance storm water controls are implemented. In the case of  
249 contracted maintenance activities, the MM may impose sanctions if the contractor fails to  
250 take appropriate actions to correct deficiencies.

251 Within the Department of Transportation's Maintenance Division, the Highway  
252 Superintendent is the MM.

253 Contractor: The contractor is responsible for carrying out the contract per the specifications.  
254 The contract requires a contractor to develop and implement elements of the maintenance  
255 program subject to the review and approval of the MM.

## 256 2.5 COORDINATION WITH OTHER MS4 PERMITTEES

257 Coordination with other municipalities on storm water management is the responsibility of  
258 the County's Storm Water Coordinator. In some instances, discharges from the County's  
259 storm water drainage systems flow to storm water drainage systems owned and operated by  
260 other municipalities and vice versa. These municipalities and the County are ultimately  
261 responsible for the quality of the discharges from their respective storm water drainage  
262 systems. To comply with its Permit, the County will ensure that pollutants in discharges  
263 from the County's storm drain system into other municipal systems are reduced or  
264 controlled in accordance with the applicable permits. Other permitted municipalities are  
265 expected to do the same relative to discharges from their facilities into the County's storm  
266 drain system.

267 The County Storm Water Coordinator will facilitate coordination on storm water  
268 management activities with other municipalities, special districts, the RWQCB and others as  
269 necessary or appropriate. Coordination is accomplished through formal and informal  
270 discussions, meetings, agreements and procedures. The coordination takes place at three  
271 levels:

272 **Ongoing Maintenance Activities:** The maintenance staff coordinates with their municipal  
273 counterparts as part of their daily activities. Many of these activities include control or  
274 removal of materials that could potentially contaminate runoff.

275        **Construction Projects:** The County’s construction site managers communicate with  
276        municipal planning staff, the public and others on new projects to resolve storm water  
277        control and disposal issues.

278        **Planning issues:** The County Storm Water Coordinator continually seeks to identify  
279        opportunities for regional or shared storm water treatment controls and public education and  
280        outreach coordination and cooperation. Additionally, the Coordinator continually seeks  
281        opportunities to participate in watershed planning processes focused on improving water  
282        quality.

283        These coordination activities also include attending regional and statewide meetings,  
284        participating in special studies and watershed planning efforts, reporting to the RWQCB,  
285        etc.

### 286        2.5.1    General Coordination Meetings

287                      Coordination meetings are conducted on a countywide, regional or watershed basis  
288                      with other MS4 permittees. In addition, the County participates in the California  
289                      Stormwater Quality Association (CASQA). The frequency of coordination  
290                      meetings varies, depending on the participants and local water quality needs.  
291                      Participation in these meetings provides the County and others an opportunity to  
292                      share information in the development and implementation of storm water  
293                      management programs, construction activities, public education, Illegal  
294                      Connections/Illicit Discharges (IC/IDs) and monitoring. These meetings also  
295                      provide an opportunity for discussing noncompliance and/or project-specific issues  
296                      that involve both the County and others.

### 297        2.6    COORDINATION WITH RWQCB

- 298                      • The County seeks to work closely with the RWQCB. Coordination with RWQCB is  
299                      accomplished through several mechanisms, including:
- 300                      • Annual reporting;
- 301                      • Notification of noncompliance (notification and follow-up reports for reportable  
302                      noncompliance as described in the plan for reporting noncompliance);
- 303                      • Notification of spills and identification of IC/IDs; and
- 304                      • Both formal and informal meetings.
- 305                      • The point of contact for the RWQCB is the County’s Storm Water Coordinator.

306

307 **2.7 COORDINATION WITH THE PUBLIC**308 **2.7.1 Routine Public Coordination**

309 Public interface will occur through three primary mechanisms:

310 **Public-initiated contact with the County's offices regarding complaints,**  
311 **suggestions and requests:** Each Department has widely publicized phone  
312 numbers. All public-initiated calls are screened, logged and routed to the  
313 appropriate party within the Department for action, as required. General water  
314 quality related calls are directed to the County's Storm Water Coordinator. The  
315 Environmental Management Department maintains a storm water web site that  
316 enables public contact with the County on water quality issues.

317 **The Public review opportunity as part of the annual report preparation**  
318 **process:** The proposed tentative SWMP, annual updates thereto and draft annual  
319 reports are made available for a public comment period. Workshops on these  
320 documents will be noticed and held, as appropriate, by the County. The County  
321 responds to comments received as these documents are finalized for submittal  
322 annually to the RWQCB.

323 **Public input on proposed construction projects during the environmental**  
324 **evaluation process:** Typically, one or more public review meetings are held for all  
325 significant construction projects.

326 **2.8 LEGAL AUTHORITY**

327 The California Government Code, Sections 23000-23027 authorizes the County to own and  
328 manage property for public purposes. The California Streets and Highways Code gives the  
329 County Board of Supervisors jurisdiction over and responsibility for control and operation of  
330 the County Highways.

331 The County possesses adequate legal authority to disconnect or prohibit point source illicit  
332 connections to its storm drain systems pursuant to Streets and Highways Code §1450. Thus,  
333 illicit connections to the County's storm drainage system are considered encroachments.  
334 Streets and Highways Code §1460 prohibits placing, changing or renewing an encroachment  
335 without a permit. Any person placing an encroachment without the authority of a permit is  
336 guilty of a misdemeanor. Generally, a permit granting an encroachment on a highway  
337 constitutes a mere revocable license that may be withdrawn at will (People by and through the  
338 Department of Public Works v. DiTomaso, 57 C.A. 2D 741).

339 Encroachment permits may also be conditioned to require compliance with storm water  
340 regulations and the requirements of the County's program.

341 According to Streets and Highways Code § 1460, if any encroachment exists in, under or over  
342 any County road or highway, the County may require the removal of such encroachment.  
343 Notice shall be given to the owner. The County may immediately remove from any highway  
344 any encroachment that is not removed, or the removal of which is not commenced and  
345 thereafter diligently prosecuted, before the expiration of ten days from and after the service of  
346 the notice.

347 The County may remove any encroachment on the failure of the owner to comply with a  
348 notice or demand of the County and may take action to recover the expense of such removal,  
349 costs and expenses of suit and \$10 per day (Streets and Highways Code § 1480-1496). If the  
350 owner denies the existence of the encroachment or refuses to remove the encroachment, the  
351 County may commence, in any court of competent jurisdiction, an action to abate the  
352 encroachment as a public nuisance. Any person owning, controlling, or placing, or causing or  
353 suffering to exist, any encroachment within any County highway after service of notice, in  
354 addition to any civil liability therefore, is guilty of a misdemeanor.

355 Within the Business, Transportation and Housing Agency of California, the CHP is  
356 established under the California Vehicle Code § 2100 et seq. The CHP has full responsibility  
357 and primary jurisdiction for the administration and enforcement of the laws on all County  
358 highways. County sheriffs, while engaged primarily in general law enforcement duties, may  
359 incidentally enforce state and local traffic laws and ordinances on County highways. The  
360 CHP may enforce those provisions relating to the transportation of hazardous waste found in  
361 Health and Safety Code Section 25160 et seq., which requires a manifest for the transport of  
362 hazardous waste. In addition, the CHP may enforce the provisions of the Hazardous Waste  
363 Haulers Act in Health and Safety Code Section 25167.1 et seq., which requires every  
364 transporter of hazardous waste to respond and pay for damages for environmental restoration,  
365 including restitution for the loss, damage or destruction of natural resources.

366 The CHP shall serve as the statewide information, assistance and notification coordinator for  
367 all hazardous substance spill incidents occurring on highways within the State of California  
368 (Vehicle Code § 2453).

369 Sections 23112, 23113, 23114 and 23115 of the Vehicle Code provide legal authority to  
370 prevent spills, dumping or disposal of materials on the highways and freeways under the  
371 County's jurisdiction.

372 Section 23112 states:

373 No person shall throw or deposit, nor shall the registered owner or the driver, if such owner is  
374 not then present in the vehicle, aid or abet in the throwing or depositing upon any highway  
375 any bottle, can, garbage, glass, nail, offal, paper, wire, any substance likely to injure or  
376 damage traffic using the highway, or any noisome, nauseous, or offensive matter of any kind.

377 No person shall place, deposit, or dump, or cause to be placed, deposited, or dumped, any  
378 rocks, refuse, garbage, or dirt in or upon any highway, including any portion of the right-of-  
379 way thereof, without the consent of the state or local agency having jurisdiction over the  
380 highway.

381 Section 23113 states:

382 Any person who drops, dumps, deposits, places or throws, or causes or permits to be dropped,  
383 dumped, deposited, placed or thrown, upon any highway or street any material described in  
384 Section 23112 or in subdivision (d) of Section 23114 shall immediately remove the material  
385 or cause the material to be removed.

386 If the person fails to comply with subdivision (a), the governmental agency responsible for the  
387 maintenance of the street or highway on which the material has been deposited may remove  
388 the material and collect, by civil action, if necessary, the actual cost of the removal operation  
389 in addition to any other damages authorized by law from the person made responsible under  
390 subdivision (a). Section 23114 states (in pertinent part):

391 No vehicle shall be driven or moved on any highway unless the vehicle is so constructed,  
392 covered, or loaded as to prevent any of its contents or load other than clear water or feathers  
393 from live birds from dropping, sifting, leaking, blowing, spilling, or otherwise escaping from  
394 the vehicle.

395 Section 23115 of the Vehicle Code states (in pertinent part):

396 No vehicle loaded with garbage, swill, cans, bottles, waste papers, ashes, refuse, trash, or  
397 rubbish, or any other noisome, nauseous, or offensive matter, or anything being transported to  
398 a dump site for disposal shall be driven or moved upon any highway unless the load is totally  
399 covered in a manner which will prevent the load or any part of the load from spilling or  
400 falling from the vehicle.

401 The County relies on the CHP and the County Sheriff for enforcement of the above Vehicle  
402 Code Sections. The CHP and sheriff possess the appropriate legal authority to pursue and  
403 take enforcement actions against persons causing, or threatening to cause such illegal  
404 discharges. The County possesses the authority to recover the costs associated with the  
405 cleanup and other activities resulting from illegal discharges.

406 The County has authority to directly control the contribution of pollutants in discharges of  
407 storm water from activities (including construction) located on County owned property and  
408 within County-owned rights-of-way to the waters of the United States.

#### 409 **Solid Waste Management Ordinance**

410 Pursuant to Government Code Section 25845, the County, by ordinance (County Code  
411 Chapter 8.42), has established a procedure for the abatement of a nuisance on private property

412 when this nuisance constitutes an immediate threat to public health. El Dorado County  
413 Ordinance Code Section 8.42.700 authorizes the County Environmental Management  
414 Department to take abatement action against littering and illegal dumping on public or private  
415 property.

#### 416 Hazardous Material Management Ordinance

417 The County, by ordinance (County Code Chapter 8.38) authorizes the County Department of  
418 Environmental Management to manage the handling, storage, transport and use of hazardous  
419 material. Additionally, Environmental Management is authorized to inspect for hazardous  
420 materials on private property and oversee clean-up activities.

#### 421 Dust Abatement Ordinance

422 The County, by ordinance (County Code Chapter 8.44) authorizes the County Department of  
423 Environmental Management to develop and manage the County's dust abatement and  
424 protection program.

#### 425 Grading, Erosion and Sediment Control Ordinance

426 The County, by ordinance (County Code Chapter 15.14) authorizes the County Department of  
427 Transportation to regulate all grading activities, and requires that such activities be undertaken  
428 in such a manner that quantities of sediment or other materials substantially in excess of  
429 natural levels are prevented from leaving the site. Additionally, this ordinance authorizes the  
430 Director of Transportation to require security deposits, suspend or revoke permits, and for the  
431 permittee to warranty all work. Further, the ordinance requires the Director to record with the  
432 County Recorder, a Notice of Noncompliance when there is a failure to secure the required  
433 permit. Security deposits are held by the Building Department and provide funding of  
434 standard inspections, with additional inspections.

#### 435 Subdivision Design and Improvement Ordinance

436 The County, by ordinance (County Code Section 16.12.050) authorizes the Planning  
437 Commission, appointed by the Board of Supervisors to determine whether the discharge of  
438 waste from the proposed subdivision into an existing community sewer system would result  
439 in violation of existing requirements prescribed by a California Regional Water Quality  
440 Control Board pursuant to division 7 (commencing with section 13000) of the Water Code.  
441 In the event that the Planning Commission finds that the proposed waste discharge would  
442 result in or add to violation of requirements of the water quality control board, it may  
443 disapprove the tentative map or maps of the subdivision.

#### 444 Liquid Waste Management Ordinance

445 The County, by ordinance (County Code Section 8.06) prohibits any hazardous waste which  
446 may be defined by either federal or state statute and regulation, whichever is more stringent;

447 and any grease or grease trappings from being discharged including potential adverse health  
448 and environmental impacts associated with on-site individual sewage disposal systems and or  
449 transport of liquid waste.

450

451 **Bear Resistant Garbage Can Ordinance**

452 The County, by ordinance (County Code Section 8.76.030) is authorized to require the  
453 owners, lessees, residents or any other person exercising physical control of any private  
454 property including businesses to install an approved bear-resistant garbage can enclosure.  
455 This ordinance only applies to new residential construction within those portions of El Dorado  
456 County that lie within the boundaries of the Silver Fork, Tahoe Truckee Unified, and Lake  
457 Tahoe Unified School Districts.

458 **Vehicle Abandonment Ordinance**

459 The County, by ordinance (County Code Section 10.16.070), in addition to and in accordance  
460 with the authority granted by the state under section 22660 of the Vehicle Code, may  
461 determine to abate and remove abandoned, wrecked, dismantled or non-operative vehicles or  
462 parts thereof as public nuisances.

463 All County ordinances are enforceable per County Code Chapter 1.24, which stipulates fines  
464 and/or imprisonment for violators. The District Attorney is responsible for enforcement  
465 actions. An annual review of the ordinances, with respect to enforcement, will occur, and as  
466 appropriate recommendations to amend or create ordinances will be brought before the  
467 County Board of Supervisors.

468 **2.9 COORDINATION WITH COUNTY LEASEHOLDERS**

469 The County owns several parcels of property. Many of these properties are leased to third  
470 parties. These third parties carryout a variety of activities on these properties. These  
471 properties and their leases will be reviewed by the County's responsible Department, General  
472 Services, to assure that the terms of the lease allow enforcement of the Permit and SWMP  
473 requirements and that the lease holders are carrying out appropriate pollution management  
474 practices.

475 Identification of these leases and review of the lease terms will be accomplished by the end of  
476 June 2006.

477 Where the terms of the leases are not presently sufficient to allow for this enforcement, efforts  
478 will be initiated to amend or replace the lease with one that allows the County to enforce the  
479 Permit and SWMP. It will be necessary to set individual time schedules for each property to  
480 upgrade, as necessary, the terms of the leases. As these leases are reviewed, deficiencies  
481 identified, and time schedules set, the results will be reported in the Annual Report.



482 The County will undertake a general compliance review on all leased properties by the end of  
483 June 2006.

484 If deficiencies in storm water pollution practices are identified, the leaseholder will be so  
485 informed, and requested to undertake appropriate practices. For those properties with  
486 deficiencies and with lease terms allowing enforcement, the County will undertake to ensure  
487 that the leaseholder responds appropriately. However, if there are noted deficiencies and the  
488 lease has not yet been amended to allow enforcement, the property will be “flagged” for  
489 revisit upon amendment of the lease terms. In this latter situation, if the identified  
490 deficiencies are seen as an immediate threat to public health, the County will initiate  
491 abatement action per County Ordinance Code Section 8.42.700.

492 **1.** The Annual Report will summarize the results of these leased property  
493 inspections.

## 494 **2.10 COORDINATION WITH RESOURCE CONSERVATION DISTRICTS**

### 495 **2.10.1 Watershed Planning**

496 The County participates with the El Dorado County & Georgetown Divide Resource  
497 Conservation Districts (RCD) to undertake watershed-planning processes focused on  
498 improving water quality in Western El Dorado County. These watershed-planning efforts are  
499 expected to include water quality monitoring, modeling and planning efforts that may result in  
500 the identification of additional water quality protection measures being identified for  
501 implementation by the County and others.

**3.1 OVERVIEW**

The County is required to identify and implement storm water management practices to minimize discharges of pollutants. The section to follow identifies the developmental strategies and the process of implementation of practices as they apply to the storm water program. This section is organized as follows:

- Section 3.2 Development and Adoption of Practices
- Section 3.3 Public Review Process / Adoption Process
- Section 3.4 Program Implementation
  - Public Education and Outreach
  - Public Participation / Involvement
  - Illicit Discharge Detection and Elimination
  - Construction Site Runoff Control
  - Post-Construction Runoff Control
  - Pollution Prevention / Good Housekeeping
- Section 3.5 BMPs

**3.2 DEVELOPMENT AND ADOPTION OF PRACTICES****3.2.1 Overview**

The current design and construction program (Section 4.4.3) is identified from within various existing County Ordinances, manuals and guidelines. Principally among these, are included the County's Grading, Erosion and Sediment Control Ordinance; Subdivision Ordinance; Design and Improvement Standards Manual; and Drainage Manual. In preparing the proposed "Standard Storm Water Mitigation Plan" (Section 4.5.3), the County drew heavily from the State Water Resource Control Board's "Final Model Standard Urban Storm Water Mitigation Plan"; the Board's recent municipal storm water NPDES Permit, Revised Tentative Order NPDES Permit No. CAS0029831, and the Board's small municipal permit, Permit No. CA00000X4.

In preparing the proposed municipal operations program (Section 4.6), the County drew heavily from an inventory of existing practices and the California Department of Transportation (Caltrans) Statewide SWMP.

31 The program identification, evaluation and approval process is on going. The  
32 County intends to, annually, revisit and refine the program. The annual review  
33 process is as follows:

- 34 • Step 1 – Research and/or Watershed Planning;
- 35 • Step 2 – Evaluation of Candidate practices (Including Re-Evaluation  
36 of Current practices); and
- 37 • Step 3 – Approval of practices for implementation, as appropriate.

38 These steps are described in the following paragraphs.

### 39 3.2.2 Step 1 – Research and/or Watershed Planning

40 Potential new practices not currently used by County will be examined on an annual  
41 basis. Pilot studies and other research conducted by the County and others will be  
42 reviewed and evaluated by the County’s Storm Water Coordinator. The Storm  
43 Water Coordinator will also review and evaluate the findings from the various  
44 watershed-planning processes carried out within the County for applicability to the  
45 County’s program.

46 This information, along with specific program recommendations, will be shared by  
47 the Coordinator with the SWAC as part of the annual program review process.

### 48 3.2.3 Step 2 – Evaluation of Candidate Practices (Including Re-Evaluation of Current 49 Practices)

50 As part of the evaluation of current practices, the County’s Storm Water  
51 Coordinator and the SWAC will evaluate available research, monitoring program  
52 information and feedback, and watershed planning results.

53 The feedback will include information on the difficulties or inadequacies of the  
54 existing practices, as well as improvements to the current practices developed and  
55 recommended by field personnel.

56 Practices that are judged by the SWAC and the County’s Storm Water Coordinator  
57 to be promising but not ready for implementation will be considered for use on a trial  
58 basis. These would include practices for which effectiveness and/or reliability  
59 information is lacking or for which design or operational parameters are unavailable.  
60 These practices will be tested and considered for an appropriate period before  
61 potentially including them within the County’s prescribed program.

### 62 3.2.4 Step 3 – Approval of Practices

63 As the County’s Storm Water Coordinator and SWAC are able to come to conclusions  
64 regarding specific practices, these practices will be accordingly addressed within the annual

65 update to the County's SWMP. Criteria used to accept or reject practices include relative  
66 effectiveness, technical feasibility, cost/benefit analysis, and legal or institutional constraints.

### 67 3.3 PUBLIC REVIEW / ADOPTION PROCESS

68 The County will annually solicit comments from interested parties and the public during the  
69 process of identifying, evaluating and approving practices. The County will announce and  
70 make available the draft Annual Report, including the revised SWMP. Final action by the  
71 County will be as an agenda item at a regular Board of Supervisor's Meeting

### 72 3.4 PROGRAM IMPLEMENTATION

73 This SWMP provides a program that the County's personnel will draw upon when making  
74 decisions at the site-specific level for maintenance activities, and for the  
75 planning/design/construction activities of County improvement projects and development /  
76 re-development projects. Site conditions dictate the type of practice chosen for  
77 implementation. The selection of practices for a specific site is the site manager's  
78 responsibility as later described in the respective design/construction and maintenance  
79 sections of the SWMP.

80 The County will continue to encourage experimentation and innovation on deploying  
81 enhanced practices to minimize pollution. Feedback from the implementation of innovative  
82 measures is gathered for analysis and reporting in the Annual Report process. Through  
83 feedback stemming from implementation of enhanced practices, the County expects that the  
84 practices identified herein will continue to evolve and improve in their effectiveness in  
85 managing the quality of storm water discharges from the County's facilities.

86 A listing of the Departments responsible for implementation of practices identified in this  
87 SWMP is as follows:

88 TABLE 3-1: DESCRIPTION OF PRACTICES AND RESPONSIBLE DEPARTMENTS  
89

Description	Responsible Implementing Department
<b>Maintenance Practices:</b> litter pickup, toxics control, street sweeping, etc.	Transportation, General Services, Agriculture, and Environmental Management
<b>Planning &amp; Design Practices:</b> permanent soil stabilization & treatment systems, etc.	Transportation, Planning, Environmental Management and General Services
<b>Construction Site Practices:</b> temporary runoff control practices, etc.	Transportation, Building, Environmental Management and General Services

90

91

92 3.4.1 Public Education and Outreach

93 The County will implement a public education program that informs the community  
94 of the impacts of storm water and contributions they may make to reduce pollutants  
95 in storm water runoff. The County will target public employees, public schools,  
96 public libraries, developers, contractors, homeowners, business owners, boaters, and  
97 the remaining general public as part of this Public Education and Outreach Program.

98 3.4.2 Public Participation and Involvement

99 The County will implement a public participation and involvement program that  
100 notifies the community of public hearings to consider the impacts of storm water and  
101 contributions they may make to reduce pollutants in storm water runoff.

102 3.4.3 Illicit Discharge Detection and Elimination

103 3.4.3.1 Construction Sites

104 3.4.3.1.1 County Improvement Projects

105 On County construction sites, the County’s Construction Manager  
106 / Resident Engineer will be alert to, and report, all potential illicit  
107 connections or illegal discharges. These will be reported to the  
108 County’s Storm Water Coordinator, who will appropriately pursue,

109 in cooperation with the involved County Departments, removal /  
110 cleanup operations.

111 For further details, see Sections 4.4.

112

113 **3.4.3.1.2 Development / Re-development Projects**

114 On non-County construction sites, the County's Project Manager  
115 (construction inspector) will be instructed to be alert to, and report, all  
116 potential illicit connections or illegal discharges. These will be reported to  
117 the County's Storm Water Coordinator, who will appropriately pursue, in  
118 cooperation with the involved County Departments, removal / cleanup  
119 operations.

120 For further details, see Sections 4.4.

121 **3.4.3.2 Municipal Operations**

122 While carrying out maintenance operations, the County's maintenance  
123 personnel will be instructed to be alert to, and report, all potential illicit  
124 connections or illegal discharges. These will be reported to the County's  
125 Storm Water Coordinator, who will appropriately pursue, in cooperation  
126 with the involved County Departments, removal / cleanup operations. For  
127 further details, see Section 4.5.

128 **3.4.3.3 Non-County Property**

129 Currently the County regulates illicit discharges through many existing  
130 environmental and public health areas currently managed, through the  
131 Environmental Management Department, Environmental Health Division  
132 and the Solid Waste & Hazardous Materials Division as summarized in  
133 Table 3-2 below:

134 **TABLE 3-2: EXISTING COUNTY PROGRAMS FOR NON-COUNTY PROPERTY ILLICIT**  
 135 **DISCHARGE DETECTION AND ELIMINATION**

<b>Environmental Health:</b>	<b>Hazardous Materials:</b>	<b>Solid Waste :</b>
<ul style="list-style-type: none"> <li>• Food Facilities</li> <li>• Liquid Waste</li> <li>• Recreational Health</li> <li>• Small Water Systems</li> <li>• Public Complaints</li> </ul>	<ul style="list-style-type: none"> <li>• Hazardous Waste/CUPA</li> <li>• Household Hazardous Waste</li> <li>• Spills/Emergency Response</li> <li>• Marina Outreach</li> <li>• Medical Waste</li> <li>• Used Oil</li> <li>• Universal Waste</li> </ul>	<ul style="list-style-type: none"> <li>• Collection/Disposal</li> <li>• Recycling</li> <li>• Enforcement</li> <li>• Litter Abatement</li> <li>• Garbage Cans/Bears</li> <li>• Construction Demolition &amp; Debris Recycling</li> <li>• Material Recovery Facility</li> </ul>

136  
 137 For further details, see Section 4.3

138 **3.4.4 Construction Site Runoff Control**

139 **3.4.4.1 County Improvement Projects**

140 County improvement projects are carried out by the County  
 141 Transportation Department and the Department of General Services. The  
 142 Department Directors are responsible for the planning, design and  
 143 execution of these projects. The projects can be carried out directly by  
 144 County forces or by a contractor retained by the County.

145 All proposed projects are subject to a CEQA review process facilitated by  
 146 the County Planning Department. Frequently, conditions of approval  
 147 related to environmental protection measures are attached to the project.

148 The County’s designated Project Manager / Project Engineer is  
 149 responsible to assure that the project’s design appropriately incorporates  
 150 these conditions of approval and the storm water practices as outlined in  
 151 this SWMP.

152 The County’s designated Construction Manager / Resident Engineer is  
 153 responsible to assure that the project’s construction site appropriately  
 154 incorporates the storm water temporary construction structural controls  
 155 and practices as outlined in this SWMP, and implements the permanent

156 structural controls and practices identified by the County's Project  
157 Manager (PM) / Project Engineer (PE).

158 For further details, refer to Section 4.4.

159 **3.4.4.2 Development / Re-development Projects**

160 Development / re-development projects, and other activities requiring  
161 grading, are subject to being permitted by the County. The County  
162 Transportation Department is responsible for administering the County's  
163 Grading, Erosion and Sediment Control Ordinance. The County Planning  
164 Department is responsible for administering the required CEQA review.

165 All proposed projects and activities are subject to a CEQA review process  
166 facilitated by the County Planning Department. Frequently, conditions of  
167 approval related to environmental protection measures are attached to the  
168 project.

169 For all projects and activities except individual single family home  
170 construction, Department of Transportation designated Project Manager  
171 (permit reviewer) is responsible to assure that the project's design  
172 appropriately incorporates these environmental conditions of approval and  
173 the storm water practices as outlined in this SWMP.

174 Single-family home construction is similarly reviewed / permitted by the  
175 Building Department's designated Project Manager (permit reviewer).

176 For all projects and activities except individual single-family home  
177 construction, Department of Transportation designated Project Manager  
178 (construction inspector) is responsible to assure that the project's  
179 construction site appropriately incorporates these environmental  
180 conditions of approval and the storm water practices as outlined in this  
181 SWMP. Single-family home construction is similarly reviewed / permitted  
182 by the Building Department's designated Project Manager (construction  
183 inspector).

184 For further details, refer to Section 4.4.

185 **3.4.5 Post-Construction Runoff Control**

186 The County will implement a long-term post-construction program that protect water  
187 quality and control runoff flow, to be incorporated into development and significant  
188 redevelopment projects. The County will comply with permit requirements by  
189 incorporating existing County Development Standards to minimize the discharge of  
190 pollutants of development and redevelopment projects. Revisions to the County



191 Development Standards shall be developed and implemented as well the  
192 development of storm water treatment practices.

193 For further details, refer to Section 4.5.

### 194 3.4.6 Pollution Prevention / Good Housekeeping

#### 195 3.4.6.1 County Property

196 The County Department of General Services is responsible for the care and  
197 upkeep of the County's parks and general government facilities. The  
198 County Department of Transportation is responsible for the care and upkeep  
199 of the County Roads and associated maintenance yards. Maintenance  
200 activities are most regularly preformed directly by County forces, however  
201 on occasion the Departments will hire a contractor to perform these  
202 activities.

203 The respective Departments designate a maintenance manager who is in  
204 responsible charge of the activity. This manager is responsible for assuring  
205 that the applicable pollution prevention / good housekeeping practices as  
206 outlined in the SWMP are incorporated within the work.

#### 207 3.4.6.2 Non-County Property

208 In those instances where structural treatment control practices are required  
209 to be constructed on non-County property as part of a development or re-  
210 development project, the project's conditions of approval will stipulate that  
211 the property owner will carry the on-going responsibility to maintain these  
212 practices in a functioning, full operational condition. Initially, these non-  
213 County facilities will be inspected by the County's Storm Water  
214 Coordinator within the first year of construction to assure operability and to  
215 determine maintenance needs / adequacy. In the long term, inspections will  
216 be scheduled periodically, on an as needed basis. At any time if operations  
217 or maintenance are found to be inadequate, enforcement actions will be  
218 pursued against the responsible party.

219 For further details, see Section 4.6

## 220 3.5 BMPS

221 As used in this document the term BMP refers to the measures set forth in the BMP Program  
222 Summary sheets in Section 4.1 - 4.6. These measures are categorized by the six minimum  
223 requirements of the permit.

**1 4.0 OVERVIEW**

2 Section 4 more specifically describes each element of the storm water management  
3 program and the practices used to meet each of the six (6) minimum required control  
4 measures of the Permit, which are as follows:

- 5 • Section 4.1 Public Education and Outreach
- 6 • Section 4.2 Public Participation and Involvement
- 7 • Section 4.3 Illicit Discharge Detection and Elimination
- 8 • Section 4.4 Construction Site Runoff Control
- 9 • Section 4.5 Post Construction Runoff Control
- 10 • Section 4.6 Pollution Prevention / Good Housekeeping

**11 4.1 PUBLIC EDUCATION AND OUTREACH**

12 The County will implement a public education program that informs the community of  
13 the impacts of storm water and contributions they may make to reduce pollutants in storm  
14 water runoff. The County will target public employees, public schools, public libraries,  
15 developers, contractors, homeowners, business owners, boaters, and the remaining  
16 general public as part of this Public Education and Outreach Program.

**17 4.2 PUBLIC PARTICIPATION AND INVOLVEMENT**

18 The County will implement a public participation and involvement program that notifies  
19 the community of public hearings to consider the impacts of storm water and  
20 contributions they may make to reduce pollutants in storm water runoff.

**21 4.3 ILLICIT DISCHARGE DETECTION AND ELIMINATION**

22 This section describes specifically how the County will comply with Permit requirements  
23 by incorporating illicit discharge detection and elimination, into the overall storm water  
24 management program. The County will achieve compliance by identifying storm drain  
25 outfalls, through enforcing County ordinances, implementing a detection and response  
26 plan and through public communications, and finally, through program evaluation and  
27 analysis.

**28 4.4 CONSTRUCTION RUNOFF CONTROL**

29 The County will comply with Permit requirements by incorporating construction site  
30 runoff control requirements that apply to both construction proposed to be undertaken  
31 directly by the County and construction proposed to be permitted by the County and  
32 undertaken by others. This will be achieved through development and implementation of  
33 the County's Development Standards (Grading, Erosion and Sediment Control  
34 Ordinance, the Design and Improvement Standards Manual and the Drainage Manual),  
35 general construction site practices, minimum construction site practices, inspections and  
36 enforcement, County ordinances, an employee training program, and through public  
37 communications.

**38 4.5 POST CONSTRUCTION RUNOFF CONTROL**

39 The County will implement a long-term post-construction program that protect water  
40 quality and control runoff flow, to be incorporated into development and significant  
41 redevelopment projects. The County will comply with permit requirements by  
42 incorporating existing County Development Standards to minimize the discharge of  
43 pollutants of development and redevelopment projects. Revisions to the County  
44 Development Standards shall be developed and implemented as well the development of  
45 storm water treatment practices.

**46 4.6 POLLUTION PREVENTION / GOOD HOUSEKEEPING**

47 While carrying out maintenance operations, the County's maintenance personnel will be  
48 instructed to be alert to, and report, all potential illicit connections or illegal discharges.  
49 These will be reported to the County's Storm Water Coordinator, who will appropriately  
50 pursue, in cooperation with the involved County Departments, removal / cleanup  
51 operations. The County will provide education and training to ensure that all of its  
52 employees have the knowledge and skills necessary to perform their functions effectively  
53 and efficiently. The County provides employee-training programs with curricula and  
54 materials tailored to specific topics and personnel levels.

**1 4.1.1 OVERVIEW**

2 This section describes how the County will comply with Permit requirements by  
3 implementing a public education program that informs the community of the impacts of  
4 storm water and contributions they may make to reduce pollutants in storm water runoff.  
5 The County will distribute pertinent educational materials regarding storm water quality to  
6 and provide outreach through the many modes to members of the community. The  
7 County will accomplish compliance by targeting the Public Education and Outreach  
8 Program to reach: public employees, public schools, public libraries, developers,  
9 contractors, homeowners, business owners, boaters, and the remaining general public.  
10 Described herein, is the County's Public Education & Outreach Program, organized as  
11 follows:

- 12 • Section 4.1.2 Outreach to Private Project Planning and Design Teams and  
13 Construction Contractors;
- 14 • Section 4.1.3 Public Education and Outreach Program;
- 15 • Section 4.1.4 SWMP Public Review Process;
- 16 • Section 4.1.5 BMP Program Summary

**17 4.1.2 OUTREACH TO PRIVATE PROJECT PLANNING AND DESIGN TEAMS AND  
18 CONSTRUCTION CONTRACTORS**

19 The County will work with the local Resource Conservation District and others to provide  
20 outreach to private project planners, designers and construction contractors to raise their  
21 awareness and understanding of the problems and causes of storm water pollution and to  
22 explain their responsibilities. This outreach will be done primarily through informational  
23 exchanges between the County and these parties. The informational exchanges cover the  
24 following topics:

- 25 • The provisions, conditions and requirements of the Permit that apply to their  
26 projects;
- 27 • The availability of the SWMP and associated training and guidance material  
28 prepared by the County; and
- 29 • General responsibilities of project site manager regarding implementation of the  
30 SWMP, the requirements of a SWPPP.

31 The County Storm Water Coordinator will work with local organizations to annually host  
32 workshops / informational exchanges focused on these topics. The first workshop will be  
33 held by the end of June 2005.

## 34 4.1.2.1 Informational Exchange Sessions With Contactors

35 For contract work directly undertaken by the County, three types of informational  
36 exchange sessions will be employed to describe storm water pollution prevention  
37 concepts and practices and to explain techniques for preparing SWPPPs for  
38 construction activities.

- 39 • **Informational Exchange #1, Storm Water Permit Compliance**  
40 **Requirements, Pre-Bid Meeting:** Pre-bid meetings may be conducted to  
41 discuss a given upcoming construction project. When such meetings are  
42 held, and depending on the site's storm water complexities, the site  
43 manager may provide general information to construction contractors  
44 regarding the requirements in the Permit and the SWMP that apply to the  
45 subject project (i.e., the project on which the contractors are considering  
46 submitting bids).
- 47 • **Informational Exchange #2, Storm Water Permit Compliance**  
48 **Requirements, Pre-Construction Meeting:** The site manager provides  
49 project-specific guidance to construction contractors on topics such as  
50 SWPPP preparation, selection of practices, and monitoring and inspection.  
51 The County will also notify the RWQCB of the pre-construction meeting to  
52 allow an RWQCB representative to be at the meeting to review and discuss  
53 the water quality issues relating to the construction project.
- 54 • **Additional Informational Exchanges:** The site manager will hold  
55 informal ad hoc sessions with contractors, as needed, during the course of  
56 the construction project.

57 The topics covered in informational exchanges will be updated as needed to reflect  
58 modifications to the County's storm water management program.

## 59 4.1.3 PUBLIC EDUCATION AND OUTREACH PROGRAM

60 The County, in cooperation with the local Resource Conservation District, currently  
61 utilizes a variety of methods to educate and provide outreach to the public about the  
62 importance of managing pollutants that potentially could enter storm water. The existing  
63 program includes:

- 64 • An annual outreach occurs at Folsom, Ice House, Sly Park, and Union Valley  
65 Reservoir, in which free educational and maintenance materials are handed out to  
66 boaters;
- 67 • Developing and distributing informational sheets for proper hazardous waste use  
68 and disposal and storm water information at the County Fair and Earth Day  
69 celebrations at local public schools;

## SECTION 4.1

### *Public Education and Outreach Program*

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- 70 • Developing and distributing storm water informational sheets for Environmental  
71 Managements food facility inspection and hazardous waste management programs  
72 on all permitted businesses;
- 73 • Developing and distributing storm water information sheets for Environmental  
74 Management collection events that accept used oil and household hazardous waste;
- 75 • Maintaining and operating a call in phone number where parties can contact the  
76 County with environmental concerns;
- 77 • The County Agriculture Department will develop and distribute storm water  
78 informational sheets at their public counter as well as to all commercial and private  
79 home owners who are currently permitted for herbicide/pesticide application;
- 80 • Maintaining a County environmental website which offers educational  
81 opportunities and the opportunity for concerned parties to contact the County.

82

83 The County will, by the end of June 2005, be supplementing these efforts by:

- 84 • Adding to the County’s informational sheets, a storm water specific informational  
85 sheet;
- 86 • Developing storm water informational sheets to the public in following categories:  
87 general, planning/design, and construction practices. Information sheets will be  
88 distributed to engineering/construction firms, County departments, and the public  
89 who obtain grading/construction permits;
- 90 • Developing and distributing storm water informational sheets for all five (5) public  
91 libraries;
- 92 • The County Storm Water Coordinator will serve in a “clearinghouse” function for  
93 disseminating storm water educational and awareness materials from other sources  
94 to various County Departments that come into contact with the public;

95 The written materials are designed to appeal to the general public (in easy-to-read  
96 formats) while providing technical information on selected storm water activities and  
97 pollution management practices.

#### 98 4.1.3.1 Resource Conservation District – Watershed Planning

99 Various parties have initiated public education research programs. These  
100 programs will be monitored by the County’s Storm Water Coordinator, and the  
101 County’s public education program will be reviewed annually to potentially take  
102 advantage of this research, with the goal of maximizing water quality benefits from  
103 the County’s public education program.

104 The Resource Conservation District currently has Proposition 204 and CalFed  
105 grants for public outreach. Supplemental outreach efforts will be initiated  
106 involving various watershed monitoring and planning studies within Western El  
107 Dorado County. These efforts will be designed to bring together various interest  
108 groups to focus on watershed specific water quality issues.

#### 109 4.1.3.2 Informational Sheets

110 The County Storm Water Coordinator will actively pursue acquiring educational  
111 sheets prepared by Caltrans, various water quality regulators and others in order to  
112 make these materials available within El Dorado County.

#### 113 4.1.3.3 Web Site

114 The County's Environmental Management web site has been modified to include a  
115 storm water quality specific element. The web site currently shares information  
116 regarding air quality, solid waste and hazardous material, vector control and  
117 general environmental health. This website will be annually updated and tracked  
118 for 'hits' to this web page.

119 The site address is: <http://co.el-dorado.ca.us/emd/>

120 The storm water element will provide information on all storm water outreach  
121 activities, including brochures, bulletins and workshops as well as bulletins on  
122 related topics, information related to construction and maintenance activities, and  
123 links to key related sites.

#### 124 4.1.3.4 Storm Drain Stenciling

125 The County is proposing to undertake a stenciling program to apply messages at  
126 storm drain inlets located at key locations and in key facilities such as parks and  
127 other areas with notable dumping problems with the intent of assisting in educating  
128 the public about storm water runoff pollution.

129 By the end of June 2005, stenciling of storm drain DI's will to be required of  
130 developers for new development.

131 By the end of June 2007, the exact locations to be stenciled will be identified and a  
132 standard practice will be in place for initial installation of these messages as new  
133 such locations are constructed.

134 By the end of June 2009, the County will complete its stenciling program for all  
135 existing storm drain inlets described above. All new inlets in the areas described  
136 above will be stenciled when constructed. The stencils will be maintained by the  
137 appropriate responsible County Department.

138 The County will report the progress of its storm drain system stenciling program in  
139 the Annual Report.

#### 140 4.1.3.5 Technical Workshops

141 Periodically, the County Storm Water Coordinator will host, or co-host with the  
142 Resources Conservation District, public workshops that focus on specific storm  
143 water topics. These workshops are for the purpose of discussing storm water  
144 topics currently being researched by the County and others and offer the  
145 opportunity to share information and facilitate a collective focus on potential  
146 solutions to the challenges faced by the County and other watershed stakeholders.

147 These workshops will be held on an as-needed basis, but the expectation is that on  
148 average, one per year will be held.

#### 149 4.1.4 SWMP PUBLIC REVIEW PROCESS

150 As the County annually reviews and updates the SWMP, at least one public workshop will  
151 be held offering the public the opportunity to review and comment on the County's storm  
152 water management program. Additionally, as the Board of Supervisors annually considers  
153 the program updates, this action will take place at a public meeting with an advanced  
154 public notice of the meeting's agenda, all in conformance with the Public Resources Code  
155 requirements.

#### 156 4.1.5 BMP PROGRAM SUMMARY

157 The following pages contain a summary of the Public Education and Outreach BMP  
158 program set forth in the El Dorado County Storm Water Management Plan. These BMP's  
159 will be subject to annual reviews and updates as outlined in Sections 3.2 and 5.6.1.

160 EPA's NPDES rules state:

161 "Implementation of best management practices consistent with the provisions of  
162 the storm water management program required pursuant to this section (the six  
163 minimum control measure, evaluation & assessment, record keeping and  
164 reporting)...constitutes compliance with the standard of reducing pollutants to the  
165 "maximum extent practicable"." (40 CFR 122.34)

166 This summary notes BMPs applicable to one of the six minimum control measures: Public  
167 Education and Outreach. El Dorado County proposes that this program constitutes  
168 fulfillment of the minimum General Permit and Federal Regulation requirements. As the  
169 public review and the SWMP finalization processes proceed, the program, and the  
170 County's assessment of this program, may change.



**SECTION 4.1**

*Public Education and Outreach Program*

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### 1 4.2.1 OVERVIEW

2 This section describes how the County will comply with Permit requirements by  
3 implementing a public participation and involvement program that notifies the  
4 community of public hearings to consider the impacts of storm water and contributions  
5 they may make to reduce pollutants in storm water runoff. Described herein, is the  
6 County's Public Participation and Involvement Program, organized as follows:

- 7 • Section 4.2.2 SWMP Public Review Process
- 8 • Section 4.2.3 Public Participation and Involvement
- 9 • Section 4.2.4 BMP Program Summary

### 10 4.2.2 SWMP PUBLIC REVIEW PROCESS

#### 11 4.2.2.1 SWMP Approval

12 As the County reviews the proposed draft SWMP, the Board of Supervisors, will  
13 notice this public hearing and it's agenda in accordance with the Public Resources  
14 Code.

#### 15 4.2.2.2 SWMP Update

16 As the County annually reviews and updates the SWMP, at least one public  
17 workshop will be held offering the public the opportunity to review and comment  
18 on the County's storm water management program. This update is to occur in the  
19 form of an annual report, required by and to be submitted to the Regional Board  
20 in September of each year.

21 The County will notice the public workshop and BOS public hearing to consider  
22 the annual report in accordance with the Public Resources Code.

### 23 4.2.3 PUBLIC PARTICIPATION AND INVOLVEMENT

24 The County, in cooperation with the local Resource Conservation District, currently  
25 utilizes a variety of methods to educate and outreach to the public about the importance  
26 of managing pollutants that potentially could enter storm water. The existing program  
27 includes:

- 28 • An annual outreach occurs at Folsom, Ice House, Sly Park, and Union Valley  
29 Reservoir, in which free educational and maintenance materials are handed out to  
30 boaters;

- 1           • Developing informational sheets for proper hazardous waste use, disposal, and  
2 storm water information for distribution at the County Fair and Earth Day  
3 celebrations at local public schools;
- 4           • Developing and distributing storm water informational sheets for Environmental  
5 Management’s food facility inspection and hazardous waste management  
6 programs on all permitted businesses;
- 7           • Developing and distributing storm water information sheets for Environmental  
8 Management collection events that accept used oil and household hazardous  
9 waste;
- 10          • Maintaining and operating a call in phone number where parties can contact the  
11 County with environmental concerns;
- 12          • Developing and distributing informational sheets at the County Agriculture public  
13 counter and distributing said sheets to all commercial and private home owners  
14 who are currently permitted for herbicide/pesticide application;
- 15          • Maintaining a County environmental website which offers educational  
16 opportunities and the opportunity for concerned parties to contact the County.
- 17          • A citizen’s advisory committee appointed by the Board of Supervisors (Planning  
18 Commission) acts as the Boards advisor on development and environmental  
19 matters, which would also include storm water and non-storm water issues.

#### 20           4.2.3.1 Resource Conservation District – Watershed Planning

21           The Resource Conservation District currently has Proposition 204 and CalFed  
22 grants for public outreach. Supplemental outreach efforts will be initiated  
23 involving various watershed monitoring and planning studies within Western El  
24 Dorado County. These efforts will be designed to bring together various interest  
25 groups to focus on watershed specific water quality issues.

26           The District also sponsors a Water Education for Teachers Workshop to promote  
27 awareness, appreciation, knowledge, and stewardship of water resources through  
28 the development of classroom-ready teaching aids. In addition, a Water  
29 Education Summit is held annually in October, in which local high school  
30 students are given opportunity and training to learn watershed monitoring  
31 techniques. This four day event takes place on three tributaries near Union Valley  
32 Reservoir in the El Dorado National Forest and exposes students to natural  
33 resource career choices.

#### 34           4.2.3.2 Informational Sheets

35           The County Storm Water Coordinator will actively pursue acquiring educational  
36 sheets prepared by Caltrans, various water quality regulators and others in order  
37 to make these materials available within El Dorado County.  
38

1           4.2.3.3 Web Site

2           The County’s Environmental Management web site has been modified to include  
3           a storm water quality specific element. The web site currently shares information  
4           regarding air quality, solid waste and hazardous material, vector control and  
5           general environmental health. This website will be annually updated and tracked  
6           for 'hits' to this web page.

7                           The site address is: <http://co.el-dorado.ca.us/emd/>

8           The storm water element will provide information on all storm water outreach  
9           activities, including brochures, bulletins and workshops as well as bulletins on  
10          related topics, information related to construction and maintenance activities, and  
11          links to key related sites.

12          The County Storm Water Coordinator will serve in a “clearinghouse” function for  
13          disseminating storm water educational and awareness materials from other  
14          sources to the various County Departments that come into contact with the public.

15          By the end of June 2005, the County’s Environmental Management and DOT web  
16          sites shall be modified to include associated storm water event information as  
17          well as links to other organizational web sites that are hosting storm water and  
18          non- storm water events. This will better inform the public and encourage  
19          increased volunteer participation and involvement in said water quality  
20          enhancement activities that are occurring in Western El Dorado County.

21          4.2.3.4 Storm Drain Stenciling

22          The County is proposing to undertake a stenciling program to apply messages at  
23          storm drain inlets located at key locations and in key facilities such as parks and  
24          other areas with notable dumping problems with the intent of assisting in  
25          educating the public about storm water runoff pollution.

26          By the end of June 2005, stenciling of storm drain DI's will to be required of  
27          developers for new development.

28          By the end of June 2007, the exact locations to be stenciled will be identified and  
29          a standard practice will be in place for initial installation of these messages as  
30          new such locations are constructed.

31          By the end of June 2009, the County will complete its stenciling program for all  
32          existing storm drain inlets described above. All new inlets in the areas described  
33          above will be stenciled when constructed. The stencils will be maintained by the  
34          appropriate responsible County Department.

1           The County will report the progress of its storm drain system stenciling program  
2           in the Annual Report.

#### 3           4.2.3.5 Technical Workshops

4           Periodically, the County Storm Water Coordinator will host, or co-host with the  
5           Resources Conservation District, public workshops that focus on specific storm  
6           water topics. These workshops are for the purpose of discussing storm water  
7           topics currently being researched by the County and others and offer the  
8           opportunity to share information and facilitate a collective focus on potential  
9           solutions to the challenges faced by the County and other watershed stakeholders.

10           These workshops will be held on an as-needed basis, but the expectation is that on  
11           average, one per year will be held.

#### 12           4.2.3.6 Coordination with Volunteer Organizations

13           Volunteer organizations serve a valuable function in the community for a variety  
14           of obvious reasons, and this is no exception in El Dorado County. A few of these  
15           organizations that deal with issues pertinent to storm water are the Parks  
16           Commission, the River Advisory Committee, and the Trails Advisory Committee.

17           The Parks Commission oversees development & maintenance of recreational  
18           opportunities within its borders and works closely with those jurisdictions  
19           endeavoring always to retain as much local control & citizen involvement as  
20           possible. The River Advisory Committee plays a key role in the update of the  
21           County's River Management Plan, which includes improving the management of  
22           whitewater recreation in addition to the preservation of the river corridors  
23           environmental resources, protecting the area's rural character, reducing conflicts  
24           between residents and boaters, and maintaining a quality whitewater boating  
25           experience. The Trails Advisory Committee oversees the implementation of the  
26           bikeway master plan and hiking and equestrian trails plan in the County.

1 Storm water informational sheets that are developed by the County will be  
2 provided to the Parks Commission, the River Advisory Committee, and the Trail  
3 Advisory Committee.

4 Recently, the Board of Supervisors adopted an ‘Adopt-A-Highway’ Program for  
5 the collection of litter along El Dorado County primary and secondary roadways.  
6 The successful partnership of County resources and trained volunteers is intended  
7 to provide valuable assistance to the existing litter collection program. The  
8 Environmental Management Department and DOT are currently in the process of  
9 implementing this program.

10 El Dorado County will continue to use volunteers in the overall effort to reduce  
11 the discharge of pollutants associated with the storm water drainage systems that  
12 serve Western El Dorado County.

#### 14 4.2.4 BMP PROGRAM SUMMARY

15  
16 The following pages contain a summary of the Public Participation and Involvement  
17 BMP program set forth in the El Dorado County Storm Water Management Plan. These  
18 BMPs will be subject to annual reviews and updates as outlined in Sections 3.2 and 5.6.1.

19 EPA’s NPDES rules state:

20 “Implementation of best management practices consistent with the provisions of  
21 the storm water management program required pursuant to this section (the six  
22 minimum control measures, evaluation & assessment, record keeping and  
23 reporting) ... constitutes compliance with the standard of reducing pollutants to  
24 the “maximum extent practicable”.” (40 CFR 122.34)

25  
26 This summary notes BMPs applicable to one of the six minimum control measures:  
27 Public Participation and Involvement. El Dorado County proposes that this program  
28 constitutes fulfillment of the minimum General Permit and Federal Regulation  
29 requirements. As the public review and the SWMP finalization processes proceed, the  
30 program, and the County’s assessment of this program, may change.

**146 4.3.1 OVERVIEW**

147 The section to follow describes how the County ensures compliance with applicable state  
148 laws, regulation, and County ordinances through many existing programs and measures  
149 described herein. This section describes specifically how the County will comply with  
150 Permit requirements by incorporating illicit discharge detection and elimination, into the  
151 overall storm water management program. The County will achieve compliance by  
152 implementing the practices in the subsequent sections:

- 153 • Section 4.3.2 Storm Drain Outfall Identification
- 154 • Section 4.3.3 County Ordinances
- 155 • Section 4.3.4 Detection & Response Plan
- 156 • Section 4.3.5 Public Communications
- 157 • Section 4.3.6 Program Evaluation
- 158 • Section 4.3.7 BMP Program Summary

**159 4.3.2 STORM DRAIN OUTFALL IDENTIFICATION**

160 The Permit requires the County to develop a storm sewer system map showing the  
161 location of all outfalls and the names and locations of receiving waters. The County will  
162 conduct a field inventory of storm drain outfalls for existing development within the  
163 County jurisdictional boundary within the timeframe of June 2005 through June 2008.  
164 Identification of existing storm drain outfalls within the County's total jurisdictional area  
165 will begin no later than the end of June 2005, with a goal of mapping approximately 25%  
166 of the County's total jurisdictional area annually following approval of the SWMP until  
167 June 2008, or until 100% of the jurisdictional area has been covered. Starting in June  
168 2006 and annually thereafter, the County will begin to update maps to include additional  
169 outfalls created from the previous year's new development and or redevelopment. The  
170 estimated percent of jurisdictional area mapped annually will be included in the Annual  
171 Report.

**172 4.3.3 COUNTY ORDINANCES****173 4.3.3.1 Prohibition of Non-Storm Water Discharges**

174 Several County ordinances prohibit non-storm water discharges into the County  
175 storm drain system. All County ordinances are enforceable per County Code  
176 Chapter 1.24, which stipulates fines and/or imprisonment for violators. The  
177 District Attorney is responsible for enforcement actions in instances of reported

178 violations. Beginning in June 2006, and annually thereafter the Storm Water  
179 Coordinator will provide an annual sufficiency review of said ordinances, and will  
180 include in this review an analysis of the adequacy of legal authority.

181 **4.3.3.1.1 Grading, Erosion and Sediment Control Ordinance**

182 The County, by ordinance (County Code Chapter 15.14) authorizes the  
183 County Department of Transportation to regulate all grading activities,  
184 and requires that such activities be undertaken in such a manner that  
185 quantities of sediment or other materials substantially in excess of  
186 nature levels are prevented from leaving the site. Additionally, this  
187 ordinance authorizes the Director of Transportation to require security  
188 deposits, suspend or revoke permits, and for the permittee to warranty  
189 all work. Further, the ordinance requires the Director to record with  
190 the County Recorder, a Notice of Noncompliance when there is a  
191 failure to secure the required permit. Security deposits are held by the  
192 Building Department and provide funding of standard inspections,  
193 with additional inspections.

194 **4.3.3.1.2 Subdivision Design and Improvement Ordinance**

195 The County, by ordinance (County Code Section 16.12.050)  
196 authorizes the Planning Commission, appointed by the Board of  
197 Supervisors to determine whether the discharge of waste from the  
198 proposed subdivision into an existing community sewer system would  
199 result in violation of existing requirements prescribed by a California  
200 Regional Water Quality Control Board pursuant to division 7  
201 (commencing with section 13000) of the Water Code. In the event  
202 that the Planning Commission finds that the proposed waste discharge  
203 would result in or add to violation of requirements of the water quality  
204 control board, it may disapprove the tentative map or maps of the  
205 subdivision.

206 **4.3.3.1.3 Solid Waste Management Ordinance**

207 Pursuant to Government Code Section 25845, the County, by  
208 ordinance (County Code Chapter 8.42), has established a procedure  
209 for the abatement of a nuisance on private property when this  
210 nuisance constitutes an immediate threat to public health. El Dorado  
211 County Ordinance Code Section 8.42.700 authorizes the County  
212 Environmental Management Department to take abatement action  
213 against littering and illegal dumping on public or private property.

214 **4.3.3.1.4 Vehicle Abandonment Ordinance**

215 The County, by ordinance (County Code Section 10.16.070), in  
216 addition to and in accordance with the authority granted by the state  
217 under section 22660 of the Vehicle Code, may determine to abate and



218 remove abandoned, wrecked, dismantled or non-operative vehicles or  
219 parts thereof as public nuisances.

220 **4.3.3.1.5 Liquid Waste Management Ordinance**

221 The County, by ordinance (County Code Section 8.06) prohibits any  
222 hazardous waste which may be defined by either federal or state  
223 statute and regulation, whichever is more stringent; and any grease or  
224 grease trappings from being discharged including potential adverse  
225 health and environmental impacts associated with on-site individual  
226 sewage disposal systems and or transport of liquid waste.

227 **4.3.3.1.6 Hazardous Material Management Ordinance**

228 The County, by ordinance (County Code Chapter 8.38) authorizes the  
229 County Department of Environmental Management to manage the  
230 handling, storage, transport and use of hazardous material.  
231 Additionally, Environmental Management is authorized to inspect for  
232 hazardous materials on private property and oversee clean-up  
233 activities. The County may also require payment to compensate  
234 County time and materials necessary for clean up activities.

235 **4.3.3.1.7 Dust Abatement Ordinance**

236 The County, by ordinance (County Code Chapter 8.44) authorizes the  
237 County Department of Environmental Management to develop and  
238 manage the County's dust abatement and protection program.

239 **4.3.3.1.8 Bear Resistant Garbage Can Ordinance**

240 The County, by ordinance (County Code Section 8.76.030) is  
241 authorized to require the owners, lessees, residents or any other person  
242 exercising physical control of any private property including  
243 businesses to install an approved bear-resistant garbage can enclosure.  
244 This ordinance only applies to new residential construction within  
245 those portions of El Dorado County that lie within the boundaries of  
246 the Silver Fork, Tahoe Truckee Unified, and Lake Tahoe Unified  
247 School Districts.

248 **4.3.3.1.9 Construction Demolition & Debris Recycling Ordinance**

249 The County, by ordinance (County Code Section 8.43), is authorized  
250 to require individuals or businesses demolishing or constructing  
251 projects with structure footprints exceeding 5,000 square feet in area,  
252 to recycle at least one-half of the construction and demolition debris  
253 created.

254 **4.3.4 DETECTION & RESPONSE PLAN**

255 Through permit and inspection processes, as well as public educational programs and  
256 compliance practices, the County serves to protect the public health and promote the  
257 well-being of all El Dorado County residences, workers, and visitors as well as manage  
258 potential and existing illicit discharges and illegal dumping as is required by the Permit.  
259 This is accomplished through many existing County Programs outlined in this section.

260 **4.3.4.1 Project Construction**261 **4.3.4.1.1 Permitted Exempt and Conditionally Exempt Non-Storm Water Discharges**

262 This section describes the County's program for controlling pollutants  
263 from permitted non-storm water discharges stemming from  
264 construction sites.

265 Permitted non-storm water discharges include the following  
266 categories:

267 Discharges Authorized by a Separate NPDES Permit: Since these  
268 discharges have a separate permit, they are not addressed by this  
269 SWMP.

270 Exempted Discharges: These discharges are not expected to contain  
271 pollutants and can therefore be discharged without direct application  
272 of practices. These discharges include:

273 water line flushing;

274 landscape irrigation;

275 diverted stream flows;

276 rising ground waters;

277 uncontaminated ground water infiltration (as defined at 40 CRF  
278 §35.2005(20)) to separate storm sewers;

279 uncontaminated pumped ground water;

280 discharges from potable water sources;

281 foundation drains;

282 air conditioning condensation;

283 irrigation water;

284 springs;

285 water from crawl space pumps;

286 footing drains;

287 lawn watering;

## SECTION 4.3

### *Illicit Discharge Detection and Elimination*

288 individual residential car washing;  
289 flows from riparian habitats and wetlands; and  
290 de-chlorinated swimming pool discharges.  
291 Conditionally Exempt Discharges:  
292 The discharges and their associated practices identified in Table 4.3-1  
293 are not expected to contain pollutants.  
294

**TABLE 4.3-1: NON-STORM WATER PRACTICES FOR CONDITIONALLY EXEMPT DISCHARGES**

Non-Storm Water Discharges	Practice Titles
a. Pumped ground or accumulated rain water	Dewatering Operations
b. Non-potable irrigation water	Non-potable Water/Irrigation

295  
296 The RWQCB has issued a general permit for dewatering, Order No.  
297 CAG995001. Qualifying dewatering operations are able to obtain  
298 permit coverage under this Order by submitting a Notice of Intent  
299 (NOI) to the Regional Board. Allowable discharges must not contain  
300 significant quantities of pollutants and be either four months or less in  
301 duration, or not exceed 0.25 mgd during dry weather. Under the terms  
302 of the permit, monitoring and reporting are required. Copies of this  
303 permit are available from the Regional Board or from the County's  
304 Storm Water Coordinator.

305 Non-potable irrigation water, landscape irrigation and lawn or garden  
306 watering runoff, though minimized, will occur on a regular basis as a  
307 result of excess irrigation water running off vegetated and nearby  
308 impervious areas and into storm drains. These discharges are not  
309 expected to result in the discharge of appreciable pollutants. If these  
310 activities are subsequently found to be resulting in an unacceptable  
311 level of pollutant discharges, the County will undertake to develop, or  
312 require the responsible discharging party to develop, a pollution  
313 management plan.

#### 314 4.3.4.1.2 Non-Permitted Exempt and Conditionally Exempt Non-Storm Water 315 Discharges

316 On construction sites, the CM/RE and the Contractor shall be alert to  
317 and report the potential presence of illicit connections to the County's  
318 storm drain system or illicit discharges.

319 The Permit prohibits the discharge of non-permitted non-storm water  
320 discharges. If a significant unauthorized non-storm water discharge  
321 occurs, the CM/RE will report the discharge to the County's Storm

322 Water Coordinator within 12 hours. The Storm Water Coordinator will  
323 coordinate the reporting of prohibited non-storm discharges to the  
324 RWQCB in accordance with the procedures in Section 5.7.

325 If the non-permitted non-storm water discharge occurs because of the  
326 construction activity, the CM/RE and the Contractor shall endeavor to  
327 immediately halt the discharge and take measures to minimize any  
328 potential re-occurrence.

329 If the non-permitted non-storm water discharge is not due to the  
330 construction activity, then the County's Storm Water Coordinator will  
331 address remediation of the situation with the responsible authorities.

332 The County's Storm Water Coordinator will log and track each reported  
333 non-permitted non-storm water discharge to conclusion. The on-going  
334 log will be included within the Annual Report.

#### 335 4.3.4.2 Municipal Operations

##### 336 4.3.4.2.1 Permitted Exempt and Conditionally Exempt Non-Storm Water Discharges

337 This section describes the County's program for controlling pollutants  
338 from permitted non-storm water discharges from municipal operations,  
339 including parks and maintenance facilities. Previously described spill  
340 prevention, waste management and other practices will be  
341 implemented to ensure that these discharges remain uncontaminated.  
342 These practices eliminate or reduce permitted non-storm water  
343 discharges and reduce water pollution from the County's Maintenance  
344 activities and operations.

345 Permitted non-storm water discharges include the following  
346 categories:

347 Discharges Authorized by a Separate NPDES Permit: Since these  
348 discharges have a separate permit, they are not addressed by this  
349 SWMP.

350 Exempted Discharges: These discharges are not expected to contain  
351 pollutants and can therefore be discharged without direct application  
352 of practices. These discharges include:

353 water line flushing;

354 landscape irrigation;

355 diverted stream flows;

356 rising ground waters;

357 uncontaminated ground water infiltration (as defined at 40 CRF  
358 §35.2005(20)) to separate storm sewers;

359 uncontaminated pumped ground water;  
 360 discharges from potable water sources;  
 361 foundation drains;  
 362 air conditioning condensation;  
 363 irrigation water;  
 364 springs;  
 365 water from crawl space pumps;  
 366 footing drains;  
 367 lawn watering;  
 368 individual residential car washing;  
 369 flows from riparian habitats and wetlands; and  
 370 de-chlorinated swimming pool discharges.  
 371 Conditionally Exempt Discharges:  
 372 The discharges and their associated practices identified in Table 4.3-2  
 373 are not expected to contain pollutants.  
 374

**TABLE 4.3-2: NON-STORM WATER PRACTICES FOR CONDITIONALLY EXEMPT DISCHARGES**

Non-Storm Water Discharges	Practice Titles
a. Pumped ground or accumulated rain water	Dewatering Operations
b. Non-potable irrigation water	Non-potable Water/Irrigation

375  
 376 The RWQCB has issued a general permit for dewatering, Order No.  
 377 CAG995001. Qualifying dewatering operations are able to obtain  
 378 permit coverage under this Order by submitting a Notice of Intent  
 379 (NOI) to the Regional Board. Allowable discharges must not contain  
 380 significant quantities of pollutants and be either four months or less in  
 381 duration, or not exceed 0.25 mgd during dry weather. Under the terms  
 382 of the permit, monitoring and reporting are required. Copies of this  
 383 permit are available from the Regional Board or from the County’s  
 384 Storm Water Coordinator.  
 385 Non-potable irrigation water, landscape irrigation and lawn or garden  
 386 watering runoff, though minimized, will occur on a regular basis as a  
 387 result of excess irrigation water running off vegetated and nearby  
 388 impervious areas and into storm drains. These discharges are not  
 389 expected to result in the discharge of appreciable pollutants. If these  
 390 activities are subsequently found to be resulting in an unacceptable  
 391 level of pollutant discharges, the County will undertake to develop, or

392 require the responsible discharging party to develop, a pollution  
393 management plan.

#### 394 4.3.4.2.2 Non-Permitted Non-Storm Water Discharges

395 On maintenance sites, the MM shall be alert to and report the potential  
396 presence of illicit connections to the County's storm drain system or  
397 illicit discharges.

398 The Permit prohibits the discharge of non-permitted non-storm water  
399 discharges. If a significant unauthorized non-storm water discharge  
400 occurs, the MM will report the discharge to the County's Storm Water  
401 Coordinator within 12 hours. The Storm Water Coordinator will  
402 coordinate the reporting of prohibited non-storm discharges to the  
403 RWQCB in accordance with the procedures in Section 5.7.

404 If the non-permitted non-storm water discharge occurs because of the  
405 maintenance activity or are within the purview of municipal operations,  
406 the MM shall endeavor to immediately halt the discharge and take  
407 measures to minimize any potential re-occurrence.

408 If the non-permitted non-storm water discharge is not as a result of the  
409 maintenance activity or within the purview of municipal operations, the  
410 County's Storm Water Coordinator will address remediation of the  
411 situation with the responsible authorities.

412 The County's Storm Water Coordinator will log and track each reported  
413 non-permitted non-storm water discharge to conclusion. The on-going  
414 log will be included within the Annual Report.

#### 415 4.3.4.2.3 Responsible Parties

416 The County Department of General Services is responsible for the care  
417 and upkeep of the County's parks and general government facilities.  
418 The County Department of Transportation is responsible for the care  
419 and upkeep of the County Roads and associated maintenance yards.  
420 Maintenance activities are most regularly performed directly by  
421 County forces, however on occasion the Departments will hire a  
422 contractor to perform these activities.

423 The respective Departments designate a MM who is in responsible  
424 charge of the activity. This manager is responsible for assuring that  
425 the applicable pollution prevention / good housekeeping practices as  
426 outlined in the SWMP are incorporated within the work.

#### 427 4.3.4.3 Non-County Properties

428 Currently the County regulates illicit discharges through many existing

## SECTION 4.3

### *Illicit Discharge Detection and Elimination*

429 environmental and public health areas, currently managed, through the  
430 Environmental Management Department, Environmental Health Division and the  
431 Solid Waste & Hazardous Materials Division as summarized in Table 4.3-3 below  
432 and described in the section to follow. The County staff responsible for carrying  
433 out these programs will be alert to and report the potential presence of illicit  
434 discharges on non-County properties.

435 The Permit prohibits the discharge of non-permitted non-storm water discharges.  
436 If a significant unauthorized non-storm water discharge occurs, this discharge will  
437 be reported to the County's Storm Water Coordinator within 12 hours. The Storm  
438 Water Coordinator will coordinate the reporting of prohibited non-storm water  
439 discharges to the RWQWB in accordance with the procedures in Section 5.7.

440 The County's Storm Water Coordinator will address remediation of the situation  
441 with the responsible authorities.

442 The County's Storm Water Coordinator will log and track each reported non-  
443 permitted non-storm water discharge to conclusion. The on-going log will be  
444 included within the Annual Report.

445

446 **TABLE 4.3-3: ILLICIT DISCHARGE AND DETECTION ON NON-COUNTY PROPERTIES**

Environmental Health:	Hazardous Materials:	Solid Waste :
Food Facilities	Hazardous Waste/CUPA	Collection/Disposal
Liquid Waste	Household Hazardous Waste	Recycling
Recreational Health	Spills/Emergency Response	Enforcement
Small Water Systems	Medical Waste	Litter Abatement
Public Complaints	Marina Outreach	Garbage Cans/Bears
	Used Oil	Construction Demolition & Debris Recycling
		Material Recovery Facility

447

#### 448 4.3.4.3.1 Food Facilities

449 Under this program, at least twice per year, food facilities are  
450 inspected by the Environmental Management Department.  
451 Environmental health specialists will begin an educational program to  
452 inform food facilities of best management practices to prevent storm  
453 water pollution. An inventory of food establishments will be  
454 conducted to identify problem facilities with significant non-storm  
455 water discharges, and these facilities will be targeted for remedial  
456 efforts.

## 457 4.3.4.3.2 Liquid Waste

458 The program permits liquid waste (septage) haulers and establishes  
459 fees and other financial assurance mechanisms to ensure proper  
460 transport, treatment and disposal of sewage waste. Adequate and safe  
461 construction of new and remodeled sewage disposal systems is also an  
462 element of the program. Since 1996, the liquid waste is disposed of  
463 and treated within the County at the Union Mine Septage Treatment  
464 Facility.

## 465 4.3.4.3.3 Recreational Health

466 The recreational health program ensures the safe and sanitary  
467 operation of commercial rafting outfitter's facilities and sewage  
468 disposal for operations on the South Fork of the American River. The  
469 program includes plan review for compliance with the California  
470 Health and Safety Code and routine inspections.

## 471 4.3.4.3.4 Small Water Systems

472 The Small Water System Program is involved with the permitting,  
473 inspection, and monitoring of 175 small public water systems. The  
474 County is the Local Primacy Agency, under contract with the State  
475 Department of Health Services, to perform the program requirements  
476 that are specified in State and Federal Regulations. El Dorado County  
477 Environmental Management Department oversees the Small Water  
478 System program. The objective of the Small Water System program is  
479 to ensure that all systems operating in the County comply with the  
480 California Safe Drinking Water Act and related regulations. This  
481 department issues permits, monitors water quality data, and conducts  
482 routine inspections to verify compliance. New applications and  
483 changes of ownership are reviewed to verify that the system will be  
484 able to meet technical, managerial, and financial capabilities. This  
485 program inadvertently protects surface waters from possible illicit  
486 discharges containing chlorinated water or other pollutants that may be  
487 contained in the water systems.

## 488 4.3.4.3.5 Public Complaints

489 The Environmental Management Department manages the receipt of  
490 public complaints. All complainant information is confidential. Through  
491 the Environmental Management Department Programs, there is an  
492 opportunity to dispense educational pamphlets to the public during events,  
493 at the offices and through the County Web Site. This information contains  
494 phone numbers for the public to engage a complaint. The public is advised  
495 to be as specific as possible, and to leave a telephone number so an



496 investigating Environmental Health Specialist may contact them. In  
497 addition, they may be requested to provide further information such as  
498 specific directions to a site, historical data, or other information may be  
499 required. The County is prepared to address complaints related to illicit  
500 discharges, for example:

- 501 • Failing septic systems or a septic system illegally repaired or installed
- 502       • A break in a public sewer
- 503       • An illegally installed or destroyed well
- 504       • A contaminated well
- 505       • Rafting company complaints: unsafe food handling, illegal  
506       garbage or liquid waste discharge.
- 507       • Roadside litter
- 508       • Other environmental health or public health issues (vector  
509       control, West Nile Virus, tattoo & piercing parlors, mold,  
510       and lead poisoning)

#### 511 4.3.4.3.6 Hazardous Waste

512 The Department of Environmental Management regulates the storage of  
513 hazardous materials and the generation of hazardous waste. Businesses  
514 that handle hazardous materials are required to submit a Business plan,  
515 which discloses the quantities of hazardous materials and wastes above  
516 designated quantities to the County. The County inspects businesses on a  
517 routine and/or complaint basis, and businesses must adhere to storage  
518 requirements that protect against spills and storm water contamination.  
519 Follow up inspections are conducted as needed to gain compliance.

520 Through a federal program called the Unified Program [Senate Bill 1082  
521 (1993)], created to provide relief to businesses complying with the  
522 overlapping and sometimes conflicting requirements of formerly  
523 independently managed programs the Environmental Management  
524 Department Hazardous Materials Division is approved by Cal-EPA as the  
525 Certified Unified Program Agency (CUPA) for El Dorado County. The  
526 Unified Program is implemented at the local government level by the  
527 CUPAs to consolidate, coordinate, and make consistent the administrative  
528 requirements, permits, inspections, and enforcement activities for the  
529 following environmental and emergency management programs:

- 530       • Hazardous Materials Release Response Plans and  
531       Inventories (Business Plans)
- 532       • California Accidental Release Prevention (CalARP)

- 533 Program
- 534 • Underground Storage Tank Program
- 535 • Aboveground Petroleum Storage Act Requirements
- 536 for Spill Prevention, Control and Countermeasure
- 537 (SPCC) Plans
- 538 • Hazardous Waste Generator and Onsite Hazardous
- 539 Waste Treatment (tiered permitting) Programs
- 540 • California Uniform Fire Code: Hazardous Material
- 541 Management Plans and Hazardous Material
- 542 Inventory Statements

543 The County has developed and implemented a **Hazardous Waste**  
 544 **Management Plan** (Nov. 5, 1990), and reviews the plan at least  
 545 annually for sufficiency, with updates to the plan provided on an as  
 546 needed basis.

547 4.3.4.3.7 Household Hazardous Waste

548 The County has been successfully assisting residents with  
 549 household hazardous waste disposal for over twelve years.  
 550 Recycling promotion efforts are sustained through grant programs  
 551 from the CIWMB. The citizen's of El Dorado County including  
 552 industry, government, agriculture and residential sources are not  
 553 large generators of hazardous waste. The majority (90+%) of the  
 554 hazardous waste stream in El Dorado County consists of waste oil,  
 555 old paint and lead acid car batteries. The following collection  
 556 events and collection facilities exist to inform residents of the  
 557 hazards of illegal disposal, discourage illegal dumping and  
 558 encourage recycling:

- 559 • Certified recycling collection facilities accepting
- 560 automotive fluids, filters and tires, are dispersed in several
- 561 locations within Western El Dorado County; see the Table
- 562 4.3-4 below for a summary of locations and items accepted
- 563 for these *Community Collection Facilities*. These public
- 564 waste oil collection sites are now open seven days/week,
- 565 which the County, in part, has funded.
- 566 • For old paint and car batteries as well as for uncommon
- 567 items such as expired or banned pesticides, herbicides,
- 568 solvents, paint strippers, etc., the County has implemented
- 569 periodic *One-Day Collection Events*. The County

## SECTION 4.3

### *Illicit Discharge Detection and Elimination*

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- 570 continues to conduct one-day collection events in the more  
571 remote areas including Meek's Bay, Mt. Aukum and the  
572 Georgetown-Divide. One-day collection events occur  
573 several times throughout the year at various locations. For  
574 more information see the Event Calendar on the County  
575 Department of Environmental Management Website.
- 576
- 577 • The County in a cooperative arrangement with the El  
578 Dorado Hills Fire Department, Lake Valley Fire  
579 Department, and Western El Dorado Recovery Systems,  
580 Inc. (Diamond Springs) has opened *Permanent Collection  
Facilities* for hazardous waste, as shown in Table 4.3-5.

## SECTION 4.3

## *Illicit Discharge Detection and Elimination*

581

582 TABLE 4.3-4: COMMUNITY COLLECTION FACILITIES

Locations	Items Accepted
<b>CAMERON PARK</b>	
Big O Tires: 3321 Durrock Road	T
(C) Jiffy Lube: 2540 Merrychase Drive	O
(C) Jiffy Lube: 3470 Palmer Drive	O
(C) Kragen Auto Parts #4020: 3398 Coach Lane	O
<b>CAMINO</b>	
(C) El Dorado County Fire District: 4040 Carson Road	O
<b>DIAMOND SPRINGS</b>	
(C) El Dorado Disposal / Materials Recovery Facility: 4100 Throwita Way	A, B, BF, F, O, T
<b>EL DORADO HILLS</b>	
(C) El Dorado Hills Fire Station: 3670 Bass Lake Road	A, B, F, O
<b>GEORGETOWN</b>	
(C) 193 Auto Parts: 6490 Highway 193 S	O
<b>LOTUS</b>	
(C) Ceccardi Feed Store: 7170 Highway 49	O
<b>PLACERVILLE</b>	
(C) Kragen Auto Parts #280: 3970-F Missouri Flat Road	O
McIntires & Tubes Goodyear Center: 1415 Broadway	T
Placerville Firestone Tire, Brake & Alignment: 796 Cary Alley	T
<b>POLLOCK PINES</b>	
(C) Crystal View Station: 6529 Pony Express Trail	F, O
<b>SOMERSET</b>	
(C) Pioneer Fire District: 7061 Mt. Aukum Road	O

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586

Notes: A=Antifreeze, B=Batteries, BF=Brake Fluid, F=Oil Filters, O=Used Oil, P=Oil Pads, T=Tires, and (C) Certified Oil Center. Certified Centers accept lubricating oil at no charge and will offer a recycling incentive payment.

587

TABLE 4.3-5: PERMANENT COLLECTION FACILITIES

Locations	Items Accepted
El Dorado Disposal Materials Recovery Facility: 4100 Throwita Way Diamond Springs	A, B, C, D, E, F, H, L, M, N, O, P, S, T, V
El Dorado Hills Fire Station: 3670 Bass Lake Road El Dorado Hills	A, B, V, D, E, F, H, L, M, O, P, S, T,

588  
589  
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592

Notes: A= Aerosols, B=Batteries, C= Corrosives, D= Antifreeze, E= Fluorescent Lights, F= Filters and Oil, H= Household Chemicals (i.e. Photo, Pool, Cleaners), L= Latex Paint Containers (5 gal ea, 20 gal limit per trip), M= Mercury Containing Devices, N= Needles, P= Pesticides/Herbicides (5gal limit per trip), S=Sealants/Adhesives, T= Thinners/Solvents, and V= Propane Tanks (10 gal maximum size limit).

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594

**4.3.4.3.8 Spills**

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The safe and efficient emergency response to Hazardous Materials events in El Dorado County depends on cooperation between multiple agencies. The Solid Waste and Hazardous Material Division of the Environmental Management Department leads this important team effort with close cooperation with law enforcement, fire and allied health agency officers and staff. Special attention is given to the hazardous materials used and transported frequently in the county by our local businesses.

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Training to prepare for possible biological, nuclear, incendiary, chemical and explosive hazards used in criminal or terrorist activities are also provided. Preparedness activities include training of team members to appropriate levels of response capability, multi-agency workshops, tabletop exercises, field training and drills. The Environmental Management Department is responsible for after hours on-call support for all Department Programs including HazMat, Air Pollution, Sewage Spills, Water Pollution, Food Poisonings, and Union Mine Landfill Issues in a typical year, 40 – 50 incidents are responded to including routine spills of vehicle fuels, unknown white powders in the mail, the release of toxic Chlorine gas, as well as, a variety of other hazardous conditions.

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The County has developed and implemented a Hazardous Materials Emergency Response Plan (Jan. 1995; Updated Oct. 2003), which establishes the policies, responsibilities, and procedures required to protect the health and safety of El Dorado County’s citizens, the environment and public and private property from the effects of hazardous materials incidents. The plan details emergency response

620 organization for incidents, and defines operational concepts and  
621 procedures associated with the created Interagency Hazardous  
622 Materials Response Team (HMRT). This is an operational plan as  
623 well as a reference document for pre-emergency planning as well as  
624 emergency response. The County reviews the plan at least annually,  
625 with an update to the plan, as needed. Depending on the circumstances  
626 of the spill, this coordination is made directly or through the Office of  
627 Emergency Services (OES). All significant spill incidents are reported  
628 to the County's Storm Water Coordinator.

629 **4.3.4.3.9 Marina Outreach**

630 The County Environmental Management Department has taken the  
631 lead in a comprehensive marina program that is being used to educate  
632 boaters using Lake Tahoe, Folsom, Sly Park, and Echo Lakes. This  
633 program educates boaters about clean boating practices, and makes  
634 them aware of the potential risk to the environment that can be caused  
635 by bad habits. Information is provided on the impacts of these  
636 practices, which may include: illegal disposal of used oil, operating  
637 poorly maintained watercraft, and pumping bilge water over board.

638 The main effort of the program is to have boat owners use oil  
639 absorbent pads and pillows. The oil absorbent pads are used to keep  
640 gasoline out the lakes during fueling. The oil absorbent pillows are  
641 placed around the engine of the boat to absorb oil and gasoline, which  
642 can leak into the bilge water. There are locations of collection and  
643 disposal of the pads and pillows at each marina. These oil absorbent  
644 pads and pillows are handed out to the public in a boat bucket kit,  
645 which also includes a bucket, a floating key chain, towel, and a ski  
646 flag. In order to receive a kit the boat owner must fill out a survey. The  
647 survey contains question as to whether or not the said person changes  
648 their boat motor oil and how he/she disposes of it. Their zip code is  
649 also asked so the County can trace what population they are reaching.

650 **4.3.4.3.10 Medical Waste**

651 If not disposed of properly, medical waste poses a very serious threat  
652 as a puncture hazard and as a vector to transmit diseases, such as  
653 hepatitis, HIV, and tetanus. Improperly disposed medical waste is also  
654 a significant ecological threat, as images of medical waste washing up  
655 on the shores of beaches all too eloquently illustrate. Within the  
656 regulatory framework of the Medical Waste Management Act, the  
657 Hazardous Materials Division ensures the proper handling and  
658 disposal of medical waste throughout El Dorado County. The public is  
659 informed of medical waste transporters who dispose of home  
660 generated medical waste and commercially generated medical waste

661 (both large and small quantity generators. The County regulates and  
662 charges fees of commercial medical waste generators (hospitals,  
663 clinics, laboratories, and medical, dental, and veterinary facilities).  
664 Non-commercial medical waste producers residing in El Dorado  
665 County are informed of how to handle their waste and encouraged to  
666 use this free service available to them through coordination with the  
667 Materials Recovery Facility.

668 4.3.4.3.11 Used Oil

669 The Environmental Management Department has launched a used  
670 oil/oil filter recycling and re-refined oil promotional program at the  
671 Placerville Speedway, sponsoring a sprint car driver and encouraging  
672 consumers to buy back re-refined oil.

673 4.3.4.3.12 Universal Wastes

674 Universal wastes are common items, which because of their chemical  
675 content are considered hazardous wastes, but they pose a relatively  
676 low risk to the user when handled in a normal manner. However, if  
677 these items are damaged or disposed of into a landfill they can release  
678 their hazardous contents and pose a risk to human health and the  
679 environment. Items such as fluorescent lights, mercury thermostats,  
680 household batteries, consumer electronic devices (CEDs) and  
681 computer monitors, also known as cathode ray tubes (CRTs), are all  
682 classified as universal wastes. The fluorescent lights, thermostats, and  
683 batteries generated by households can be disposed free of charge at the  
684 HHW permanent collection centers listed above. The Diamond  
685 Springs disposal site will accept CRTs and CEDs for a fee.

686 4.3.4.3.13 Collection / Disposal

687 The Union Mine Disposal Site, comprised of 280 acres of public  
688 property, is the last remaining and active landfill property in the  
689 County. The existing permitted landfill unit is confined to 59.5 acres  
690 within the middle of the Union Mine property [a number of permits are  
691 required to operate a landfill including those from the State Integrated  
692 Waste Management, Regional Water Quality Control and Air  
693 Resources Boards].

694 Sierra Disposal Service is proposing to build a small volume transfer  
695 station and recycling facility within the Georgetown/Divide area. Such  
696 a facility is imperative to combat illegal dumping and to provide  
697 convenient opportunities for disposal and the recycling of materials.  
698 Similar small-scale facilities may also be proposed in other portions of  
699 the County.

700                    4.3.4.3.13        **Recycling**

701                    Waste reduction, reuse, and recycling in El Dorado County is  
702                    encouraged due to a federal mandate requiring the County to divert  
703                    50% of their waste from landfills. The program strives to encourage  
704                    the community to do their part to achieve this goal through distribution  
705                    of information on recycling locations, reuse opportunities, and ways to  
706                    reduce waste in the home and business. Non-storm water  
707                    informational sheets will accompany materials distributed at  
708                    community events, recycling centers and through the County website.

709                    4.3.4.3.15        **Enforcement**

710                    The County's Solid Waste Ordinance, which governs the  
711                    accumulation, storage, collection and disposal of solid waste generated  
712                    on residential, commercial and industrial properties within the County  
713                    is enforced by the Department of Environmental Management.  
714                    Complaints alleging improper solid waste management practices on  
715                    the West slope of the County can be lodged by calling or by email  
716                    through either the telephone phone number and link posted on the  
717                    County website.

718                    4.3.4.3.14        **Litter Abatement**

719                    El Dorado County operates a roadside litter collection program.  
720                    Permanent staff and low-risk inmates collect litter from the County  
721                    Jail. Litter is collected along the County maintained roads and the  
722                    State Highways. Because there are literally thousands of miles of  
723                    County maintained roadways within the County, priority is given to  
724                    the more heavily used roadways and those where significant  
725                    accumulations of litter exist.

726                    4.3.4.3.15        **Garbage Cans/Bears**

727                    To enhance public safety and eliminate conditions that attract bears,  
728                    residents that live within the boundaries of the Silver Fork School  
729                    District are required to install bear resistant garbage can enclosures, in  
730                    conjunction with new construction. This ordinance may also reduce  
731                    the likelihood of garbage/debris being dispersed throughout these  
732                    neighborhoods due to the bears, and subsequently other animals  
733                    rummaging through garbage cans.



## 734 4.3.4.3.16 Construction Demolition &amp; Debris Recycling

735 Through the Construction and Demolition Debris Recycling Ordinance  
736 (Code 8.43), individuals or businesses demolishing or constructing  
737 projects with structure footprints exceeding 5,000 square feet in area,  
738 are required to recycle at least one-half of the construction and  
739 demolition debris created. Workshops are hosted and information is  
740 distributed to inform generators of their requirement to recycle and of  
741 strategies they can enlist to meet this requirement.

## 742 4.3.4.3.17 Material Recovery Facility

743 West Slope County residents are served by a Material Recovery  
744 Facility located in Diamond Springs. The facility accepts material for  
745 disposal, as well as recycling. Household hazardous waste is accepted  
746 free of charge.

## 747 4.3.4.4 Leaseholder Review and Inspections

748 The County owns several parcels of property. Many of these properties are leased  
749 to third parties. These third parties carryout a variety of activities on these  
750 properties. These properties and their leases will be reviewed by the County's  
751 responsible Department, General Services, to assure that the terms of the lease  
752 allow enforcement of the Permit and SWMP requirements and that the lease  
753 holders are carrying out appropriate pollution management practices.  
754 Identification of these leases and review of the lease terms will be accomplished  
755 by the end of June 2006.

756 Where the terms of the leases are not presently sufficient to allow for this  
757 enforcement, efforts will be initiated to amend or replace the lease with one that  
758 allows the County to enforce the Permit and SWMP. It will be necessary to set  
759 individual time schedules for each property to upgrade, as necessary, the terms of  
760 the leases. As these leases are reviewed, deficiencies identified, and time  
761 schedules set, the results will be reported in the Annual Report.

762 The County will undertake a general compliance review on all leased properties  
763 by the end of June 2006. If deficiencies in storm water pollution practices are  
764 identified, the leaseholder will be so informed, and requested to undertake  
765 appropriate practices. For those properties with deficiencies and with lease terms  
766 allowing enforcement, the County will undertake to ensure that the leaseholder  
767 responds appropriately. However, if there are noted deficiencies and the lease has  
768 not yet been amended to allow enforcement, the property will be "flagged" for  
769 revisit upon amendment of the lease terms. In this later situation, if the identified  
770 deficiencies are seen as an immediate threat to public health, the County will

771 initiate abatement action per County Ordinance Code Section 8.42.700. The  
772 Annual Report will summarize the results of these leased property inspections.

773 **4.3.4.5 Facility Pollution Prevention Plans**

774 It is required that Facility Pollution Prevention Plans for County's  
775 highway maintenance facilities include an inventory of facilities and  
776 activities for each site, a site map and a compliance status report. As  
777 applicable, the MM shall provide a schedule for achieving compliance,  
778 and identify improvements needed to enhance pollution minimization  
779 activities. By the end of June 2006, Annual Reviews of the FPPPs and  
780 of the maintenance facilities will occur with annual reporting of results  
781 and actions to the RWQCB.

782 **4.3.5 PUBLIC COMMUNICATION**

783 **4.3.5.1 Public Outreach**

784 The County currently utilizes a variety of methods to educate and  
785 outreach to the public about the importance of managing pollutants  
786 that potentially could enter storm water. The existing program  
787 includes:

788 An annual outreach occurs at Folsom, Ice House, Sly Park, and Union  
789 Valley Reservoir, in which free educational and maintenance materials  
790 are handed out to boaters.

- 791 • Developing and distributing informational sheets by Environmental  
792 Management for proper hazardous waste use and disposal and storm water  
793 information at the County Fair and Earth Day celebrations at local public  
794 schools.
- 795 • Developing and distributing storm water informational sheets for  
796 Environmental Management's food facility inspection program on all  
797 permitted businesses.
- 798 • Developing and distributing storm water information sheets for  
799 Environmental Management collection events that accept used oil and  
800 household hazardous waste.
- 801 • Maintaining and operating a call-in phone number where parties can  
802 contact the County with environmental concerns,
- 803 • Developing and distributing storm water informational sheets at the  
804 County Agriculture Department public counter as well as to all  
805 commercial and private home owners who are currently permitted for  
806 herbicide/pesticide application.

- 807                   • Maintaining a County environmental website which offers educational  
808 opportunities and the opportunity for concerned parties to contact the  
809 County.

810                   The County will, by the end of June 2006, be supplementing these  
811 efforts by:

- 812                   • Adding to the County’s informational sheets, a storm water specific  
813 informational sheet.

- 814                   • Adding a storm water specific component to the County’s environmental  
815 website.

- 816                   • Developing storm water informational sheets to the public in following  
817 categories: general, planning/design, and construction practices.  
818 Information sheets will be distributed to engineering/construction firms,  
819 County departments, and the public who obtain grading/construction  
820 permits.

- 821                   • Developing and distributing storm water informational sheets for all five  
822 (5) public libraries.

823                   The County Storm Water Coordinator will serve in a “clearinghouse”  
824 function for disseminating storm water educational and awareness  
825 materials from other sources to various County Departments that  
826 encounter the public.

827                   The written materials are designed to appeal to the general public (in  
828 easy-to-read formats) while providing technical information on  
829 selected storm water activities and pollution management.

#### 830           4.3.5.2 Informational Exchange with Contractors

831                   For contract work directly undertaken by the County, three types of  
832 informational exchange sessions will be employed to describe storm  
833 water pollution prevention concepts and practices and to explain  
834 techniques for preparing SWPPPs for construction activities.

835                   Informational Exchange #1, Storm Water Permit Compliance  
836 Requirements, Pre-Bid Meeting: Pre-bid meetings may be conducted  
837 to discuss a given upcoming construction project. When such  
838 meetings are held, and depending on the sites storm water  
839 complexities, the site manager may provide general information to  
840 construction contractors regarding the requirements in the Permit and  
841 the SWMP that apply to the subject project (i.e., the project on which  
842 the contractors are considering submitting bids).

843                   Informational Exchange #2, Storm Water Permit Compliance  
844 Requirements, and Pre-Construction Meeting: The site manager provides

845 project-specific guidance to construction contractors on topics such as  
846 SWPPP preparation, selection of practices, and monitoring and  
847 inspection of said practices. The County will also notify the RWQCB  
848 of the pre-construction meeting to allow an RWQCB representative to  
849 be at the meeting to review and discuss the water quality issues  
850 relating to the construction project.

851 Additional Informational Exchanges: The site manager will hold  
852 informal ad hoc sessions with contractors, as needed, during the course  
853 of the construction project.

854 The topics covered in informational exchanges will be updated as  
855 needed to reflect modifications to the County's storm water  
856 management program.

#### 857 4.3.5.3 Resource Conservation Districts

858 The County will work with the local Resource Conservation District  
859 and others to provide outreach to private project planners, designers  
860 and construction contractors to raise their awareness and  
861 understanding of the problems and causes of storm water pollution and  
862 to explain their responsibilities. This outreach will be done primarily  
863 through informational exchanges between the County and these  
864 parties. The informational exchanges cover the following topics:

- 865 • The provisions, conditions and requirements of the Permit that apply to  
866 their projects;
- 867 • The availability of the SWMP and associated training and guidance  
868 material prepared by the County; and
- 869 • General responsibilities of project site manager regarding implementation  
870 of the SWMP, the requirements of a SWPPP.

871 The County Storm Water Coordinator will work with local organizations to  
872 annually host workshops / informational exchanges focused on these topics. The  
873 first workshop will be held by the end of June 2005.

### 874 4.3.6 PROGRAM EVALUATION

#### 875 4.3.6.1 Self Audit

876 As a quality control mechanism to help the County to determine how well the  
877 activities identified in this SWMP are being implemented. The self-audit is  
878 viewed as independent from line management. The information gathered from  
879 these self-audits will be shared with, and considered by the County's SWAC and  
880 management as part of the process to annually update the SWMP. The results of

881 the self-audit will be included in the Annual Report.

882 The goals of the County self-audit program are:

- 883 • To evaluate the efficiency and effectiveness of the activities outlined in
- 884 the SWMP;
- 885 • To provide a sound basis for re-directing or refining such activities;
- 886 • To recommend ways to revise or refine the SWMP, as needed; and
- 887 • To assess compliance with Permit and program requirements.

#### 888 4.3.6.2 Departmental Review

889 The Storm Water Coordinator will provide a review of the departments  
890 responsible for administering the provisions of the ordinances and, as appropriate  
891 measures will be developed and implemented to ensure departments effectively  
892 achieve compliance. Each department's program elements with respect to  
893 enforcement will be reviewed annually, followed by an annual meeting with  
894 department managers to discuss those measures to be developed and  
895 implemented.

896 The primary mechanism for accomplishing program evaluation and ensuring that  
897 the County's front line personnel have adequate knowledge and assistance to be  
898 successful is the day-to-day supervision by the responsible managers. This  
899 supervision includes observing and evaluating design and construction personnel  
900 as they implement the requirements of the SWMP on both County and private  
901 projects, and maintenance personnel as they conduct their assigned activities. In  
902 addition to day-to-day oversight by the responsible managers, the County's Storm  
903 Water Coordinator will provide focused follow-up activity reviews on a regular  
904 basis. Feedback from this oversight will assist the County in addressing the  
905 following types of questions:

- 906 • Is the County properly integrating storm water management practices
- 907 into planning, designing, and constructing both County and private
- 908 projects?
- 909 • Are the County's efforts to incorporate storm water practices into
- 910 maintenance activities effective and efficient?
- 911 • Are the organizational structures and procedures functioning
- 912 effectively and efficiently for performance of the County's water
- 913 quality protection measures?
- 914 • Are the County's training programs and guidance materials sufficient?
- 915 • Are the procedures for incorporating practical practices into daily
- 916 activities functioning properly?

## 917 4.3.6.3 Storm Water Advisory Committee

918 The County’s Storm Water Coordinator will host quarterly meetings of the  
919 County’s Storm Water Quality Advisory Committee (SWAC) to review  
920 progress in SWMP implementation. These meetings will serve to identify  
921 the key issues and recommendations for improvement within the County’s  
922 program and to ensure communication/cooperation between Departments  
923 and functions.

924 **4.3.7 BMP PROGRAM SUMMARY**

925 The following pages contain a summary of the Illicit Discharge Detection and  
926 Elimination BMP program set forth in the El Dorado County Storm Water Management  
927 Plan. These BMPs will be subject to annual reviews and updates as outlined in Sections  
928 3.2 and 5.6.1.

929 EPA’s NPDES rules state:

930 “Implementation of best management practices consistent with the provisions of  
931 the storm water management program required pursuant to this section (the six  
932 minimum control measures, evaluation & assessment, record keeping and  
933 reporting) ... constitutes compliance with the standard of reducing pollutants to  
934 the “maximum extent practicable.” (40 CFR 122.34)

935 This summary notes BMPS applicable to one of the six minimum  
936 control measures: Illicit Discharge Detection and Elimination. El  
937 Dorado County proposes that this program constitutes fulfillment of  
938 the minimum General Permit and Federal Regulation requirements.  
939 As the public review and the SWMP finalization processes proceed,  
940 the program, and the County’s assessment of this program, may  
941 change.

**1 4.4.1 OVERVIEW**

2 The County complies with State Water Resources Control Board's storm water discharge  
3 permit requirements by incorporating storm water management into the County's process  
4 to design and construct County facilities and the County's process to oversee the  
5 execution of design and construction proposed to be carried out by third parties subject to  
6 permitting by the County. These storm water permit requirements are as set forth in the  
7 Board's statewide construction general permit and the small municipal separate storm  
8 sewer systems general permit.

9 The State Board has defined construction as:

10 "… clearing, grading, disturbances to the ground such as stockpiling, or  
11 excavation that results in soil disturbances …". "Construction activity  
12 does not include routine maintenance to maintain original line and grade,  
13 hydraulic capacity, or original purpose of the facility, nor does it include  
14 emergency construction activities required to protect public health and  
15 safety."

16 Regulated construction sites subject to this Design/Construction Storm Management  
17 Program involve at least one acre of construction as defined above, or less if the site is  
18 part of a larger common plan of development that encompasses more than one acre of  
19 construction.

20 El Dorado County specifically exempts from this Design/Construction Storm Water  
21 Management Program, the following:

- 22 • Individual single family homes not a part of a master planned (production home  
23 development) owned by a single owner which disturb less than 1 acre of soil,
- 24 • Agricultural operations not involving the construction of buildings, and
- 25 • Fire suppression / prevention activities.

26 The State Board requires that the property owner proposing to undertake a construction  
27 project seek coverage under the Board's statewide construction general permit by filing a  
28 Notice of Intent (NOI) and filing fees with the local Regional Water Quality Control  
29 Board prior to commencement of construction; and upon completion of construction,  
30 similarly file a Notice of Termination (NOT). Further, the property owner is required to  
31 develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for the  
32 construction site, which specifies the specific practices that will be implemented on the  
33 site.

34 The County will comply with Permit requirements by incorporating construction site

35 runoff controls into the overall storm water management program. These requirements  
36 apply to both construction (as defined above) proposed to be undertaken directly by the  
37 County and construction proposed to be permitted by the County and undertaken by  
38 others.

39 Compliance will be achieved through development and implementation of practices in  
40 the following sections:

- 41 • Section 4.4.2 General Program
- 42 • Section 4.4.3 County Development Standards
  - 43 ○ Grading, Erosion and Sediment Control Ordinance
  - 44 ○ Design and Improvement Standards Manual
  - 45 ○ Drainage Manual
- 46 • Section 4.4.4 General Construction Site Practices
- 47 • Section 4.4.5 Minimum Construction Site Practices
- 48 • Section 4.4.6 Inspections and Enforcement
- 49 • Section 4.4.7 County Ordinances
- 50 • Section 4.4.8 Public Communications
- 51 • Section 4.4.9 BMP Program Summary

#### 52 4.4.2 GENERAL PROGRAM

53 The County currently has in place extensive policies and procedures for regulating design  
54 and construction activities to protect the Region's water resources, as described in  
55 Section 4.4.3, which defines the elements of the County's Development Standards.  
56 Additionally, the County is proposing a specific set of General and Minimum  
57 Requirements for Construction Site Storm Water Practices as explained in Sections 4.4.4  
58 and 4.4.5 respectively.

59 The design and construction site practices selected and implemented by the responsible  
60 party for a given site are expected to be sufficient to achieve compliance with the State of  
61 California NPDES General Permits for Storm Water Discharges Associated with  
62 Construction Activity and Small Municipal Separate Storm Sewer Systems.

63 A site's program is required to adhere to the minimum prescribed practice requirements



64 as set forth within the SWMP; and the site manager is required to select additional  
65 practices from the referenced guidance materials, as may be necessary, to achieve the  
66 permit requirements. If there arise any questions about the selection of practices, the  
67 responsible party is to contact the County's Storm Water Coordinator. Inspection and  
68 Enforcement Procedures (Section 4.4.6) as well as County Ordinances (4.4.7) will allow  
69 monitoring of construction activities and assure compliance with the required practices  
70 set forth herein. Public communications will occur through the web, and via County  
71 offices, and County workshops, as described in Section 4.4.8. BMPs applicable to the  
72 minimum control measures are summarized in Section 4.4.9.

### 73 4.4.3 COUNTY DEVELOPMENT STANDARDS

74 The County's Development Standards, which include the Grading, Erosion and Sediment  
75 Control ordinance; the County's Design and Improvement Standards Manual; and the  
76 County's Drainage Manual contain measures and practices required upon all parties  
77 undertaking construction to minimize the discharge of pollutants from the construction  
78 sites.

79 In addition, the County will provide a sufficiency review with respect to the enforcement  
80 of the County Development Standards, and as appropriate, recommend to the County  
81 Board of Supervisors the adoption of more effective ordinances and standards. Said  
82 revisions will be reflected in the SWMP Annual Report.

#### 83 4.4.3.1 Grading, Erosion and Sediment Control Ordinance

84 The Grading, Erosion and Sediment Control Ordinance requires that permittees be  
85 responsible to:

- 86 • prevent discharge of sediment from the site in quantities greater than  
87 before the grading occurred, to any watercourse, drainage system or  
88 adjacent property; and
- 89 • protect watercourses and adjacent properties from damage by erosion,  
90 flooding, or deposition, which may result from the permitted  
91 grading.

92 Additionally, the Ordinance authorizes the Director of Transportation to:

- 93 • require security deposit to assure faithful performance,
- 94 • suspend or revoke the permit and abate a hazardous public nuisance  
95 condition, and
- 96 • require a one-year warranty on all work.

97 This Ordinance requires of the permittee the following:

- 98 • The slope of cut and fill slopes shall not be steeper than two horizontal to  
99 one vertical, exclusive of terraces and slope roundings, except when  
100 supported by bedrock and/or in accordance with a geotechnical or  
101 geological report. Further, the Director of Transportation may require fill  
102 slopes to be flatter for stability purposes.
- 103 • Drainage shall be effected in such a manner that it will not cause erosion  
104 or endanger the stability of any cut or fill slopes.
- 105 • Grading plans shall be designed with long-term erosion and sediment  
106 control as a primary consideration.
- 107 • Grading operations during the rainy season (from October 15th to May  
108 1st, inclusively) shall provide erosion and sediment control measures  
109 except upon a clear demonstration to the satisfaction of the Director of  
110 Transportation that at no stage of the work will there be any substantial  
111 risk of increased sediment discharge from the site.
- 112 • Should grading be permitted during the rainy season, the smallest  
113 practicable area of erosive land shall be exposed at any one time during  
114 grading operations and the time of exposure shall be minimized.
- 115 • Wherever possible, natural features, including vegetation, oak trees,  
116 terrain, watercourses, wetlands and similar resources shall be preserved.  
117 Limits of grading shall be clearly defined and marked to prevent damage  
118 by construction equipment. Wetlands and oak trees so marked, shall be  
119 protected from construction activity.
- 120 • Permanent drought-resistant vegetation and structures for erosion and  
121 sediment control shall be installed as soon as possible.
- 122 • Adequate provision shall be made for long-term maintenance of  
123 permanent erosion and sediment control structures and vegetation.
- 124 • No topsoil shall be removed from the site unless otherwise directed or  
125 approved by the Director of Transportation. Topsoil overburden shall be  
126 stockpiled and redistributed within the graded area after rough grading to  
127 provide a suitable base for seeding and planting. Runoff from the  
128 stockpiled area shall be controlled to prevent erosion and resultant  
129 sedimentation of receiving water.
- 130 • Runoff shall not be discharged from the site in quantities or at velocities  
131 substantially above those, which occurred before the grading except into

132 drainage facilities, whose design has been specifically approved by the  
133 Director of Transportation.

134 • Permittee shall take reasonable precautions (i.e. stabilized construction  
135 entrances/exits and/or wash racks) to ensure that vehicles do not track or  
136 spill earth materials into public streets and shall immediately remove such  
137 materials if this occurs.

138 • Erosion and Sediment Control Plans shall include an effective  
139 revegetation program to stabilize all disturbed areas that will not be  
140 otherwise protected.

141 • Erosion and Sediment Control Plans shall be designed to prevent  
142 increased discharge of sediment at all stages of grading and development  
143 from initial disturbance of the ground to project completion. Every  
144 feasible effort shall be made to ensure that site stabilization is permanent.  
145 Plans shall indicate the implementation period and the stage of  
146 construction where applicable.

147 • Erosion and Sediment Control Plans shall provide for inspection and  
148 repair of all erosion and sediment control facilities at the close of each  
149 working day during the rainy season and for specific sediment cleanout  
150 and vegetation maintenance criteria.

#### 151 4.4.3.2 Design and Improvement Standards Manual

152 Among the key provisions of the County's Design and Improvement Standards  
153 Manual administered by the County Planning Department are minimum lot sizes  
154 and general development standards for varying slope conditions. These standards  
155 are set to minimize the environmental effects of construction.

#### 156 4.4.3.3 Drainage Manual

157 The Department of Transportation's Drainage Manual prescribes planning and  
158 design criteria for drainage facilities within the County. Among the key  
159 provisions of the County's Drainage Manual include:

160 • The planning and design of drainage systems within El Dorado County  
161 shall take into consideration any potential downstream impacts including  
162 those to property, flow regimes, water quality or riparian and wetland  
163 areas. Provisions mitigating potential impacts shall be included as a part  
164 of the drainage analysis for the proposed project.

165 • Increases in storm runoff from upstream properties resulting from  
166 improvements is discouraged.

- 167                   • Improvements that propose to increase storm water runoff shall be  
168                   evaluated to show, among other things, that land of downstream properties  
169                   is not lost due to increased flood plain limits, there is no increase in  
170                   erosion, and there is no net loss of storage available to attenuate peak  
171                   flows. When downstream properties are unable to adequately  
172                   accommodate increases in storm water runoff, appropriate mitigation  
173                   measures shall be implemented into the analysis and design. These  
174                   mitigation measures may include storm water storage facilities (detention  
175                   or retention structures) designed to hold storm water and then releasing it  
176                   at a rate that will not cause damage downstream.
- 177                   • The County has approved the use of two types of detention basins, dry and  
178                   wet basins. However, due to the added long-term maintenance  
179                   requirements and vector concerns associated with wet basins, their use  
180                   requires site-specific approval by the County.
- 181                   • The County has approved the use of retention (infiltration) basins.  
182                   However, due to varying site-specific infiltration concerns and added  
183                   long-term maintenance requirements their use requires site-specific  
184                   approval by the County. While the implementation of detention or  
185                   retention facilities on-site to attenuate peak runoff to a level which does  
186                   not impact downstream facilities is acceptable, the County sees facilities  
187                   designed as a component of a watershed planning process (classified as  
188                   regional or downstream storage facilities) as potentially being more  
189                   economical and effective. Coordinated regional detention/retention  
190                   facilities that take into account the entire watershed area are preferred.  
191                   When a regional drainage study has been conducted and regional basins  
192                   are designed, the regional basin will always take precedence over local  
193                   basin design.
- 194                   • The use of natural channels for the collection and conveyance of storm  
195                   water runoff is preferred. Natural channels shall be capable of conveying  
196                   runoff without increased erosion, widening and meandering of the channel  
197                   alignment due to increased runoff from development.
- 198                   • Grass lined channels are viable only for channels with relatively flat  
199                   slopes. Successful grass lined channels require maintenance both for the  
200                   establishment of the root network and to control the length of the grass.
- 201                   • Where appropriate, floodplain and open space criteria shall comply with  
202                   FEMA standards and the 100-year flood plain shall be designated.
- 203                   • In order to determine the proper type of channel stabilization and flood &  
204                   water quality protection measures, the following issues should be

- 205 considered during the planning and design of drainage improvements:
- 206 ○ The effect that any changes in the runoff hydrograph may have  
207 upon the floodplain limits.
  - 208 ○ The effect that potential growth of vegetation in the channel or  
209 floodplain has upon the long-term flood protection of adjacent  
210 development.
  - 211 ○ The effect that channelization of an existing stream has upon the  
212 natural floodplain storage volume.
  - 213 ○ The effect that increases of either peak flow or velocity may have  
214 on channel erosion or deposition.
  - 215 ○ The effect that the proposed development project will have on both  
216 short-term and long-term sediment production. This includes  
217 measures to control erosion during construction.
  - 218 ○ For projects, which propose the creation or expansion of  
219 permanent water bodies, the effect that, a change in water  
220 temperature will have upon fish and wildlife.
  - 221 ○ The role that drainage improvements will play in managing  
222 pollutant in storm water runoff.
  - 223 ○ The effect that the proposed drainage improvement has upon the  
224 existing aesthetic quality of the area.
- 225 All of the above are not applicable to all drainage design projects. However,  
226 multidisciplinary involvements is encouraged in both the planning and design of  
227 major drainage projects to the extent that it results in preservation of natural  
228 systems and reliable flood protection.

#### 229 4.4.4 GENERAL CONSTRUCTION SITE PRACTICES

230 In addition to the County's current storm water pollution control program described, in  
231 Section 4.4.3, the responsible party for each construction site is to identify, consider, and  
232 deploy storm water practices sufficient to achieve compliance with the State of California  
233 NPDES General Permits for Storm Water Discharges Associated with Construction  
234 Activity and the County's Grading Ordinance.

235 Table 4.4-1 is a matrix of typical construction site practices that the on site responsible  
236 party would typically implement or require be implemented on a construction site. Two  
237 reliable sources of information are readily available for details of specific construction

238 practices:

239 **Detailed references:**

240 **1. California Stormwater Quality Association (CASQA) “Construction**  
241 **Handbook”, January 2003. Available online at:**

242 **<http://www.cabmphandbooks.com/>**

243 **2. Caltrans “Statewide Storm Water Quality Practice Guidelines”, May 2003.**  
244 **(CTSW-RT-02-009) Available online at:**

245 **<http://www.dot.ca.gov/hq/env/stormwater/special/newsetup/>**

246

247 Section 4.4.5 outlines minimum storm water practices required for all construction sites.  
248 If there might arise a conflict between the typical practices noted on Table 4.4-1, the  
249 various practices fact sheets in the CASQA’s Handbook, the Caltrans Guidelines, and the  
250 deployment of the minimum practice expectations in Section 4.4.5 shall control.  
251 However, the on-site responsible manager is expected to deploy practices sufficient to  
252 achieve compliance with the State of California NPDES General Permits for Storm Water  
253 Discharges Associated with Construction Activity and the County’s Grading Ordinance.

# SECTION 4.4

## Construction Site Runoff Control

**TABLE 4.4-1: TYPICAL CONSTRUCTION SITE PRACTICES FOR CONSTRUCTION ACTIVITIES**

	Typical Construction Activities																											
	Demolish Pavement/Structures	Clear and Grub	Construct Access Roads	Grading (inc. cut and fill slopes)	Channel Excavation	Channel Paving	Trenching/ Underground Drainage	Underground Drainage Facility Installation	Drainage Inlet Modification	Utility Trenching	Utility Installation	Subgrade Preparation	Base Paving	AC Paving	Concrete Paving	Saw Cutting	Joint Sealing	Grind/Groove	Structure Excavation	Erect Falsework	Bridge/Structure Construction	Remove Falsework	Striping	Miscellaneous Concrete Work	Sound Walls/Retaining Walls	Planting and Irrigation	Contractor Activities	Treatment Practices Construction
<b>Best Management Practices</b>																												
<b>Temporary Sediment Control</b>																												
Silt Fence	X	X	X	X	X	X			X	X									X	X						X	X	
Sandbag Barrier	X	X	X	X	X	X			X	X									X	X						X	X	
Straw Bale Barrier	X	X	X	X	X	X			X	X									X	X						X	X	
Fiber Rolls	X	X	X	X	X	X			X											X						X	X	
Gravel Bag Berm	X	X	X	X	X	X			X											X						X	X	
Check Dam	X	X		X	X	X																					X	
Desilting Basin	X	X	X	X	X																X					X	X	
Sediment Trap	X	X	X	X	X	X			X	X									X	X						X	X	
Sediment Basin		X		X	X																X					X	X	
<b>Temporary Soil Stabilization</b>																												
Hydraulic Mulch	X	X		X	X																X					X	X	
Hydroseeding	X	X		X	X																X					X	X	
Soil Binders	X	X		X	X														X	X						X	X	
Straw Mulch	X	X	X	X	X	X	X		X	X									X	X						X	X	
Geotextiles, Mats/Plastic Covers and Erosion Control Blankets	X	X	X	X	X	X	X		X	X									X	X						X	X	
<b>Scheduling</b>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X
<b>Preservation of Existing Vegetation</b>		X	X	X		X	X		X										X	X		X			X			
<b>Temporary Concentrated Flow Conveyance Controls</b>																												
Earth Dikes/Drainage Swales & Lined Ditches		X	X	X																	X							

# SECTION 4.4

# Construction Site Runoff Control

**TABLE 4.4-1: TYPICAL CONSTRUCTION SITE PRACTICES FOR CONSTRUCTION ACTIVITIES**

	Typical Construction Activities																											
	Demolish Pavement/Structures	Clear and Grub	Construct Access Roads	Grading (inc. cut and fill slopes)	Channel Excavation	Channel Paving	Trenching/ Underground Drainage	Underground Drainage Facility Installation	Drainage Inlet Modification	Utility Trenching	Utility Installation	Subgrade Preparation	Base Paving	AC Paving	Concrete Paving	Saw Cutting	Joint Sealing	Grind/Groove	Structure Excavation	Erect Falsework	Bridge/Structure Construction	Remove Falsework	Striping	Miscellaneous Concrete Work	Sound Walls/Retaining Walls	Planting and Irrigation	Contractor Activities	Treatment Practices Construction
<b>Best Management Practices (cont.)</b>																												
Outlet Protection/Velocity Dissipation Devices		X	X	X																	X							
Slope Drains				X																	X							
<b>Temporary Stream Crossing</b>			X			X	X		X	X										X	X	X		X				
<b>Clear Water Diversion</b>	X		X		X	X														X	X	X			X			X
<b>Wind Erosion Control</b>		X	X	X	X	X			X		X	X	X	X	X											X		X
<b>Sediment Tracking Control</b>	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X				X	X	X	X
Street Sweeping and Vacuuming	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X				X	X	X	X
Stabilized Construction Roadway		X	X	X																								
Entrance/Outlet Tire Wash		X	X	X																						X	X	
<b>Waste Management</b>																												
Spill Prevention and Control	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Solid Waste Management	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Hazardous Waste Management	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Contaminated Soil Management	X	X		X		X	X		X	X										X								
Concrete Waste Management	X		X			X	X			X		X		X	X				X	X		X			X	X	X	X
Sanitary/Septic Waste Management	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Liquid Waste Management														X		X	X		X				X				X	X
<b>Materials Handling</b>																												
Material Delivery, and Storage	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Material Use	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X



# SECTION 4.4

# Construction Site Runoff Control

**TABLE 4.4-1: TYPICAL CONSTRUCTION SITE PRACTICES FOR CONSTRUCTION ACTIVITIES**

	Typical Construction Activities																											
	Demolish Pavement/Structures	Clear and Grub	Construct Access Roads	Grading (inc. cut and fill slopes)	Channel Excavation	Channel Paving	Trenching/ Underground Drainage	Underground Drainage Facility Installation	Drainage Inlet Modification	Utility Trenching	Utility Installation	Subgrade Preparation	Base Paving	AC Paving	Concrete Paving	Saw Cutting	Joint Sealing	Grind/Groove	Structure Excavation	Erect Falsework	Bridge/Structure Construction	Remove Falsework	Striping	Miscellaneous Concrete Work	Sound Walls/Retaining Walls	Planting and Irrigation	Contractor Activities	Treatment Practices Construction
<b>Best Management Practices (cont'd)</b>																												
<b>Vehicle and Equipment Operations</b>																												
Vehicle and Equipment Cleaning	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Vehicle and Equipment Fueling	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Vehicle and Equipment Maintenance	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<b>Paving Operations</b>			X			X			X				X	X	X	X	X	X			X							
<b>Stockpile Management</b>	X		X				X		X	X		X	X	X			X											
<b>Water Conservation Practices</b>	X	X	X	X	X	X	X	X	X		X					X	X	X	X		X			X		X	X	X
<b>Stabilized Construction Entrance/Exit</b>		X	X	X																						X		X
<b>Dewatering Operations</b>	X			X	X	X	X	X	X	X									X		X			X	X	X		X

X Practice may be applicable to activity

1 The individual practice designated by an “X” in Table 4.4-1, as being applicable to a  
2 particular typical construction activity, will not necessarily be appropriate for all projects  
3 involving the noted activity. For example, not all projects will have on-site vehicle  
4 fueling and maintenance operations; however, those that do will be required to conduct  
5 those operations in a manner consistent with the intent of the practice, as described in the  
6 referenced guidelines.

#### 7 4.4.5 MINIMUM CONSTRUCTION SITE PRACTICES

8 Storm water pollution control requirements are intended to be implemented on a year-  
9 round basis at an appropriate level. The practices described below are the minimum,  
10 required water quality protection measures. This listing does not include the various  
11 inspection, record keeping, training and reporting requirements. Additionally, there will  
12 be instances where project and site conditions require supplementing or deviating from  
13 these minimum protection requirements. The contractor is expected to deploy measures  
14 sufficient to achieve compliance with the County’s Grading Ordinance, and, as  
15 applicable (projects which involve one acre or more of disturbed soil, or are part of a  
16 larger common plan of development that encompasses one acre or more of disturbed  
17 soil), the State Water Resources Control Board’s (SWRCB) NPDES General Permit for  
18 Storm Water Discharges Associated with Construction Activity within 12 months of  
19 SWMP approval.

##### 20 4.4.5.1 Scheduling

21 Construction scheduling shall consider the amount and duration of soil exposed to  
22 erosion by wind, rainfall, runoff and vehicle tracking and shall be scheduled to  
23 minimize construction activities in watercourses and the amount of active  
24 disturbed soil areas, during the rainy season. A schedule shall be prepared that  
25 shows the sequencing of construction activities with the installation of erosion  
26 and sediment control practices.

27 Construction shall be scheduled to minimize construction activities in “high-risk  
28 areas” and the amount of active disturbed soil areas, during the rainy season (Oct.  
29 15th to May 1st). “High-risk areas” include those areas within 50 feet of USGS  
30 watercourses, 100-year flood plains, regulated wetlands, and where slopes exceed  
31 16%.

32 Unless specifically authorized by the County’s on-site representative, during the  
33 rainy season the contractor shall not schedule construction activities in “high risk  
34 areas” or schedule to have more than 5 acres of active disturbed soil area. As an  
35 alternative to these restrictions, the contractor may elect to assure that these areas  
36 are fully protected by “Sediment Basins” or “Treatment”, in addition to the

37 normally required “effective combination” of soil stabilization, sediment barriers  
38 and basins / traps.

39 Where permanent storm water treatment devices are to be constructed, these  
40 devices should, whenever feasible, be constructed as an early work item.

#### 41 4.4.5.2 Preservation of Existing Vegetation

42 Preserving existing vegetation to the maximum extent possible and for as long as  
43 possible on a construction site reduces or eliminates erosion in those areas. To  
44 facilitate this practice, on a year-round basis, temporary fencing shall be provided  
45 prior to commencement of clearing and grubbing operations or other soil  
46 disturbing activities to protect those areas where no construction activity is  
47 planned or where construction will occur at a later date. Prior to the  
48 commencement of soil disturbing activities, areas of existing vegetation that are  
49 to remain and environmentally sensitive areas (i.e. wetlands, protected habitats,  
50 etc) shall be fenced for protection. In general, site designs shall preserve existing  
51 vegetation to the maximum extent possible; and during construction, existing  
52 vegetation shall be preserved (and protected by fencing) for as long as possible to  
53 minimize erosion.

#### 54 4.4.5.3 Storm Water Run-On and Concentrated Flows

55 The diversion of storm water run-on and conveyance of concentrated flows must  
56 be considered in determining the appropriateness of the practices chosen.  
57 Practices to divert or manage concentrated flows in a non-erosive fashion may be  
58 required on a project-by-project basis to divert off-site drainage through or around  
59 the construction site or to properly manage construction site storm water runoff.  
60 Existing watercourses shall be protected; and if diverted, handled in a non-  
61 eroding fashion. To the extent feasible, all concentrated water flows shall be  
62 channeled away from disturbed soil areas / stockpiles. Concentrated water flows  
63 shall be conveyed in a non-eroding fashion; and they shall, to the maximum  
64 extent practicable, be channeled away from all disturbed soil areas. See the  
65 reference Handbook and Guidelines for details on practices.

#### 66 4.4.5.4 Stockpile Management

67 Stockpile management is required year round. Minimum soil stabilization and  
68 sediment control requirements are outlined in Appendix B.

69 In addition, the County will require the following:

- 70 • Soil stockpiles:

71 Rainy season (Oct. 15th to May 1st):

- 72                                   ○ Covered, or protected with soil stabilization measures &  
73                                   perimeter sediment barriers.

74                                   Non-rainy season:

- 75                                   ○ Covered or protected with perimeter sediment barriers.

- 76                                   • Concrete/asphalt rubble, rock and aggregate base/sub-base:

- 77                                   ○ Covered or protected with perimeter sediment barriers.

- 78                                   • “Cold mix” asphalt:

- 79                                   ○ Covered.

80                                   **4.4.5.5. Sediment Tracking Control**

81                                   Appropriate measures shall be deployed to minimize the tracking of sediment off-  
82                                   site by vehicles and/or equipment. These measures include stabilized  
83                                   construction entrances/exits and roadways, and tire washing. Where tracking  
84                                   occurs, streets shall be swept or vacuumed.

85                                   Sediment tracking control practices are required year round. These measures  
86                                   include:

- 87                                   • Street sweeping and use of pickup sweeper with water supply
- 88                                   • Stabilization of construction roadways
- 89                                   • Entrance / Outlet tire washing

90                                   These measures might also include stabilized construction entrance/exit controls,  
91                                   however frequently this control is not effective and does not suffice as a substitute  
92                                   for tire washing.

93                                   **4.4.5.6 Wind Erosion Control**

94                                   Wind erosion control measures are required year round to minimize dust  
95                                   generated by the construction activities. These measures include applying water  
96                                   or other dust palliatives to minimize dust.

97                                   **4.4.5.7 Non-Storm Water Management**

98                                   Non-storm water discharges shall be minimized to the extent feasible. Sediment-  
99                                   laden non-storm water is required to be filtered (or equivalent treatment) prior to  
100                                   discharging. Measures required to manage non-storm water discharges include:

---

101 water conservation practices, dust control, material storage practices,  
102 vehicle/equipment operation and maintenance requirements, waste management  
103 practices, and spill prevention/control measures. Measures to control non-storm  
104 water discharges are required year round.

105 These measures include, but are not limited to:

- 106 • Water conservation practices,
- 107 • Vehicle and equipment operational practices,
- 108 • Dewatering operational practices,
- 109 • Waste (including hazardous and septic / sanitary) waste management  
110 practices,
- 111 • Spill prevention and control practices,
- 112 • Material handling practices, and
- 113 • Practices for paving, pavement grinding, pile driving, demolition,  
114 temporary batch plant and irrigation operations.

115 On construction sites, the CM/RE and the Contractor shall be alert to and report  
116 the potential presence of illicit connections to the County's storm drain system or  
117 illicit discharges.

118 The Permit prohibits the discharge of non-permitted non-storm water discharges.  
119 If a significant unauthorized non-storm water discharge occurs, the CM/RE will  
120 report the discharge to the County's Storm Water Coordinator within 12 hours.  
121 The Storm Water Coordinator will coordinate the reporting of prohibited non-  
122 storm discharges to the RWQCB in accordance with the procedures in Section  
123 5.7.

124 If the non-permitted non-storm water discharge occurs as a result of the  
125 construction activity, the CM/RE and the Contractor shall endeavor to  
126 immediately halt the discharge and take measures to minimize any potential re-  
127 occurrence.

128 If the non-permitted non-storm water discharge is not as a result of the  
129 construction activity, then the County's Storm Water Coordinator will address  
130 remediation of the situation with the responsible authorities.

131 The County's Storm Water Coordinator will log and track each reported non-  
132 permitted non-storm water discharge to conclusion. The on-going log will be

133 included within the Annual Report.

134 **4.4.5.8 Disturbed Soil Area Management**

135 Minimum disturbed soil area management requirements shown in Table 4.4.2 and  
136 4.4.3 are based on typical rainfall patterns (time frames, intensities, and amounts),  
137 general soil types, the seasons, slope inclinations, and slope lengths. These same  
138 factors must be considered for each site when developing the appropriate levels of  
139 soil stabilization and sediment control for a specific site. Disturbed soil areas  
140 (DSA) shall be protected with an effective combination of measures including soil  
141 stabilization, sediment barriers and basins / traps.

142 **4.4.5.8.1 Definitions**

143 **Disturbed Soil Area**

144 Disturbed soil areas (DSAs) are areas of exposed, erosive soil that are  
145 within the construction limits and that result from construction activities.  
146 The following are not considered DSAs:

- 147 • Areas where soil stabilization, erosion control, highway planting,  
148 or slope protection are applied and associated drainage facilities  
149 are in place and functional.
- 150 • Roadways, construction roads, access roads or contractor's yards  
151 that have been stabilized by the placement of compacted sub-base  
152 or base material or paved surfacing.
- 153 • Areas where construction has been completed in conformance with  
154 the contract plans and permanent erosion control is in place and  
155 functional.
- 156 • Erosion control is considered functional when a uniform  
157 vegetative cover equivalent to 70 percent of the native  
158 background vegetation coverage has been established or  
159 equivalent stabilization measures have been employed.

160 **Active and Non-Active Areas**

161 Active areas are construction areas where soil-disturbing activities have  
162 already occurred and continue to occur or will occur during the ensuing  
163 21 calendar days.

164 Non-active areas are construction areas (formerly active areas) that will  
165 be idle for at least 21 calendar days.

166 The contractor will conduct a review of the existing active areas on a  
167 regular basis to determine if a non-active status should be applied to  
168 some DSAs.

169 **Slope Length and Terraces**

170 Slope length is measured or calculated along a continuous inclined  
171 surface. Each discrete slope is between one of the following: top to toe,  
172 top to terrace, terrace to terrace, and terrace to toe.

173 Terraces are drainage facilities that intercept surface flow and convey  
174 the resulting concentrated flow away from a slope.

175 **Rainy Season**

176 The rainy season for El Dorado County is defined as October 15th  
177 through May 1st.

178 **Sediment Basin**

179 A basin with a capacity equivalent to at least 3600 cubic feet of storage  
180 (as measured from the bottom of the basin to the principal outlet) per  
181 acre draining into the basin. The length of the basin shall be more than  
182 twice the basin's width (length is determined by measuring the distance  
183 between the inlet and the outlet). The depth of the basin must not be  
184 less than three feet nor greater than five feet.

185 **Treatment**

186 A combination of basin and treatment engineered to capture and treat (to  
187 remove 0.01 mm sized particles and larger) the 10-year, 6-hour rain  
188 event using  $Q=CxIxA$  where  $C=0.5$  and  $I$  ranges from 0.286 (El Dorado  
189 Hills) to 0.500 (Sly Park).

190 **4.4.5.8.2 DSA Protection by Soil Stabilization, Sediment Barriers and Basins/Traps**

191 To account for rainfall patterns (time frames, intensities, and amounts)  
192 and to a lesser extent general soil type differences, the County is divided  
193 into "high" and "low" elevation areas at the 3000 foot elevation.

194 The specific minimum erosion and sediment control practices for DSA  
195 protection in each area are determined from Tables 4.4-2 and 4.4-3.  
196 Based on consultation with experts, the slope length and slope  
197 inclination are seen as the most important criteria for soil stabilization  
198 and sediment control requirements, as these factors have the largest  
199 potential impact on the erosion rate. As indicated on these tables, the

---

200 temporary erosion and sediment controls at a construction site will  
201 increase with increasing slope inclination and length.

202 DSAs shall be protected as follows:

203                   • Temporary control practices (as required in Table 4.4-2) shall be  
204 performed on non-active DSAs within 14 days from the  
205 cessation of soil-disturbing activities or one day prior to the  
206 predicted (40% or more chance) onset of significant  
207 precipitation, whichever occurs first.

208                   • Temporary control practices for active DSAs (as required in  
209 Table 4.4-3) shall be performed prior to the predicted (40% or  
210 more chance) onset of significant precipitation and throughout  
211 each day for which precipitation is forecasted.

212                   • For permanent construction and non-active DSAs, at least 8 foot  
213 wide, properly drained terraces shall be provided at intervals not  
214 more than every 25 feet in height for all slopes exceeding 30 feet  
215 in height.

216                   • Where non-active DSAs are deemed substantially complete,  
217 permanent erosion controls shall be provided. Where permanent  
218 erosion controls involve seeding, this seeding shall be applied  
219 during the defined seeding window. When permanent seeding is  
220 delayed to adjust to this window, the temporary measures noted  
221 in Table 4.4 -2 are required during the intervening period.



# SECTION 4.4

## Construction Site Runoff Control

222  
223  
224

**TABLE 4.4-2: MINIMUM COMBINATION OF TEMPORARY SOIL STABILIZATION, SEDIMENT BARRIERS AND BASINS/TRAPS FOR NONACTIVE DISTURBED SOIL AREAS**

SEASON	RAINFALL AREA(S)	TEMPORARY PRACTICE	SLOPE (V:H) <sup>(1)</sup>			
			≤ 1:20	> 1:20 ≤ 1:4	> 1:4 ≤ 1:2	> 1:2
RAINY	High Elevation	SOIL STABILIZATION <sup>(4)</sup>	X	X	X	X
		SEDIMENT BARRIER <sup>(4)</sup>	X	X	X	X
		BASIN/TRAP <sup>(2)</sup>		X	X	X
	Low Elevation	SOIL STABILIZATION <sup>(4)</sup>	X	X	X	X
		SEDIMENT BARRIER		X	X	X
		BASIN/TRAP				
NON-RAINY	High Elevation	SOIL STABILIZATION <sup>(4)</sup>	X <sup>(3)</sup>	X <sup>(3)</sup>	X	X
		SEDIMENT BARRIER		X <sup>(3)</sup>	X	X
		BASIN/TRAP				
	Low Elevation	SOIL STABILIZATION				
		SEDIMENT BARRIER				X
		BASIN/TRAP				

225

1. Unless otherwise noted, the temporary practice is required for the slope inclinations indicated on slope lengths greater than 10 feet.

226  
227

2. Required in addition to the temporary sediment barrier, where feasible. Feasibility will depend on site-specific factors such as available right-of-way within the project limits, topography, soil type, disturbed soil area within watershed, and climate conditions.

228

3. Implementation of controls required at least 24 hours prior to all predicted rain events.

229

4. The indicated temporary practice is required on all slope lengths.

230

# SECTION 4.4

## Construction Site Runoff Control

231 **TABLE 4.4-3: MINIMUM COMBINATION OF TEMPORARY SOIL STABILIZATION, SEDIMENT**  
 232 **BARRIERS AND BASINS/TRAPS FOR ACTIVE DISTURBED SOIL AREAS <sup>(3)</sup>**  
 233

SEASON	RAINFALL AREA (S)	TEMPORARY PRACTICE	SLOPE (V: H) <sup>(1)</sup>		
			≤ 1:20	> 1:20 ≤ 1:2	> 1:2
RAINY	High Elevations	SOIL STABILIZATION		X	X
		SEDIMENT BARRIER <sup>(4)</sup>	X	X	X
		BASIN/TRAP <sup>(2)</sup>		X	X
	Low Elevations	SOIL STABILIZATION			X <sup>(5)</sup>
		SEDIMENT BARRIER		X	X <sup>(5)</sup>
		BASIN/TRAP <sup>(2)</sup>			X <sup>(5)</sup>
NON-RAINY	High Elevations	SOIL STABILIZATION			
		SEDIMENT BARRIER		X	X
		BASIN/TRAP <sup>(2)</sup>			X <sup>(5)</sup>
	Low Elevations	SOIL STABILIZATION			
		SEDIMENT BARRIER			
		BASIN/TRAP			

- 234 1. Unless otherwise noted, the temporary practice is required for the slope inclinations indicated on slope lengths greater than 10 feet.
- 235 2. Required in addition to the temporary sediment barrier, where feasible. Feasibility will depend on site-specific factors such as available  
 236 right-of-way within the project limits, topography, soil type, disturbed soil area within watershed, and climate conditions.
- 237 3. Implementation of controls required at least 24 hours prior to all predicted rain events.
- 238 4. The indicated temporary practice is required on all slope lengths.
- 239 5. The indicated temporary practice is required on slope lengths greater than 50 feet.

240 **4.4.6 INSPECTION PROCEDURES**

241 The County will employ the following sliding scale project site rating system:

242	Substantial compliance	1
243	Minor deficiencies	2
244	Major deficiencies	3
245	Critical deficiencies	4

246 • The County’s Storm Water Coordinator will be informed of all sites found to be  
 247 with major and critical deficiencies within 2 working days. Efforts will be made  
 248 to immediately inform the County’s Storm Water Coordinator and the RWQCB  
 249 will be informed of all sites found to be with critical deficiencies.

250 • When sites are found to have critical deficiencies, the sites will be re-inspected at  
 251 least weekly until the rating is reduced from a 4 to a 3 or better. If the rating  
 252 remains a 4 on the second re-inspection, enforcement / contractor sanctions will  
 253 be initiated, and the County’s Storm Water Coordinator and the RWQCB will be  
 254 informed.

255 • When sites are found to have major deficiencies, the sites will be re-inspected at  
 256 least every other week until the rating is reduced from a 3 to a 2 or better. If the  
 257 rating remains a 3 on the second re-inspection, enforcement / contractor sanctions  
 258 will be initiated, and the County’s Storm Water Coordinator and the RWQCB will  
 259 be informed.

260 • When sites are found to have minor deficiencies, the sites will be re-inspected at  
 261 least monthly until the rating is reduced from a 2 to a 1. If the rating remains a 2  
 262 on the third re-inspection, enforcement / contractor sanctions will be initiated, and  
 263 the County’s Storm Water Coordinator and the RWQCB will be informed.

264 **4.4.6.1 Construction Site Inspection Procedures**

265 Annual rainy season readiness reviews will be conducted to assure each site  
 266 achieves compliance with rainy season expectations prior to October 15th. For  
 267 County projects, this may involve directing the contractor to undertake  
 268 preparations. For non-County projects, this may involve the contractor for  
 269 County projects and the permittee for private party projects, are responsible for  
 270 implementing appropriate construction site storm water practices. For County  
 271 projects, oversight inspections of practices are conducted daily when significant,  
 272 on-site activities are underway. For non-County projects, the County’s oversight

273 inspections of practices are generally on an as needed basis, with an emphasis in  
274 the late summer / early fall to prepare for the rainy season.

275 The County is setting the following construction site oversight inspection of  
276 practices goals by the end of June.

277 i. Annual rainy season readiness reviews will be conducted to assure each  
278 site achieves compliance with rainy season expectations prior to October  
279 15th. For County projects, this may involve directing the contractor to  
280 undertake preparations. For non-County projects, this may involve formal  
281 communications and ordinance enforcement.

282 ii. On receipt of a complaint or concern from the public regarding a  
283 construction site, within 5 working days, a site oversight inspection will  
284 be conducted.

285 iii. All sites will be reviewed within a week following start of the on-site, soil  
286 disturbing construction.

287 iv. All sites will be reviewed prior to construction close / grading permit  
288 release / NOT filing.

289 v. Minimum non-rainy season inspection review frequency:

290 1. Sites 5 acres or more in size, every other month.

291 2. Sites less than 5 acres in size, every third month.

292 vi. Minimum rainy season inspection review frequency:

293 1. Sites 5 acres or more in size, every month.

294 2. Sites less than 5 acres in size, every other month.

295 vii. Pre-storm inspection review frequency:

296 1. Approximately 10% of the construction sites involving 5 acres or  
297 more of disturbed soil with the greatest risk for storm water  
298 pollution will be inspected prior to major predicted storms.

- 299                   viii. Post-storm inspection review frequency:
- 300                   1. Approximately 15% of the construction sites involving 5 acres or  
301                   more of disturbed soil with the greatest risk for storm water  
302                   pollution will be inspected following a major storm.
- 303                   2. Approximately 5% of the construction sites involving less than 5  
304                   acres of disturbed soil with the greatest risk for storm water  
305                   pollution will be inspected following a major storm.

306                   ix. The County will employ the following sliding scale project site rating  
307                   system:

308	Substantial compliance	1
309	Minor deficiencies	2
310	Major deficiencies	3
311	Critical deficiencies	4

312                   • The County’s Storm Water Coordinator and the RWQCB will be  
313                   informed of all sites found to be with major and critical deficiencies  
314                   within 2 working days. Efforts will be made to immediately inform  
315                   the County’s Storm Water Coordinator of all sites found to be with  
316                   critical deficiencies.

317                   • When sites are found to have critical deficiencies, the sites will be re-  
318                   inspected at least weekly until the rating is reduced from a 4 to a 3 or  
319                   better. If the rating remains a 4 on the second re-inspection,  
320                   enforcement / contractor sanctions will be initiated, and the County’s  
321                   Storm Water Coordinator and the RWQCB will be informed.

322                   • When sites are found to have major deficiencies, the sites will be re-  
323                   inspected at least every other week until the rating is reduced from a 3  
324                   to a 2 or better. If the rating remains a 3 on the second re-inspection,  
325                   enforcement / contractor sanctions will be initiated, and the County’s  
326                   Storm Water Coordinator and the RWQCB will be informed.

327                   • When sites are found to have minor deficiencies, the sites will be re-  
328                   inspected at least monthly until the rating is reduced from a 2 to a 1. If  
329                   the rating remains a 2 on the third re-inspection, enforcement /  
330                   contractor sanctions will be initiated, and the County’s Storm Water

331 Coordinator and the RWQCB will be informed.

332 **4.4.6.2 Responsible Parties**

333 For all projects and activities except individual single-family home construction,  
334 Department of Transportation designated Project Manager (construction  
335 inspector) is responsible to assure that the project's construction site appropriately  
336 incorporates the storm water practices as outlined in this SWMP. Single-family  
337 home construction is similarly reviewed / permitted by the Building Department's  
338 designated Project Manager (construction inspector).

339 As outlined in Section 2, the contractor for County projects and the permittee for  
340 Non-County (private party) projects, are responsible for implementing  
341 appropriate construction site storm water practices and non-storm water practices.

342

343 **4.4.6.2.2 County Improvement Projects**

344 For County projects, oversight inspections of practices are conducted  
345 daily when significant, on-site activities are underway. The County's  
346 designated Construction Manager / Resident Engineer is responsible to  
347 assure that the project's construction site appropriately incorporates the  
348 storm water temporary construction structural controls and practices as  
349 outlined in this SWMP, and implements the permanent structural  
350 controls and practices identified by the County's Project Manager (PM)  
351 / Project Engineer (PE).

352 **4.4.6.2.3 Development/Re-development Projects**

353 For non-County projects, the County's oversight inspections of practices  
354 are generally on an as needed basis, with an emphasis in the late summer  
355 / early fall to prepare for the rainy season. Development / re-  
356 development projects, and other activities requiring grading, are subject  
357 to being permitted by the County.

## 358 4.4.6.3 Permitted Exempt and Conditionally Exempt Non-Storm Water Discharges

359 This section describes the County's program for controlling pollutants from  
360 permitted non-storm water discharges stemming from construction sites.

361 Permitted non-storm water discharges include the following categories:

362 • **Discharges Authorized by a Separate NPDES Permit:** Since these  
363 discharges have a separate permit, they are not addressed by this SWMP.

364 • **Exempted Discharges:** These discharges are not expected to contain  
365 pollutants and can therefore be discharged without direct application of  
366 practices. These discharges include:

- 367       ▪ water line flushing;
- 368       ▪ landscape irrigation;
- 369       ▪ diverted stream flows;
- 370       ▪ rising ground waters;
- 371       ▪ uncontaminated ground water infiltration (as defined at 40 CRF  
372        §35.2005(20)) to separate storm sewers;
- 373       ▪ uncontaminated pumped ground water;
- 374       ▪ discharges from potable water sources;
- 375       ▪ foundation drains;
- 376       ▪ air conditioning condensation;
- 377       ▪ irrigation water;
- 378       ▪ springs;
- 379       ▪ water from crawl space pumps;
- 380       ▪ footing drains;
- 381       ▪ lawn watering;
- 382       ▪ individual residential car washing;
- 383       ▪ flows from riparian habitats and wetlands; and
- 384       ▪ de-chlorinated swimming pool discharges.

385

386 • **Conditionally exempt discharges:**

387 The discharges and their associated practices identified in Table 4.4-4 are  
388 not expected to contain pollutants.

**TABLE 4.4-4: NON-STORM WATER PRACTICES FOR CONDITIONALLY EXEMPT DISCHARGES**

<b>Non-Storm Water Discharges</b>	<b>Practice Titles</b>
a. Pumped ground or accumulated rain water	Dewatering Operations
b. Non-potable irrigation water	Non-potable Water/Irrigation

389 The RWQCB has issued a general permit for dewatering, Order No.  
 390 CAG995001. Qualifying dewatering operations are able to obtain permit  
 391 coverage under this Order by submitting a Notice of Intent (NOI) to the  
 392 Regional Board. Allowable discharges must not contain significant  
 393 quantities of pollutants and be either four months or less in duration, or  
 394 not exceed 0.25 mgd during dry weather. Under the terms of the permit,  
 395 monitoring and reporting are required. Copies of this permit are available  
 396 from the Regional Board or from the County’s Storm Water Coordinator.

397 Non-potable irrigation water, landscape irrigation and lawn or garden  
 398 watering runoff, though minimized, will occur on a regular basis as a  
 399 result of excess irrigation water running off vegetated and nearby  
 400 impervious areas and into storm drains. These discharges are not expected  
 401 to result in the discharge of appreciable pollutants. If these activities are  
 402 subsequently found to be resulting in an unacceptable level of pollutant  
 403 discharges, the County will undertake to develop, or require the  
 404 responsible discharging party to develop, a pollution management plan.

405 **4.4.7 County Ordinances**

406 Several ordinances are in effect and include enforcement measures to require erosion and  
 407 sediment controls. An annual review of the ordinances, with respect to enforcement, will  
 408 occur and the County will perform an analysis of the adequacy of legal authority of these  
 409 ordinances with respect to enforcement, and as appropriate, recommendations to amend,  
 410 or create, ordinances will be brought before the County Board of Supervisors. The  
 411 County will include, as a part of the Annual Report, specific problems and actions  
 412 encountered while implementing the storm water program, such as; problems that may  
 413 develop as a result of legal constraints, or additional resulting ordinances and actions to  
 414 improve the ordinances.

415 All County ordinances are enforceable per County Code Chapter 1.24, which stipulates  
 416 fines and/or imprisonment for violators. The District Attorney is responsible for  
 417 enforcement actions. The following ordinances require erosion and sediment controls  
 418 within the El Dorado County jurisdictional boundary:



## 419           4.4.7.1 DUST ABATEMENT ORDINANCE

420           The County, by ordinance (County Code Chapter 8.44) authorizes the County  
421           Department of Environmental Management to develop and manage the County's  
422           dust abatement and protection program.

## 423           4.4.7.2 GRADING, EROSION AND SEDIMENT CONTROL ORDINANCE

424           The County, by ordinance (County Code Chapter 15.14) authorizes the County  
425           Department of Transportation to regulate all grading activities, and requires that  
426           such activities be undertaken in such a manner that quantities of sediment or other  
427           materials substantially in excess of natural levels are prevented from leaving the  
428           site. Additionally, this ordinance authorizes the Director of Transportation to  
429           require security deposits, suspend or revoke permits, and for the permittee to  
430           warranty all work. Further, the ordinance requires the Director to record with the  
431           County Recorder, a Notice of Noncompliance when there is a failure to secure the  
432           required permit.

## 433           4.4.7.3 SUBDIVISION DESIGN AND IMPROVEMENT ORDINANCE

434           The County, by ordinance (County Code Section 16.12.050) authorizes the  
435           Planning Commission, appointed by the Board of Supervisors to determine  
436           whether the discharge of waste from the proposed subdivision into an existing  
437           community sewer system would result in violation of existing requirements  
438           prescribed by a California Regional Water Quality Control Board pursuant to  
439           division 7 (commencing with section 13000) of the Water Code. In the event that  
440           the Planning Commission finds that the proposed waste discharge would result in  
441           or add to violation of requirements of the water quality control board, it may  
442           disapprove the tentative map or maps of the subdivision.

443   **4.4.8 PUBLIC COMMUNICATIONS**

## 444           4.4.8.1 Public Review

445           The County will annually solicit comments from interested parties and the public  
446           during the process of identifying, evaluating and approving practices. The  
447           County will announce and make available the draft Annual Report, including the  
448           revised SWMP.

449           Public interface will occur through three primary mechanisms:

- 450           • **Public-initiated contact with the County's offices regarding**  
451           **complaints, suggestions and requests:** Each Department has widely  
452           publicized phone numbers. All public-initiated calls are screened, logged

453 and routed to the appropriate party within the Department for action, as  
454 required. General water quality related calls are directed to the County's  
455 Storm Water Coordinator. The Environmental Management Department  
456 maintains a storm water web site that enables public contact with the  
457 County on water quality issues.

458 • **The Public review opportunity as part of the annual report**  
459 **preparation process:** The proposed tentative SWMP, annual updates  
460 thereto and draft annual reports are made available for a public comment  
461 period. Workshops on these documents will be noticed and held, as  
462 appropriate, by the County. The County responds to comments received  
463 as these documents are finalized for submittal annually to the RWQCB.

464 • **Public input on proposed construction projects during the**  
465 **environmental evaluation process:** Typically, one or more public review  
466 meetings are held for all significant construction projects.

#### 467 4.4.8.2 Web Site

468 The County's Environmental Management web site has been modified to  
469 include a storm water quality specific element. The web site currently  
470 shares information regarding air quality, solid waste and hazardous  
471 material, vector control and general environmental health. This website  
472 will be annually updated and tracked for 'hits' to this web page.

473 The site address is: <http://co.el-dorado.ca.us/emd/>

474 The storm water element will provide information on all storm water  
475 outreach activities, including brochures, bulletins and workshops as well  
476 as bulletins on related topics, information related to construction and  
477 maintenance activities, and links to key related sites.

#### 478 4.4.8.3 Informational Exchange with Contractors

479 For contract work directly undertaken by the County, three types of  
480 informational exchange sessions will be employed to describe storm water  
481 pollution prevention concepts and practices and to explain techniques for  
482 preparing SWPPPs for construction activities.

483 • **Informational Exchange #1, Storm Water Permit Compliance**  
484 **Requirements, Pre-Bid Meeting:** Pre-bid meetings may be  
485 conducted to discuss a given upcoming construction project.  
486 When such meetings are held, and depending on the sites storm  
487 water complexities, the site manager may provide general  
488 information to construction contractors regarding the requirements

---

489 in the Permit and the SWMP that apply to the subject project (i.e.,  
490 the project on which the contractors are considering submitting  
491 bids).

492 • **Informational Exchange #2, Storm Water Permit Compliance**  
493 **Requirements, Pre-Construction Meeting:** The site manager provides  
494 project-specific guidance to construction contractors on topics  
495 such as SWPPP preparation, selection of practices, and monitoring  
496 and inspection of said practices. The County will also notify the  
497 RWQCB of the pre-construction meeting to allow an RWQCB  
498 representative to be at the meeting to review and discuss the water  
499 quality issues relating to the construction project.

500 • **Additional Informational Exchanges:** The site manager will hold  
501 informal sessions with contractors, as needed, during the course of  
502 the construction project.

503 The topics covered in informational exchanges will be updated as needed  
504 to reflect modifications to the County’s storm water management program.

505 **4.4.9 BMP PROGRAM SUMMARY**

506 The following pages contain a summary of the Construction Site Runoff Control BMP  
507 program set forth in the El Dorado County Storm Water Management Plan. These BMPs  
508 will be subject to annual reviews and updates as outlined in Sections 3.2 and 5.6.1.

509 EPA’s NPDES rules state:

510 “Implementation of best management practices consistent with the provisions of the  
511 storm water management program required pursuant to this section (the six minimum  
512 control measures, evaluation & assessment, record keeping and reporting) ... constitutes  
513 compliance with the standard of reducing pollutants to the “maximum extent  
514 practicable”.” (40 CFR 122.34)

515 This summary notes BMPs applicable to one of the six minimum control measures:  
516 Construction Site Runoff Control. El Dorado County proposes that this program  
517 constitutes fulfillment of the minimum General Permit and Federal Regulation  
518 requirements. As the public review and the SWMP finalization processes proceed, the  
519 program, and the County’s assessment of this program, may change.

520

**1 4.5.1 OVERVIEW**

2 The section to follow describes how the County will comply with State Water Resources  
3 Control Board's storm water discharge permit requirements for long-term post-  
4 construction practices that protect water quality and control runoff flow, to be  
5 incorporated into development and significant redevelopment projects. The County will  
6 comply with permit requirements by incorporating existing County Development  
7 Standards to minimize the discharge of pollutants of development and redevelopment  
8 projects. Revisions to the County Development Standards shall be developed and  
9 implemented as well the development of storm water treatment practices, all of which are  
10 outlined in the following sections:

- 11 • Section 4.5.2 Current Program
- 12 • Section 4.5.3 Standard Storm Water Mitigation Plan
- 13 • Section 4.4.4 BMP Program Summary

14 The County currently has in place extensive policies and procedures for regulating design  
15 and construction activities to protect the Region's water resources, described in Section  
16 4.5.2. Additionally, the County is proposing to incorporate two supplemental elements  
17 into these policies and procedures: a "Standard Storm Water Mitigation Plan" as part of  
18 future project planning and design processes (Section 4.5.3), and a specific set of  
19 construction site storm water practices (Sections 4.4.4, and 4.4.5).

20 The design and construction site practices selected and implemented by the responsible  
21 party for a given site are expected to be sufficient to achieve compliance with the State of  
22 California NPDES General Permits for Storm Water Discharges Associated with  
23 Construction Activity and Small Municipal Separate Storm Sewer Systems.

24 All proposed permanent storm water treatment practices that are not noted within this  
25 SWMP must be pre-approved by the County's Storm Water Coordinator.

**26 4.5.2 CURRENT PROGRAM**

27 The County's Development Standards, which include the Grading, Erosion and Sediment  
28 Control Ordinance; the County's Design and Improvement Standards Manual; and the  
29 County's Drainage Manual contain measures and practices required of all parties  
30 undertaking construction to minimize the discharge of pollutants from the construction  
31 sites.

## 32 4.5.2.1 Grading, Erosion and Sediment Control Ordinance

33 The Grading, Erosion and Sediment Control Ordinance requires that permittees be  
34 responsible to:

- 35
- Prevent discharge of sediment from the site in quantities greater than  
36 before the grading occurred, to any watercourse, drainage system or  
37 adjacent property; and
  - Protect watercourses and adjacent properties from damage by erosion,  
38 flooding, or deposition that may result from the permitted grading.  
39

40 Additionally, the Ordinance authorizes the Director of Transportation to:

- 41
- Require security deposit to assure faithful performance,
  - Suspend or revoke the permit and abate a hazardous public nuisance  
42 condition, and  
43
  - Require a one-year warranty on all work.  
44

45 This Ordinance requires of the permittee the following:

- 46
- The slope of cut and fill slopes shall not be steeper than two horizontal to  
47 one vertical, exclusive of terraces and slope roundings, except when  
48 supported by bedrock and/or in accordance with a geotechnical or  
49 geological report. Further, the Director of Transportation may require fill  
50 slopes to be flatter for stability purposes.
  - Drainage shall be affected in such a manner that it will not cause erosion  
51 or endanger the stability of any cut or fill slopes.  
52
  - Grading plans shall be designed with long-term erosion and sediment  
53 control as a primary consideration.  
54
  - Grading operations during the rainy season (from October 15<sup>th</sup> to May 1<sup>st</sup>,  
55 inclusively) shall provide erosion and sediment control measures except  
56 upon a clear demonstration to the satisfaction of the Director of  
57 Transportation that at no stage of the work will there be any substantial  
58 risk of increased sediment discharge from the site.  
59
  - Should grading be permitted during the rainy season, the smallest  
60 practicable area of erosive prone land shall be exposed at any one time  
61 during grading operations and the time of exposure shall be minimized.  
62

## SECTION 4.5

### *Post Construction Runoff Control*

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- 63                   • Wherever possible, natural features, including vegetation, oak trees,  
64 terrain, watercourses, wetlands and similar resources shall be preserved.  
65 Limits of grading shall be clearly defined and marked to prevent damage  
66 by construction equipment. Wetlands and oak trees so marked shall be  
67 protected from construction activity.
  
- 68                   • Permanent drought-resistant vegetation and structures for erosion and  
69 sediment control shall be installed as soon as possible.
  
- 70                   • Adequate provision shall be made for long-term maintenance of  
71 permanent erosion and sediment control structures and vegetation.
  
- 72                   • No topsoil shall be removed from the site unless otherwise directed or  
73 approved by the Director of Transportation. Topsoil overburden shall be  
74 stockpiled and redistributed within the graded area after rough grading to  
75 provide a suitable base for seeding and planting. Runoff from the  
76 stockpiled area shall be controlled to prevent erosion and resultant  
77 sedimentation of receiving water.
  
- 78                   • Runoff shall not be discharged from the site in quantities or at velocities  
79 substantially above those that occurred before the grading except into  
80 drainage facilities whose design has been specifically approved by the  
81 Director of Transportation.
  
- 82                   • Permittee shall take reasonable precautions (i.e. stabilized construction  
83 entrances/exits and/or wash racks) to ensure that vehicles do not track or  
84 spill earth materials into public streets and shall immediately remove such  
85 materials if this occurs.
  
- 86                   • Erosion and sediment control plans shall include an effective revegetation  
87 program to stabilize all disturbed areas that will not be otherwise  
88 protected.
  
- 89                   • Erosion and sediment control plans shall be designed to prevent increased  
90 discharge of sediment at all stages of grading and development from initial  
91 disturbance of the ground to project completion. Every feasible effort  
92 shall be made to ensure that site stabilization is permanent. Plans shall  
93 indicate the implementation period and the stage of construction where  
94 applicable.
  
- 95                   • Erosion and sediment control plans shall provide for inspection and repair  
96 of all erosion and sediment control facilities at the close of each working  
97 day during the rainy season and for specific sediment cleanout and  
98 vegetation maintenance criteria.

## 99           4.5.2.2 Design and Improvement Standards Manual

100           Among the key provisions of the County's Design and Improvement Standards  
101           Manual administered by the County Planning Department are minimum lot sizes  
102           and general development standards for varying slope conditions. These standards  
103           are set to minimize the environmental effects of construction.

## 104           4.5.2.3 Drainage Manual

105           The Department of Transportation's Drainage Manual prescribes planning and  
106           design criteria for drainage facilities within the County. Among the key  
107           provisions of the County's Drainage Manual include:

- 108           • The planning and design of drainage systems within El Dorado County  
109           shall take into consideration any potential downstream impacts including  
110           those to property, flow regimes, water quality or riparian and wetland  
111           areas. Provisions mitigating potential impacts shall be included as a part  
112           of the drainage analysis for the proposed project.
  
- 113           • Increases in storm runoff from upstream properties resulting from  
114           improvements is discouraged.
  
- 115           • Improvements that propose to increase storm water runoff shall be  
116           evaluated to show, among other things, that land of downstream properties  
117           is not lost due to increased flood plain limits, there is no increase in  
118           erosion, and there is no net loss of storage available to attenuate peak  
119           flows. When downstream properties are unable to adequately  
120           accommodate increases in storm water runoff, appropriate mitigation  
121           measures shall be implemented into the analysis and design. These  
122           mitigation measures may include storm water storage facilities (detention  
123           or retention structures) designed to hold storm water and then release it at  
124           a rate that will not cause damage downstream.
  
- 125           • The County has approved the use of two types of detention basins, dry and  
126           wet basins. However, due to the added long-term maintenance  
127           requirements and vector concerns associated with wet basins, their use  
128           requires site-specific approval by the County.
  
- 129           • The County has approved the use of retention (infiltration) basins.  
130           However, due to varying site-specific infiltration concerns and added  
131           long-term maintenance requirements their use requires site-specific  
132           approval by the County. While the implementation of detention or  
133           retention facilities on-site to attenuate peak runoff to a level which does  
134           not impact downstream facilities is acceptable, the County sees facilities  
135           designed as a component of a watershed planning process (classified as

136 regional or downstream storage facilities) as potentially being more  
137 economical and effective. Coordinated regional detention/retention  
138 facilities that take into account the entire watershed area are preferred.  
139 When a regional drainage study has been conducted and regional basins  
140 are designed, the regional basin will always take precedence over local  
141 basin design.

142 • The use of natural channels for the collection and conveyance of storm  
143 water runoff is preferred. Natural channels shall be capable of conveying  
144 runoff without increased erosion, widening and meandering of the channel  
145 alignment due to increased runoff from development.

146 • Grass lined channels are viable only for channels with relatively flat  
147 slopes. Successful grass lined channels require maintenance both for the  
148 establishment of the root network and to control the length of the grass.

149 • Where appropriate, floodplain and open space criteria shall comply with  
150 FEMA standards and the 100-year flood plain shall be designated.

151 • In order to determine the proper type of channel stabilization, flood and  
152 water quality protection measures, the following issues should be  
153 considered during the planning and design of drainage improvements:

154 ○ The effect that any changes in the runoff hydrograph may have  
155 upon the floodplain limits.

156 ○ The effect that potential growth of vegetation in the channel or  
157 floodplain has upon the long-term flood protection of adjacent  
158 development.

159 ○ The effect that channelization of an existing stream has upon the  
160 natural floodplain storage volume.

161 ○ The effect that increases of either peak flow or velocity may have  
162 on channel erosion or deposition.

163 ○ The effect that the proposed development project will have on both  
164 short-term and long-term sediment production. This includes  
165 measures to control erosion during construction.

166 ○ For projects which propose the creation or expansion of permanent  
167 water bodies, the effect that a change in water temperature will  
168 have upon fish and wildlife.

169 ○ The role those drainage improvements will play in managing



170 pollutant in storm water runoff.

- 171           ○ The effect that the proposed drainage improvement has upon the  
172           existing aesthetic quality of the area.

173 All of the above are not applicable to all drainage design projects. However,  
174 multidisciplinary involvement is encouraged in both the planning and designs of  
175 major drainage projects to the extent that it results in preservation of natural  
176 systems and reliable flood protection.

### 177 4.5.3 STANDARD STORM WATER MITIGATION PLAN

178 The Standard Storm Water Mitigation Plan, a supplemental element to the policies and  
179 procedures described in Section 4.5.2, shall comprise of the following components to  
180 address future project planning and design processes:

- 181           1. An initial augmentation of the County Development Standards as it pertains to  
182           new development and redevelopment projects that disturb greater than or equal to  
183           one acre shall be accompanied by the end of June 2005 (5.4.1, and 5.4.2).
- 184           2. A sufficiency review with respect to the enforcement of the County Development  
185           Standards, and as appropriate, a recommendation to the County Board of  
186           Supervisors to adopt more effective ordinances and standards. Said revisions will  
187           be reflected in the SWMP Annual Report.
- 188           3. Training of County employees on the augmented County Development Standards  
189           will occur by the end of June 2006.
- 190           4. By the end of June 2005, an amendment of the County’s Drainage Manual will  
191           occur, as necessary, to incorporate the following tentative procedures and policies  
192           which are intended to be equivalent to WQO 2003-005-DWQ, Attachment 4. The  
193           process to formally update the Manual will be an open process involving users of  
194           the Manual, the Regional Board, and other interested parties.
- 195           5. At the planning/design stage of a proposed construction project involving one or  
196           more acres of disturbed soil a site specific Storm Water Mitigation Report  
197           (SWMR) documenting the permanent site specific storm water quality mitigation  
198           measures proposed to be deployed shall be developed for approval by the  
199           County’s PM/PE.
- 200           6. The SWMR shall document that the project was designed to minimize impervious  
201           surfaces and maximize vegetation-covered soil areas. In addition to reducing the  
202           volume of runoff, these vegetated areas can function as storm water treatment  
203           devices, bio-filtration strips (overland flow areas) and bio-filtration swales

204 (vegetated ditches).

205 The SWMR shall document the following:

- 206 • Incorporation within the site's plan or design, land use planning measures to  
207 minimize water quality impacts, including stream buffers and restoration  
208 activities.
- 209 • Reduction of the site's imperviousness, conserving natural resources and areas,  
210 maintaining and using natural drainage courses in the storm water conveyance  
211 system and minimizing clearing and grading.
- 212 • When landscaping is required or proposed, provision of runoff storage measures  
213 dispersed uniformly throughout the site's landscape with the use of a variety of  
214 detention, retention, and runoff practices.
- 215 • Implementation of on-site hydrologically functioning landscape design and  
216 management practices.

217 The SWMR shall adhere to the following design principles:

- 218 • Strive to maintain pre-development rainfall runoff characteristics.
  - 219 ○ Minimize project's impervious footprint and conserve natural  
220 areas.
  - 221 ○ Minimize directly connected impervious areas.
  - 222 ○ Where landscaping is proposed in or adjacent to parking areas, to  
223 the extent feasible, incorporate landscaped areas into a site  
224 drainage design that minimizes runoff.
- 225 • Maximize the protection of slopes and channels, including in hillside areas,  
226 through the use of deep-rooted, drought tolerant plant species.

227 The SWMR shall adhere to the following design standards:

- 228 • Provide storm drain system stenciling and signage at inlets in areas where curb,  
229 gutter and sidewalks are provided.
- 230 • Design outdoor material storage areas to reduce pollution introduction into storm  
231 drain systems.

## SECTION 4.5

## *Post Construction Runoff Control*

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- 232           • Design hazardous material storage areas so as to prevent contact with runoff or  
233           spillage to storm water conveyance systems.
  
- 234           • Design trash storage areas to reduce pollutant introduction.
  
- 235           • Use water efficient irrigation systems and landscape design.
  
- 236           • To the extent feasible, drain street runoff to vegetated swales (bio-filters) or  
237           gravel shoulder (infiltration) areas.
  
- 238           • Encourage the covering of loading / unloading dock areas to preclude storm water  
239           run-on/off.
  
- 240           • Prohibit direct connections to storm drains from depressed loading docks (truck  
241           wells).
  
- 242           • Vehicle / equipment maintenance and wash areas shall be covered or designed to  
243           preclude storm water run-on/off.
  
- 244           • Drainage systems serving areas with vehicle / equipment maintenance and wash  
245           areas shall be designed to capture all wash water, leaks and spills so as to  
246           facilitate proper disposal of all non-permitted, non-storm water discharges.
  
- 247           • Outdoor processing areas that pose a significant threat to water quality shall be  
248           isolated from storm drain systems and runoff.
  
- 249           • Fuel dispensing areas shall contain the following:
  - 250                   ▪ Have an appropriate slope to prevent ponding, and be hydraulically  
251                   separated from the rest of the site by a grade break that prevents  
252                   run-on.
  
  - 253                   ▪ Overhanging roof structure or canopy. The cover's minimum  
254                   dimensions must be equal to or greater than the area within the  
255                   grade break. The cover must not drain onto the fuel dispensing  
256                   area and the downspouts must be routed to prevent drainage across  
257                   the fueling area.
  
  - 258                   ▪ Pavement of Portland cement concrete or equivalent. Asphalt  
259                   concrete shall not be used.
  
  - 260                   ▪ At a minimum, the concrete fuel dispensing area must extend 6.5  
261                   feet from the corner of each fuel dispenser, or the length at which  
262                   the hose and nozzle assembly may be operated plus 1 foot,  
263                   whichever is greater.

- 264           • For the following sites:
- 265                     ▪ Residential projects with 10 or more housing units;
- 266                     ▪ Commercial sites involving auto repair shops, retail gasoline  
267 outlets, restaurants, or more than 2 acres total;
- 268                     ▪ Commercial sites involving parking lots 5,000 square feet or more  
269 or with 25 or more parking spaces exposed to storm water runoff;
- 270                     ▪ Industrial sites involving auto repair shops, retail gasoline outlets,  
271 restaurants, or more than 5 acres total; or
- 272                     ▪ Industrial sites involving parking lots 5,000 square feet or more or  
273 with 25 or more parking spaces exposed to storm water runoff
- 274           ○ Storm water treatment retention (infiltration) and/or detention basins, or  
275 equivalent, shall be provided and designed to infiltrate or treat, on site, runoff  
276 from the site prior to its discharge to a storm drain system or surface receiving  
277 water, unless a waiver is granted by the PM/PE based on a determination that  
278 to do so would be infeasible. First priority shall be to, where feasible and  
279 appropriate, provide for infiltration of the site’s runoff. Where infiltration is  
280 not feasible or appropriate, detention shall be considered.
- 281           • Storm water treatment retention and detention basin siting practices and designs  
282 shall be in accordance with the Caltrans “Statewide Storm Water Quality Practice  
283 Guidelines”, April 2002, Section 5.4, “Descriptions of Treatment BMPs”.
- 284           • The “design storm” used for storm water structural treatment devices shall be in  
285 accordance with the following:
- 286                     “Design Storm” is the particular event that generates runoff rates or volumes that  
287 the drainage-related facilities are designed to handle. For water quality treatment  
288 purposes, the volume of water that must be treated is termed the Water Quality  
289 Volume (WQV), and the flow rate to be treated is the Water Quality Flow (WQF).  
290 Methods for determining the WQV are generally tied to an analysis of rainfall  
291 depths generated over 24-hour periods.
- 292                     The WQV of treatment BMPs will be based on using one of the following  
293 methods:
- 294                     1. The maximized detention volume determined by the 85<sup>th</sup> percentile  
295 runoff capture ratio. A Web-based design tool, which uses data  
296 from more than 300 California rainfall stations, has been created  
297 for use. It is available at <http://stormwater.water-programs.com>.



- 326           • For the following sites:
- 327                     ▪ Commercial sites involving restaurants with “drive through”  
328                     service, or
- 329                     ▪ Other commercial sites involving 100,000 sq ft or more of building  
330                     space,
- 331           And where:
- 332                     ▪ The use of detention or retention basins are not feasible, and
- 333                     ▪ Vegetation within the drainage area will not be generating  
334                     significant amounts of vegetative debris.
- 335                     ○ Gross solids removal devices (e.g. linear radial or inclined bar rack as set  
336                     forth in Caltrans “Statewide Storm Water Quality Practice Guidelines”, April  
337                     2002, Section 5.4, “Descriptions of Treatment BMPs”), or equivalent, shall  
338                     be provided and designed to treat runoff prior to its discharge to a storm  
339                     drain system or any surface receiving water, unless a waiver is granted by the  
340                     PM/PE based on a determination that to do so would be infeasible.
- 341           • The SWMR shall recognize that there are situations where the placement of  
342           structural treatment devices is infeasible due to: (i) extreme limitations of space  
343           for treatment on a redevelopment project, (ii) unfavorable or unstable soil  
344           conditions at a site to attempt infiltration, and (iii) risk of ground water  
345           contamination because a known unconfined aquifer lies beneath the land surface  
346           or an existing or potential underground source of drinking water is less than 10  
347           feet from the soil surface. Any other justification for infeasibility must be  
348           separately petitioned to the RWQCB for consideration.
- 349           • The SWMR shall recognize that the County may, as a result of on-going  
350           watershed planning processes, establish impact fee program(s) as an alternative to  
351           on-site storm water structural treatment devices.
- 352           • The SWMR shall document that there is a mechanism in place that will ensure  
353           ongoing long-term maintenance of all storm water structural treatment devices.

#### 354 4.5.4 BMP PROGRAM SUMMARY

355           The following page contains a summary of the Post Construction Runoff Control BMP  
356           program set forth in the El Dorado County Storm Water Management Plan. These BMPs  
357           will be subject to annual reviews and updates as outlined in Sections 3.2 and 5.6.1.

358

359 EPA's NPDES rules state:

360 "Implementation of best management practices consistent with the provisions of  
361 the storm water management program required pursuant to this section (the six  
362 minimum control measures, evaluation & assessment, record keeping and  
363 reporting) ... constitutes compliance with the standard of reducing pollutants to  
364 the "maximum extent practicable ." (40 CFR 122.34)

365 This summary notes BMPs applicable to one of the six minimum control measure: Post  
366 Construction Runoff Control. El Dorado County proposes that this program constitutes  
367 fulfillment of the minimum General Permit and Federal Regulation requirements. As the  
368 public review and the SWMP finalization processes proceed, the program, and the  
369 County's assessment of this program, may change.

**1 4.6.1 OVERVIEW**

2 This section describes how the County will comply with Permit requirements by  
3 incorporating pollution prevention and good housekeeping storm water quality  
4 management into County municipal operations. The County will achieve compliance by  
5 implementing the Maintenance Storm Water Management Program described herein:

- 6 • Section 4.6.2 Maintenance Practices
- 7 • Section 4.6.3 Materials Handling
- 8 • Section 4.6.4 Vehicle and Equipment Operations
- 9 • Section 4.6.5 Paving Operations Procedures
- 10 • Section 4.6.6 Water Conservation Practices
- 11 • Section 4.6.7 Water / Irrigation Practices
- 12 • Section 4.6.8 Safer Alternative Product Use
- 13 • Section 4.6.9 Drainage Facilities
- 14 • Section 4.6.10 Illicit Connection Detection, Reporting and Removal
- 15 • Section 4.6.11 Illegal Discharge Control
- 16 • Section 4.6.12 Litter and Debris Removal
- 17 • Section 4.6.13 Chemical Vegetation Control
- 18 • Section 4.6.14 Vegetated Slope Inspection
- 19 • Section 4.6.15 Snow Removal and De-Icing Agents
- 20 • Section 4.6.16 Storm Water De-Watering Operations (Temporary Pumping  
21 Operations)
- 22 • Section 4.6.17 Sweeping
- 23 • Section 4.6.18 Maintenance Facility Housekeeping Practices
- 24 • Section 4.6.19 Non-Storm Water Discharges
- 25 • Section 4.6.20 Maintenance of Treatment Devices



- 26           • Section 4.6.21 Facility Pollution Prevention Plans
- 27           • Section 4.6.22 Employee Training Program
- 28           • **Section 4.6.23 BMP Program Summary**

29           Section 1.4.2 of the SWMP defines emergency conditions under which the protection of  
30           public health, safety and property takes precedence over the storm water practices in the  
31           SWMP. Maintenance personnel are frequently tasked with responding to emergency  
32           situations where some elements of the storm water practices cannot be applied for the  
33           duration of the emergency. Under these conditions, Maintenance Managers (MMs) and  
34           the County’s Storm Water Coordinator will work directly with the RWQCB to facilitate  
35           accurate, cooperative communication.

36    **4.6.2 MAINTENANCE PRACTICES**

37           **4.6.2.1 Maintenance Work Areas and BMP Identification**

38           The County will finalize storm water municipal operations practices for the  
39           municipal operations and maintenance program on County roadways and County  
40           facilities by the end of June 2005 and implement said practices by the end of June  
41           2006.

42           Table 4.6-1 identifies the approved maintenance practices, or category of  
43           practices, that are applicable to the various maintenance activities carried out by  
44           the responsible departments.

**TABLE 4.6-1: MAINTENANCE PRACTICES**

Scheduling and Planning
Sediment Control
Waste Management
Spill Prevention and Control
Solid Waste Management
Hazardous Waste Management
Contaminated Soil Management
Sanitary/Septic Waste Management
Liquid Waste Management
Concrete Waste Management
Materials Handling
Material Delivery and Storage
Material Use
Vehicle and Equipment Operations
Vehicle and Equipment Fueling
Vehicle and Equipment Maintenance
Paving Operations Procedures
Water Conservation Practices
Water/Irrigation

**TABLE 4.6-1: MAINTENANCE PRACTICES**

Safer Alternative Products
Drainage Facilities
Illicit Connection Detection, Reporting, and Removal
Illegal Discharge Control
Litter and Debris
Litter and Debris
Anti-Litter Signs
Chemical Vegetation Control
Vegetated Slope Inspection
Snow Removal and De-Icing Agents
Storm Water Dewatering Operations (temporary pumping operations)
Sweeping
Maintenance Facility Housekeeping Practices

45  
 46 The objective of implementing maintenance practices is to provide preventative  
 47 measures to ensure that maintenance activities are conducted in a manner that  
 48 reduces the amount of pollutants discharged to surface waters via the County’s  
 49 storm water drainage systems. The County’s maintenance activities involve the  
 50 use of a variety of products. Under normal, intended conditions of use, these  
 51 materials are not considered “pollutants of concern.” However, if these products  
 52 are used, stored, spilled or disposed of in a way that may cause them to contact  
 53 storm water or enter storm water drainage systems, they may become a concern  
 54 for water quality. Potential pollutants of concern for the County’s maintenance  
 55 activities include petroleum products, sediments, trash and debris, metals,  
 56 acidic/basic materials, nutrients, solvents, waste paint, herbicides, pesticides, and  
 57 others. Many of these potential pollutants can be prevented from being  
 58 discharged via storm water drainage systems by selecting and implementing  
 59 practices appropriate for the activity being conducted.

60 The majority of maintenance activities are performed in dry weather to minimize  
 61 impacts to water quality; however, conditions may exist which require some  
 62 activities be conducted during wet weather.

63 For some activities, maintenance personnel may select from a variety of practices  
 64 for storm water pollution prevention. For example, during cleanup or repair of  
 65 minor slides and slip outs, several sediment controls are available that may assist  
 66 in containing sediment. Personnel will need to select one or a combination of the  
 67 available control methods to address the sediment they encounter at the site.

68 **4.6.2.2 Pavement and Bridge Maintenance Work Activities**

69 The general objectives of pavement and bridge maintenance activities are to  
 70 provide public safety, protect personal property, preserve the County’s capital

71 investment, and to maintain a riding quality satisfactory to the traveling public.  
72 Road surface maintenance typically involves the use of concrete, asphalt and  
73 other materials to repair existing road surfaces. The typical practices for these  
74 operations are similar to those for a construction site, and the MM will, in  
75 addition to the maintenance practices described in this section, draw from the  
76 construction site practices when directing pavement and bridge maintenance  
77 activities.

#### 78 4.6.2.3 Slopes/Drainage/Vegetation Work Activities

79 The maintenance activities related to slopes, drainage and vegetation typically  
80 include repair, replacement and clearing of channels, ditches, culverts, under-  
81 drains, horizontal drains and other elements of storm water drainage systems. As  
82 with pavement maintenance, the typical practices for these operations are similar  
83 to those for a construction site, and the MM will, in addition to the maintenance  
84 practices described in this section, draw from the construction site practices when  
85 directing slope/drainage/vegetation maintenance activities.

#### 86 4.6.2.4 Storm Water Drainage Facilities Inspection and Cleaning Program

87 Maintenance personnel routinely inspect storm water drainage systems and assess  
88 the need for cleaning or clearing. Drain systems will be cleaned when  
89 accumulated material impairs the system's function. Ditches will routinely be  
90 inspected, and as necessary, cleaned to maintain the hydraulic capacity of the  
91 ditch. Ditches and gutters will be sealed or repaired when structural integrity is  
92 endangered. Down-drains will be routinely inspected and cleaned or repaired as  
93 necessary. Solid and liquid wastes generated by the cleaning of storm water  
94 drainage system facilities are disposed of in accordance with federal and state  
95 liquid and solid waste disposal regulations.

#### 96 4.6.2.5 Illicit Connection / Illegal Discharge (IC/ID)

97 When IC/IDs are discovered, they will be referred to the MM for initial  
98 investigation. Illegal dumping on County right-of-way or property that may  
99 impact storm water quality will be removed. The MM will report all significant  
100 illicit connections, illegal dumping and cleanup activities to the County's Storm  
101 Water Coordinator.

#### 102 4.6.2.6 Litter and Debris Cleanup

103 Litter and debris can accumulate along County roadways and on County  
104 properties. The County Environmental Management Department conducts  
105 periodic litter cleanup operations to maintain neat and clean appearance and  
106 undertakes abatement actions against illegal dumping. In addition, the

107 Department of Transportation periodically provides litter and debris removal  
108 activities to maintain safe highway conditions.

#### 109 4.6.2.7 Landscape Maintenance

110 The County maintains vegetation on roadsides that is compatible with the  
111 surrounding environment, safe highway use, aesthetics, and erosion and dust  
112 control. However, some vegetation must be controlled to reduce the risk of  
113 roadside fires, to maintain sight distances to provide safe highway operating  
114 conditions and to discourage noxious weeds.

115 The vegetation management program includes chemical weed control, mechanical  
116 weed control, tree and shrub pruning and tree and shrub removal. Along roads,  
117 removal of vegetation is generally restricted to a narrow band adjacent to shoulder  
118 edges, which is necessary to provide sight distance and protect highway  
119 appurtenances, such as guardrails and signs. Vegetation management practices  
120 are designed to control vegetation while minimizing soil erosion.

121 The County's vegetation control program include the following elements:

- 122 • Enhance the use of appropriate native and adapted vegetation for the  
123 purpose of preventing erosion and removing pollutants in storm water  
124 runoff.
- 125 • Apply herbicides in a manner that minimizes or eliminates the  
126 discharge of herbicides to receiving waters, including consideration of  
127 the timing of applications in relation to expected precipitation events,  
128 restricting use in proximity to water bodies, and careful consideration  
129 of the combinations of chemicals used.
- 130 • Restrict the application of nutrients to rates necessary to establish and  
131 maintain vegetation without causing significant nutrient runoff to  
132 surface water.
- 133 • Assuring that chemical control activities are performed in compliance  
134 with federal, state and local regulations.

135 The County also periodically inspects roadside vegetated slopes to determine the  
136 need for remedial measures. If roadsides are found to be experiencing significant  
137 erosion, measures will be pursued for site-specific remedial measures to maintain  
138 soil stability.

#### 139 4.6.2.8 Maintenance of Treatment Devices

140 Treatment devices capture and remove pollutants from storm water before the  
141 runoff is discharged to receiving wastes. After construction, and if arrangements  
142 are not made with third parties to undertake on-going maintenance of these

143 devices, the County will assume responsibility to assure their on-going  
144 functionality. In the case of the County's Government Center or parks, these  
145 maintenance responsibilities will be carried out by the Department of General  
146 Services. For facilities within the County's maintained road rights-of-way, these  
147 responsibilities will be carried out by the Department of Transportation.

148 These maintenance activities will include regular inspections and maintenance to  
149 allow the systems to continue to function as designed, and to facilitate periodic  
150 removal and proper disposal of accumulated trash, litter, debris, sediments and  
151 other pollutants. If in the MM's opinion, routine maintenance will not sufficiently  
152 maintain functionality of the treatment device; this will be brought to the attention  
153 of the Storm Water Coordinator.

#### 154 4.6.2.9 Snow and Ice Control

155 Snow removal and ice control include snow removal operations and opening of  
156 drainage inlets that get covered or blocked by snow and ice. Because salt, deicing  
157 chemicals and abrasives may pollute storm water runoff, the County uses no more  
158 than the minimum amount of these materials necessary for effective snow and ice  
159 control.

#### 160 4.6.2.10 Management and Support

161 The activities include:

- 162 • Storage, repair, and maintenance of vehicles, equipment and related  
163 support materials;
- 164 • Fueling and washing of vehicles and equipment;
- 165 • Maintenance of buildings, storm water drainage systems and  
166 landscaping;
- 167 • Storage of sand, salt, asphalt, rock and pesticides;
- 168 • Storage of self-generated wastes; and
- 169 • Bulk storage of sediment, litter and debris collected by road  
170 maintenance activities.

171 The County implements practices to reduce the potential for storm water  
172 pollution by minimizing contact between storm water and the various activities  
173 conducted at the site and substances used and stored at the maintenance  
174 facilities.

## 175           4.6.2.11 Scheduling and Planning

## 176                   Description:

177                   These practices involve scheduling and planning of all activities (at  
178                   maintenance facilities or maintenance activity sites) in a manner that  
179                   considers the use of practices. Planning is needed to reduce the exposure  
180                   of potential pollutants to wind, rain, runoff and vehicle tracking. Planning  
181                   is important when working in the vicinity of a drainage system or water  
182                   body. These practices also include the scheduling of maintenance  
183                   activities and control practices to minimize potential water quality impacts  
184                   during rainfall events.

## 185                   Appropriate Applications:

186                   Except for emergency conditions, the following activities shall not be  
187                   performed during rain events:

- 188                   1. asphalt cement crack and joint grinding/sealing;
- 189                   2. asphalt paving;
- 190                   3. structural pavement failure (dig outs);
- 191                   4. pavement grinding and paving;
- 192                   5. sealing operations;
- 193                   6. concrete slab repair (concrete spall repair is allowed);
- 194                   7. Portland cement crack and joint sealing;
- 195                   8. mudjacking and drilling;
- 196                   9. shoulder grading (should not be performed if runoff is visible);
- 197                   10. non-landscaped chemical vegetation control;
- 198                   11. curb and sidewalk repair;
- 199                   12. chemical vegetation control;
- 200                   13. painting;
- 201                   14. thermoplastic striping and marking;
- 202                   15. paint striping and marking; raised/recessed pavement marker

203 application and removal; and

204 16. outdoor vehicle and equipment maintenance.

205 Maintenance activities should be scheduled to minimize land disturbance  
206 during the rainy season.

207 Implementation:

208 • During the rainy season, to the extent feasible, avoid scheduling  
209 maintenance activities that could adversely affect storm water  
210 quality.

211 • Establish the appropriate planting time when introducing vegetation.  
212 If it is necessary to vegetate disturbed soil at other times of the year,  
213 then perform more frequent inspections and maintenance.

214 Maintenance:

215 • Verify that work is progressing in accordance with the schedule. If  
216 the schedule changes, revise practices as necessary.

217 • Inspect vegetation and perform maintenance to ensure it is  
218 established.

#### 219 4.6.2.12 Sediment Control

220 Sediment control practices for maintenance activities are essentially the same as  
221 those deployed for construction activities. Therefore, details of these practices  
222 are not duplicated here, but rather are as outlined the Section 4.4.

#### 223 4.6.2.13 Waste Management

224 Waste management consists of implementing procedural and structural practices  
225 for handling, storing and disposing of wastes generated by a maintenance  
226 activity to prevent the release of waste materials into storm water discharges.  
227 Waste management includes the following practices:

228 1. Spill Prevention and Control;

229 2. Solid Waste Management;

230 3. Hazardous Waste Management;

231 4. Contaminated Soil Management;

- 232 5. Sanitary/Septic Waste Management;
- 233 6. Liquid Waste Management; and
- 234 7. Concrete Waste Management.

235 These controls shall be implemented for all applicable activities, material usage  
236 and site conditions.

237 **4.6.2.14 Spill Prevention and Control**

238 Description:

239 Spill prevention and control procedures and practices are implemented to  
240 prevent and control spills in a manner that minimizes or prevents  
241 discharge to storm water drainage systems or watercourses at maintenance  
242 activity sites and maintenance facilities (see Material Use for additional  
243 materials handling procedures).

244 Appropriate Applications:

- 245 • These controls apply at maintenance activity sites and at maintenance  
246 facilities.
- 247 • Spill prevention and control procedures are implemented wherever non-  
248 hazardous chemicals and/or hazardous substances are stored or used.  
249 Substances may include, but are not limited to, soil stabilizers, dust  
250 palliatives, pesticides, growth inhibitors, fertilizers, paints, de-icing  
251 chemicals, fuels, lubricants and other petroleum distillates.
- 252 • To the extent that the clean up work can be accomplished safely, wastes  
253 shall be contained and cleaned up immediately.

254 Implementation:

- 255 • If a spill or leak occurs in the containment area, accumulated rainwater  
256 shall be evaluated to determine appropriate disposal method.
- 257 o If accumulated rainwater is hazardous, dispose of in accordance with  
258 the Hazardous Waste Management practices.
- 259 o If accumulated rainwater is chemically contaminated, but non-  
260 hazardous, dispose of in accordance with the Liquid Waste  
261 Management practices.
- 262 • To the extent that cleanup activities and safety are not compromised,



263 spills shall be covered and protected from storm water run-on during  
264 rainfall.

265 • Dry cleanup methods should be used when possible.

266 • Used cleanup materials, contaminated materials and recovered spill  
267 material that is no longer suitable for its intended purpose shall be  
268 disposed in accordance with the Hazardous Waste Management  
269 practices or Solid Waste Management, practices depending on waste  
270 characteristics.

271 • Contaminated water used for cleaning and decontamination shall not be  
272 allowed to enter storm water drainage systems or watercourses.

273 • Waste storage areas shall be kept clean, well organized and equipped  
274 with cleanup supplies that are appropriate for the materials being stored.

275 • Perimeter controls, containment structures, covers and liners shall be  
276 repaired or replaced as needed to maintain proper function.

277 • Tarps and similar control measures should be used to prevent spills or  
278 material drift from being deposited into watercourses (e.g., during bridge  
279 maintenance).

280 Maintenance:

281 • Verify that spill control cleanup materials are located near material  
282 storage, unloading and use areas.

283 • Update spill prevention and control plans and stock appropriate cleanup  
284 materials whenever changes occur in the types of chemicals stored on  
285 site.

#### 286 4.6.2.15 Solid Waste Management

287 Description:

288 Solid waste management procedures and practices are designed to  
289 minimize or eliminate the discharge of pollutants to drainage systems or  
290 watercourses associated with the stockpiling or removal of maintenance  
291 activity wastes.

292

293 Appropriate Applications:

## SECTION 4.6

### *Pollution Prevention / Good Housekeeping*

---

294 Solid waste management practices are implemented during maintenance  
295 activities that generate solid wastes. These solid wastes include, but are  
296 not limited to:

- 297 • Maintenance wastes, including brick, mortar, asphalt concrete,  
298 Portland cement, concrete, timber, steel and metal scraps, pipe and  
299 electrical cuttings, non-hazardous equipment parts, Styrofoam,  
300 grindings, sandblast grit and other materials used to transport and  
301 package maintenance materials;
- 302 • Highway planting wastes, including vegetative material, plant  
303 containers and packaging materials; and
- 304 • Litter and debris, including food containers, beverage cans, coffee  
305 cups, paper bags and plastic wrappers.

306 Implementation:

- 307 • Use dry cleanup techniques (e.g., vacuuming, sweeping, dry rags) to  
308 remove solid waste from the maintenance activity site when practicable.
- 309 • Recycle, reuse or properly dispose of solid waste.
- 310 • Storm water run-on shall be prevented from contacting stored solid  
311 waste through the use of appropriately stabilized ditches, berms, dikes  
312 and swales.
- 313 • Solid waste storage areas at maintenance facilities should be located  
314 away from drainage facilities and watercourses and shall not be located  
315 in areas prone to flooding or ponding.
- 316 • Asphalt chunks and grindings may be placed in embankments when  
317 these materials are placed where they will not enter streams, lakes and  
318 rivers. In addition, they may be used as road shoulder backing when  
319 placed in accordance with standard construction specifications.

320 Maintenance:

- 321 • Periodically inspect the solid waste storage areas and review the  
322 disposal procedures.
- 323 • Repair or replace damaged or missing ditches, berms, dikes and swales.

## 324 4.6.2.16 Hazardous Waste Management

## 325 Description:

326 Hazardous waste management procedures and practices are designed to  
327 minimize or eliminate the discharge of pollutants at maintenance activity  
328 sites and maintenance facilities to storm water drainage systems or  
329 watercourses.

## 330 Appropriate Applications:

331 Hazardous waste management practices are implemented during  
332 maintenance activities and at maintenance facilities that generate or store  
333 hazardous waste from the use of petroleum products, asphalt products,  
334 concrete curing compounds, pesticides, acids, paints, solvents, wood  
335 preservatives, stains, roofing tar and any other materials considered a  
336 hazardous waste.

## 337 Implementation:

- 338 • Hazardous waste shall be stored in sealed containers constructed of a  
339 compatible material and shall be properly labeled.
- 340 • All hazardous waste shall be stored, transported and disposed in  
341 accordance with federal, state and local regulations.
- 342 • Containers shall not be overfilled.
- 343 • Paintbrushes and equipment for water- and oil-based paints shall be  
344 cleaned within a contained area and associated waste shall not be  
345 allowed to contaminate site soils, watercourses or storm water drainage  
346 systems.

## 347 Maintenance:

348 Periodically inspect the maintenance facility storage site to ensure all  
349 requirements are met and to review the disposal procedures.

## 350 4.6.2.17 Contaminated Soil Management

## 351 Description:

352 These are procedures and practices to minimize or eliminate the  
353 discharges of pollutants from contaminated soil/sediment to storm water  
354 drainage systems or watercourses.

355 Appropriate Applications:

356 Contaminated soil/sediment generated during emergency response or other  
357 maintenance activities should be collected and managed for treatment or  
358 disposal.

359 Implementation:

360 • Work with the local regulatory agencies to develop options for  
361 treatment, reuse and/or disposal of contaminated soil. Disposal of  
362 contaminated soil shall be in accordance with the Solid Waste  
363 Management practices or Hazardous Waste Management practices,  
364 depending on soil characteristics.

365 • Avoid stockpiling contaminated soils or hazardous material.

366 • Do not stockpile in or near storm water drainage systems or  
367 watercourses.

#### 368 4.6.2.18 Sanitary/Septic Waste Management

369 Description:

370 Sanitary/septic waste management procedures and practices are designed  
371 to minimize or eliminate the discharge of sanitary/septic waste materials  
372 to storm drain systems or watercourses.

373 Appropriate Applications:

374 Sanitary/septic waste management practices are implemented for all  
375 maintenance activities that use portable sanitary/septic waste systems.

376 Implementation:

377 • Sanitary facilities shall be located away from drainage facilities and  
378 watercourses. When subjected to risk of high winds, sanitary facilities  
379 shall be secured to prevent overturning.

380 • Wastewater shall not be discharged (unless the discharge is to a  
381 permitted leach field or pond) or buried within the highway right-of-  
382 way.

383 Maintenance:

384 • Sanitary/septic waste should be discharged to a sanitary sewer or  
385 managed by a licensed hauler.

- 386                   • Sanitary/septic waste storage and the disposal procedures should be  
387                   managed to prevent non-storm water discharge.

388           4.6.2.19 Liquid Waste Management

389           Description:

390                   Liquid waste management procedures and practices are designed to  
391                   prevent the discharge of pollutants to storm water drainage systems or  
392                   watercourses as a result of the creation, collection or disposal of non-  
393                   hazardous liquid and un-permitted non-storm water discharges.

394           Appropriate Applications:

- 395                   • Liquid waste management is applicable to maintenance activities that  
396                   generate non-hazardous byproducts, residuals or wastes, including  
397                   drilling slurries and drilling fluids; grease-free and oil-free wastewater  
398                   and rinse water; dredging; and other non-storm water liquid discharges.
- 399                   • Un-permitted non-storm water discharges are prohibited, and if and  
400                   where such are discovered to be occurring, the MM will notify the  
401                   Storm Water Coordinator who will report to the RWQCB in accordance  
402                   with Section 9. The Storm Water Coordinator will work with the  
403                   responsible site manager to facilitate identifying a schedule for  
404                   achieving permit compliance.

405           Implementation:

- 406                   • Non-storm water discharges to drainage paths, drain systems, and  
407                   watercourses are prohibited.
- 408                   • Drilling and saw cutting fluids:
- 409                         ○ Stick-down berms may be used to improve containment.
- 410                         ○ Fluids may be collected by vacuum or other methods.
- 411                         ○ Collected fluids shall be contained and recycled, evaporated or  
412                         discharged to the sanitary sewer system with approval from the  
413                         publicly owned treatment works (POTW).
- 414                         ○ Fluids shall not be discharged to storm water drainage systems or  
415                         watercourses.
- 416                   • Vactor™ liquid wastes:

417                   ○ A visual inspection of water drainage facilities shall be  
418                   performed prior to cleaning. If chemical contamination is  
419                   suspected, the MM will follow appropriate Hazardous Materials  
420                   Spills.

421                   ○ Liquid waste collected in the Vactor™ trucks may be evaporated  
422                   or discharged to an approved temporary decanting location.

423                   Maintenance:

- 424                   • At the completion of the task, remove deposited solids from containment  
425                   areas and capturing devices.
- 426                   • Check containment areas and capturing devices for damage and repair.

#### 427                   4.6.2.20 Concrete Waste Management

428                   Description:

429                   Concrete waste management procedures and practices are designed to  
430                   ensure that concrete wastes are properly handled and eliminate the  
431                   discharge of concrete waste to storm water drainage systems or  
432                   watercourses.

433                   Appropriate Applications:

434                   Concrete waste can be generated in various maintenance activities  
435                   including Curb and Sidewalk Repair, Mud jacking and Drilling, Drain and  
436                   Culvert Maintenance, Drainage Ditch and Channel Maintenance, Public  
437                   Facilities, Saw cutting for Loop Installation, Sign Repair and  
438                   Maintenance, Median Barrier and Guard Rail Repair, and Building and  
439                   Grounds Maintenance.

440                   Implementation:

- 441                   • Contracts for concrete providers require contractors to appropriately  
442                   manage any concrete waste and prohibit non-storm water discharges  
443                   generated at the job site.
- 444                   • Portland cement concrete waste shall not be allowed to enter storm  
445                   water drainage or watercourses.
- 446                   • Concrete waste from grout pumping operations shall be contained.
- 447                   • Concrete residue should be collected by vacuum or shovel for proper  
448                   disposal. Concrete debris may be disposed of through on-site burial.

- 449                   • Liquid waste can be contained in a bucket or drum with a tight-fitting lid  
450                   for transport and approved off-site disposal. Plastic bags may be used if  
451                   nothing else is available. Avoid breaking the bags by double bagging  
452                   and filling the bags to about one-fifth of their capacity. Allow solids to  
453                   settle and recycle or dispose of in accordance with the Solid Waste  
454                   Management practices. The liquid waste may be evaporated. Decanted  
455                   liquid waste shall be discharged to sanitary sewer only with the POTW's  
456                   approval. Decanted liquid waste may also be removed for disposal as  
457                   hazardous waste. Refer to the Hazardous Waste Management practices.
- 458                   • A temporary concrete washout facility may be constructed at the  
459                   maintenance activity area. Below-grade concrete washout facilities are  
460                   preferred. Above-grade facilities are used if excavation is not practical.  
461                   Designated washout areas should be located at least 15 meters (50 feet)  
462                   away from drainage facilities.
- 463                   • Below-grade facilities consist of a pit excavated away from  
464                   watercourses. Above-grade washout facilities should be bermed using  
465                   sandbags or straw bales.

466                   Maintenance:

467                   The MM shall monitor the concrete working tasks, such as saw cutting,  
468                   coring, grinding and grooving to ensure that concrete waste is collected  
469                   and disposed of properly.

### 470    4.6.3 MATERIALS HANDLING

471                   Materials handling consists of implementing procedural and structural practices for  
472                   handling, storing and using maintenance materials in a manner that prevents the release  
473                   of those materials into storm water.

#### 474    4.6.3.1 Materials Delivery and Storage

475                   Description:

476                   Material delivery and storage procedures and practices are designed for  
477                   the proper handling and storage of materials at the maintenance facility.  
478                   These procedures and practices minimize or eliminate the discharge of  
479                   these materials to storm water drainage systems or watercourses.

480                   Appropriate Applications:

- 481                   • These procedures are implemented at maintenance facilities involved in  
482                   the delivery and storage of aggregate, pesticides, fertilizers, detergents,

## SECTION 4.6

### *Pollution Prevention / Good Housekeeping*

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483 plaster, petroleum products, asphalt and concrete components, hazardous  
484 chemicals, concrete compounds or other materials that may be detrimental  
485 if released to storm water drainage systems or watercourses.

- 486 • Refer to Material Use for procedures that apply to any materials that are  
487 assembled for use at a maintenance activity site.

488 Implementation:

- 489 • Containment facilities shall provide for an effective spill containment  
490 volume equal to 110% of the largest container in the facility.

- 491 • Containment facilities shall be impervious to the materials stored there.

- 492 • Rainwater in containment facilities should be inspected prior to discharge.  
493 Drain valves should remain closed except to release clean rainwater.

- 494 • Personnel at maintenance facilities shall be trained to ensure that materials  
495 are properly handled and stored.

- 496 • Separation should be provided between stored containers to allow for spill  
497 cleanup and emergency response cleanup.

- 498 • To provide protection from rain, bagged and boxed materials stored  
499 outdoors shall be stored on pallets throughout the rainy season.

- 500 • To provide protection from rain, bagged and boxed materials shall be  
501 covered prior to rain events.

- 502 • Storage areas shall be kept clean, well organized and equipped with  
503 cleanup supplies for the materials being stored. Perimeter controls,  
504 containment structures, covers and liners shall be repaired or replaced as  
505 needed.

- 506 • Liquids stored outside shall be clearly labeled.

- 507 • Tank and delivery vehicles shall be parked so that spills can be isolated  
508 and quickly contained.

509 Maintenance:

- 510 • Check to ensure that designated storage areas are kept clean and well  
511 organized.

- 512 • Repair and/or replace perimeter controls, containment structures and



513 covers as needed to keep them functioning properly.

514 4.6.3.2 Material Use

515 Description:

516 Material use procedures and practices are used at maintenance facilities  
517 and maintenance activity sites to minimize or eliminate the discharge of  
518 materials to storm water drainage systems or watercourses.

519 Appropriate Applications:

520 These procedures are implemented at maintenance facilities and at  
521 maintenance activity sites where pesticides, fertilizers, detergents, plaster,  
522 petroleum products, asphalt and concrete components, hazardous  
523 chemicals, concrete compounds and other material that may be  
524 detrimental if released to the environment are used or prepared.

525 Implementation:

- 526 • Contract agreements with haulers who supply materials to maintenance  
527 activity sites should require them to supply materials in accordance with  
528 the requirements of these practices.
- 529 • Latex paint and paint cans, used brushes, rags, absorbent materials and  
530 drop cloths shall be disposed of in accordance with federal, state and local  
531 requirements.
- 532 • Do not remove the original product label from a container as it contains  
533 important spill cleanup and disposal information. Make copies of the  
534 label information or material safety data sheet if needed. Use the entire  
535 product before disposing of the container. Appropriately label all  
536 secondary containers.
- 537 • Mix paint indoors or in a containment area. Do not clean paintbrushes or  
538 rinse paint containers into a street, gutter, storm water drainage systems or  
539 watercourses. Rinsate from latex paint cleaning may be recycled or  
540 discharged to the sanitary sewer. Empty paint cans shall be dry prior to  
541 disposal as solid waste. See Liquid Waste Management and Hazardous  
542 Waste Management practices.
- 543 • Paint should be loaded into spray equipment at a maintenance facility.  
544 Nearby drain inlets should be protected at maintenance facilities and at  
545 maintenance activity site.

- 546                   • Use materials only where and when needed to complete the maintenance  
547                   activity. Consider the use of safer alternative materials when possible.  
548                   Reduce or eliminate use of hazardous materials on site when possible.
  
- 549                   • Keep a supply of spill cleanup material near material use areas. Train  
550                   employees in spill cleanup procedures.
  
- 551                   • Secure loads and cover loose materials in open-bed trucks during hauling  
552                   to activity sites.
  
- 553                   • Truck beds should be inspected after the completion of material delivery  
554                   to avoid depositing materials on the roadway.
  
- 555                   • Use proper loading and unloading techniques to prevent spills.

#### 556   4.6.4 VEHICLE AND EQUIPMENT OPERATIONS

557                   Vehicle and equipment operations, procedures and practices are designed to minimize or  
558                   eliminate the discharge of pollutants from vehicle and equipment fueling and  
559                   maintenance operations to storm water drainage systems or watercourses.

##### 560   4.6.4.1 Vehicle and Equipment Fueling

561                   Description:

562                   Vehicle and equipment fueling procedures and practices are designed to  
563                   minimize or eliminate the discharge of fuel spills and leaks into storm  
564                   water drainage systems or watercourses during equipment fueling and the  
565                   bulk delivery of fuel.

566                   Appropriate Applications:

567                   These procedures apply at all maintenance sites where vehicle and  
568                   equipment fueling occurs.

569                   Implementation:

##### 570                   ▪ Bulk Fuel Delivery

571                   • All aboveground and underground storage tanks shall be equipped  
572                   with automatic overfill shutoff valves.

573                   • Implement Spill Prevention and Control practices to prevent  
574                   spillage.

##### 575                   ▪ Fueling Areas

- 576                                      • Existing fueling areas are covered, paved with Portland cement  
577                                      concrete, and incorporate vapor recovery nozzles.
  
- 578                                      • Newly constructed or significantly reconstructed fueling areas will  
579                                      incorporate latest, applicable gasoline outlet practices.
  
- 580                                      ■ Fueling Area Maintenance
  
- 581                                      • Absorbent spill cleanup materials or drip pans shall be stored in  
582                                      fueling and maintenance areas and used materials shall be disposed  
583                                      in accordance with the Hazardous Waste Management practices.
  
- 584                                      • Immediately clean up leaks and drips.
  
- 585                                      • Hosing off the fueling area is prohibited. Dry shop clean up  
586                                      practices should be used.
  
- 587                                      • Manage wastes to reduce adverse impacts on storm water quality  
588                                      (see Solid Waste Management and Hazardous Waste  
589                                      Management). Fueling areas should be kept free of litter and debris  
590                                      that might become contaminated with petroleum products.
  
- 591                                      • Maintain and implement a current spill response plan for fueling  
592                                      operations.
  
- 593                                      ■ Refueling Practices
  
- 594                                      • Nozzles used at dedicated fueling areas shall be equipped with an  
595                                      automatic shutoff.
  
- 596                                      • Warnings against “topping off” fuel tanks should be posted at fuel  
597                                      dispensers.
  
- 598                                      • Fueling operations shall not be left unattended.
  
- 599                                      • Fueling in the field shall not be performed near unprotected  
600                                      drainage facilities or watercourses. See Spill Prevention and  
601                                      Control practices for pollution prevention and response  
602                                      requirements.
  
- 603                                      Maintenance:
  
- 604                                      • Inspect fueling facilities daily and correct deficiencies.
  
- 605                                      • Keep a supply of spill cleanup materials on site.

## 606 4.6.4.2 Vehicle and Equipment Maintenance

## 607 Description:

608 Vehicle and equipment maintenance procedures and practices are  
609 designed to minimize or eliminate the discharge of pollutants to storm  
610 water drainage systems or watercourses from vehicle and equipment  
611 maintenance.

## 612 Appropriate Applications:

- 613 • These procedures are applied where equipment and vehicles are stored or  
614 repaired.
- 615 • These procedures should be implemented to avoid prohibited discharges to  
616 the storm water drainage system of fuel, oil, hydraulic fluid, brake fluid,  
617 antifreeze and wiper fluid.

## 618 Implementation:

## 619 ■ Indoor Maintenance

- 620 • Maintenance should be performed in covered or indoor  
621 maintenance areas where potential pollutants cannot be introduced  
622 into storm water drainage systems.

## 623 ■ Field or Outdoor Maintenance

- 624 • Drip pans or absorbent materials shall be used during vehicle and  
625 equipment maintenance work that involves fluids.
- 626 • See Spill Prevention and Control practices for pollution prevention  
627 and response measures.
- 628 • The Contaminated Soil Management practices should be used to  
629 address any contaminated soil resulting from vehicle or equipment  
630 repair.
- 631 • Use dry methods (e.g., dry rags, vacuuming or sweeping) for  
632 cleaning associated with maintenance in outdoor areas.

## 633 ■ General Maintenance (in the field or in the yard)

- 634 • Vehicles and equipment shall be inspected for leaks on a regular  
635 basis. Significant leaks should be repaired; problematic vehicles  
636 or equipment should be removed from the maintenance activity

- 637 site.
- 638 • All parts washing should be performed in designated areas. Do not  
639 wash parts where wash waste cannot be captured. Use self-  
640 contained sinks or tanks when working with solvents.
- 641 • Non-storm water discharges into storm water drainage systems or  
642 watercourses are prohibited.
- 643 • Wastes should be collected and reused, recycled, removed or  
644 disposed of in accordance with the Hazardous Waste Management  
645 practices.
- 646 • Vehicle and equipment washing is conducted in designated areas  
647 only.

648 Maintenance:

- 649 • Inspect areas following field maintenance areas to ensure there is no  
650 residual contamination that might impact storm water quality. Clean areas  
651 as needed using dry methods, (e.g., sweeping or vacuuming).
- 652 • Maintain waste fluid containers in leak-proof condition.
- 653 ○ Inspect equipment for damaged hoses and leaky gaskets. Repair or  
654 replace as necessary.

655 **4.6.5 PAVING OPERATIONS PROCEDURES**

656 Paving operations practices for maintenance activities are essentially the same as those  
657 deployed for similar construction activities. Therefore, details of these practices are not  
658 duplicated here, but rather are as outlined the Section 4.4.

659 **4.6.6 WATER CONSERVATION PRACTICES**

660 Description:

661 Water conservation practices minimize water use during a maintenance activity to  
662 avoid causing erosion and/or the transport of pollutants into the drainage system  
663 and watercourses. Non-storm water discharges to storm water drainage systems  
664 and watercourses are prohibited unless the discharge is authorized by a separate  
665 National Pollutant Discharge Elimination System (NPDES) permit, exempted or  
666 conditionally exempt as provided in the Permit.

667 Appropriate Applications:

668           • All maintenance activities should practice water conservation.

669           • Un-permitted non-storm water discharges are prohibited.

670           Implementation:

671           • Keep water application equipment in good working condition.

672           • Avoid using water to clean maintenance areas. Use dry cleanup methods where  
673           practical. Sweep paved areas.

674           • Use the minimum amount of water needed to complete each maintenance activity.

675           Maintenance:

676           Repair water supply and distribution equipment to minimize the loss of water.

#### 677   **4.6.7 WATER / IRRIGATION**

678           Description:

679           Some non-storm water discharges are conditionally exempt by the Permit. The  
680           conditionally exempt non-storm water discharges include irrigation water, potable  
681           water sources and water from line and hydrant flushing. This practice is intended  
682           to reduce the possibility for the discharge of potential pollutants associated with  
683           conditionally exempt discharges from irrigation systems, planned and unplanned  
684           discharges from potable water sources and water line or hydrant flushing.

685           Appropriate Applications:

686           This practice should be implemented on a site-specific basis whenever the above  
687           activities or discharges occur.

688           Implementation:

689           • When possible, flushed water should be applied for landscaping purposes.

690           • Shut off the water source to isolate a broken line, sprinkler or valve as soon as  
691           possible to minimize the loss of water.

692           • Repair broken water lines as soon as possible.

693           • Protect downstream storm water drainage systems and watercourses from water  
694           pumped or bailed from trenches excavated to repair water lines.

695           • Manage irrigation systems to ensure the appropriate amount of water is used and

696 runoff is minimized.

#### 697 4.6.8 SAFER ALTERNATIVE PRODUCTS

698 Description:

699 A variety of products that may be harmful to the environment if they come into  
700 contact with surface waters are used in maintenance facilities and activities. In  
701 some cases, a less harmful product that serves the same purpose can replace a  
702 harmful product. The less harmful product is referred to as a safer alternative  
703 product. The primary purpose of using safer alternative products is to reduce the  
704 potential for the discharge of toxic products to drainage paths, storm water  
705 drainage systems or watercourses.

706 Appropriate Applications:

707 Safer alternative products should be considered for all maintenance activities. For  
708 example, when safer alternative products exist for cleaning products, paints,  
709 herbicides, automotive products and fertilizers, they should be used where  
710 practical and effective. Alternative products may not be available, effective or  
711 cost effective in every situation.

712 Implementation:

- 713 • Create awareness among employees regarding the benefits of safer alternative  
714 products.
- 715 • The use of a safer alternative product may still result in the discharge of harmful  
716 materials to drainage paths, storm water drainage systems or watercourses. Use  
717 safer alternative products in accordance with manufacturers' recommendations.

#### 718 4.6.9 DRAINAGE FACILITIES

719 Description:

720 Culverts, ditches, gutters, underdrains, horizontal drains and downdrains require  
721 inspection and cleaning to prevent flooding and to provide for sufficient hydraulic  
722 capacity.

723 Appropriate Applications:

724 These procedures are applicable to maintenance personnel who conduct storm  
725 water drainage system facilities inspection and cleaning. Practices  
726 implementation will depend on traffic, weather, available resources, safety  
727 conditions and access to storm water drainage systems.

728 Implementation:

- 729 • Inspect culverts, ditches, gutters, underdrains, horizontal drains, downdrains and  
730 outlets periodically to determine if cleaning is required or if damage has occurred.
- 731 • Clean culverts to maintain sufficient hydraulic capacity of the culvert.
- 732 • Inspect ditches and gutters to maintain sufficient hydraulic capacity. Schedule  
733 routine ditch-cleaning activities designed to maintain sufficient hydraulic capacity  
734 of ditches prior to the rainy season.
- 735 • When cleaning drainage ditches below cut slopes or steep slopes, avoid cutting  
736 the toe of the slope. This can also prevent damage to the ditch.
- 737 • Where waterways are affected, coordinate maintenance activities with the  
738 appropriate regulatory agency.

#### 739 4.6.10 ILLICIT CONNECTION DETECTION, REPORTING AND REMOVAL

740 Description:

- 741 • This procedure directs maintenance staff to detect and report illicit connections  
742 and illegal discharges into County storm water drainage systems. Illicit  
743 connections are connections to County drainage systems that have not been  
744 approved by the County.
- 745 • This management practice is directed at continuous or recurring discharges  
746 through direct connections to storm water drainage systems or as run-on from  
747 adjacent properties.

748 Appropriate Applications:

749 Detecting and reporting illicit connections applies to all field activities performed  
750 by maintenance staff. If an illicit connection is discovered, it shall be reported.

751 Implementation:

- 752 • Maintenance personnel, as part of their routine inspections and maintenance  
753 work, shall report all observed suspected illicit connections to the Storm Water  
754 Coordinator who will appropriately pursue, in cooperation with the involved  
755 County Departments, removal / cleanup operations.
- 756 • All public-initiated calls should be should be logged, routed to the Storm Water  
757 Coordinator, and as appropriate, responded to.



758 **4.6.11 ILLEGAL DISCHARGE CONTROL**

759 Description:

- 760           • This procedure calls for maintenance field staff who detects significant illegal  
761           dumping, discharges and spills of pollutants on County properties and facilities to  
762           report said incident to the MM.
- 763           • This practice is directed at incidents involving dumping, discharges or spills that  
764           affect storm water.

765 Appropriate Applications:

766           Any spills or dumped materials that are observed by maintenance personnel shall  
767           be reported.

768 Implementation:

- 769           • Maintenance personnel shall report to the MM any observed illegal dumping or  
770           discharges as part of their routine inspections and maintenance work.
- 771           • MM will report any significant observed illegal dumping to the County's Storm  
772           Water Coordinator who will appropriately pursue, in cooperation with the  
773           involved County Departments, removal / cleanup operations.
- 774           • Spill cleanup will be handled in accordance with the legal authority presented in  
775           Section 2.8 of the SWMP.

776 **4.6.12 LITTER AND DEBRIS REMOVAL**

777           Litter and debris removal consists of removing and properly disposing of litter and  
778           implementing procedures to discourage littering to reduce the discharge of potential  
779           pollutants.

780 **4.6.12.1 Litter and Debris**

781 Description:

782           These measures are intended to reduce the discharge of litter to storm  
783           water drainage systems or watercourses.

784 Appropriate Applications:

785           This practices should be implemented on a site-specific basis whenever  
786           litter and debris removal activities are performed. The frequency of  
787           removal is dependent on the availability of resources, safety

788 considerations and rate of accumulation.

789 Implementation:

790 • Remove litter and debris from drainage grates, trash racks and ditch  
791 lines to maintain sufficient hydraulic capacity.

792 ○ Secure or cover transported materials, equipment and supplies to  
793 and from maintenance activity sites to prevent spillage to the  
794 roadway.

795 ○ Place litter containers at convenient locations in parks and other  
796 public places where litter might be generated.

#### 797 4.6.12.2 Anti-Litter Signs

798 Description:

799 The County conducts a signage program that warns against dumping and  
800 littering (e.g., “No Dumping” and “\$1,000 Fine for Littering”). These  
801 signs are placed along highways and other locations where littering  
802 violations are frequent. The purpose of this program is to discourage  
803 littering by educating the public.

804 Appropriate Applications:

805 Anti-litter signs may be placed in parks and other locations that receive an  
806 unsightly amount of litter.

807 Implementation:

808 Maintenance personnel routinely visit County properties in their assigned  
809 areas to observe overall conditions and assess the need for litter removal  
810 and installation of anti-litter signs. Anti-litter signs can be requested when  
811 litter removal becomes a concern.

#### 812 4.6.13 CHEMICAL VEGETATION CONTROL

813 Description:

814 This practice is intended to reduce the potential for the discharge of pollutants  
815 generated during chemical vegetation control. This method of vegetation control  
816 uses herbicides to eliminate and prevent weed growth. The purpose is to control  
817 weed growth that may threaten the growth and health of preferred vegetation that  
818 may become a fire hazard or raise other safety concerns.

819           Appropriate Applications:

820                   The practices should be implemented on a site-specific basis whenever chemical  
821                   vegetation control activities are performed.

822           Implementation:

- 823           •    The County follows an approved list of chemicals.
- 824           •    To achieve effective vegetation control through chemical application and to  
825                   minimize chemical usage, maintenance personnel consider the following: (1) use  
826                   of the correct herbicide, (2) seasonal timing of applications, (3) timing in relation  
827                   to expected precipitation events, (4) proximity to water bodies, (5) speed of travel  
828                   when applying herbicides and (6) proper agitation of the spray tank.
- 829           •    Apply herbicides in compliance with federal, state and local pesticide use  
830                   regulations.
- 831           •    Apply herbicides only as specified on the label.
- 832           •    Activities are monitored by licensed Agricultural Pest Control Advisers.
- 833           •    Minimize the use of herbicides in or near storm water drainage systems or  
834                   watercourses.
- 835           •    Calibrate the spray rig to ensure accurate application of herbicides.
- 836           •    Avoid using overhead irrigation for as long as the chemical manufacturer  
837                   recommends after applying herbicides.

#### 838    4.6.14 VEGETATED SLOPE INSPECTION

839           Description:

840                   The County routinely reviews vegetated slopes and concentrated flow areas to  
841                   identify problematic slopes and drainage courses for repair to reduce erosion.

842           Appropriate Application:

843                   Slope and unpaved areas are regularly inspected.

844           Implementation:

845                   The following general steps are taken to re-establish vegetation:

- 846                   •    Slopes and concentrated flow areas with erosion problems that are

847 within the abilities of the maintenance personnel are repaired as  
848 resources allow.

849 • Problem slopes and areas of concentrated flow with erosion concerns  
850 that cannot be repaired by the maintenance personnel are reported to the  
851 County's Storm Water Coordinator to be considered for inclusion within  
852 the County's Capital Improvement Program.

#### 853 4.6.15 SNOW REMOVAL AND DE-ICING AGENTS

854 Description:

855 This practice is intended to minimize the discharge of potential pollutants  
856 generated during ice control activities. Ice control activities include:

- 857 • The mechanical spreading of abrasives and de-icing agents;
- 858 • The mechanical removal of snow from the travel way;
- 859 • Opening of drains covered by snow and ice; and
- 860 • Appropriate Applications:
  - 861 ○ This practice provides guidance to maintenance personnel who are  
862 involved in snow and ice removal activities. The use or nonuse of  
863 de-icing agents is based on driver safety, traffic delay, geographic  
864 location, weather and total cost.

865 Implementation:

- 866 • Calibrate spreader to avoid the over-application of de-icing agents or  
867 abrasives. Use no more than is necessary for snow and ice control.
- 868 • Store de-icing agents (e.g., salt) in appropriate areas, bunkers or storage  
869 buildings. Do not store de-icing agents where they will come into contact with  
870 storm water runoff.
- 871 • Minimize blowing, pushing or dumping snow into the watercourse.

872

873 **4.6.16 STORM WATER DEWATERING OPERATIONS (TEMPORARY PUMPING**  
874 **OPERATIONS)**

875 Description:

876 The RWQCB has issued a general permit for dewatering, Order No. CAG995001.  
877 Qualifying dewatering operations are able to obtain permit coverage under this  
878 Order by submitting a Notice of Intent (NOI) to the Regional Board. Allowable  
879 discharges must not contain significant quantities of pollutants and be either four  
880 months or less in duration, or not exceed 0.25 mgd during dry weather. Under the  
881 terms of the permit, monitoring and reporting are required. Copies of this permit  
882 are available from the Regional Board or from the County's Storm Water  
883 Coordinator.

884 These practices are implemented where accumulated storm water is pumped.  
885 This practices addresses discharge from portable pumps used by maintenance  
886 personnel during normal maintenance operations.

887 Appropriate Applications:

888 These practices are implemented where significant amounts of accumulated storm  
889 water are pumped as part of a routine (non-emergency) maintenance activity.

890 Implementation:

- 891 • Consult with the County's Storm Water Coordinator.
- 892 • Ensure that dewatering discharges do not cause erosion at the discharge point.
- 893 • Pumping systems should be equipped with screens on the intake.
- 894 • Intakes should be located to reduce the pumping of sediment. Pumping areas near  
895 the water surface often contain less sediment than areas near the bottom.
- 896 • Sediment control practices may be installed at intake or outlet locations to trap  
897 excessive sediment.

898 **4.6.17 SWEEPING**

899 Description:

900 Sweeping is performed to remove litter, debris and de-icing abrasives from paved  
901 roads and shoulders. Sweeping to reduce track-out generally involves manual

902 sweeping or use of small equipment, but does not exclude the use of sweepers  
903 should the need arise (e.g., for slides and slip-outs).

904 Appropriate Applications:

- 905 • Sweeping operations may be used to assist in removing material from small  
906 slides, litter and debris from roadways and other paved areas.
- 907 • Sweeping may be implemented anywhere sediment is tracked from off-road  
908 maintenance activity sites onto public or private paved roads typically at the  
909 points of egress.

910 Implementation:

911 Highway Sweeping:

- 912 • Do not sweep up any unknown substance that may be potentially  
913 hazardous.
- 914 • Adjust brooms to maximize the efficiency of sweeping operations.
- 915 • Do not load hoppers beyond their capacity.
- 916 • Dispose of waste in accordance with local regulations and Solid Waste  
917 Management practices. Clean materials may be incorporated into the  
918 maintenance activity area.

919 Tracking Control:

- 920 • Substantially visible sediment shall be swept from the maintenance  
921 activity site.
- 922 • If not mixed with debris or trash, consider incorporating the removed  
923 sediment back into the maintenance activity site.
- 924 • Washing and rinsing of equipment shall be performed in designated areas  
925 and the resulting runoff shall not be discharged to the storm drain system.

#### 926 **4.6.18 MAINTENANCE FACILITY HOUSEKEEPING PRACTICES**

927 Description:

928 Daily activities occurring at maintenance facilities often involve the use of  
929 materials and products that are potentially harmful to the environment. Good  
930 housekeeping practices are intended to eliminate the potential for discharge of

## SECTION 4.6

### *Pollution Prevention / Good Housekeeping*

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931 pollutants to drainage paths, storm water drainage systems or watercourses by  
932 promoting efficient and safe storage, use and cleanup of potentially harmful  
933 materials.

934 Appropriate Applications:

935 Proper housekeeping practices apply to all maintenance personnel who participate  
936 in activities that have a potential to generate pollutants that could discharge to  
937 storm water drainage systems or watercourses.

938 Implementation:

939 • Maintain clean, orderly material and equipment storage areas. Provide covers for  
940 materials as needed.

941 • All solid wastes shall be managed per the requirements of the Solid Waste  
942 Management practices.

943 • Seek to maintain equipment and buildings to avoid peeling paint, rust and  
944 degradation.

945 • Sweep or vacuum maintenance facility floors and pavement. If mopping is used to  
946 clean floors or pavement, contain the mop water and dispose of it to the sanitary  
947 sewer system not into the parking lot, street, gutter or drain inlet.

948 • Secure and close lids on waste receptacles and bins when not in use.

949 • Clean up spills promptly. See Spill Prevention and Control practices.

950 • Use drip pans or absorbent material under vehicles and equipment with  
951 significant leaks to capture fluids.

952 • If it is necessary to use a hose for cleaning, wash water shall not be discharged to  
953 watercourses.

954 • Minimize the possibility of storm water pollution from outdoor waste receptacles  
955 by doing at least one of the following:

956     ○ Use only watertight waste receptacle(s) and keep the lid(s) closed;

957     ○ Grade and pave the waste receptacle area to prevent run-on of storm  
958     water;

959     ○ Install a roof over the waste receptacle area; or

960 • Install a low containment berm around the waste receptacle area.

## 961 4.6.19 NON-STORM WATER DISCHARGES

## 962 4.6.19.1 County Maintenance Non-Storm Water Discharges

963 The Permit prohibits the discharge of non-permitted non-storm water  
964 discharges. Maintenance personnel shall:

- 965 • Determine where the flow of a leak, spill or other runoff will travel;
- 966 • Identify drain inlets and watercourses, both upstream and downstream of  
967 the work site;
- 968 • Ensure that vehicles and equipment are clean and in good operating  
969 condition by conducting pre-operational inspections of vehicles and  
970 equipment;
- 971 • Set up work areas to minimize the tracking of material by vehicles and  
972 equipment in and out of the work area;
- 973 • Collect and properly dispose of wastes, materials removed as a result of  
974 equipment and system maintenance, and litter and debris;
- 975 • Secure lids on containers of liquids when not in use;
- 976 • Control spills promptly and transport collected materials back to a  
977 maintenance facility or approved storage site; and
- 978 • Have appropriate spill cleanup material on site and protect drainage  
979 systems and watercourses from spilled material.

980 On maintenance sites, the MM shall be alert to and report the potential presence  
981 of illicit connections to the County's storm drain system or illicit discharges.

982 The Permit prohibits the discharge of non-permitted non-storm water  
983 discharges. If a significant unauthorized non-storm water discharge occurs, the  
984 MM will report the discharge to the County's Storm Water Coordinator within  
985 12 hours. The Storm Water Coordinator will coordinate the reporting of  
986 prohibited non-storm discharges to the RWQCB in accordance with the  
987 procedures in Section 5.7.

988 If the non-permitted non-storm water discharge occurs as a result of the  
989 maintenance activity or are within the purview of municipal operations, the MM  
990 shall endeavor to immediately halt the discharge and take measures to minimize  
991 any potential re-occurrence.



## SECTION 4.6

### *Pollution Prevention / Good Housekeeping*

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992 If the non-permitted non-storm water discharge is not as a result of the  
993 maintenance activity or within the purview of municipal operations, the  
994 County's Storm Water Coordinator will address remediation of the situation  
995 with the responsible authorities.

996 The County's Storm Water Coordinator will log and track each reported non-  
997 permitted non-storm water discharge to conclusion. The on-going log will be  
998 included within the Annual Report.

999 Storm water quality practices to control or prevent non-storm water discharges  
1000 that may result from the routine County maintenance activities are described in  
1001 the above practices.

1002 The County will finalize non-storm water maintenance practices for municipal  
1003 operations program on County roadways and County facilities by the end of  
1004 June 2005 and implement said practices by the end of June 2006.

#### 1005 4.6.19.2 Spills

1006 The safe and efficient emergency response to Hazardous Materials events in El  
1007 Dorado County depends on joint cooperation between multiple agencies. The  
1008 Solid Waste and Hazardous Material Division of the Environmental  
1009 Management Department leads this important team effort with close  
1010 cooperation with law enforcement, fire and allied health agency officers and  
1011 staff. Special attention is given to the hazardous materials used and transported  
1012 frequently in the county by our local businesses.

1013 Training to prepare for possible biological, nuclear, incendiary, chemical and  
1014 explosive hazards used in criminal or terrorist activities are also provided.  
1015 Preparedness activities include training of team members to appropriate levels  
1016 of response capability, multi-agency workshops, tabletop exercises, field  
1017 training and drills. The Environmental Management Department is responsible  
1018 for after hours on-call support for all Department Programs including HazMat,  
1019 Air Pollution, Sewage Spills, Water Pollution, Food Poisonings, and Union  
1020 Mine Landfill Issues in a typical year, 40 – 50 incidents are responded to  
1021 including routine spills of vehicle fuels, unknown white powders in the mail,  
1022 the release of toxic Chlorine gas, as well as, a variety of other hazardous  
1023 conditions.

1024 The County has developed and implemented a Hazardous Materials Emergency  
1025 Response Plan (Jan. 1995; Updated Oct. 2003), which establishes the policies,  
1026 responsibilities, and procedures required to protect the health and safety of El  
1027 Dorado County's citizens, the environment and public and private property  
1028 from the effects of hazardous materials incidents. The plan details emergency  
1029 response organization for incidents, and defines operational concepts and

1030 procedures associated with the created Interagency Hazardous Materials  
1031 Response Team (HMRT). This is an operational plan as well as a reference  
1032 document for pre-emergency planning as well as emergency response. The  
1033 County reviews the plan at least annually, with an update to the plan, as needed.

1034 Depending on the circumstances of the spill, this coordination is made directly  
1035 or through the OES. All significant spill incidents are reported to the County's  
1036 Storm Water Coordinator.

1037 **4.6.19.3 Exempt and Conditionally Exempt Non-Storm Water Discharges**

1038 This section describes the County's program for controlling pollutants from  
1039 permitted non-storm water discharges from maintenance facilities or activities.  
1040 Previously described spill prevention, waste management and other practices  
1041 will be implemented to ensure that these discharges remain uncontaminated.  
1042 These practices eliminate or reduce permitted non-storm water discharges and  
1043 reduce water pollution from the County's maintenance activities and operations.

1044 Permitted non-storm water discharges through the County's storm water  
1045 drainage systems are divided into three categories:

1046 o Discharges authorized by a separate NPDES permit: Since these  
1047 discharges have a separate permit, they are not addressed by this  
1048 SWMP.

1049 o Exempted discharges: These discharges have not been found to contain  
1050 significant pollutant loads and can therefore be discharged without direct  
1051 application of storm water practices.

1052 • These discharges include:

1053                                   ▪ water line flushing;

1054                                   ▪ landscape irrigation;

1055                                   ▪ diverted stream flows;

1056                                   ▪ rising ground waters;

1057                                   ▪ uncontaminated ground water infiltration (as defined at  
1058 40 CRF §35.2005(20)) to separate storm sewers;

1059                                   ▪ uncontaminated pumped ground water;

1060                                   ▪ discharges from potable water sources;

## SECTION 4.6

## *Pollution Prevention / Good Housekeeping*

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- 1061                                   ▪ fountain drains;
- 1062                                   ▪ air conditioning condensation;
- 1063                                   ▪ irrigation water;
- 1064                                   ▪ springs;
- 1065                                   ▪ water from crawl space pumps;
- 1066                                   ▪ footing drains;
- 1067                                   ▪ lawn watering;
- 1068                                   ▪ individual residential car washing
- 1069                                   ▪ flows from riparian habitats and wetlands; and
- 1070                                   ▪ de-chlorinated swimming pool discharges.
  
- 1071                                   o Conditionally exempt discharges: The conditionally exempt discharges
- 1072                                   associated with maintenance activities and their associated practices are
- 1073                                   identified in Table 4.6-2

1074

**TABLE 4.6-2: NON-STORM WATER PRACTICES FOR CONDITIONALLY EXEMPT DISCHARGES**

Non-Storm Water Discharges	Practice Titles
a. Pumped ground or accumulated rain water	Dewatering Operations
b. Non-potable irrigation water	Non-potable Water/Irrigation

1075

1076 The RWQCB has issued a general permit for dewatering, Order No.  
 1077 CAG995001. Qualifying dewatering operations are able to obtain permit  
 1078 coverage under this Order by submitting a Notice of Intent (NOI) to the  
 1079 Regional Board. Allowable discharges must not contain significant quantities  
 1080 of pollutants and be either four months or less in duration, or not exceed 0.25  
 1081 mgd during dry weather. Under the terms of the permit, monitoring and  
 1082 reporting are required. Copies of this permit are available from the Regional  
 1083 Board or from the County’s Storm Water Coordinator.

1084 Non-potable irrigation water, landscape irrigation and lawn or garden watering  
 1085 runoff, though minimized, will occur on a regular basis as a result of excess  
 1086 irrigation water running off vegetated and nearby impervious areas and into  
 1087 storm drains. While these discharges are not expected to result in the discharge  
 1088 of appreciable pollutants, the County on an on-going basis will monitor these  
 1089 discharges. If these activities are subsequently found to be resulting in an  
 1090 unacceptable level of pollutant discharges, the County will undertake to  
 1091 develop, or require the responsible discharging party to develop, a pollution  
 1092 management plan.

1093 **4.6.19.4 Non-permitted Non-Storm Water Discharges**

1094 The MM will report all instances of non-permitted non-storm water discharges  
 1095 to the County’s Storm Water Coordinator.

1096 **4.6.20 MAINTENANCE OF TREATMENT DEVICES**

1097 Treatment devices capture and remove pollutants from storm water before the runoff is  
 1098 discharged to receiving wastes. After construction, and if arrangements are not made  
 1099 with third parties to undertake on-going maintenance of these devices, the County will  
 1100 assume responsibility to assure their on-going functionality. In the case of the County’s  
 1101 Government Center or parks, these maintenance responsibilities will be carried out by the  
 1102 Department of General Services. For facilities within the County’s maintained road

1103 rights-of-way, these responsibilities will be carried out by the Department of  
1104 Transportation.

1105 Guidelines for maintaining these devices is yet in the formative stage, but until more  
1106 definitive guidance is available the maintenance activities will focus on assuring that  
1107 these devices continue to operate as designed and intended. The County will finalize  
1108 development of storm water treatment BMP guidelines to capture and remove pollutants  
1109 from storm water prior to discharging to receiving waters by the end of June 2006.

1110 These maintenance activities will include regular inspections and maintenance to allow  
1111 the systems to continue to function as designed, and to facilitate periodic removal and  
1112 proper disposal of accumulated trash, litter, debris, sediments and other pollutants. If in  
1113 the maintenance manager's opinion, routine maintenance will not sufficiently maintain  
1114 functionality of the treatment device, this will be brought to the attention of the County  
1115 Storm Water Coordinator. Sufficiency inspections of storm water treatment facilities that  
1116 capture and remove pollutants from storm water prior to discharging to receiving waters  
1117 will commence by the end of June 2007.

#### 1118 **4.6.21 FACILITY POLLUTION PREVENTION PLANS**

1119 Facility Pollution Prevention Plans (FPPP) will be developed for each County highway  
1120 maintenance facility owned or operated by the County by the end of June 2005. The  
1121 FPPPs will describe the activities conducted at the facility and the practices to be  
1122 implemented to reduce the discharge of pollutants in storm water runoff from these  
1123 facilities.

1124 Site MMs inspect their maintenance facilities regularly to monitor the implementation  
1125 and adequacy of the practices. Any observed instances of non-compliance will be  
1126 reported to the County's Storm Water Coordinator, and a schedule will be established to  
1127 achieve compliance.

1128 MMs will be responsible for ensuring that the FPPPs are developed and maintained for  
1129 each maintenance facility.

1130 In addition to regular facility inspections conducted by the facility supervisor, the  
1131 County's Storm Water Coordinator will review each facility, each year. These reviews  
1132 will monitor each facility's FPPP and include a thorough yard inspection. Any observed  
1133 instances of noncompliance will be reported in accordance with the procedures provided  
1134 in Section 9.

#### 1135 **4.6.22 EMPLOYEE TRAINING PROGRAM**

1136 The County's practice is to provide education and training to ensure that all of its

## SECTION 4.6

### *Pollution Prevention / Good Housekeeping*

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1137 employees have the knowledge and skills necessary to perform their functions effectively  
1138 and efficiently.

1139 The County provides employee-training programs with curricula and materials tailored to  
1140 specific topics and personnel levels. These programs are evaluated and refined  
1141 periodically to ensure the educational messages are both timely and effective.

1142 The purpose of the Employee Storm Water Training Program is to teach appropriate  
1143 employees about the following:

- 1144 • Storm water characteristics and water quality issues;
- 1145 • The roles and responsibilities of the various County Departments and individuals  
1146 within these Departments regarding implementation of the SWMP to achieve  
1147 Permit compliance;
- 1148 • Activities and practices conducted by County employees that are or could be  
1149 sources of storm water pollution and non-storm water discharges;
- 1150 • practices to be implemented in conjunction with various activities; and
- 1151 • How to use the SWMP and available guidance materials to select and implement  
1152 practices.

1153 The County's strategy for training current and new employees consists of two parts, as  
1154 follows:

- 1155 • Developing and presenting focused training that is targeted to specific topics,  
1156 specific groups within the County, or specific levels of personnel summarized in  
1157 Table 4.6-3.
- 1158 • Developing storm water training components that will be incorporated into  
1159 routine training programs. This strategy is considered to have the highest long-  
1160 term effectiveness because the County's employees learn to incorporate storm  
1161 water quality thinking and pollution prevention practices into all aspects of their  
1162 work.

1163 The County's employees are classified into several functional groups. Table 4.6-3  
1164 identifies the functional groups that have storm water quality management  
1165 responsibilities.

## SECTION 4.6

## Pollution Prevention / Good Housekeeping

1166 TABLE 4.6-3: THE COUNTY'S FUNCTIONAL GROUPS

Functional Group	Area of Responsibility
Planning and Design	Responsible for overseeing the development and implementation of practices through the project planning and design phase for construction projects.
Construction	Responsible for overseeing the development and implementation of practices relating to the construction stage of projects.
Maintenance	Responsible for development and implementation of practices relating to the maintenance of County facilities.

1167 As part of the Annual Report, the County's Storm Water Coordinator will evaluate the  
1168 training provided to the County's employees and assess its effectiveness.

### 1169 4.6.22.1 Storm Water Training

1170 Storm water training materials will be developed by the County's Storm Water  
1171 Coordinator in conjunction with the County's SWAC. These materials will  
1172 provide a comprehensive review of storm water pollution prevention concepts  
1173 and practices contained in this SWMP, however they will additionally draw  
1174 from training and guidance materials available from Caltrans, EPA, the State  
1175 and Regional Boards, and the California Storm Water Quality Association. The  
1176 materials will focus on storm water pollution prevention measures and practices  
1177 involved in routine activities carried out by the various functional groups. In  
1178 addition, these training opportunities will provide an opportunity for staff to  
1179 discuss issues with the County's SWAC members and Storm Water  
1180 Coordinator. Topics and training materials will be updated, as needed, to reflect  
1181 annual modifications the County's storm water management program.

1182 Training materials will focus on revisions to the various County programs that  
1183 are and will be developed for each of the functional activities identified below.

- 1184 • **General Storm Water Management:** Materials will cover all  
1185 aspects of the Permit and the SWMP to support the overall  
1186 implementation of the storm water management program.
- 1187 • **Storm Water Management for Planning and Design of**  
1188 **Construction Projects:** Materials will cover how construction  
1189 projects are to be planned and designed.
- 1190 • **Storm Water Management Related to Construction Sites:**  
1191 Materials will cover construction site operations. This will include  
1192 an explanation of the sources of pollutants at construction sites, a

## SECTION 4.6

### *Pollution Prevention / Good Housekeeping*

1193 review of the practices that are typically deployed at construction  
1194 sites and a review of the site manager's role and responsibilities to  
1195 implement the Construction Storm Water Management Program.  
1196 Site managers will be informed of contractor obligations and  
1197 responsibilities in development and implementation of SWPPPs.

1198 • **Storm Water Management for Maintenance Activities:** Materials  
1199 will provide an explanation of the specific sources of pollutants  
1200 associated with maintenance activities, describe the practices to  
1201 address those sources and a review of the Maintenance Managers  
1202 responsibilities to implement the Maintenance Storm Water  
1203 Management Program.

1204 Table 4.6-4 defines which County employees are targeted for each storm water  
1205 management training package.

1206 TABLE 4.6-4: STORM WATER MANAGEMENT TRAINING

Package Focus	Target Employees
General Storm Water Management	SWAC Members and Maintenance Managers, Construction Site Managers, Project Managers, Project Engineers, Construction Managers and Resident Engineers (see Sections 2, 4.4 and 4.6)
Storm Water Management for Planning and Design	Project Managers and Project Engineers from Design (see Section 4.4)
Storm Water Management Related to Construction Sites	Construction Managers and Resident Engineers (see Section 4.4)
Storm Water Management for Maintenance Activities	Maintenance Managers (see Section 4.6)

#### 1207 4.6.22.2 Training Frequency

1208 The initial materials will be covered with targeted employees by the end of June  
1209 2006. Materials will be shared with new targeted employees as part of their job  
1210 introduction. Updated SWMP practices will be shared with the targeted  
1211 employees on an annual basis. The County will monitor the potential need for  
1212 overall refresher material distributions. If the need becomes apparent, the  
1213 County's Storm Water Coordinator will so arrange.

1214 The County's Storm Water Coordinator will establish an e-mail network with  
1215 the targeted employees to share, on an as needed basis, updates and news which  
1216 might enhance pollution control activities. Information shared in this fashion



1217 might include feedback from field implementation of practices that would  
1218 potentially be of benefit to share with other front line employees.

1219 **4.6.22.3 On-the-Job Training**

1220 To support implementation of the SWMP, the County's Storm Water  
1221 Coordinator will be available on an on-call basis to provide on-the-job training  
1222 to project planning/design personnel, construction employees and maintenance  
1223 managers.

1224 Also, meetings will be regularly held by the SWAC to discuss storm water  
1225 issues, management concepts and new or revised procedures and practices. And  
1226 the SWAC team members will bring this information back to their respective  
1227 Departments and groups.

1228 The County's Grading Ordinance, DOT's Design and Improvement Standards  
1229 and Drainage Manual, collectively referred to as the "County Development  
1230 Standards", provides storm water practices for new development and  
1231 redevelopment projects that disturb greater than or equal to one acre. Training  
1232 of County employees to implement the augmented County Development  
1233 Standards will commence by the end of June 2006.

1234 Training will be provided to maintenance managers for proper inspection of  
1235 maintenance facilities of the Facility Pollution Prevention Plans (FPPPs) for  
1236 each of the County's highway owned or operated maintenance facilities and will  
1237 commence by the end of June 2006.

1238 The County will outreach with the community in hosting a storm water/non  
1239 storm water workshop to raise the awareness and understanding of storm  
1240 water/non storm water pollution problems. Local engineering/construction  
1241 firms, other local private and governmental organizations, and the general  
1242 public will target to attend this training. Training shall be provided from  
1243 Federal/State/Local agencies, who shall positively facilitate compliance and  
1244 minimize instances of noncompliance and developed storm water/non storm  
1245 water information sheets and other educational and awareness material shall be  
1246 provided by the end of June 20, 2005.

1247 **4.6.22.4 Educational Reminders**

1248 The County's Storm Water Coordinator will monitor, and as appropriate share  
1249 storm water bulletins from the Caltrans Storm Water Program and other sources  
1250 with the targeted employee groups.

1251 **4.6.23 BMP PROGRAM SUMMARY**

1252 The following page contains a summary of the Pollution Prevention / Good  
1253 Housekeeping BMP program set forth in the El Dorado County Storm Water  
1254 Management Plan. These BMPs will be subject to annual reviews and updates as  
1255 outlined in Sections 3.2 and 5.6.1.

1256 EPA's NPDES rules state:

1257 "Implementation of best management practices consistent with the provisions of the  
1258 storm water management program required pursuant to this section (the six minimum  
1259 control measures, evaluation & assessment, record keeping and reporting) ... constitutes  
1260 compliance with the standard of reducing pollutants to the "maximum extent  
1261 practicable"." (40 CFR 122.34)

1262 This summary notes BMPs applicable to one of the six minimum control measures:  
1263 Pollution Prevention/ Good Housekeeping. El Dorado County proposes that this program  
1264 constitutes fulfillment of the minimum General Permit and Federal Regulation  
1265 requirements. As the public review and the SWMP finalization processes proceed, the  
1266 program, and the County's assessment of this program, may change.

1267

**1 5.1 OVERVIEW**

2 This section describes how the County will monitor and evaluate the proposed storm  
3 water management program and report to the RWQCB. The overall strategy of the  
4 County for reducing pollutants to the Maximum Extent Practicable (MEP) and protecting  
5 receiving waters involves the use of effective storm water management practices and a  
6 process of continuous program improvement and refinement. As part of the County's  
7 storm water management program, the County regularly reviews its activities, inspects its  
8 facilities, oversees and guides its personnel and conducts focused studies to obtain  
9 information that supports responsible management and allocation of the resources  
10 available to implement storm water quality efforts. The remaining sections describe  
11 further how the County will accomplish monitoring, evaluating the program and  
12 reporting, and are organized as follows:

- 13 • Section 5.2 Monitoring and Research
- 14 • Section 5.3 Program Evaluation, Oversight and Assistance
- 15 • Section 5.4 Performance Monitoring
- 16 • Section 5.5 Self-Audit
- 17 • Section 5.6 Annual Report
- 18 • Section 5.7 Non-Compliance Reporting

**19 5.2 MONITORING AND RESEARCH**

20 The County's monitoring and research efforts will, initially be focused on qualitative  
21 examination of the storm water practices, as they may affect the quality of the water  
22 being discharged into the local receiving waters.

23 As the program progresses, the anticipation is that more focused watershed studies will  
24 be undertaken. These efforts will involve collecting information on the characterization  
25 of discharges from the County's storm drain system, identifying other sources of  
26 pollutants, characterizing the receiving waters, identifying greater details regarding the  
27 County and private operations within these watersheds, inventorying the storm drain  
28 systems, developing greater focus on the priority pollutants of concern, and identifying  
29 the performance of existing and potential enhanced storm water pollution control  
30 measures. This information will be used to assess the effectiveness of the SWMP and to  
31 develop proposed program refinements, including new or improved practices for  
32 application within the watersheds.

33 The anticipated watershed planning efforts will involve working cooperatively with  
34 RWQCB staff during the development of these studies and evaluation of the results of  
35 these studies. The RWQCB will provide input on monitoring site selection and sampling

36 and analysis plans. Results and recommendations of these studies will be reviewed with  
37 the RWQCB to help establish the appropriate practice enhancements. As part of the  
38 anticipated watershed studies, the focus will be on potentially innovative practices that  
39 address the specific storm water constituents expected to cause or contribute to  
40 exceedances of the applicable water quality standards.

41 The County will continue to seek innovation of storm water practices and technologies.  
42 In addition to conducting County research into the effectiveness of various alternative  
43 practices, the County's Storm Water Coordinator will monitor research conducted by  
44 others. Information from efforts by the County and others will provide insight into how  
45 the County's program may need to evolve. These efforts will be designed to evaluate the  
46 effectiveness of selected practices in reducing constituents of concern, constituent  
47 removal efficiency, technical feasibility, and the cost of retrofitting existing facilities.

### 48 **5.3 PROGRAM EVALUATION, OVERSIGHT, AND ASSISTANCE**

49 The primary mechanism for accomplishing program evaluation and ensuring that the  
50 County's front line personnel have adequate knowledge and assistance to be successful is  
51 the day-to-day supervision by the responsible managers. This supervision includes  
52 observing and evaluating design and construction personnel as they implement the  
53 requirements of the SWMP on both County and private projects, and maintenance  
54 personnel as they conduct their assigned activities.

55 These responsibilities are outlined in detail in Section 2: Program Management.

56 In addition to day-to-day oversight by the responsible managers, the County's Storm  
57 Water Coordinator will provide focused follow-up activity reviews on a regular basis.  
58 Feedback from this oversight will assist the County in addressing the following types of  
59 questions:

- 60 • Is the County properly integrating storm water management practices into  
61 planning, designing, and constructing both County and private projects?
- 62 • Are the County's efforts to incorporate storm water practices into maintenance  
63 activities effective and efficient?
- 64 • Are the organizational structures and procedures functioning effectively and  
65 efficiently for performance of the County's water quality protection measures?
- 66 • Are the County's training programs and guidance materials sufficient?
- 67 • Are the procedures for incorporating storm water management practices into daily  
68 activities functioning properly?

69 The County's Storm Water Coordinator will host quarterly meetings of the County's  
70 Storm Water Quality Advisory Committee (SWAC) to review progress in SWMP  
71 implementation. These meetings will serve to identify the key issues and

72 recommendations for improvement within the County's program and to ensure  
73 communication/cooperation between Departments and functions.

74 The County's Storm Water Coordinator will facilitate at least quarterly meetings between  
75 the County's SWAC with staff of the RWQCB. The purpose of these meetings will be to  
76 discuss specific issues and requirements that arise from implementing the Permit and the  
77 County's SWMP.

## 78 5.4 PERFORMANCE MONITORING

### 79 5.4.1 General

80 El Dorado County is a rapidly growing area. Many land development /  
81 redevelopment projects and transportation improvement projects are currently being  
82 planned, designed and constructed. Achieving compliance with the storm water  
83 expectations for the program is one of the County's top priorities.

84 The County's current ordinances and programs implement many of the anticipated  
85 project planning, design and construction practices. Even before the SWMP is  
86 formally approved, the County will be moving to re-enforce efforts to protect water  
87 quality within these existing ordinances / programs.

88 After the SWMP is formally approved, educational efforts will be undertaken.  
89 However, education alone will not achieve the program's expectations. At least  
90 initially, considerable oversight / enforcement efforts will be necessary. The  
91 expectation is that over time, the project sponsors will routinely plan for, budget  
92 and deploy adequate storm water pollution control measures.

93 There are notable challenges to achieving this goal. For example, construction  
94 projects, involving public and private investments alike, are several years in  
95 development. In El Dorado County, there are many of these projects in varying  
96 stages of planning, design and construction. It is not unusual for these projects to  
97 not have included within their project budgets sufficient resources for at least some  
98 of the storm water pollution control measures set forth in this SWMP. As these  
99 budgets are frequently set at the early stages of the project, it is sometimes difficult  
100 for the project sponsors to incorporate these added measures at the latter stages of  
101 the project delivery process. For some projects, there is very limited funding  
102 flexibility to accommodate additional expectations. It's reasonable that there be a  
103 transitional period within which to incorporate the SWMP's storm water pollution  
104 control measures within these on-going projects.

105 While all project sponsors will be requested to immediately and fully comply with  
106 the storm water pollution control measures outlined in the SWMP, the following  
107 schedule is the County's general performance expectations:

- 108                   • Within 12 months, following approval of the final SWMP, all  
109                   Construction Activities will be expected to comply with the temporary  
110                   construction site practices outlined in Sections 4.4.4 and 4.4.5.
- 111                   • Within 18 months, following approval of the final SWMP, all newly  
112                   initiated (for which funds are proposed to be programmed) County  
113                   projects will, as applicable, be expected to incorporate the Post  
114                   Construction Practices outlined in Section 4.5.
- 115                   • By the end of June 2005, the County’s Drainage Manual will be amended,  
116                   as necessary, to incorporate the Standard Storm Water Mitigation Plan  
117                   measures outlined in Section 4.5; and these measures will be incorporated  
118                   within all subsequent project design approvals of private projects, as  
119                   applicable.

120                   In addition to a transitional period for project programming and budgetary  
121                   purposes, the County has initiated a review of how it goes about administering the  
122                   project planning, design and construction storm water pollution control measures.

#### 123                   5.4.2 Project Planning and Design

124                   During the year following the approval of the SWMP, on-going County design  
125                   projects (projects for which funds have been programming but where the designs  
126                   are not yet completed) will be reviewed. Project specific goals within the  
127                   framework of the general performance expectations as outlined in Section 5.4.1  
128                   will be set. Follow up progress reviews will also be set to assure that the project  
129                   goals are achieved.

130                   Similar reviews will be undertaken on all County design projects for which funds  
131                   are programmed, and designs initiated, subsequent to these initial reviews, but  
132                   prior to date wherein the Standard Storm Water Mitigation Plan measures become  
133                   applicable per Section 4.5.3.

134                   In addition, the County Stormwater Coordinator will implement an annual  
135                   sufficiency review of the County ordinances and County Development Standards,  
136                   with respect to augmenting enforcement procedures, and as appropriate, request  
137                   adoption of more effective ordinances and standards. Said revisions will be  
138                   reflected in the SWMP Annual Report.

#### 139                   5.4.3 Project Construction

140                   As outlined in Section 2, Section 4.4.4 and Section 4.4.5, the contractor for  
141                   County projects and the permittee for private party projects, are responsible for  
142                   implementing appropriate construction site storm water practices. For County  
143                   projects, oversight inspections of practices are conducted daily when significant,

## SECTION 5

### *Monitoring, Program Evaluation and Reporting*

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144 on-site activities are underway. For non-County projects, the County's oversight  
145 inspections of practices are generally on an as needed basis, with an emphasis in  
146 the late summer / early fall to prepare for the rainy season.

147 The County is setting the following goals for construction site oversight  
148 inspection and enforcement of control measures to be developed by the end of  
149 June, 2005 and implemented by the end of June 2006.

150 • Annual rainy season readiness reviews will be conducted to assure each  
151 site achieves compliance with rainy season expectations before October  
152 15<sup>th</sup>. For County projects, this may involve directing the contractor to  
153 undertake preparations. For non-County projects, this may involve formal  
154 communications and ordinance enforcement.

155 • On receipt of a complaint or concern from the public regarding a  
156 construction site, within 5 working days, a site oversight inspection will  
157 be conducted.

158 • All sites will be reviewed within a week following start of the on-site, soil  
159 disturbing construction.

160 • All sites will be reviewed before construction close / grading permit  
161 release / NOT filing.

162 • Minimum non-rainy season inspection review frequency:

163 • Sites 5 acres or more in size, every other month.

164 • Sites less than 5 acres in size, every third month.

## SECTION 5

### *Monitoring, Program Evaluation and Reporting*

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- 165           • Minimum rainy season inspection review frequency:
- 166                 • Sites 5 acres or more in size, every month.
- 167                 • Sites less than 5 acres in size, every other month.
- 168           • Pre-storm inspection review frequency:
- 169                 • Approximately 10% of the construction sites involving 5 acres or  
170                     more of disturbed soil with the greatest risk for storm water  
171                     pollution, will be inspected before major predicted storms.
- 172           • Post-storm inspection review frequency:
- 173                 • Approximately 15% of the construction sites involving 5 acres or  
174                     more of disturbed soil with the greatest risk for storm water  
175                     pollution, will be inspected following a major storm.
- 176                 • Approximately 5% of the construction sites involving less than 5  
177                     acres of disturbed soil with the greatest risk for storm water  
178                     pollution, will be inspected following a major storm.
- 179           The County will employ the following sliding scale project site rating system.
- 180                 • Substantial compliance                     1
- 181                 • Minor deficiencies                             2
- 182                 • Major deficiencies                             3
- 183                 • Critical deficiencies                             4
- 184           • The County's Storm Water Coordinator and the RWQCB will be informed  
185                     of all sites found to be with major and critical deficiencies within 2  
186                     working days. Efforts will be made to immediately inform the County's  
187                     Storm Water Coordinator of all sites found to be with critical deficiencies.
- 188           • When sites are found to have critical deficiencies, the sites will be re-  
189                     inspected at least weekly until the rating is reduced from a 4 to a 3 or  
190                     better. If the rating remains a 4 on the second re-inspection, enforcement /  
191                     contractor sanctions will be initiated, and the County's Storm Water  
192                     Coordinator and the RWQCB will be informed.
- 193           • When sites are found to have major deficiencies, the sites will be re-  
194                     inspected at least every other week until the rating is reduced from a 3 to a



195 2 or better. If the rating remains a 3 on the second re-inspection,  
196 enforcement / contractor sanctions will be initiated, and the County's  
197 Storm Water Coordinator and the RWQCB will be informed.

198 • When sites are found to have minor deficiencies, the sites will be re-  
199 inspected at least monthly until the rating is reduced from a 2 to a 1. If the  
200 rating remains a 2 on the third re-inspection, enforcement / contractor  
201 sanctions will be initiated, and the County's Storm Water Coordinator and  
202 the RWQCB will be informed.

## 203 5.5 SELF-AUDIT

204 The goals of the County self-audit program are:

- 205 • To evaluate the efficiency and effectiveness of the activities outlined in the  
206 SWMP;
- 207 • To provide a sound basis for re-directing or refining such activities;
- 208 • To recommend ways to revise or refine the SWMP, as needed; and
- 209 • To assess compliance with Permit and program requirements.

210 The County's self-audit serves as a quality control mechanism to help the County to  
211 determine how well the activities identified in this SWMP are being implemented. The  
212 self-audit is viewed as independent from line management. The County's Storm Water  
213 Coordinator will execute this review by the end of June 2006. The results of the self-  
214 audit will be included in the Annual Report.

215 Projects or activities identified as having major or critical deficiencies will be reported to  
216 the RWQCB immediately by the County's Storm Water Coordinator.

217 The information gathered from these self-audits will be shared with, and considered by  
218 the County's SWAC and management as part of the process to annually update the  
219 SWMP.

220 A summary of the self-audit will be provided in the Annual Report.

## 221 5.6 ANNUAL REPORT

222 The information and reports from the monitoring and research program and the program  
223 evaluation efforts will be incorporated into the Annual Report, along with other Permit  
224 reporting requirements. These include:

- 225           • Status of compliance with permit conditions,
- 226           • An assessment of the appropriateness and effectiveness of the identified practices,
- 227           • Status of the identified measurable goals (deliverables),
- 228           • Monitoring and research findings, if any, during the reporting period,
- 229           • A summary of specific storm water program activities (aside from general  
230 implementation of the SWMP) that the County intends to undertake during the  
231 next reporting cycle,
- 232           • Any proposed changes to the SWMP,
- 233           • Any change in storm water assignments or key contact personnel, and
- 234           • Any outfalls not identified in the inventory per Section 4.3.2.

#### 235           5.6.1   Revised SWMP

236           The SWMP will be reviewed annually and revised as necessary to maintain an  
237 effective program. The revised SWMP is to be submitted as part of the Annual  
238 Report. The Annual Report will contain documentation that describe and justify the  
239 proposed SWMP changes.

240           The draft SWMP update will be made available for public review before being  
241 finalized and transmitted to the RWQCB.

#### 242           5.6.2   Analysis of the Adequacy of Legal Authority

243           The County will annually, as part of the Annual Report, perform an analysis of  
244 the adequacy of legal authority as described in Section 2 (Program Management)  
245 of this SWMP. As appropriate, this Section will be updated as part of the annual  
246 SWMP update process. Specific problems encountered while implementing the  
247 storm water program as described in the SWMP that develop as a result of legal  
248 constraints will be documented in the Annual Report.

#### 249           5.6.3   Report on the Storm Sewer System Mapping

250           The Permit requires the County to complete a storm sewer system map showing  
251 the location of all outfalls and the names and locations of all waters of the U.S.  
252 that receive discharges from these outfalls. This inventory will be completed by  
253 the end of June 2008. Field inventory and mapping of existing known outfalls in  
254 one quarter of the County jurisdictional boundary will occur at least annually by  
255 the end of June 2005. An annual update of the maps, to start by the end of June

256                    2006, will include any additional outfalls created from the previous year's new  
257                    development or re-development activities. Progress in gathering this inventory  
258                    will be reported to the RWQCB as part of the Annual Report.

259    **5.7    NON-COMPLIANCE REPORTING**

260                    The Permit requires the County to implement a noncompliance reporting procedure. The  
261                    County's Storm Water Coordinator will make noncompliance reports to the RWQCB.

262                    Instances of noncompliance resulting in emergencies (i.e. that endanger human health or  
263                    the environment) will be reported orally to the RWQCB within 24 hours from the time  
264                    the County becomes aware of the circumstance, and in writing to the RWQCB within 24  
265                    hours from the time the County becomes aware of the circumstance. In all other  
266                    instances of noncompliance, the RWQCB will be notified in writing within 30 days.

267                    The written notifications will identify the noncompliance event, an initial assessment of  
268                    any impact caused by the event, describe the actions necessary to achieve compliance,  
269                    and include a time schedule indicating when compliance will be achieved.