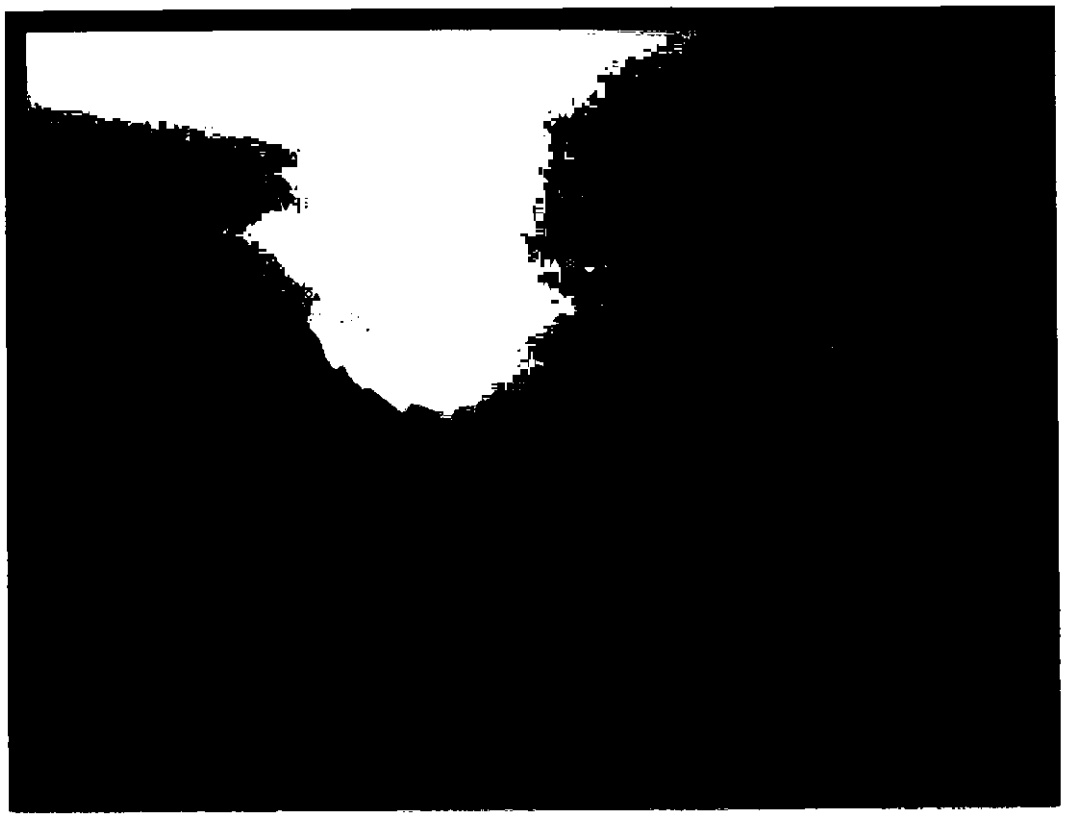
DOÑA ANA COUNTY

STORM WATER MANAGEMENT PROGRAM



(Includes all required attachments for the Notice of Intent to authorize discharges under National Pollutant Discharge Elimination System General Permit No. NMR040000.)

JUNE 2009

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signed by:

Brian Haines, County Manager — Date: 7/16/09

Recommended by:

Sue Padilla, Assistant County Manager — Date: 7/16/09

Approved as to form only:

County Attorney — Date: 07-16-09

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ACRONYMS

BMP	Best Management Practice
BOCC	Board of County Commissioners
CFR	Code of Federal Regulations
CGP	Construction General Permit
CWA	Clean Water Act
DAC	Doña Ana County
DMR	Discharge Monitoring Report
DPW	Department of Public Works
EBID	Elephant Butte Irrigation District
ECM	Erosion Control Measure
ECP	Erosion Control Plan
EMP	Erosion Mitigation Plan
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FWS	United States Fish and Wildlife Service
GIS	Geographic Information System
GP	General Permit
IDDE	Illicit Discharge Detection and Elimination
LID	Low Impact Development
MAP	Monitoring/Assessment Plan
MCM	Minimum Control Measure
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
MSGP	Multi-Sector General Permit
NEC	No Exposure Certification
NHPA	National Historic Preservation Act
NMED	New Mexico Environment Department
NMSU	New Mexico State University
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
PWD	Public Works Director
SHPO	State Historic Preservation Office
SWMP	Storm Water Management Program
SWPPP	Storm Water Pollution Prevention Plan
TMDL	Total Maximum Daily Load
UA	Urbanized Area
WLA	Waste Load Allocation
WQS	Water Quality Standard
WRAS	Watershed Restoration Action Strategy
WWTP	Waste Water Treatment Plant

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STORM WATER MANAGEMENT PROGRAM

1.0 BACKGROUND

1.1 DOÑA ANA COUNTY

Doña Ana County (County) encompasses approximately 3,804 square miles in south-central New Mexico (see Figure 1). The County is bounded by the New Mexico counties of Luna to the west, Sierra to the north, and Otero to the east. El Paso County, Texas is located to the southeast, and the State of Chihuahua, Mexico is located south of the County. The County was created in 1852 and is the second-most populated county in the state with a population over 198,000 people (Doña Ana County, 2009).

The County was originally an agricultural based society in the early 1900s. Towards the end of the 20th century, the County was urbanized with an economy based on service and retail; however, northern portions of the County remain rural. Rapid population growth has occurred in the City of Las Cruces and southern portions of the County near the City of El Paso, Texas. Growth in the southern portion of the County is anticipated to be at a rate between 4 to 6 percent over the next two decades (Doña Ana County, 2009).

The County employs more than 800 employees and is governed by a Board of County Commissioners. The County's operations are separated into several departments, including Administration, Sheriff's Office, Health and Human Services, Community Development, Utilities, and Public Works. The Public Works Department is responsible for the Airport, Engineering, Facilities and Parks, Roads, and overall implementation of the Storm Water Management Program (SWMP).

The County sits within the Basin and Range Province of the western United States and Mexico. The County encompasses several mountain ranges while the Chihuahuan Desert covers large portions of the county. The Rio Grande traverses through the County creating the Mesilla Valley. The fertile valley provides a source of water for irrigating crops and is an important center for human development. The Las Cruces and El Paso Urbanized Areas lie within the valley.

Elevations within the County range from 3,700 feet in the valleys to approximately 5,000 feet on the upland plains. Mountains within the County have elevations ranging from 4,800 to 9,000 feet. Over 70 different soil types can be found with the County. Of the 70 types within the county, 31 soil types covering approximately 11% of the county are considered farmland of statewide importance. All soils within the County are considered highly erodible soils. (Vision 2040, 2008).

1.2 NPDES GENERAL PERMIT FOR DISCHARGES FROM SMALL MS4S

Under Phase II of Federal storm water regulations, operators of Municipal Separate Storm Sewer Systems (MS4) within an urbanized area are required to obtain permit authorization to discharge storm water from their MS4. Municipalities that had a population of less than 100,000 people in the 1990 Decennial Census are called "Small MS4s." The County is a Small MS4 operator for portions of the Las Cruces and El Paso Urbanized Areas (see Figures 2 and 3) that

are not under the jurisdiction of the City of Las Cruces, City of Sunland Park, Town of Mesilla, or New Mexico State University (NMSU).

On May 31, 2007, the U.S. Environmental Protection Agency (EPA) issued National Pollutant Discharge Elimination System (NPDES) General Permit Number NMR040000 (Federal Register, 2007) authorizing discharges from Small MS4s to waters of the United States. Small MS4s are eligible for authorization of their storm water discharges under the General Permit, as long as they comply with the conditions of the permit. One of the conditions is implementation of a Storm Water Management Program (SWMP).

The MS4 General Permit requires Small MS4 operators to submit to the EPA a Notice of Intent (NOI) to authorize their storm water discharges under the permit. The NOI was due by October 1, 2007. As a MS4 operator in the Las Cruces and El Paso Urbanized Areas, the County was required to comply with this deadline; however, a change in the environmental administration of the County caused delays in the submittal.

Mr. Michael Michaud, Chief of the Water Enforcement Branch of the EPA Region 6, requested a timeline and status update for the County's NOI in a letter dated May 1, 2008. Mr. Henry K. Corneles, P.E., Engineer Supervisor, Doña Ana County, replied in a letter dated October 15, 2008. Mr. Corneles stated that a schedule for compliance was being developed. He also stated that a SWMP would be prepared by an in-house committee consisting of all affected departments and assisted by a consultant, Martich Professional Services, PLLC. Mr. Corneles wrote a follow-up letter to the EPA dated October 31, 2008. The follow-up letter provided a schedule to submit the NOI and SWMP to the EPA by June 30, 2009. Copies of these letters are Appendix A of the SWMP.

This SWMP was prepared in accordance with the letters that the County sent to EPA Region 6 and the requirements of the MS4 General Permit. It was developed by a team consisting of the Flood Commission, Department of Public Works, an Inter-Departmental Committee of Departments affected by the SWMP, and Martich Professional Services. The County has not combined or shared efforts with any other MS4 operator and is solely responsible for the implementation of the SWMP.

The Notice of Intent and the SWMP have been developed only for the portions of the urbanized areas that are within the unincorporated areas of the County (Figures 2 and 3). The County may choose to implement some BMPs through-out the County, but it is only applying for permit authorization of discharges within the regulated urbanized areas.

2.0 GENERAL PERMIT CONDITIONS

2.1 PUBLIC NOTICE

Part 1.2.3.1 of the MS4 General Permit requires the County to provide public notice sixty (60) days prior to the submittal of its NOI. At the same time, the County is required to make available the complete NOI with attachments, including the SWMP, for public review. A Public Notice of the availability of the NOI and SWMP for review was published in the Las Cruces Sun-News on April 12 and 19, 2009.

Appendix B includes copies of the following:

- Public Notices published in the Las Cruces Sun-News;
- Public comments received; and
- Summary list of changes made to the NOI and SWMP in response to the public comments received.

2.2 ENDANGERED SPECIES ACT ELIGIBILITY

According to Part 1.5 of the MS4 General Permit, coverage under the permit is only available if the MS4 operator's storm water discharges will not jeopardize the continued existence of any species that are listed as endangered or threatened according to the Endangered Species Act (ESA) or will not result in the adverse modification or destruction of habitat that is designated as critical by the ESA. The MS4 operator's storm water discharge should not cause a prohibited "take" of endangered or threatened species unless such takes are authorized by the ESA. If endangered or threatened species are located in proximity to the MS4, consultation with the U.S. Fish and Wildlife Service (FWS) must be completed to address the effects of the storm water discharges and discharge-related activities on listed species and critical habitat.

According to the website (January 10, 2009) of the Southwest Region Ecological Services office of the U.S. Fish & Wildlife Service (USFWS), the species potentially present in Doña Ana County that are federally listed as endangered are:

- Least Tern (*Sterna antillarum*) - Bird;
- Northern Aplomado Falcon (*Falco femoralis septentrionalis*) - Bird;
- Rio Grande Silvery Minnow *(Hybognathus anarus)* - Fish;
- Sneed Pincushion Cactus (*Coryphantha sneedii var. sneedii*) - Plant; and
- Southwestern Willow Flycatcher (*Empidonax traillii* extimus) - Bird.

The website also lists the Mexican Spotted Owl (*Strix occidentalis lucida*) potentially present in Doña Ana County as a threatened bird species.

Doña Ana County assessed the potential effects of its storm water discharges, allowable non-storm water discharges and discharge-related activities on the above species using the criteria in Appendix A of the MS4 General Permit. No endangered or threatened species or critical habitat occurs in proximity to the MS4 or the MS4's points of discharge. Therefore, Doña Ana County is eligible for general permit authorization of its MS4 discharges under Part 1.5.3.1 ESA Criterion A of the permit. Refer to Appendix C of the SWMP for the complete ESA Eligibility Evaluation.

2.3 NATIONAL HISTORIC PRESERVATION ACT ELIGIBILITY

Part 1.6 of the MS4 General Permit requires the County to assess its eligibility for coverage under this permit to assure compliance with the National Historic Preservation Act (NHPA). The County must assure storm water discharges, non-storm water discharges, and discharge-related activities do not affect property that is listed or is eligible for listing on the National Register of Historic Places as maintained by the Secretary of the Interior. Should any discharges affect a property protected by the NHPA, a written agreement must be obtained from

the State Historic Preservation Officer that outlines all measures the MS4 operator will undertake to mitigate or prevent adverse effect of the historic property.

According to the National Register of Historic Places on the National Park Service website (January 7, 2009), there are four listed historic properties located within Doña Ana County's portions of the El Paso and Las Cruces Urbanized Areas. The properties are:

- Fort Fillmore;
- Our Lady of Purification Catholic Church;
- Dona Ana Village Historic District; and
- Elephant Butte Irrigation District (EBID).

According to the New Mexico Historic Preservation Division, the EBID listing is not of concern for the MS4 permit. Doña Ana County assessed the potential effects of its storm water discharges, allowable non-storm water discharges and planned construction of BMPs on the other listed properties using the criteria in Appendix B of the MS4 General Permit. Appendix D of the SWMP contains the complete NHPA Eligibility Evaluation. Doña Ana County determined that the County is eligible for general permit authorization of its MS4 discharges under Part 1.6.1.1 NHPA Criterion A of the permit.

The County submitted its evaluation and determination to the New Mexico Historic Preservation Division, Department of Cultural Affairs for their review. The NM State Historic Preservation Officer confirmed that the discharges authorized by the permit will not have an adverse effect on registered or eligible properties. Documentation showing the no adverse effect determination is in Appendix D.

2.4 COMPLIANCE WITH TOTAL MAXIMUM DAILY LOADS

The urbanized areas of Doña Ana County that are covered by this SWMP are located within USGS Hydrologic Unit Code 13030102 in the Lower Rio Grande watershed. This reach of the river is fully supporting of all designated uses except secondary contact, for which it is impaired due to bacteria. On June 11, 2007, the EPA approved an *E. coliform* Total Maximum Daily Load (TMDL) for the Main Stem of the Lower Rio Grande. The Waste Load Allocations for *E. coliform* include an allocation for storm water discharges authorized by NPDES General Permit NMR040000; however, no effluent limitation was established for storm water discharges. The WLA varies and is set at two percent of the available allocation for each hydrologic zone (Surface Water Quality Bureau, 2007).

The EPA-Approved TMDL indicates that the elevated levels of *E. coliform* tended to occur during non-rainfall sampling events. The County's representative consulted with Ms. Heidi Henderson, the NMED TMDL Coordinator, to confirm that the SWMP is consistent with the TMDL. She indicated that this TMDL was the first in New Mexico where NMED tried to correlate loading with flow. Ms. Henderson requested that any monitoring implemented include the flow component (Henderson, 2008). After further discussion within NMED and EPA Region 6, Ms. Henderson stated that representative sampling of the storm water discharges is needed (Henderson, 2009).

To provide the representative sampling, the County included sampling for *E. coliform* in its Monitoring/Assessment Plan (Appendix J). The sampling will be coordinated with the New Mexico Surface Water Quality Bureau and regional TMDL efforts.

There are numerous possible sources of the bacteria load. Sources that could be in contact with the County's storm water discharges include impervious surfaces/parking lots, pet waste, wildlife, failing septic systems, and urbanized high density areas (Surface Water Quality Bureau, 2007). The SWMP includes BMPs to educate the public about animal waste, eliminate on-site sewage systems, decrease post-construction impervious area, and require post-construction detention/retention. These BMPs are match the ones recommended in the Watershed Restoration Action Strategy for the Lower Rio Grande, which was funded by an EPA 319(h) Grant (Paso Del Norte Watershed Council, 2007).

Doña Ana County has determined that its storm water discharges are eligible for coverage under the general permit as long as the discharges adhere to the conditions of this SWMP, in accordance with the second paragraph of MS4 General Permit Part 1.4.6.

3.0 MINIMUM CONTROL MEASURES

Part 5.1 of the MS4 General Permit states:

"The permittee must develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants from a small MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy applicable surface water quality standards."

The MS4 General Permit (GP) outlines six Minimum Control Measures (MCM) for the SWMP:

- Public Education and Outreach on Storm Water Impacts
- Public Involvement/Participation
- Illicit Discharge Detection and Elimination
- Construction Site Storm Water Runoff Control
- Post-Construction Storm Water Management in New Development and Redevelopment
- Pollution Prevention/Good Housekeeping for Municipal Operations

An MCM consists of Best Management Practices (BMPs) to prevent or reduce the discharge of pollutants. According to the Code of Federal Regulations, Part 40, Section 122.34, implementation of the BMPs consistent with an authorized SWMP constitutes compliance with the MEP standard.

The following were considered in selecting BMPs for each MCM:

- Existing resources and activities that could be utilized to protect storm water quality;
- Limited resources and legal authority available to a county;
- Size of the population impacted; and
- Practicality of implementation due to the non-contiguous portions of the urbanized areas that are the County's responsibility.

Section 3.0 of the SWMP provides a general discussion of the BMPs for the six MCMs. The MS4 General Permit contains a list of information that must be included under each MCM, and these requirements are referenced using italics in the subsections of the MCMs.

The tables at the end of the SWMP text contain specific BMPs, measurable goals and schedules for each MCM. Doña Ana County believes implementation of the BMPs will protect water quality and meet the MEP requirement for the limited portions of the urbanized areas within the County's control.

3.1 PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS

Part 5.2.1.1 of the MS4 General Permit requires DAC to:

"Implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impact of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff."

3.1.1 General Description and Methods

MS4 GP Part 5.2.1.2.1. *"A description of the education program and outreach activities;"*

MS4 GP Part 5.2.1.2.2. *"A description of the methods for disseminating information."*

The County will conduct an educational program to inform the general public about storm water quality in the urbanized areas and its connection to the Rio Grande. The program will emphasize the public's role and responsibility in improving storm water quality. Educating the public is also critical to generating support for the SWMP.

Educational materials may include brochures, fact sheets, flyers, give-away items (e.g. magnets), posters, and other items that can be distributed to individuals. The materials may be developed by the County or in cooperation with other MS4 operators. The County may also use materials available from the EPA, NMED, or other government entities willing to share storm water educational material that they've developed.

Educational material will be available for the public at the Doña Ana County Government Center. County staff will also distribute the educational material when they attend festivals, public functions, inspect facilities, or respond to complaints. Storm water quality information was posted on the County's website during the second permit year. Links to new educational material will be placed on the website as it is developed or acquired by the County.

The County currently broadcasts radio shows and public service announcements that reach a diverse residential and commuting population. Storm water information will be added to the broadcasts. The channels currently used by the County are:

- KVLC 101.1, a Golden Oldies Station;
- KHOT 103.1, a Hip-Hop Station;
- KGRT 103.9, a Country Station; and
- AM 570 and 1450, Talk Radio.

Additional and different stations may be used as needed to reach other audiences or as radio station formats and policies change.

The County does not operate a public school system. The County will meet with the City of Las Cruces and discuss cooperating on an elementary school presentation for Las Cruces Public Schools that serve the unincorporated portions of the Las Cruces Urbanized Area. The County will also meet with the Gadsden (Sp?) Independent School District (check) to determine if they are interested in water quality presentations for their students.

Since the County's portions of the urbanized areas are non-contiguous and are separated by other MS4 operators, the County will investigate ways to cooperate with the other MS4 operators on public education. In support of the TMDL for the Lower Rio Grande, the County will meet with other MS4 operators to explore the potential for a watershed-based public education program targeted at bacteria sources. The program could be through an existing regional effort, such as the Paso Del Norte Watershed Council, or may be cooperation directly between the MS4 operators.

3.1.2 Target Audiences and Target Pollutants

MS4 GP Part 5.2.1.2.3. *"The target audiences and target pollutants and sources that the MS4 operator will address in the program, and how they were selected."*

The portions of the urbanized areas under the authority of the County consist primarily of unincorporated residential areas. Some of these areas are Census Designated Places such as Doña Ana, Santa Teresa, Berino and Anthony, which are historically agricultural communities. Other residential areas are new subdivisions where people live and commute to an urban center for employment. Dogs, horses, chickens, goats and other livestock for personal use or consumption are common. There are no substantial industrial, commercial or other employment centers within the unincorporated portions of the urbanized areas.

The primary target audience for the education and outreach activities is the general public. Pollutants that are typically a concern in unincorporated residential areas are litter and trash (floatables), motor vehicle fluids, and household hazardous waste. Pet waste, waste from personal livestock, and discharges from on-site sewage systems are also target pollutants, since they are potential bacteria sources contributing to impairment of water quality in the Lower Rio Grande.

Common commercial activities in the unincorporated areas are land development, construction, auto repair, and auto recyclers. Target pollutants for the first two include trash, debris, and sediment. Educational outreach to this audience is discussed under the MCMs for Construction Site Storm Water Runoff Control (SWMP Section 3.4) and Post-Construction Storm Water Management (SWMP Section 3.5). Target pollutants for auto repair shops and auto recyclers or salvage yards are automobile fluids, batteries, tires, and metals. Educational material will be developed to address these pollutants.

3.1.3 Estimation of the Number of Contacts

MS4 GP Part 5.2.1.2.4. *"An estimation of the number of people with whom the MS4 operator intends to communicate."*

Based on GIS data from the 2000 census tracts, the County estimates that 25,300 people resided in the unincorporated portion of the Las Cruces Urbanized Area and 12,800 people lived in the El Paso Urbanized Area in year 2000. At an average annual growth rate of 2% for the County (Vision 2040, 2008), the population of the combined unincorporated portions of the urbanized areas may be over 45,000 in year 2009.

The County estimates 10,000 to 20,000 contacts with the general public will be made during the five-year permit period. The majority of these contacts are anticipated to be via radio broadcasts; however, there is no means to track radio listeners within the unincorporated portions of the urbanized areas. As the County implements its education program, it will start to track the number of "hits" to the storm water webpage, educational items distributed, violations issued, attendance at presentations, etc... to develop a better estimate of contact numbers for future activities.

Current data for construction contractors and businesses within the County does not segregate by urbanized area, so no data is available to size the target commercial audiences. Developing this data will be part of the activities during the five year permit period.

3.1.4 Best Management Practices

Specific BMPs, measurable goals and schedules are listed in Table 1. The BMPs are intended to inform people of the ways they affect storm water quality and to encourage them to change their behavior. By doing so, the County will improve water quality by decreasing the sources of pollutants from the general public.

3.1.5 Program Coordinator

The Public Works Director is responsible for overall management, coordination and implementation of the public education BMPs. The Sheriff's Office, Community Development Department, and the Public Information Office are responsible for accomplishing specified BMPs with guidance and support from Public Works.

3.2 PUBLIC INVOLVEMENT/PARTICIPATION

Part 5.2.2.1 of the MS4 General Permit requires DAC to:

"Develop and implement a plan to encourage public involvement and participation in the development and implementation of the SWMP."

3.2.1 General Description

MS4 GP Part 5.2.2.4.1. *"A description of the general plan for informing the public of involvement and participation opportunities."*

MS4 GP Part 5.2.2.4.2. *"The types of activities for public involvement that the program will include and the target audiences."*

The target audience for the public involvement BMPS are the residents of the unincorporated urbanized areas. An active role in the Storm Water Management Program encourages the public to have a sense of ownership and responsibility for the quality of life in their community. Public involvement can assist the County in developing BMPs that meet local water quality needs and priorities. Citizens can also provide useful information and knowledge that may not be readily available to County staff.

The County will publicize a phone number for the public to report storm water pollution to the County. The number will be included in the educational material developed and distributed under the Public Education MCM. The number will also be posted on the County's website with a description of the types of pollution to report. The public will be encouraged to report illegal dumping, illicit discharges, and construction site discharges.

Keep Doña Ana County Beautiful is an affiliate of the National Keep America Beautiful Program. Through this program, the County supports community volunteers who clean-up County parks and other public areas. The County will continue to seek opportunities to involve the public in community clean-up events and activities.

3.2.2 Public Review and Comment Process

MS4 GP Part 5.2.2.4.3. *"A description of the procedure for receiving and reviewing public comments."*

MS4 GP Part 5.2.2.4.8. *"How the public was involved in the development of the SWMP submitted with the NOI."*

The Board of County Commissioners holds regularly scheduled meetings that are open to the public. Public notice of the meetings is given in accordance with the New Mexico Open Meetings Act and local open meeting rules. The meetings provide an opportunity for the public to comment on items presented to the BOCC and issues of concern.

Items related to the SWMP will be regularly placed on the BOCC agenda. An overview of the MS4 General Permit and the SWMP requirements were presented at the BOCC meeting on March 10, 2009 (see Appendix B). Two citizens commented after the presentation. One of the comments was not related to development of the SWMP. The other comment was a question about coordinating the SWMP with the Lower Rio Grande Watershed Project. This comment is believed to be about the Lower Rio Grande Watershed activities of the Paso Del Norte Watershed Council.

The Paso Del Norte Watershed Council received a 319(h) Watershed Restoration Grant for the Lower Rio Grande. The grant was used to prepare a Watershed Restoration Action Strategy (WRAS) in response to the TMDL for bacteria in the Lower Rio Grande. The WRAS was considered in development of the SWMP. The County intends to align its SWMP with related initiatives in the Lower Rio Grande Watershed.

Public notice of the NOI and SWMP was published in the Las Cruces Sun-News as described in Section 2.1 of the SWMP. Throughout the term of the permit, the SWMP

and NOI will be available for public review and comment. Procedures and/or a form for public comment will be added to the storm water page on the County's website.

Public comments will be directed to the Department of Public Works (DPW), where the Director or his designee will review the comments. DPW will maintain a record of the public comments and documentation of how the comments were addressed. This record will be maintained in Appendix B of the SWMP.

3.2.3 Availability of SWMP and NOI

MS4 GP Part 5.2.2.4.4. *"An explanation of how interested parties may access the NOI and the SWMP."*

The NOI and the SWMP will be made available to the public via the County's website. A copy of the SWMP will also be available for public review at the Department of Public Works.

3.2.4 Best Management Practices

Specific BMPs, measurable goals and schedules are listed in Table 2. The BMPs are intended to make it easy for the public to access and comment on the SWMP and to become involved in implementing the program. Public involvement will improve water quality by increasing the public sense of ownership for water quality in the region, and thus support for the program's activities. With a sense of ownership, the public will hopefully be motivated to improve storm water quality.

3.2.5 Program Coordinator

The Public Works Director is responsible for the overall management, coordination and implementation of public involvement and participation BMPs. The Sheriff's Office, Utilities Department, and Public Information Office are responsible for accomplishing specified BMPs with guidance and support from Public Works.

3.3 ILLICIT DISCHARGE DETECTION AND ELIMINATION

Part 5.2.3.1 of the MS4 General Permit requires DAC to:

"Develop, implement, and enforce a program to detect and eliminate illicit discharges into the small MS4."

3.3.1 MS4 Map

MS4 GP Part 5.2.3.2. *"Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls (interim map may be submitted with NOI, with completion of map included as a SWMP schedule item)."*

The County maintains a GIS database that contains hydrology data, including arroyos, laterals and drains operated by the Elephant Butte Irrigation District, and the Rio Grande. The County recently acquired the iWorQ Asset Tracker software to manage

their roads and culverts. The software creates a database that tracks inventory, condition assessments, and maintenance records. The iWorQ software also has a GIS Mapping Integration feature which the County is considering using to map the drainage infrastructure.

The County will map outfalls within the urbanized areas during the term of the five year permit. Refer to Figure 4 for an Interim Drainage System and System Outfall Map that shows the current extent of the County's map. An updated map will be submitted with each annual report.

3.3.2 On-Site Sewage Disposal Systems

MS4 GP Part 5.2.3.8. *"Address on-site sewage disposal systems that flow into the storm drainage system."*

On-site sewage systems in Doña Ana County are permitted and inspected by the New Mexico Environment Department (NMED) and are not under the County's jurisdiction. If a discharge is determined to originate at an on-site sewage system, it is reported to the NMED District 3 Las Cruces Office for investigation and enforcement.

To decrease the risk of water contamination from on-site sewage systems, the County operates wastewater collection systems and treatment plants in unincorporated areas of the County that have concentrated population densities. The wastewater system is governed by County Ordinance No. 201-02, Policies and Regulations for Wastewater Systems Owned, Established or Authorized by Doña Ana County (see Appendix E). Section 6, Mandatory Connection, of the ordinance, requires buildings and facilities that are within 300 ft of a wastewater line to connect to the County system. The County maintains a five-year Infrastructure Capital Improvement Program to extend wastewater lines to areas currently using on-site sewage systems.

3.3.3 Visual Screening

MS4 GP Part 5.2.3.9.1. *"Description of detection methods."*

As part of the County's on-going maintenance program, storm drainage facilities are inspected on a regular basis. The infrastructure is inspected for structural integrity and debris and sediment accumulation. The structures are cleaned when needed as determined by the inspections. The crews that inspect the drainage infrastructure will be trained to identify illicit discharges. If discharges are found during inspections, the crew will attempt to track the discharge back to its source. If the flow is determined to be an allowed discharge, no further action is needed. Otherwise, the investigation will follow enforcement procedures described in the next section of the SWMP.

After the County completes its map of the outfalls within the urbanized areas, it will develop procedures for dry weather screening of the outfalls. The procedures will ensure that the unincorporated portions of the urbanized areas are screened once each permit term. EPA's manual for illicit discharge detection and elimination (Brown et.al., 2004) will be referenced when developing the procedures; however, methods will be selected that are applicable to the arid climate and limited drainage system to be screened.

The County will also publicize a report line for citizens to assist in detecting illicit discharges and illegal dumping. Refer to Section 3.2.1 of the SWMP.

3.3.4 Illicit Discharge Enforcement Policy

MS4 GP Part 5.2.3.9.2. *"A description of enforcement policy and jurisdiction. The program must include procedures for coordination with adjacent municipalities and/or state, tribal, or federal regulatory agencies to address situations where investigations indicate the illicit discharge originates outside the MS4s jurisdiction. Where the permittee lacks legal authority for direct enforcement action, the program must include notification procedures and if an illicit discharger fails to comply with procedures or policies established by the permittee, the permittee may rely on EPA and the state environmental agency for assistance in enforcement of this provision of the permit."*

County Ordinance No. 230-07, Residential and Commercial Solid Waste Collection and Disposal (see Appendix F), contains a prohibition on discharges of solid waste. Solid waste is defined in the ordinance as: "...any garbage, rubbish, or refuse, rejected or waste food, offal, swill, carrion, ashes, dirt, slop, wastewater, trash, weeds, briars, brush, automobiles or automobile parts, waste or unwholesome material of any kind..." Section II.B.3, Prohibited Acts, of the ordinance states: "It shall be unlawful for any person to sweep, place, throw, or deposit solid waste upon any street, alley, sidewalk, gutter, storm sewer, parkway, river, stream, lake, pond, arroyo, or other premises within the County, except in receptacles or containers consistent with the provisions of this Ordinance."

Section IV of the same ordinance, Enforcement Provisions, provides for escalating enforcement to eliminate discharges of solid waste. The ordinance is enforced by the Sheriff's Office. Upon discovering or receiving a report of a violation of the ordinance, the County issues a Notice of Violation and directs the violator to clean up the site at their cost. If the violator refuses, then the County can provide cleanup with a back charge to the landowner, or in some cases, the violation is sent to court for prosecution.

Enforcement authorized under the ordinance includes:

- Notice of violation with 30 days to remedy the violation;
- Authority for the County to incur the cost of the abatement and establish a lien against the property in the amount of the cost of abatement;
- Fine of up to $300, up to 90 days imprisonment, or both for each violation;
- Fine of up to $1000 for disposal of garbage in any manner other than in an authorized landfill or other disposal facility; and
- Fine of up to $5000 for disposing of hazardous waste improperly.

The County will strengthen its ability to eliminate illicit discharges by developing and adopting a Storm Water Pollution Control Ordinance that defines illicit discharges and authorized discharges to the MS4. Part of developing the ordinance will be identifying the staff responsible for enforcing the ordinance and developing inspection and enforcement procedures to eliminate illicit discharges. The staff will then be trained on

the procedures. Investigations of discharges will occur within 15 days of a discharge being detected or reported.

Since an illicit discharge can potentially originate in the jurisdiction of another MS4 operator, investigation procedures will include a list of contacts for adjacent MS4 operators. The urbanized areas served by the County's MS4 are adjacent to the following MS4 operators:

- City of Las Cruces, NM (Phase II)
- Town of Mesilla, NM (Phase II)
- NM-DOT District 1 (Phase II)
- City of Sunland Park, NM (Phase II)
- City of El Paso, TX (Phase I)
- Town of Anthony, TX (Phase II)
- Village of Vinton, TX (Phase II)

3.3.5 Allowed Non-Storm Water Discharges

MS4 GP Part 5.2.3.9.4. *"A list of the non-storm water discharges allowed in the small MS4 because they are identified as non-significant contributors of pollutants to the small MS4. This list must also identify any additional categories of discharges (besides those named in the first paragraph of Part 5.2.3.6) that the MS4 intends to address as non-illicit discharges."*

An illicit discharge is any discharge to the County's MS4 that is not composed entirely of storm water; except for discharges authorized by an NPDES permit (other than the NPDES permit for discharges from the County's MS4). The County believes the following categories of non-storm water discharges are <u>not</u> significant contributors of pollutants to the MS4. As such, they are <u>not</u> considered illicit discharges and are allowed non-storm water discharges:

- Water line flushing;
- Landscape irrigation;
- Diverted stream flows;
- Rising ground waters;
- Uncontaminated ground water infiltration (as defined in 40 CFR Section 35.2005(20));
- Uncontaminated pumped ground water;
- Discharges from potable water sources;
- Foundation drains;
- Air conditioning condensate;
- Irrigation water;
- Springs;
- Water from crawl space pumps;
- Footing drains;
- Lawn watering;
- Individual residential car washing;

- Flows from wetlands and riparian habitats;
- De-chlorinated swimming pool discharges;
- Street wash water; and
- Discharges from emergency fire fighting activities (does not include discharges from fire fighting training activities).

In addition, the County believes that discharges from non-commercial or charity car washes, etc. are insignificant contributors of pollutant to the MS4 and will consider these discharges to be allowed.

3.3.6 Employee Training for IDDE

MS4 GP Part 5.2.3.9.5. *"The methods for informing/training employees about illicit discharges."*

County inspectors that routinely work in the urbanized areas will be trained to identify and respond to illicit discharges. The training will evolve during the third through fifth years of the permit. Initial training will include recognizing illicit discharges that are enforceable under existing ordinances and reporting them to Codes Officers in the Sheriff's Office.

As the County develops the Storm Water Pollution Control Ordinance, the County will develop written procedures for investigating illicit discharges and eliminating them. The procedures will identify the County staff that has authority to issue warnings and to escalate the enforcement as needed to eliminate the illicit discharge. Affected County staff will be trained on the procedures while they are being developed and implemented.

3.3.7 Public Education for IDDE

MS4 GP Part 5.2.3.9.6. *"The methods for informing the public of hazards associated with illegal discharges and improper disposal of waste."*

Information about the effects of illicit discharges on storm water quality will be included in the public education and involvement activities discussed in Sections 3.1 and 3.2 of the SWMP. Improper disposal of trash and household hazardous waste is of particular concern, since curbside collection is not a government function in the unincorporated areas of the County. The County will use its website and develop a brochure to promote proper disposal of these wastes.

3.3.8 Best Management Practices

Specific BMPs, measurable goals and schedules are listed in Table 3. The BMPs will improve storm water quality by:

- Preventing illicit discharges through public education;
- Providing the public with alternatives to illegal dumping;
- Decreasing the potential for discharges from on-site sewage systems by extending the County's wastewater collection system; and
- Stopping illicit discharges through investigation and enforcement.

3.3.9 Program Coordinator

The Public Works Director is responsible for the overall management, coordination and implementation of the illicit discharge elimination and detection BMPs. The Utilities Department, Public Information Office, Community Development Department, and Sheriff's Office are responsible for accomplishing specified BMPs with guidance and support from Public Works.

3.4 CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

Part 5.2.4.1 of the MS4 General Permit requires DAC to:

"Develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more."

3.4.1 Construction Ordinances

MS4 GP Part 5.2.4.5.1. *"A description or citation of the established ordinance or other regulatory mechanism used to prohibit erosion and waste on construction sites. If the permittee needs to develop the required regulatory mechanism, describe the plan and a schedule to do so."*

County Ordinance No. 194-2000, Erosion Control Regulations (see Appendix G), was enacted to protect and maintain the natural environment. The ordinance endeavors to accomplish this goal by establishing requirements for activities, including construction, that create dust or make land more vulnerable to erosion.

Section 2.1 of the regulations, Erosion Control Plan (ECP) Requirements for Development, states: "Other than for a single family dwelling unit, any grading, construction, demolition, or other development requiring a permit or other form of approval under any County Ordinance shall have an approved Erosion Control Plan (ECP) in place prior to receiving a permit." The ECP is required to include Erosion Control Measures (ECMs). Section 2.3 of the regulations lists guidelines for ECMs. The guidelines contain stabilization measures that protect storm water from sediment, including:

- Applying palliatives or chemical soil suppressant/stabilizer for idle construction periods;
- Re-seeding or re-vegetation of graded or disturbed areas;

- Retaining natural vegetation during the construction phase of buildings, excluding the building pad site; and
- Utilizing existing or natural vegetation as part of the required landscaping to limit grading activities.

County Ordinance No. 236-08, Development Design Standards (see Appendix H for the relevant sections of the Standards), requires a grading permit prior to the start of construction. The application for a grading permit includes submission of a grading plan that is sealed and signed by a licensed New Mexico Professional Engineer. Section 5.4.C of the standards contains a list of things that must be shown on the grading plan, including:

- All areas to be graded and final contours;
- The location of temporary erosion structures and methods used, including staging and stockpile areas; and
- All facilities for control and disposition of storm water runoff.

Section 5.11.C of the Development Design Standards describes specific erosion control measures to be incorporated into development plans.

County Ordinance No. 230-07, Residential and Commercial Solid Waste Collection and Disposal (see Appendix F), Section III.A states: "At all sites where streets, sidewalks, buildings or structures are being constructed, remodeled, repaired, demolished or maintained, the construction site shall be kept free from uncontained accumulations of solid waste materials (new or used) and construction and demolition debris, including but not limited to scrap or discarded pieces of wood, brick, sheetrock, shingles, tar paper, cement, concrete, cinderblock, asphalt concrete, and other building or construction products, as well as any containers and wrappers of such products." Section III.A.5 adds: "Solid waste capable of being windborne shall be contained daily, except on windy days when it shall be contained immediately.

The County will strengthen its ability to control pollutants discharged with construction site storm water by developing and adopting a Storm Water Pollution Control Ordinance. The new ordinance will combine the requirements for temporary controls during construction into one ordinance and require a Storm Water Pollution Prevention Plan (SWPPP). The requirements for the SWPPP will be similar to and/or may reference those contained in NPDES General Permit for Storm Water Discharges from Construction Activities.

3.4.2 Enforcement Procedures

MS4 GP Part 5.2.4.5.2. *"A description of the sanctions and enforcement mechanism(s) to ensure compliance (including enforcement escalation procedures for recalcitrant or repeat offenders)."*

Community Development will not issue a building, grading and/or subdivision permit until the ECP and grading plan are deemed acceptable. The County's acceptance of the ECP constitutes a mandate that the ECMs contained or described within the plan be implemented as part of the construction activities. County Ordinance No. 194-2000,

Erosion Control Regulations Section 5.1, Enforcement Provisions, authorizes a fine of up to $300 and/or up to 90 days in jail for failing to implement the ECP.

Additional enforcement options are available under County Ordinance No. 236-08, Development Design Standards and County Ordinance No. 230-07, Residential and Commercial Solid Waste Collection and Disposal. Under the latter, failure to contain construction waste is enforceable with the same escalating penalties described for illicit discharges in Section 3.3.4 of the SWMP.

Section 5.8.B of the County's Development Design Standards gives the County authority to direct construction site operators to remove materials that are washed or deposited upon streets, alleys or other public property, which includes public drainage ways. The standards also give the County authority to take remedial action if the construction site operator does not remove the material within 24 hours. Section 1.11 of the Standards establishes a penalty of up to $300 and/or up to 90 days in jail for failure to comply with the standards, including the grading plan and the erosion and storm water controls in the plan.

The proposed Storm Water Pollution Control Ordinance will include enforcement mechanisms and enforcement escalation options.

3.4.3 Plan Review and Site Inspection

MS4 GP Part 5.2.4.5.3. *"A description of the procedures for site inspection and enforcement of control measures (including enforcement escalation procedures for recalcitrant or repeat offenders), and procedures for site plan reviews."*

Operators of construction sites must obtain a permit from the County, which requires operators to comply with the Erosion Control Regulations and the Development Design Standards. Construction plans are reviewed by the Flood Commission, the Department of Public Works Engineering Division, and the Planning Division of Community Development. Prior to issuance of a permit, the County Engineer or their designee evaluates the completeness of the plans with respect to a number of considerations, one of which is protection of water quality and reduction of erosion and runoff. The County Engineer has the authority to require additional controls if it's deemed necessary to protect water quality.

During construction, inspectors in the Public Works Department and the Community Development Department inspect construction sites to ensure compliance with the plans accepted by the County. If the County inspector determines that the erosion controls are not properly installed or maintained, he or she may require corrective action. The inspectors have the authority to deny inspections needed to proceed with construction and to issue stop work orders until site conditions are in accordance with the plans. All previously discussed penalties and fines (SWMP Section 3.4.2) also apply to incidents of non-compliance found during inspections.

After the Storm Water Pollution Control Ordinance is adopted, the County will develop plan review, inspection and enforcement escalation procedures for implementation of the SWPPPs required by the ordinance.

3.4.4 Public Reports

MS4 GP Part 5.2.4.5.4. "Procedures for receipt, acknowledgment and consideration of information submitted by the public."

Information about reporting pollution from construction sites will be included in the public education and involvement activities discussed in Sections 3.1 and 3.2 of the SWMP. Reports of problems at construction sites will initiate an inspection in accordance with the procedures established with the proposed Storm Water Pollution Control Ordinance.

3.4.5 Best Management Practices

Specific BMPs, measured goals and schedules are listed in Table 4. The BMPs will improve water quality by ensuring controls are in place to reduce pollutants from construction sites.

3.4.6 Program Coordinator

The Public Works Director is responsible for the overall management, coordination and implementation of the construction BMPs. The Community Development Department and the Public Information Office are responsible for accomplishing specified BMPs with guidance and support from Public Works.

3.5 POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

Part 5.2.5.1 of the MS4 General Permit requires the County to:

"Develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, and discharge into the small MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts."

3.5.1 Operation and Maintenance of Post-Construction BMPs

MS4 GP Part 5.2.5.4. *"Ensure adequate long-term operation and maintenance of BMPs."*

County Ordinance 236-08, Design Development Standards, Section 5.9.E requires the following for owner of development permitted by the standards: "The continued maintenance and repair of all retaining walls, cribbing, drainage facilities, slopes, landscaping, soil stabilization and erosion control measures and any other protective devices located upon his property and constructed pursuant to the permit." Appendix B of the standards contains a Drainage Maintenance Agreement that is required for private drainage structures, including BMPs such as detention/retention ponds. Table 4.9 of the standards contains the minimum maintenance requirements. The maintenance agreement is enforced through a written notification process. The County is authorized to take corrective actions and assess the cost to the owner if the owner fails to comply with the notice.

County Ordinance 194-2000, Erosion Control Regulations, Section 1.7, Existing Conditions, states: "The owner of any property that is determined to be in a condition vulnerable to erosion by natural forces due to human development of the property may be required to submit an Erosion Mitigation Plan (EMP) consistent with Article 2, if the condition of the property is determined to pose a significant health threat due to the nature or extent of the vulnerable condition of the property, or its location near concentrations of vulnerable populations, such as of school children, or ill or elderly persons." Article 4, Existing Conditions, of the regulations establishes the submittal and review requirements for the EMP to ensure the EMP provides a long-term remedy for the condition.

Maintenance of post-construction BMPs is the responsibility of the property owner up to the point where storm water enters County facilities. Facilities for which the County assumes ownership or maintenance are maintained by the Department of Public Works. Maintenance of these facilities is addressed under the Pollution Prevention/Good Housekeeping for Municipal Operations MCM, in Section 3.6 of the SWMP.

The Flood Commission, which is not under control of the County, designs and constructs flood control structures such as dams, ponds, berms and channels. The Flood Commission ensures that water quality issues are included and sediment, trash and debris removal are addressed in the facility's design. They also have a program for regular maintenance of flood control structures that are under its control/jurisdiction. Regular maintenance includes removal of vegetation, trash, debris and rodents. Sediment removal to the original design elevations is performed on an as-needed basis to ensure adequate capacity for flood control.

3.5.2 Post-Construction Management Practices

MS4 GP Part 5.2.5.5.1. *"A description of the management practices to reduce post-construction runoff from new development and redevelopment projects within the MS4; address any specific priority areas and tailor to the local community."*

Storm events that produce runoff in the region tend to be of short duration and high intensity. Storm water runoff is typically of high velocity and can be heavy with sediment, even in undeveloped areas, due to steep terrain, soil types, and desert vegetation. Detention/retention ponds are the most common BMP used to manage both the quantity and quality of storm water runoff. In addition to requiring detention/retention, the County's Development Design Standards allow pervious drainage structures, such as roadway swales and open channels that use vegetation instead of concrete. The Standards specify maximum velocities to ensure non-erosive conditions in the swales and channels.

Vision 2040 is a Regional Comprehensive Plan that is being developed jointly by Doña Ana County and the City of Las Cruces with their contractor, Peter J. Smith & Co., Inc. The project started in August 2007 and is scheduled to be completed during the third permit year. The Regional Comprehensive Plan will result in policy recommendations to update the Doña Ana County Comprehensive Plan, which will be used to guide development requirements in the County.

The Vision 2040 Draft Goals and Objectives were published during the first permit year. The goals and their objectives include:

- We will coordinate growth in a manner that protects and enhances the natural environment.
  - Provide for and invest in an open space network, land conservation and access to water resources.
  - Work with landowners by using land use planning tools to protect natural and historical resources.
  - Promote growth in locations with the least likely potential to impact conditions for flooding.

- We will promote and develop a system of parks, trails and open spaces adequate for a wide variety of active and passive leisure pursuits.
  - Promote the development of natural corridors and green infrastructure to define and enhance community character.
  - Provide an alternative circulations system that minimizes automobile use by encouraging pedestrian and bicycle transport.

Implementing these types of goals and objectives can result in less impervious area and encourage preservation of buffers along arroyos and other natural drainage ways. The County will continue to participate in Vision 2040. The County will use the final Regional Comprehensive Plan to develop a list of local priorities for development that includes reduction in post-construction runoff and related pollutants.

3.5.3 Development Ordinances

MS4 GP Part 5.2.5.5.2. *"A description or citation of the established ordinance or other regulatory mechanism used to address post-construction runoff control. If the permittee needs to develop the required regulatory mechanism, describe the plan and a schedule to do so."*

County Ordinance 236-08, Development Design Standards, was adopted during the second permit year and requires all development permitted by the standards to provide for post-construction storm water and erosion control. Section 4, Terrain Management, of the standards requires a Terrain Management Plan as a condition for a construction permit. It states that the plan: "...shall address the control of drainage and erosion and shall include a grading and drainage plan that calculates and analyzes the measures necessary to adapt the development to the existing soil characteristics and topography." This principle is one of the basic tenets of low impact development. Section 5.11.B.1 of the standards similarly states: "Development plans for any project site should be as effectively fitted to existing topography and soils as practical so as to create the least erosion potential possible."

Section 4 of the Development Design Standards contains specific requirements for drainage designs. Requirements that address post-construction runoff quantity and quality are:

- The differential runoff between pre-development and post-development conditions shall be retained/detained in ponding areas. (Section 4.2.B.9.)

- Outfall points shall be designed in such a manner that they will not cause damage to areas downstream. (Section 4.2.C.5.)
- Side slopes of on-lot ponding areas shall receive a permanent erosion control treatment. (Section 4.2.C.8.)
- The use of on-site detention or retention is required for the purpose of limiting the major (100-yr) storm runoff rates to historical levels. (Section 4.7.A.)

As the County participates in Vision 2040 during the permit period, it will evaluate additional ordinance requirements to promote the development goals and objectives of Vision 2040.

3.5.4 Enforcement Procedures

MS4 GP Part 5.2.5.5.3. *"A description of the procedure to ensure compliance with local requirements."*

As part of the development review process, the Flood Commission, the Department of Public Works Engineering Division, and the Planning Division of Community Development review the grading and drainage plans and reports required by the Development Design Standards. In this review, the County looks for structural and non-structural BMPs that reduce post-construction storm water runoff, improve the quality of storm water runoff, and/or control erosion. The County Engineer has the authority to require additional controls if it's deemed necessary to prevent flooding, protect water quality, or control erosion.

During construction, inspectors in the Public Works Department and the Community Development Department inspect construction sites to ensure compliance with the plans accepted by the County. If the County inspector determines that the site grading or infrastructure construction is not in compliance with accepted plans, he or she may require corrective action. The inspectors have the authority to deny inspections needed to proceed with construction and to issue stop work orders until site conditions are in accordance with the plans. Section 4.9 of the Development Design Standards requires an As-Built/Record Plan, stamped and certified by a licensed New Mexico Professional Engineer, be submitted to the County to ensure the construction complies with the plans accepted by the County.

3.5.5 Developer and Public Education

MS4 GP Part 5.2.5.5.4. *"Education program for developers and the public about project designs that minimize water quality impacts."*

Doña Ana County will use its website to provide links to information about the benefits of Low Impact Development (LID). The County will also investigate opportunities to cooperate with NMSU and the City of Las Cruces to present a workshop or training on LID practices that are appropriate for the region.

3.5.6 Best Management Practices

Specific BMPs, measurable goals and schedules are listed in Table 5. The County believes these BMPs will protect storm water quality by ensuring that development plans address the long-term impacts of development on storm water runoff.

3.5.7 Program Coordinator

The Public Works Director is responsible for the overall management, coordination and implementation of the post-construction BMPs. The Community Development Department and the Public Information Office are responsible for accomplishing specified BMPs with guidance and support from Public Works.

3.6 POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

Part 5.2.6.1 of the MS4 General Permit requires the County to:

"Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations due to activities, including but not limited to, park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance."

3.6.1 Affected Municipal Operations

MS4 GP Part 5.2.6.2.1. *"A list of the municipal operations impacted by this operation and maintenance program."*

The following County departments and divisions have operations with the potential to discharge pollutants and will implement the pollution prevention/good housekeeping BMPs.

- DPW/Roads: roadway and storm drainage system maintenance.
- DPW/Facilities & Parks: facility and parks maintenance.
- DPW/Fleet: vehicle maintenance and repair.
- Utilities/Water and Wastewater: water distribution and wastewater collection and treatment operations.

In addition to operation and maintenance activities, the County constructs new facilities that have the potential to affect storm water quality. DPW and Utilities both have responsibilities for constructing new County infrastructure. These departments will ensure that projects constructed by the County implement a Storm Water Pollution Prevention Plan during construction and comply with requirements of the NPDES Construction General Permit.

3.6.2 County-Owned/Operated Industrial Activities

MS4 GP Part 5.2.6.2.2. *"A list of industrial facilities (other than large construction activities defined as industrial activity) owned or operated by the permittee that ultimately discharge to the small MS4 and are subject to: the Multi-Sector General Permit (MSGP) or Individual NPDES permit for discharges of storm water associated with industrial activity."*

The County owns and operates two facilities that are industrial activities according to the definition of "storm water discharges associated with industrial activity" in 40 CFR 122.26(b)(14)(i)-(ix) and (xi). The facilities are the Doña Ana County Airport at Santa Teresa and the South Central Regional WWTP. Figure 5 shows their location in relation to the urbanized areas and waters of the U.S.

The South Central Regional WWTP qualifies for a No Exposure Certification (NEC). The airport recently updated its SWPPP according to the requirements in the MSGP re-issued in September 2008. Refer to Appendix I for the WWTP's NEC and the airport's NOI.

3.6.3 Employee Training Program

MS4 GP Part 5.2.6.2.5. *"A description of the training program for municipal employees."*

Employee training will be separated into two categories: general storm water pollution prevention and BMP training. The former will be given to all County employees who work outdoors or whose duties require them to travel through the County. Their training will be similar to general public education. The purpose of the training is to educate the employees about storm water quality and to inform them of ways they can prevent storm water pollution. The training may include, but will not be limited to:

- Storm water pollution concerns in the County;
- SWMP overview;
- Good housekeeping;
- Recognition and reporting of illicit discharges; and
- Procedures for receiving citizen complaints.

Employees whose job duties include activities that could generate storm water pollutants will receive additional training. The training will be specific to the BMPS listed in Table 6. The training may also include other information necessary to accomplish their job duties in a manner that minimizes storm water pollution, such as:

- Good housekeeping;
- Standard operating procedures for processes and materials; and
- Spill response.

3.6.4 Best Management Practices

Specific BMPs, measurable goals and schedules are listed in Table 6. Storm water quality will be protected by ensuring the County's operations minimize the potential to

discharge pollutants. The County endeavors to lead by example, and thus encourage its residents and businesses in the urbanized areas to also implement BMPs to improve storm water quality.

3.6.5 Program Coordinator

The Public Works Director is responsible for the overall management, coordination and implementation of the municipal operations BMPs. The Community Development Department, Sheriff's Office and Utilities Department are responsible for accomplishing specified BMPs with guidance and support from Public Works.

4.0 BMPs, MEASURABLE GOALS AND SCHEDULE

For each of the six MCMs, the MS4 General Permit requires: "*A list of measurable goals*," and "*Dates by which the permittee will achieve specific measurable goals*."

Tables 1 through 6 summarize the County's BMPs, the related measurable goals and their implementation schedule. The MS4 General Permit is effective for five years, starting on July 1, 2007 and expiring on June 30, 2012. Years 3, 4, and 5 in the tables refer to the corresponding permit year. BMPs and measurable goals with a schedule that contains one year (e.g. Year 4) occur once and are scheduled to be completed by the end of the indicated year (e.g. June 30, 2011). BMPs with multiple year schedules (Years 3-5) are activities that occur annually starting in the first scheduled year.

The SWMP was prepared in Year 2 of the five year permit term; therefore, no activities are scheduled for Years 1 and 2.

5.0 GENERAL PERMIT REQUIREMENTS

5.1 ANNUAL REPORTS

Part 5.8 of the MS4 General Permit requires Doña Ana County to submit an Annual Report to the EPA by October 1st of each year starting in 2008. The report should cover all SWMP activities for the prior permit year of July 1st to June 30th. The County is also required to provide public notice and make available for public comment a draft of the Annual Report for at least thirty (30) days. All public input and any resulting changes to the SWMP must be addressed in the Final Annual Report that is submitted to EPA.

Part 5.8 of the MS4 General Permit contains a discussion of items that must be included in the Annual Report. These items include, but are not limited to:

- A statement of Doña Ana County's status of compliance with the MS4 General Permit;
- An assessment of the appropriateness of the BMPs that have been implemented;
- Review of the progress made toward reducing the discharge of pollutants to the Maximum Extent Practicable (MEP);
- An assessment of the success of the measurable goals for each of the MCMs;
- A summary of the collected and analyzed information, if any, used to track the success of the program;

- A summary of the storm water activities that the County is going to implement during the next reporting cycle, including a schedule;
- Proposed changes to the SWMP, BMPs or measurable goals;
- Description and schedule of any additional BMPs that may be necessary based on new information or applicable TMDLs;
- A notice of any agreements that the County has for another government entity to satisfy some of its permit obligations;
- A summary of any issues raised by the public on the Draft Annual Report;
- Proposed changes to the SWMP based on public comment; and
- A summary of the County's response to public comments.

The Annual Reports should be submitted to the EPA at the following address:

U.S. EPA, Region 6
Compliance Assurance and Enforcement Division
Water Enforcement Branch (6EN-WC)
1445 Ross Avenue
Dallas, TX 75202-2733

Refer to Part 5.8 of the MS4 General Permit for all requirements related to Annual Reports.

5.2 REVIEWING AND UPDATING THE SWMP

Part 5.5 of the MS4 General Permit requires Doña Ana County to annually review its SWMP in conjunction with preparation of the Annual Report. The County may add BMPs, components, controls, or requirements to the SWMP at any time upon written notification to the EPA as long the changes do not replace anything in the SWMP and nothing is removed from the SWMP. If the County wishes to replace an ineffective or infeasible BMP with an alternate BMP, the County must submit a written request for the change to the EPA. Requests for changes must include:

- An analysis of why the BMP is ineffective or infeasible (including cost prohibitive);
- Expectations of the effectiveness of the replacement BMP; and
- An analysis of why the replacement BMP is expected to achieve the goals of the BMP being replaced.

Unless denied by the EPA, changes proposed according to the criteria above will be deemed approved and may be implemented sixty (60) days after submitting the request.

Refer to Part 5.5 of the MS4 General Permit for all requirements related to Reviewing and Updating SWMPs.

5.3 MONITORING/ASSESSMENT PLAN

Part 5.6.1 of the MS4 General Permit requires Doña Ana County to develop a Monitoring /Assessment Plan (MAP) that evaluates program compliance, the appropriateness of identified best management practices, and progress toward achieving identified measurable goals. For discharges to waters on the State's CWA 303(d) list of impaired waters or for which a TMDL has

been developed or approved by EPA, the MAP must include collection of information on the levels of the pollutant of concern in the MS4s discharge.

A proposed MAP was due to the EPA for review with the Annual Report for the first permit year. The MAP is Appendix J of the SWMP.

Refer to Part 5.6 of the MS4 General Permit for all requirements related to Monitoring and Assessment.

5.4 RECORDKEEPING

Part 5.7 of the MS4 General Permit requires Doña Ana County to retain the following for at least three years from the date of the sample, measurement, report, or permit application, or for the remainder permit term, whichever is longer:

- Records of all data used to complete the NOI;
- All monitoring records, calibration and maintenance records, and all original strip chart recordings for continuous monitoring instrumentation;
- Copies of all reports required by the permit;
- Copies of Discharge Monitoring Reports (DMRs);
- A copy of the NPDES permit;
- Information and determinations used to document permit eligibility based on discharges being consistent with a TMDL;
- Information and determinations used to document permit eligibility based on the ESA; and
- Information and determinations used to document permit eligibility based on the NHPA.

The recordkeeping period may be extended by request of the EPA. Refer to Part 5.7 of the MS4 General Permit for all requirements related to Recordkeeping.

6.0 REFERENCES

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