

# **BERNALILLO COUNTY ANNUAL STORM WATER REPORT FISCAL YEAR 2004**

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## I. Executive Summary

The County's National Pollutant Discharge Elimination System (NPDES) program implements federal regulations that were promulgated by the United States Environmental Protection Agency (EPA) in December 1999<sup>1</sup>. These regulations, in part, called for small municipal separate storm sewer systems (MS4s), such as Bernalillo County, to submit a Storm Water Quality Management Plan (Plan) that describes how the County will reduce the discharge of pollutants to the "maximum extent practicable," protect water quality, and satisfy appropriate water quality requirements of the Clean Water Act. This report summarizes the work that has been completed by each of the departments/sections that are included in the Plan.

Bernalillo County Public Works began working with the other County divisions in early 2000 to establish a Plan. Each department/section within the County determined what Best Management Practices or BMPs they would implement in order to reduce the amount of pollutants entering the storm water runoff. Along with these BMPs, goals were established and a way of measuring progress toward reaching those goals was also defined. This information comprises the Plan and is included in this report at Appendix A.

The County departments/sections that participate in complying with the regulations include Public Works (Operations and Maintenance, Storm Drainage Section, Technical Services, and Water Resources), Animal Control, Solid Waste, Zoning, Building, Planning and Environmental Health, Parks and Recreation, and Fleet and Facility Management.

Departments/Sections within Public Works implemented 36 BMPs and achieved 81% of their goals. Other departments/sections within the County implemented 45 BMPs and achieved 80% of their goals.

The NPDES program is a federally mandated, non-funded program. Initial cost estimates by the respective departments/sections for implementing the County's Plan were approximately \$4,294,700.00. These funds would come from current budgets.<sup>2</sup> In compiling Fiscal Year (FY) 2004 information about implementing the Plan, departments/sections submitted estimates of costs expended for each of their assigned BMPs. Using these figures, estimates total \$13,532,856.90 and include labor, equipment, contractor costs, and other charges associated with the storm water program. These funds came from current budgets. In addition, approximately \$120,000.00 from Capital Improvement Project funds was expended on a sweeper to improve sediment control.

The County views this reporting period as preparation for when the EPA issues a permit for small MS4 activities. This voluntary reporting period this allows us the opportunity to refine our Plan and identify the funding requirements and seek the necessary funding prior to EPA issuing a Permit.

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<sup>1</sup> While the County submitted the required documents in order to meet the March 10, 2003 federal deadline, the EPA – Region 6 Office has not issued a final general permit for small MS4s in the State of New Mexico.

<sup>2</sup> The budget includes monies from grants, County bonds, Capital Improvement funds, Environmental Sales and Gross Receipt Tax funds, as well as the County's General Fund.

## **II. National Pollutant Discharge Elimination System Phase II Regulations for Municipal Separate Storm Sewer Systems**

Under the NPDES storm water program, operators of large, medium and regulated small municipal separate storm sewer systems (MS4s) require authorization to discharge pollutants under a NPDES permit. EPA defines regulated small MS4s as all small MS4s located in "urbanized areas" (UAs) as defined by the Bureau of the Census and those small MS4s located outside of a UA that are designated by NPDES permitting authorities. Most of Bernalillo County (except for portions of the East Mountain area) has been defined as an UA by the Census Bureau.

Operators of regulated small MS4s must have permit coverage no later than March 10, 2003.<sup>3</sup> Under the Small MS4 Storm Water Program, operators of regulated small MS4s are required to:

- Apply for NPDES permit coverage
- Develop a storm water management program which includes the six minimum control measures
- Implement the storm water management program using appropriate storm water management controls or best management practices (BMPs)
- Develop measurable goals for the program
- Evaluate the effectiveness of the program

Listed below are the six minimum control measures that operators of regulated small MS4s must incorporate into storm water management programs. These measures are expected to result in significant reductions of pollutants discharged into receiving water bodies.

- Public Education and Outreach
- Public Participation/Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post-Construction Runoff Control
- Pollution Prevention/Good Housekeeping

These six minimum control measures comprise the Storm Water Quality Management Plan. This Plan seeks to keep pollutants such as fertilizers, oil, grease and toxic chemicals, sediment and bacteria and nutrients from pet waste and faulty septic systems from entering storm water runoff.

Each minimum control measure is carried out by implementing best management practices (BMPs). These BMPs have goals and a means of measuring whether or not the goals have been met.

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<sup>3</sup> While the County submitted the required documents in order to meet the March 10, 2003 federal deadline, the EPA – Region 6 Office has not issued a final general permit for small MS4s for the State of New Mexico.

### **III. 2004 Activities toward Goals by Minimum Control Measure**

#### **Public Education and Outreach** **Public Participation/Involvement**

The Public Works Division (PWD) - Water Resources Section (WRS) is responsible for most of the public education and outreach and public participation/involvement BMPs in the Plan. These practices include ensuring that the County complies with the MS4 Permit regulations, drafting and revising the County's Storm Water Ordinance, and informing the public about the County's Storm Water Program. During the development of the Plan, several community meetings were held throughout the County in order to involve the public in the process. Most attendees were consultants and the attendance at the meetings was less than 20 people. WRS also made storm water information available at Household Hazardous Waste Collection Events and to contractors.

Animal Control licenses over 6000 pet owners a year and has a role in reminding the public that they are responsible for cleaning up after their pet. Information about pet waste and its impact on storm water is attached to each permit or license that it dispenses. This department distributed this information to a third of the applicants during FY 2004.

Environmental Health (EH) educates the public on proper septic system maintenance and informs restaurant owners of the impact of the improper disposal of grease and oil on storm water. During this reporting period, WRS and EH staff worked to develop materials to be distributed to the public during FY 2005.

#### **Illicit Discharge Detection and Elimination**

The WRS administers the Partners in Improvement and Protection of the Environment program. This program provides financial assistance to low income households so that they may obtain connections to sewer and public drinking water supply systems. The PWD - Technical Services Department (TSD) Valley Utilities Project involves the construction of infrastructure so that Valley residents have access to sewer and public drinking water supply systems as well. Both of these programs seek to reduce the number of households using septic tanks, thereby decreasing the potential for pollutants from faulty systems to impact storm water. The WRS also developed a systems-wide map to assist in the detection of illicit discharges from unregulated sources into the storm drain system. These programs exceeded all of their goals for the reporting year.

The Solid Waste Department expanded its recycling program with the completion of the East Mountain Transfer Station. During FY 2004, the Department collected 42,577.96 tons of recycling materials, which included plastics, newspaper, cardboard, motor oil, tires, tin cans, aluminum, appliances and green waste. By recycling these materials, the County reduced the likelihood that these materials end up as litter thereby negatively impacting storm water.

EH, in conjunction with the Solid Waste Department, sponsors the Household Hazardous Waste (HHW) events. The collection and proper disposal of these wastes helps to ensure that potential storm water pollutants, such as used oil, anti-freeze, paint, etc., do not end up in our storm drains. The five year goal is to increase the number of HHW events per year from four events to eight events as funding becomes available. In FY 2004, two additional HHW events were scheduled.

EH also issues waste water permits and by insuring that the permitted waste water systems are properly installed, decreases the potential for pollutants from faulty systems to impact storm water.

This program issued 208 permits during the reporting period and began to distribute information to the public regarding the proper maintenance of septic systems.

### **Construction and Post-Construction Site Runoff Control**

The TSD is responsible for managing the Public Works Division construction projects, such as the Valley Utilities Project and the reconstruction of Isleta Boulevard. Construction activities that disturb one acre or more are regulated by a NPDES permit that specifically addresses these types of construction activities. The NPDES permit for Construction Activities, which EPA has issued, is separate from the Small MS4 Permit.

Under the NPDES Permit for Construction Activities, developers/contractors must develop and implement a Storm Water Pollution Prevention Plan (SWPPP), which details how the developer/contractor will prevent pollution from his/her construction site from entering the storm water during and after construction. The Engineering Section of the TSD designs and implements (or contracts for the design and implementation of) SWPPPs for County-initiated projects that must comply with the NPDES Permit for Construction Activities requirements.

In addition, the Development and Review Staff within the TSD is responsible for overseeing the implementation of the NPDES Construction Permit activities for the public sector, which includes developers/contractors that want to build within the County. The Development and Review staff reviews SWPPPs from the private sector and inspects their sites during and after the construction projects.

The departments/sections referenced above met most of their goals with respect to ensuring that the County complies with NPDES Construction Permit regulations for both the private and public sector.

Zoning, Building and Planning BMPs are centered on promoting cluster developments, encouraging developers to reduce the amount of impervious cover, encouraging development within existing neighborhoods and commercial settings, as well as supporting low density residential planning areas where appropriate. This department did not meet its goals for the reporting period.

### **Pollution Prevention/Good Housekeeping**

The PWD - Road Maintenance Section (RMS) is responsible for maintaining the County's roads. One of the ways in which the Section addresses storm water quality is to minimize the amount of sediment and trash that gets into storm water drains that flow directly to the Rio Grande. BMPs for the RMS involve mowing the shoulders of the roads and reducing the amount of grading done along these sections, thereby reducing the amount of sediments entering storm water runoff. This Section met its goals for cleaning and mowing the roadways and shoulders of the road.

The Storm Drainage Section oversees the inspection and maintenance of all of the County's culverts, retention ponds, lift stations, storm inlets/outlets, and channels. This section has met or exceeded all of its goals by inspecting and maintaining the County's facilities that impact storm water.

The Parks and Recreation Department plays a large role in implementing BMPs to control what enters the storm water system. Most of these BMPs have to do with reducing runoff from sprinkler and irrigation systems, providing additional trash containers and pet waste receptacles at County facilities, as well as installing low water use landscaping, where appropriate. This department exceeded its goals for the reporting year by addressing the BMPs mentioned above.

The Fleet Section of the Fleet and Facilities Management Department maintains the County's vehicles and their BMPs focus on ensuring that hazardous materials/wastes such as used oil, oil filters, and antifreeze are disposed of properly. This section met all of its goals for this reporting period. Facility Management's sole BMP is to notify the appropriate department when any potential problems are detected during the inspection of the exterior of a building that they maintain and no problems were detected during this reporting year.

## **IV. Recommendations for 2005**

### **Public Education and Outreach** **Public Participation/Involvement**

The County, along with the City of Albuquerque, the University of New Mexico, the State Dept. of Transportation, and the Albuquerque Metropolitan Arroyo Flood Control Authority, has formed a committee to address public education and outreach BMPs. The County has committed \$10,000 in FY 2004 for a consultant who will design a public relations campaign which will be implemented in 2005. Additional funds may be available, as budgeting allows. In addition, a more responsive web site will be developed to provide storm water information to the public. This web site will be available in early 2005. Further, WRS staff will be working with the City of Albuquerque, and others, in reviewing and revising the current grading and drainage ordinance as it relates to storm water quality.

### **Illicit Discharge Detection and Elimination**

WRS staff will continue to work with EH in determining a better means to quantify the decrease in the amount of illegal dumping after an extensive public education program is initiated. WRS staff will also continue to update the systems map in order to insure that the County can detect illicit discharges to the storm water system.

### **Construction and Post-Construction Site Runoff Control**

The Development and Review Section within the TSD has begun developing a referral process for recalcitrant construction site owners who have not complied with the storm water regulations. This process, along with allocating the permitting/review fees as expenses (to be used by the storm water program for construction-related workshops), should be implemented by FY 2005.

The responsibility for training of contractors on construction and post-construction BMPs has been transferred to the WRS and a workshop on low impact design will be offered in February/March 2005.

The Zoning, Building and Planning (ZBP) Department can play an important role in the control of storm water runoff by encouraging the developers to use building techniques such as low impact design and increasing the amount of impervious surface in developments. The WRS will make a greater effort in 2005 to provide ZBP with any technical assistance they may need. ZBP can also notifying our inspectors of storm water related problems that they observe during their inspections. While Public Works representatives have met with ZBP inspectors to make them aware of the storm water regulations and asked that they advise Development and Review of any potential violations, no referrals have been made. The two departments need to work together and establish a method of making referrals.

### **Pollution Prevention/Good Housekeeping**

The Storm Drainage Section oversees the inspection and maintenance of all of the County's culverts, retention ponds, lift stations, storm inlets/outlets, and channels. This department's efforts could be furthered by the addition of another staff person, which would enable the supervisor to send out crews of two and thereby increase the productivity of the Section.

The installation of a salt storage cover was recommended for the 2400 Broadway location. This cover will prevent salt used on roads during the winter from coming into contact with storm water/or snow. This recommendation will be implemented in FY2006. It is also recommended that training in BMPs for road maintenance personnel be combined with fleet management training to cover the same subject material.

**V. 2004 Costs Associated with Implementing the Bernalillo County Storm Water Quality Management Plan**

<b>Department or Section</b>	<b>Labor</b>	<b>Equipment</b>	<b>Contractor Costs</b>	<b>Other</b>
PWD - RMS	\$ 36,768.35	\$52,890.00	\$0	\$0
PWD - SDS	\$100,665.04	\$57,933.07	\$0	\$0
PWD - TSD	\$253,040.50	\$0	\$35,089.00	\$11,263,571.00
PWD - WRS	\$108,272.89	\$15,357.88	\$473,709.55	\$0
PWD – FFM	\$0	\$384.00	\$3,980.00	\$0
Animal Control	\$109.04	\$58.00	\$0	\$0
Solid Waste	\$276,247.00	\$45,360.00	\$0	\$0
ZBP & EH	\$17,437.18	\$993.00	\$36,365.00	\$4,350.00 <sup>4</sup>
Parks & Rec	\$47,788.00	\$3,450.00	\$119,759.00 <sup>5</sup>	\$0
Totals:	\$840,328.00	\$176,425.95	\$674,902.55	\$11,267,921.00

<sup>4</sup> Does not include \$10,026.00 profit from waste water permits.

<sup>5</sup> Does not include contract costs for Waste Management.



**Appendix A**

**Bernalillo County Storm Water Quality Management Plan  
(with 2004 Activities Toward Goals Included)**

**BERNALILLO COUNTY NATIONAL DISCHARGE ELIMINATION SYSTEM  
PHASE II STORM WATER QUALITY MANAGEMENT PLAN**

**Public Outreach/Education  
Public Participation/Involvement**

<b>DEPT.</b>	<b>BEST MANAGEMENT PRACTICE</b>	<b>GOAL</b>	<b>MEASUREMENT</b>	<b>COMMENTS</b>	<b>COST</b>
PWD-WRS	Educate the general public on storm water issues via appropriate media, including brochures, flyers, pony panels, etc.	Promote better public awareness of storm water issues as part of the public education and outreach requirements of the permit.	Distribute information to the public via civic events, environmental fairs, office distribution, etc.	County has joined with City, AMAFCA, DOT and UNM to develop Public Relations program.	\$10,000.00
PWD-SDS	Storm drains will be marked to indicate that they drain to the river.	Promote better public awareness of storm water issues as part of the public education and outreach requirements of the permit.	Affix approximately 1000 storm drain markers to county property over 5 year period.	Affixed 115 markers. Met 58% of goal.	\$294.00 Labor \$44.24 Equipment \$230.00 Materials.
PSD-AC	Inform pet owners and pet related business of impact of pet waste on storm water.	Promote better public awareness of storm water issues as part of the public education and outreach requirements of the permit.	Approximately 6000 licenses/permits per year. The application will contain information on the impact of pet waste.	1450 permits/licenses dispensed with attached information regarding pet waste. Met 24% of goal.	\$109.04 Labor \$58.00 equipment (paper)
CSD-EH	Training and Outreach regarding Septic System/Alternative Systems	Certification of all waste water evaluators in state (200).	Number of waste water evaluators receiving certification.	61 waste water evaluators certified. Met 31% of goal.	\$4,350.00
CSD-EH	Training and Outreach regarding Septic System/Alternative Systems	Educate public on proper septic system maintenance.	Number of flyers/brochures distributed to public.	Put in FY 05 budget.	
CSD-EH	Inform restaurant owners of impact of improper disposal of grease and oil on storm water.	Promote better public awareness of storm water issues as part of the public education and outreach requirements of the permit.	Approximately 450 permits are issued to restaurant owners per year. Permit will include information on BMPs for proper disposal of grease and oil.	To be implemented during FY 05.	

PWD – WRS (Public Works Division - Water Resources Section)  
 PWD – SDS (Public Works Division – Storm Drainage Section)  
 PWD-TS (Public Works Division –Technical Services Dept.)  
 PWD – SW (Public Works Division – Solid Waste Dept.)  
 PWD – FFM (Public Works Division – Fleet/Facility Management Dept.)  
 PWD – RMS (Public Works Division – Road Maintenance Section)

CSD – EH (Community Services Division - Office of Environmental Health)  
 CSD – ZPB (Community Services Division - Zoning, Building, and Planning)  
 CSD – PR (Community Services Division - Parks and Recreation)  
 PSD – AC (Public Safety Department - Animal Control)

<b>Public Outreach/Education Public Participation/Involvement (cont.)</b>					
<b>DEPT.</b>	<b>BEST MANAGEMENT PRACTICE</b>	<b>GOAL</b>	<b>MEASUREMENT</b>	<b>COMMENTS</b>	<b>COST</b>
PWD-WRS	Provide information on storm water quality and BMPs to the public on the County Webpage.	Maintain Storm water Quality Information on the County website.	Number of visitors/Number of e-mail questions/contacts from website.	To be implemented during FY 05.	
PWD-WRS	Seek public participation in review and revision of the SWQMP.	Conduct public meetings annually to seek input on the plan.	Minimum of two meetings per year.	Permit has not been issued. Meeting requirement not activated.	
PWD-WRS	Seek public participation in review and revision of the SWQMP.	Maintain Storm water Quality Information on the County website.	Number of visitor to storm water quality information section of the website.	To be implemented during FY 05.	
PWD-WRS	Monitor compliance with SWPPP.	Meet BMP goals.	Annual Reports and Plan Revisions.	Annual Report published and revisions made. Met 100% of goal.	
PWD-WRS	Comply with applicable state federal and local laws for public notice.	Compliance with laws.	Number of violations or complaints regarding public notice compliance.	None received. Met 100% of goal.	
PWD-WRS	Review development of a comprehensive storm water ordinance.	Determine if additional ordinance language is required to fully implement SWPPP.	After the first permit period is almost completed, County staff will evaluate the adequacy of existing authority and may recommend changes.	Not applicable. EPA has not issued permit.	
PWD-WRS	Coordinate potential storm water quality monitoring program.	Determine if storm water quality monitoring is necessary to comply with SWPPP, and develop such a program if necessary.	During this permit period staff will gather information on the need for monitoring data and develop a program for such data where needed.	Contract is in place to do monitoring of storm water events at Paseo Del Norte, Alameda, Adobe Acres, and Sanchez Farms.	\$59,230.00 (monitoring costs) \$15,357.88(one time equipment costs.)

PWD – WRS (Public Works Division - Water Resources Section)  
PWD – SDS (Public Works Division – Storm Drainage Section)  
PWD-TS (Public Works Division –Technical Services Dept.)  
PWD – SW (Public Works Division – Solid Waste Dept.)  
PWD – FFM (Public Works Division – Fleet/Facility Management Dept.)  
PWD – RMS (Public Works Division – Road Maintenance Section)

CSD – EH (Community Services Division - Office of Environmental Health)  
CSD – ZPB (Community Services Division - Zoning, Building, and Planning)  
CSD – PR (Community Services Division - Parks and Recreation)  
PSD – AC (Public Safety Department - Animal Control)

<b><i>Illicit Discharge Detection and Elimination</i></b>					
<b>DEPT.</b>	<b>BEST MANAGEMENT PRACTICE</b>	<b>GOAL</b>	<b>MEASUREMENT</b>	<b>COMMENTS</b>	<b>COST</b>
PWD-SW	Expand County Recycling Program for: used motor oil, steel and aluminum cans, cardboard and newspapers.	Provide Transfer Station Facilities for these items.	Tonnage of recycling collected.	42577.96 tons of recycling materials collected.	\$276,247.00 Labor \$45,360.00 Equipment
PWD-SW	Expand County Transfer Station Capabilities.	Increase the number of residents who use these facilities.	Number of visits per station per year.	39,600 visits annually.	
PWD-TS	Valley Utilities Project -- provide sewer connections to the South and North Valley.	Make sewer available to an average of 100 households per year.	Number of available connections provided.	850 connections made. Exceeded goal by 75%.	\$237,675.00 Labor \$11,263,571.00 Infrastructure
PWD-WRS	Develop and maintain a system map.	Map updated annually and provided with annual reports.	Map updated annually.	Map has been developed and updated. Met 100% of goal.	\$5,789.00 Labor
PWD-WRS	Sewer Connections/Partners in Protection of the Environment (PIPE).	Average 84 sewer connections per year.	Number of sewer connections.	Made 148 sewer connections. Exceeded goal by 76%.	\$54,366.00 Labor \$414,479.55 (Contractor costs. Does not include \$78,000.00 for UEC (capital infrastructure) 65 connections at \$1,200 ea.)
CSD-EH	Household Hazardous Waste Collection Events.	To prevent the improper disposal of household hazardous waste.	Increase number of household hazardous waste collected at events from four to eight as funding becomes available.	Number of events increased to six per year.	\$1,800.00 Labor \$36,365.60 Contractor
CSD-EH	Septic System/Alternative Systems.	400 waste water permits issued annually.	Number of waste water permits issued annually.	208 permits issued. Met 52% of goal.	(\$10,026.00 profit)

PWD – WRS (Public Works Division - Water Resources Section)  
 PWD – SDS (Public Works Division – Storm Drainage Section)  
 PWD-TS (Public Works Division –Technical Services Dept.)  
 PWD – SW (Public Works Division – Solid Waste Dept.)  
 PWD – FFM (Public Works Division – Fleet/Facility Management Dept.)  
 PWD – RMS (Public Works Division – Road Maintenance Section)

CSD – EH (Community Services Division - Office of Environmental Health)  
 CSD – ZPB (Community Services Division - Zoning, Building, and Planning)  
 CSD – PR (Community Services Division - Parks and Recreation)  
 PSD – AC (Public Safety Department - Animal Control)

<b>Construction Site Storm Water Runoff Control</b>					
<b>DEPT.</b>	<b>BEST MANAGEMENT PRACTICE</b>	<b>GOAL</b>	<b>MEASUREMENT</b>	<b>COMMENTS</b>	<b>COST</b>
CSD-ZBP	Assist PW in identifying problems with construction phase BMPs.	BPZ inspectors to notify PWD inspectors of potential construction phase BMP compliance issues.	Number of contacts to PWD per number of sites.	No referrals received.	
PWD-IPGR	Implement Construction NPDES Phase II Requirements by Ordinance.	Revise existing ordinance.	Ordinance is revised.	Met 100% of goal.	
PWD-TS	Inspection of one-acre or larger disturbed areas.	Inspect projects with one acre disturbed area intermittently during construction and at completion for proper installation of post construction BMPs.	Number of inspections and the number of problems identified.	Implementation in FY 2005.	
PWD-TS	Coordinate with other County departments on enforcement of ordinances and monitoring of BMPs.	Formalize process of notification of Technical Services inspectors by inspectors from other departments.	Number of referrals and the number of inspections where problems are identified.	No referrals received.	
PWD-TS	Train inspectors in proper installation of construction phase BMPs.	Train 75% of Public Works inspectors annually.	Percentage of inspectors trained annually.	Trained 100% of inspectors. Met 100% of goal.	
PWD-TS	Train contractors in installation of construction phase BMPs.	Offer one training per year to contractors.	Number of trainings per year.	To be implemented during FY 05.	
PWD-TS	Hold workshops with consultant design engineers on construction and post construction BMPs.	Conduct one training per year to design engineers and contractors.	Number of trainings per year.	To be implemented during FY 05.	
PWD-TS	Design SWPPPs for County construction projects involving one acre or more of land disturbance (consultant design).	Ensure that the County is in compliance with NPDES Phase II regulations with regard to County construction activities conducted by contractor.	Identify County construction activities where SWPPPs have been designed by consultants.	3 County projects identified were SWPPPs were designed by Consultants. Met 100% of goal.	\$10,970.00 (consultant costs)

PWD – WRS (Public Works Division - Water Resources Section)  
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 PWD – FFM (Public Works Division – Fleet/Facility Management Dept.)  
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<b>Construction Site Storm Water Runoff Control</b>					
<b>DEPT.</b>	<b>BEST MANAGEMENT PRACTICE</b>	<b>GOAL</b>	<b>MEASUREMENT</b>	<b>COMMENTS</b>	<b>COST</b>
PWD-TS	Implement SWPPPs for County construction projects involving one acre or more of land disturbance (contractor implements).	Ensure that the County is in compliance with NPDES Phase II regulations with regard to County construction activities conducted by contractor.	Identify County construction activities were SWPPPs have been implemented and inspected by the contractor.	4 County projects identified were SWPPPs were implemented and inspected by Consultants. Met 100% of goal.	\$24,119.00(consultant costs)
PWD-TS	Design SWPPPs for County construction projects involving one acre or more of land disturbance (County design).	Ensure that the County is in compliance with NPDES Phase II regulations with regard to County construction activities conducted by the County.	Identify County construction activities were SWPPPs have been designed by the County.	7 County projects identified were SWPPPs were designed by the County. Met 100% of goal.	\$7,661.00 Labor
PWD-TS	Implement SWPPPs for County construction projects involving one acre or more of land disturbance (County implements).	Ensure that the County is in compliance with NPDES Phase II regulations with regard to County construction activities conducted by the County.	Identify County construction activities were SWPPPs have been implemented and inspected by the County.	6 County projects identified were SWPPPs were implemented and inspected by the County. Met 100% of goal.	\$1,653.00 Labor
PWD-TS	Incorporate post construction BMPs into design and construction of County facilities, one acre or greater disturbed area.	Develop design standards for County projects.	Incorporate appropriate BMPs into all County design requirements.	Appropriate BMPs incorporated into 5 County projects. Met 100% of goal.	\$74.00 Labor

PWD – WRS (Public Works Division - Water Resources Section)  
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 PSD – AC (Public Safety Department - Animal Control)

<b>Post Construction Storm Water Management in New Development and Redevelopment</b>					
<b>DEPT.</b>	<b>BEST MANAGEMENT PRACTICE</b>	<b>GOAL</b>	<b>MEASUREMENT</b>	<b>COMMENTS</b>	<b>COST</b>
CSD-ZBP	Promote/encourage cluster development.	Use existing subdivision ordinance to allow for cluster development and increase number of cluster developments by 20%.	Percentage increase in cluster development.	Reviewed 40 development plans.	\$3,375.00 Labor
CSD-ZBP	Promote/encourage development to reduce impervious cover.	Allow variances for certain roadway standards to reduce impervious cover.	Number of variances granted.	Reviewed 40 development plans.	\$3,375.00 Labor
CSD-ZBP	Base drainage impact fees on amount of impervious surface.	Reduce impervious cover. Diminished disturbed areas.	Reduction in drainage impact fees per project.	Not measured.	
CSD-ZBP	Utilize Transfer of Development Rights.	Amend the Zoning Ordinance to include TDR criteria.	Development and implementation of a TDR ordinance.	Reviewed 5 development plans that included TDR.	\$3,375.00 Labor
CSD-ZBP	Encourage development within existing neighborhood and commercial nodes.	Adopt plans and policies which encourage utilization of existing commercial and residential infrastructure in identified areas.	Evaluate node areas as defined by the plans.	Reviewed 40 development plans.	\$3,375.00 Labor
CSD-ZBP	Support/adopt low density residential planning areas where appropriate.	Adopt large lot zoning.	Evaluate level of development (dwelling units per acre).	Reviewed 20 development plans.	\$3,375.00 Labor

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 PSD – AC (Public Safety Department - Animal Control)

<b>Pollution Prevention/Good Housekeeping</b>					
<b>DEPT.</b>	<b>BEST MANAGEMENT PRACTICE</b>	<b>GOAL</b>	<b>MEASUREMENT</b>	<b>COMMENTS</b>	<b>COST</b>
PWD-FFM	Facility Management will notify the appropriate department when they observe problems or potential problems around the exterior of buildings they maintain.	Reduce storm water quality concerns by identifying and correcting problems or potential problems.	Number of work orders requested and corrected.	No work orders received. Met 100% of goal.	
PWD-RMS	Mow the shoulders of the roads instead of grading.	Reduce the amount of disturbed area on roadways where vegetation exists by increasing the number of road miles mown from 200 to 300.	Number of miles mown.	Mowed 822 miles. Met 274% of goal.	\$3,261.60 Labor \$2,040.48 Equipment
PWD-RMS	Cover road salt storage areas in the urbanized area.	Keep salt dry and out of surface and/or groundwater.	Construct a cover for the Broadway location.	Salt cover is in FY2005 budget.	
PWD-RMS	Clean Roadways	Sweep 450 miles of roadway annually.	Number of road miles swept.	664.5 miles swept. Met 148% of goal.	\$33,506.75 Labor \$50,850.20 Equipment
PWD-SDS	Inspect channels	Inspect 16 miles of channel per year.	Number of miles/year inspected.	21.96 miles inspected. Met 137% of goal.	\$429.42 Labor \$94.01 Equipment
PWD-SDS	Clean and Reshape Channels.	Remove 1500 cubic yards (c.y.) of debris per year.	Cubic yards per year of debris removed, or documentation that removal was not required.	658 c.y. of debris collected. Met 44% of goal.	\$8,844.29 Labor \$6,866.08 Equipment
PWD-SDS	Inspect and Clean Storm Water Ponds.	Remove 960 cubic yards of debris from storm water ponds annually.	Cubic yards per year of debris removed, or documentation that removal was not required.	1082 c.y. of debris collected. Met 113% of goal.	\$14,997.81 Labor \$11,358.97 Equipment
PWD-SDS	Inspect and Clean Storm Inlet/Outlet Structures.	Inspect and clean 450 structures per year.	Number of structures inspected and cleaned per year.	1087 structures inspected and cleaned. Met 242% of goal.	\$13,542.62 Labor \$8,785.86 Equipment
PWD-SDS	Inspect Storm Sewers -- to inspect integrity of the system and also identify any dry weather flows.	Inspect 15 miles of storm sewer per year.	Miles per year inspected and dry weather flows identified.	21.78 miles inspected. Met 145% of goal.	\$3,493.82 Labor \$503.23 Equipment

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<b>Pollution Prevention/Good Housekeeping (cont.)</b>					
<b>DEPT.</b>	<b>BEST MANAGEMENT PRACTICE</b>	<b>GOAL</b>	<b>MEASUREMENT</b>	<b>COMMENTS</b>	<b>COST</b>
PWD-SDS	Clean Storm Sewer Lines	Clean 10,000 feet of storm sewer per year.	Number of feet of storm sewer cleaned per year.	Cleaned 13,215 feet of storm sewers. Met 132% of goal.	\$8,656.95 Labor \$5,650.95 Equipment
PWD-SDS	Inspect Culverts	Inspect 1,200 culverts every year.	Number of culverts inspected per year.	1630 culverts inspected. Met 136% of goal.	\$5,915.06 Labor \$1,006.46 Equipment
PWD-SDS	Clean/Flush Culverts	Clean and flush 420 culverts per year.	Number of culverts cleaned and flushed per year.	433 culverts cleaned and flushed. Met 103% of goal.	\$30,407.33 Labor \$21,532.93 Equipment
PWD-SDS	Storm Water Lift Station Maintenance	Spend 240 hours per year maintaining storm water lift stations.	Number of hours per year spent maintaining lift stations.	374 hours spent maintaining lift stations. Met 156% of goal.	\$14,083.74 Labor \$2,090.34 Equipment
PWD-RMS	Training in appropriate safety, best management practices, regulations and other area as needed.	56 Hours per year.	Hours of training per staff member.	To be implemented during FY 05.	
PWD-FFM	Spills on shop floors captured using dry chemicals and stored in collection containers.	Prevent runoff of water and petroleum-based products by review of procedures and daily observation.	Number of incidents of runoff noted.	No incidents of runoff reported. Met 100% of goal.	\$384.00 Equipment (absorbent)
PWD-FFM	Used oils are captured and recycled	Recycle 100% of used motor oil.	Volume and percentage of motor oil recycled.	100 % of used motor oil recycled.	\$1,560 (contractor costs)
PWD-FFM	All used antifreeze is captured and recycled.	Recycle 100% of used antifreeze.	Volume and percentage of antifreeze recycled.	100 % of used antifreeze recycled.	\$300.00 (savings not included.)
PWD-FFM	All oil filters are drained, crushed and metal is recycled	Recycle 100% of used oil filters	Number/ pounds of used oil filters recycled.	100 % of used oil filters recycled.	\$500.00(contractor costs)
PWD-FFM	On site drainage traps are maintained and pumped	Traps will be cleaned	Clean traps three times per year	Met 100% of goal.	0 (absorbed by O&M)
PWD-FFM	Parts cleaners are reusable/recycled fluids	Continue to use water based parts cleaners	Annual inspection of cleaning devices and products.	Parts cleaners and fluids inspected monthly. Met 100% of goal.	\$1,920(contractor costs)

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<b>Pollution Prevention/Good Housekeeping (cont.)</b>					
<b>DEPT.</b>	<b>BEST MANAGEMENT PRACTICE</b>	<b>GOAL</b>	<b>MEASUREMENT</b>	<b>COMMENTS</b>	<b>COST</b>
PWD-FFM	Staff is reviewed annually on use of hazardous chemicals and environmental practices.	100% of involved staff reviewed annually.	Percentage of staff that reviewed material.	100% of staff reviewed material. Met 100% of goal.	
CSD-PR	Reduce fertilizer applications on park facilities.	Reduce fertilizer usage by 10%.	Reduction in fertilizer per acre/number of times per year applied.	Reduced fertilizer use by 50%. Exceeded goal by 40%.	\$1,500.00 Equipment
CSD-PR	Move sprinkler heads away from curbs.	Reduce water usage and runoff from irrigation systems.	Move sprinklers systems at two facilities a year.	Relocated 2 sprinkler systems. Met 100% of goal.	\$1,700.00 Labor
CSD-PR	Put paths around perimeter of parks to reduce runoff to street.	Reduce water usage and runoff from irrigation systems.	Install paths at a total of seven parks, one facility every year.	Installed one path. Met goal by 100%.	\$3,800.00 Labor
CSD-PR	Install low water use landscaping where appropriate.	Install xeriscape landscaping around parks and recreation facilities where appropriate.	Number of facilities where xeriscape is added/installed. The goal is three facilities in the next five years.	Installed one xeriscape median at Alameda Blvd. between 2nd and 4th street. Met goal by 100%.	\$115,759.00 (contractor costs)
CSD-PR	Educate employees in plant science so that plants are cared for properly, without excess fertilizer or water.	Seminar training for 100% of involved employees.	Annual training of all full-time employees through TVI program.	0 employees trained.	
CSD-PR	Reduce turf areas where appropriate	Reduce runoff from irrigation systems by replacing turf areas with xeriscape.	Number of square feet converted to xeriscape from irrigated turf.	7,400 sq. ft. converted to xeriscape from irrigated turf.	\$41,700.00 (contractor costs)
CSD-PR	Use short (syringe) cycles of watering instead of heavier water programs to eliminate runoff into streets and arroyos.	Reduce runoff from irrigation systems to less than three events per facility per year.	Number of runoff events reported at the facility by the public or by staff.	No incidents of runoff reported. Met 100% of goal.	
CSD-PR	Use reduced pressure on irrigation system to reduce over-spray and misting.	Reduce runoff from irrigation systems to less than three events per facility.	Number of runoff events reported at the facility by the public or by staff.	No incidents of runoff reported. Met 100% of goal.	
<b>Pollution Prevention/Good Housekeeping (cont.)</b>					

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DEPT.	BEST MANAGEMENT PRACTICE	GOAL	MEASUREMENT	COMMENTS	COST
CSD-PR	Provide training and orientation to new employees through an employee handbook.	Increase employee awareness of best management practices and other job requirements.	Develop and distribute orientation packet to new employees.	No new employees.	
CSD-PR	Train employees in irrigation repair, installation and operation.	Seminar training for 100% of full-time employees.	Annual training of all involved employees through TVI program.	Enrolled 31 employees in irrigation design course. Completed backflow recertification for 15 employees.	\$8,330.00 (course materials)
CSD-PR	Utilized licensed journeymen irrigation specialists when appropriate.	Ensure that qualified staff is overseeing the irrigation systems.	All supervisors must have JMS-6 license.	4 supervisors have JMS-6 license.	
CSD-PR	Provide additional trash containers at park facilities.	Keep trash off of the grounds, roadways and drainage facilities by providing 18 additional trash containers per year.	New containers provided, and tonnage of trash collected.	22 receptacles installed. Exceeded goal by 122%.	\$400.00 Labor \$590.00 Equipment
CSD-PR	Provide on-site lift dumpsters at park facilities.	Keep trash off of the grounds, roadways and drainage areas by providing one lift dumpster to one facility every year.	New containers provided, and tonnage of trash collected.	Provided two 4 yard dumpsters at park facilities. Exceeded goal by 100%.	\$4,000.00(contractor costs)
CSD-PR	Install enclosed trash containers.	Keep trash off of the grounds, roadways and drainage facilities, by providing 5 new garbage containers that are inaccessible to dogs and storm events per year.	New containers provided, and tonnage of trash collected.	No new containers provided.	
CSD-PR	Pick up trash daily from park facilities.	Keep trash off of the grounds, roadways and drainage areas by collecting trash from facilities daily, and monitoring the volume of trash collected.	Tonnage of trash collected.	352.25 tons of trash collected.	\$8,000 (contractor costs)
CSD-PR	Improve grades on turf areas to eliminate runoff into streets and arroyos.	Retrofit turf areas where needed to reduce runoff.	One retrofit a year	Put in FY 05 budget.	

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<b>Pollution Prevention/Good Housekeeping (cont.)</b>					
<b>DEPT.</b>	<b>BEST MANAGEMENT PRACTICE</b>	<b>GOAL</b>	<b>MEASUREMENT</b>	<b>COMMENTS</b>	<b>COST</b>
CSD-PR	Install silt boxes and cobblestone at runoff exits into arroyos.	Reduce runoff at facilities that drain to arroyos.	Complete the two required retrofits.	Put in FY 05 budget.	
CSD - PR	Provide receptacles for plastic bags for pet waste collection.	Make receptacles available at 4 facilities where the need has been observed.	Number of receptacles installed.	9 receptacles installed.	\$180.00 Labor \$1,350.00 Equipment
CSD - PR	Install signs reminding pet owners to pick up after their pets.	Add signs at one facility a year.	Number of signs installed.	Installed 13 signs reminding pet owners to pick up after their pets.	\$8.00 Labor \$10.00 Equipment

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