


Overview of Implications of the MS4 Stormwater Permit on County Processes and Operations

Municipal Separate Storm Sewer System (MS4)

- ▶ Stormwater and wastewater are collected and treated separately by municipalities – hence MS4. Combined systems exist elsewhere
 - ▶ EPA–permit is required to discharge stormwater – including to ditches, arroyos, and MRGCD (?)
 - ▶ Multiple permit/program elements are required of the County and other permittees
 - ▶ Compliance will affect/change multiple County operations and processes
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A Brief History



- ▶ **Clean Water Act – 1972**
 - USEPA to implement pollution control programs
 - EPA sued for failing to address stormwater
- ▶ **Water Quality Act – 1987**
 - Required industry and MS4s to obtain NPDES permits (National Pollution Discharge Elimination System)
 - Phased approach for stormwater permits
 - Phase I (populations > 100,000) – 1990 – Albuquerque
 - Phase II (in urbanized areas) – 1999 – Bernalillo County
 - EPA directly administers the NPDES program only in NM and three other states

A Brief History

- ▶ Bernalillo County Phase II permit – 2007
 - 2010 Albuquerque selected as one of three “pilot” watershed programs – other two now “defunct”
 - 2012 Phase II permit administratively continued
- ▶ “Watershed-based” permit in effective for Bernalillo County as of November 16, 2015
 - Now Class A or B rather than Phase I or II
 - No decrease in requirements / no “backsliding”
 - Increased requirements similar to Phase I
 - Deadline extensions for “Cooperative Agreements”

Overview of County Requirements

- ▶ Special Studies – PCBs, sediment pollutant loading, source areas of erosion in arroyos
- ▶ Monitoring and Sampling
 - Wet Season/Dry Season Rain Event Sampling
 - Dry Weather Discharge Screening
 - Floatables Monitoring
- ▶ Stormwater Management Program (SWMP) that addresses eight Control Measures
- ▶ Documentation, documentation, documentation

What We Think of Now When We Say “Stormwater Management Program”



Stormwater Management Program

Minimum Control Measure	Best Management Practice (BMPs)	Affected Divisions / Departments
Construction Site Monitoring	Silt fences, drive pads, inspection	Development Review
Post-Construction Stormwater Management	Green Infrastructure / Low-Impact Design, Retention Ponds, Water Harvesting	Planning and Development Services, Zoning Enforcement, Development Review, Natural Resources, Development Community, Facilities, Technical Services
Pollution Prevention	Good Housekeeping / Recycling Fluids, Dry Storage of Materials	Parks and Recreation, Risk Management, Sheriff, Fleet and Facilities, O&M,
Illicit Discharge/Improper Disposal (IDDE)	Enforcement on Septic Permits, Household Hazardous Waste Events	Planning and Development Services, Call Center, Health Protection, Stormwater O&M, GIS, Natural Resource Services,, Solid Waste
Floatables Control	Trash ladders at discharge stations	Stormwater O&M, Natural Resource Services
Public Education and Outreach	There is no Poop Fairy	Health and Social Services, PIO, Natural Resource Services, Parks and Rec.
Public Involvement and Participation	Public Meetings	Natural Resource Services, PIO

Construction Site Monitoring

- ▶ Ordinance and inspection program largely in-place. Ordinance revisions if needed

6/21/16 (DR)

- ▶ Need extra inspector(s) if growth increases as 100% inspection required (DR)

- ▶ *NEW REQUIREMENT TO EVALUATE AND TRACK PROJECTS FOR GREEN INFRASTRUCTURE OPPORTUNITIES and PERCENT IMPLEMENTATION*

12/23/15 (NRS, PDS- application and review process)

Post-Construction Stormwater Management (2/20/16)

- ▶ New Requirement for sites > 1 acre (PDS, Development Review)
- ▶ Containment of 90th percentile storm (0.61 inch rain vs. 100-year flood event) with pre-development hydrology (DR)
- ▶ Alternative compliance mechanisms if infeasible –
 - off-site mitigation (Technical Services)
 - groundwater replenishment project
 - payment in lieu of for a public stormwater project
 - (Technical Services)
- ▶ *New Requirement for Contract Mechanisms to ensure long-term maintenance by owner (PDS, DR)*
 - *90-day as-built submittal*
 - *Developer vs Owner Responsibilities and problems with related encumbrance on property*

Post-Construction Stormwater Management

- ▶ New Requirement to Assess ALL regulations and planning documents for impediments to the use of GI/LID. (DR, NRS, PDS)
 - ▶ Tracking of impervious area and directly connected impervious areas. (PDS, GIS, NRS, DR)
 - ▶ Report of
 - necessary changes,
 - proposed review schedules
 - Schedules to incorporate changes

12/22/16 (PW, NRS, PDS)
 - ▶ New Ordinance (or Amendment) to address post-construction controls
- 12/22/17 (PW, PDS)

Pollution Prevention

- ▶ **Good housekeeping practices** (Risk Management)
 - Employee training (HR, PW, PR, LMS – My Bernie)
 - Documentation of stormwater maintenance schedules and activities (Deicing activities, vehicle yards, street sweeping, targeted roadways, fleet fluids and recycling, pesticide/herbicides and fertilizer use) – (PW, PR, Sheriff)
- ▶ **Programs are largely in place**
 - Need to be evaluated and updated
 - Increased documentation. (PW, NRS, PR)



Illicit Discharge and Improper Disposal

- ▶ Any discharge MS4 that is not stormwater unless otherwise NPDES permitted
- ▶ New Ordinance to specifically address IDDE—currently a stretch of the Solid Waste Ordinance 6/21/17
- ▶ New Spill Prevention and Response plan / Establishment of a hotline/48 hour response time (Call Center, NRS, Health Protection)
- ▶ Screening, prioritization, education (NRS, PIO)
- ▶ Dry Weather Discharge Screening (Stormwater O&M, NRS)

Floatables Control

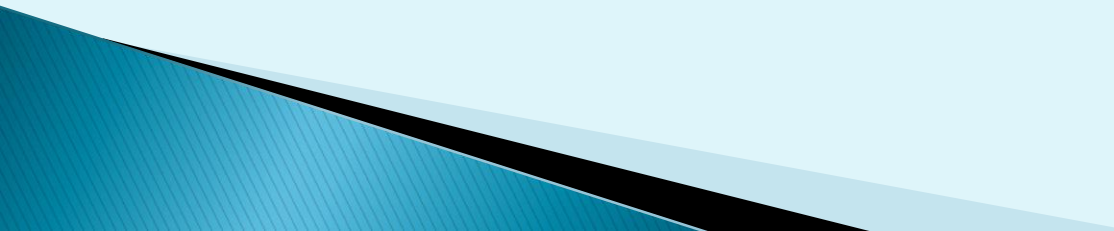
- ▶ Source controls and structural controls largely in place.
- ▶ Annual volume of floatables and trash removed and characterization of trash types
 - Monitored at least twice per year and at a minimum of one station
 - Or participated in a cooperative floatable monitoring plan for a perennial water.
- ▶ Will need to formalize program and do trash characterization



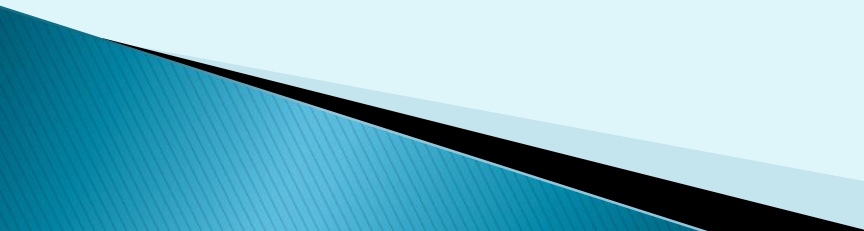
Public Education and Outreach



Public Education and Outreach

- ▶ Wide reaching public education campaign
 - ▶ Proper septic maintenance, household chemicals and household hazardous waste, automotive fluid disposal.
 - ▶ Inform how to become involved in stream restoration activities.
 - ▶ Targeted groups: FOG specifically called out, minority and disadvantage communities.
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Public Involvement and Participation

- ▶ Requirements for public notice and chance to participate in annual SWMP revision and the Annual Report preparation
 - ▶ At least one assessment of behavior change following a public education or participation event.
 - ▶ Solicit involvement by environmental groups, environmental justice community, and other organizations
 - ▶ Must reach “all economic and ethnic groups”
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Monitoring Activities



- ▶ Wet Weather monitoring
 - Wet Season (July to October) / Dry Season (November to June)
 - 7 storm events (0.25-in rain)
 - minimum 3 wet season and 4 dry season.
 - Working on cooperative program with multiple entities for “one upstream / one downstream” sampling.
 - MRGCD Implications and Contributions

What We Need to Be Thinking of By 2017 When We Say “Stormwater Management”

