

Middle Rio Grande Watershed Stormwater Monitoring Program

Monitoring Program Objectives:

1. Assess compliance with this permit
2. Assess the effectiveness of the permittee's stormwater management program;
3. Assess the chemical, physical, and biological impacts to receiving waters resulting from stormwater discharges;
4. Characterize stormwater discharges (largely already done by Phase I) confirm applicability to Phase IIs
5. Identify sources of specific pollutants;
 - Dissolved Oxygen: Develop and implement a strategy to reduce the discharge of pollutants entering the receiving waters of the Rio Grande that cause or contribute to exceedances of applicable dissolved oxygen water quality standards
 - Investigation and Reduction of PCBs in the San Jose Drain and North Diversion Channel
 - Investigation and Reduction of PCBs in stormwater discharges (Phase I)
 - Develop and implement a strategy to reduce the effects of MS4 discharges of nutrients entering Las Huertas and Tijeras Arroyo that cause or contribute to exceedances of applicable nutrient water quality standards
 - Develop and implement a strategy to reduce the effects of MS4 discharges on the temperature of receiving waters of the Rio Grande that cause or contribute to exceedances of applicable temperature water quality standards
6. Protect endangered species
 - U.S. Fish and Wildlife Service Biological Opinion Requirements Phase I Permit and Phase II BE
7. Detect and eliminate illicit discharges and illegal connections to the MS4; and

Assess the overall health and evaluate long-term trends in receiving water quality.

Monitoring Types:

A. Storm Event Discharge Monitoring: (Phase I)

(a) Representative Monitoring: Representative outfalls, internal sampling locations, and/or in-stream sampling monitoring locations

- # of constituent: TBD
- 1 event/wet season, 1 event/dry season

(b) Rapid Bioassessment: Optional - drop???

- Two locations in the MRG, twice a year
- One reference site

(c) Additional Monitoring: potential source of pollution, wet and dry weather screening

- At least 3 monitoring sites at sensitive areas or areas indicated as sources of pollution to the MS4

B. ESA Monitoring - USFWS ESA Consultation –current permit, (Phase I Phase II)

- BO for Phase I MS4 Permit and BE for phase II General Permit
- Toxicity Monitoring to protect listed species

It will refine with ESA consultation.

C. Floatables Monitoring (Phase I and II)

- The permittees should establish locations for monitoring floatable material in discharges to and/or from their MS4
- Floatable material should be monitored at least twice per year.

D. Industrial and High Risk Runoff Monitoring (Phase I only)

-At minimum (1) storm event per year.

E. Dry Weather Field Screening and Analytical Monitoring- IDDE Program (Phase I and Phase II)

- The permittee must screen outfalls during dry weather and, if flow or ponded water is observed, collect a sample for field screening and analytical monitoring
- Analytical monitoring for key indicators: conductivity, fluoride and/or hardness concentration, ammonia and/or potassium concentration, surfactant and/or fluorescence concentration, chlorine concentration, pH, and other chemicals may similarly be indicative of industrial sources

F. Baseline Water Quality Monitoring (Instream/upstream of MRG) (Phase I and Phase II)

G. Screening Monitoring Program for POCs, key indicators (e.g., pH, conductivity), verify if parameters are within range of existing phase I representative data (Phase II)

Middle Rio Grande Watershed Map/Storm Sewer System Map:

The storm sewer system map must show the following, at a minimum:

1. The location of all MS4 outfalls and drainage areas contributing to those outfalls that are operated by the permittee, and that discharge within the permittee's jurisdiction to a receiving water
2. The location (and name, where known to the permittee) of all waters receiving discharges from those outfall pipes. Each mapped outfall must be given an individual alphanumeric identifier, which must be noted on the map. When possible, the outfalls must be located using a geographic position system (GPS) and photographs should be taken to provide baseline information and track operation & maintenance needs over time.
3. Priority areas identified
 - a. Areas with older infrastructure that are more likely to have illicit connections
 - b. Areas with a history of past illicit discharges;
 - c. Areas with a history of illegal dumping;
 - d. Areas with onsite sewage disposal systems;
 - e. Areas with older sewer lines or with a history of sewer overflows or cross-connections;
 - f. Areas upstream of sensitive waterbodies
3. Field screening stations identified under IDDE program
4. Receiving waters, arroyos, channels, drains, ditches, etc
6. Land use inventory (e.g.,commercial, industrial, and residential areas,)