

New Mexico Department of Transportation DISTRICT 1

FY 2020 MS4 Annual Report

Reporting Period: July 1, 2019 – June 30, 2020



Prepared by:

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Bohannon  **Huston**

Engineering

Spatial Data

Advanced Technologies

Annual Report Format



National Pollutant Discharge Elimination System Stormwater Program MS4 Annual Report Format



Check box if you are submitting an individual Annual Report with one or more cooperative program elements.

Check box if you are submitting an individual Annual Report with individual program elements only.

Check box if this is a new name, address, etc.

1. MS4(s) Information

New Mexico Department of Transportation - District 1

Name of MS4

Trent

Doolittle

District 1 Engineer

Name of Contact Person (First)

(Last)

(Title)

(575) 544-6621

trent.doolittle@state.nm.us

Telephone (including area code)

E-mail

2912 E. Pine Street

Mailing Address

Deming

NM

88030

City

State

ZIP code

What size population does your MS4(s) serve?

159,312

NPDES number

NMR04E005 and NMR04L005

What is the reporting period for this report? (mm/dd/yyyy) From

Jul 1, 2019

to

Jun 30, 2020

2. Water Quality Priorities

A. Does your MS4(s) discharge to waters listed as impaired on a state 303(d) list? Yes No

B. If yes, identify each impaired water, the impairment, whether a TMDL has been approved by EPA for each, and whether the TMDL assigns a wasteload allocation to your MS4(s). Use a new line for each impairment, and attach additional pages as necessary.

Impaired Water	Impairment	Approved TMDL		TMDL assigns WLA to MS4	
		Yes	No	Yes	No
2101_03 Rio Grande NM (NM+)	None (but TMDL for E. coli)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2101_00 Rio Grande NM (Inte+)	Boron	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2101_00 Rio Grande NM (Inte+)	E. coli	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. B. Continued

Impaired Water	Impairment	Approved TMDL		TMDL assigns WLA to MS4	
<input type="text"/>	<input type="text"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="text"/>	<input type="text"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="text"/>	<input type="text"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="text"/>	<input type="text"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No

C. What specific sources contributing to the impairment(s) are you targeting in your stormwater program?

NMDOT maintenance activities target collection, removal, and disposal of floatables, roadside litter, and sediment. NMDOT compliance with CGP requirements targets sedimentation concerns within the watershed.

D. Do you discharge to any high-quality waters (e.g., Tier 2, Tier 3, outstanding natural resource waters, or other state or federal designation)? Yes No

E. Are you implementing additional specific provisions to ensure their continued integrity? Yes No

3. Public Education and Public Participation

A. Is your public education program targeting specific pollutants and sources of those pollutants? Yes No

B. If yes, what are the specific sources and/or pollutants addressed by your public education program?

NMDOT brochures, educational displays, and outreach programs address litter, household hazardous waste, illicit discharges, pet waste, and general stormwater quality awareness.

C. Note specific successful outcome(s) (e.g., quantified reduction in fertilizer use; NOT tasks, events, publications) fully or partially attributable to your public education program during this reporting period.

Continued distributing educational handouts at pre-construction meetings. Adopt-a-highway litter removal program had 509 volunteers and removed approximately 17 tons of trash from NMDOT District 1 roadways.

D. Do you have an advisory committee or other body comprised of the public and other stakeholders that provides regular input on your stormwater program? Yes No

4. Construction

A. Do you have an ordinance or other regulatory mechanism stipulating:

Erosion and sediment control requirements? Yes No

Other construction waste control requirements? Yes No

Requirement to submit construction plans for review? Yes No

MS4 enforcement authority? Yes No

B. Do you have written procedures for:

Reviewing construction plans? Yes No

Performing inspections? Yes No

Responding to violations? Yes No

C. Identify the number of active construction sites \geq 1 acre in operation in your jurisdiction at any time during the reporting period.

D. How many of the sites identified in 4.C did you inspect during this reporting period?

E. Describe, on average, the frequency with which your program conducts construction site inspections.

All projects within NMDOT right-of-way are inspected per the Construction General Permit (CGP) requirements.

F. Do you prioritize certain construction sites for more frequent inspections? Yes No

If Yes, based on what criteria?

All projects within NMDOT right-of-way are inspected per the Construction General Permit requirements. +

G. Identify which of the following types of enforcement actions you used during the reporting period for construction activities, indicate the number of actions, or note those for which you do not have authority:

- | | | | | |
|------------------------------|-----------------------|--------------------------------|--------------|-------------------------------------|
| <input type="checkbox"/> Yes | Notice of violation | <input type="text" value="0"/> | No Authority | <input type="checkbox"/> |
| <input type="checkbox"/> Yes | Administrative fines | <input type="text" value="0"/> | No Authority | <input type="checkbox"/> |
| <input type="checkbox"/> Yes | Stop Work Orders | <input type="text" value="0"/> | No Authority | <input type="checkbox"/> |
| <input type="checkbox"/> Yes | Civil penalties | <input type="text" value="0"/> | No Authority | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> Yes | Criminal actions | <input type="text" value="0"/> | No Authority | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> Yes | Administrative orders | <input type="text" value="0"/> | No Authority | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> Yes | Other | <input type="text"/> | | |

H. Do you use an electronic tool (e.g., GIS, data base, spreadsheet) to track the locations, inspection results, and enforcement actions of active construction sites in your jurisdiction? Yes No

I. What are the 3 most common types of violations documented during this reporting period?

Typically NMDOT projects will have minor comments to contractors regarding BMPs, but nothing that has resulted in an enforcement action. NMDOT has the ability to enforce deficiencies through contract documents if escalation is required.

J. How often do municipal employees receive training on the construction program?

5. Illicit Discharge Elimination

A. Have you completed a map of all outfalls and receiving waters of your storm sewer system? Yes No

B. Have you completed a map of all storm drain pipes and other conveyances in the storm sewer system? Yes No

C. Identify the number of outfalls in your storm sewer system.

D. Do you have documented procedures, including frequency, for screening outfalls? Yes No

E. Of the outfalls identified in 5.C, how many were screened for dry weather discharges during this reporting period?

F. Of the outfalls identified in 5.C, how many have been screened for dry weather discharges at any time since you obtained MS4 permit coverage?

G. What is your frequency for screening outfalls for illicit discharges? Describe any variation based on size/type.

Outfalls are screened a minimum of once per Permit term.

H. Do you have an ordinance or other regulatory mechanism that effectively prohibits illicit discharges? Yes No

I. Do you have an ordinance or other regulatory mechanism that provides authority for you to take enforcement action and/or recover costs for addressing illicit discharges? Yes No

J. During this reporting period, how many illicit discharges/illegal connections have you discovered?

K. Of those illicit discharges/illegal connections that have been discovered or reported, how many have been eliminated?

L. How often do municipal employees receive training on the illicit discharge program?

6. Stormwater Management for Municipal Operations

A. Have stormwater pollution prevention plans (or an equivalent plan) been developed for:

- | | | |
|--|---|--|
| All public parks, ball fields, other recreational facilities and other open spaces | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| All municipal construction activities, including those disturbing less than 1 acre | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| All municipal turf grass/landscape management activities | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| All municipal vehicle fueling, operation and maintenance activities | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| All municipal maintenance yards | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| All municipal waste handling and disposal areas | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |

Other

B. Are stormwater inspections conducted at these facilities? Yes No

C. If Yes, at what frequency are inspections conducted?

D. List activities for which operating procedures or management practices specific to stormwater management have been developed (e.g., road repairs, catch basin cleaning).

Street sweeping, litter pickup, catch basin cleaning, culvert cleaning, scour repair, and water quality structure maintenance.

E. Do you prioritize certain municipal activities and/or facilities for more frequent inspection? Yes No

F. If Yes, which activities and/or facilities receive most frequent inspections?

G. Do all municipal employees and contractors overseeing planning and implementation of stormwater-related activities receive comprehensive training on stormwater management? Yes No

H. If yes, do you also provide regular updates and refreshers? Yes No

I. If so, how frequently and/or under what circumstances?

Ongoing, as needed.

7. Long-term (Post-Construction) Stormwater Measures

A. Do you have an ordinance or other regulatory mechanism to require:

- | | | |
|--|---|-----------------------------|
| Site plan reviews for stormwater/water quality of all new and re-development projects? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Long-term operation and maintenance of stormwater management controls? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Retrofitting to incorporate long-term stormwater management controls? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

B. If you have retrofit requirements, what are the circumstances/criteria?

NMDOT will review STIP projects for opportunities to retrofit and incorporate appropriate control measures into redevelopment projects. NMDOT will not develop an inventory or priority ranking of potential retrofit projects.

C. What are your criteria for determining which new/re-development stormwater plans you will review (e.g., all projects, projects disturbing greater than one acre, etc.)?

NMDOT will review STIP projects for opportunities to retrofit and incorporate appropriate control measures into redevelopment projects. NMDOT will not develop an inventory or priority ranking of potential retrofit projects.

- D. Do you require water quality or quantity design standards or performance standards, either directly or by reference to a state or other standard, be met for new development and re-development? Yes No
- E. Do these performance or design standards require that pre-development hydrology be met for:
- Flow volumes Yes No
- Peak discharge rates Yes No
- Discharge frequency Yes No
- Flow duration Yes No
- F. Please provide the URL/reference where all post-construction stormwater management standards can be found.

https://dot.state.nm.us/content/dam/nmdot/Infrastructure/Drain_Design_Manual.pdf

- G. How many development and redevelopment project plans were reviewed during the reporting period to assess impacts to water quality and receiving stream protection?
- H. How many of the plans identified in 7.G were approved?
- I. How many privately owned permanent stormwater management practices/facilities were inspected during the reporting period?
- J. How many of the practices/facilities identified in I were found to have inadequate maintenance?
- K. How long do you give operators to remedy any operation and maintenance deficiencies identified during inspections?
- L. Do you have authority to take enforcement action for failure to properly operate and maintain stormwater practices/facilities? Yes No
- M. How many formal enforcement actions (i.e., more than a verbal or written warning) were taken for failure to adequately operate and/or maintain stormwater management practices?
- N. Do you use an electronic tool (e.g., GIS, database, spreadsheet) to track post-construction BMPs, inspections and maintenance? Yes No
- O. Do all municipal departments and/or staff (as relevant) have access to this tracking system? Yes No
- P. How often do municipal employees receive training on the post-construction program?

8. Program Resources

- A. What was the annual expenditure to implement MS4 permit requirements this reporting period?
- B. What is next year's budget for implementing the requirements of your MS4 NPDES permit?
- C. This year what is/are your source(s) of funding for the stormwater program, and annual revenue (amount or percentage) derived from each?
- | | | | | | |
|---------|---|-----------|----------------------|------|----------------------------------|
| Source: | <input type="text" value="DOT Budget"/> | Amount \$ | <input type="text"/> | OR % | <input type="text" value="100"/> |
| Source: | <input type="text"/> | Amount \$ | <input type="text"/> | OR % | <input type="text"/> |
| Source: | <input type="text"/> | Amount \$ | <input type="text"/> | OR % | <input type="text"/> |
- D. How many FTEs does your municipality devote to the stormwater program (specifically for implementing the stormwater program; not municipal employees with other primary responsibilities)?

E. Do you share program implementation responsibilities with any other entities? Yes No

Entity	Activity/Task/Responsibility	Your Oversight/Accountability Mechanism
	Refer to Item 10 Additional	
	Information Memo, Item 8E	

9. Evaluating/Measuring Progress

A. What indicators do you use to evaluate the overall effectiveness of your stormwater management program, how long have you been tracking them, and at what frequency? These are not measurable goals for individual management practices or tasks, but large-scale or long-term metrics for the overall program, such as macroinvertebrate community indices, measures of effective impervious cover in the watershed, indicators of in-stream hydrologic stability, etc.

Indicator	Began Tracking (year)	Frequency	Number of Locations
<i>Example: E. coli</i>	2003	Weekly April–September	20
Adopt-a-highway tracking	pre MS4 Permit	monthly	23 roadways
Maintenance activity tracking	pre MS4 Permit	weekly	23 roadways

B. What environmental quality trends have you documented over the duration of your stormwater program? Reports or summaries can be attached electronically, or provide the URL to where they may be found on the Web.

10. Additional Information


Please attach any additional information on the performance of your MS4 program, including information required in Parts I.C, I.D, and III.B. If providing clarification to any of the questions above, please provide the question number (e.g., 2C) in your response.

Certification Statement and Signature

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.

Yes No

Federal regulations require this application to be signed as follows: **For a municipal, State, Federal, or other public facility:** by either a principal executive or ranking elected official.

Signature		Trent Doolittle, District 1 Engineer	11-13-2020
		Name of Certifying Official, Title	Date (mm/dd/yyyy)



Date: December 1, 2020
 To: EPA Region 6
 From: Trent Doolittle, PE, NMDOT District 1 Engineer
 Subject: **NPDES Stormwater Program MS4 Annual Report**
Item 10: Additional Information
New Mexico Department of Transportation, District 1
NPDES Permit NMR04E005 (El Paso) and NMR04L005 (Las Cruces)

The items below provide additional information for each corresponding item in the MS4 Annual Report Format PDF for the reporting period July 1, 2019, to June 30, 2020.

1. The total population listed of 159,312 includes 128,600 for the City of Las Cruces Urbanized Area (UA) and 30,712 for the El Paso, TX – NM UA, which are the two classified UAs within NMDOT District 1. The 2010 U.S. Census population values for the urbanized areas and urban clusters were used for this population estimate.
 NPDES Permit numbers: NMR04E005 (El Paso) and NMR04L005 (Las Cruces).
2. **2B:** Impaired Waters – Text box in the Environmental Protection Agency (EPA) MS4 Annual Report Format PDF form truncates the text. For clarity, impaired waters that the NMDOT District 1 discharges to within the Las Cruces and El Paso MS4 areas include:

Impaired Water*	Impairment	Approved TMDL?	TMDL Assigns WLA for MS4?
Rio Grande NM-2101_03 (NM 192 Bridge W of Mesquite to Picacho Bridge)	None**	Yes – E. coli	Yes
Rio Grande NM-2101_00 (International Mexico boundary to Anthony Bridge)	Boron	No	N/A
Rio Grande NM-2101_00 (International Mexico boundary to Anthony Bridge)	E. coli	Yes	Yes

*Impaired water designation from New Mexico Environment Department (NMED) Surface Water Quality Bureau 2018-2020 State of New Mexico CWA §303(d)/§305(b) Integrated List & Report.

**Not all the Lower Rio Grande through the Las Cruces and El Paso UA is impaired for E. coli; however, there is a TMDL for E. coli from the International Boundary with Mexico to the Elephant Butte Dam (June 11, 2007).

2C: NMDOT maintenance activities target collection, removal, and disposal of floatables, roadside litter, and sediment. NMDOT compliance with the Construction General Permit (CGP) requirements targets sedimentation concerns within the watershed.

NMDOT's facilities and activities do not contribute directly to the existing impairments and therefore, NMDOT's activities do not directly target these impairments. NMDOT does not contribute to the boron impairment, as boron in rivers is typically attributed to inputs from natural sources, wastewater, and fertilizers – all of which are not directly related to NMDOT roadways or operations. For E. coli, MS4s can be significant sources of E. coli because they transport urban runoff that can be affected by pet waste, illicit sewer connections, and failing septic systems – all of which are not directly related to NMDOT roadways or operations.

3. No additional comments on information provided on the MS4 Annual Report Form.

4. **4A:** Regulatory Mechanisms:

NMDOT Standard Specifications for Highway and Bridge Construction – web link: <https://dot.state.nm.us/content/nmdot/en/standards.html#>, construction contract, and NPDES Manual – web link:

<http://dot.state.nm.us/content/dam/nmdot/Infrastructure/NPDESM.pdf>. NMDOT led the effort in FY 2020 to update the NPDES Manual. This updated Manual will be completed in FY 2021 and will include updated regulatory information as well as added Green Stormwater Infrastructure (GSI) and Low Impact development (LID) Best Management Practices.

4B: NMDOT Standard Specifications for Highway and Bridge Construction and EPA SWPPP inspection form (available in NPDES Manual). Links provided in 4A above.

4C: There were five (5) NMDOT active construction projects that were both within the MS4 boundary and disturbed greater than one (1) acre of bare ground. The projects included NM 273 (CN E100160), Valley Drive (CN LC00160), NM 404 (CN E100170), Artcraft (CN E1000818283), and I-25/University (CN LC00250).

4J: NMDOT NPDES/SWPPP Qualified training is required every four (4) years but is typically offered multiple times per year.

5. **5A:** NMDOT Outfalls maps for the Las Cruces and El Paso MS4 areas have been developed. These maps were provided to EPA with the Annual Report submitted on March 22, 2018 for the time period of January 1, 2016 through June 30, 2017.

5B: The vast majority of potential NMDOT storm drain outlets are short culverts under the roadways, and therefore do not need to be mapped to determine upstream sources. The limited networked storm drains within NMDOT ROW capture only NMDOT runoff. Mapping these will serve no benefit in locating illicit discharges entering NMDOT ROW from outside its jurisdiction. The City of Las Cruces storm drain map includes many of the NMDOT roadway drainage structures within the MS4 area.

5C: NMDOT has five (5) outfalls in the El Paso UA/MS4 area and five (5) outfalls in the Las Cruces UA/MS4 area – for a total of 10 outfalls for District 1.

5H: NMDOT has no authority to issue an ordinance or other regulatory mechanism to prohibit illicit discharges.

5I: NMDOT has no authority to issue an ordinance or other regulatory mechanism to take enforcement action or recover costs for addressing illicit discharges.

5J & 5K: No illicit discharges were discovered by NMDOT during this reporting period in either the Las Cruces or El Paso UAs.

5L: NMDOT does not have a stand-alone illicit discharge training program – this topic is covered in the general stormwater training, spill prevention and response training, as well as in the maintenance activity performance guidelines (such as emergency repairs/clean-up and litter pickup). All employees also have access to an illicit discharge educational brochure and report form - <http://dot.state.nm.us/content/dam/nmdot/Infrastructure/Illicit-Discharge-Brochure-and-Form.pdf>.

6. 6A:

1. NMDOT does not have parks or ball fields.
2. All projects greater than (>) one (1) acre are required to develop a SWPPP as required by the Construction General Permit (CGP); projects less than (<) one (1) acre are dealt with on a case-by-case basis.
3. NMDOT has negligible turf and landscaping.
4. NMDOT has an equivalent plan for vehicle fueling, operation and maintenance activities.
5. NMDOT has an equivalent plan for maintenance yard operation – development of SWPPP type documents was completed in FY 2020 for NMDOT facilities within the UA/MS4 area.
6. NMDOT has no municipal waste handling facilities.

6B: Safety inspections typically include stormwater inspections and are conducted by NMDOT's Risk Management group, usually twice per year. In addition, the NMDOT MS4 Coordinator completed an annual good housekeeping inspection of the NMDOT patrol facilities located in District 1.

6G: All employees who approve drainage plans and final stabilization temporary erosion control plans receive comprehensive training on stormwater management.

7. 7E:

1. Pre-development hydrology flow volumes are not limited by NMDOT design standards. Stormwater retention is required within MS4 areas as required in the MS4 Permits (covering the Middle Rio Grande Permit and anticipating the regulations in the forthcoming state-wide permit).
2. Peak discharge rate limits are addressed in the current Drainage Design Manual (DDM).

3. Discharge frequency is not limited by NMDOT design standards.
4. Flow duration is not limited by NMDOT design standards.

7F: The web page link to NMDOT's Drainage Design Manual, which includes post-construction stormwater management standards, is:
http://dot.state.nm.us/content/dam/nmdot/Infrastructure/Drain_Design_Manual.pdf.

7I & 7J: Not applicable; there are no privately-owned facilities within the NMDOT jurisdiction.

7K through M: Not applicable; NMDOT is the only operator post-construction and as a result, no enforcement authority or action is required.

8. **8A:** Dollar amounts shown reflect estimated expenditures from July 1, 2019, through June 30, 2020. Expenditures shown reflect consultant fees, costs for maintenance activities (litter pickup, street sweeping, drainage structure cleaning, etc.), and New Mexico Corrections Department contract cost for litter pickup (which reflects costs District-wide, but most of those costs were within the MS4 boundary). The costs of the Drainage Design Bureau employee salaries, training, and travel expenses were **not** included in this MS4 program resources estimate.

1. Consultant fees = \$58,500
2. Maintenance/litter pickup activities = \$533,600
3. NM Corrections Dept. contract for litter pickup = \$100,300
4. Total = \$692,400

8B: Next year's budget for implementing NMDOT District 1's MS4 NPDES program is anticipated to be similar to this year's expenditures with an added \$200,000 expected for construction of District erosion control projects.

8C: NMDOT has no annual revenue or direct funding source for the MS4 program. The MS4 program budget (amounts shown) is allocated out of the general funding for the DOT.

8E: NMDOT is part of the Doña Ana Stormwater MS4 Advisory Group, which is organized as a Memorandum of Agreement between the City of Anthony, City of Las Cruces, City of Sunland Park, Doña Ana County, New Mexico State University, the New Mexico Department of Transportation District 1, and the Town of Mesilla. This Group agrees to support and encourage a cooperative commitment to assist one another with issues regarding compliance with the MS4 Permit within the Doña Ana Basin. The group cooperates on public education including distribution of pamphlets and informational brochures.

9. **9A:** NMDOT is a non-traditional MS4 and evaluating the overall effectiveness of its stormwater management program focuses on metrics collected specific to its roadway facilities. Large scale watershed or in-stream hydrologic studies are beyond the jurisdiction and reach of NMDOT. NMDOT tracks adopt-a-highway data (public participation litter removal program) including the number of volunteers and amount of trash removed for each of the six (6) NMDOT districts within the state. In addition,

through NMDOT's MMS system, NMDOT tracks all their maintenance activities in each district including miles of roadway sweeping, litter removal, and drainage structure cleanings. Tracking this data assists NMDOT in evaluating the overall effectiveness of its activities related to stormwater management and MS4 Permit compliance.

10. Support documents similar to those provided with previous MS4 Annual Reports have been compiled and are on file at NMDOT offices. They have not been included in this report to keep this submittal to a manageable size. These support documents are available upon request.