

**PUERTO RICO DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
AND
PUERTO RICO HIGHWAY AND TRANSPORTATION AUTHORITY**

**NOTICE OF INTENT (NOI)
FOR
2016 NEW SMALL MS4 GENERAL PERMIT
PRR040000/PRR040080**

2016 SEP 30 AM 9:35
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SEPTEMBER 2016

United States Environmental Protection Agency
National Pollutant Discharge Elimination System
Notice of Intent (NOI) for coverage under the Small Municipal Separate
Storm Sewer System (MS4) General Permit (PRR040000) for Puerto Rico

Part A. General Information

1. Name of Municipality or Organization: Department of Transportation and Public Works/Highway and Transportation Authority
2. Type: ☐ Federal ☒ State ☐ Municipality ☐ Other: _____
3. Existing Permittee: ☒ Yes ☐ No If yes, provide EPA NPDES Permit Number: P R R 0 4 0 0 8 0
4. Location Address:
 - a. Street: Roberto Sánchez Vilella Government Center
17 th Floor, South Tower
 - b. City: San Juan State: PR Zip Code: 00940-2007
5. Mailing Address:
 - a. Street: P.O. Box 42007
Minillas Station
 - b. City: San Juan State: PR Zip Code: 00940-2007
6. Telephone Number: (787) 722-2929, Ext. 2050, 2324 Fax: _____
7. E-mail: _____
8. Standard Industrial Classification (SIC) Code (see instructions for common codes): 9 1 9 9
9. Latitude: (use the format provided.) Longitude: (use the format provided.)
2.2.4.2 Approximate center of the regulated portion of the MS4.
1 8 ° 1 3 ' 2 0 " N (degrees, minutes, seconds) 6 6 ° 2 5 ' 4 9 " W (degrees, minutes, seconds)
Or
_____. _____ ° N (degrees decimal) _____ ° W (degrees decimal)

Part B. Primary MS4 Program Manager Contact Information

1. Name: Eng. Germán Irizarry Santos
2. Position Title: Executive Director
3. Stormwater Management Program (SWMP) Location (web address or physical location): _____
DTPW, MS4 Coordinator Office
4. Mailing Address:
 - a. Street: P. O. Box 42007
Minillas Station
 - b. City: San Juan State: PR Zip Code: 00940-2007

5. Telephone Number: (787) 722-2929, Ext. 2050, 2354

6. E-mail: _____

Part C. Eligibility Determination

1. Endangered Species Act (ESA) determination complete? ☐ Yes ☒ No
- a. Eligibility Criteria (check all that apply): ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F
2. National Historic Preservation Act (NHPA) determination complete? ☒ Yes ☐ No
- a. Eligibility Criteria (check all that apply): ☒ A ☐ B ☐ C ☐ D

Part D. Map/Boundaries

1. MS4/Organization Description of regulated boundaries (narrative):
- The MS4 owned by the DTPW/HTA comprises all the state roadways that are located within the limits of the urban areas defined by the U.S. Census. Therefore, in order to provide the required map, the urban areas footprint have been overlayed in the state roads map. It has been included in a CD with this document. Additional information and details about the system have been included in Attachment A of this form.
2. Location Map/Boundaries. A location map must be attached showing the pertinent city, town, wards, or boundaries, the boundaries of the Small MS4, including surface water body(s), and the "urbanized area" (UA) when applicable.
- Is map attached? ☒ Yes ☐ No

Part E. MS4 Infrastructure (if covered under the 2006 general permit)

1. Estimated Percent of Outfall Map Complete? (Section 4.2.3 of 2006 general permit): 2 %
- a. If 100% of 2006 requirements are not met, enter an estimated date of completion: 2026
(MM/DD/YYYY)
- b. Web address where MS4 map is published: Current outfalls maps are included in the accompanying CD.
If outfall map is unavailable on the internet an electronic or paper copy of the outfall map must be included with NOI submission.

Part F. Bylaw/Ordinance Development (if covered under the 2006 general permit)

1. Illicit Discharge Detection and Elimination (IDDE) authority adopted? ☐ Yes ☒ No
- a. Effective Date or Estimated Date of Adoption: _____
(MM/DD/YYYY)

2. Construction/Erosion and Sediment Control authority adopted? ☐ Yes ☒ No

a. Effective Date or Estimated Date of Adoption: _____
(MM/DD/YYYY)

3. Post-Construction Stormwater Management adopted? ☐ Yes ☒ No

a. Effective Date or Estimated Date of Adoption: _____
(MM/DD/YYYY)

Part G. Receiving Waters

List the names of all surface waterbody segments to which your MS4 discharges. For each waterbody segment, please report the number of outfalls discharging into it and, if applicable, any impairments. You may attach additional information.

| Waterbody Segment that receives flow from the MS4 | Number of Outfalls into receiving waterbody segment | Have any monitoring been performed to outfalls? (Yes/No) | List of Pollutant(s) causing impairment (if applicable) | List of TMDL Pollutant (s) (if any) |
|---|---|--|---|-------------------------------------|
| | | SEE ATTACHMENT A | | |
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For every measurable goal and associated Best Management Practice (BMP) listed in the adopted program, provide the following information (You may include additional pages):

[illegible]

Public Education and Outreach (See Section 2.4.2 for detailed information of required BMPs):

[illegible]

Public Involvement and Participation (See Section 2.4.3 for detailed information of required BMPs):

[illegible]

Illicit Discharge Detection and Elimination (See Section 2.4.4 for detailed information of required BMPs):

[illegible]

Construction Site Stormwater Runoff Control (See Section 2.4.5 for detailed information of required BMPs):

[illegible]

Post-Construction Stormwater Management in New Development and Redevelopment (See Section 2.4.6 for detailed information of required BMPs):

| BMP Description or BMP ID (e.g. MCM-1) | Program Description (Describe the program and how it will control stormwater runoff from properties after they are developed, e.g. new regulations, practices, or resources for contractors to use Low Impact Development (LID), etc.) | Measurable Goal (What is the end result of this program? What indicator will determine the goal has been met? (e.g., adoption of bylaws/ordinances, amount of implemented practices, development of capacity building resources, etc.) |
|---|---|---|
| | SEE ATTACHMENT A | |
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Part I. 2016 Stormwater Management Program (SWMP) Summary (continued)

Good Housekeeping and Pollution Prevention in Municipal Operations (See Section 2.4.7 for detailed information of required BMPs):

| BMP Description or BMP ID (e.g. MCM-1) | Program Description (Describe the program and how it will mitigate stormwater runoff at municipal properties or through municipal activities, e.g. installation of structural stormwater controls on the municipal properties, new practices to reduce pollutant exposure to rain events, runoff management, trainings, etc.) | Measurable Goal (What is the end result of this program? What indicator will determine the goal has been met? (e.g., structural BMPs installed, SOPs developed and implemented, etc.) |
|---|---|---|
| | SEE ATTACHMENT A | |
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MORENO ASSOCIATES

ENVIRONMENTAL AND ENGINEERING CONSULTANTS

PMB 179
1353 RD. 19
GUAYNABO, PUERTO RICO 00966-2700

Phone: (787) 487-1342
E-mail: dmorenov@hotmail.com

December 13, 2016

Ms. Carmen R. Guerrero Pérez
Director
Environmental Protection Agency
Caribbean Environmental Protection Division
City View Plaza -Suite 7000
#48 165 Road km 1.2
San Juan, Puerto Rico 00968-8069

**RE: NPDES Phase II
Regulated Small Municipal Separate Storm Sewer Systems (MS4)
Department of Transportation and Public Works
Notice of Intent (NOI)
Permit PRR040080**

2016 DEC 15 AM 10:57
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US EPA
CARIBBEAN ENVIRONMENTAL PROTECTION DIVISION

Dear Ms. Guerrero:

As per the request of the technical staff, and on behalf of my client, find Part J of the NOI application duly signed by Eng. Miguel A. Torres Díaz, Secretary of the Department of Transportation and Public Works (DTPW).

If additional information regarding to this subject is required, don't hesitate to contact the undersigned at your convenience at (787) 487-1342.

Cordially,



Eng. David Moreno
DTPW Consultant

Part J. Application Certification 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.

Signature of Mayor/Elected Official: _____




Print Name of Mayor/Elected Official: _____

MIGUEL TAMEZ DIZE

Title: SecretaryDate: 12/13/16

Recomended By:


German E. Irizarry Santos, PE12-dic-2016
Fecha
David Moreno Vázquez, PE12/dic/2016
Fecha

ATTACHMENT

ATTACHMENT A
SUPPLEMENTAL INFORMATION FOR NOTICE OF INTENT

DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS (DTPW)
AND
PUERTO RICO HIGHWAY AND TRANSPORTATION AUTHORITY (HTA)

1.0 INTRODUCTION

The July 1, 2016 new **Small Municipal Separate Storm Sewer System (MS4) NPDES permit PRR040000** requires the submittal of **Notice of Intent (NOI)** not later than 90 days after its issuance. Failure to comply with this requirement may result in the loss of coverage for the discharges of stormwater runoff associated with the operation of the **MS4** owned by the **Department of Transportation and Public Works (DTPW)** and the **Highway and Transportation Authority (HTA)**. The DTPW/HTA system is considered as non-conventional MS4 resulting from its unique characteristics. Therefore, this documents intends to provide additional information on those instances in which the space provided by the form is not adequate to include all of the required information. Therefore, this attachment constitutes an extension of the **NOI** form provided by the **U.S. Environmental Protection Agency (EPA)**.

In order to facilitate the part of the form whose information is being included in this attachment, the specific part of the form will be referenced, immediately followed by the provided information.

2.0 SPECIFIC ITEMS OF THE NOTICE OF INTENT FOR WHICH ADDITIONAL INFORMATION IS BEING PROVIDED

Part C: Endangered Species Act (ESA)

At the time of the **NOI** preparation, the **DTPW/PRHTA** cannot certify their compliance with this eligibility requirements. The reason for this statement follows from the fact that the **MS4** inside urban areas owned by the agencies is extensive, covering approximately 72 municipalities of the Island. Since the **U.S. Fish and Wildlife Service (USFWS)** is responsible for the designation and protection of rare and endangered species under provisions of **Section 7** of the **Endangered Species Act (ESA)**, a supporting letter with a determination from this agency seems to constitute the most reasonable way to comply with this eligibility requirement. Since the list of plants and animal species protected by this agency is extensive (**Figure 1** which provides a map illustrating the presence of rare and/or endangered species within the Island) and at the same time covers the entire Island, it is not reasonable to certify compliance with this section until a final letter from this agency is received by the **DTPW/HTA** after completing a total review of the available data. This is especially important since there are some of the protected species such as the sea turtles and the manatees that may be found close to outfalls of the **MS4** owned by the agency. Therefore, until the **USFWS** completes its analysis of the data, it will not be possible to answer yes to this item. However, the **EPA** will be informed of the outcome of this consultation as soon as it is finalized.

Part C: National Historic Preservation Act (NHPA)

Based upon a review of the instructions provided in **Appendix D** of the **NOI** to obtain coverage under the terms and conditions of the **2016 MS4 Permit**, and considering that no new construction is being considering that the **DTPW/HTA** meet the eligibility for this regulation under **Criteria A**. It shall be also indicated that the construction of any improvement of the **MS4** resulting from the permit related activities will require to secure the approval and permits of many agencies. The **USFWS** will be consulted about this subject when the time arrives.

Part D: Maps/Boundaries

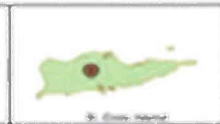
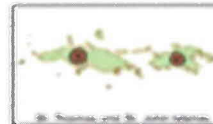
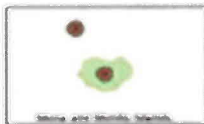
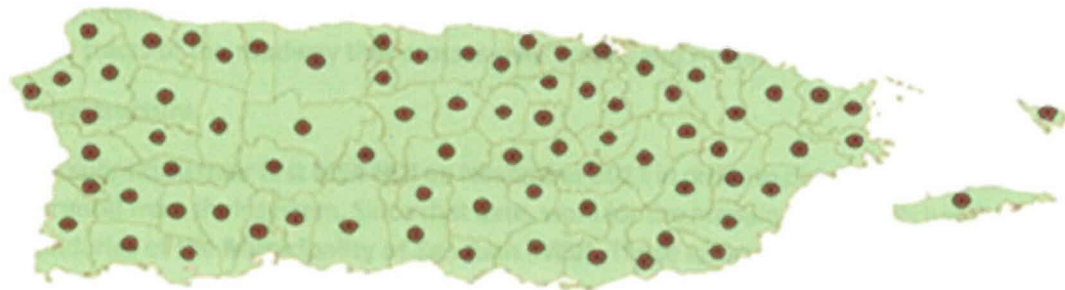
The delineation of the **MS4** coverage area has been made by overlying the urban areas defined by the **U.S. Census Office** on a state roadway map. The original map was developed using data from the 2000 census. Since data from the 2010 Census was available, a comparison of the newest one with the previous one was performed. In addition, information published by the **U.S. Census** regarding to the expansion of urban areas

U.S. Fish & Wildlife Service

Caribbean Endangered Species Map

Mapa de Especies Caribeñas en Peligro de Extinción

Puerto Rico and U.S. Virgin Islands
Federally Listed Species



Carey



Coqui guajón



Higuero de Sierra



Palometas



Figure 1: Location of rare/endangered species within Puerto Rico

This recent effort has resulted in a total of approximately 66.1 kms. roadways for which outfall maps have been completed. In addition, a total of 84.7 kms. of highway PR-22 outfalls have been mapped up to this date. Therefore, a total of 176.6 kms. of roadways outfalls have been mapped.

Based on information obtained from the **DTPW**, the total highway system of Puerto Rico comprises approximately 14,400 kms. of roads. If we consider that approximately 60% of this system is located within urban areas covered by the **MS4** permit, this means that approximately 8,640 kms. of roadways outfalls are required to be mapped. Based on this estimates the percentage of already mapped area stands at approximately 2.0%.

Part G: Receiving Waters

The instruction of the **NOI** require to provide list of the names of all surface water bodies to which the **DTPW/HTA MS4** discharges. Considering the fact that the **MS4** of the highway system basically span the entire Island, and not having completed the outfall mapping, the agency has elected to list the totality of the surface bodies of water which was obtained from the **U.S. Geological Survey (USGS)** data. This was obtained from the current **Stormwater Management Program (SWMP)**.

Surface bodies of water, constitute the most important hydrological resource of the Island. There are approximately 102 watersheds which account for 5,394 stream miles and 3,843 estuary acres. There are also 18 lakes with a surface area of approximately 7,378 acres, and twenty (2) lagoons with a 4,768 acres of surface area. In addition, there are 550 miles of shorelines, 22,971 acres of wetlands and 79,096 acres of freshwater wetlands. It is estimated that Puerto Rico has about 224 rivers and more than 4,000 streams that drain a significant amount of rainfall that reach the basins during the year. This implies that a significant volume of surface runoff is generated. The **USGS** operates a network of gauging stations that are used to collect qualitative and quantitative data for each of the drainage basins associated with the surface streams. Therefore, their data is useful to identify the points of discharges of the **MS4**. Since the majority of the Island surface has been designated as urban by the Census, it is reasonable to assume on a preliminary basis, that a majority of the streams located within each of the basins, will be receiving discharges of the **MS4's** operated by the agency. According the to the Water Resources Data for Puerto Rico and U.S. Virgin Islands (**Water Data Report PR-01-1**), there are 14 major drainage basins distributed across the entire Island. They are (identified starting from the northwest part and moving toward the east until ending in the west part of Puerto Rico, in the same order used by the **USGS**):

- **Río Guajataca basin**

This basin is located toward the northwest part of the Island. Río Guajataca, Quebrada de los Cedros and Guajataca Lake comprise the most significant hydrologic features of this basin. This basin ultimately drains to the Atlantic Ocean.

- **Río Camuy basin**

The Río Camuy basin is bounded by the municipalities of Quebradillas and Arecibo. This basin is still within the northwest part of the Island. Major surface streams within this basin are Río Angeles, Río Criminales and Río Piedras. As with the previous basin, this one drains toward the Atlantic Ocean.

- **Río Grande de Arecibo basin**

This drainage basin is located near the center part of the northern plains, but reaches deep into the center part of the Island. It possess one the biggest superficial areas of the drainage basins. Numerous streams are observed within this basin. The Most important ones are: Río Caonillas, Río Cidra, Río Caricaboa, Río Jauca, Río Jayuya, Río Limón, Río La Venta, Río Pellejas, Río Saliente, Río Tanamá, Río Vacas, Río Viví, and Río Yunes. The Adjuntas, Caonillas, Dos Bocas and Garza's lakes are also part of the hydrologic features of this basin. This basin drains toward the north coast until reaching the Atlantic Ocean. Major streams within the basin are: Río Bauta, Río Cialitos, Río Grande de Manatí, Río Matrullas, Río Orocovis, Río Sana Muertos and Río Toro Negro.

- **Río Grande de Manatí basin**

This drainage basin is located almost to the center of the northern part of the Island, and also extends toward the mountainous center. It is also observed to be located toward the central portion of the north part of the Island, between the municipalities of Barceloneta and Vega Baja. Major streams within the basin are: Río Bauta, Río Cialitos, Río Grande de Manatí, Río Matrullas, Río Orocovis, Río Sana Muertos and Río Toro Negro. The Matrullas Lake is also part of the hydraulic features of this basin which ultimately drains toward the Atlantic Ocean.

- **Río Cibuco basin**

This drainage basin is also observed toward the central portion of the north coast of the Island between the municipalities of Manatí and Toa Baja. The major streams observed in this basin are: Río Cibuco, Río Corozal, Río de los Negros, Río Indio, Río Mavillas, Río Morovis, and Río Unibón. All of the mentioned streams drain into the Atlantic Ocean through the Río Cibuco.

- **Río de la Plata basin**

Although this river ends in the Atlantic Ocean, it reaches are mostly located within the central part of the Island. Major streams observed in this basin are: Río Aibonito, Río Arroyata, Río Bucarabones, Río Cañas, Río Cuesta Arriba, Río de la Plata, Río Guadiana, Río Guavate, Río Hondo, and Río Usabón.

- **Río Hondo to Río Puerto Nuevo basins**

This drainage basin is observed approaching the eastern part of the northern Island coast. It can be observed between the municipalities of Toa Baja and Dorado. It also extends toward the central and mountainous part of the Island. Major streams located within this basin are: Río Bayamon, Río Hondo, Río Guaynabo, Río Minillas and Río Piedras. Quebrada Margarita and Quebrada San Antón are also part of the hydrologic features of the basin along with maybe the most emblematic of them which is the San Juan Bay.

- **Río Grande de Loíza basin**

This drainage basin drains mostly through Río Grande Loíza up to the Atlantic Ocean, and is observed leaning toward the east side of the Island. As with the previous one, most of the area comprised within the basin is located to the center portion of Puerto Rico. Major streams located within this basin are: Río Bairoa, Río Caguitas, Río Canóvanas, Río Cañas, Río Cayagüas, Río Grande de Loíza, , Río Gurabo, Río Pastrana, Río Turabo, and Río Valenciano. Quebrada Arenas, quebrada Blasina, quebrada de las Quebradillas, quebrada Grande, Quebrada Maracuto and Loíza Lake are also within this basin.

- **Río Herrera to Río Antón Ruíz basins**

This drainage basin is located toward the most eastern part of the Island, within the municipalities of Fajardo and Luquillo. This basin splits its ultimate discharges between the Atlantic Ocean, Vieques Channel and the Caribbean Sea. Major streams located within this basin are: Río Antón Ruíz, Río Blanco, Río Cubuy, Río Demajagua, Río Espíritu Santo, Río Fajardo, Río Herrera, Río Icacos, Río Juan Martín, and Río Santiago. Quebrdas Ceiba and Palma also are located within this basin.

- **Río Humacao to Río Quebrada Aguas Verdes basins**

This drainage basin is located toward the southeastern part of the Island, draining its waters into the Caribbean Sea. Its configuration differs from most of the previous ones due to the fact that it does not reach the central part of the Island. Several small streams are observed within this basin, of which the most important are: Río Apeadero, Río Candelero, Río del Ingenio, Río Jacaboa, Río Grande de Patillas, Río Guamaní, Río Guayanés, Río Humacao, Río Limones, Río Maunabo, Río Melania, Río Nigua, Caño de Santiago, Quebrada Agua Verde, Quebrada Cimarrón, and Quebrada Mariana. There are also some channels that have a function within the hydraulic characteristics of this basin. They are Canal de Guamaní Oeste, Canal de Guamaní Este, and Canal de Patillas.

- **Río Salinas to Río Jacaguas basins**

This drainage basin is located toward the central portion of the south coast of Puerto Rico and drains to the Caribbean Sea. Major streams located within this basin are: Río Coamo, Río Cuyón, Río Descalabrado, Río Jacaguas, Río Jájome, Río Jueyes, Río Lapa, Río Majada, and Río Salinas. Additional hydrologic features for the area are Coamo Lake, Canal de Juana Díaz, Canal de Patillas, and Quebrada Carmen.

- **Río Inabón to Río Loco basins**

This basin is still located within the south part of the Island and ultimately drains to the Caribbean Sea. The most prominent streams found within this basin are: Río Bayagán, Río Bucaná, Río Cañas, Río Chiquito, Río Duey, Río Guayanés, Río Inabón, Río Loco, Río Macaná, Río Pastillo, Río Tallaboa, and Río Yauco. Additional hydrologic features of the basin are: Lagos Serrallés, Lago Cerrillos, Canal de Riego de Lajas.

- **Río Guanajibo basin**

This basin is located at the southwestern part of the Island, within the municipalities of Cabo Rojo, Hormigueros, Sabana Grande, and San Germán. Major streams within this basin are: Río Caín, Río Cupeyes, Río Cruces, Río Duey, Río Flores, Río Guanajibo, Río Hoconuco, Río Maricao, Río Prieto, and Río Rosario. Additional hydrologic features of the area are: Canal Principal de Riego Valle de Lajas, Laguna Joyudas, and Quebrada Grande.

- **Río Yagüez and Río Grande de Añasco basins**

This last drainage basin is located in the west side of the Island, between Añasco and Aguadilla. Major streams located within this basin are: Río Cañas, Río Culebrinas, Río Culebras, Río Grande de Añasco, Río Guatemala, Río Ingenio, Río Sonador, and Río Yagüez. Quebrada Los Morones and quebrada Grande are also located within this basin.

With respect to the previously provided information, it shall be understood that at of the unnamed creeks located within each of the basin also constitute surfaces bodies of water that are to be considered as part of this list.

In addition to identify the list of surface bodies of water toward which the **DTPW/HTA MS4** discharges, it is being required to provide a list of the pollutants that have resulted in the impairment to the water quality of the waterbodies. In addition, it is required to identify those pollutants that are determined as a **Total Maximum Daily Load (TMDL)** for the water body. As the **DTPW/HTA MS4** may discharge on water bodies that basically comprise the entire Island, the list of water bodies along with their corresponding **TMDL's** and pollutants have been obtained from the **Fact Sheet on Puerto Rico's 2014 Impaired Water List** (October 2, 2014). This constitutes the most recent one, since the 2016 list has not been issued yet. Before proceed with the listing of the required information it is important to provide a summary of the 2014 findings.

Puerto Rico's 303 (d) List contains 581 instances where a pollutant is causing a designated use impairment. The most common indicators/causes of impairment include:

- Low dissolved oxygen (20.48 % of impairments)
- Turbidity (16.01% of impairments)
- Cyanide (12.91% of impairments)
- Pathogens (8.61% of impairments)
- Copper (7.40% of impairments)

Based on this report conclusions, sources of these pollutants include:

- Onsite wastewater systems (169 sub-basins)
- Urban/stormwater runoff (92)
- Confined animal feeding operations (78)
- Collection system failure (57)
- Agriculture (56)

Table 1 summarizes the **TMDL** List for 2014 published at the **EQB** webpage.

Considering the mapping of the outfalls that have been performed as of this date, the following water bodies receive discharges from the **DTPW/HTA MS4** with their corresponding pollutant causing the impairment:

| TABLE 1:TMDL LIST 2014 | | | |
|--|------------|-----------------|-------------------------------|
| Segment/Pollutant | Segment ID | Project Status | Projected TMDL Submittal Date |
| 1. RIO GUAJATACA/FECAL COLIFORMS | PRNR3A2 | Approved by EPA | September 2012 |
| 2. LAGO GUAJATACA/FECAL COLIFORMS | PRNL3A1 | Approved by EPA | September 2012 |
| 3. QUEBRADA LAS SEQUIAS/FECAL COLIFORMS | PRNQ3B | Approved by EPA | September 2012 |
| 4. RIO CAMUY/FECAL COLIFORMS | PRNE5A | Approved by EPA | September 2012 |
| 5. RIO CAMUY/FECAL COLIFORMS | PRNR5A | Approved by EPA | September 2012 |
| 6. RIO HONDO/FECAL COLIFORMS | PRER11A | Approved by EPA | September 2012 |
| 7. RIO BAYAMON/FECAL COLIFORMS | PRER12A1 | Approved by EPA | September 2012 |
| 8. RIO BAYAMON/FECAL COLIFORMS | PRER12A2 | Approved by EPA | September 2012 |
| 9. LAGO CIDRA/FECAL COLIFORMS | PREL12A2 | Approved by EPA | September 2012 |
| 10. RIO GUAYNABO/FECAL COLIFORMS | PRER12B | Approved by EPA | September 2012 |
| 11. RIO MINILLAS/FECAL COLIFORMS | PRER12C | Approved by EPA | September 2012 |
| 12. SISTEMA ESTUARIO DE LA BAHIA DE SAN JUAN/FECAL COLIFORMS | PREE13A1 | Approved by EPA | September 2012 |
| 13. SISTEMA ESTUARIO DE LA BAHIA DE SAN JUAN/FECAL COLIFORMS | PREE13A2 | Approved by EPA | September 2012 |
| 14. RIO GRANDE DE LOIZA/FECAL COLIFORMS | PRER14A1 | Approved by EPA | September 2012 |
| 15. RIO CANOVANAS/FECAL COLIFORMS | PRER14B | Approved by EPA | September 2012 |
| 16. RIO CANOVANILLAS/FECAL COLIFORMS | PRER14C | Approved by EPA | September 2012 |
| 17. QUEBRADA MARACUTO/FECAL COLIFORMS | PREQ14D | Approved by EPA | September 2012 |
| 18. QUEBRADA GRANDE/FECAL COLIFORMS | PREQ14E | Approved by EPA | September 2012 |
| 19. RIO HERRERA/FECAL COLIFORMS | PREE15A | Approved by EPA | September 2012 |
| 20. RIO HERRERA/FECAL COLIFORMS | PRER15A | Approved by EPA | September 2012 |
| 21. RIO ESPIRITU SANTO/FECAL COLIFORMS | PREE16A | Approved by EPA | September 2012 |
| 22. RIO ESPIRITU SANTO/FECAL COLIFORMS | PRER16A | Approved by EPA | September 2012 |
| 23. RIO MAMEYES/FECAL COLIFORMS | PREE17A | Approved by EPA | September 2012 |
| 24. RIO MAMEYES/FECAL COLIFORMS | PRER17A | Approved by EPA | September 2012 |
| 25. RIO HUMACAO/FECAL COLIFORMS | PREE33A | Approved by EPA | September 2012 |
| 26. RIO HUMACAO/FECAL COLIFORMS | PRER33A | Approved by EPA | September 2012 |
| 27. RIO CANDELERO/FECAL COLIFORMS | PREE34A | Approved by EPA | September 2012 |
| 28. RIO CANDELERO/FECAL COLIFORMS | PRER34A | Approved by EPA | September 2012 |
| 29. RIO GUAYANES/FECAL COLIFORMS | PREE35A | Approved by EPA | September 2012 |

| TABLE 1: TMDL LIST 2014 (continued) | | | |
|---|-----------------------|-----------------|-------------------------------|
| Segment/Pollutant | Segment ID | Project Status | Projected TMDL Submittal Date |
| 30. RIO GUAYANES/FECAL COLIFORMS | PRER35A | Approved by EPA | September 2012 |
| 31. CAÑO SANTIAGO/FECAL COLIFORMS | PREE35.1 | Approved by EPA | September 2012 |
| 32. CAÑO SANTIAGO/FECAL COLIFORMS | PREK35.1 | Approved by EPA | September 2012 |
| 33. RIO MAUNABO/FECAL COLIFORMS | PRER37A | Approved by EPA | September 2012 |
| 34. QUEBRADA AGUAS VERDES/FECAL COLIFORMS | PRSE53A | Approved by EPA | September 2012 |
| 35. QUEBRADA AGUAS VERDES/FECAL COLIFORMS | PRSQ53A | Approved by EPA | September 2012 |
| 36. RIO NIGUAS DE SALINAS/FECAL COLIFORMS | PRSE54A | Approved by EPA | September 2012 |
| 37. RIO NIGUAS DE SALINAS/FECAL COLIFORMS | PRSR54A | Approved by EPA | September 2012 |
| 38. RIO JACAGUAS/FECAL COLIFORMS | PRSE60A | Approved by EPA | September 2012 |
| 39. RIO JACAGUAS/FECAL COLIFORMS | PRSR60A1 | Approved by EPA | September 2012 |
| 40. RIO JACAGUAS/FECAL COLIFORMS | PRSR60A2 | Approved by EPA | September 2012 |
| 41. LAGO GUAYABAL/FECAL COLIFORMS | PRSL ₁ 60A | Approved by EPA | September 2012 |
| 42. LAGO TOA VACA/FECAL COLIFORMS | PRSL ₂ 60A | Approved by EPA | September 2012 |
| 43. RIO INABON/FECAL COLIFORMS | PRSE61A | Approved by EPA | September 2012 |
| 44. RIO INABON/FECAL COLIFORMS | PRSR61A | Approved by EPA | September 2012 |
| 45. RIO GUAYANILLA/FECAL COLIFORMS | PRSR67A | Approved by EPA | September 2012 |
| 46. RIO YAUCO/FECAL COLIFORMS | PRSE68A | Approved by EPA | September 2012 |
| 47. RIO YAUCO/FECAL COLIFORMS | PRSR68A1 | Approved by EPA | September 2012 |
| 48. RIO YAUCO/FECAL COLIFORMS | PRSR68A2 | Approved by EPA | September 2012 |
| 49. LAGO LUCHETTI/FECAL COLIFORMS | PRSL68A1 | Approved by EPA | September 2012 |
| 50. RIO LOCO/FECAL COLIFORMS | PRSE69A | Approved by EPA | September 2012 |
| 51. RIO LOCO/FECAL COLIFORMS | PRSR69A1 | Approved by EPA | September 2012 |
| 52. RIO LOCO/FECAL COLIFORMS | PRSR69A2 | Approved by EPA | September 2012 |
| 53. LAGO LOCO/FECAL COLIFORMS | PRSL69A | Approved by EPA | September 2012 |
| 54. RIO GUANAJIBO/FECAL COLIFORMS | PRWR77A | Approved by EPA | September 2012 |
| 55. RIO HONDO/FECAL COLIFORMS | PRWR77B | Approved by EPA | September 2012 |
| 56. RIO ROSARIO/FECAL COLIFORMS | PRWR77C | Approved by EPA | September 2012 |
| 57. RIO VIEJO/FECAL COLIFORMS | PRWR77D | Approved by EPA | September 2012 |
| 58. RIO DUEY Y RIO HOCONUCO/FECAL COLIFORMS | PRWR77E | Approved by EPA | September 2012 |
| 59. RIO CAIN/FECAL COLIFORMS | PRWR77F | Approved by EPA | September 2012 |
| 60. RIO CUPEYES/FECAL COLIFORMS | PRWR77G | Approved by EPA | September 2012 |

| TABLE 1: TMDL LIST 2014 (continued) | | | |
|---|-----------------------|-------------------|-------------------------------|
| Segment/Pollutant | Segment ID | Project Status | Projected TMDL Submittal Date |
| 61. RIO CRUCES/FECAL COLIFOS | PRWR77H | Approved by EPA | September 2012 |
| 62. RIO GRANDE/FECAL COLIFORMS | PRWR77I | Approved by EPA | September 2012 |
| 63. RIO GRANDE DE AÑASCO/FECAL COLIFORMS | PRWR83A | Approved by USEPA | September 2010 |
| 64. RIO GRANDE DE AÑASCO/FECAL COLIFORMS | PRWR83B | Approved by USEPA | September 2010 |
| 65. RIO GRANDE DE AÑASCO/FECAL COLIFORMS | PRWR83C | Approved by USEPA | September 2010 |
| 66. RIO GRANDE DE AÑASCO/FECAL COLIFORMS | PRWR83D | Approved by USEPA | September 2010 |
| 67. RIO GRANDE DE AÑASCO/FECAL COLIFORMS | PRWR83E | Approved by USEPA | September 2010 |
| 68. RIO GRANDE DE AÑASCO/FECAL COLIFORMS | PRWR83F | Approved by USEPA | September 2010 |
| 69. RIO GRANDE DE AÑASCO/FECAL COLIFORMS | PRWR83G | Approved by USEPA | September 2010 |
| 70. RIO GRANDE DE AÑASCO/FECAL COLIFORMS | PRWR83H | Approved by USEPA | September 2010 |
| 71. RIO GRANDE DE AÑASCO/FECAL COLIFORMS | PRWR83I | Approved by USEPA | September 2010 |
| 72. LAGO GUAYO/FECAL COLIFORMS | PRWL83H | Approved by USEPA | September 2010 |
| 73. RIO GRANDE DE ARECIBO/FECAL COLIFORMS | PRNR7A1 | Approved by USEPA | September 2010 |
| 74. LAGO DOS BOCAS/FECAL COLIFORMS | PRNL ₁ 7A1 | Approved by USEPA | September 2010 |
| 75. RIO GRANDE DE ARECIBO/FECAL COLIFORMS | PRNR7A2 | Approved by USEPA | September 2010 |
| 76. RIO GRANDE DE ARECIBO/FECAL COLIFORMS | PRNR7A3 | Approved by USEPA | September 2010 |
| 77. LAGO GARZAS/FECAL COLIFORMS | PRNL ₃ 7A3 | Approved by USEPA | September 2010 |
| 78. RIO GRANDE DE ARECIBO/FECAL COLIFORMS | PRNR7B1 | Approved by USEPA | September 2010 |
| 79. RIO GRANDE DE ARECIBO/FECAL COLIFORMS | PRNR7B2 | Approved by USEPA | September 2010 |
| 80. RIO GRANDE DE ARECIBO/FECAL COLIFORMS | PRNR7C1 | Approved by USEPA | September 2010 |
| 81. LAGO CAONILLAS/FECAL COLIFORMS | PRNL ₂ 7C1 | Approved by USEPA | September 2010 |
| 82. RIO GRANDE DE ARECIBO/FECAL COLIFORMS | PRNR7C2 | Approved by USEPA | September 2010 |
| 83. RIO GRANDE DE ARECIBO/FECAL COLIFORMS | PRNR7C3 | Approved by USEPA | September 2010 |
| 84. RIO GRANDE DE MANATÍ/FECAL COLIFORMS | PRNR8A1 | Approved by USEPA | September 2010 |
| 85. RIO GRANDE DE MANATÍ/FECAL COLIFORMS | PRNR8A2 | Approved by USEPA | September 2010 |
| 86. RIO GRANDE DE MANATÍ/FECAL COLIFORMS | PRNR8A3 | Approved by USEPA | September 2010 |
| 87. RIO GRANDE DE MANATÍ/FECAL COLIFORMS | PRNR8B | Approved by USEPA | September 2010 |

| TABLE 1: TMDL LIST 2014 (continued) | | | |
|--|-----------------------|-------------------|-------------------------------|
| Segment/Pollutant | Segment ID | Project Status | Projected TMDL Submittal Date |
| 88. RIO GRANDE DE MANATÍ/FECAL COLIFORMS | PRNR8C1 | Approved by USEPA | September 2010 |
| 89. LAGO GUINEO/FECAL COLIFORMS | PRNL ₁ 8C1 | Approved by USEPA | September 2010 |
| 90. LAGO MATRULLAS/FECAL COLIFORMS | PRNL ₂ 8C1 | Approved by USEPA | September 2010 |
| 91. RIO GRANDE DE MANATÍ/FECAL COLIFORMS | PRNR8C2 | Approved by USEPA | September 2010 |
| 92. RIO GRANDE DE MANATÍ/FECAL COLIFORMS | PRNR8D | Approved by USEPA | September 2010 |
| 93. RIO GRANDE DE MANATÍ/FECAL COLIFORMS | PRNR8E1 | Approved by USEPA | September 2010 |
| 94. RIO GRANDE DE MANATÍ/FECAL COLIFORMS | PRNR8E2 | Approved by USEPA | September 2010 |
| 95. RIO CULEBRINAS/FECAL COLIFORMS | PRWR95A | Approved by USEPA | September 2010 |
| 96. RIO CULEBRINAS/FECAL COLIFORMS | PRWR95B | Approved by USEPA | September 2010 |
| 97. RIO CULEBRINAS/FECAL COLIFORMS | PRWR95C | Approved by USEPA | September 2010 |
| 98. RIO CULEBRINAS/FECAL COLIFORMS | PRWR95D | Approved by USEPA | September 2010 |
| 99. RIO CULEBRINAS/FECAL COLIFORMS | PRWR95E | Approved by USEPA | September 2010 |
| 100. RIO CULEBRINAS/FECAL COLIFORMS | PRWR95F | Approved by USEPA | September 2010 |
| 101. RIO CULEBRINAS/FECAL COLIFORMS | PRWR95G | Approved by USEPA | September 2010 |
| 102. RIO CULEBRINAS/FECAL COLIFORMS | PRWR95H | Approved by USEPA | September 2010 |
| 103. RIO CULEBRINAS/FECAL COLIFORMS | PRWR95I | Approved by USEPA | September 2010 |
| 104. RIO CULEBRINAS/FECAL COLIFORMS | PRWR95J | Approved by USEPA | September 2010 |
| 105. RIO CULEBRINAS/FECAL COLIFORMS | PRWR95K | Approved by USEPA | September 2010 |
| 106. RIO SABANA/FECAL COLIFORMS | PREE19A | Approved by USEPA | September 2011 |
| 107. RIO JUAN MARTÍN/FECAL COLIFORMS | PREE20A | Approved by USEPA | September 2011 |
| 108. RIO FAJARDO/FECAL COLIFORMS | PREE22A | Approved by USEPA | September 2011 |
| 109. RIO DAGUAO/FECAL COLIFORMS | PREE26A | Approved by USEPA | September 2011 |
| 110. RIO SANTIAGO/FECAL COLIFORMS | PREE29A | Approved by USEPA | September 2011 |
| 111. RIO BLANCO/FECAL COLIFORMS | PREE30A | Approved by USEPA | September 2011 |
| 112. RIO ANTON RUIZ/FECAL COLIFORMS | PREE31A | Approved by USEPA | September 2011 |
| 113. QUEBRADA FAJARDO/FECAL COLIFORMS | PREQ21A | Approved by USEPA | September 2011 |
| 114. QUEBRADA CEIBA/FECAL COLIFORMS | PREQ24A | Approved by USEPA | September 2011 |
| 115. QUEBRADA AGUAS CLARAS/FECAL COLIFORMS | PREQ25A | Approved by USEPA | September 2011 |

| TABLE 1: TMDL LIST 2014 (continued) | | | |
|--|------------|-------------------|-------------------------------|
| Segment/Pollutant | Segment ID | Project Status | Projected TMDL Submittal Date |
| 116.QUEBRADAPALMA/FECAL COLIFORMS | PREQ27A | Approved by USEPA | September 2011 |
| 117.QUEBRADABOTIJAS/FECAL COLIFORMS | PREQ28A | Approved by USEPA | September 2011 |
| 118.RIO BLANCO/FECAL COLIFORMS | PREQ30B | Approved by USEPA | September 2011 |
| 119.RIO SABANA/FECAL COLIFORMS | PRER19A | Approved by USEPA | September 2011 |
| 120.RIODEMAJAGUA/FECAL COLIFORMS | PRER23A | Approved by USEPA | September 2011 |
| 121.RIO DAGUAO/FECAL COLIFORMS | PRER26A | Approved by USEPA | September 2011 |
| 122.RIO BLANCO/FECAL COLIFORMS | PRER30A | Approved by USEPA | September 2011 |
| 123.RIO ANTON RUIZ/FECAL COLIFORMS | PRER31A | Approved by USEPA | September 2011 |
| 124.CAÑO TIBURONES/FECAL COLIFORMS | PRNE7.1 | Approved by USEPA | September 2011 |
| 125.QUEBRADA DE LOS CEDROS/FECAL COLIFORMS | PRNQ1A | Approved by USEPA | September 2011 |
| 126.QUEBRADABRANDER/FECAL COLIFORMS | PRSE48A | Approved by USEPA | September 2011 |
| 127.QUEBRADAMELANIA/FECAL COLIFORMS | PRSE50A | Approved by USEPA | September 2011 |
| 128.RIO SECO/FECAL COLIFORMS | PRSE51A | Approved by USEPA | September 2011 |
| 129.QUEBRADA AMOROS/FECAL COLIFORMS | PRSE52A | Approved by USEPA | September 2011 |
| 130.RIODESCALABRADO/FECAL COLIFORMS | PRSE58A | Approved by USEPA | September 2011 |
| 131.LAGO PATILLAS/FECAL COLIFORM | PRSL43A1 | Approved by USEPA | September 2011 |
| 132.LAGO CERRILLOS/FECAL COLIFORMS | PRSL62A1 | Approved by USEPA | September 2011 |
| 133.QUEBRADA MANGLILLO/FECAL COLIFORMS | PRSQ38A | Approved by USEPA | September 2011 |
| 134.QUEBRADA FLORIDA/FECAL COLIFORMS | PRSQ39A | Approved by USEPA | September 2011 |
| 135.QUEBRADA PALENQUE/FECAL COLIFORMS | PRSQ41A | Approved by USEPA | September 2011 |
| 136.QUEBRADA YAUREL/FECAL COLIFORMS | PRSQ44A | Approved by USEPA | September 2011 |
| 137.QUEBRADAMELANIA/FECAL COLIFORMS | PRSQ50A | Approved by USEPA | September 2011 |
| 138.QUEBRADA AMOROS/FECAL COLIFORMS | PRSQ52A | Approved by USEPA | September 2011 |
| 139.RIO JACABOA/FECAL COLIFORMS | PRSR40A | Approved by USEPA | September 2011 |
| 140.RIO CHICO/FECAL COLIFORMS | PRSR42A | Approved by USEPA | September 2011 |
| 141.RIO GRANDE DE PATILLAS/FECAL COLIFORMS | PRSR43A1 | Approved by USEPA | September 2011 |
| 142.RIO GRANDE DE PATILLAS/FECAL COLIFORMS | PRSR43A2 | Approved by USEPA | September 2011 |
| 143.RIO MARIN/FECAL COLIFORMS | PRSR43B | Approved by USEPA | September 2011 |
| 144.RIO NIGUAS DE ARROYO/FECAL COLIFORMS | PRSR45A | Approved by USEPA | September 2011 |

| TABLE 1: TMDL LIST 2014 (continued) | | | |
|---|------------|-------------------|-------------------------------|
| Segment/Pollutant | Segment ID | Project Status | Projected TMDL Submittal Date |
| 145.QUEBRADACORAZON/FECAL COLIFORMS | PRSR47A | Approved by USEPA | September 2011 |
| 146.RIO GUAMANI/FECAL COLIFORMS | PRSR49A | Approved by USEPA | September 2011 |
| 147.RIO JUEYES/FECAL COLIFORMS | PRSR55A | Approved by USEPA | September 2011 |
| 148.RIO CAYURES/FECAL COLIFORMS | PRSR56A | Approved by USEPA | September 2011 |
| 149.RIO COAMO/FECAL COLIFORMS | PRSR57A1 | Approved by USEPA | September 2011 |
| 150.RIO COAMO/FECAL COLIFORMS | PRSR57A2-1 | Approved by USEPA | September 2011 |
| 151.RIO COAMO/FECAL COLIFORMS | PRSR57A2-2 | Approved by USEPA | September 2011 |
| 152.RIO CUYON/FECAL COLIFORMS | PRSR57B | Approved by USEPA | September 2011 |
| 153.RIO CAÑAS/FECAL COLIFORMS | PRSR59A-1 | Approved by USEPA | September 2011 |
| 154.RIO CAÑAS/FECAL COLIFORMS | PRSR59A-2 | Approved by USEPA | September 2011 |
| 155.RIO JACAGUAS/FECAL COLIFORMS | PRSR62A1 | Approved by USEPA | September 2011 |
| 156.RIO PORTUGUES/FECAL COLIFORMS | PRSR63A-1 | Approved by USEPA | September 2011 |
| 157.RIO PORTUGUES/FECAL COLIFORMS | PRSR63A-2 | Approved by USEPA | September 2011 |
| 158.RIO MATILDE PASTILLO/FECAL COLIFORMS | PRSR64A-1 | Approved by USEPA | September 2011 |
| 159.RIO MATILDE PASTILLO/FECAL COLIFORMS | PRSR64A-2 | Approved by USEPA | September 2011 |
| 160.RIO TALLABOA/FECAL COLIFORMS | PRSR65A-1 | Approved by USEPA | September 2011 |
| 161.RIO TALLABOA/FECAL COLIFORMS | PRSR65A-2 | Approved by USEPA | September 2011 |
| 162.RIO MACANA/FECAL COLIFORMS | PRSR66A | Approved by USEPA | September 2011 |
| 163.CAÑO MERLE/FECAL COLIFORMS | PRWE78A | Approved by USEPA | September 2011 |
| 164.CAÑO CONDE AVILA/FECAL COLIFORMS | PRWK75A | Approved by USEPA | September 2011 |
| 165.CAÑO MERLE/FECAL COLIFORMS | PRWK78A | Approved by USEPA | September 2011 |
| 166.CAÑO DE SANTI PONCE/FECAL COLIFORMS | PRWK93A | Approved by USEPA | September 2011 |
| 167.CAÑO CORAZONES/FECAL COLIFORMS | PRWK96A | Approved by USEPA | September 2011 |
| 168.LAGUNA JOYUDAS/FECAL COLIFORMS | PRWN0005 | Approved by USEPA | September 2011 |
| 169.QUEBRADA BOQUERON/FECAL COLIFORMS | PRWQ71A | Approved by USEPA | September 2011 |
| 170.QUEBRADA ZUMBON/FECAL COLIFORMS | PRWQ72A | Approved by USEPA | September 2011 |
| 171.QUEBRADA GONZALEZ/FECAL COLIFORMS | PRWQ73A | Approved by USEPA | September 2011 |
| 172.QUEBRADA LOS PAJARITO/FECAL COLIFORMS | PRWQ74A | Approved by USEPA | September 2011 |
| 173.QUEBRADA IRIZARRY/FECAL COLIFORMS | PRWQ76A | Approved by USEPA | September 2011 |
| 174.QUEBRADA DEL ORO/FECAL COLIFORMS | PRWQ80A | Approved by USEPA | September 2011 |
| 175.RIO YAGUEZ/FECAL COLIFORMS | PRWR79A | Approved by USEPA | September 2011 |
| 176.RIO GUAYABO/FECAL COLIFORMS | PRWR94A | Approved by USEPA | September 2011 |

- San Juan Bay Estuary (Fecal Coliforms)
- Rio Hondo (Fecal Coliforms)

The instruction of the **NOI** indicate that the number of outfalls that discharge into each one of the receiving bodies of water shall be included. In attempting to comply with this requirement, the results of the recent San Juan **Outfall Reconnaissance Investigation (ORI)** as well as of previous investigations have been used to provide a current list, which is not inclusive since the outfall mapping effort has not been completed. Since the outfalls have been the result of different highway investigations, they have been summarized as a function of the corresponding highway. It shall be noted that the list may be partial since this is an ongoing process.

Table 2: Outfalls Identified on DTPW/HTA MS4 with their corresponding receiving body of water

| Highway ID | Number of outfalls | Name of Receiving Body of Water |
|------------|--------------------|-----------------------------------|
| PR-1 | 5 | Rio Piedras River |
| | 2 | San Juan Bay |
| PR-2 | 7 | Unnamed creek of the San Juan Bay |
| PR-3 | 2 | San Antón Creek |
| PR-8 | 5 | San José Lagoon |
| PR-17 | 4 | Josefina Creek |
| | 4 | Rio Piedras River |
| | 11 | Unamed creeks |
| PR-18 | 1 | Buena Vista Creek |
| PR-22 | 13 | Unnamed channels |
| | 1 | Puerto Nuevo River |
| | 4 | Margarita Channel |
| | 1 | Santa Catalina Creek |
| | 2 | Rio Hondo River |
| | 2 | Rio Grande de Manatí River |
| PR-23 | 2 | Rio Piedras River |
| PR-25 | 4 | Atlantic Ocean |
| PR-26 | 17 | Condado Lagoon |
| PR-27 | 1 | Juan Méndez Creek |
| PR-47 | 1 | Unnamed Creek |
| | 3 | Juan Méndez Creek |

The **NOI** also asks to indicate if monitoring has been performed on them. A review of the available information, allow to indicate that majority of them did not have flow at the time of the investigation, and therefore, no monitoring was performed. However, an outfall of **PR-27** (Barbosa Avenue) that had flow during the investigation was analyzed using ammonia strips and resulted positive. This indicates that an illicit discharge is reaching this outfall which will be further investigated to eliminate such discharge. This discharge reaches Juan Méndez Creek. This creek eventually reaches the San Juan Bay Estuary for which a TMDL for Fecal coliforms have been established.

Part H: Summary of Stormwater Management Program (SWMP) under the 2006 Small MS4 Permit

This section of the **NOI** requires to provide information related with the goals and best management practices (BMP's)/controls developed, implemented and enforce in the **Stormwater Management Program (SWMP)** under the 2006 **Small MS4 General Permit**. It is required to provide a description or identification of the practice/control/goal achieved, continuation of practice/control in to the next permit cycle, and modifications, if any to the goal and/or practice/control.

In general, it shall be indicated that the current **SWMP** will be revised in order to focus on less but more effective **Minimum Control Measures (MCM)**. This follows from the experiences gained under the previous permit cycle, as well as to incorporate additional measures that were required as part of the stipulation of the Civil Action No. 3:14-cv-1476-CCC. Some of the requirements contained under the **Consent Decree (CD)** of this case are:

- The revised **SWMP** shall incorporate the deadlines included in the **CD**
- Incorporate the sludge disposal plan in the **SWMP**
- A Spill Control Plan for containing and remediating spills or leaks of petroleum products or hazardous substances into the **MS4** shall be incorporated into the **SWMP**

The previously detailed **SWMP** requirements are in addition to the new permit required modifications.

The current **SWMP** details the specific **MCM** in Section 16.0, page 53. The specific activities for each of the MCM have been included in the table that follows (see table 3). This table has been prepared as per the details of the **NOI**.

Part I: 2016 Stormwater Management Program (SWMP) Summary

The section of the **NOI** requires to provide information pertaining to the SWMP that will be updated taking into account the requirements established in the 2016 **Small MS4 General Permit** for each **MCM**. It is required to provide a description or identification for each of the practice/control, educational topic, program description, and measurable goals for:

- **Public Education and Outreach**
- **Public Involvement and Participation**
- **Illicit Discharge Detection and Elimination**
- **Construction Site Stormwater Runoff Control**
- **Post-Construction Stormwater Management in New Development and Redevelopment**

As required by the **NOI Table 4A** through **4F** summarizes the required information.

Table 3: Summary of Stormwater Management Program under the 2006 Small MS4 General Permit

| BMP Description or BMP ID | Goal Achieved? (Yes/No) | Continued in next permit Cycle? (Yes/No) | Who was the targeted audience? Explain reason for not achieving goal. | Modification (s) to goals or BMP for next permit cycle. |
|---|--------------------------------|---|---|--|
| MCM #1: Public Education and Outreach | | | | |
| Educational Material Distribution in Schools | Yes | No | Students | Will focus of roadways users |
| Activities with education of stormwater for communities | Yes | No | General public | Will focus on roadway users, contractors, employees |
| Visits to webpage created by agency | Yes | Yes | General Public | Need to incorporate interconnection with social networks such as facebook, twitter, etc. |
| Distribution of flyers at toll plazas | Yes | Yes | Roadway users | Will continue in next permit cycle as currently being performed. |
| MCM #2: Public Participation and Involvement | | | | |
| Public Participation in Workshops held for Environmental Clearance Process of projects, but for which stormwater educational material will be distributed | No | No. People interest in these activities is the proposed project. Difficulty to grab their attention for other subjects. | General public interested in the construction of a new roadway | New strategy required to be included this MCM. |
| Adopt a Highway Program | Yes | Yes | People of entities interested in sharing the maintenance of landscaping portions of highway | No modifications required |

Table 3: Summary of Stormwater Management Program under the 2006 Small MS4 General Permit (continued)

| BMP Description or BMP ID | Goal Achieved? (Yes/No) | Continued in next permit Cycle? (Yes/No) | Who was the targeted audience? Explain reason for not achieving goal. | Modification (s) to goals or BMP for next permit cycle. |
|---|---|---|---|--|
| Public notifications about illegal discharges into the MS4 system | No | No. | General Public and Roadway users. Need to establish a hot line or link to the agency webpage. | Needs to follow up until webpage link is established. |
| MCM #3: Illicit Discharge Detection and Elimination (IDDE) | | | | |
| Inventory conducted and sites prioritized for inspection at DTPW/HTA facilities | Yes. | Yes, with a re-inspection of the DTPW/HTA facilities. | Employees. Need economic and human resources. | No. Need to follow up the results of the inspection |
| Agreements signed with municipalities | Yes. MOU signed with the MSJ | Yes | Municipal government with interconnected MS4's | No. Need to include the Municipality of Carolina, DRNA. |
| Miles of roadway inventoried | Yes | Yes | Employees. Need economic and human resources. | No |
| Number of outfalls identified | Partially completed, needs further and extensive efforts to complete. | Yes | Employees. Need economic and human resources. | No. Need to complete mapping of entire system in 10 years. |
| Number of dry tests completed | Yes | Yes | Employees | No. |
| MCM #4: Construction Site Runoff Control | | | | |
| Number of permits issued by EQB/EPA | Yes | Yes | Contractors and project administrators | No |
| Trained Inspectors | Yes | Yes | Project administrators | Need to establish an annual training requirement for agency employees. |

Table 3: Summary of Stormwater Management Program under the 2006 Small MS4 General Permit (continued)

| BMP Description or BMP ID | Goal Achieved? (Yes/No) | Continued in next permit Cycle? (Yes/No) | Who was the targeted audience? Explain reason for not achieving goal. | Modification (s) to goals or BMP for next permit cycle. |
|---|---|--|---|--|
| Number of sites inspected | Yes | Yes | Employees and contractors | Needs to establish an annual CGP refresher. |
| MCM #5: Post-Construction Runoff Control | | | | |
| Number of transportation related facilities assessed to identify the possibility for reducing the volume of stormwater runoff | No | No | Employees. The majority of the MS4 is comprised of highways for which runoff reduction controls is difficult to attain. | Yes, need to assess and identify reasonable possibilities. |
| Inspection of structural BMP's | No | Yes | Employees. Need technical expertise to perform inspections | Need to prepare an inventory of BMPs. |
| MCM #6: Pollution Prevention/Good Housekeeping Practices | | | | |
| Training of employees in the prevention of pollution generated by vehicles, and equipment maintenance activities | Partially completed, needs further and extensive efforts to complete. | Yes | Employees. Need economic and human resources. | No |
| Inspections of facilities | Yes | Yes | Employees. Requires follow up to inspected facilities to correct observed deficiencies | No |

Table 4A: 2016 Stormwater Program Summary

| BMP Description or BMP ID | Education Topic (Identify the issue your BMP is educating the public about) | Outreach Method (Describe the method used to convey this topic, e.g. mailing, events, school, etc.) | Measurable Goal (What is the end result of this program? What indicator will determine the goal has been met? (e.g., number mailing sent, people at event, class participation, etc.) |
|---|---|---|---|
| MCM #1: Public Education and Outreach | | | |
| Distribution of educational materials | Importance of eliminating discharges of oil and other petroleum products as well as sewage discharges into the MS4 | Flyers and brochures at toll plazas, environmental fairs, DTPW facilities (like CESCOS) | Number of flyers, people attending an exhibition being used to distribute materials, etc. |
| Attendance to activities requested by schools and other organizations | Types of pollutants generated by transportation maintenance related activities, including those performed at home. | Flyers and brochures | Number of flyers, people attending the activity |
| Information provided at agency Webpage | Importance of eliminating discharges of oil and other petroleum products as well as sewage discharges into the MS4. | Agency webpage | Number of site visits |

Table 4B: 2016 Stormwater Program Summary

| BMP Description or BMP ID | Education Topic (Identify the issue your BMP is educating the public about) | Outreach Method (Describe the method used to convey this topic, e.g. mailing, events, school, etc.) | Measurable Goal (What is the end result of this program? What indicator will determine the goal has been met? (e.g., number mailing sent, people at event, class participation, etc.) |
|---|--|---|--|
| MCM #2: Public Participation and Involvement | | | |
| Adopt a Highway | Importance of eliminating discharges of oil and other petroleum products as well as sewage discharges into the MS4 | Information provided to participants will be enhanced to include additional statements regarding the importance of their commitment to adopt a portion of a highway and encouraging them to remain vigilant to the improper disposal of oils, hazardous substances and sanitary discharges into the MS4 | Number of participants |
| Assistance to activities related with this measure being developed by other entities such as the MSJ and the DNER | Importance of eliminating discharges of oil and other petroleum products as well as sewage discharges into the MS4. Responsibility of the DTPW/HTA to perform the IDDE on its MS4. | Events | Number of people attending the activity |
| Publish the SWMP on the agency webpage and request comments from citizens | Purpose of developing the SWMP and the DTPW/HTA responsibilities under 2016 Small MS4 permit | Agency webpage | Number of site visits and comments received |

Table 4C: 2016 Stormwater Program Summary

| BMP Description or BMP ID | Education Topic (Identify the issue your BMP is educating the public about) | Outreach Method (Describe the method used to convey this topic, e.g. mailing, events, school, etc.) | Measurable Goal (What is the end result of this program? What indicator will determine the goal has been met? (e.g., number mailing sent, people at event, class participation, etc.) |
|--|--|---|---|
| MCM #3: Illicit Discharge Detection and Elimination (IDDE) | | | |
| Identification of known locations where Sanitary Sewer Overflows (SSO) occur | Importance of notifying and eliminating discharges of sewage discharges into the MS4 | This outreach is intended for the O & M employees of the DTPW/HTA. | Number of participants and number of notifications to PRASA |
| Complete System Mapping in consideration to the new 2016 permit requirements | Identification of the mapping of the outfalls of the MS4 | This MCM is for the internal use of the agency | Number of miles at with completed mapping of the outfalls |
| Stenciling of outfalls | Physical identification of outfalls | This MCM is for the internal use of the agency | Number of identified outfalls |

Table 4E: 2016 Stormwater Program Summary

| BMP Description or BMP ID | Education Topic (Identify the issue your BMP is educating the public about) | Outreach Method (Describe the method used to convey this topic, e.g. mailing, events, school, etc.) | Measurable Goal (What is the end result of this program? What indicator will determine the goal has been met? (e.g., number mailing sent, people at event, class participation, etc.) |
|--|--|---|---|
| MCM #5: Post Construction Stormwater Management in New development and Re-development | | | |
| Requirement of analyzing the potential for green practices in the design stage of new highway projects | Reduction of discharge of pollutants from the MS4 to the Maximum Extent Practicable (MEP) Maintenance of structural BMP's | This outreach is intended for the HTA Design Division | Number of designers and projects where the use of green practices of BMP's to reduce pollutants are developed |
| Requirements to analyze the possibility of using green practices in re-development projects | Reduction of discharge of pollutants from the MS4 to the Maximum Extent Practicable (MEP) Maintenance of structural BMP's | This outreach is intended for the HTA Design Division | Number of designers and projects where the use of green practices of BMP's to reduce pollutants are developed |

Table 4F: 2016 Stormwater Program Summary

| BMP Description or BMP ID | Education Topic (Identify the issue your BMP is educating the public about) | Outreach Method (Describe the method used to convey this topic, e.g. mailing, events, school, etc.) | Measurable Goal (What is the end result of this program? What indicator will determine the goal has been met? (e.g., number mailing sent, people at event, class participation, etc.) |
|---|---|---|---|
| MCM #6: Good Housekeeping and Pollution Prevention in Municipal Operations | | | |
| Develop written Operations and Maintenance (O & M) Programs | Reduction of pollutants of stormwater runoff from the agency park and open space maintenance; fleet and building maintenance; street, road or highway maintenance; stormwater system maintenance; new construction and land disturbances; vehicle and equipment maintenance and storage yards; waste transfer stations, others. | This outreach is intended for the O & M employees of the DTPW/HTA. | Number of employees |
| Training Program for O & M Personnel | DTPW/HTA responsibility under the 2016 Small MS4 permit. Implementation of the BMP's developed for the DTPW/HTA facilities | This outreach is intended for the O & M employees of the DTPW/HTA. | Number of employees |
| SWPPP team and Inspections | DTPW/HTA responsibility under the 2016 Small MS4 permit. SWPPP Inspections. Team members responsibilities | This outreach is intended for the team members of the SWPPP | Number of inspections |