

MUNICIPALITY OF SABANA GRANDE

Estado Libre Asociado de Puerto Rico

PO Box 356

Sabana Grande, PR 00736

Honorable Miguel Ortiz Vélez

Mayor

NOTICE OF INTENT

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
(NPDES) PHASE II, REGULATED SMALL MUNICIPAL SEPARATE
STORM SEWER SYSTEMS (MS4's)**

GENERAL PERMIT

**MUNICIPALITY OF SABANA GRANDE
EPA REGION 2 PUERTO RICO**

PREPARED BY RIQUEL

REVIEWED BY MUNICIPALITY OF SABANA GRANDE

NOVEMBER 2009

U.S. ENV. PROT. AGENCY
2009 NOV 19 PM 1:56
EPA-DIRECTOR OFFICE

EXECUTIVE SUMMARY

The content of this report was created based on the research performed with local environmental agencies in Puerto Rico and information gathered thru meetings with community representatives from the Municipality of Sabana Grande.

The Storm Water Notice of Intent presented in this report includes general information on the permittee, the nature of their business, a description of the characteristics and hydrology of the Sabana Grande municipality, person(s) responsible for implementing the plan and the MS4 main users.

INTRODUCTION

In 1987 the Environmental Protection Agency (EPA) amended the Clean Water Act (CWA), requiring the implementation of a two phase program for addressing storm water discharges. On December 9, 1999 EPA published the second phase of the storm water regulations (64 FR 68721). As outlined in these regulations, municipal separate storm sewer systems (MS4's) serving populations of more than 50,000 and/or processing a density of 1000 people per square mile are required to obtain a General Phase II National Pollutant Discharge Elimination System (NPDES) Permit. The EPA is requesting municipal storm sewer operators to apply for an NPDES permit as required by 40 CFR 122.33.

The Municipality of Sabana Grande is required to submit an application for permit coverage. We hereby present to the EPA, Sabana Grande's Notice of Intent (NOI) to obtain the NPDES permit for the municipalities storm sewer system discharge.

PERMITTEE GENERAL INFORMATION

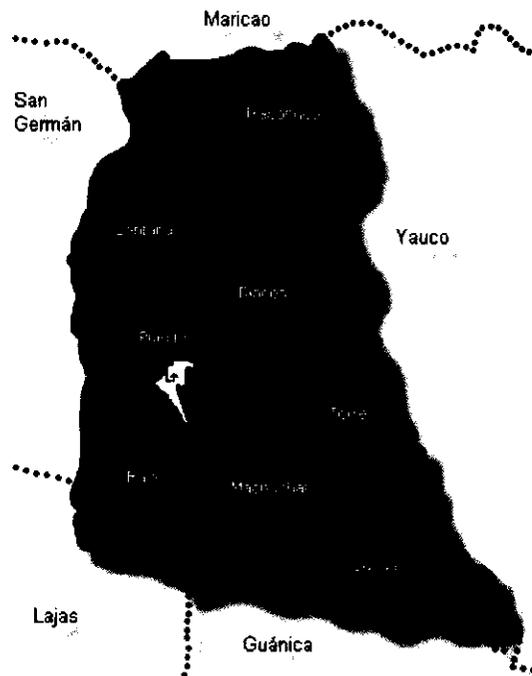
The Sabana Grande MS4 is currently owned and operated by the municipality under the direction of its mayor, Hon. Miguel Ortiz Vélez. The Department of Transportation and Public Works, DTPW, will be the office responsible to implement and uphold the proposed storm water program. Mr. Raymundo Martínez, Director of DTPW, will be the person responsible for assuring the program maintains its proposed schedule.

The Municipality of Sabana Grande is located in the south of the island at the latitude 18°07'97" N and the longitude 66°96'08" W. It has a territorial extension of 35.89 square miles. Sabana Grande is bounded by the north with Lajas and Guánica municipalities; south with Maricao; east with San Germán; and by the west with Yauco municipality.

Sabana Grande possesses a population of 25,935 inhabitants, according to the 2000 Census.

Sabana Grande is divided into seven (7) wards: Torre, Machuchal, Rayo, Rincón, Santana, Susúa and Tabonuco.

Figure 1 below shows the Sabana Grande ward's distribution.



The soil associations of Sabana Grande are Coloso-Toa, Caguabo-Mucara, Consumo-Humatas and Descalabrado.

Coloso-Toa Association: It consists of level soils, susceptible to flooding and sedimentation, located along three major river flood plains. They are deep, dark-brown, slightly acid to moderately acid and of moderately fine texture. They contain a range of nutrients and organic materials at appropriate levels, which were adapted to the planting of crops, particularly sugar cane.

Caguabo-Mucara Association: They are identified as soils with good drainage, moderate permeability, clayey and plastic, which in turn contain weathered hard rock, which are located less than 30 inches deep.

The Caguabo soils are identified by their dark grayish brown color and moderately fine texture, with shallow soils. The Múcara soils are identified by their grayish-brown, very dark color. The fast runoff on these soils causes it to lose much of the topsoil due to erosion. This soil type occupies the central part of the municipality up to the north boundary, occupying the largest area of the territory.

Consumo-Humatas Association: It is found mostly in hills areas surrounded by cliffs, (i.e. in areas of strong slopes), where countless rivers and streams traverse the area. They are clayey, washed, sticky and plastic character residing on dense layers of meteoric rock, all under the conditions of an extremely humid climate. This type of soil is located northeast of the municipality and occupies a small area.

Descalabrado Association: Descalabrado soils are shallow, dark yellow brown in color, slightly acid and of moderately fine texture. They are also slightly washed, which have clayey sub-soils and less than 20 inches of hard rock, established under a semiarid climate. These soils are built on volcanic rock and are generally the steeper slopes of the association. It is found in areas of rugged slopes, in the foothills, hills and peaks.

The geological formation in the Sabana Grande area is generally alluvium.

The Sabana Grande topography varies from undulating to very steep. Surface water running through the municipality originates in the north and east mountain areas. The Guanajibo River is the largest water body of the town; others are Loco, Grande,

Cruces and Flores River. The temperature varies by seasons between 70 and 80 degrees F. The average annual rainfall is 56”.

Figure 2 depicts the municipality’s hydrology.

ACTIVITIES SUBJECT TO NPDES PERMIT APPLICABILITY

The municipality of Sabana Grande operates a municipal separate storm sewer system located in the urban area of the Municipality.

The municipal urban area has a population of 8,784 and a territorial extension of approximately 1.68 square miles.

The main users of the Sabana Grande MS4 are schools, and commerce’s located in the urban region of the town. Approximately 5 schools, 1 hospital and 1 industrial lot have been identified within the delineated urban area of Sabana Grande. As part of our storm water management plan an outreach program will be presented to promote the participation of the main users in the clean up activities of our plan. The primary pollutant sources of the Sabana Grande MS4 are sanitary overflows.

STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE

The SIC Code established by the federal Office of Management and Budget for public administration for local government activities is 9199.

OPERATOR NAME (S), ADDRESS (ES), TELEPHONE NUMBER (S)

Municipality of Sabana Grande
PO Box 356
Sabana Grande, PR 00637
Tel: 787-873-2060

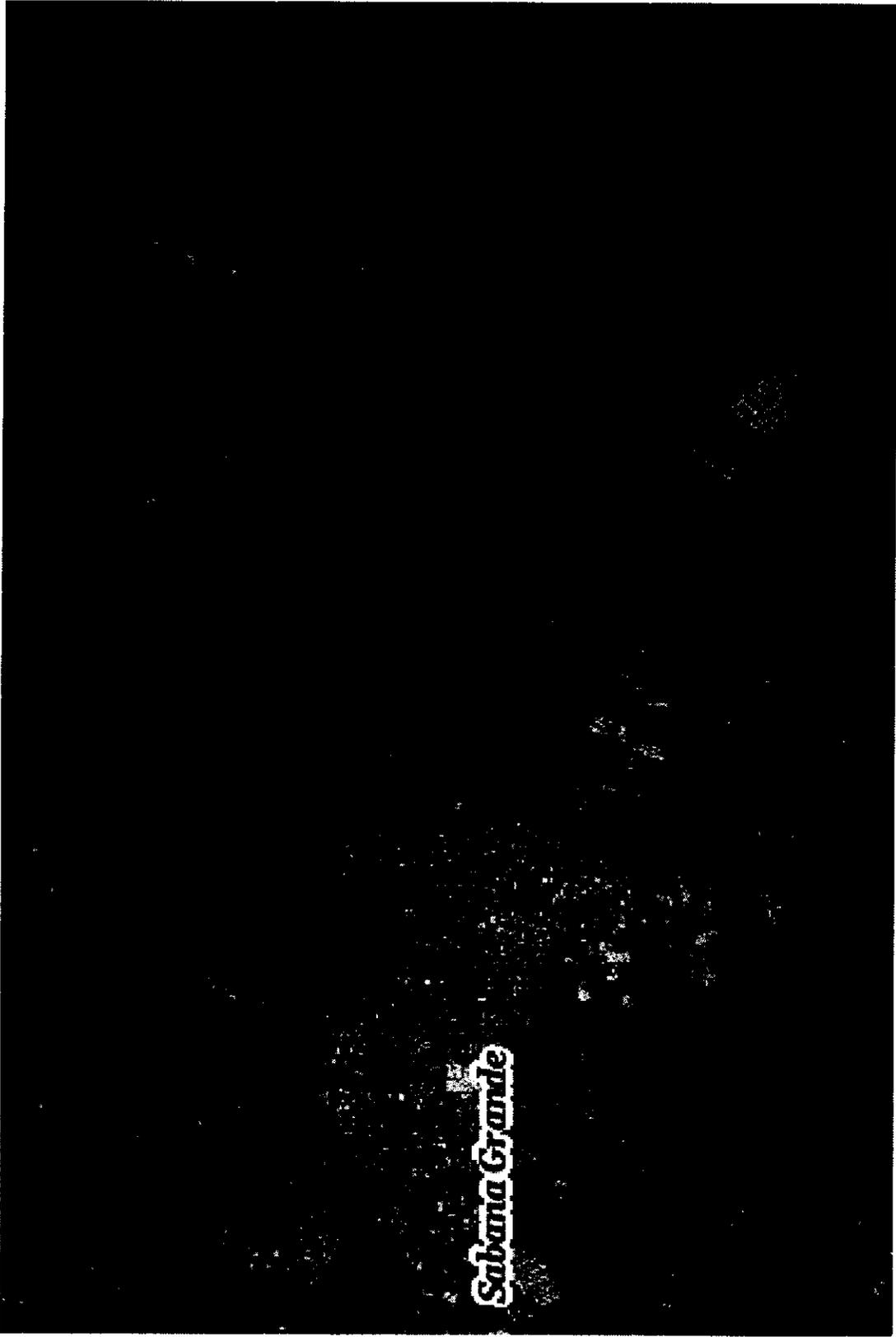


FIGURE: SABANA GRANDE'S HIDROLOGY MAP

PERMITS OR CONSTRUCTION APPROVALS RECEIVED OR APPLIED UNDER THE FOLLOWING PROGRAMS:

Resource Conservation and Recovery Act

None

Underground Injection Control under the Safe Drinking Water Act

None

NPDES Program under the Clean Water Act

None

Nonattainment Program under the Clean Air Act

None

National Emissions Standards for Hazardous Air Pollutants Preconstruction Approvals under the Clean Air Act

None

Ocean Dumping Permits under the Marine Protection Research and Sanctuaries Act

None

Dredge or Fill Permits under Section 404 of the Clean Water Act

None

Puerto Rico Environmental Quality Board (DS-1)

Permit to Transport Non-Hazardous Solid Wastes (SR-02-62-0032)

Used Oil Generator Permit (AU-98-6205-75-RM)

Puerto Rico Department of Natural Resources and the Environment

Permits to remove vegetation and sediment accumulated on municipal streams:

(R-R5-PCA01-MA-00002-26112008)

STORM WATER SEWER MAP

The Municipality of Sabana Grande Storm Water Sewer System in the urban area in general consist of a series of open channel culverts and catch basins, located within the right-of-way of municipal and state roads, interconnected by underground concrete or PVC pipes which normally discharge to the Guanajibo River. Another two watershed areas, east of the pueblo ward, discharges on the Grande River and the Loco River. As a summary, the Urban Area of the Sabana Grande Municipality is part of three (3) watersheds.

Watershed #1 collects runoff from the Pueblo ward, the southern part of Santana Ward and the northern part of the Rayo ward. Runoff from this area runs towards the Guanajibo River. The Guanajibo River runs from north to south and runs towards San German, Hormigueros and Mayagüez Municipalities prior to discharge into the Mayagüez Bay.

Watershed #2 collects runoff from the Rincon Ward and discharges it on the Grande River which eventually joins the Guanajibo River.

Watershed #3 collects runoff from the eastern part of Torre Ward and from the northern part of Machuchal Ward and discharges it on the Loco River.

As the Sabana Grande Municipality implements the proposed Storm Water Management Program a more accurate description of the MS4s can be provided.

Included in Figure 3, is a topographic map depicting the watersheds and the runoff behavior of the Sabana Grande Urban Area.

NATURE OF THE BUSINESS

Our goal is aimed at establishing mechanisms to ensure that all instruments of skilled labor, technical and administrative, related to municipal administration, are dynamic and changing.

It is necessary not to lose their effectiveness or their usefulness and to keep pace with the changes happening in our city.

The plans, regulations, standards, systems and procedures relating to human resource management require ongoing review and amendment to constitute effective tools for administrative work.

ESTIMATED SQUARE MILEAGE SERVED BY THE MS4

The municipal urban area has a population of 8,784 and a territorial extension of approximately 1.68 square miles.

The municipality has a territorial extension of 35.89 miles of which 1.68 square miles are classified as urban area (for purposes of our MS4 management plan, only the delineated urban area is considered the service area of the municipality storm sewer system).

BEST MANAGEMENT PRACTICES

Minimum Control Measure 1 – Public Education and Outreach

- ❖ *Distribution of Storm Water Related materials: pamphlets, booklets, and flyers*

Minimum Control Measure 2 – Public Involvement and Participation

- ❖ *Annual Cleanup (rivers, streams, catch basins)*
- ❖ *Reforestation Programs*

Minimum Control Measure 3 – Illicit Discharge Detection and Elimination

- ❖ *Storm sewer system map*
- ❖ *Program to detect, identify and eliminate illicit discharges*
- ❖ *Program to detect, identify and eliminate illegal dumping*
- ❖ *Program to detect, identify and eliminate wastewater connections to the storm drain system*
- ❖ *Program to detect, identify and eliminate sanitary sewer overflows*
- ❖ *Program to detect, identify and eliminate failing septic systems*

Minimum Control Measure 4 – Construction Site Storm Water Runoff Control

- ❖ *Site Inspection and Enforcement*

Minimum Control Measure 5 – Post Construction Storm Water Management in Development and Re-development

- ❖ *BMP Inspection and Maintenance*

Minimum Control Measure 6 – Pollution Prevention (Good Housekeeping for
Municipal Operations)

- ❖ *Municipal Employees Training*
- ❖ *Parking Lot and Street Cleaning Program*
- ❖ *Storm Drain System Cleaning Program*
- ❖ *Spill Response and Prevention Program*
- ❖ *Used Oil Recycling Program*
- ❖ *Recycling*

**PERSON RESPONSIBLE FOR IMPLEMENTING OR COORDINATING THE
APPLICANT'S STORM WATER MANAGEMENT PROGRAM**

Mr. Raymundo Martínez
DTPW Director
(787) 873-0820