

MUNICIPALITY OF OROCOVIS

Estado Libre Asociado de Puerto Rico

PO Box 2106

Orocovis, PR 00720

Honorable Jesús E. Colón Berlingeri

Mayor

CEPD-DIRECTOR OFFICE

2009 OCT 28 PM 1:11

U.S. ENV. PROT. AGENCY

NOTICE OF INTENT

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

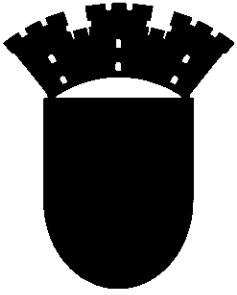
GENERAL PERMIT

**MUNICIPALITY OF OROCOVIS
EPA REGION 2 PUERTO RICO**

PREPARED BY RIQUEL

REVIEW BY MUNICIPALITY OF OROCOVIS

OCTOBER 2009



ESTADO LIBRE ASOCIADO DE PUERTO RICO
GOBIERNO MUNICIPAL DE OROCOVIS

Jesús E. Colón Berlingeri
ALCALDE

September 17, 2009

Carl Axel P. Soderberg
Director
Caribbean Environmental Protection Division
United States Environmental Protection Agency
Multi-Media Permits and Compliance Branch
Europa Building Center, Suite 417
1492 Ponce de León Avenue
San Juan, PR 00907

Notice of Intent for General Permit for Discharges from Small Municipal Separate Storm Sewer Systems

Dear Mr. Soderberg:

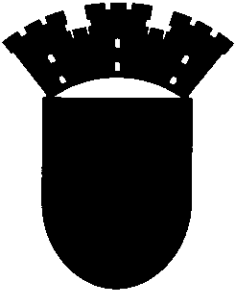
In compliance with the provisions of the Clean Water Act, the Municipality of Orocovis must submit a Notice of Intent to obtain the authorization to discharge pollutants to waters of the United States in accordance with the conditions and requirements set forth in 40 CFR 122.33.

It is our privilege to present to the EPA, Orocovis Notice of Intent to obtain the NPDES permit for the municipality's Storm Sewer System Discharge.

If you need more information, you can contact Mr. Luis A. Meléndez Rodríguez, Director of the Department of Transportation and Public Works at (787) 867-5000.

Sincerely,

Hon. Jesús E. Colón Berlingeri
Mayor



ESTADO LIBRE ASOCIADO DE PUERTO RICO
GOBIERNO MUNICIPAL DE OROCOVIS

Jesús E. Colón Berlingeri
ALCALDE

CERTIFICATION

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 the Orocovis Municipality properly gather and evaluate the information submitted by Riquel. Based on my inquiry of the person or persons who managed 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.

Hon. Jesús E. Colón Berlingeri
Mayor

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 Orocovis.

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 Orocovis 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 yet to issue a general NPDES Phase II permit for regulated MS4s. The EPA is requesting municipal storm sewer operators to apply for a NPDES permit as required by 40 CFR 122.33.

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

PERMITTEE GENERAL INFORMATION

The Orocovis MS4 is currently owned and operated by the municipality under the direction of its mayor, Hon. Jesús E. Colón Berlingeri. The Department of Transportation and Public Works (DTPW) will be the office responsible to implement and uphold the proposed storm water program. Mr. Luis A. Meléndez Rodríguez, Director of DTPW, will be the person responsible for assuring the program maintains its proposed schedule.

The Municipality of Orocovis is located in the Central Mountain Range at Latitude 18°13'37 North, 66°23'28 West. It is located North of Villalba and Coamo; South of Morovis and Corozal; Southeast of Ciales; East of Jayuya; and West of Barranquitas. It has a territorial extension of 63.66 square miles.

Orocovis possesses a population of 23,844 inhabitants, according to the 2000 Census.

Orocovis is spread over into 17 wards: Ala de la Piedra, Barros, Bauta Abajo, Bauta Arriba, Bermejales, Botijas, Cacaos, Collores, Damián Abajo, Damián Arriba, Gato, Mata de Cañas, Orocovis, Orocovis Pueblo (The downtown area and the administrative center of the city), Pellejas, Sabana y Sallos.

Figure 1 below, shows the Orocovis's wards distribution.



The soil associations of Orocovis are mainly: Maricao-Los Guineos.

These soils formed in residuum weathered from basic volcanic rocks. They are steep to very steep. They are used for food crops, pasture, and forest. They receive moisture throughout the year and are not deficient in moisture needed for the common crops. The landscape is mountainous and is strongly dissected by intermittent streams. Steep to very steep side slopes and ridges are common.

The Maricao soils are deep to hard rock, well drained, and clayey. They are on strongly dissected uplands where slope gradients are 20 to 60 percent.

The Los Guineos soils are deep to hard rock, moderately well drained, and clayey. They are on side slopes having gradients of 20 to 60 percent.

This unit in general has severe limitations for farming because of the slope and the erosion hazard. Steep slopes and the erosion hazard make fieldwork costly and difficult.

The hydrological system consists of the following water bodies: the Toro Negro River, the Sana Muertos River, Matrullas River, Bauta River and the Orocovis River. The Toro Negro River forms in the Ala de Piedra sector from its tributaries, the Matrullas and Bauta rivers and the Doña Juana, Palmar and Cacaos streams. This river is 32 kilometers (20 miles) in length. The Matrullas River originates in the Bauta Abajo sector and is fed by the Novillo stream. The Bauta forms in the Bauta Arriba sector and its tributaries are the Cangilones, Damián and Riachuelo streams and the Culebra River.

The Sana Muertos River originates in the Saltos sector. Its tributaries are the Barros, Ciénaga and Los Cabros streams. The Orocovis River forms in the Sabana sector. Its tributaries are the Botijas River and Los Saltos, El Gato and Grande streams.

Orocovis also has two lakes that serve as reservoirs: the Guineo, which is formed within the Toro Negro River, and the Matrullas, which is formed by the Bauta river, in the Bauta sector. To the north of the lake is the Toíta peak and to the southeast is La Francia peak. Matrullas is the second-largest reservoir on the island and is used to produce electricity, for fishing, for aquatic recreation and as a water source.

Most of the Orocovis terrain runs through the Cordillera Central of the island. Most of the high peaks are in the southern region of the town within the limits of the municipality with Villalba and Coamo. The highest peak of the town is Cerro Mogote.

The annual precipitation is approximately 90 inches.

Figure 2 depicts the municipality's hydrology.

ACTIVITIES SUBJECT TO NPDES PERMIT APPLICABILITY

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

According to a new definition on the 2000 Census Bureau, Orocovis is predominantly urban. There is only five (5) out of seventeen wards which are identify as totally rural areas (Bauta Abajo, Cacao, Collores, Damián Abajo and Pellejas). The rural population is 6,644 or 27.9%. The remaining twelve (12) wards are predominantly urban with a population of 17,200 or 72.1%. This new definition is based on population density and concentration irrespectively of location. For this reason, wards evidently rural are now identified with the majority of its population as urban. (for purposes of our MS4 management plan, only the delineated urban area is considered the service area of the municipality storm sewer system).

An aerial photo detailing the urban area of the town is provided on Figure 3 of this report.

The main users of the Orocovis MS4 are residences in the urban region of the town. Three (3) schools, three (3) hospitals and one (1) commercial complex or industrial lot have been identified within the Pueblo area of Orocovis. 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. No primary pollutant sources of the Orocovis MS4 have been identified. According to municipal personnel, the municipality has no reported problems with illegal dumps or illegal connections into the storm sewer system. A major pollutant source could be the areas were no sanitary system exists and instead are served with septic tanks, however, no problems have been identified yet.

NAME, MAILING ADDRESS, AND LOCATION OF FACILITY FOR WHICH THE APPLICATION

Municipality of Orocovis
PO Box 2106
Orocovis, PR 00720
Tel: 787-867-5000

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)

Mr. Luis A. Meléndez Rodríguez
Director, Department of Transportation and Public Works
PR-156, Km. 2.1 Interior, Las Marianas Ward
Orocovis, Puerto Rico
(787) 867-5000 ext. 2279

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-55-0270)
Used Oil Generator Permit (99-55-0638)

Puerto Rico Department of Natural Resources and the Environment

None

STORM WATER SEWER MAP

The Orocovis Municipality 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 roads, interconnected by underground PVC pipes that either discharge on the Orocovis River or the Botijas River.

As a summary, the Urban Area of the Orocovis Municipality is part of two (2) watersheds or runoff areas located on the eastern part of the municipality.

Watershed #1 collects runoff from the Gato, Mata de Cañas, Orocovis, Barros, Saltos and Sabana Wards. Runoff from this area runs towards the Orocovis River. The Orocovis River runs from south to north and discharges on Grande de Manatí River.

Watershed #2 collects runoff from the Botijas Ward and discharges it on the Botijas River which eventually connects with the Orocovis River.

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

Included in Figure 4, is a topographic map depicting the watersheds and the runoff behavior of the Orocovis Urban Area.

NATURE OF THE BUSINESS

The mission of the Orocovis municipality is to orientate their objectives, programs and strategies for the consecution of its fundamental purpose which is a better quality of life for all its citizens.

ESTIMATED SQUARE MILEAGE SERVED BY THE MS4

According to a new definition on the 2000 Census Bureau, Orocovis is predominantly urban. There is only five (5) out of seventeen wards which are identify as totally rural areas (Bauta Abajo, Cacaos, Collores, Damián Abajo and Pellejas). The rural population is 6,644 or 27.9%. The remaining twelve (12) wards are predominantly urban with a population of 17,200 or 72.1%. This new definition is based on population density and concentration irrespectively of location. For this reason, wards evidently rural are now identified with the majority of its population as urban.

The municipality has a total territorial extension of 63.66 miles of which 41.06 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
- Educate Public Employees
- 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

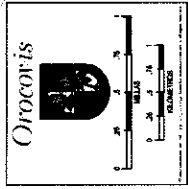
Mr. Luis A. Meléndez Rodríguez
Director, Department of Transportation and Public Works
PR-156, Km. 2.1 Interior, Las Marianas Ward
Orocovis, Puerto Rico
(787) 867-5000 ext. 2279

Figure 2

Orocovis Hydrology

COROZAL

BARRANQUITAS



MOROVIS

COAMO

VILLALBA

CIALES



JAYUYA

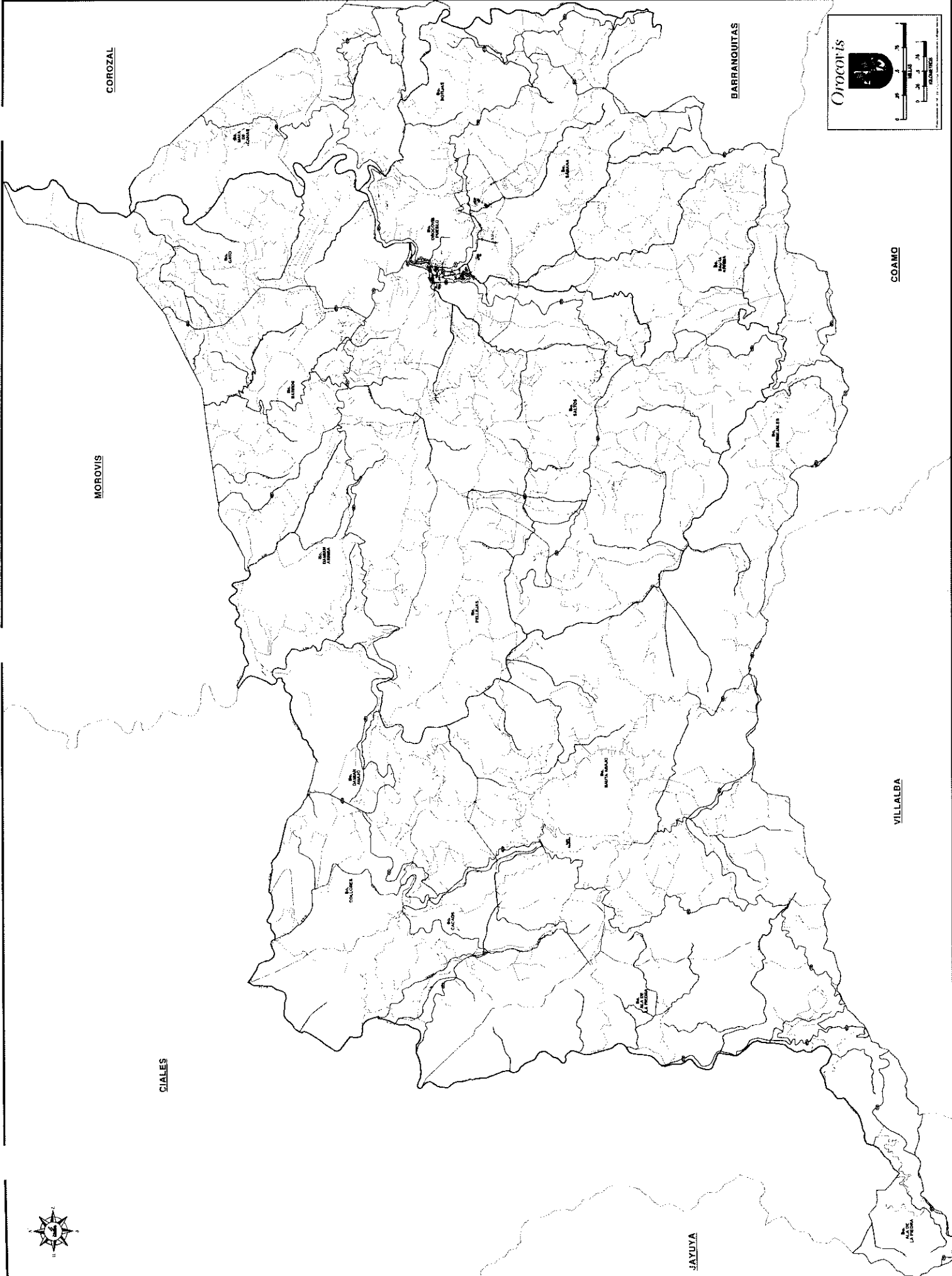
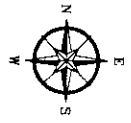


Figure 3

Topographic Map Depicting the Watersheds and Runoff Behavior



- Legend:**
- Municipality Limit
 - Watershed
 - River
 - - - - - Creek
 - Runoff Direction

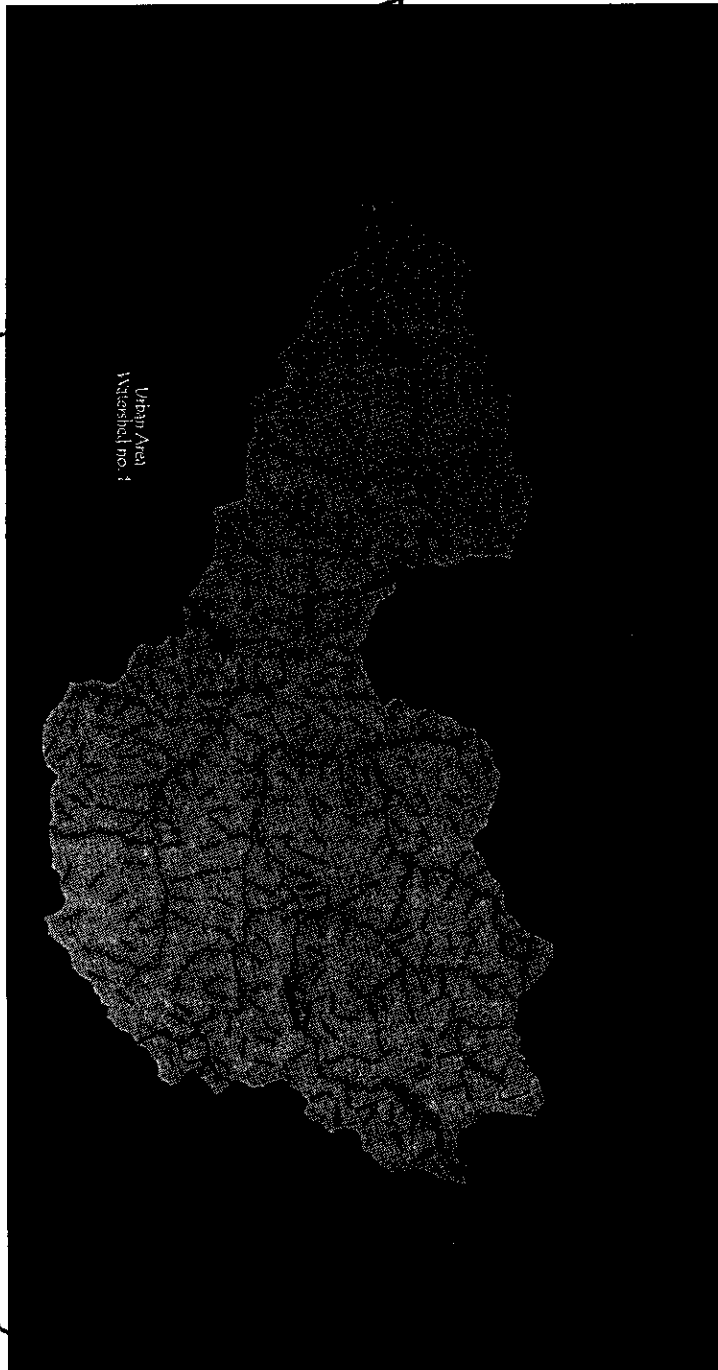
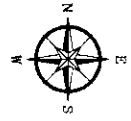
Urban Area 2
Watershed no. 2

Urban Area 1
Watershed no. 1

	CLIENT'S NAME S. WALK	PROJECT TITLE PUEBLO DE OROCOVIS	ADDRESS NO. _____ ST. _____		ECO CONSULTING GROUP 517 CUEVAS BUSTAMANTE, USRD PARQUE CENTRAL, HATO REY PR 00918 TEL: (787) 469-1200 FAX: (787) 461-7218 EMAIL: info@ecoconsulting.com
	DATE OCTOBER 19, 2007	PROJECT LOCATION OROCOVIS, PUERTO RICO	PROJECT NO. _____		
	SCALE NOT TO SCALE	PROJECT DESCRIPTION WATERSHED AND RUNOFF DIRECTION	PROJECT NO. _____		

Figure 4

Orocovis Urban Area



- Legend:**
- Municipality Limit
 - ===== Watershed
 - ==== River
 - Cheek
 - > Runoff Direction

	CLIENT P: S. BAEZ	PROJECT NO.: PUEBLO DE OROCOVIS OROCOVIS, PUERTO RICO	ADDRESS: No. _____ St. _____ City _____ State _____ Zip _____	ECO CONSULTING GROUP 517 CUEVAS BUSTAMANTE, URB. PARQUE CENTRAL, HATO REY PR 00916 TEL: (787) 468-1100 FAX: (787) 468-1101
	DATE: 08 FEBRUARY 2008	AERIAL PHOTO	SCALE:	