



May 16, 2017

Team Leader  
Clean Water Act Team  
Multimedia Permits and Compliance Branch  
Caribbean Environmental Protection Division  
U.S. Environmental Protection Agency, Region 2  
City View Plaza II, Suite 7000  
#48 Rd. 165 km 1.2  
Guaynabo, PR 00968-8069

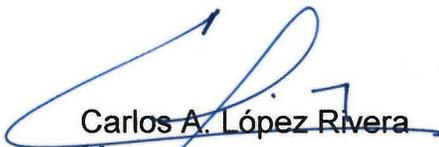
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**REQUEST FOR INFORMATION  
NOI UNDER THE 2016 SMALL MS4 GENERAL PERMIT  
NPDES PERMIT TRACKING NUMBER PRR040023  
CEPD-CWA-02-IF-2017-033**

Dear Team Leader:

On September 29, 2016, the Municipality of Dorado submitted a Notice of Intent for coverage under the NPDES Permit no. PRR040023. After that submittal, the EPA issued a letter, dated March 29, 2017, requesting the Municipality to submit missing or incomplete information from the NOI, in order to complete its evaluation and approval. We are hereby submitting the requested information. Specifically, we are including the first 4 pages of the NOI, which contain all of the changes made, along with 3 new maps: 1) Location Map / Boundaries, 2) Dorado Hydrography Map, and 3) Dorado Wetlands Map. If you need additional information, do not hesitate to contact us at the Mayor's Office at 787-796-1230 or via e-mail at [carlos.lopez@dorado2025.com](mailto:carlos.lopez@dorado2025.com).

Sincerely,

  
Carlos A. López Rivera  
Mayor

Enclosure:  
Missing or incomplete information

Oficina del Alcalde

AUTONOMOUS MUNICIPALITY OF DORADO

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

INDIVIDUAL PERMIT

MUNICIPALITY OF DORADO

EPA REGION 2 PUERTO RICO

PREPARED BY  
ECOSTAHLIA CONSULTORES AMBIENTALES  
SAN JUAN, PUERTO RICO

**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: Municipality of Dorado
2. Type :  Federal  State  Municipality  Other: \_\_\_\_\_
3. Existing Permittee:  Yes  No If yes, provide EPA NPDES Permit Number: PRR040023
4. Location Address:
  - a. Street: Méndez Vigo and San Quintín corner, Pueblo Ward
  - b. City: Dorado State: PR Zip Code: 00646
5. Mailing Address:
  - a. Street: PO Box 588
  - b. City: Dorado State: PR Zip Code: 00646
6. Telephone Number: 787-796-1230 Fax: (787) 796 - 3660
7. E-mail: carlos.lopez@dorado2025.com
8. Standard Industrial Classification (SIC) Code (see instructions for common codes): 9199
9. Latitude: (use the format provided.) Longitude: (use the format provided.)  
2.2.4.2 Approximate *center of the regulated portion of the MS4.*

Latitude: 18°26'01.05" N  
Longitude: 66°16'54.92" W

**Part B. Primary MS4 Program Manager Contact Information**

1. Name: Alexis A. Ramos, PPL
2. Position Title: Director of the Planning and Land Use Office
3. Stormwater Management Program (SWMP) Location (web address or physical location):  
Planning and Land Use Office, Municipality of Dorado's City Hall's Annex Building, Calle Méndez Vigo # 310, Dorado, PR
4. Mailing Address:
  - a. Street: PO Box 588
  - b. City: DoradoState: PR Zip Code: 00646
5. Telephone Number: 787-796-1230
6. E-mail: alexis.ramos@dorado2025.com

**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):
2. Dorado is located in the northern coast of Puerto Rico at latitude 18° 26'01.05" N and longitude 66°16'54.92" W. The town has borders with Toa Baja and the La Plata River to the East, Toa Alta to the South, the Atlantic Ocean to the North, and the Municipality of Vega Alta to the West. It has a territorial extension of 23.5 square miles. It is spread over 6 wards:
  - Espinosa
  - Higuillar
  - Mameyal
  - Pueblo
  - Maguayo

- Río Lajas

According to the 2010 Census, the municipality has a population of 38,165 inhabitants. The town is surrounded by agricultural lands, the ocean and the Karstic Zone. The municipality is embedded in the Northern Karstic Region. The presence of limestone increases the existence of sinkholes in the southern tip of the town. The Municipality of Dorado is within the La Plata River water basin, and has a shoreline of approximately 13.5 kilometers facing the Atlantic Ocean. The majority of its storm waters drain towards the La Plata River, which reaches its final destination in the Atlantic Ocean inside the Dorado boundary. The MS4 of the Municipality of Dorado contains a wide range of discharges, including existing residential, commercial, industrial, agricultural and tourist developments, along with ongoing constructions for a variety of similar uses.

The Municipality of Dorado covers a total area of 23.5 square miles (15,489 cuerdas). Of these, approximately 8.35 square miles (around 5,500 cuerdas, or 36% of the total area) are considered to form the urbanized area, according to the Municipality's Land Use Plan. Despite that fact, according to the 2010 Census Urbanized Area Map (see figure), most of the Municipality of Dorado is considered to be an urbanized area by the EPA. The only part of the Municipality not considered to form part of the urbanized area is the majority of the Mameyal ward, which lies East of the La Plata River, except for a small section South of PR-6165, which is considered to be urbanized.

Inside this urbanized area, there are three (3) gated communities where the streets are private, owned by each respective residents' association. Because the Municipality does not own the streets in these communities, nor the storm sewers that lie within them, they should not be included as part of the Municipality's MS4. These communities are: Sabanera Dorado, Brighton Country Club, and Dorado Beach East.

3. 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*): 50%
  - a. If 100% of 2006 requirements are not met, enter an estimated date of completion: 06/30/2017  
(MM/DD/YYYY)
  - b. Web address where MS4 map is published: PDF copy of the map included with the NOI  
*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: 10/29/2014  
(MM/DD/YYYY)

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

a. Effective Date or Estimated Date of Adoption: 06/30/2017  
(MM/DD/YYYY)

3. Post-Construction Stormwater Management adopted?  Yes  No

a. Effective Date or Estimated Date of Adoption: 06/30/2017  
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(MM/DD/YYYY)
2. Construction/Erosion and Sediment Control authority adopted?  Yes  No

a. Effective Date or Estimated Date of Adoption: 06/30/2017  
(MM/DD/YYYY)

3. Post-Construction Stormwater Management adopted?

Yes  No

a. Effective Date or Estimated Date of Adoption: 06/30/2017  
(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.

<b>Waterbody Segment that receives flow from the MS4</b>	<b>Number of Outfalls into receiving waterbody segment</b>	<b>Has any monitoring been performed to outfalls? (Yes/No)</b>	<b>List of Pollutant(s) causing impairment (if applicable)</b>	<b>List of TMDL Pollutant (s) (if any)</b>
Río La Plata	17 were identified between 2015 and 2016	No	The segment known as Estuary does not have any list of pollutants according to the EPA or the EQB.	Unknown
Marshes and wetlands south and north of the urban center	2 identified during 2015 and 2016 surveys.	No	Total coliforms, fecal coliforms,	Fecal coliforms
Atlantic Ocean	6 identified during 2015 and 2016 surveys	No	None	Fecal Coliforms

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

For every measurable goal and associated Best Management Practice (BMP) listed in the adopted program, provide the following information (You may include additional pages):

<b>MCM 1 – PUBLIC EDUCATION AND OUTREACH</b>	<b>Goal Achieved? (Yes/No)</b>	<b>Continued in next permit cycle? (Yes/No)</b>	<b>Who was the targeted audience? Explain reason for not achieving goal.</b>	<b>Modification(s) to goals or BMP for next permit cycle</b>
BMP-1- School education campaign	Yes	Yes	Public Meetings, School Students.	Number of residents attending the events. To target 200 students every year city-wide. No changes to the proposed goals in the next cycle.
BMP-2 Development and Distribution of Storm Water Related Materials	Yes	Yes	Written information was distributed to more than 300 persons in more than 6 activities during this year.	None. Was completed during last permit, but the Municipality is expecting to continue with the BMP.
BMP-3 Storm Water Web Page	No	Yes	Not started. In July 2016 the Municipality contracted a specialized firm that is going to help them implement this goal.	They Municipality will continue with minor changes.
<b>MCM 2 – PUBLIC INVOLVEMENT &amp; PARTICIPATION.</b>	<b>Goal Achieved? (Yes/No)</b>	<b>Continued in next permit cycle? (Yes/No)</b>	<b>Who was the targeted audience? Explain reason for not achieving goal.</b>	<b>Modification(s) to goals or BMP for next permit cycle</b>
BMP-1 Storm Drain Stenciling Program	No	Yes	General Public and Homeowners. One of the residential projects was completed but the project is aimed to include the urban center. The relocation of financial resources to complete other tasks of the permit.	The Municipality will continue with the same target goals.
BMP-2 Annual Cleanup	Yes	Yes	General Public. The targeted goal was achieved.	The Municipality will continue with the same target goals.
BMP-3 Public Involvement Program	No	Yes	Local Residents. The need for relocating funds to conduct other tasks within the NPDES Permit.	The Municipality will continue with the effort in the new cycle.

BMP-4 Community Hotline	No	Yes	Local Residents. This is an ongoing process.	The effort will continue during the new cycle.
<b>MCM 3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION</b>	<b>Goal Achieved? (Yes/No)</b>	<b>Continued in next permit cycle? (Yes/No)</b>	<b>Who was the targeted audience? Explain reason for not achieving goal.</b>	<b>Modification(s) to goals or BMP for next permit cycle</b>
BMP-1 Storm Sewer System Map	No	Yes The municipality may have to add new sections if new urban development is completed	Citywide	None. The task will continue during the next cycle.
BMP-2 Implement Regulations to Enforce Non-Storm Discharges	No	Yes	Ordinance and regulation approved on 10/29/2014. Local Residents. The Municipality needed information on the impact from new regulations on a weak local economy.	For the next cycle the Municipality will complete the implementation of the ordinance and regulation addressing Non-Storm Discharges.
BMP-3 Educational Outreach	No	Yes	Local (K-12) and college students. More than 200 students were reached. There were not enough economical resources to reach the proposed goal.	The Municipality will focus its efforts in the K-12 groups to increase the efficiency in using local funds.
BMP-4 Program to Detect, Identify and Eliminate Illicit Discharges	No	Yes	Residences city wide. This is an ongoing effort. The Municipality, with the support of a local firm, has identified 380 illegal discharges around urban areas. There still are areas in need of a survey.	The Municipality will continue with the effort during the new cycle.
BMP-5 Program to Detect, Identify and Eliminate Illegal Solid Waste Dumping	Yes	Yes	The ordinance and its regulation was approved on 10/29/2016. Local residents. The Municipality will enforce full force the ordinance starting in January, 2017.	As part of the new cycle, the municipality will continue with this effort.
BMP-7 Program to Detect and Eliminate Sanitary Sewer Overflows	No	Yes	Urban Areas. Lack of available funding. The task will be continued during the new cycle. The Municipality will continue working with PRASA to address the issue.	The Municipality will allocate funds to continue this task during the new cycle.

BMP-8 Program to Detect and Eliminate Failing Septic Systems	No	Yes	Urban Areas This is an ongoing issue. The Municipality will continue providing support to PREQB.	The Municipality will continue providing support to PREQB
<b>MCM 4 – CONSTRUCTION SITE STORM WATER RUN OFF CONTROL</b>	<b>Goal Achieved? (Yes/No)</b>	<b>Continued in next permit cycle? (Yes/No)</b>	<b>Who was the targeted audience? Explain reason for not achieving goal.</b>	<b>Modification(s) to goals or BMP for next permit cycle</b>
BMP-1 Ordinance or Other Regulatory Mechanism	No	Yes	Local Residents The Municipality needed information on the impact from new regulations on a weak local economy.	For the next cycle the Municipality will complete the approval of the draft ordinance and regulation addressing Stormwater Runoff from Construction Sites.
BMP-2- Construction Site Storm Runoff Control Requirements.	No	Yes	Contractors and Developers. The Municipality focused its efforts on getting the contractors to comply with the PREQB runoff control requirements.	It will continue during the next cycle depending on the number of new projects being developed.
BMP-3 Construction Site Storm Runoff Control Project Inspection and Monitoring Program.	Yes	Yes	City-wide residents. Municipal staffers visited most of the projects. More needs to be done.	The Municipality will allocate the necessary funds to complete this task.
BMP-4 Construction Site Storm Runoff management Training Program.	No	No	Contractors and Developers City-wide.	After reviewing the existing projects, the Municipality decided to refocus efforts on other areas.
BMP-5- Construction Site Storm Runoff Control Program Performance Metrics.	No	Yes	Contractors and Developers City-wide	The Municipality will continue with this effort in the next cycle.

<b>MCM 5 – POST CONSTRUCTION STORM WATER MANAGEMENT DEVELOPMENT &amp; REDEVELOPMENT</b>	<b>Goal Achieved? (Yes/No)</b>	<b>Continued in next permit cycle? (Yes/No)</b>	<b>Who was the targeted audience? Explain reason for not achieving goal.</b>	<b>Modification(s) to goals or BMP for next permit cycle</b>
BMP-1 Ordinances or other regulatory mechanism	No	Yes	Local Residents. Urban Development Boards. The Municipality needed information on the impact from new regulations on a weak local economy.	For the next cycle the Municipality will complete the approval of the draft ordinance and regulation addressing Post-Construction BMPs.
BMP 2 Structural - Runoff Pretreatment Practices	No	Yes	City-wide. The lack of new projects where to implement this task delayed the completion.	The Municipality will implement the task during the new cycle.
BMP-3a Structural Post Construction Storm Water Management Strategies and Plans BMP.	No	Yes	Developers. Structural Strategies to manage post construction storm water – this includes actions to be required from contractors when making new facilities for the post construction management phase.	The Municipality will continue with the effort during the new cycle.
BMP-3b Non Structural Post Construction Storm Water Management Strategies and Plans BMP.	No	Yes	Developers and Contractors. Non-Structural Post Construction Storm Water Management Strategies and Plans – Management Document.	The Municipality will continue with the effort during the new cycle.
BMP 3c Nonstructural-Develop an alternative paver program	No	Yes	City-wide. The lack of technical resources delayed the implementation of this task.	The Municipality will continue the implementation during the new cycle.
BMP 3d Nonstructural-Develop an education program for developers and public	No	Yes	City-wide, Residents and Developers. The Municipal government did not have the necessary funds to complete this task.	The Municipality will allocate the funds to complete this task during the new cycle.

<b>MCM 6 – POLLUTION PREVENTION (GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS)</b>	<b>Goal Achieved? (Yes/No)</b>	<b>Continued in next permit cycle? (Yes/No)</b>	<b>Who was the targeted audience? Explain reason for not achieving goal.</b>	<b>Modification(s) to goals or BMP for next permit cycle</b>
BMP-1 Pollution Prevention/Good Housekeeping for Facilities Operation and Maintenance Strategies and Plans BMPs.	Yes	Yes	Municipal Employees at Public Works. A Standard Operating Procedure was developed for the Municipality.	The effort will continue during the next cycle.
BMP-2 Pollution Prevention/Good Housekeeping for Facilities Operation and Maintenance Inspection, Monitoring and Maintenance Program.	Yes	Yes	Municipal Employees. Pollution Prevention/Good Housekeeping Program Inspection and Monitoring Protocol approved and enforced.	The effort will continue during the next cycle.
BMP-3 Pollution Prevention/Good Housekeeping for Facilities Training Program.	Yes	Yes	Municipal Employees. Twice a year, municipal employees receive basic training on BMPs.	The effort will continue during the next cycle.

**Part I. 2016 Stormwater Management Program (SWMP) Summary**

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

<b>MCM 1 – PUBLIC EDUCATION AND OUTREACH.</b>	<b>Education Topic (Identify the issue your BMP is educating the public about.)</b>	<b>Outreach Method (Describe the method used to convey this topic, e.g. mailing, events, school, etc.)</b>	<b>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.)</b>
BMP-1 Storm Drain Stenciling Program	Non-Point Sources and Illegal Discharges	Storm Drains Stenciling	Number of storm water inlets painted and volunteers participating. The target is to have a minimum of 50 drains marked on yearly basis.
BMP-2 Annual Cleanup	Non-Point Sources	Volunteer and residents' participation	Number of tons of debris and recyclables collected during the cleanup events. The target is to collect 1 ton per year but to reduce the amount based on the success of the program.
BMP-3 Public Education Program	Illegal Discharges, Non-Point Sources and Erosion Control	Public Meetings, School Lectures	Number of residents attending the events. To target 200 students every year city-wide.
BMP-4 Community Hotline	Illegal Discharges and Non-Point Sources	Through the general outreach activities, the Municipality encourages the use of the hotline to address the problems.	Number of calls and referrals to correct illegal discharges and non-point sources of pollution.
BMP-5 Social Media Education Campaign	Illegal Discharges, Non-Point Sources and Erosion Control	Posting of educational clips and messages in Facebook, Twitter, Instagram and Snapchat	Number of messages distributed, shared and viewed on a weekly basis.

**Part I. 2016 Stormwater Management Program (SWMP) Summary (continued)**

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

<b>MCM 2 – PUBLIC PARTICIPATION AND INVOLVEMENT</b>	<b>Program Description (Describe the program and how it will inspire public participation, e.g. special events, volunteer sampling and monitoring efforts, household hazardous waste recycling, etc.)</b>	<b>Measurable Goal (What is the end result of this program? What indicator will determine the goal has been met? (e.g., participation, amount of sampling performed, waste collected, etc.)</b>
BMP-1 Storm Sewer System Map	As required by the new permit, the Municipality will prepare the new storm sewer map for the urban areas described in the 2010 Census.	The completion of 100% of the urban areas as described in the 2010 Census.
BMP-2 Implement Regulations to Enforce Non-Storm Discharges	The Municipality of Dorado is working to complete the implementation of the IDDE ordinance and the approval of the ordinances and their regulations addressing Erosion from Construction Projects.	It is expected that the ordinances and their regulations get approved by mid-2017.
BMP-3 Meet with Local NGOs to Involve them in Stormwater Efforts	The Municipality proposes the use of public meetings through the community as a mean to request their involvement in the efforts coordinated by the administration.	The number of volunteers and the total number of communities covered during the public meetings.
BMP-4 Develop and conduct periodical focus groups to discuss the current issues related to pollution from stormwaters	The Municipality proposes the use of focus groups through the community as a mean to request their involvement in the efforts coordinated by the administration.	The number of volunteers participating during the focus groups and the number of issues identified and fixed.
BMP-5 Conduct Public Hearings to address Stormwater issues	The Municipality proposes conducting a yearly Public Hearing to address the most pressing issues related to pollution from Stormwater runoff.	The number of participants and issues identified and resolved as a result from the Public Hearing.

**Part I. 2016 Stormwater Management Program (SWMP) Summary (continued)**

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

<b>MCM-3 - ILLICIT DISCHARGE DETECTION AND ELIMINATION</b>	<b>Program Description (Describe the program and how it will identify and remove illicit connections from the MS4, e.g. new regulations, investigation practices, removal of illicit connections, etc.)</b>	<b>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 investigation performed, identified and removed illicit connections, etc.)</b>
BMP-1 Prepare and implement an ordinance targeting illegal discharges at the storm sewer system	The Municipality approved the local ordinance and the necessary regulation targeting illegal discharges into the storm sewer system. The Municipality still needs to implement the process.	The number of discharges identified and corrected on a yearly basis.
BMP-2 Adopt a Stream Program	The Municipality proposes the development of an adoption program with local partners aimed to target one of the three water bodies located within the urban area of Dorado.	The number of streams or meters adopted and the improvement of the surface water quality of the streams.
BMP-3 MS4Web Permit Manager Tool	Dorado proposes the use of the MS4Web Permit Manager as a mean to provide local residents and municipal managers with an internet based tool to access data on illegal discharges and all storm water outfalls in the city and how to address the issue of illegal discharges.	Number of residents and local managers using the Internet-based tool.
BMP-4 Used Oil Recycling Program	The Municipality of Dorado will implement the Cease the Grease Program as part of the city-wide effort to reduce the illegal discharge of used cooking oil in the storm sewer system and surface water bodies.	The number of gallons of used cooking oil recycled city-wide
BMP-5 Basic Surface Water Quality Monitoring Project	A basic surface water quality monitoring program will be established in a selected stream using parameters like pH, Temperature and Fecal Coliforms	Data from streams will be compared to data obtained on a regular basis by the PR Environmental Quality Board

**Part I. 2016 Stormwater Management Program (SWMP) Summary (continued)**

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

<b>MCM-4 CONSTRUCTION SITE RUNOFF CONTROL</b>	<b>Program Description (Describe the program and how it will help control stormwater runoff at construction sites, e.g. new regulations, construction practices, inspection protocols, etc.)</b>	<b>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 inspections performed and sites actively regulated, etc.)</b>
BMP-1 Ordinance to control runoff from construction sites	The Municipality will prepare, approve and adopt an ordinance specifically targeting runoff from construction sites impacting the stormwater sewer system covered by the permit.	The number of interventions and sites corrected. 100% inspection rate city-wide.
BMP-2 Construction Sites Annual Inventory	The Municipality is required to develop an inventory of all public and private construction projects. The local government proposes the use of the MS4Web Permit Manager to create and maintain the inventory identifying all construction sites. The tool helps the local managers to update the information as needed. All documents associated with the projects will be added in PDF format during the inspections and will be ready available to the inspectors.	The number of projects identified and certified ion compliance with the permit.
BMP-3 Development of SOPs for Construction Permits.	The Municipality proposes the completion of a Construction SOP aimed to provide developers with new means to address regulation requirement and for inspectors to identify deficiencies during inspections.	Number of Projects city-wide visited and brought into compliance with local ordinance and USEPA regulations.
BMP-4 BMPs during construction Poster	The Municipality will prepare and distribute a poster aimed to contractors and construction projects with BMPs specifically design to reduce impacts to the stormwater runoff from construction activities.	A 100% coverage of active and permitted construction projects city-wide.

**Part I. 2016 Stormwater Management Program (SWMP) Summary (continued)**

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

<b>MCM-5 POST-CONSTRUCTION RUNOFF CONTROL</b>	<b>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.)</b>	<b>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.)</b>
BMP-1 Ordinance to control runoff pollution from post-construction projects	The Municipality will prepare, approve and adopt an ordinance specifically targeting runoff from post-construction projects impacting the stormwater sewer system covered by the permit.	The number of interventions and sites corrected. 100% inspection rate city-wide.
BMP-2 Standard Operating Procedures for Post-Construction Projects	The Municipality of Dorado proposes to develop procedures to avoid runoff impacts to nearby surface waterbodies from stormwater controls located on completed construction projects. This will include impacts from retention ponds or non-covered areas prone to high rates of sedimentation.	Number of projects visited and certified in compliance with local ordinances and USEPA regulations.
BMP-3 Brochures	A series of brochures will be developed to be distributed among residents and managers of new and old housing and apartment projects city-wide aimed to educate them in good practices to avoid impacts to the existing stormwater infrastructure.	To distribute no less than 100 copies on a yearly basis.

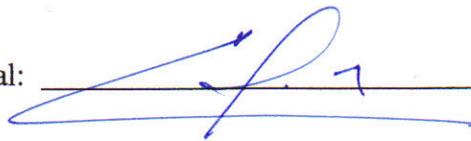
**Part I. 2016 Stormwater Management Program (SWMP) Summary (continued)**

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

<p><b>MCM-6 POLLUTION PREVENTION/GOOD HOUSEKEEPING OF MUNICIPAL OPERATIONS</b></p>	<p><b>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.)</b></p>	<p><b>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.)</b></p>
<p>BMP-1 Trainings for Municipal Employees</p>	<p>The Municipality will provide trainings on BMPs for mechanics, green-areas workers, painters, electricians, and clerical employees on how to address simple issues identified in the daily tasks of Municipal Operations. The trainings will cover oil, paint and fuel spills, emergency response, good housekeeping, material storage, and record keeping.</p>	<p>The Municipality will provide their employees with two (2) workshops/trainings every year addressing BMPs and their responsibility under the USEPA-NPDES Permit.</p>
<p>BMP-2 SOPs for Municipal Operations</p>	<p>The Municipality will continue with the implementation of their Standard Operation Procedures for all the operations and maintenance activities conducted daily at Municipal Public Works. The SOPs will cover all activities that may have an impact on the NPDES-MS4 permit.</p>	<p>Number of inspections completed and certified in compliance with local ordinances and USEPA regulations.</p>
<p>BMP-3 SOPs for Municipal Facilities</p>	<p>The Municipality will develop and implement the required SOP for the operation of municipal facilities including parks and open space maintenance, sidewalks, streets and roads; and auto yards.</p>	<p>Number of inspections completed and certified in compliance with local ordinances and USEPA regulations.</p>
<p>BMP-4 Webinars on Water Quality BMPs</p>	<p>The Municipality proposes offering a webinar to municipal employees on simple BMPs designed to protect their surface water resources.</p>	<p>The number of participants and efforts developed by the employees after the webinar.</p>

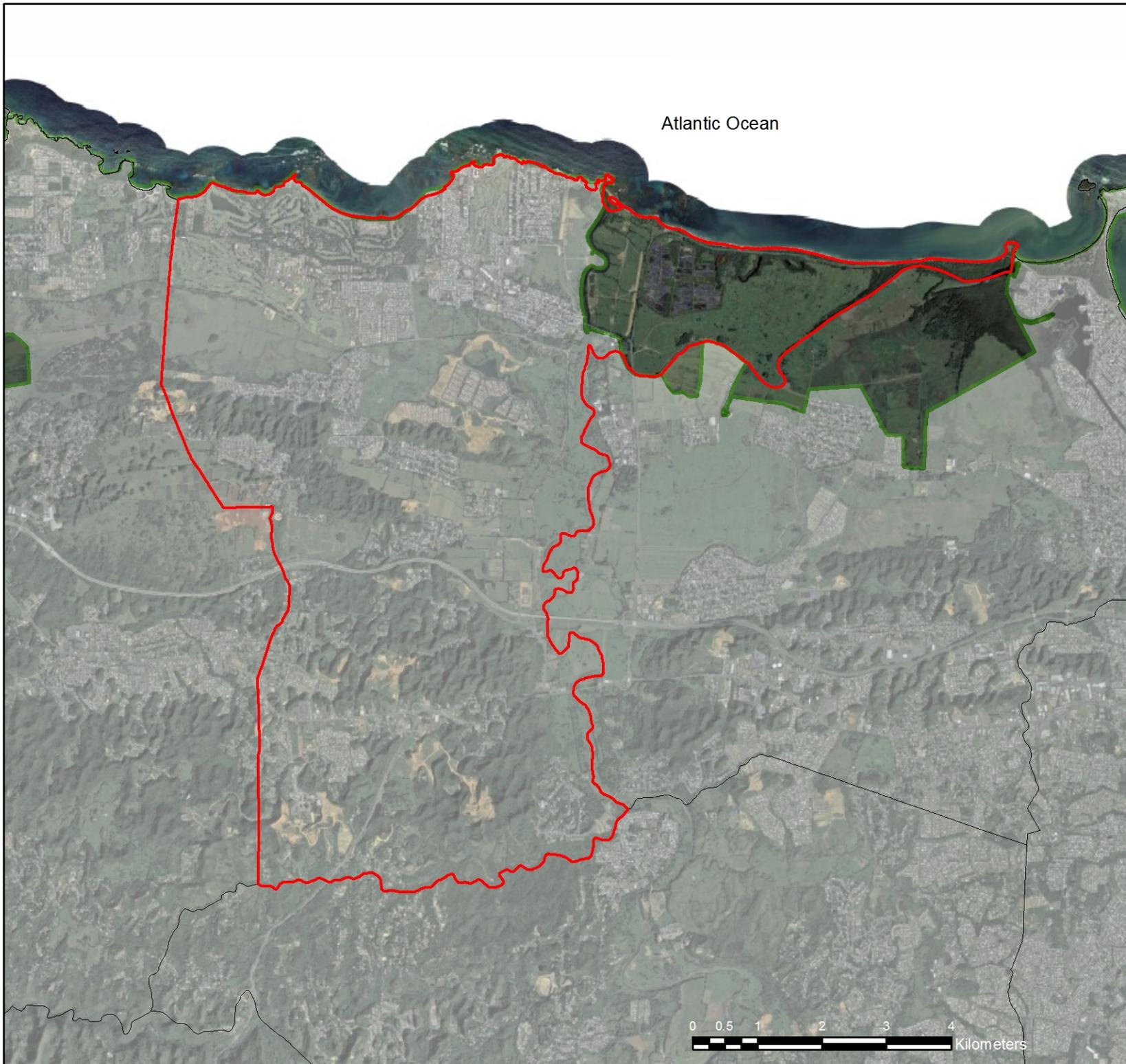
**Part J. Application Certification and Signature**

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: Carlos López Rivera \_\_\_\_\_

Title: Mayor \_\_\_\_\_ Date: May 16, 2017 \_\_\_\_\_



Atlantic Ocean



### Dorado CENUS Urbanized Area Map

**Legend**

**Dorado**

 Dorado

 SJ 2010 Urban Area

Projection: Lambert  
Coordinate System: NAD83 PR StatePlane



Source: JP, CENSUS

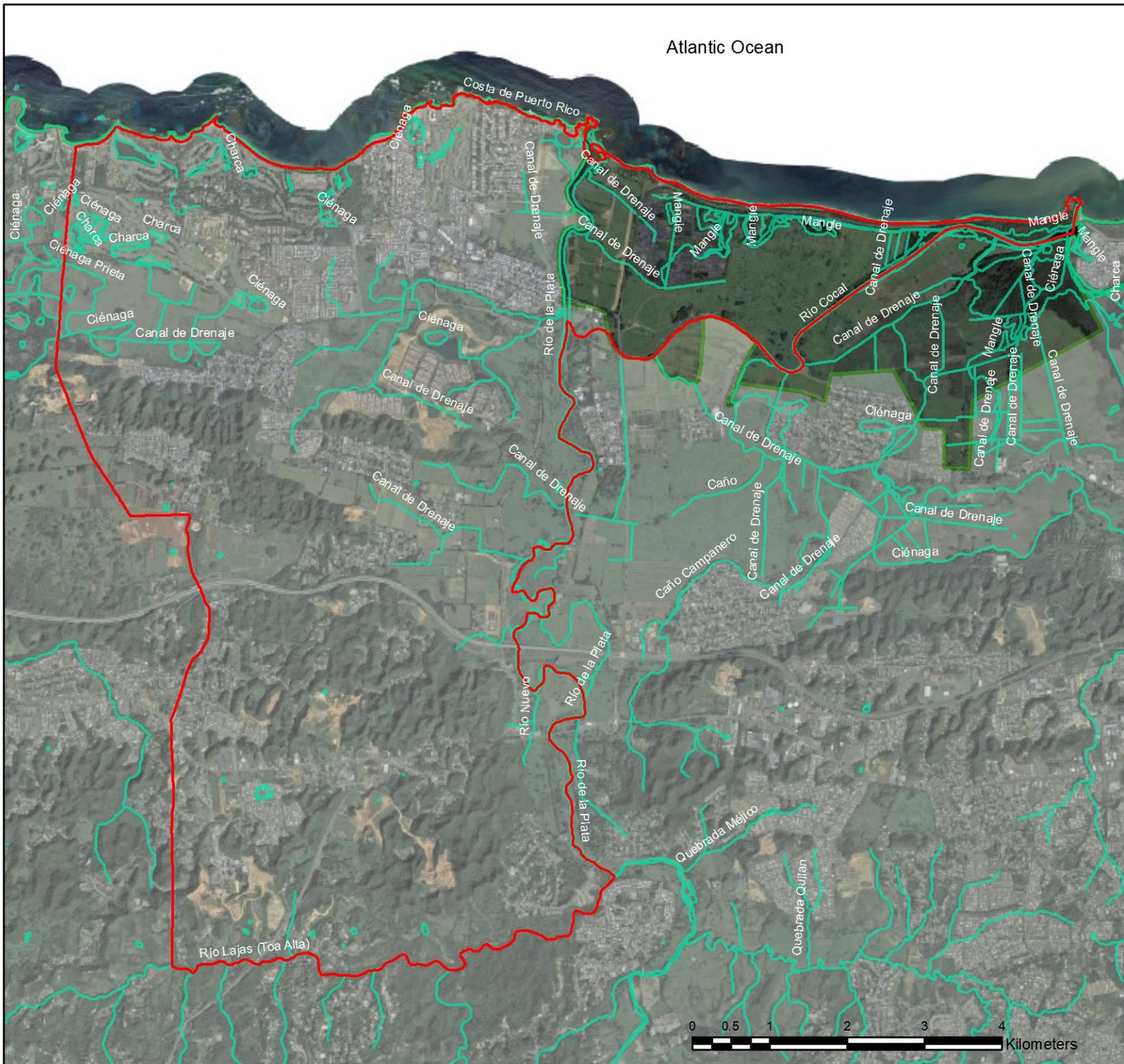
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Puerto Rico



2017



Atlantic Ocean



## Dorado DRNA Hydrography & CENSUS 2010 Urbanized Areas

### Legend

- Dorado
- Hydrography DRNA
- CENSUS Urbanized Areas**
- San Juan, PR

Projection: Lambert  
Coordinate System: NAD83 PR StatePlane



Source: JP, CENSUS, DRNA

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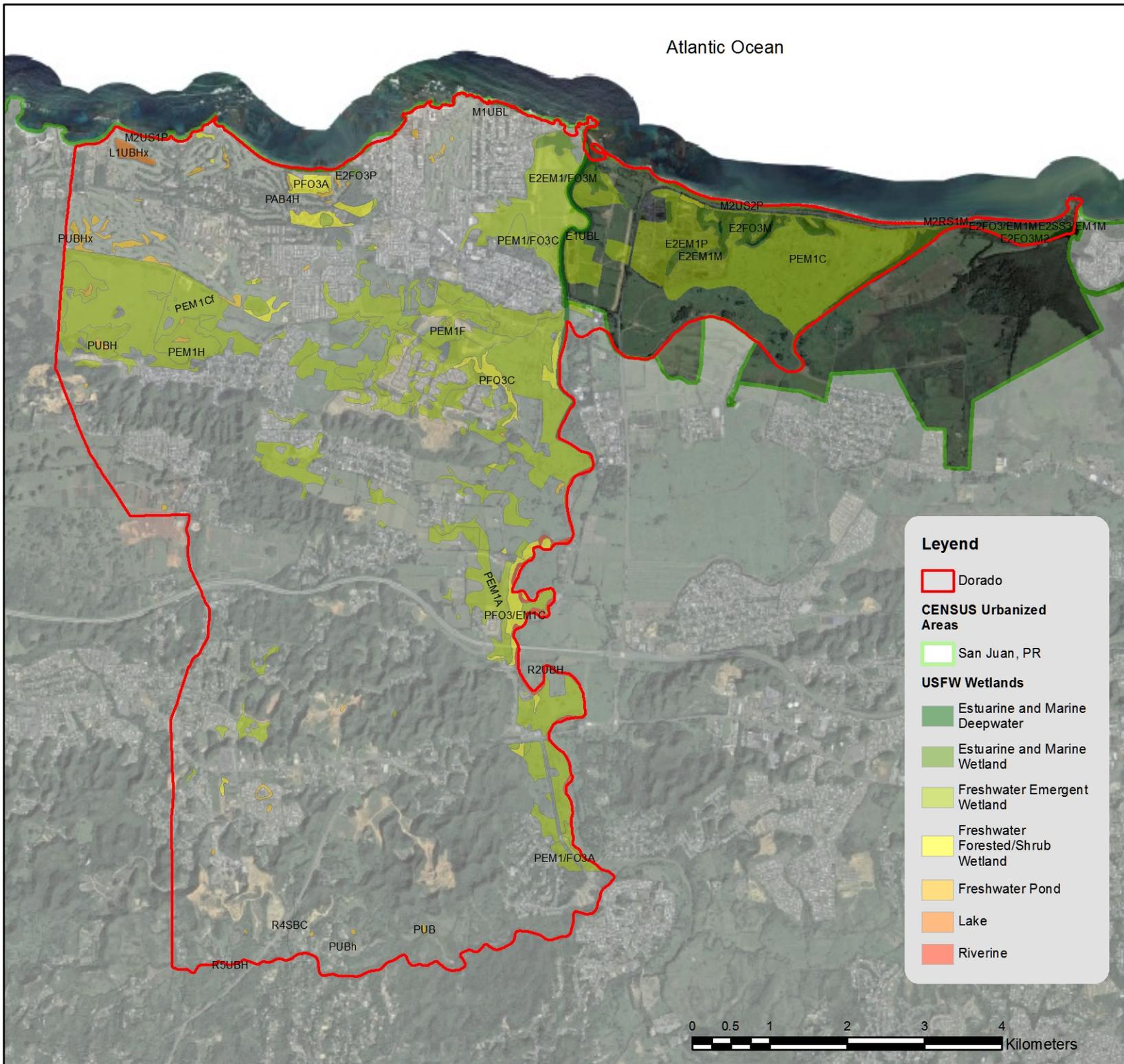


Puerto Rico



2017





Atlantic Ocean



## Dorado Wetlands & CENSUS 2010 Urbanized Areas

### Legend

Dorado

### CENSUS Urbanized Areas

San Juan, PR

### USFW Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Riverine

Projection: Lambert  
Coordinate System: NAD83 PR StatePlane



Source: JP, CENSUS, USFW

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Puerto Rico

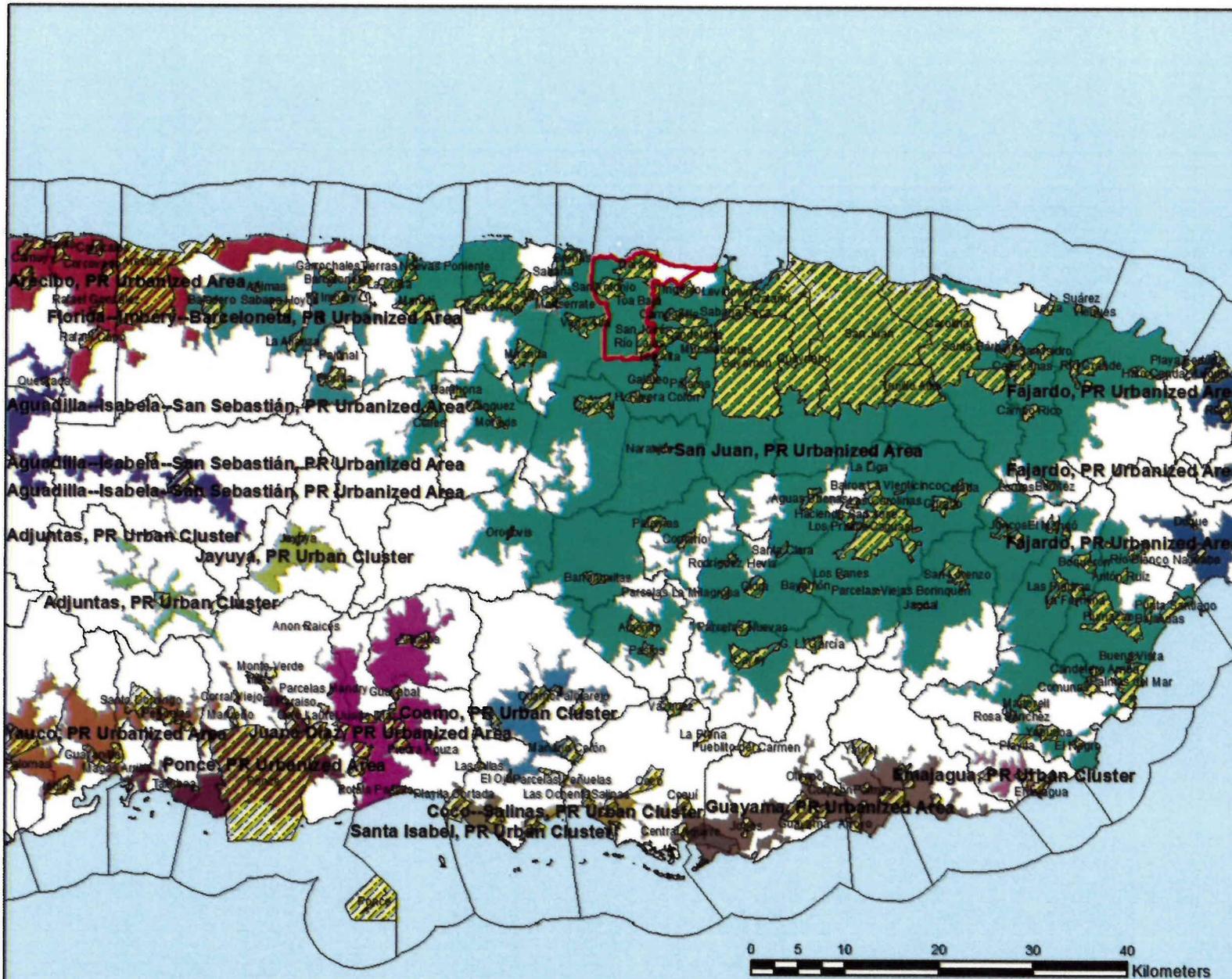


2017

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## Dorado, PR

### Census Urban Area



Projection: Lambert  
Coordinate System: NAD83 PR StatePlane



Source: JP, Census

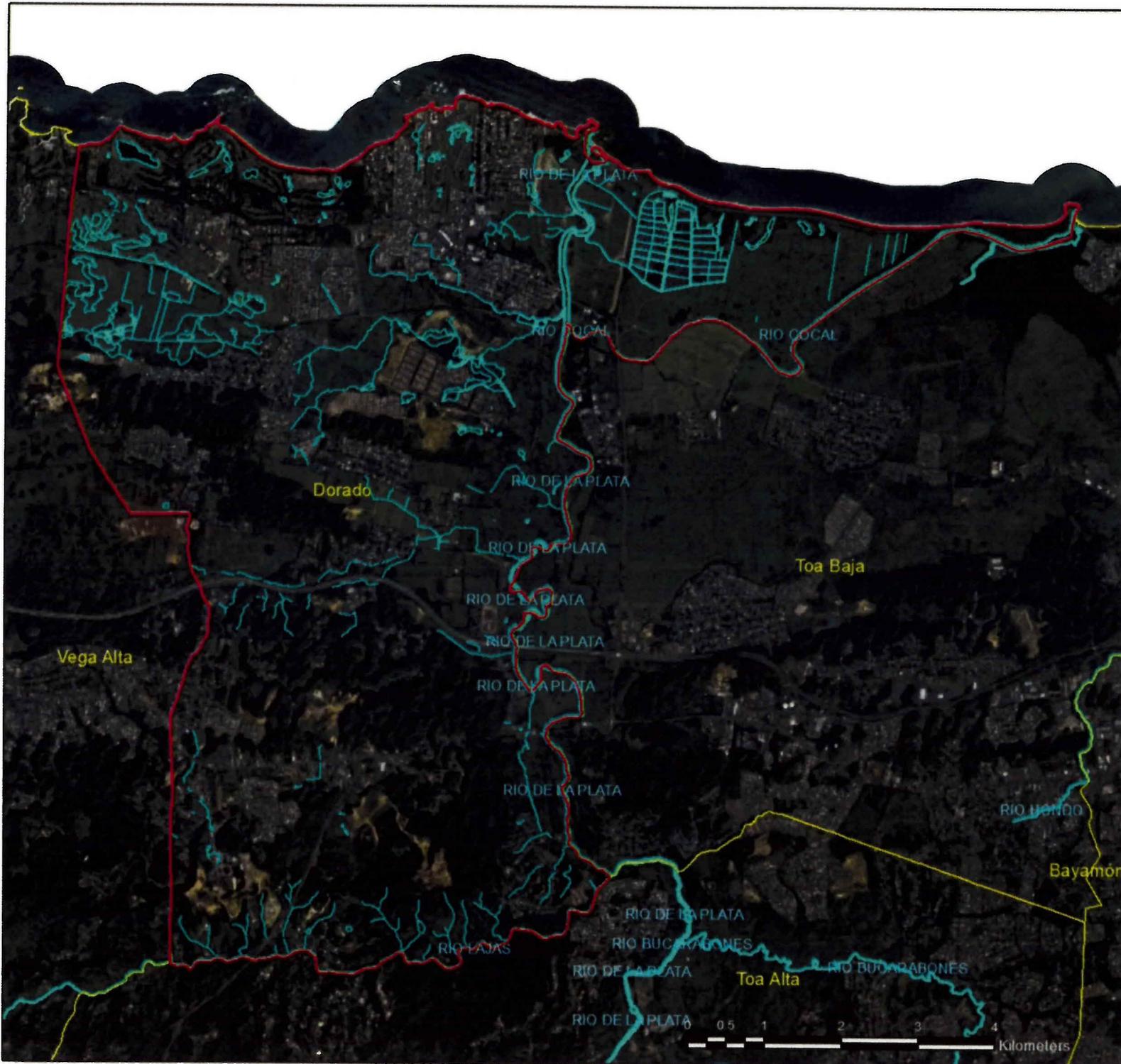
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Puerto Rico

#### Legend

Dorado	Adjuntas, PR	Coamo, PR	Florida-Imbáy- Barceloneta, PR	Juana Díaz, PR	San Germán- Cabo Rojo- Sabana Grande, PR	Vieques (Vieques Municipio), PR
Urban Zones	Aguadilla-Isabela-San Sebastián, PR	Coto-Salinas, PR	Guayama, PR	Maricao, PR	San Juan, PR	Yauco, PR
Urban Zones	Arecibo, PR	Fajardo, PR	Jayuya, PR	Mayagüez, PR	Santa Isabel, PR	
				Ponce, PR		



## Dorado Hydrography

### Legend

-  Dorado
-  Hydrography
-  Municipalities

Projection: Lambert  
 Coordinate System: NAD83 PR StatePlane



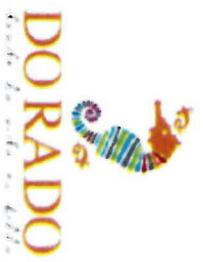
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Puerto Rico



2016



**Dorado  
Wards &  
City Limits**

- Legend**
-  Municipalities
  -  Wards

Projection: Lambert  
Coordinate System: NAD83 PR StatePlane



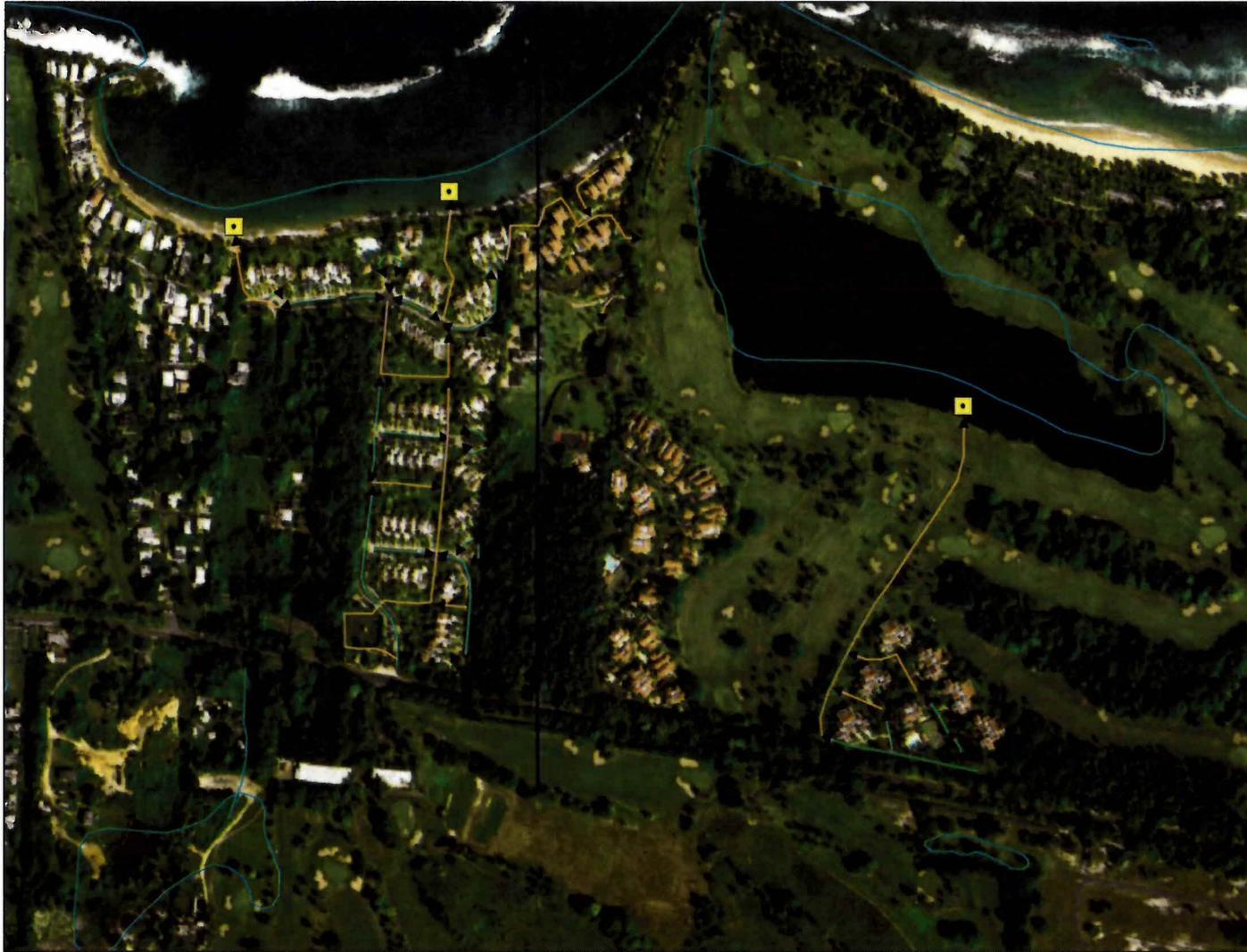
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Puerto Rico

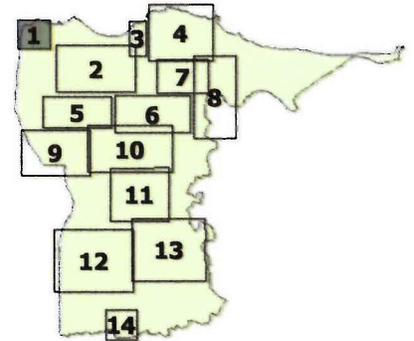


2016



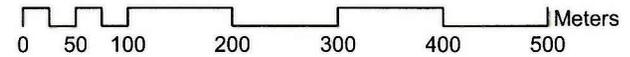
### Legend

-  Water
-  Outfalls
-  Surface Drainage
-  Underground Pipes

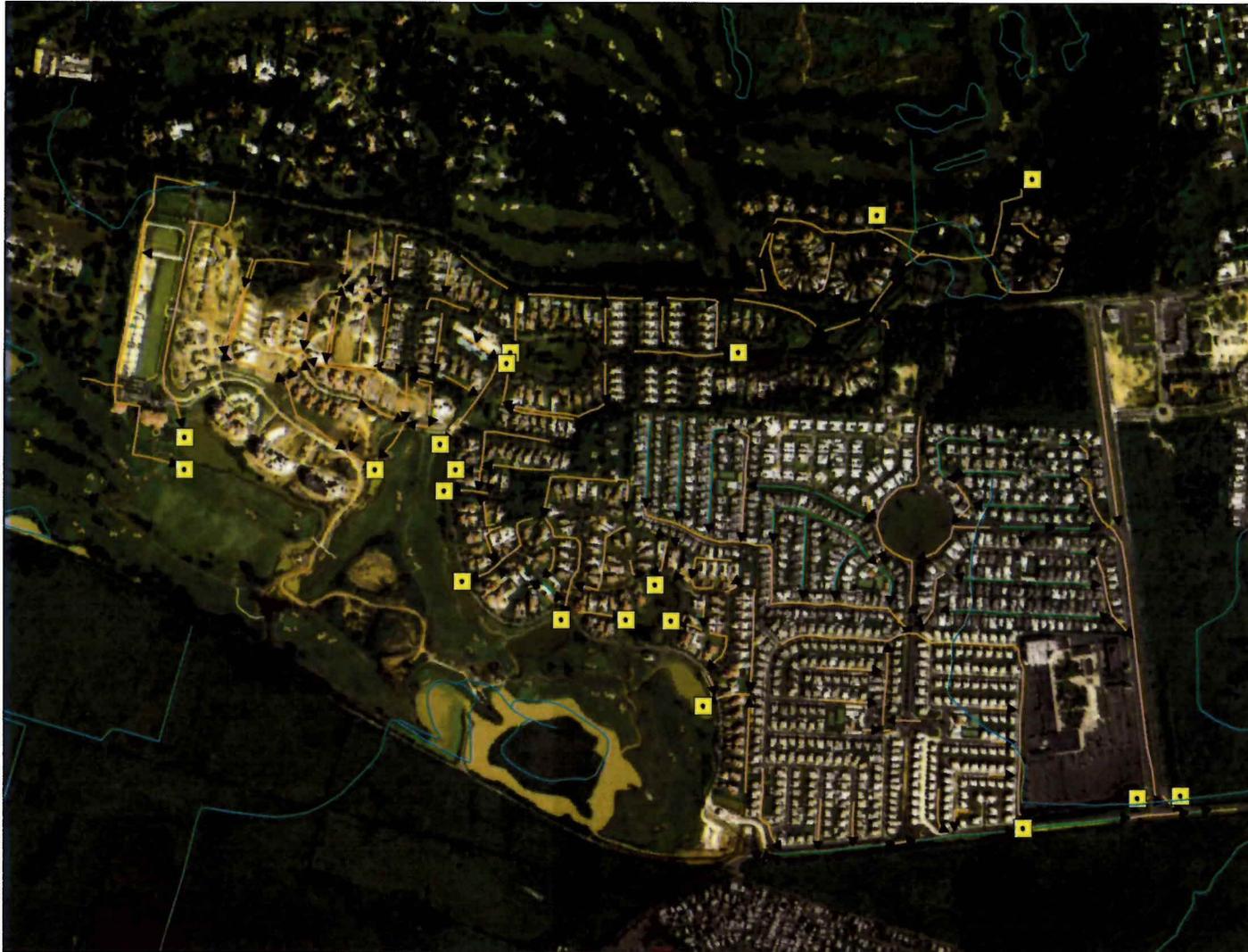


**Storm Sewer System  
Municipality of Dorado**

**Sheet 1**

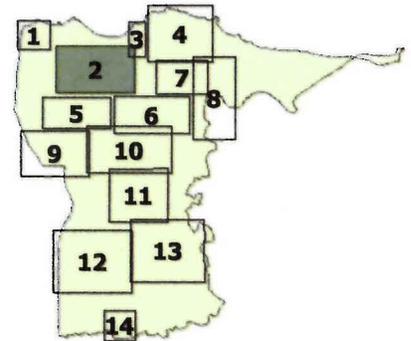


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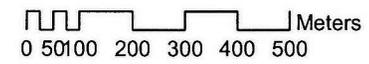
### Legend

-  Water
-  Outfalls
-  Surface Drainage
-  Underground Pipes

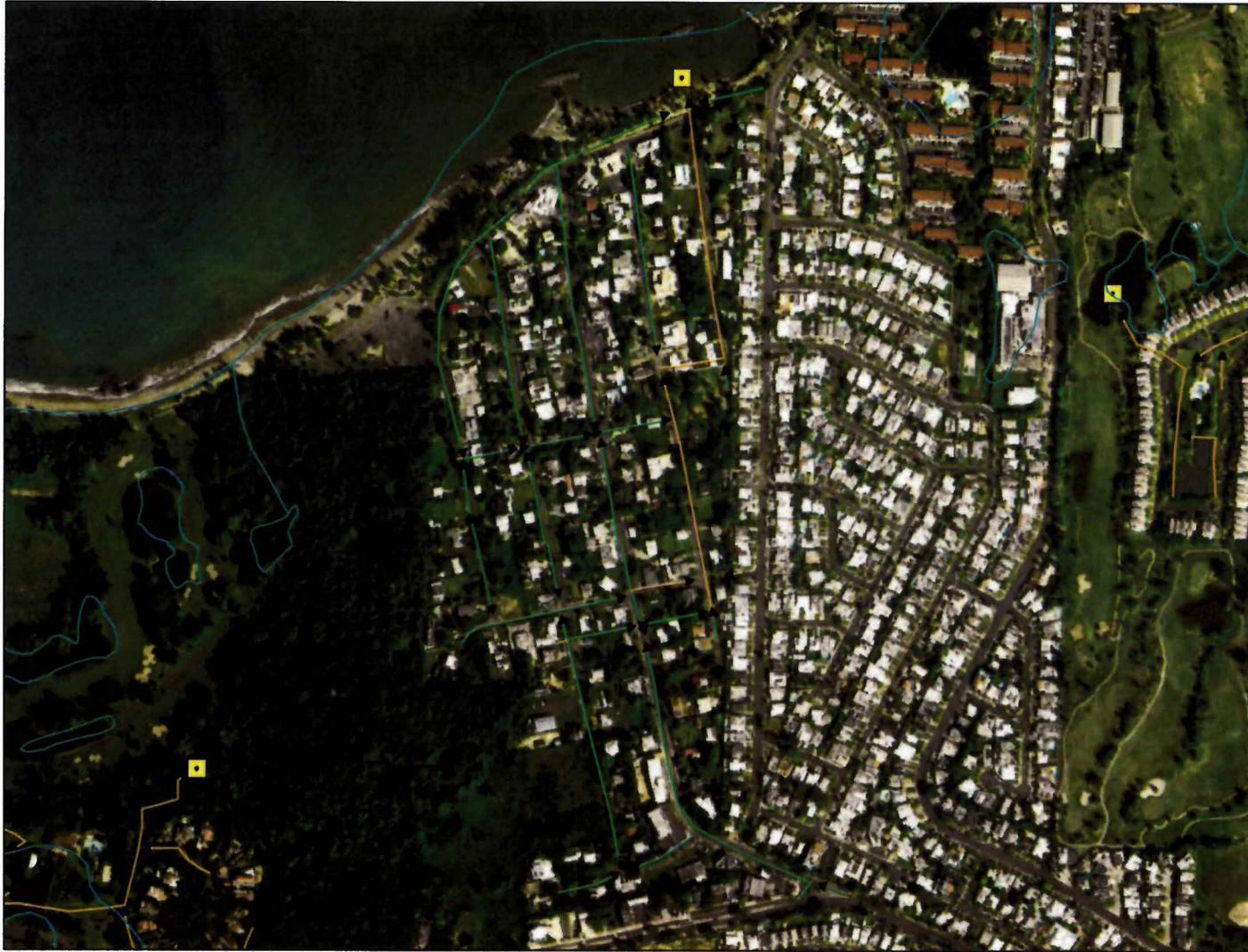


**Storm Sewer System  
Municipality of Dorado**

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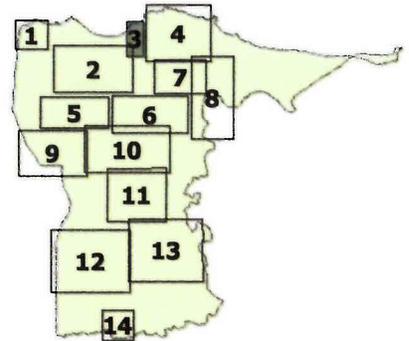


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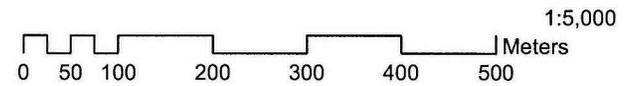
### Legend

-  Water
-  Outfalls
-  Surface Drainage
-  Underground Pipes



Storm Sewer System  
Municipality of Dorado

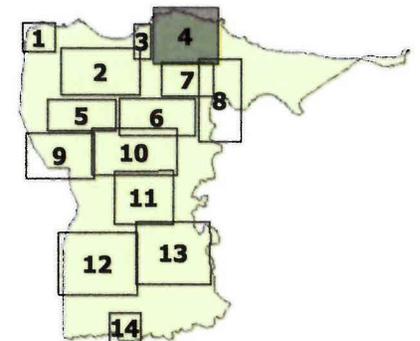
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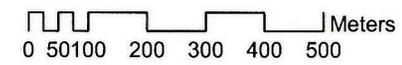
### Legend

-  Water
-  Outfalls
-  Surface Drainage
-  Underground Pipes



Storm Sewer System  
Municipality of Dorado

**Sheet 4**

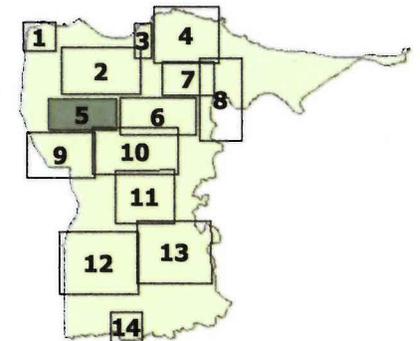


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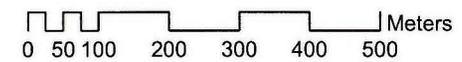
### Legend

-  Water
-  Outfalls
-  Surface Drainage
-  Underground Pipes



**Storm Sewer System  
Municipality of Dorado**

**Sheet 5**

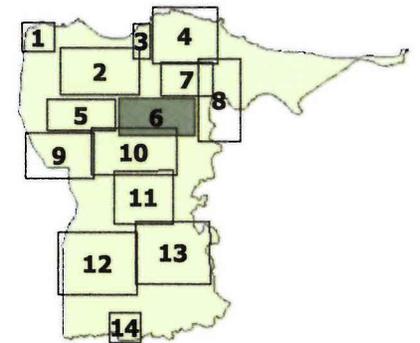


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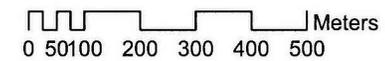
### Legend

-  Water
-  Outfalls
-  Surface Drainage
-  Underground Pipes



Storm Sewer System  
Municipality of Dorado

**Sheet 6**

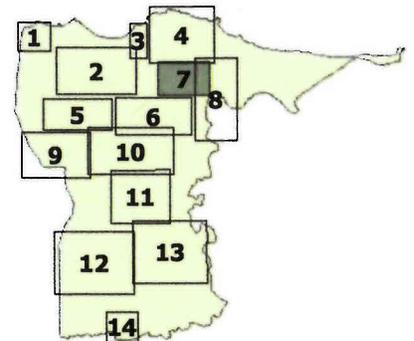


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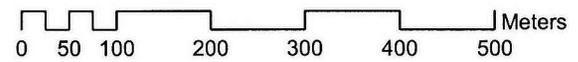
### Legend

-  Water
-  Outfalls
-  Surface Drainage
-  Underground Pipes

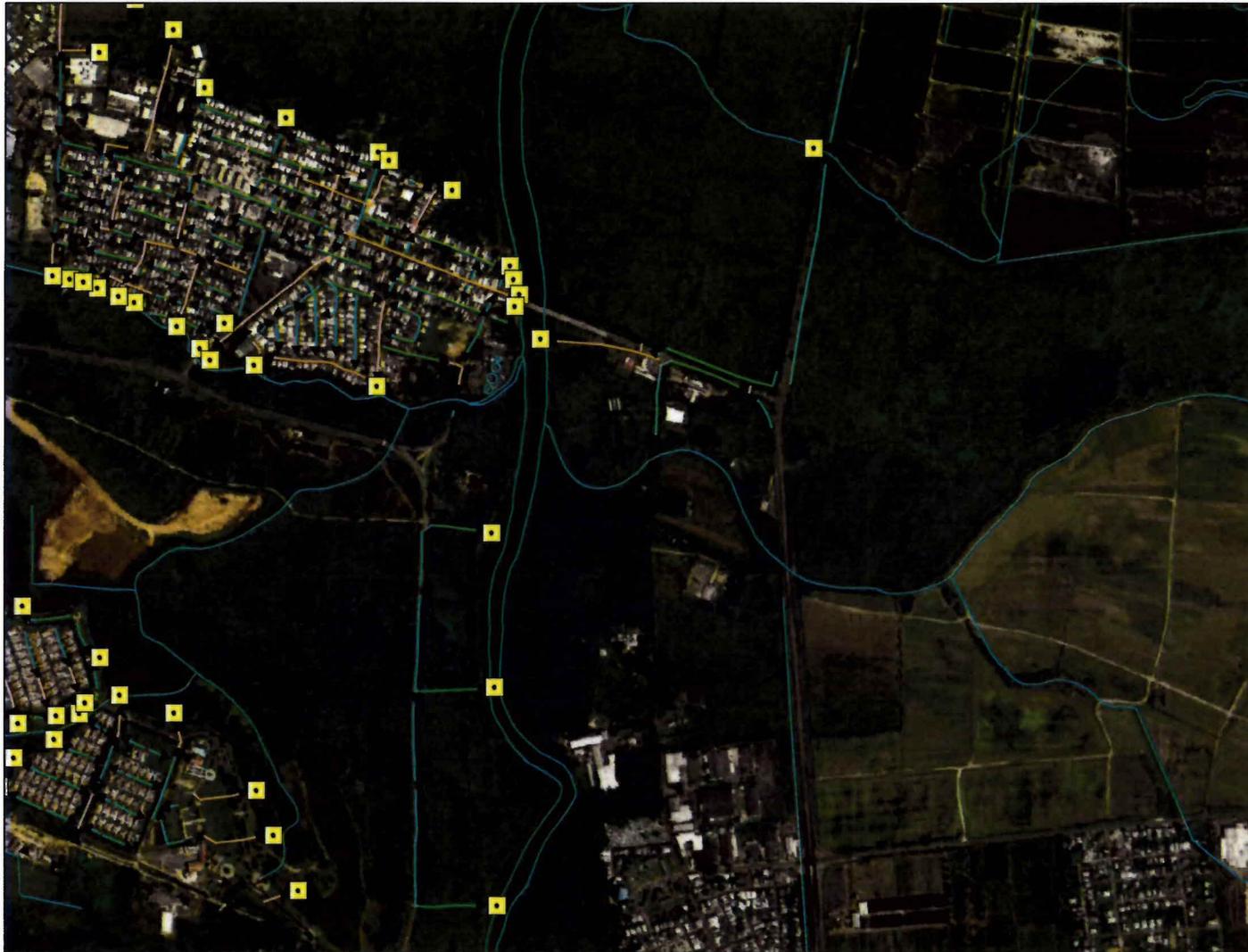


Storm Sewer System  
Municipality of Dorado

**Sheet 7**

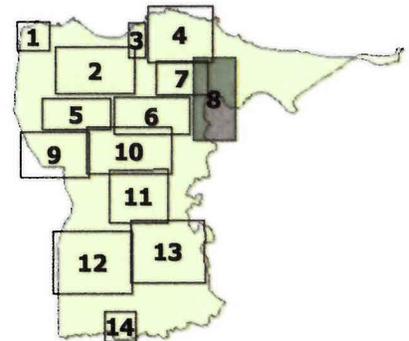


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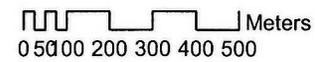
### Legend

-  Water
-  Outfalls
-  Surface Drainage
-  Underground Pipes

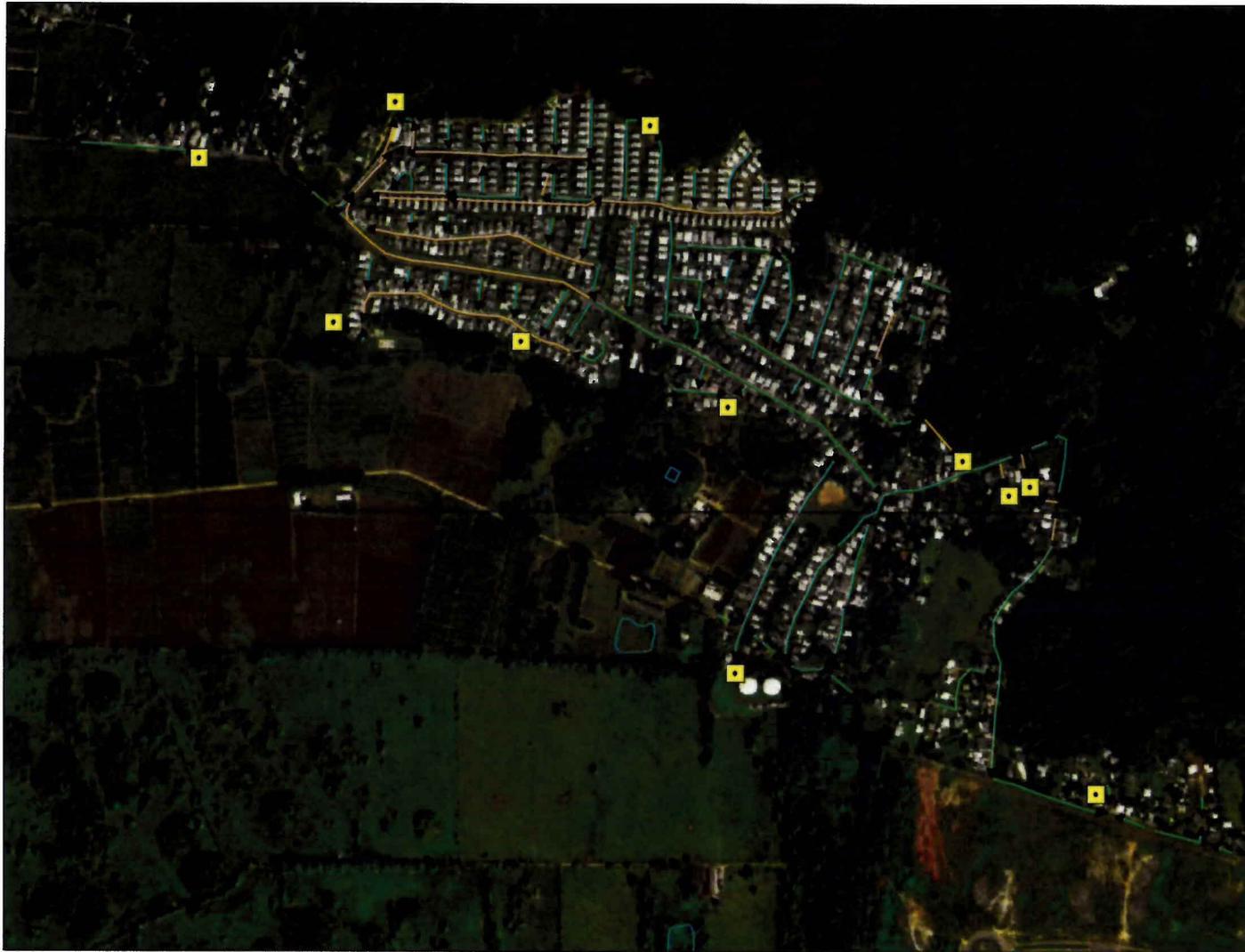


Storm Sewer System  
Municipality of Dorado

**Sheet 8**

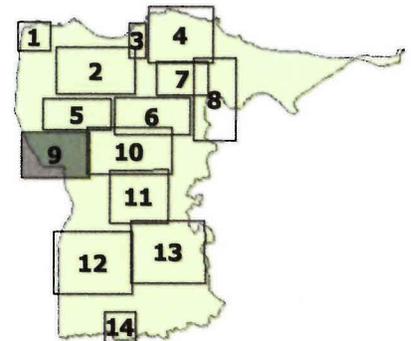


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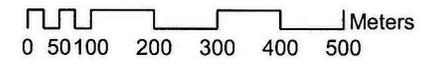
### Legend

-  Water
-  Outfalls
-  Surface Drainage
-  Underground Pipes



**Storm Sewer System  
Municipality of Dorado**

**Sheet 9**

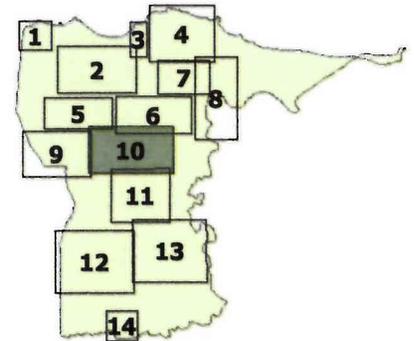


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### Legend

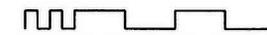
-  Water
-  Outfalls
-  Surface Drainage
-  Underground Pipes



Storm Sewer System  
Municipality of Dorado

**Sheet 10**



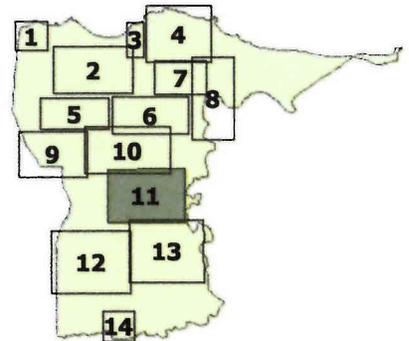
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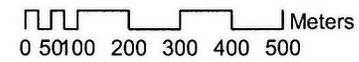
### Legend

-  Water
-  Outfalls
-  Surface Drainage
-  Underground Pipes



Storm Sewer System  
Municipality of Dorado

**Sheet 11**

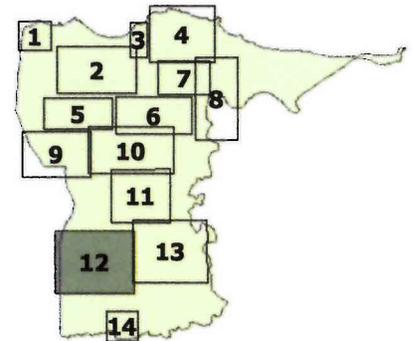


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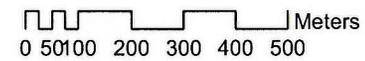
### Legend

-  Water
-  Outfalls
-  Surface Drainage
-  Underground Pipes



Storm Sewer System  
Municipality of Dorado

# Sheet 12

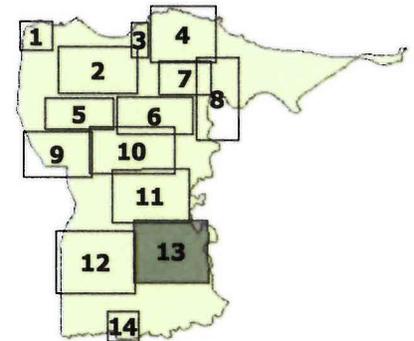


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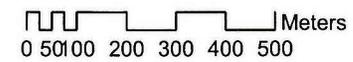
### Legend

-  Water
-  Outfalls
-  Surface Drainage
-  Underground Pipes

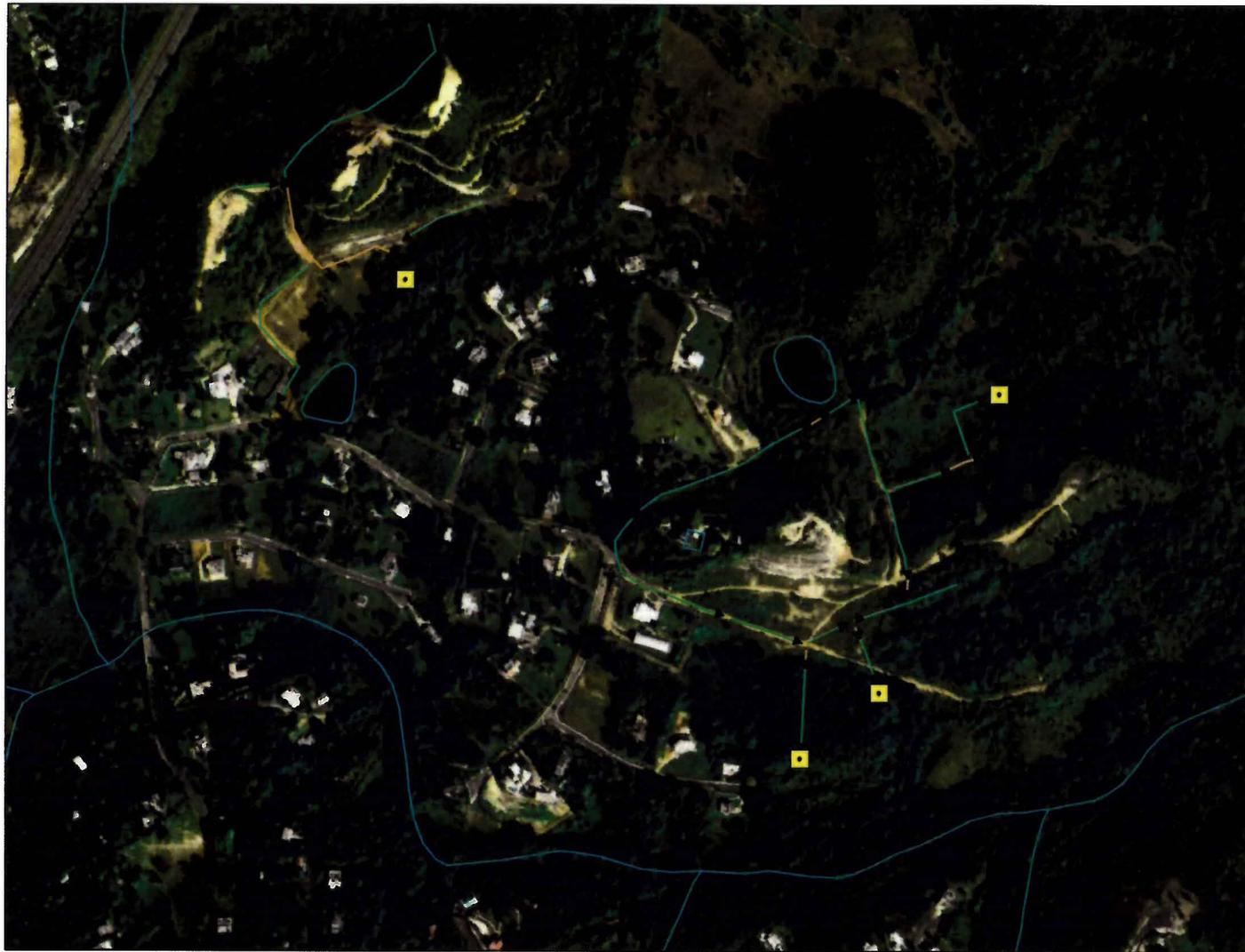


Storm Sewer System  
Municipality of Dorado

**Sheet 13**

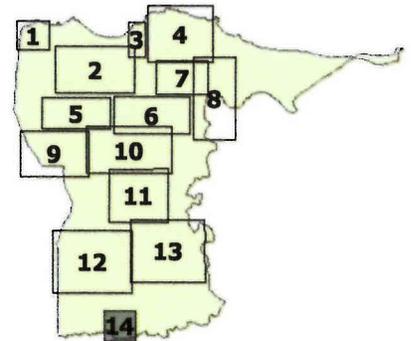


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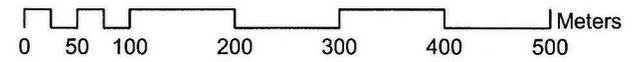
### Legend

-  Water
-  Outfalls
-  Surface Drainage
-  Underground Pipes



Storm Sewer System  
Municipality of Dorado

**Sheet 14**



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