Adiestramiento a grupos ciudadanos para la evaluación de la calidad de aguas

Introducción al taller

Estación Experimental de Lajas

Sala de reuniones

19 y 20 de junio 2014 (jueves y viernes)

Proyecto colaborativo entre UPR-Mayagüez y USEPA (EEA Z-268)
"Assessment of Water Quality and Efficacy of Water Treatment Infrastructure in Southwestern Puerto Rico"

OVERVIEW INFORMATION

U.S. Environmental Protection Agency
National Health and Environmental Effects Research
2012 Regional Sustainability and Environmental Sciences Research Program

CITIZEN MONITORING OF WATER SANITATION IN A RURAL PUERTO RICO WATERSHED

This is the initial announcement of this funding opportunity.

Funding Opportunity Number: EPA-GED-TBN-35177

Catalog of Federal Domestic Assistance (CFDA) Number: 66.510

Solicitation Opening Date:
Solicitation Closing Date: 5:00 PM Central Standard Time

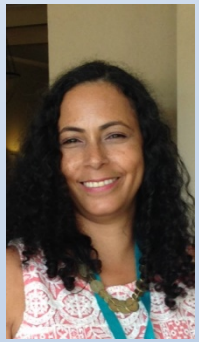
General Information

Announcement Type:	Initial Announcement
Funding Instrument Type:	Cooperative Agreement
Funding Opportunity Number:	EPA-GED-TBN-35177

Synopsis of Program: The U.S. Environmental Protection Agency (EPA) Office of Research and Development's National Health and Environmental Effects Research Laboratory (NHEERL), as part of its Sustainable and Healthy Communities Research Program, is seeking applications for a cooperative effort to engage community members in characterizing the efficacy of wastewater treatment in the Guánica Bay/ Rio Loco watershed of southwestern Puerto Rico. The objective is to increase public awareness of sanitation issues in the watershed by initiating assessments of water quality and sewage infrastructure by citizen volunteers. It is expected that the successful applicant will assemble citizen volunteers and train them to safely collect water samples from targeted locations throughout the area and to photograph and characterize the type and condition of wastewater treatment infrastructure. The successful applicant will be expected to analyze the water samples for fecal bacteria indicators, identify areas of poor sanitation, and correlate sample results with wastewater treatment infrastructure. Mapping of water quality and sewage infrastructure will help to identify risks in the area from contact and ingestion exposures, as well as to identify high nutrient loads that can threaten aquatic resources. Public awareness and participation is a principal objective; an informed citizenry will be better prepared to make decisions that affect public health and environmental resources.

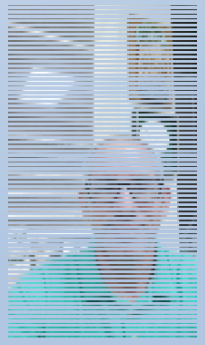
Personal educativo

- Luis Pérez Alegría
- Gustavo A. Martínez Rodriguez



- Glorisell Negrón
- Dave Bachoon

- David Sotomayor Ramírez



Personal de apoyo (UPRM)

- Paloma Rodriguez, estudiante graduada
- Hector Torres, Técnico de Investigaciones Científicas
- Rosario Gaud, Técnico de Investigaciones Científicas

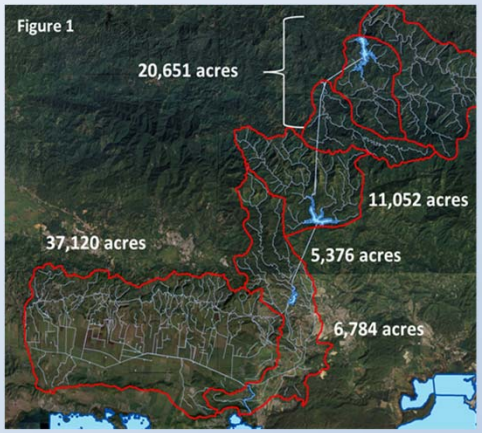
- Armando Román, estudiante subgraduado

Grupos ciudadanos (estudiantes 4-H)

- Guánica – a cargo de Agro. Isbeth Irizarry
- Lajas – a cargo de Agro. Anibal Ruiz

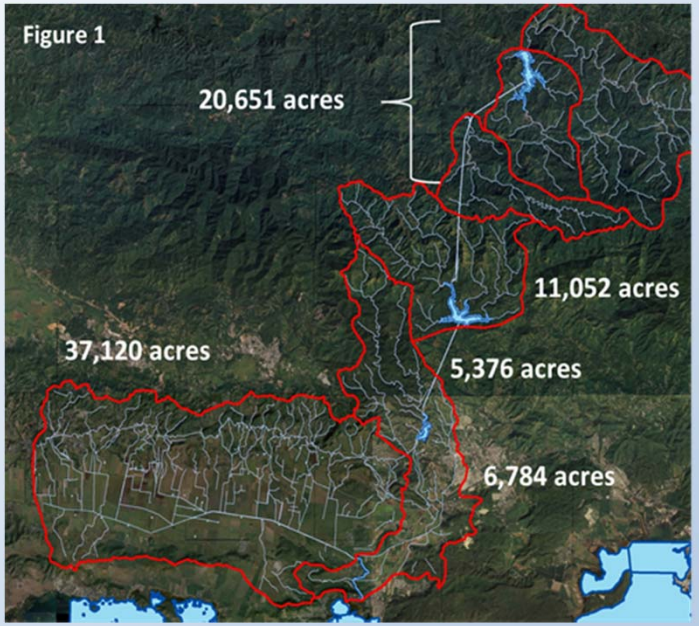
¿Que vamos a hacer en estos dos dias?

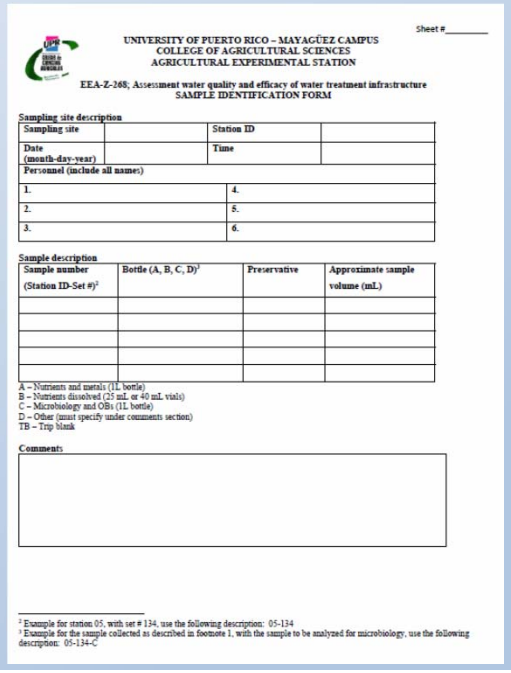
- Día 1 (19 de junio)
  - Conceptos básicos sobre el manejo de cuencas
  - Introducción al proyecto; Ejemplo de las cuencas Valle de Lajas y Guánica
  - Importancia del monitoreo de calidad aguas
  - Identificación de fuentes de contaminación



¿Que vamos a hacer en estos dos dias?

- Día 2 (20 de junio)
  - Materiales y métodos para evaluar la calidad de aguas y seguridad
  - Demostraciones de muestreo y manejo de formularios





Sheet #_____

UNIVERSITY OF PUERTO RICO – MAYAGÜEZ CAMPUS
COLLEGE OF AGRICULTURAL SCIENCES
AGRICULTURAL EXPERIMENTAL STATION

EEA-Z-268; Assessment water quality and efficacy of water treatment infrastructure
SAMPLE IDENTIFICATION FORM

Sampling site description

Sampling site		Station ID	
Date (month-day-year)		Time	
Personnel (include all names)			
1.		4.	
2.		5.	
3.		6.	

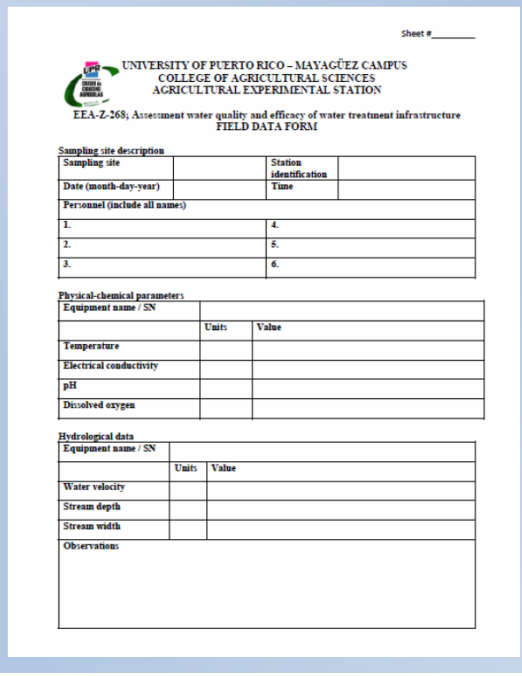
Sample description

Sample number (Station ID-Set #)[2]	Bottle (A, B, C, D)[3]	Preservative	Approximate sample volume (mL)

A – Nutrients and metals (1L bottle)
B – Nutrients dissolved (25 mL or 40 mL vials)
C – Microbiology and ORs (1L bottle)
D – Other (must specify under comments section)
TB – Trip blank

Comments

[2] Example for station 05, with set # 134, use the following description: 05-134
[3] Example for the sample collected as described in footnote 1, with the sample to be analyzed for microbiology, use the following description: 05-134-C



Sheet #_____

UNIVERSITY OF PUERTO RICO – MAYAGÜEZ CAMPUS
COLLEGE OF AGRICULTURAL SCIENCES
AGRICULTURAL EXPERIMENTAL STATION

EEA-Z-268; Assessment water quality and efficacy of water treatment infrastructure
FIELD DATA FORM

Sampling site description

Sampling site		Station identification	
Date (month-day-year)		Time	
Personnel (include all names)			
1.		4.	
2.		5.	
3.		6.	

Physical-chemical parameters

Equipment name / SN		
	Units	Value
Temperature		
Electrical conductivity		
pH		
Dissolved oxygen		

Hydrological data

Equipment name / SN		
	Units	Value
Water velocity		
Stream depth		
Stream width		
Observations		

Medidas de flujo y muestreo