



**Activities of the San Juan Bay Estuary Program Post-Hurricane María
Period: January 1 – January 31, 2018**

Following is a summary of the activities which the San Juan Bay Estuary Program (SJBEP) completed during the month of January 2018. The activities are organized by the five CCMP areas: Aquatic Debris, Green Infrastructure, Habitat and Wildlife, Water Quality and Public Involvement.

Water Quality and Sediment

Water Quality Monitoring: As part of its Water Quality Volunteer Monitoring Program, the SJBEP conducted its monthly water quality sampling during the week of January 23rd to 26th of 2018, with the help of 13 volunteers. Additionally, weekly monitoring events in the Condado Lagoon and public beaches were conducted on January 4th, 11th, 18th and 25th, also with the help of volunteers. Results were made available to the public on social media. The results of the most recent sampling are shown below.



Illegal Discharges Detection and Elimination Task Force: On January 16th, the SJBEP held a meeting of its Illegal Discharges Detection and Elimination Task Force (IDDLE). 15 members from state and federal government agencies, academia, and the SJBEP attended. The Task Force agreed to make an announcement calling for ideas to improve the De Diego Pumping Station in order to reduce the contaminants reaching the discharge point, and to

make it more sustainable in terms of energy, operations and maintenance. The SJBEP also asked Task Force members to send recommendations for the development of a mobile application for the public to use to report and document discharges into bodies of water.

State Revolving Funds: On January 25th, the SJBEP presented at the SRF public hearings to inform about its proposal to fund the expansion the scope of the monitoring program and implement a systematic strategy to pinpoint (i.e., identify at the lowest scale possible) major contaminant areas at a subbasin scale. Identified cases will be referred to concerning agencies (i.e., AAA, corresponding Municipality for corrective action) for corrective action. Each subbasin (or subbasin segment) within a major area is divided into several sampling stations based on relevant landcover, topographic and hydrographic features.

Aquatic Debris

Recycling, Education: January is a special month for Old San Juan, where the SJBEP's Center is located, due to the Fiestas de la Calle San Sebastian, a street festival attended by hundreds of thousands of people from Puerto Rico and around the world. The festival took place from January 17th to 21st, during which the SJBEP adopted a recycling station along with volunteers and other environmental organizations. The SJBEP incorporated a Trash Free Waters educational initiative into the event by placing a cigarette butt receptacle at the station. Staff and volunteers oriented the public about how cigarette butts thrown on the ground will eventually end up in our bodies of water via rainwater sewers, and encouraged the public to use the receptacle. Noemí Mercado from the EPA, who has always supported the SJBEP, was a special visitor to the recycling station. See photos of the station, cigarette butt receptacle and visit below.



Green Infrastructure

Reforestation at the Condado Lagoon: On January 24th, the SJBEP conducted a field visit to design a planting event in the Condado Lagoon, as a green infrastructure activity to stabilize the lagoon's borders and decrease runoff and contaminants reaching the Lagoon. The SJBEP decided to do a restoration of the typical coastal zoning by planting red mangrove, sea grapes, and emajagüilla (*Thespesia populnea*) trees. The planting event, which will also serve as a kickoff for the #EstuarioRevive initiative "Friends of the Condado Lagoon", will take place in February. It was decided that there will also be a cleanup prior to the event, where vegetative debris will be converted to mulch, educating volunteers on the repurposing of resources. On January 31st, the SJBEP conducted a follow-up field visit to determine the exact numbers of each species to be planted.

On January 25, Jorge Bauzá from the SJBEP guided a boat tour as part of the activities of the Eco-Urbanism Congress, lead by Ariel Lugo. The congress seeks to integrate green infrastructure into the vision of urban development. The tour started on foot in the Las Cucharillas Marsh, and continued by boat starting at the San Juan Bay and through the San José Lagoon, Torrecilla Lagoon, Suarez Canal, Blasina Canal, and other bodies of water in the watershed.

On January 25th, the SJBEP attended a public hearing to discuss the proposal submitted in November to the Environmental Quality Board to obtain SRF funds to develop a Green Infrastructure Master Plan and Immediate Reforestation. The total amount requested is \$1,149,400. With this funding the San Juan Bay Estuary will be supporting the municipalities that are part of the San Juan Bay Estuary watershed make substantial upgrades to its storm sewer systems throughout the city by developing a Green Infrastructure Master Plan. Storm water runoff in the study area of the San Juan Bay Estuary is collected through separate storm sewer systems and is discharged into local waterways. The Green Infrastructure Master Plan for the metropolitan region of Puerto Rico incorporates architectural planning and design at several different scales, following the participatory-process model. It seeks to identify and access financial and technical resources in order to promote the concept of green infrastructure and to implement it at state and municipal levels. The Plan will identify existing green infrastructure and areas of opportunity for expansion and improvement of this infrastructure. This initiative includes three pilot projects to be executed and documented as part of the Green Infrastructure Master Plan. The projects are located in San Juan, Loiza and Bayamon.

Habitat, Fish and Wildlife

Christmas Bird Count: The SJBEP continued its Christmas Bird Censuses, which it had begun in December during the month of January, holding 3 censuses. On January 3rd, 29 volunteers participated in a census in Old San Juan. On January 4th, 7 participated in Luiz Muñoz Rivera Park, and on January 5th, 4 volunteers participated in the census in Las Curías Lake. The census results were entered into eBird, a global citizen science database from the Cornell Lab of Ornithology.

Public Education and Involvement

Water Quality Monitoring Day: In January the SJBEP posted a job opening for a Coordinator of the Puerto Rico Water Quality Monitoring Day, the largest annual citizen science event in Puerto Rico, which is in its 10th edition. The person chosen for the position was Laura Fidalgo, a former Americorps VISTA volunteer who has collaborated closely with the Estuary for several years. She began her position on January 29th.

Estuarine Leadership Workshop: The first Children's Community Estuarine Leadership Workshop was held on January 29th at the Center of the Estuary. The workshop was offered to children from the La Perla community in Old San Juan; thirteen (13) children of various ages attended. The workshop series will teach about the Estuary and their community from an environmental perspective using different tools, such as participative cartography, water quality monitoring, art activities, and bird censuses. During the first workshop the children were introduced to the Estuary and the topics to be covered, and were given a pre-test to be able to measure their learning at the end of the series.

Urban Waters: The SJBEP obtained additional funding from EPA's Urban Waters Program to provide relief to residents of its watershed. The funding level allowed the SJBEP to bring two additional staff members on board on January 8th. Within weeks, their support has yielded great results. On January 22nd, the SJBEP attended a community meeting in Caimito, which resulted in the placing of an information booth in the monthly Agriculture Fair in

Caimito. Through the booth, the SJBEP talked with members of the community about the Estuary and recruited volunteers for future SJBEP Urban Waters initiatives in the community.

Additionally, on January 31st, the SJBEP Urban Waters Team in collaboration with the Sor Isolina Ferré Centers visited communities in Caimito (San Juan), Cataño and Loíza to distribute water filters donated by GivePower. Over 150 families were impacted with access to filtered water. See photos of the water filter distribution below. During the month of January, the SJBEP also coordinated the installation of solar panels in the Caimito Cultural Center by GivePower. The installation will be completed in February.



Boys Scouts: On January 27th, the SJBEP participated in a special event: a Court of Honor for Boy Scout Troop 685 of Puerto Nuevo, in which the first Estuary badges were distributed. The event took place in the in the San Patricio Urban Forest. This troop had adopted the urban forest and done much of the trail clearing work after Hurricane María. Additionally, the troop had attended the bird census conducted in San Patricio in December. See photos of the event below.



Community Support #EstuarioRevive: As part of its post-hurricane María #EstuarioRevive campaign initiatives in Community Support, the SJBEP continues to coordinate the connection of outside resources to communities where they are very much needed. On January 13th, the SJBEP collaborated with G-8 to visit Barrio Obrero community, one of the communities bordering the Martín Peña Channel, to provide filters and solar lanterns donated by Empowered by Light to 40 families.

Estuario Mitigation Plan: On January 25th, the SJBEP presented at the SRF Public Hearings about a long-term forward thinking through mitigation planning that it is proposing, as this is the key to breaking the cycle of disaster damage, reconstruction and repeated damage. The Mitigation plan will help the San Juan Bay Estuary Program lead the efforts of assessing its study area after hurricane Maria; approximately 97 square miles, with a population of approximately 700,000 thousand people. A comprehensive mitigation plan will be developed to help us identify risks and vulnerabilities associated with natural disasters, and develop long-term strategies for protecting people and property from future hazard events.

Media: The SJBEP continues reaching out to the public with its media presence. The SJBEP was active on social media throughout the month, recruiting volunteers and announcing and reporting its activities to the public. On January 9th, Executive Director Brenda Torres was given an 8-minute interview on Radio Isla. On January 17, the SJBEP's recycling activity during the Fiestas de la Calle San Sebastian festival was covered by Presencia in digital media. The link is provided below. The SJBEP also posted a job opening and conducted interviews to hire a Graphic Artist, who will help the SJBEP in the development of social media/web content and infographics as part of their responsibilities.

<http://www.presenciapr.com/estuario-de-la-bahia-de-san-juan-activa-reciclaje-en-las-fiestas-de-la-sanse/>