



Emergency Watershed Protection Program (EWPP)

The NRCS Caribbean Area Team is committed to providing emergency assistance to Puerto Rico and the U.S. Virgin Islands (USVI) via the **Emergency Watershed Protection Program (EWPP)**. NRCS achieved significant progress implementing EWP in the Caribbean Area despite delays caused by COVID-19.

EWPP helps conserve natural resources by relieving imminent threats to life and property. In the Caribbean Area, EWPP is clearing and repairing waterways impacted by hurricanes Irma and María in September 2017, and tropical storms Dorian (2019) and Isaías (2020). Through EWPP, NRCS works with land stewards, land owners and local government agencies to assess and implement debris removal and streambank stabilization in directly-impacted areas. Sponsors include municipalities, conservation districts, the PR Dept. of Natural and Environmental Resources (DNER), and the VI Dept. of Public Works.

EWP Status Update:

During FY 2021, NRCS completed all EWP clearing and snagging projects still pending post-Hurricanes Irma & María and Tropical Storm Isaías – a total investment of **\$3.9 million** to complete **73** projects, for an overall EWP investment of over **\$15.3 million** since 2017 related to these natural disasters. This significant accomplishment was achieved through the efforts of NRCS staff and support from EWP sponsors (VI Department of Public Works; Caribe, Oeste and Suroeste Soil & Water Conservation Districts; the Puerto Rico DNER and several Puerto Rico municipalities).

Great strides were also achieved in design plan development and detailed assessment of the two Añasco, PR, dams damaged by Hurricane María (Ajies and Dagüey). Survey data collection, bathymetry, and pipeline camera assessments were completed along with preliminary design for both structures. Repair construction work is expected to begin in FY 2022.



Caribe Soil & Water Conservation District and NRCS EWPP staff hold an on-site kick-off meeting for the first Hurricane María EWPP Structural Stabilization project in Villalba in September 2021.



NRCS Engineer Rolando Collazo and contractors from Torres Rosa, Inc., and Freese-Nichols, Inc., inspect the Ajies Dam principal spillway conduit (250' of 30" diameter reinforced concrete pipe) from impact basin to riser across the earthen dam using Remotely Operated Vehicle equipment to visually inspect the internal condition of the pipeline and its joints.



To date, NRCS has completed **all 325** Hurricanes Irma & María clearing & snagging projects and **16** Tropical Storm Isaiás clearing & snagging projects for a total allocation of about **\$15.3 million**. Design work on the Añasco dams and Hurricane María stabilization projects is underway, representing an additional **\$10 million** allocation.

Pathways On-the-Job Training (OJT):

In July 2021, NRCS Engineer Rolando Collazo provided on-the-job training to 5 new Pathways student interns during Añasco Dams inspections. They were taught about the proper usage of basic measurement tools to measure distances and slopes of earthen dam embankments. Below clockwise from top left: Eng. Collazo provides basic measurement tools training to new Pathways student interns; Eng. Collazo provides OJT inspection training to Pathways students at Ajies Dam; Eng. Collazo (left)



with Pathways students at Ajies dam; Eng. Collazo demonstrates embankment slope measurement to Pathways students.

More Information:

Natural
Resources
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