



LandslideReady Community Engagement Program in Puerto Rico 2026

Status Update Progress

Isabella Cámara Torres¹, Karla H. Torres Angleró¹, Anishka M. Ruiz Perea¹, K. Stephen Hughes¹

Department of Geology, University of Puerto Rico at Mayagüez¹; USGS, Geologic Hazard Science Center at Golden, Colorado²

What is LandslideReady?

LandslideReady is modeled after the successful NWS Storm Ready and TsunamiReady programs. The program is focused on landslide hazards in a given jurisdiction. Community-level presentations aim to inform residents about how to mitigate landslide hazards and make informed decisions before, after, and during a landslide-triggering natural disaster.

The program activities include:

- Workshops for Local Emergency Management Offices
- Workshops for Municipal Employees
- Community Presentations
- Informative Tables



Figure (a) Lajas Emergency Management personnel assisting community workshop, (b) San Germán community school workshop, and (c) Cabo Rojo Emergency Management personnel workshop in PRLHMO office.



Figure (a) Lajas Emergency Management personnel assisting community workshop, (b) San Germán community school workshop, and (c) Cabo Rojo Emergency Management personnel workshop in PRLHMO office.

Office Background

The **Puerto Rico Landslide Hazard Mitigation Office** is part of the Department of Geology at the University of Puerto Rico Mayagüez. The office works with diverse agencies, stakeholders, community organizations, and others on the issues related to landslide hazards in Puerto Rico.

For more information:

Website: derrumbe.net
E-mail: slidespr@uprm.edu
Telephone: (787) 832-4040 x6844



Figure 1. The Puerto Rico Landslide Hazard Mitigation Office personnel (November 2025).

Landslides in Puerto Rico

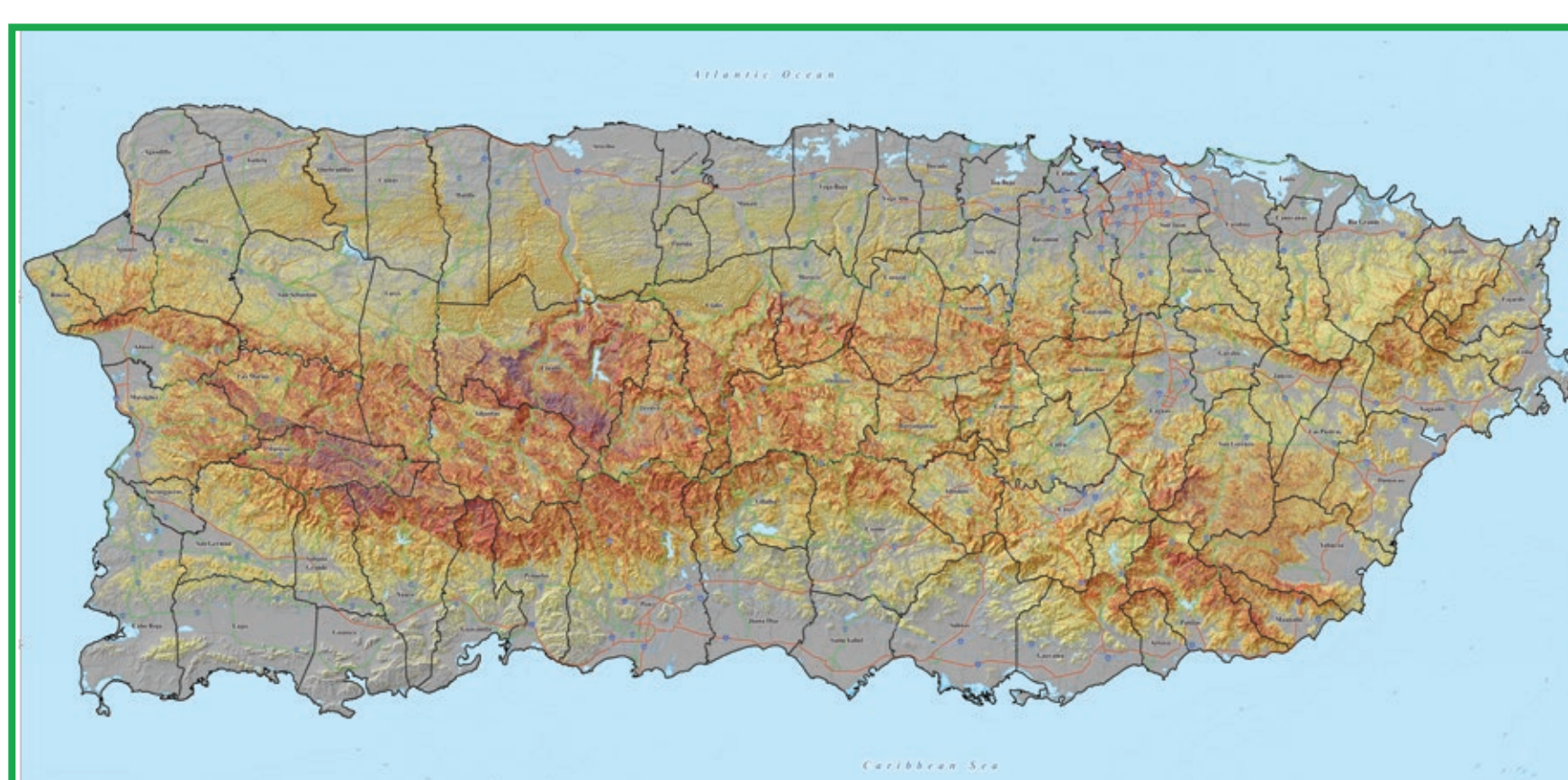
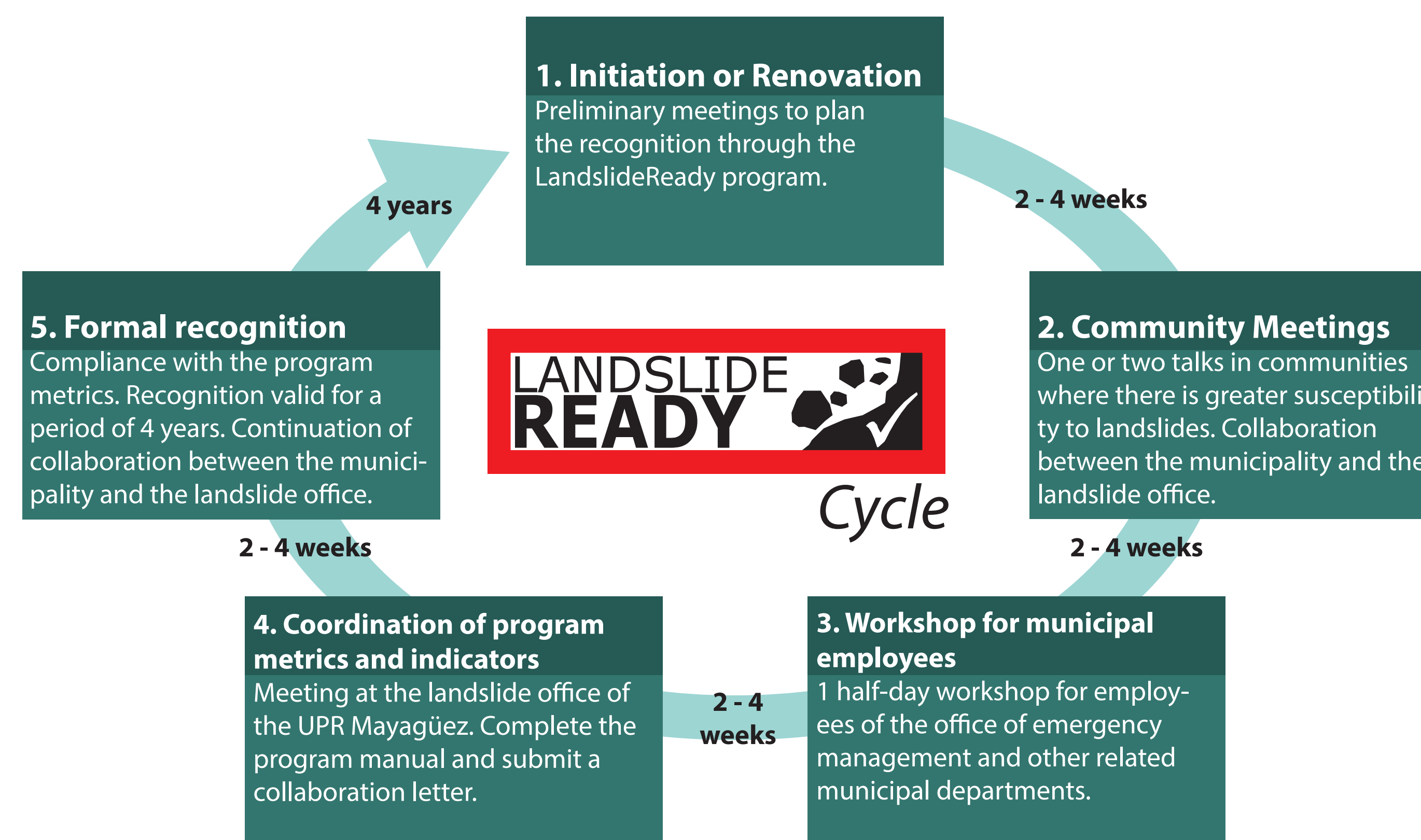


Figure 1. Map depicting susceptibility to landslides triggered by intense rainfall, Puerto Rico (Hughes and Schulz, 2020)

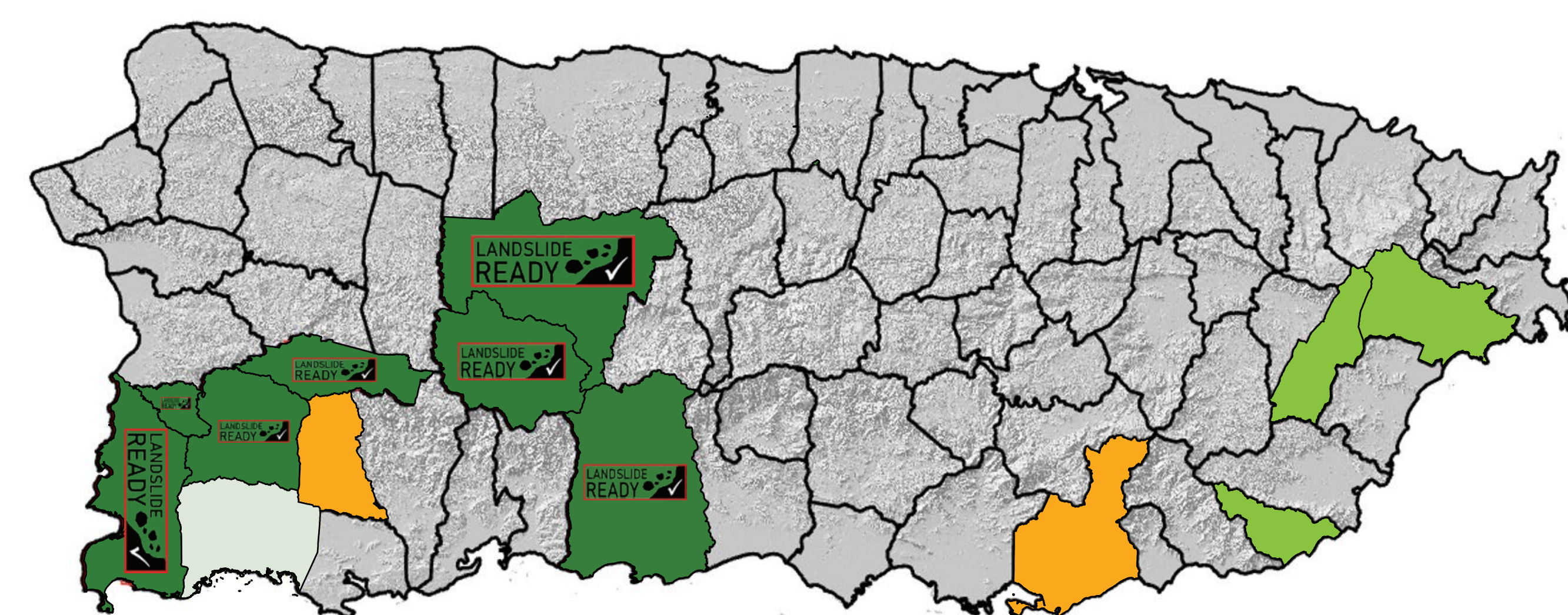


Figure 2. Landslide along PR-4131 in the municipality of Lares, Puerto Rico (Civil Air Patrol, 2017).

"Municipal recognition program focused on Assessment, Preparation, & Response for Landslide Hazards"



LandslideReady Municipalities in Puerto Rico for 2025-2026



Municipalities recognized as LandslideReady (updated May 2026)	
Utua	Adjuntas
Ponce	San Germán
Cabo Rojo	Maricao
Hormigueros	

- Completed
- Final Step
- In advanced progress
- In progress

The 2025–2026 LandslideReady agenda spans multiple operational phases across Puerto Rico target municipalities. Full program completion has been achieved in the dark green zones, while orange highlights regions currently completing the final step of the certification cycle. Municipalities making advanced progress are shown in pale green, and those actively beginning their initial milestones are represented in lime green.

LandslideReady By The Numbers



Figure 1. Meeting with the Emergency Management Office of Mayagüez and the Regional Director on August 11, 2025.



Figure 2. PRLHMO's LandslideReady logo.



Figure 3. PRLHMO presentation at the 2025 Hurricane Tour EcoExploratorio in the municipality of Ponce on August 23, 2025.



Figure 4. First community meeting at Bo. Bucarabón in the municipality of Maricao on May 29, 2025.

LandslideReady Survey Response

PRELIMINARY RESULTS AND BEHAVIORAL INSIGHTS

Pre-workshop surveys were deployed in-situ prior to delivering training to community members and emergency personnel (n = 84). Post-workshop evaluations were conducted via telephone and email (n = 16). To ensure objectivity and protect participant privacy, all surveys were entirely anonymous.

Perceived Threat Level (Risk Perception)

Measures participant's ability to recognize local risks. As illustrated on **Graph 1**, a clear post-workshop trend emerges: a distinct shift away from "Low Threat" perceptions alongside a sharp trajectory toward "Threat" and "Severe Threat" classifications following the workshop.

Personal Capability Level (Self-Capability)

Measures participant capability, specially assessing preparedness knowledge and the ability to respond during a landslide emergency. As illustrated in **Graph 2**, a clear trend emerges showing a distinct migration toward higher personal capability levels following the workshop.

Combined Preliminary Behavioral Insight

Increased risk awareness (**Graph 1**) alone often triggers paralysis. However, by simultaneously building personal capability (**Graph 2**), the workshop successfully converts potential anxiety or fatalism into actionable confidence.

NEXT STEPS

(ONGOING INVESTIGATION)

- Finalize Data Collection:** Complete all pre-/post-workshop survey matching across remaining participant cohorts.
- Formal Modeling:** Evaluate interactive effects of threat perception and capability using formal behavioral models.
- Community Output:** Deliver findings to local emergency managers and hazard coalitions to refine community toolkits.



Figure 1. Community engagement event in Bo. Bucarabón, Maricao for in-person survey collection.



Figure 2. Online LandslideReady survey about landslides in Puerto Rico

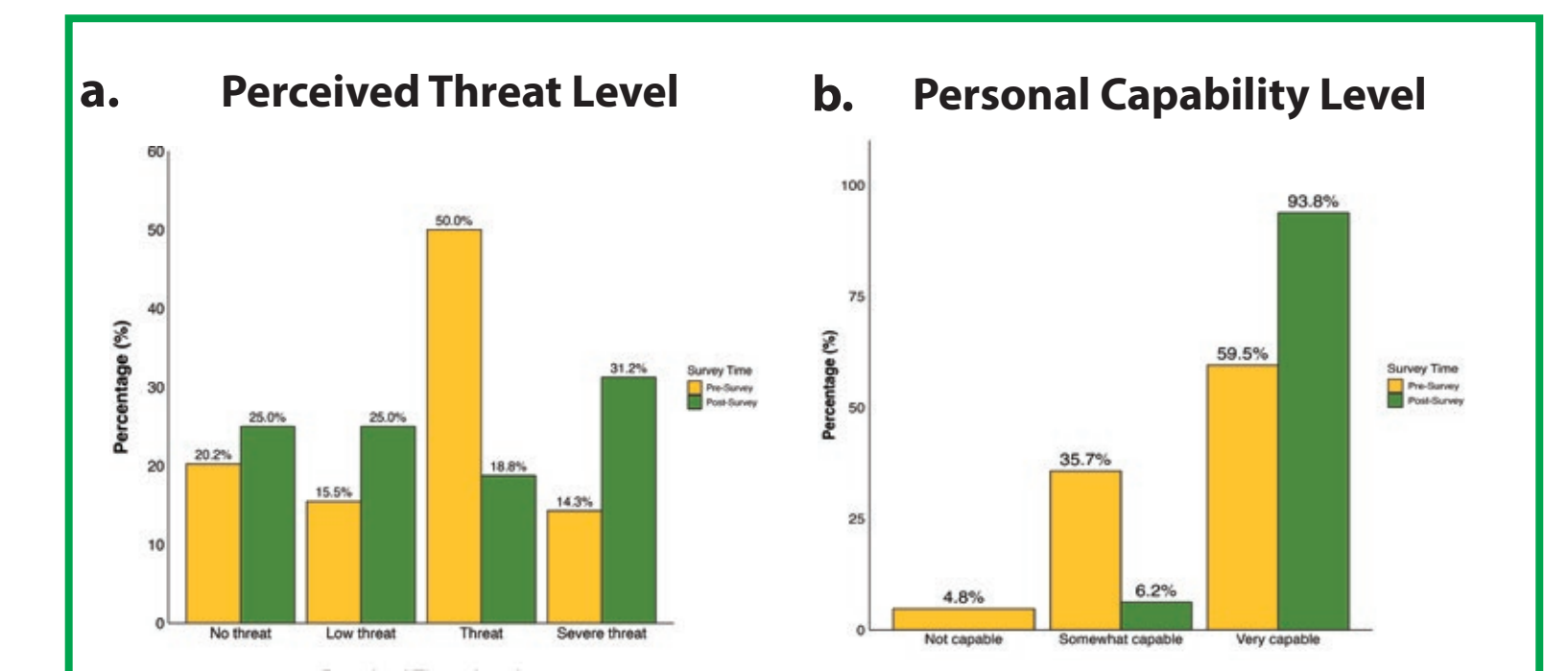


Figure 3. Selected Pre vs Post-Workshop survey responses graphs: (a) Perceived Threat Level graph, (b) Personal Capability Level graph.