

## June 27, 2017 Post-Disaster Lessons Prompt Planning at Hazard Mitigation Workshop

[stjohnsource.com/2019/09/19/post-disaster-lessons-become-planning-and-action-at-hazard-mitigation-workshop](https://stjohnsource.com/2019/09/19/post-disaster-lessons-become-planning-and-action-at-hazard-mitigation-workshop)

September 19,  
2019

As Virgin Islanders recover from the devastation of Hurricanes Irma and Maria in 2017 and watch the destruction wrought by Hurricane Dorian in the Bahamas, a new disaster mitigation plan for the territory is taking shape.

Researchers from the University of the Virgin Islands say keeping natural disasters on the public's mind is something they hope will promote better planning. At a recent two-day workshop on the subject that took place on Sept. 12 and 13, one UVI scientist said disaster planning does not start and end with hurricanes.

According to coastal engineer Dr. Greg Guannel, a changing planet means more frequent disruptions due to natural disasters. For that reason, he said, it's important to encourage citizens to take a greater role in hazard mitigation.

Advertising ([skip](#))

Guannel is the co-lead for the Virgin Island's next Hazard Mitigation and Resilience Plan update. U.S. states and territories that submit five-year plans to the federal government receive greater levels of support in the form of disaster non-emergency mitigation assistance than those who don't. The last plan helped the territory receive vital assistance prior to Hurricane Irma making landfall in 2017.



Drs. Kim Waddell and Greg Guannel are leading the work of shaping a new long term disaster plan for the Virgin Islands. (Source photo by Judi Shimel)

“The V.I. is very vulnerable to different kinds of hazards and those hazards are going to be more and more disruptive to our lives,” Guannel said. To illustrate the point, he notes that in the past six months, the territory has experienced an earthquake, severe rain events that triggered local floods and landslides, a drought and just recently, another hurricane.

“Community Resilience in an Ever Changing World” was the theme for this year’s workshop. It was also an opportunity to let a roomful of non-profit community leaders, health experts, and resilience planners in on details of a partnership reached between UVI and the V.I. Territorial Emergency Management Agency.

To Dr. Kim Waddell, UVI’s project lead for the mitigation and resilience plan update, the partnership has much to offer the process of developing a new five-year disaster management plan.

Organizers of the workshop warn that the level of FEMA support in the future may not be as substantial as it has been, given the frequency and severity of recent disasters that are impacting the nation. For those reasons, mitigation planning and resilience planning must be taken seriously, Guannel said.

Making the best use of available resources also came up in discussions on resiliency. Dr. David Alderson, Director of the Center for Infrastructure Defense at the Naval Postgraduate School called on those attending the workshop to promote broader thinking about disaster response.

That, he said, is a key to greater resilience. “Resilience is not about what you have. It’s about what you do,” Alderson said in a panel titled “Resilience and Mitigation: Modern Approaches and Insights.”

The team from the Infrastructure Defense Center has spent 18 months working in the Virgin Islands, assessing energy, water, transportation and supply chain systems. Alderson said they are also taking a look at the territory’s telecommunications systems but, “working in this domain is much harder.”

Harder because electronic infrastructure is not visible, unlike roads and water pipelines which can be mapped and analyzed, Alderson said.

Once the assessments are completed investigators hope to demonstrate how well each of those main lifelines — systems that allow a modern society to function — perform under normal and extreme circumstances. As the center develops models around their observations, some are expected to be transferred to UVI for their use in hazard mitigation and resilience development, he said.

In his remarks to those attending the workshop, Guannel expressed the idea that resilience results from constant awareness and practice. Adopting this approach, he said, makes disaster response a matter of scaling up adaptability.

Professor Roberto Barrios from the University of Southern Illinois put the concept in human terms. Resiliency is the flip side of vulnerability, he said. From a psychological standpoint, vulnerability can be used to predict which groups of people are most likely to live, die and recover from disasters. Laurie Schoeman, national program director at Enterprise Community Partners, said discriminatory business and banking practices make low- and middle-income communities vulnerable by restricting where they can build homes, often in flood prone areas.

For those reasons workshop organizers say citizens, communities and non-governmental groups will have a greater role to play in hazard mitigation.

Representatives from long-term recovery groups involved in the response during 2017 Hurricanes Irma and Maria also took part in panel discussions. Imani Daniel from the St. Thomas Long Term Recovery Group spoke about gaps in services that showed up after the 2017 disasters. Deanna James, president of the St. Croix Foundation, spoke of how collaborations with other non-profits shaped their disaster response strategy.

The director of the St. John Community Foundation has a similar tale to tell about collaborations taking place prior to Hurricanes Irma and Maria. By inviting non-profit organizations to their annual meetings, Kalousek said they were able to form a chapter of VOAD – Voluntary Organizations Active in Disaster. “We have been on a mission to build and empower other island non-profits so they can do what they do,” Kalousek said. Those efforts produced a post-disaster Resilient Housing Initiative, the acquisition of solar power pods and the development of ways to fill the gaps in disaster case management and housing construction, she said.

V.I. Office of Disaster Recovery Director Adrienne Williams-Octalien said she hopes to capitalize on her experience as a hazard mitigation manager for the Federal Emergency Management Agency to move the Virgin Islands toward a full recovery from the 2017 storms. Octalien said one goal – consistent with her current responsibilities – is to make sure the Virgin Islands can recover faster when disasters strike.

The director said she also wants to promote the ability to quickly adjust to conditions brought on by disasters of any kind. To do so would enhance the territory’s collective resilience and produce effective hazard mitigation strategies, workshop organizers said.

The ability to do so becomes increasingly important as studies on climate change highlight the unpredictability and uncertainty associated with the array of familiar natural disasters appearing in the future. Research presented at the workshop suggests that by the year

2100, global warming trends will raise sea levels, impact ocean temperatures, energize storms and put coastlines at greater risk.

UVI President David Hall introduced the keynote speaker on day one of the conference and spoke about the importance of the university and the territory's lead emergency management agency working in collaboration.

Working as a team, VITEMA and UVI are developing professional development opportunities for emergency managers, first responders and technical experts who serve as the territory's front line against natural and man-made disasters, Hall said. There is also an opportunity to prepare the next generation of Virgin Islanders who will take their place in the future.

It also provides an opportunity for UVI to create a new focus on hazard mitigation and resilience, "something we see as essential and something we support fully," the UVI president said.

The leader on developing the university's resilience and mitigation plan expressed appreciation for support from the top administrator. At the same time Waddell said while it is natural for the government and communities to think about recovery, placing an emphasis on mitigation strategies may prove most effective.

The communities that will be most effective in planning for the next disaster will identify mitigation strategies that make a real difference in their ability to recover the next time there is a disaster, Waddell said.