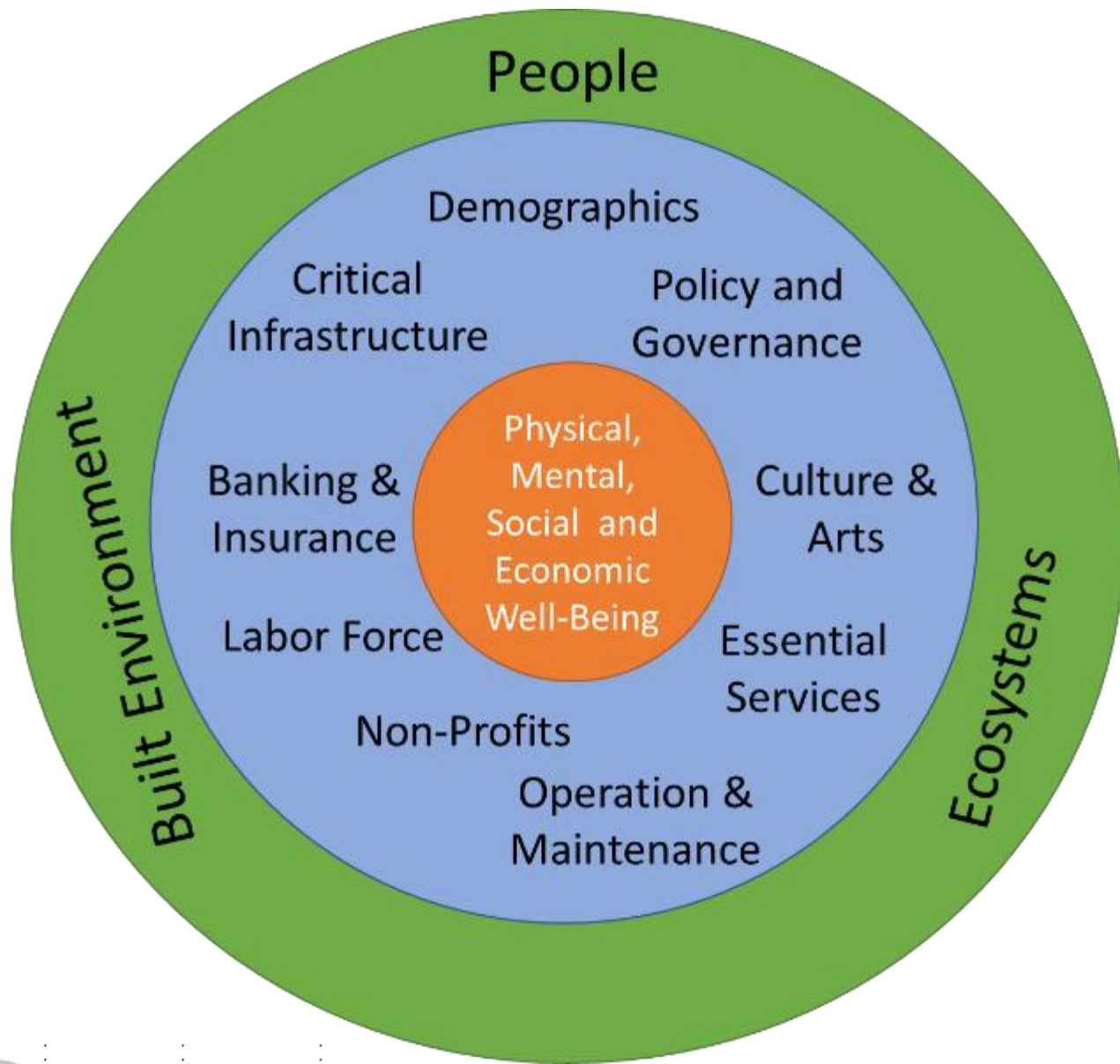


Addressing Inequities in Hazard Mitigation Planning in the USVI

*NOAA in the Caribbean Biannual Meeting
September 22, 2021*

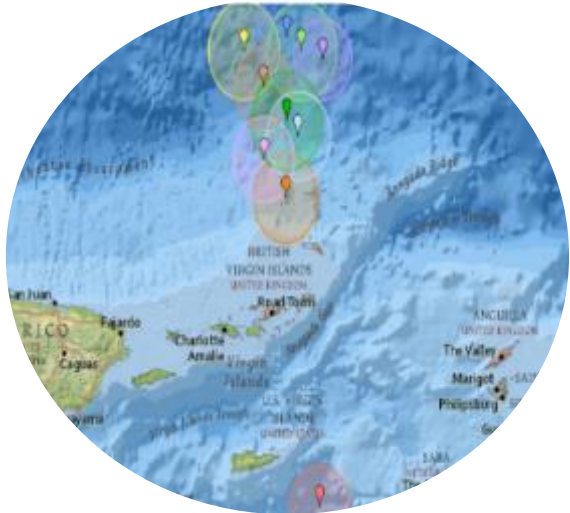


**Achieving Physical,
Mental, Social And
Economic Well-Being
Requires Many Systems
To Work Well Together**

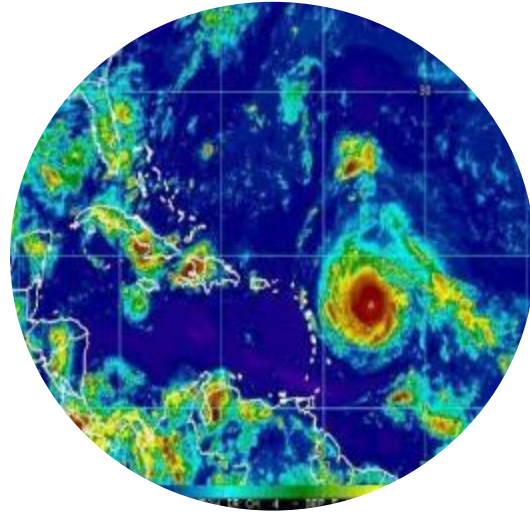


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We Are Vulnerable to Many Hazards, Amplified by Climate Change



**Earthquakes, Tsunamis,
Landslides,...**



**Stronger & Intense
Storms**



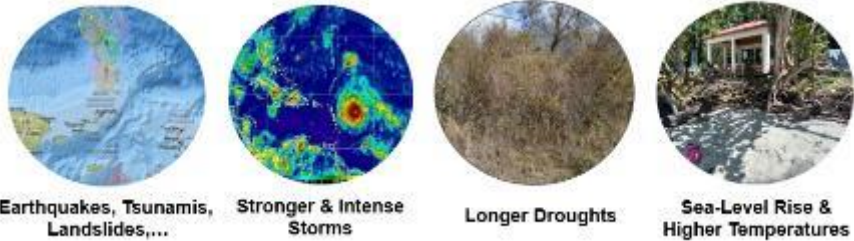
Longer Droughts



**Sea-Level Rise &
Higher Temperatures**

**Natural hazards can devastate our economy and
communities**

Hazards & Sector Analysis: Focus on System Resilience



Critical Infrastructure

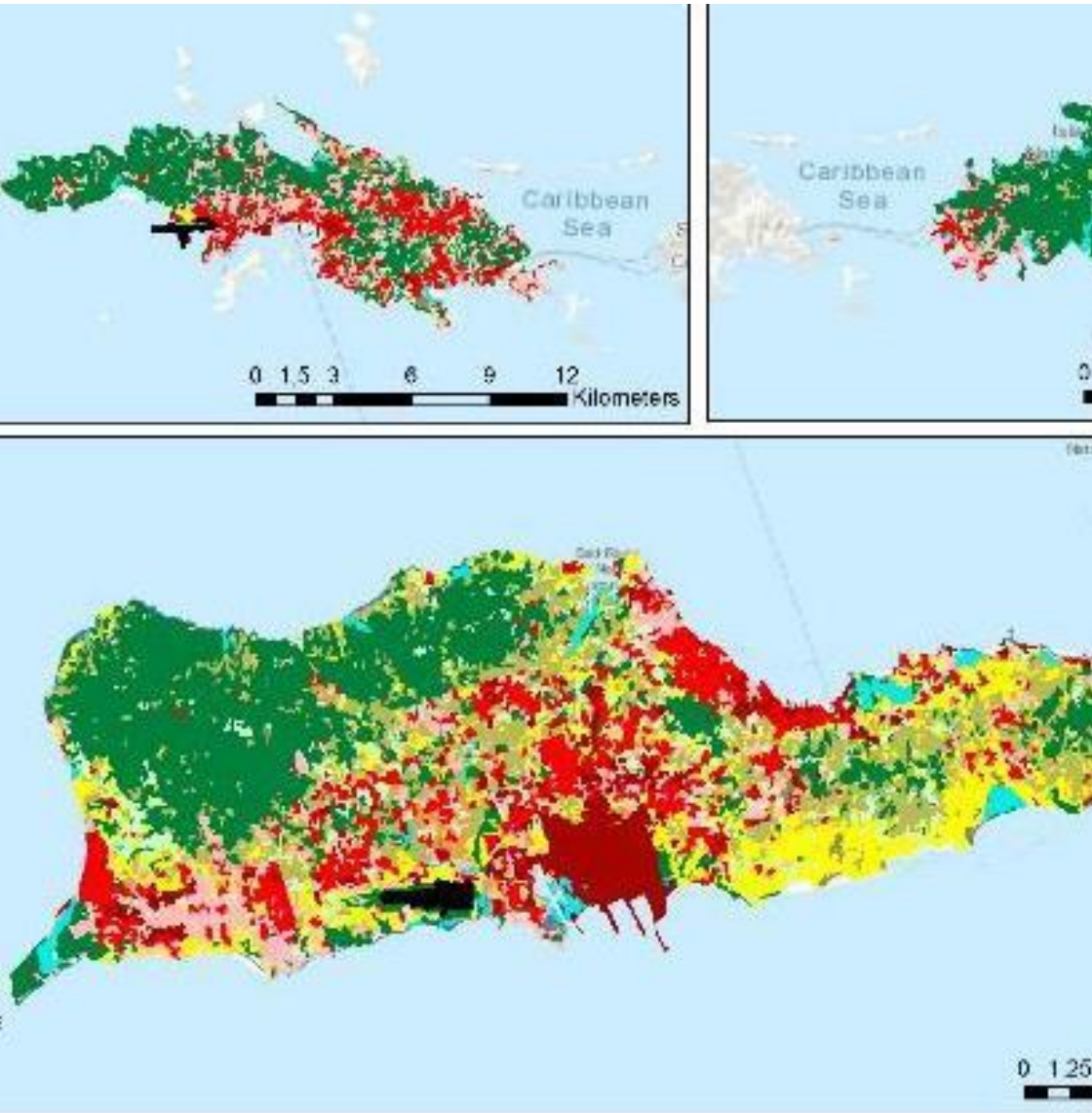
- Government and Capabilities
- Energy
- Transportation
- Communications
- Natural Systems

Essential Services

- Economy
- Housing
- Education
- Health
- Agriculture



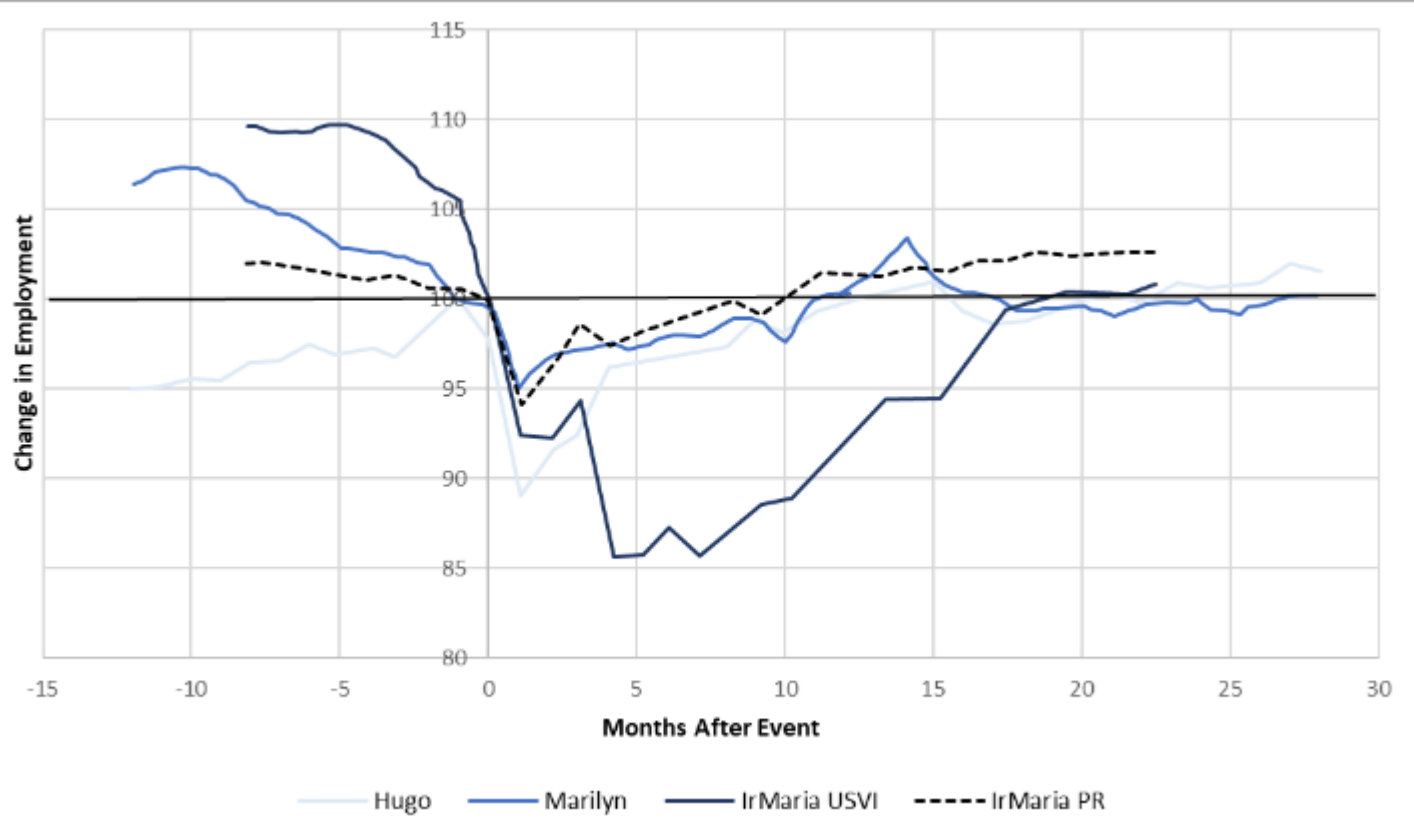
The USVI Has Strong Drivers of Risk



- **Underlying disaster risk drivers**
 - Unplanned and rapid urbanization (increase places at risk; impact on natural resources)
 - Poverty and inequality
 - Climate change and variability

- **Compounding factors**
 - Demographic change
 - Non disaster risk-informed policies
 - Lack of regulations and incentives for private disaster risk reduction investment
 - Complex supply chains
 - Limited availability of technology
 - Unsustainable uses of natural resources
 - Declining ecosystems
 - Pandemics and epidemics

The VI Economy Is Highly Vulnerable to Hazards and Shocks



- Hazards and economic shocks set us back for years
- **GDP Dropped 17% from 2008 – 2017**
- Population stagnant and likely to decrease
- Government investment dependent on Federal funding



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Riverine Flooding Is Getting Worse

- Development significantly increased runoff volumes in the last 40 years
- Most flooding events are not TS
- Tropical storms are getting wetter because of climate change

- Lack of infrastructure maintenance and standards increases flooding depth
- **Vulnerable populations experience more and more flooding**
- Economic impacts high



Wind Is As Dangerous As Ever



Hurricane wind speeds double at top of mountains



Wind speedup not properly taken into account during design



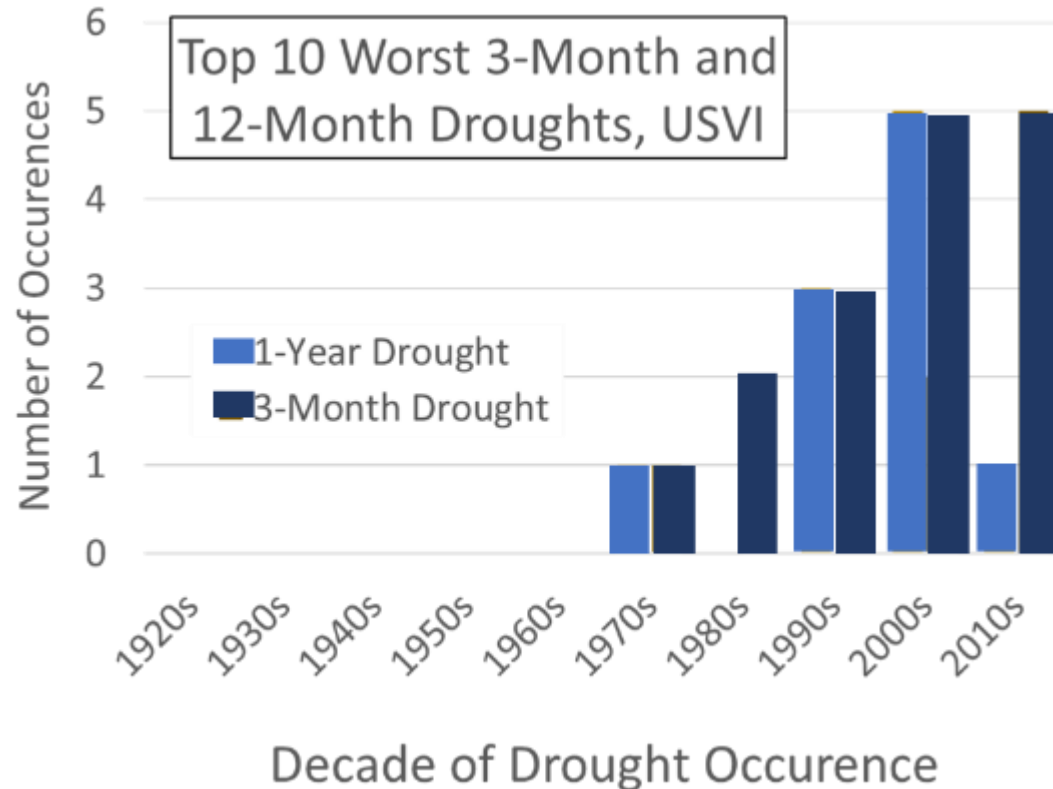
Lack of structural details impairs proper assessment of wind (and other) risk



Hazard Impacts

- More than 25% of buildings are in flood and tsunami zone
- More than 45% of government, public safety & health buildings are in flood and tsunami zone
- More than 40% buildings are in extremely high wind zones
- Risks of catastrophic failure of critical infrastructure abound

Drought: An Increasing Threat

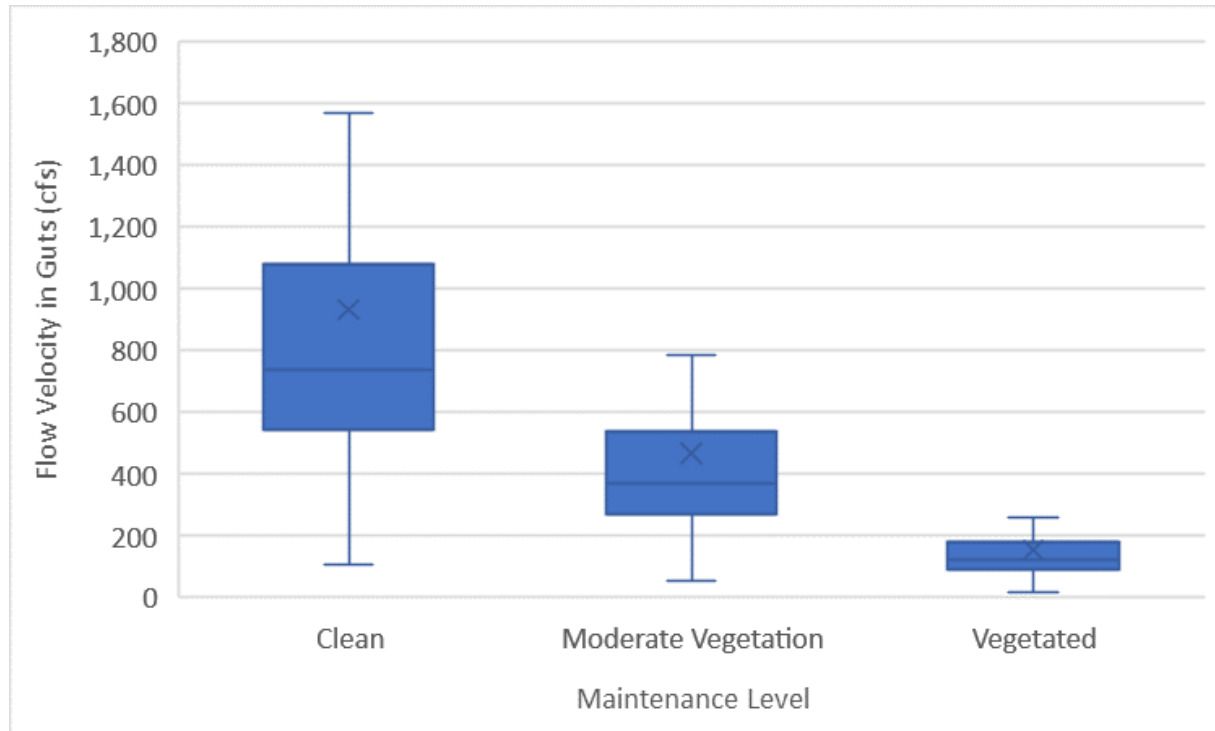


- Drought occurrence and length is increasing
- Cisterns, ponds and aquifers taking longer to fill
- Water management is improving among farmers, but progress needed
- Water access and cost is a silent emergency



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Role of Maintenance: Reduction in Service Delivery, Asset Degradation



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Want more details? Have additional Questions?

Kim.Waddell@uvi.edu

Thank you!