

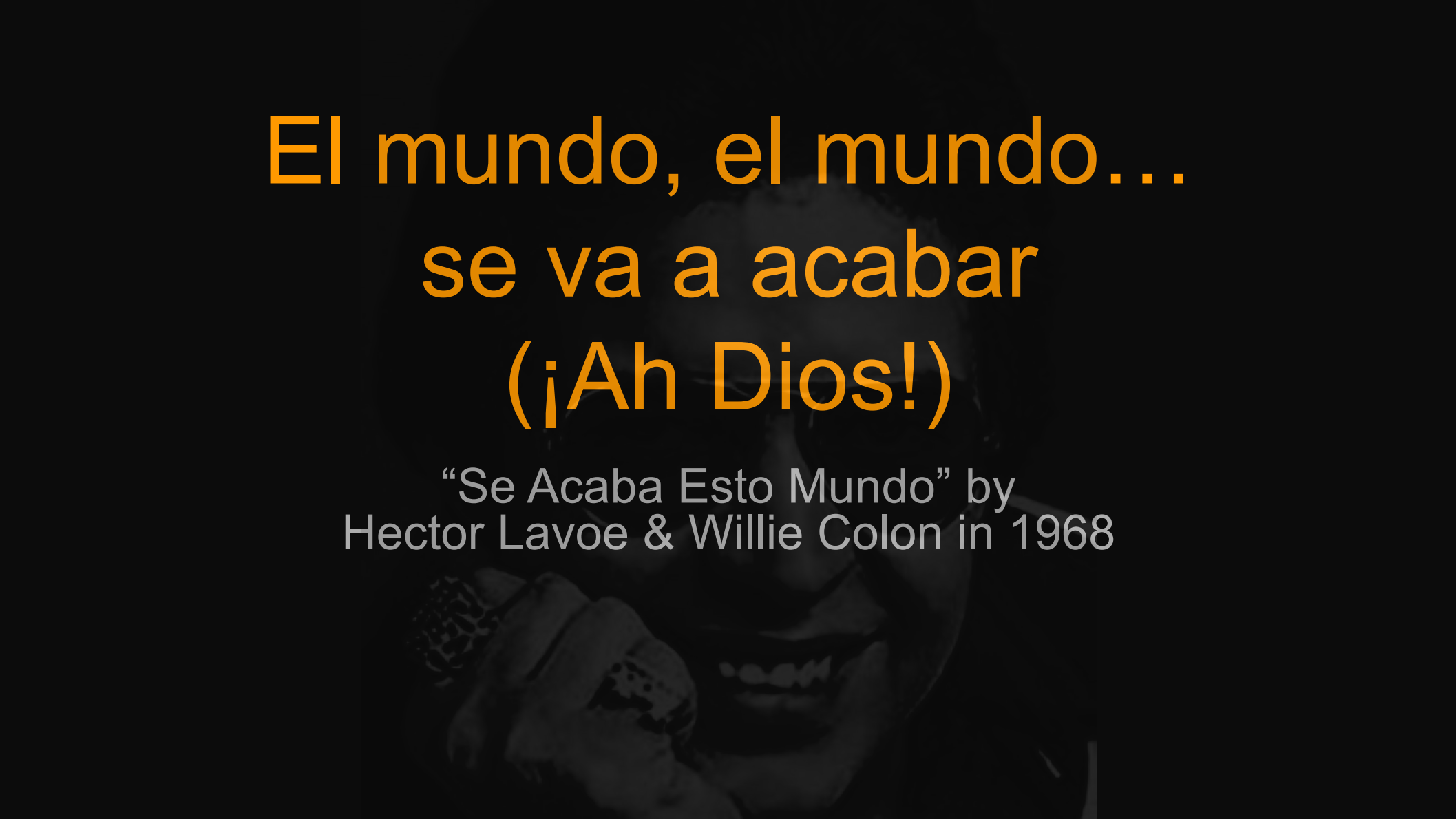


LIBREPLANET 2023

CHARTING THE COURSE

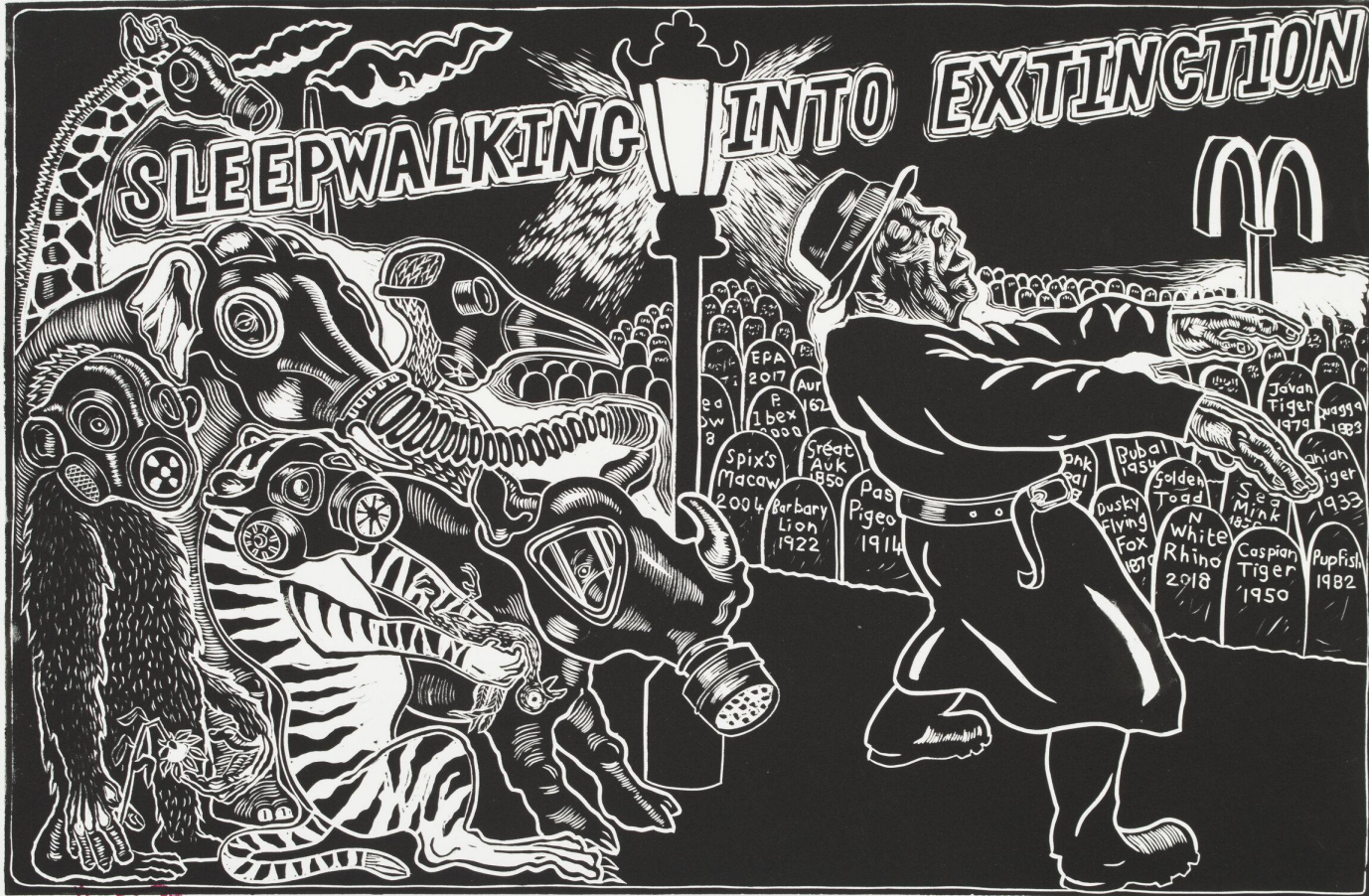
Life 0.01 Free Software for the End of Times

Kevin W. Shockey
Executive Director, **Ahora**
March 19th, 2023



El mundo, el mundo...
se va a acabar
(¡Ah Dios!)

“Se Acaba Esto Mundo” by
Hector Lavoe & Willie Colon in 1968



AJP

Sue Co 2018

Hypothesis:

Free software and hardware can save lives in post-disaster situations. And pre & post-society situations too!

Background

- Hurricane **Maria** September 2017,
Hurricane **Fiona** September 2022
- Call to Action: 2017-2020; Ahora Inc. established May 2021
 - Resilience is Survival
- “Our free software work is all about taking control over our digital lives and protecting our freedom” Zoë Kooyman
 - What is accepted as free today may not be tomorrow
 - Preserving knowledge systems before they disappear

Anthropocene Alliance (A2)

Harriet Festings,
Executive Director



Loiza Street
San Juan, PR



Our **Goal** is to Help Communities Fight Back.

- **Providing** Them Organizing Support, Scientific and Technical Guidance, and Better Access to Foundation and Government Funding.
- Has 140 Member-Communities in 38 U.S. States & Territories.
- Impacted by **Flooding, Toxic Waste, Wildfires, Drought, Extreme Weather & Heat**
- ALL Compounded by Reckless Development & Climate Change. Consequence is **Broken Lives & Ravaged Environment**

Our **Work** Consists of **Listening To** our **Frontline Leaders**.

- Their Experience, Research, & Solidarity Guide **Everything we Do**
- Offer a Path Toward Environmental & Social Justice

Join:

<https://anthropocenealliance.org/connect/contact-us/>

DISCLAIMER:

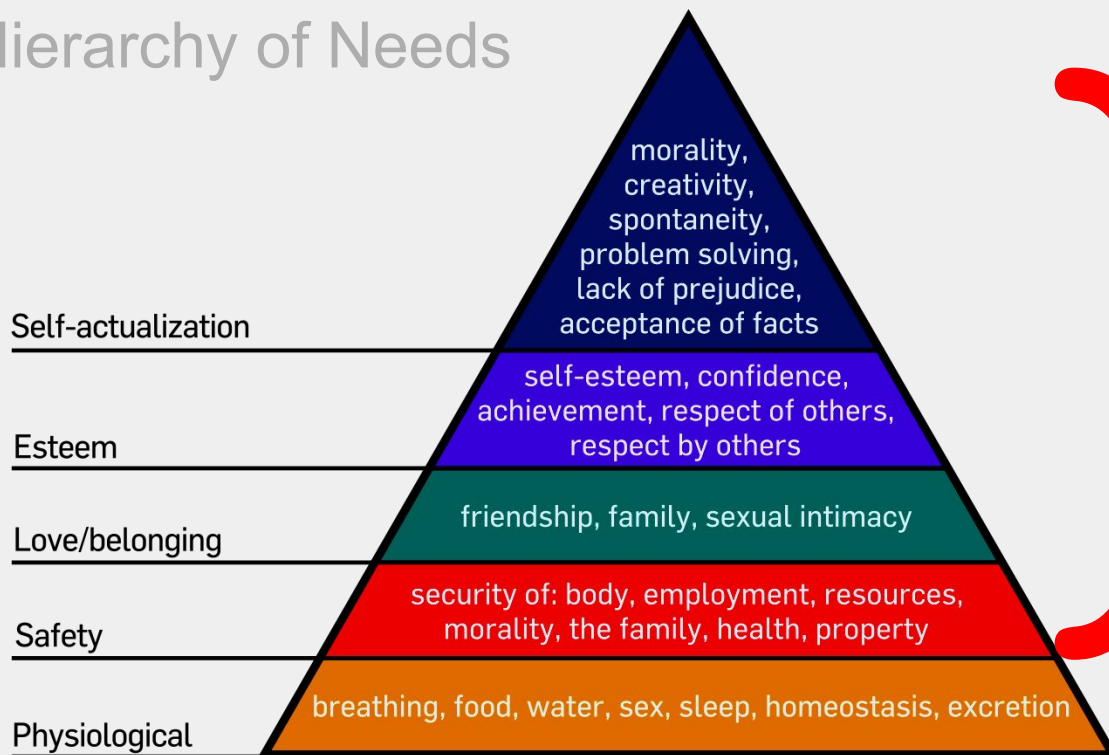
**Help Might Not Be
On the Way!**

Citizen Needs After a Disaster

- Food, Water, Safety, a Roof, & a Bed
- Information
- Connectivity
- **DEPENDS ON:** What were the citizen's needs before the disaster?

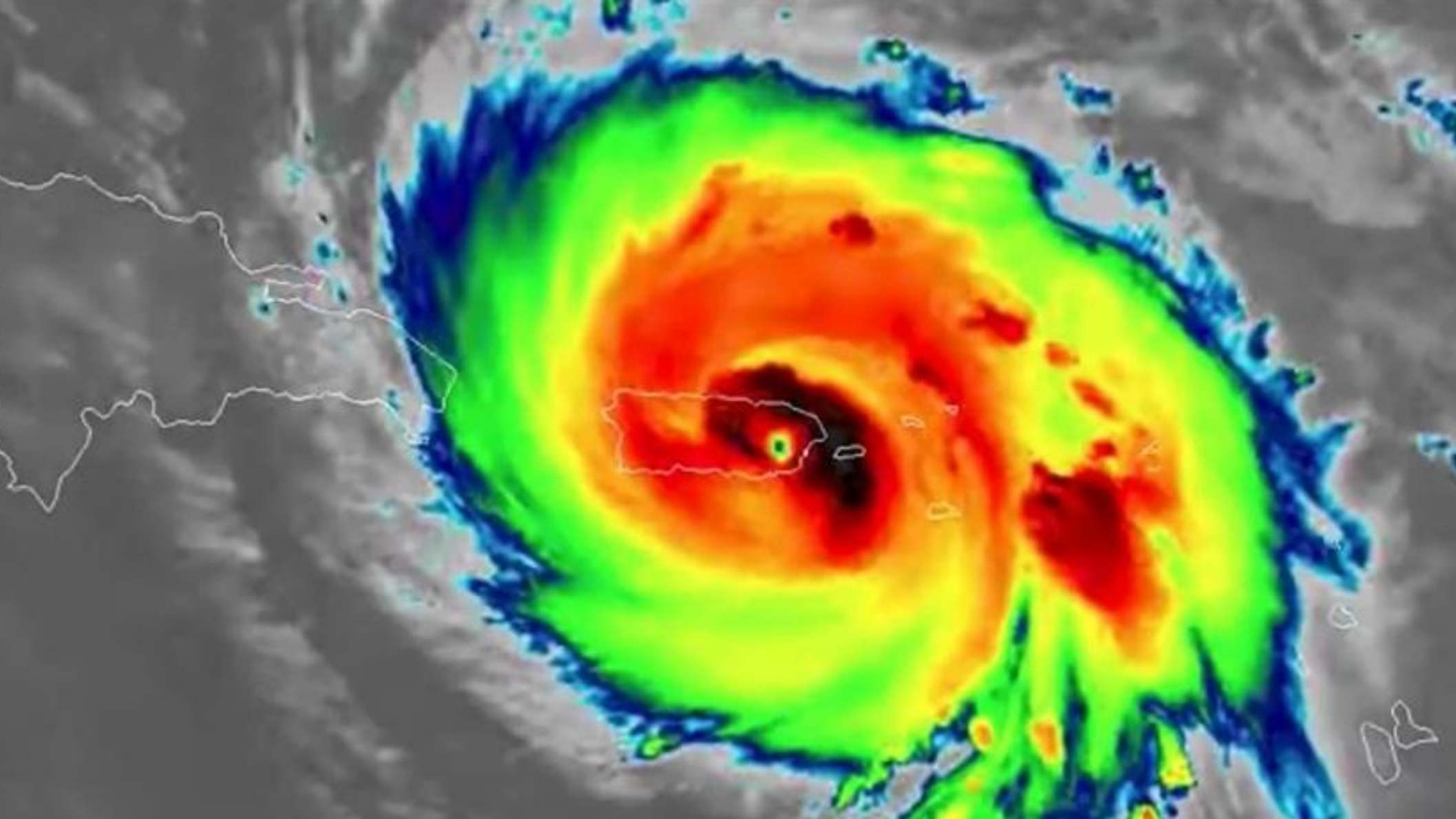
Citizen Needs

Hierarchy of Needs



**Pre-Maria,
Pre-Junta,
Pre-Bankruptcy**







Maria - September 20, 2017

- NOAA Hurricane Center - <https://www.nhc.noaa.gov/>
 - “Life Threatening”
 - “God Will Spare Us”
- Electrical power:
 - Before and During
 - 12 - 36 Hours After
 - 4 - 12 Weeks After
 - Good Luck With That!

Maria - September 20, 2017

- Cascading Failures
 - With no power, the government could not access their contingency plans stored in the cloud
 - Drivers stuck in their houses were unable to respond the all hands call
 - Diesel and gas deliveries
 - Emergency supplies

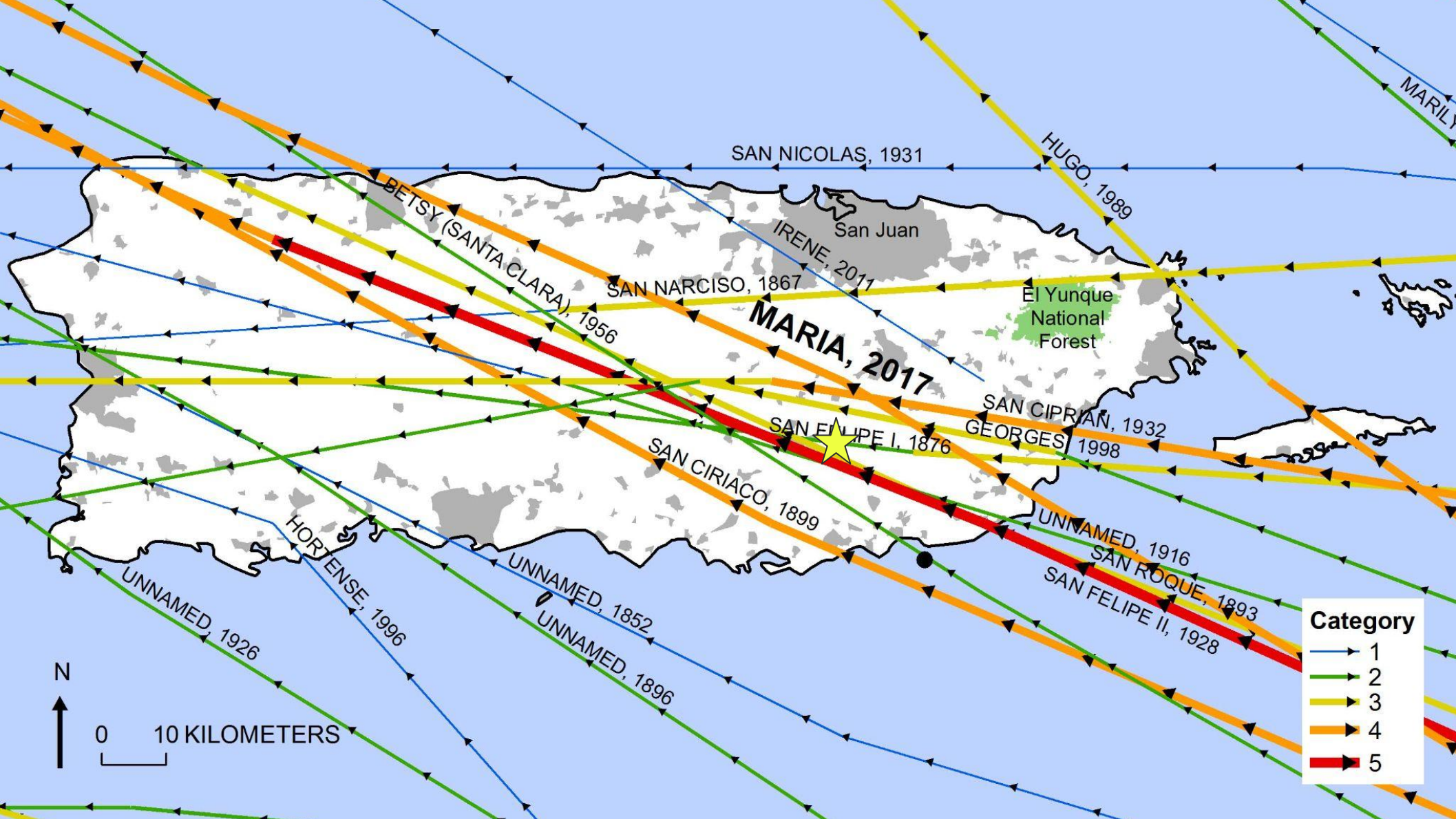
BARRANQUITAS
PUERTO RICO

Life Post Disaster

- Information Blackout
 - Cash is King
 - Post EMP - Special Operations
- Armed Robbery of Diesel; Stealing Generators
- FEMA
 - No Active Contingency Plans Upon Arrival
 - National Guard Activations and Arrival of the US Army
- Disaster Capitalism = Getting Rich Quickly on Other People's Misery
 - Whitefish Energy

Climate Change in Puerto Rico

- **Rising Sea Levels**
 - Not as simple as “Vote with your feet”
 - **I won’t leave my home!**
- **More Extreme Weather Events**
 - Since 1867, 13 hurricanes have hit Guayama
 - 5 Since 1998
- Will it become an annual occurrence? Semiannual?
- Cycles of: Drought & Deluge





Life 0.01

Requirements

- Models for Resilience
- Priorities for Action
- Role of Technology
- Factors Influencing the Descent of Technology
- Free Software for the End of Times
 - Post Disaster Use Cases
 - Post Society Use Cases
 - Pre-Disaster Use Cases

Thoughts on Resilience

- Models for Resilience
 - I'm only as safe or resilient as my neighbors, community, city, county, or state
 - Sendai Risk Reduction Framework



Sendai Risk Reduction Framework



Priorities for Risk Reduction Action:

- Priority 1: Understanding disaster risk
- Priority 2: Strengthening disaster risk governance to manage disaster risk
- Priority 3: Investing in disaster risk reduction for resilience
- Priority 4: Enhancing disaster preparedness for effective response
 - “Build Back Better” in recovery, rehabilitation, and reconstruction

I Never Want To Hear That Word Again!

Tracie Washington,
Civil Rights Lawyer
AFTERSHOCKS OF DISASTER

This is What's Really Complicated: How **Resilience** can Serve as a Pressure Valve for the State.

- Suggests that Business Carry on as Usual, That Puerto Rico can be “*Open for Business*” as Thousands Suffer
- Resilience Becomes **Jargon** for Simply Adapting To, Rather than **Confronting or Transforming**, Unacceptable Conditions.

Tracie Washington: “*I never want to hear the world resilience again. Resilience means you can hit me again.*”

p. 32. The Trauma Doctrine

What Role Can Technology play Post-Disaster?

Rd. #901
Yabucoa, PR



In a World Warmed Past 1.5°?

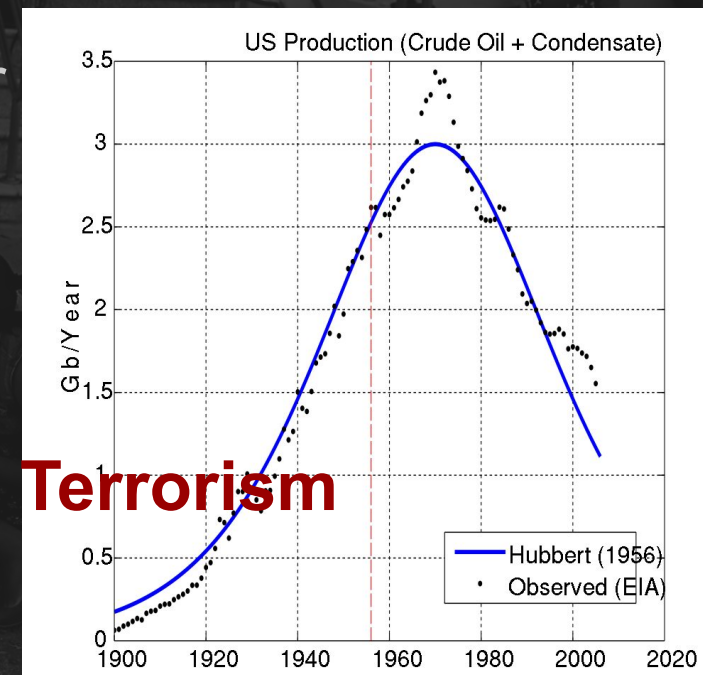
In a Post-civilization World?

Role of Technology

- Lifting the Role of Women
- Supporting Post-Disaster Recovery and Reconstruction
- Connecting isolated communities
- Boosting agroecological adoption as climate mitigation
- Localization that provides applications or functionality in an appropriate language
- Localized information about **shelter, food, and water**
- Increasing resilience for rural communities

The Descent of Technology

- Shortages of Skilled Workers, Licensed Professionals
- Climate Change
 - Global Famine
 - Global Drought and Lack of Freshwater
 - Climate Refugees and Migration
 - War or Plague
- Frequent Major Disasters
- Descending Oil - Fuel Shortages
- **World War, Use of Nuclear Weapons, Terrorism**



Will There Still be Cat Videos?

- As Long as There Can Be! That's What it Was Designed To Do
- Nodes will fail:
 - Traffic Will Route Around the Failure - Yes!
 - Speeds Will Slow
 - Isolated Nodes = **THE END**, Unless Cached **LOCALLY**
- Using Mesh Technology → Extend the Reach of Active Nodes
- Climate Migration to Active Nodes
- Applications to Maintain a List of Active Nodes (LISTSERV)
- Low Bandwidth Applications Will RULE!

Free Software for the End of Times

- Would the FSF Philosophy or Software Definition Still Be Relevant?
 - If There Is A Platform Capable of Running Free Software
- FSF Software - Stand Alone Client &/or Stand-Alone Server
 - Servers and Nodes - If You Have Them, Harden Them Now!
 - What Can Be Done to Mitigate the Reduction of Platforms Capable of Running Free Software?
- How Might the Mission and Values of the FSF Need to Change in a Descending Technology Future?

Citizen Needs After a Disaster (Use Cases)

- Offline Maps Identifying the Locations of Shelters, Escape Routes, Medical Services. etc.
- An Emergency Phone Directory Containing all Post-Disaster Agencies
- Video Tutoring, Books, Illustrations, etc. that:
 - Provide First Aid for Victims with Mental or Bodily Harm
 - Provide Safety Training for Common Post-Disaster Problems: Using a Generator, Water Purification, and Home Self Defense
- Mesh Networking Downloads and Software - Link Phones With No Signal to Those That DO!

Use Cases For the End of Times

- All Use Cases From Post-Disaster
- **Additional Use Cases:**
 - Add Living Off of the Land to Information Applications
 - Mesh Networking with Node Preservation
 - Using Amateur Radio Networks (IP traffic)
 - Ability to Download Small Applications onto Phones
- Primitive Internet functionality:
 - Low Bandwidth
 - List Servers, BBS

Use Cases Pre-Disaster

- Software to Aid Conservationists and Practitioners of Nature-based Solutions to:
 - Build a Community Intelligence Database providing:
 - **Learning & Teaching**
 - Ability to Form Communities of Practice,
 - Conducting Community Outreach for Public Education of the Risks of Climate Change
- Visual Design Software for Planning and Implementing Nature-based Solutions
- All Post-disaster and Post-civilization use cases too!!

Use Cases Pre-Disaster

- Free hardware and software combination for community monitoring of:
 - Key roads, bridges and causeways for flooding, excessive runoff, or mudslides
 - Rivers and creeks
- Free hardware/software combination to provide mesh network monitoring of lands under protection and conservation



Decolonize Puerto Rico Now!



Photos of Finca Kaleli



Photos of Finca Kaleli



Photos of Finca Kaleli



Photos of Finca Kaleli



Use Cases for Pre-Disaster



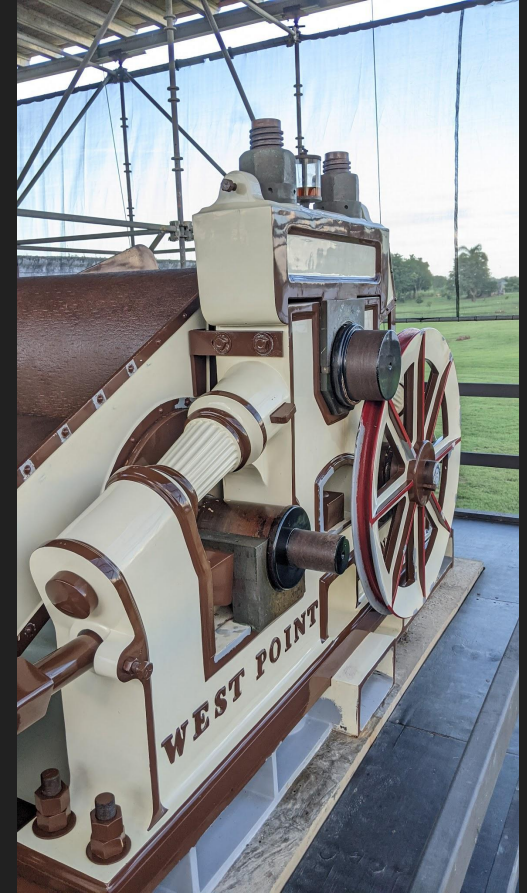
Use Cases for Pre-Disaster



Use Cases for Pre-Disaster



Use Cases for Pre-Disaster



Use Cases for Pre-Disaster



Video Message from Vandana Shiva

*“When You
Control Seed
You Control
Life”*



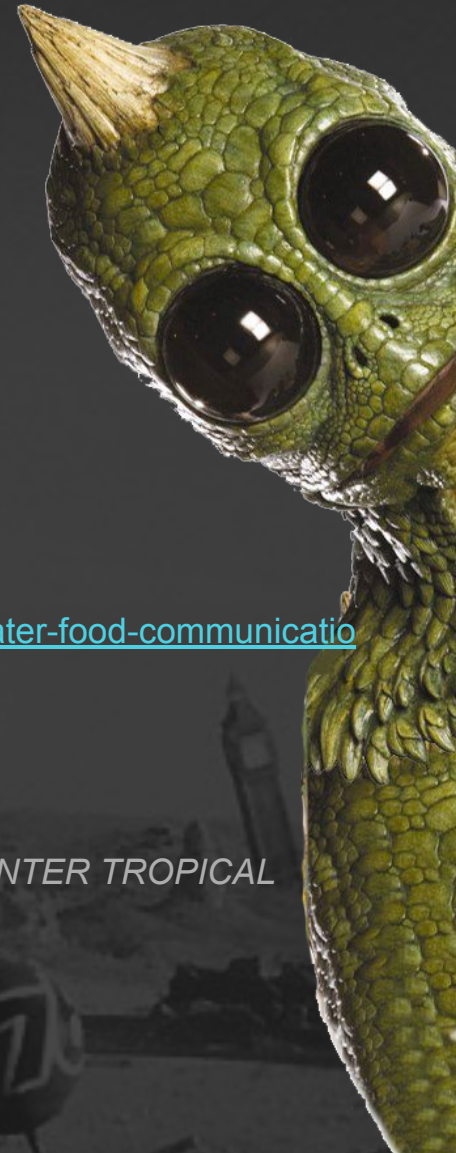
A New Frontier for Defending Freedom?

- From 1903 to 1983 the US Lost 93% of Seed Variety
- World-Wide Pressure to Switch to Genetically Modified Products
 - Proprietary Seeds
 - Proprietary Fertilizer
 - Proprietary Pesticide
- Fight for Non-GMO Seeds
 - Independence
 - Protection
 - “We would like to believe we can live freely within the set boundaries of democracy”



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Thank You **Boston!**
Thank You
Free Software
Foundation!!!!

