

# **Impact of Disasters on Supply Chain Resilience**

**Washington, DC (Virtual)**

**February 3, 2021**

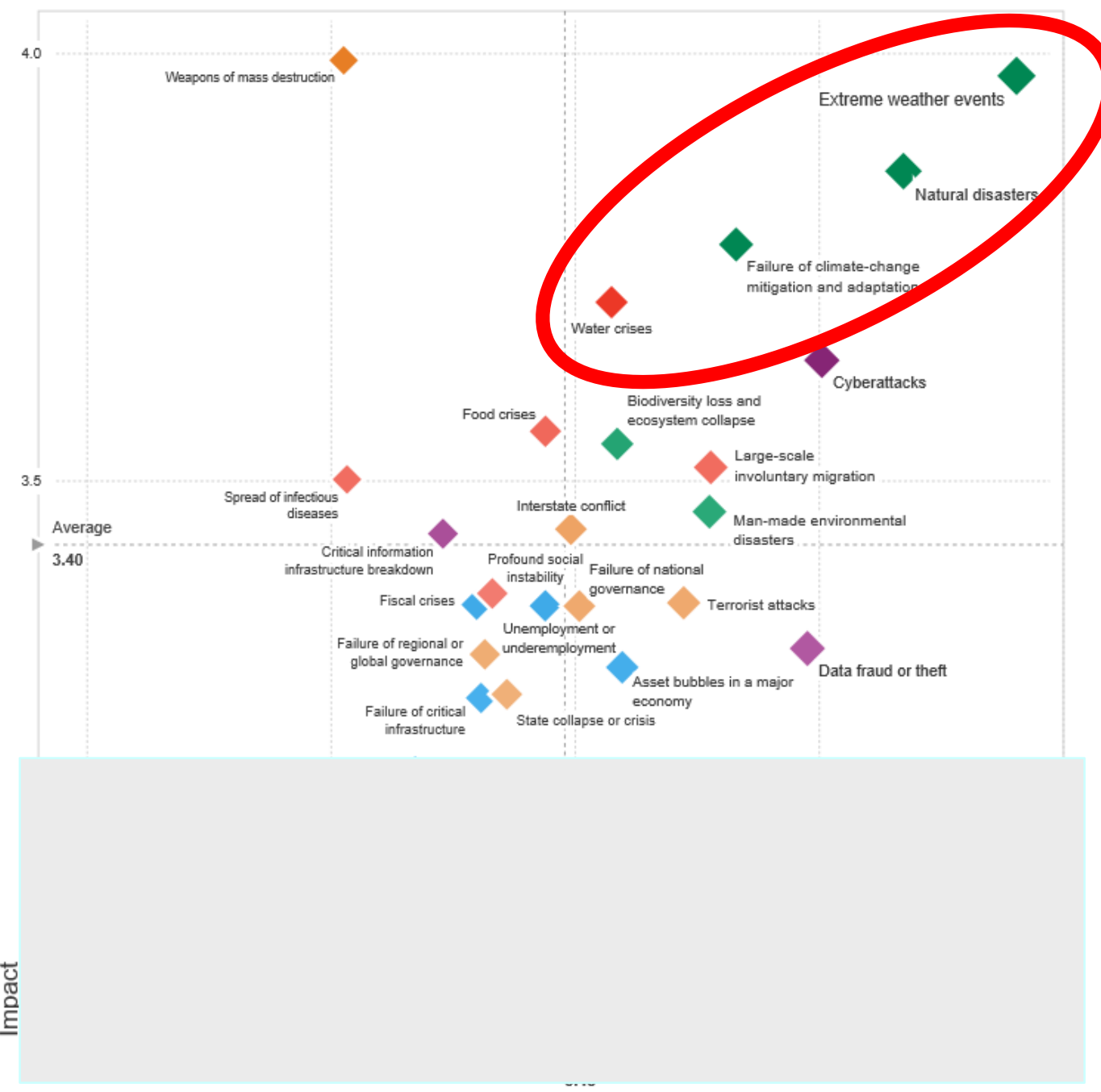
**Gerald E. Galloway, Jr., PE, PhD**

Glenn L. Martin Institute Professor of Engineering, University of Maryland

[gegallo@umd.edu](mailto:gegallo@umd.edu)

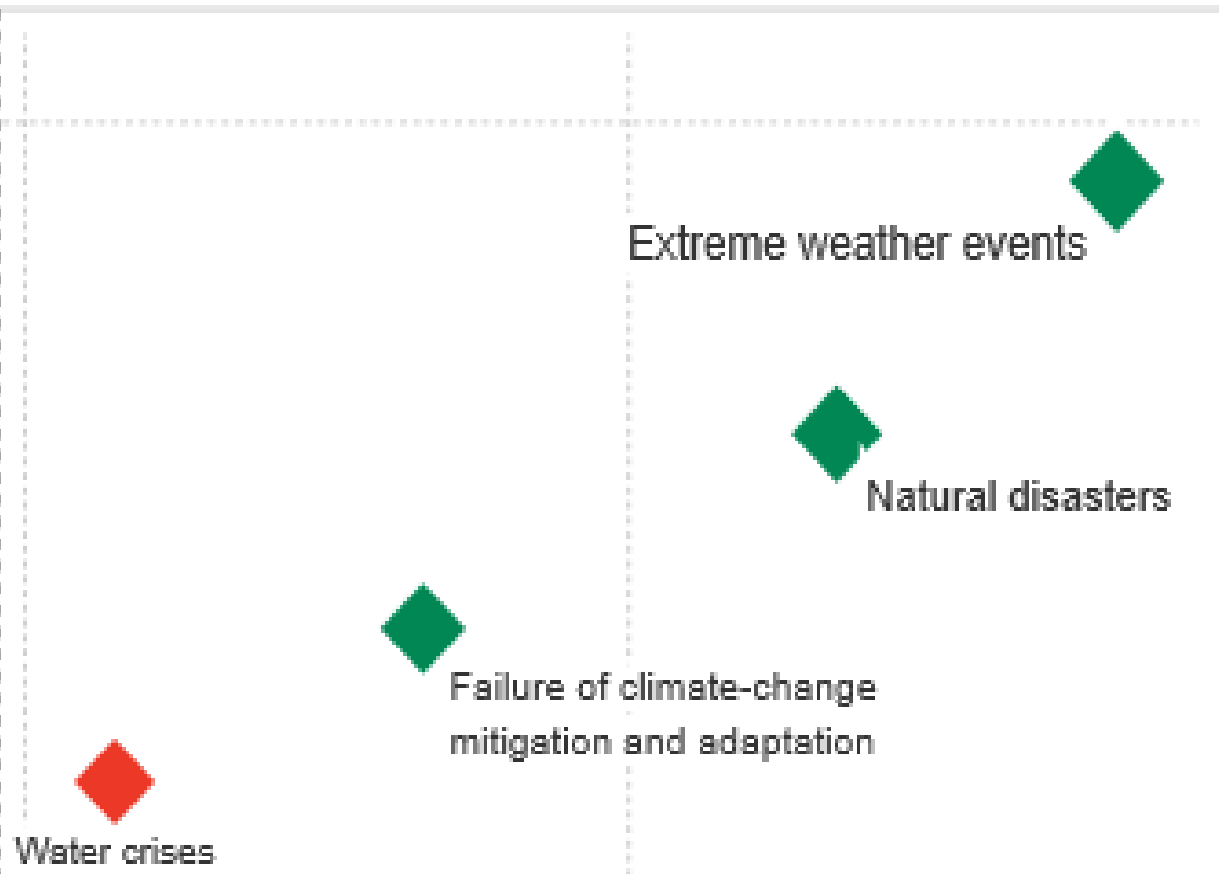
# **The BLUF**

- 1. The World Around Us Is Changing and Change Is a Big Deal**
- 2. The Extent and Risks Associated with Changes Are Increasing**
- 3. These Changes Are Adversely Affecting Value and Supply Chains**
- 4. There Are Actions We Can Take to Deal with these Growing Challenges**



The Global Risks Landscape 2018. What is the impact and likelihood of global risks?

World Economic Forum



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World Economic Forum

# WEF 2021

## Top Risks

by likelihood

- 1 Extreme weather
- 2 Climate action failure
- 3 Human environmental damage
- 4 Infectious diseases
- 5 Biodiversity loss
- 6 Digital power concentration
- 7 Digital inequality
- 8 Interstate relations fracture
- 9 Cybersecurity failure

## Top Risks

by impact

- 1 Infectious diseases
- 2 Climate action failure
- 3 Weapons of mass destruction
- 4 Biodiversity loss
- 5 Natural resource crises
- 6 Human environmental damage
- 7 Livelihood crises
- 8 Extreme weather
- 9 Debt crises



# Rojana Industrial Park in Ayutthaya Province, Thailand

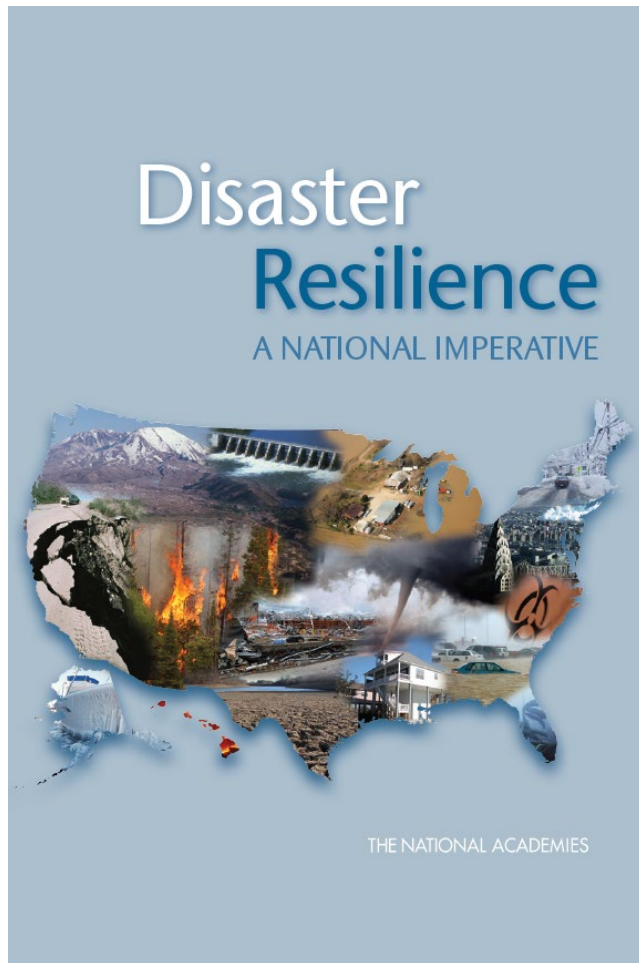


U.S. Marine Corps photo by Cpl. Robert J. Maurer





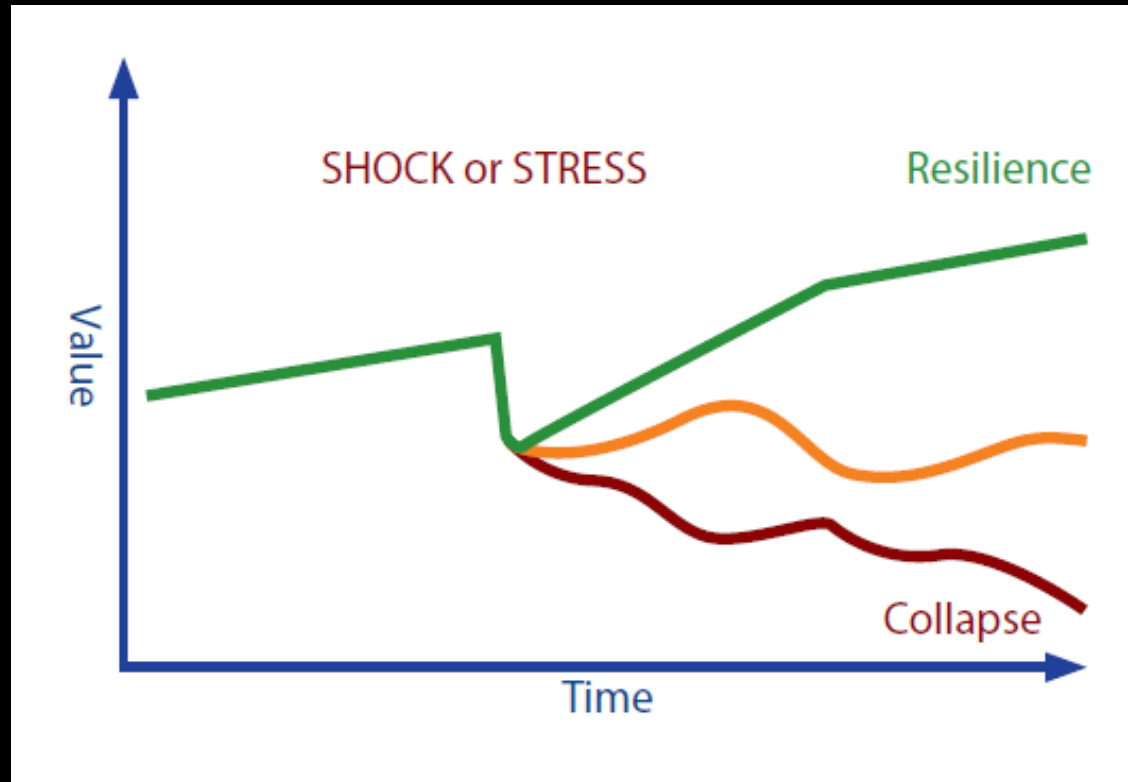
It's Complicated



# **Disaster Resilience**

The ability to prepare and plan for, absorb, recover from, or more successfully adapt to actual or potential adverse events

**It is a way to think  
– a culture**



# Disaster Resilience

A NATIONAL IMPERATIVE



THE NATIONAL ACADEMIES

**Building resilience towards  
a 2030 future  
vision...requires a new  
national “culture” of  
disaster resilience**

**Including/or Value/Supply Chains!**

# THE FOUNDATION

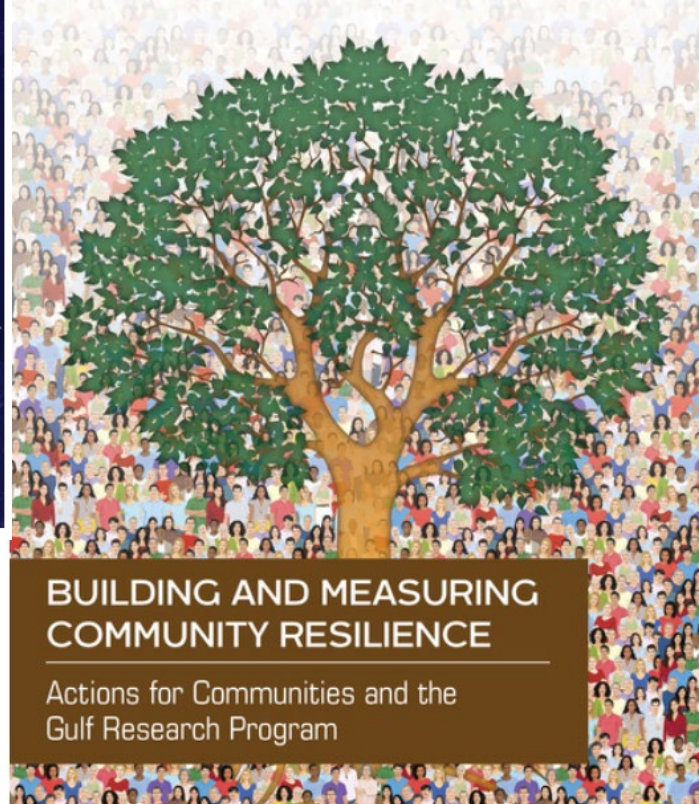


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**CONSENSUS STUDY REPORT**

Enhancing the  
**RESILIENCE**  
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**CONSENSUS STUDY REPORT**



**BUILDING AND MEASURING  
COMMUNITY RESILIENCE**

Actions for Communities and the  
Gulf Research Program

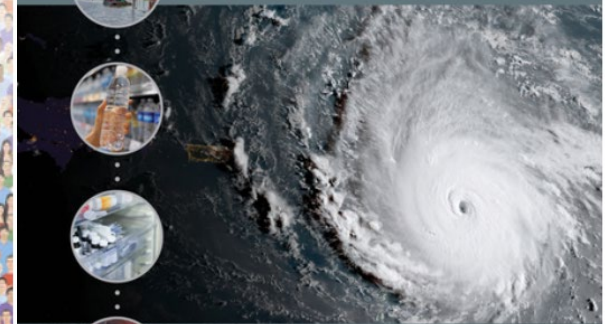
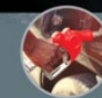
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**CONSENSUS STUDY REPORT**

**STRENGTHENING POST-HURRICANE  
SUPPLY CHAIN RESILIENCE**



Observations from  
Hurricanes Harvey, Irma, and Maria



# Dimensions of Resilience

- **Natural** (or environmental air, land, water, mineral resources, stability and health of ecosystems, natural land cover, environmental quality).
- **Built** (infrastructure): the buildings and infrastructure systems support facilities, housing, schools, commercial and industrial buildings, and supporting infrastructure lifelines
- **Financial** (economic): the totality of economic assets and **livelihoods** in a community.
- **Human and cultural**: demographic characteristics, knowledge, skills, **health, and physical abilities; educational levels, age distributions, health insurance, access**
- **Social**: the social networks and **connectivity** among groups and individuals feeling of belonging
- **Political (institutional or governance)**: **access to resources and the ability/power to influence their distribution** as well as the ability to engage external(to the community) entities in efforts to achieve community goals. This includes disaster insurance coverage coordination or fragmentation, disaster experience in response and recovery,

# 9-11 Commission Report

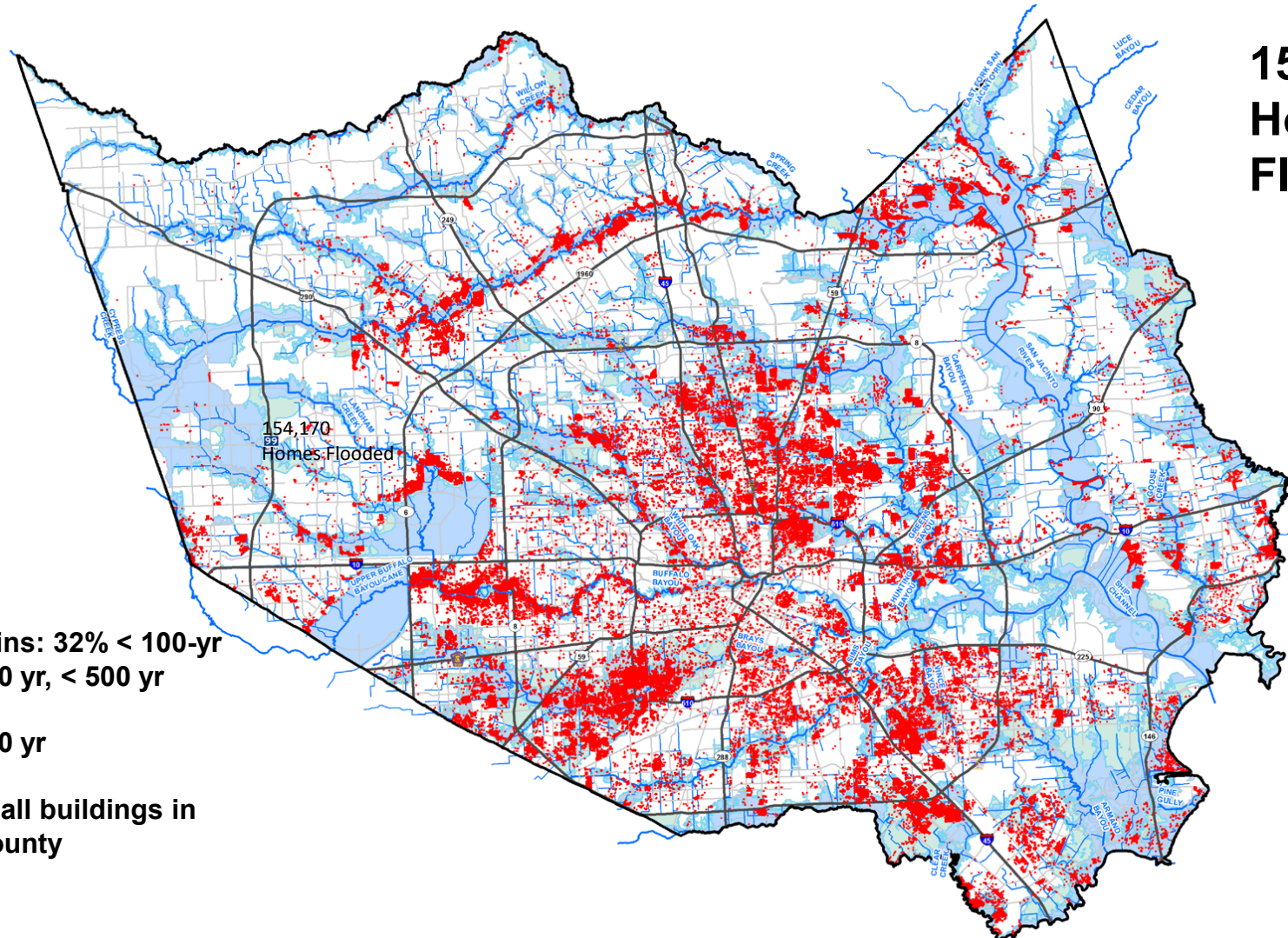
- Failure of Imagination
- Mind-set that dismissed possibilities



# Over the Horizon

# The People Dimension!

**154,170  
Homes  
Flooded**



**Floodplains: 32% < 100-yr  
23% > 100 yr, < 500 yr**

**46% > 500 yr**

**~ 10% of all buildings in  
Harris County**

The 74



Binghamton NY Hospital

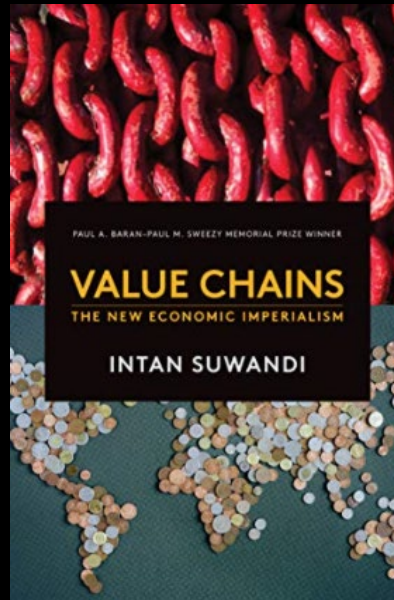


Tidal basin



New scientist

# Equity in/for the Labor Force



**Reliance on algorithms that  
exacerbate inequalities can  
damage well-being and  
amplify societal fractures**  
***WEF 2021***

## The New Economic Imperialism

The exploitation of labor and class in the Global South

It's Complicated

# **The Bottom Line**

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# NEW YORK

The City and the Storm

Starting on p.17



**Remember:  
Nature Bats Last**

**Thank You!**

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