

MAY 19-23

ASFPM2019



ASFPM – Cleveland, Ohio
May 21, 2019

Presenters:

Suzanne Vermeer, P.E, CFM, FEMA HQ
Tammy Conforti, P.E., CFM, USACE HQ



FEMA



USACE and FEMA Present

THE REUNION TOUR

1. Finding Common Ground (30:00)
2. Enabling Good Outcomes (10:00)
3. Communicating Risk (20:00)
4. Key Changes to Expect (15:00)
5. Q&A (15:00)

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500 C. Street SW, Washington, D.C. 20024



978123456789



SESSION OBJECTIVES

PARTICIPATION:

- Learn about different perspectives on levees and flood risk
- Discuss how risk influences behaviors of those behind levees
- Provide feedback on how USACE and FEMA can help communicate risk

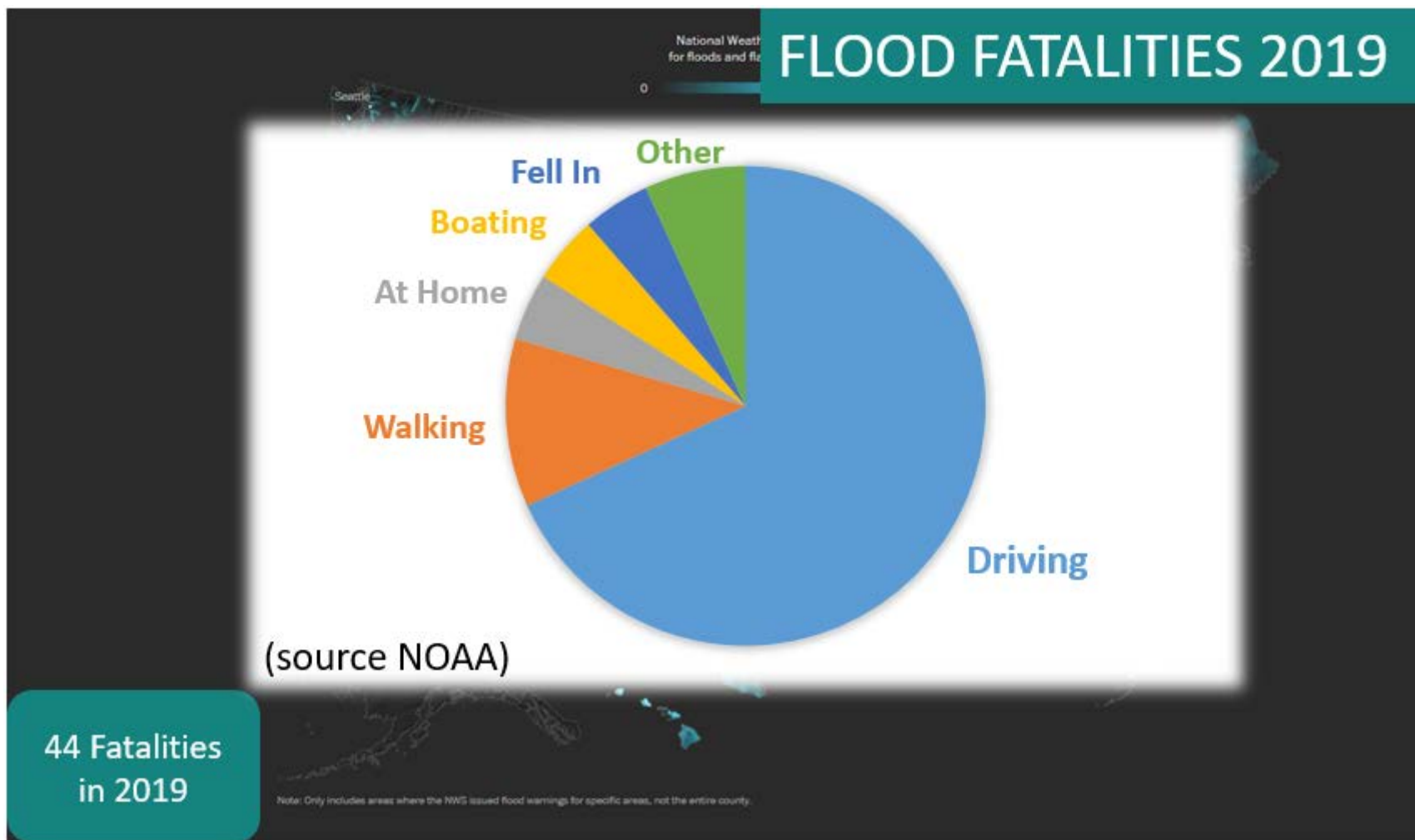
KNOWLEDGE:

- Present latest updates from USACE and FEMA

WHO'S WHO?



WHY DO WE CARE?



POLL EVERYWHERE

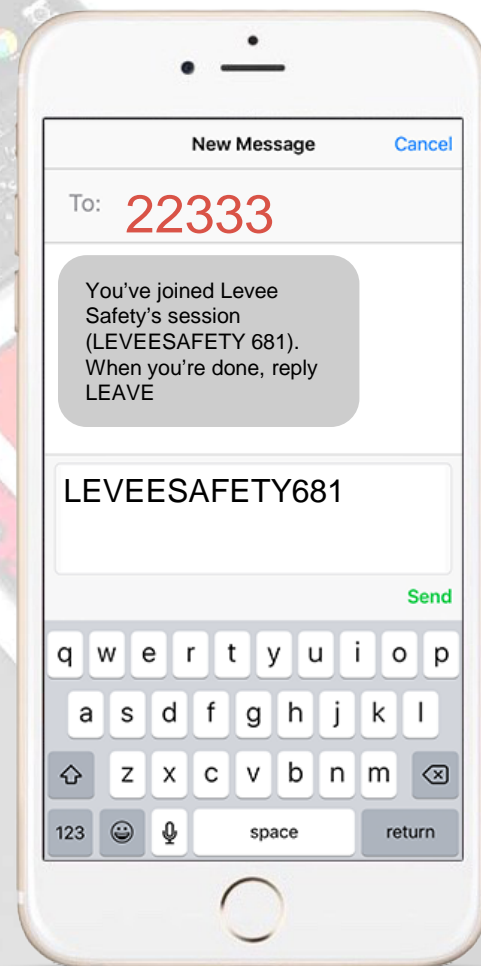


We will be using Poll Everywhere to receive real time feedback, gather ideas and learn about your experience. You'll be submitting your responses via phone.

PARTICIPATING WITH POLL EVERYWHERE

How do I start?

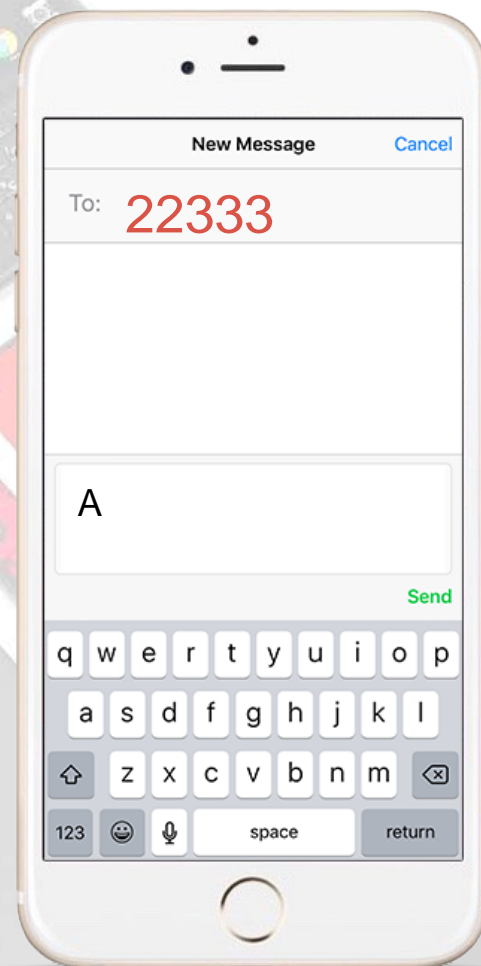
- In the “To” field, enter 22333
- In the message field, enter “**LEVEESAFETY681**” and tap “Send”
- Wait a few seconds to receive a message confirming that you’ve joined a USACE Levee Safety polling session
- You only need to join once to be able to participate in all the polls this week



PARTICIPATING WITH POLL EVERYWHERE

How do I start?

- In the “To” field, enter 22333 (Continue to text to this number all week)
- In the message field, enter your ideas (for an open ended question) or your choice if it is multiple choice.



**What is the first word that comes to mind
when you hear the word "risk"?**

oll Everywhere

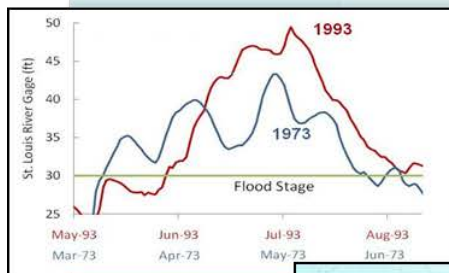
Start the presentation to see live content. Still no live content? Install the app or get help at PollEv.com/app



FEMA



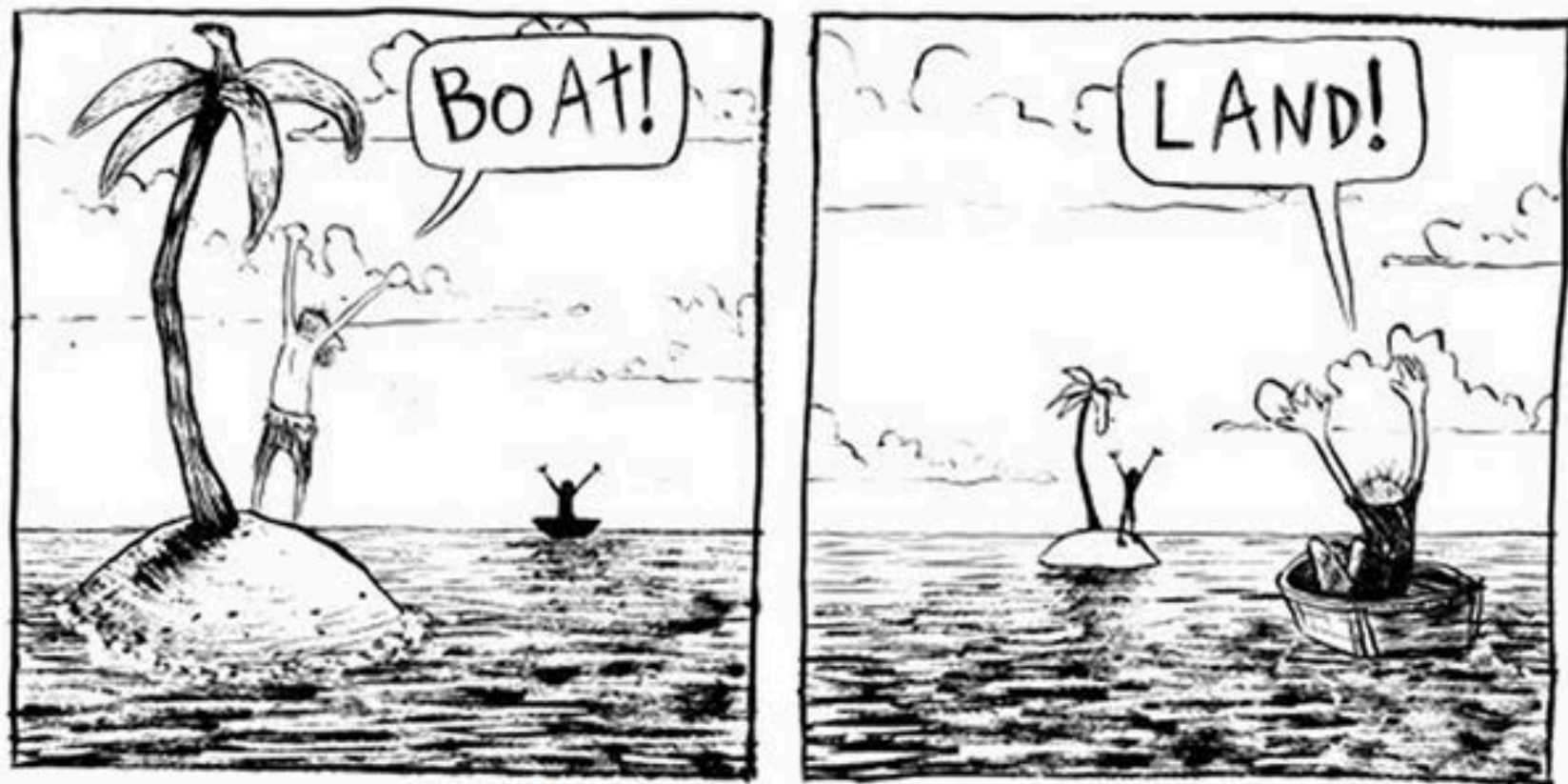
**What is the first word that comes to mind
when you hear the word "levee"?**



Risk = f(Hazard, Performance, Consequences)

**The measure of the probability and severity
of undesirable consequences**

A DIFFERENCE IN PERSPECTIVES



Perspective...

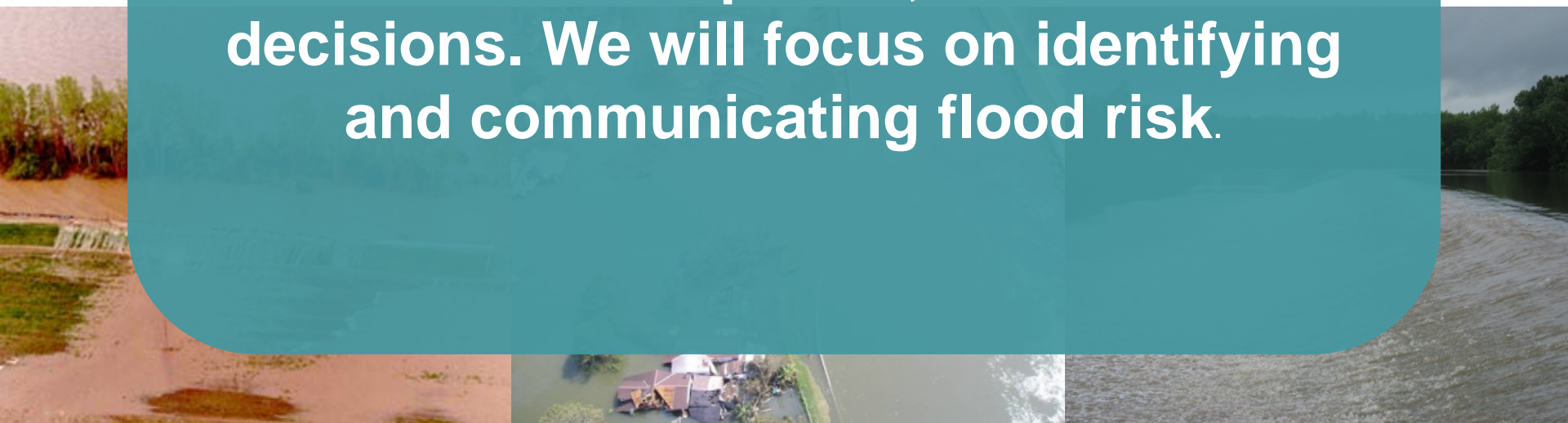
USACE AND FEMA

- What do USACE and FEMA care about?



GOALS FOR LEVEE SAFETY

- Develop increased understanding of benefits and risks of levee systems
- Promote actions to manage risks
- **We want people to understand their flood risk. Understanding risk helps people make more transparent, well-informed decisions. We will focus on identifying and communicating flood risk.**
- Make wise federal investment decisions



SPONSORS AND STAKEHOLDERS

- What is your most important interest in flood risk management?



In one word, what is the most important consideration for flood risk management?

oil Everywhere

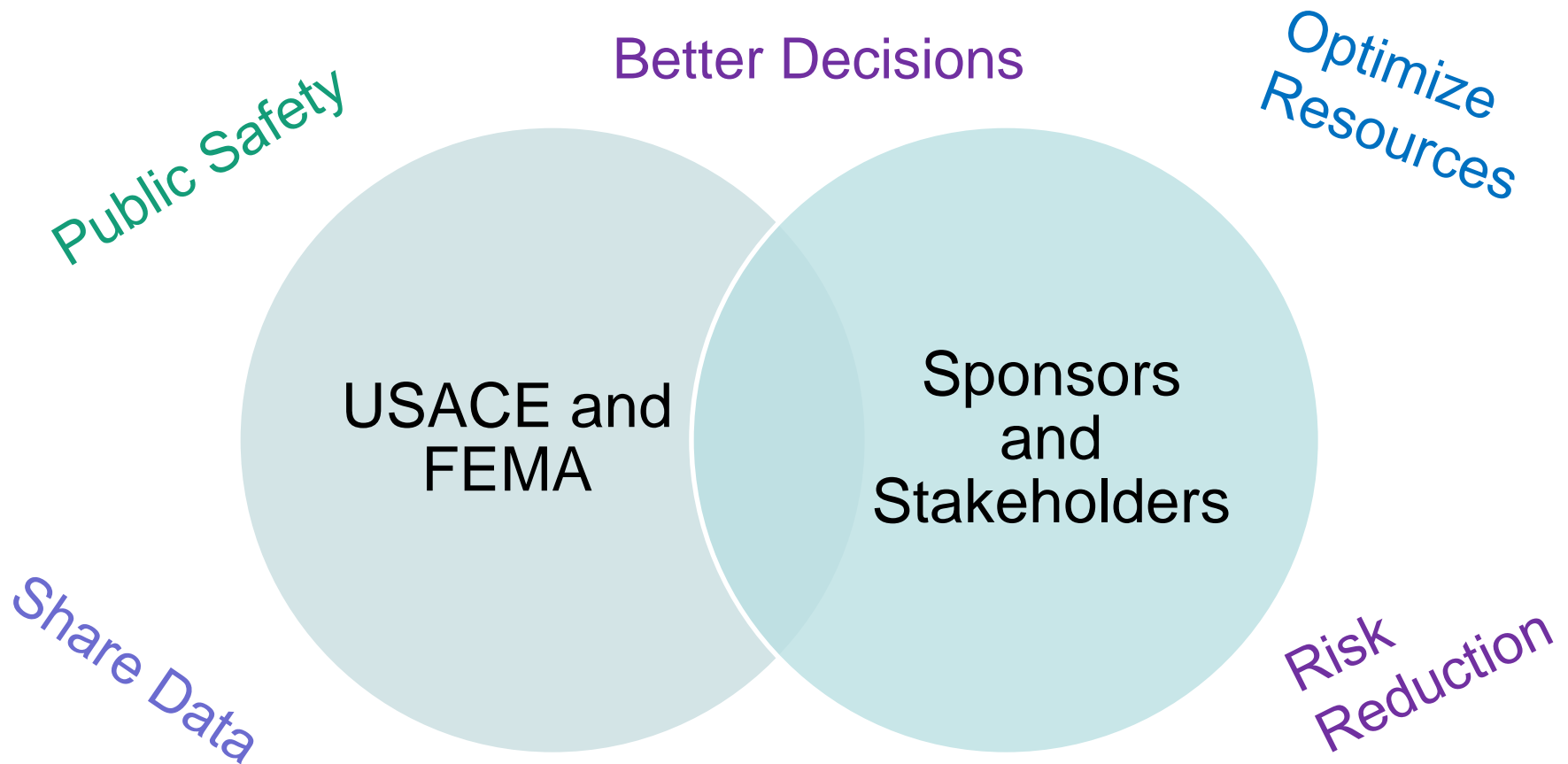
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FEMA



WHAT DO WE HAVE IN COMMON?

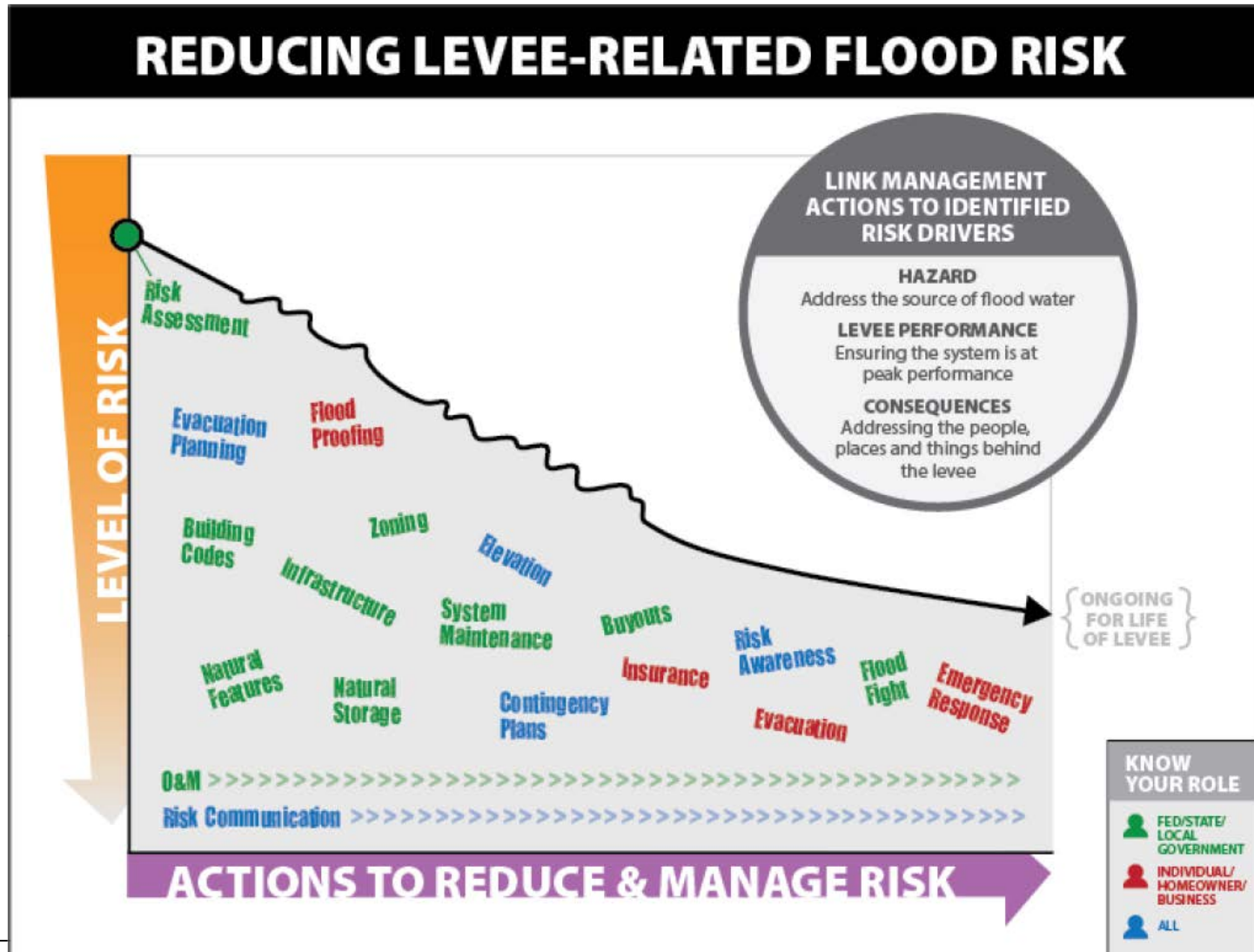


Risk Informed Decision Making

ENABLING GOOD OUTCOMES



REDUCING RISK: IT'S NOT JUST BUILDING BIGGER LEVEES



RISK MANAGEMENT MENUS



DISCUSSION

What can USACE and FEMA do to help you reduce and manage risk?

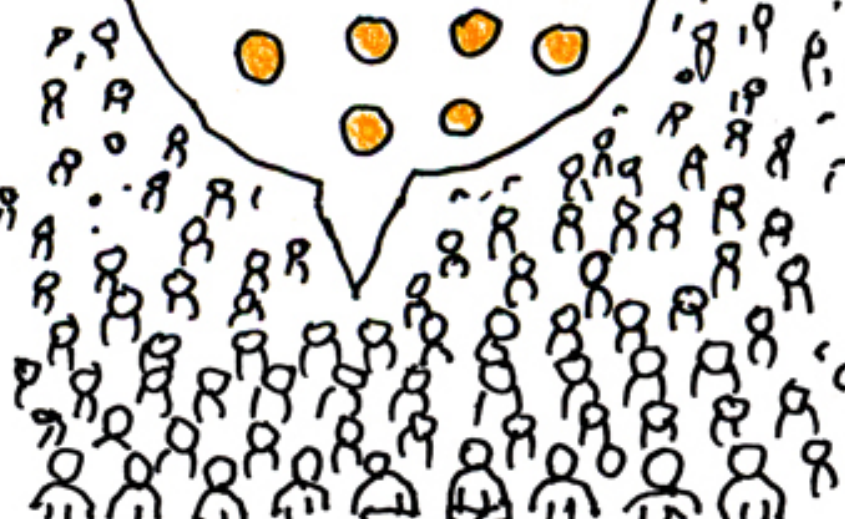
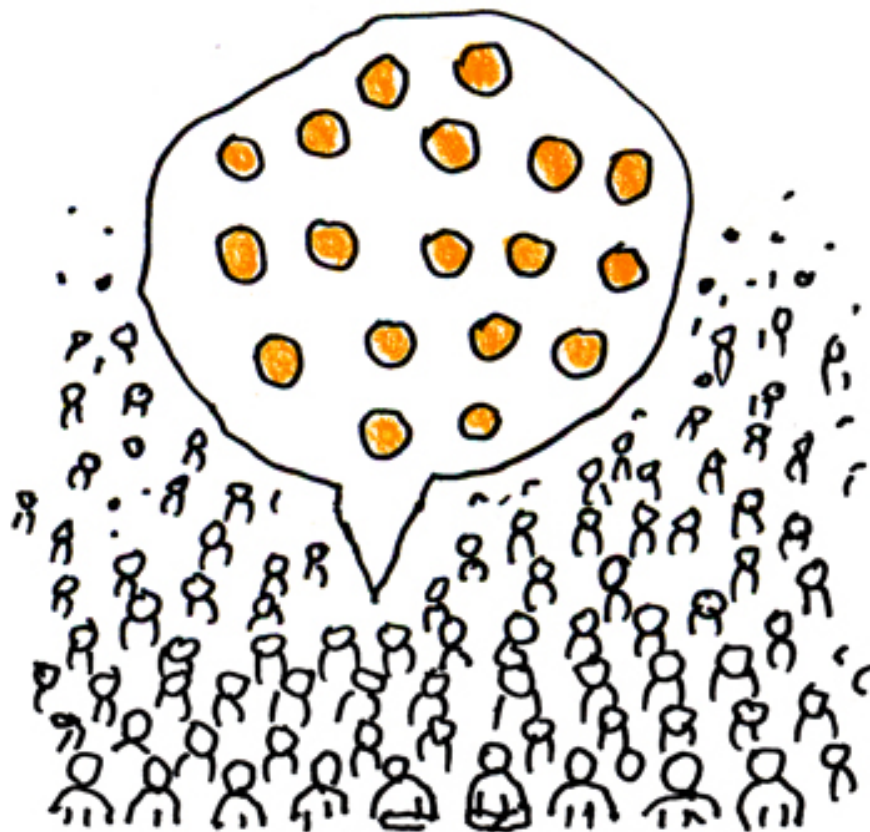
UNDERSTANDING AND COMMUNICATING RISK



UNDERSTANDING RISK



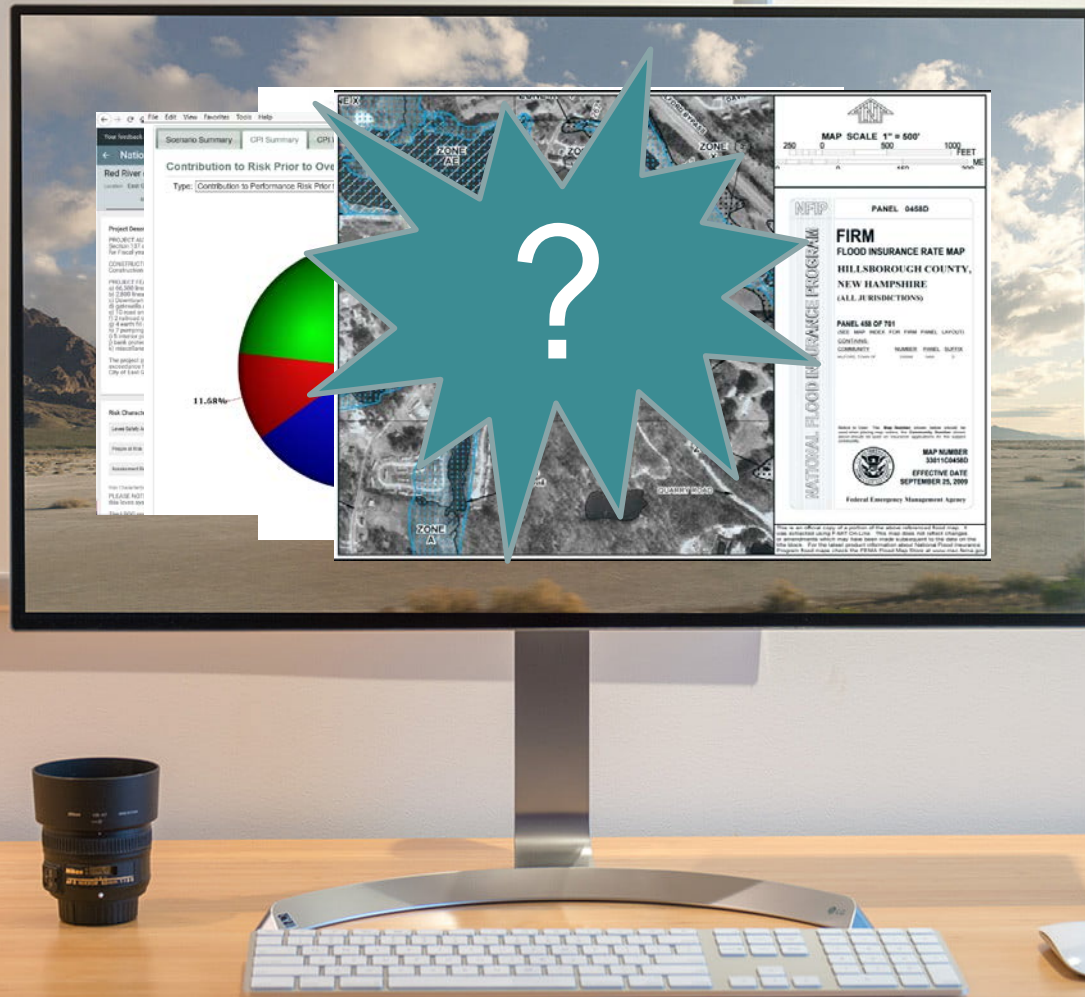
scientists



the public

Source: <https://www.americanscientist.org/blog/from-the-staff/8-myths-about-public-understanding-of-science>

DATA WE COLLECT



COMMUNICATING RISK

USACE and FEMA have been working on using “good” Risk Communication techniques that do not simply rely on numbers and data.

NUMBERS ARE GREAT, BUT...

TRANSLATING TECHNICAL INFORMATION

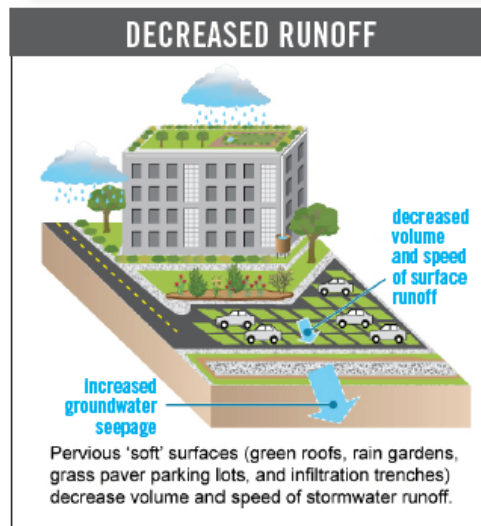
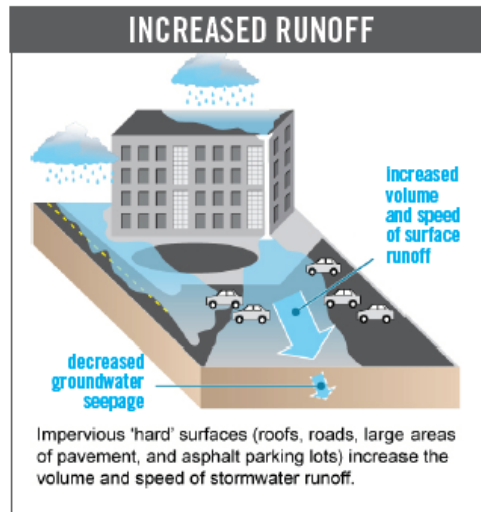
- Focus on essential details
- Reduce use of acronyms
- Include primarily concrete numbers



PAINTING A PICTURE

ENHANCED MANAGEMENT OF URBAN STORMWATER!

Reduce your community's vulnerability to flooding: **1. minimize your community's stormwater contributions and 2. work with upstream communities to reduce their stormwater contributions, which the river will bring your way.** Most municipalities are already engaged in stormwater reduction under Clean Water Act programs, and EPA has many resources (both technical assistance and funding) to maximize those efforts.

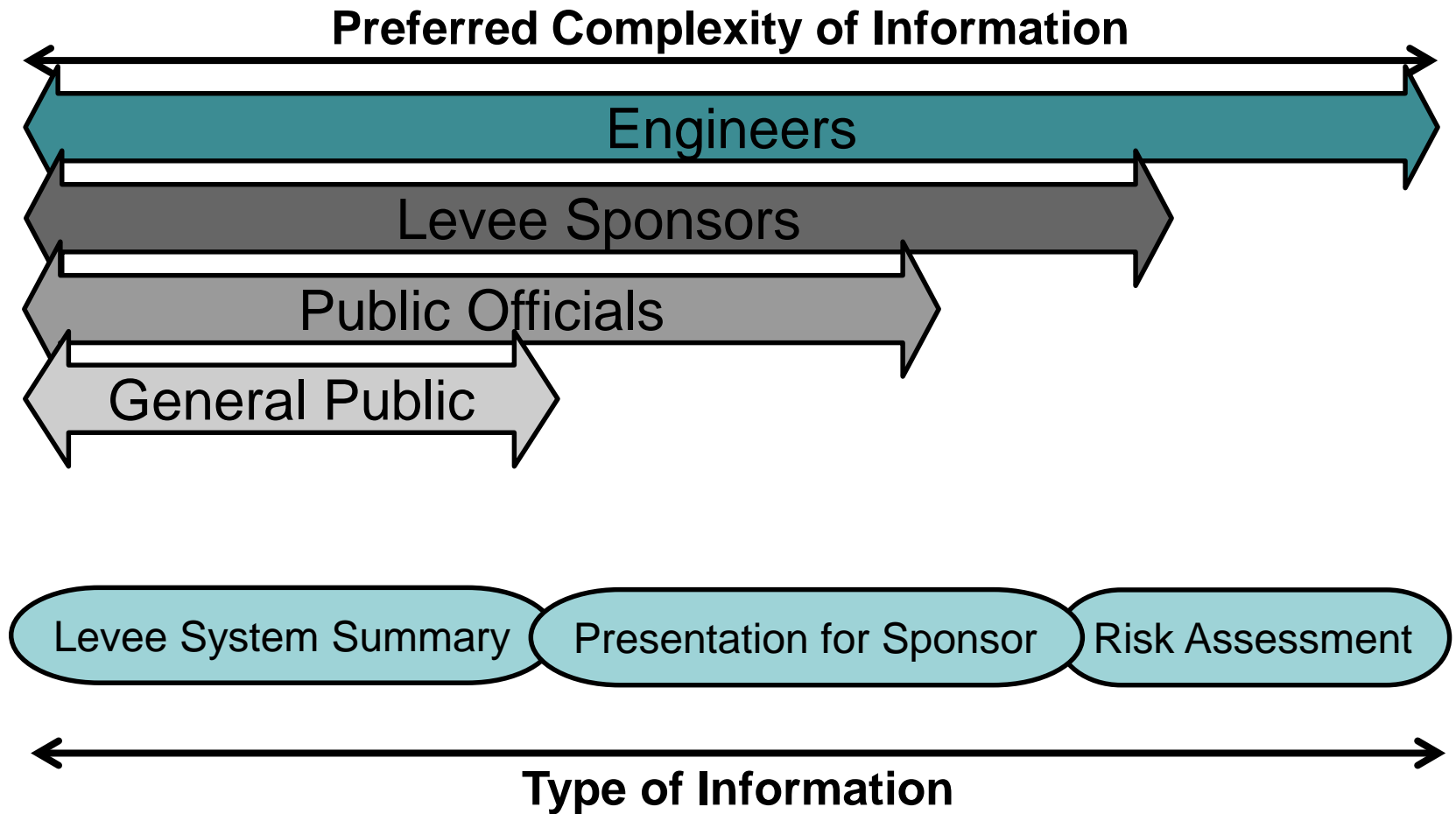


DESIGNED OVERTOPPING

Making a low, armored spot to intentionally direct water during an extraordinarily high water event.



SCALING INFORMATION BY AUDIENCE



TELLING THE STORY



DISCUSSION

- In your communities, what are some examples of risk communication? How is information about levees provided or made available?
- What information is helpful when you are communicating risk? Any particular data and/or messages?
- What are the challenges?

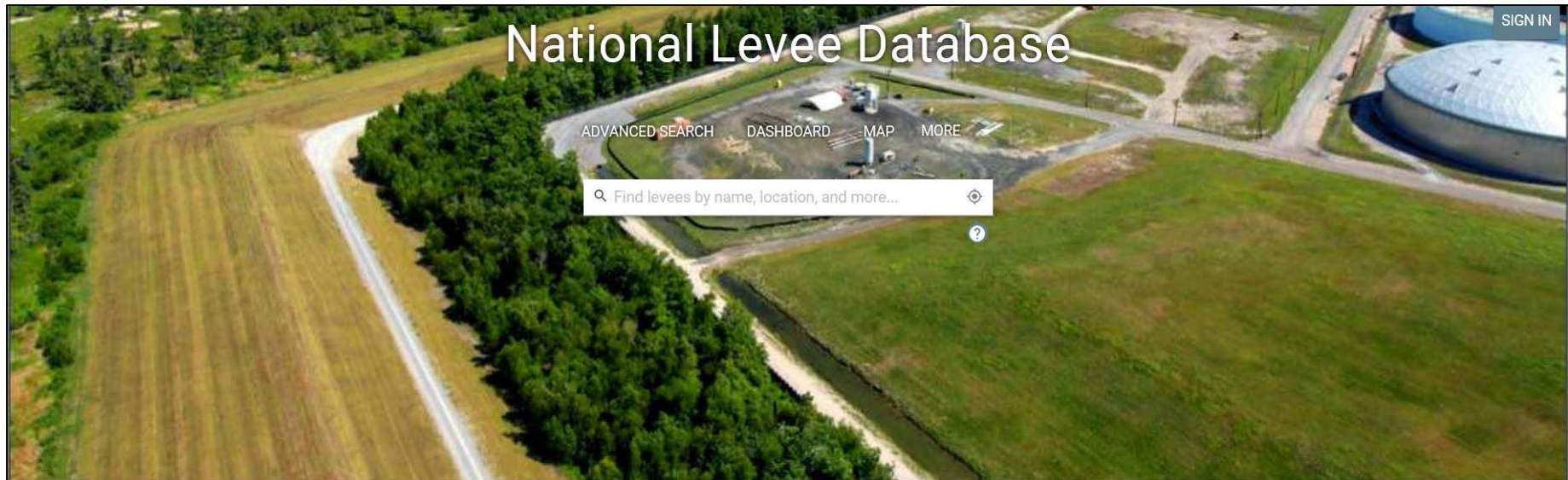


KEY CHANGES TO EXPECT

DIFFERENT ROLES, COMMON GOALS



NATIONAL LEVEE DATABASE



Levees of The Nation

9,220 Levee Systems 29,529 Miles of Levees 47,110 Levee Structures 55 years Average Levee Age

The Nation

Click on a state below or on the map to zoom in.

States and Counties

Select other territory types from the drop-down menu.

Search this list

Alabama

Alaska

American Samoa

Arizona

Arkansas

BROWSE THESE LEVEES



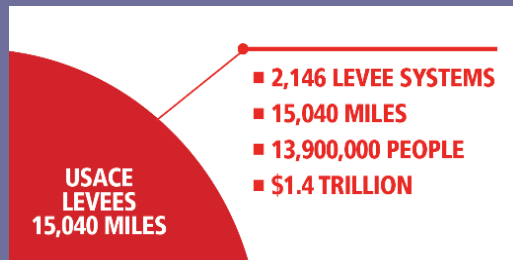
<https://levees.sec.usace.army.mil/>



FEMA



USACE Levee Safety



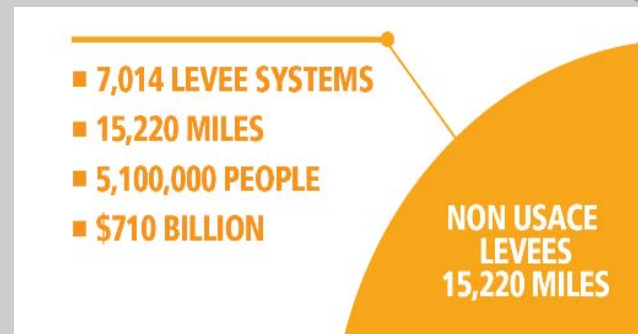
Authorities: Project specific/Section 221/PL 84-99/MAP21

Draft Levee Safety Engineer Circular

- 1) Program implementation
- 2) Risk assessment
- 3) Levee inspection
- 4) Risk communication
- 5) Connections with FEMA

National Levee Database

National Levee Safety



Authority: Title IX, WRDA 2007, National Levee Safety Act, as amended (by Section 3016 (WRRDA 2014); Section 1130 (WRDA 2016); and Section 1144 (WRDA 2018)).

Deferred Activities

- 1) National Committee on Levee Safety
- 2) National Guidelines
- 3) Grants to States (FEMA)
- 4) State and Tribal Program Guidelines
- 5) Levee Rehab Fund
- 6) Reports to Congress



FEMA

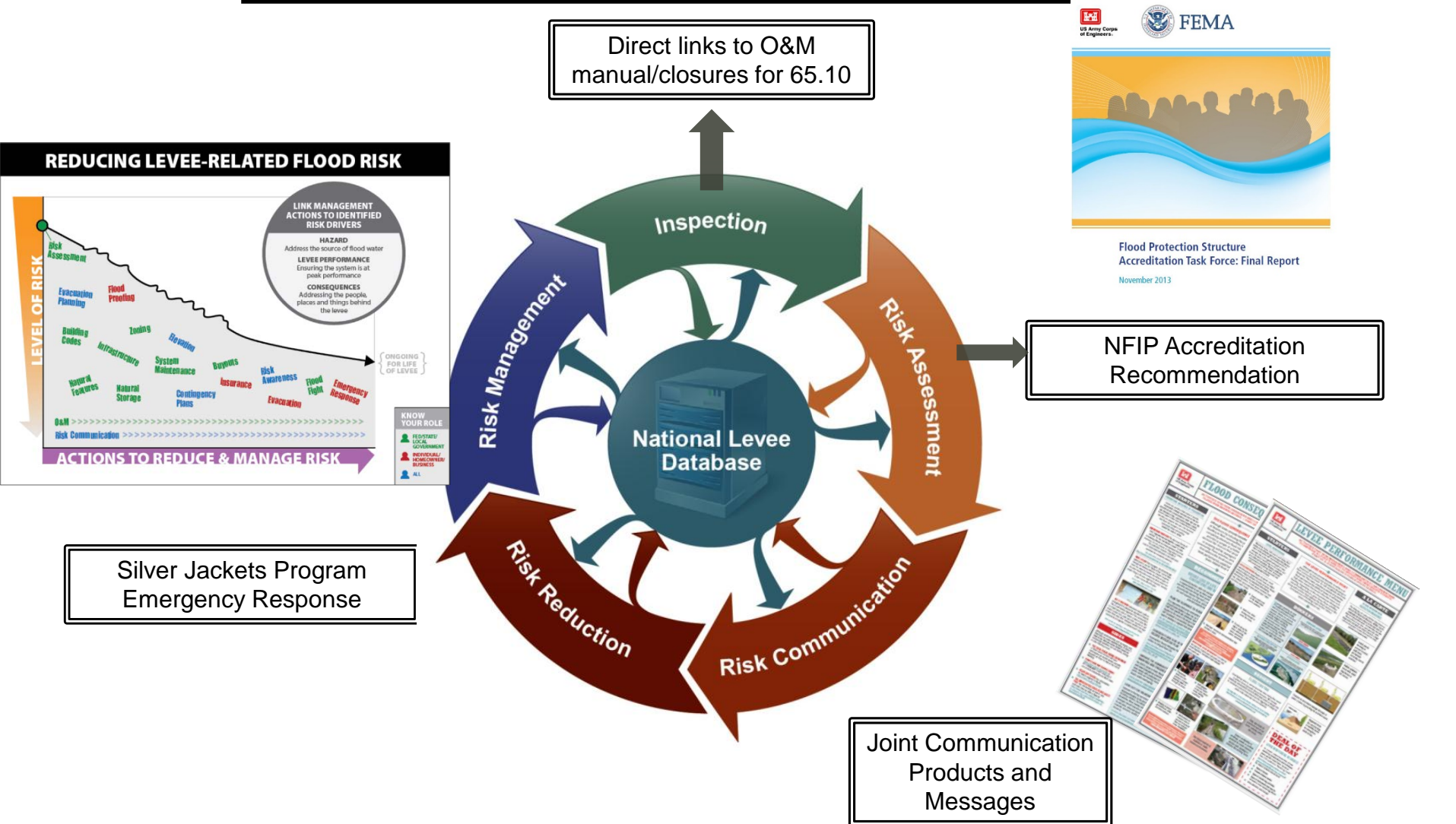


BUILDING STRONG

NEAR TERM - USACE

- Transparent decision-making.
- Less focus on structure, more focus on risk.
- Risk-informed recommendations.
- Streamline process and delivery of information.
- Update Inspection procedures, tools, frequency and ratings.
- More judgment in inspection ratings.
- Ongoing engagement with levee sponsors and FEMA.

USACE - FEMA Direct Links



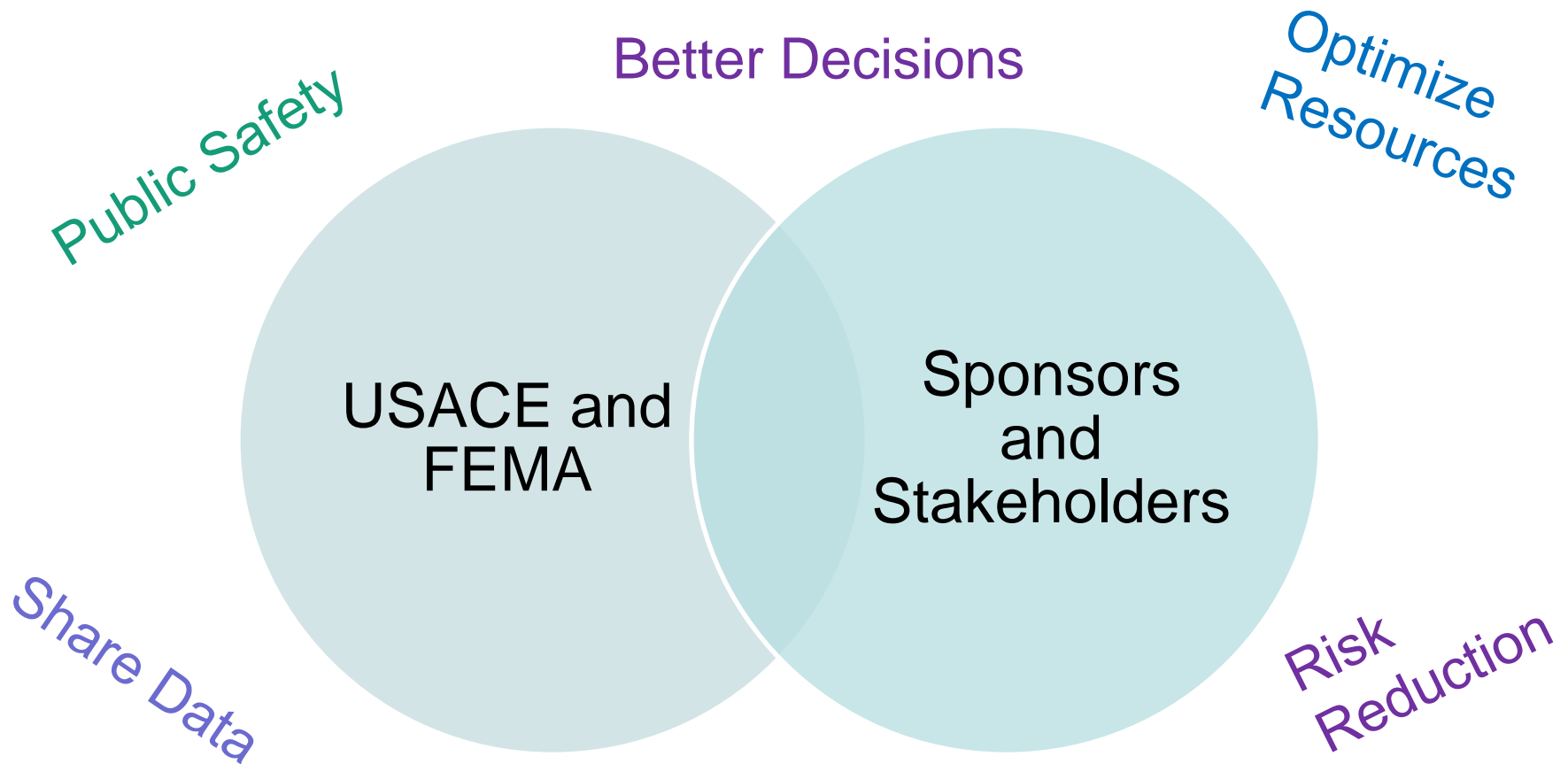
LONGER TERM - FEMA

- Help the nation better understand flood risk.
- Shift from the current binary depiction of flood hazards to a more comprehensive representation of flood risk.
- Partner with USACE and leverage their expertise with flood risk assessments for levee systems.
- Levee accreditation (44 CFR 65.10) does not:
 - Communicate residual risk behind levee systems.
 - Identify areas of inundation due to system failure.
 - Help communities manage risk.

DISCUSSION

- How does levee accreditation impact a community?
- How can we move the conversation beyond levee accreditation?
- What other information is helpful to inform people about their flood risk?

WHAT DO WE HAVE IN COMMON?



Risk Informed Decision Making

THANK YOU!

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CFM, FEMA HQ

