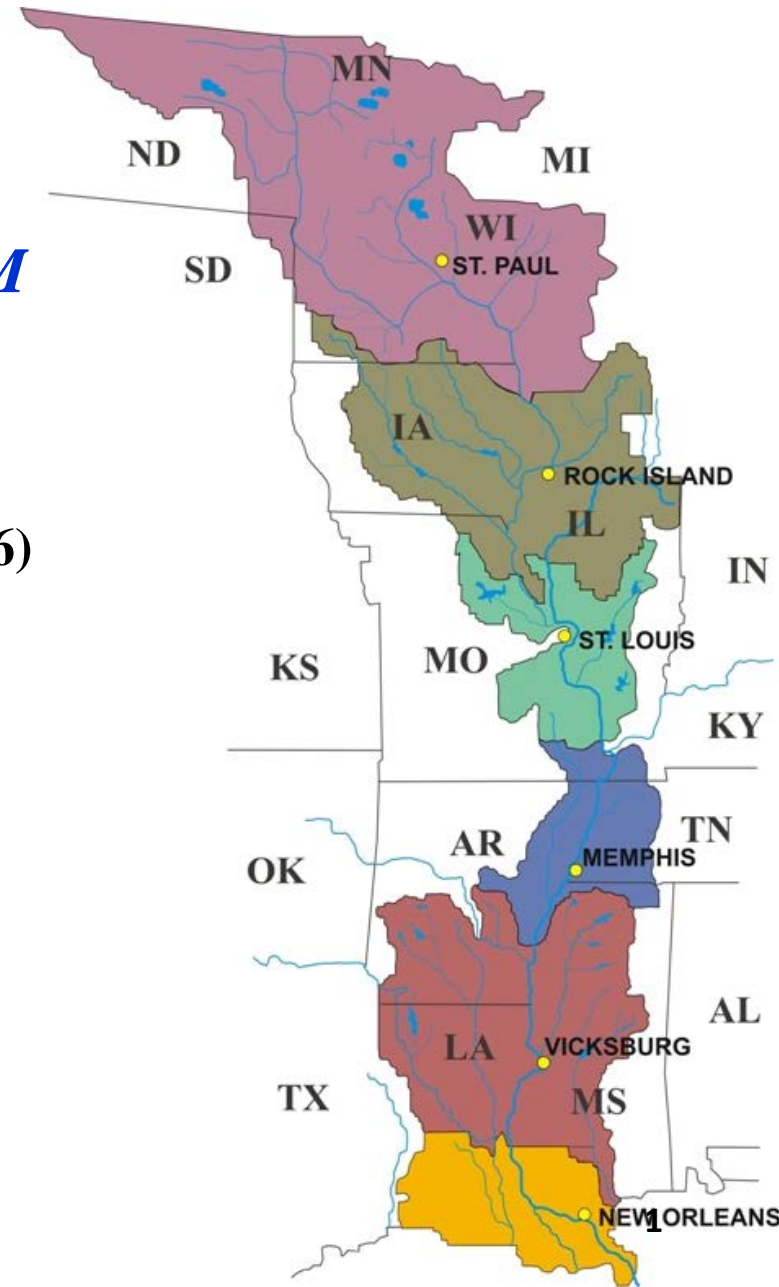


# Mississippi Valley Divisions' Regional Flood Risk Management Program

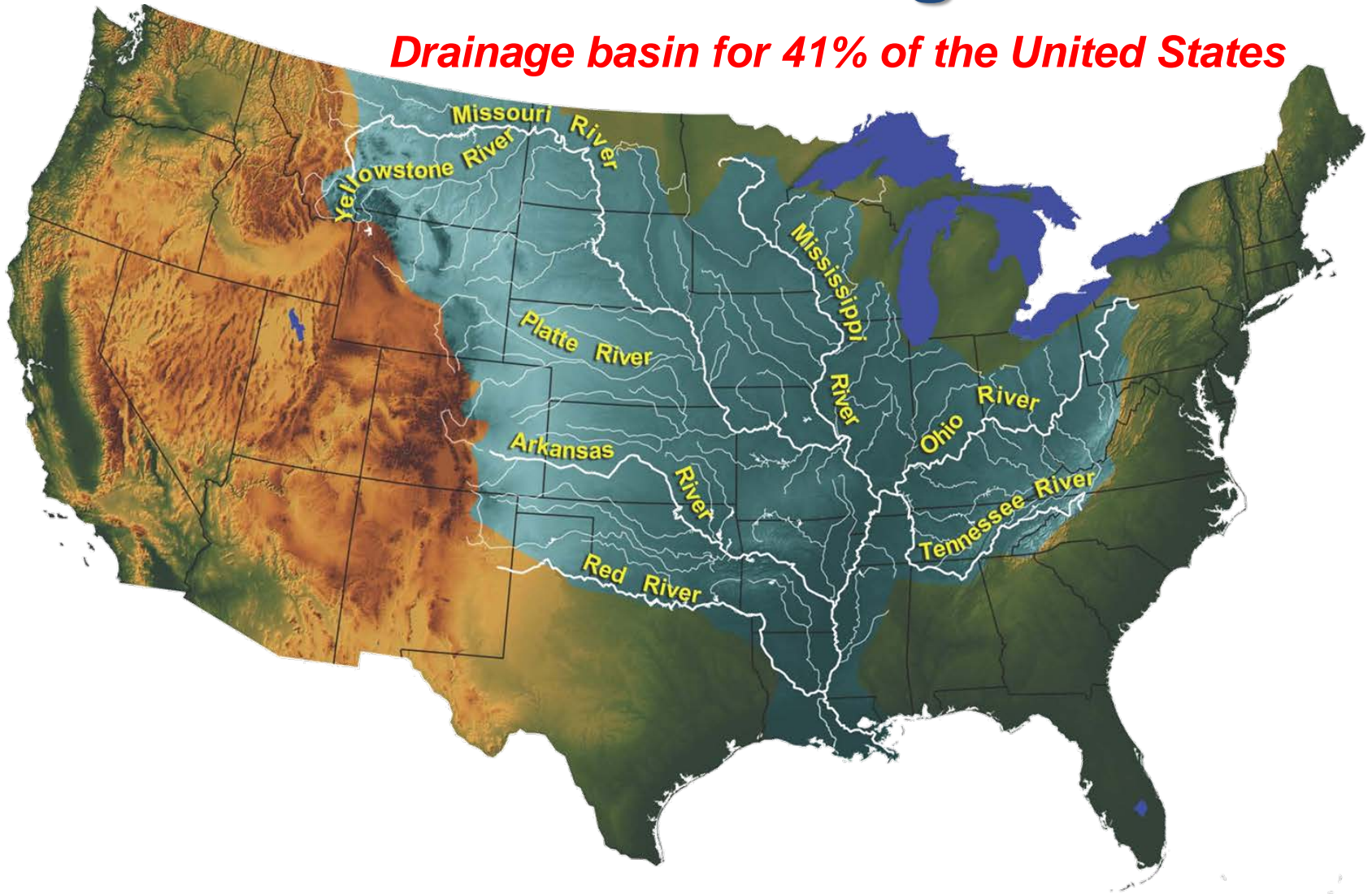
*“Understanding and Leading an RFRM  
Transformation”*

Presented by Scott D. Whitney  
MVDs Regional Flood Risk Manager (2011-16)



# Mississippi River Watershed World's 3<sup>rd</sup> Largest

*Drainage basin for 41% of the United States*



# MVDs FRM BUSINESS LINE:

## ➤ 36 flood control reservoirs:

- 3 in Arkansas
- 2 in Missouri
- 3 in Louisiana
- 4 in Mississippi
- 3 in Iowa
- 1 in Wisconsin
- 5 in Illinois
- 2 in North Dakota
- 13 in Minnesota

## ➤ 59 pumping stations (MR&T)

## ➤ 400 drainage structures

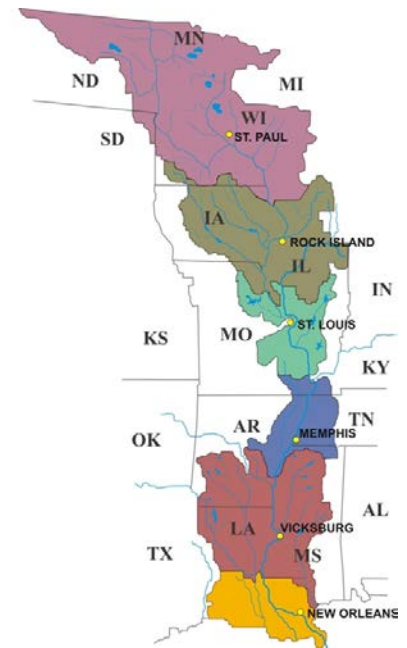
## ➤ ~6,400 mi of levee (3,486 mi MR&T)

## ➤ 700 miles of wing dams

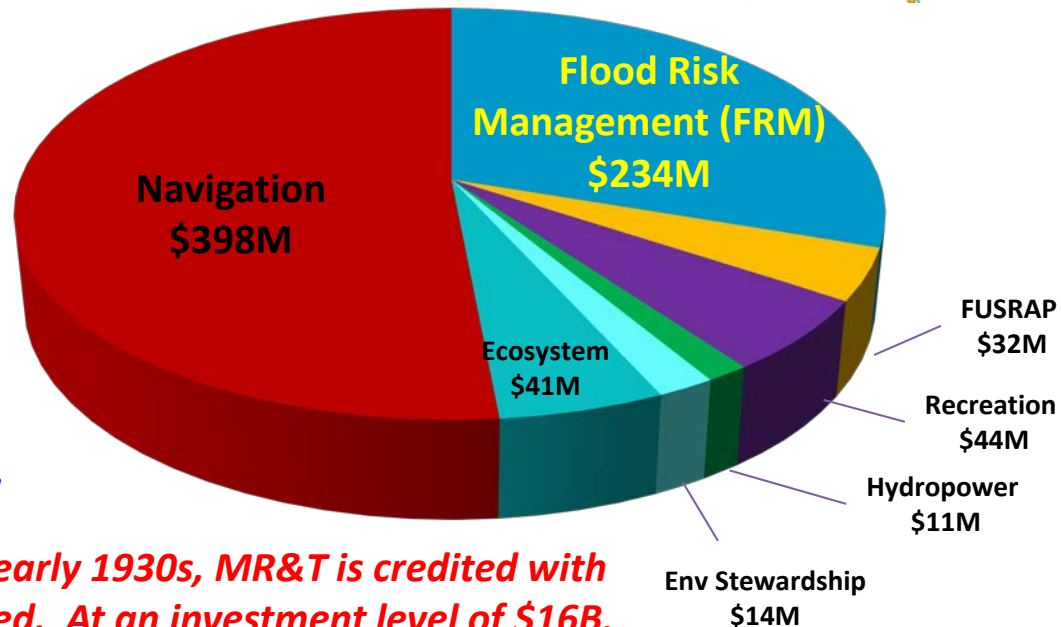
## ➤ 1,144 mi of revetment

## ➤ 326 mi of rock dikes

## ➤ 143 mi of foreshore protection



**Total FY15 \$774M**



**3<sup>rd</sup> LARGEST WATERSHED IN THE WORLD:**  
*The 1.25 million-square-mile Mississippi River drainage basin gathers water from 41 percent of the continental United States. This includes all or parts of 31 states and two Canadian provinces via 250+ tributaries.*

**VALUE TO NATION:** *Since inception in the early 1930s, MR&T is credited with \$1.27T cumulative flood damages prevented. At an investment level of \$16B, those savings result in a \$80 return on every \$1 invested.*



# District FRM Programs and Personnel

## Authorities

- Operation & Maintenance
- Levee/Dam Safety Program (FY15)
- MR&T
- Emergency Operations
- PL84-99
- **Floodplain Management Services (FPMS)**
- Planning Assistance to States (PAS)
- Interagency and International Services
- **Silver Jackets**
- National Levee Database
- CAP FRM Projects
- **Specifically Auth. FRM Projects**

*\* Bold items, key elements funded by FRM Business Line*

## Disciplines

- Flood Risk Managers
- Engineers
- Sr. Management
- Public Affairs
- Economists
- Modelers
- Biologists
- Emergency Managers
- Flood Area Engineers
- Project Managers
- Planners
- PAOs, OC, RE, EM.....etc.

# Making the News.....

## PEOPLE – PERCEPTIONS - REACTIONS

**Lake Red Rock cresting into top ten all-time highest ever mark at dam**

<http://kniakrls.com/2018/10/lake-red-rock-cresting-into-top-ten-all-time-highest-ever-mark-at-dam/>

KNIA/KRLS – Knoxville/Pella, IA – 10/20/18 – Andrew Schneider

**'It's not normal': Iowa City holding up despite heavy rainfall**

<https://www.press-citizen.com/story/news/2018/10/08/iowa-city-holding-up-despite-abnormal-rainfall/1565101002/>

Iowa City Press-Citizen – Iowa City, IA – 10/8/18 – Hillary Ojeda

**Rain slows U.S. corn, soy harvest; disrupts river barge traffic**

<https://www.agriculture.com/markets/newswire/rain-slows-us-corn-soy-harvest-disrupts-river-barge-traffic>

Successful Farming – Des Moines, IA – 10/10/18 – Julie Ingwersen

**How one Iowa town made peace with the Mississippi River**

<https://www.csmonitor.com/Environment/2018/0925/How-one-Iowa-town-made-peace-with-the-Mississippi-River>

Christian Science Monitor – Boston, MA – 9/25/18 – Story Hinckley

**Flooding in U.S. Midwest more frequent, study finds; Research covered more than 50 years of data in 14 states**

<https://www.sciencedaily.com/releases/2015/02/150209161149.html>

February 9, 2015, University of Iowa: The U.S. Midwest and surrounding states have endured increasingly more frequent flood episodes over the past half-century, according to a new study.

# Making the News.....

PEOPLE - PERCEPTIONS - REACTIONS



# Making the News.....

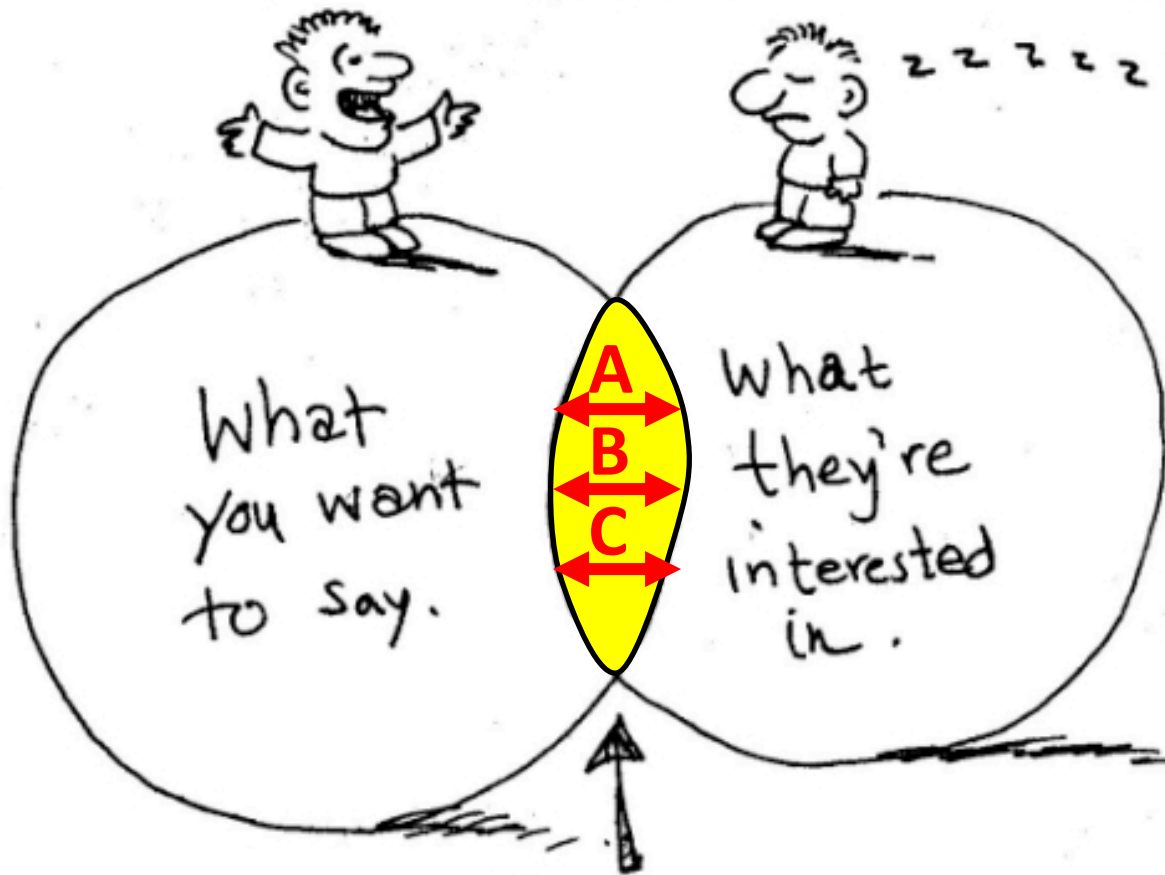
PEOPLE - PERCEPTIONS - REACTIONS



NOT LOOKING GOOD!



# COMMUNICATION 101



- A - Awareness**
- B - Understanding**
- C - ACTION**

Relevance

*"What's in this for me?"*

**= OPPORTUNITY**

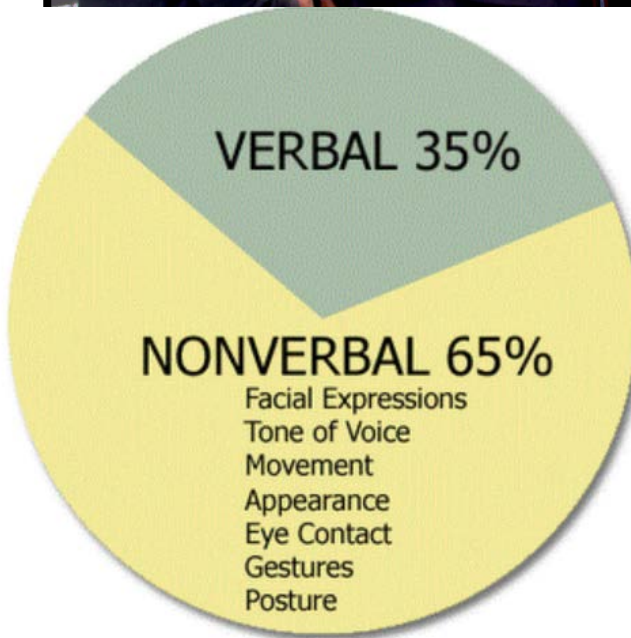
(Learning, Safety, Resources, Partnerships, Leveraging, Productivity, Performance...etc.)



# Reading the Signs

## Non Verbal Communication

- Active listening
- Voice
- Eye contact
- Attentiveness
- Facial expressions
- Silence
- Body language
- Position and movement
- Distracting habits
- Enthusiasm
- Dress



# QUALITIES OF A SUCCESSFUL TRANSFORMER!

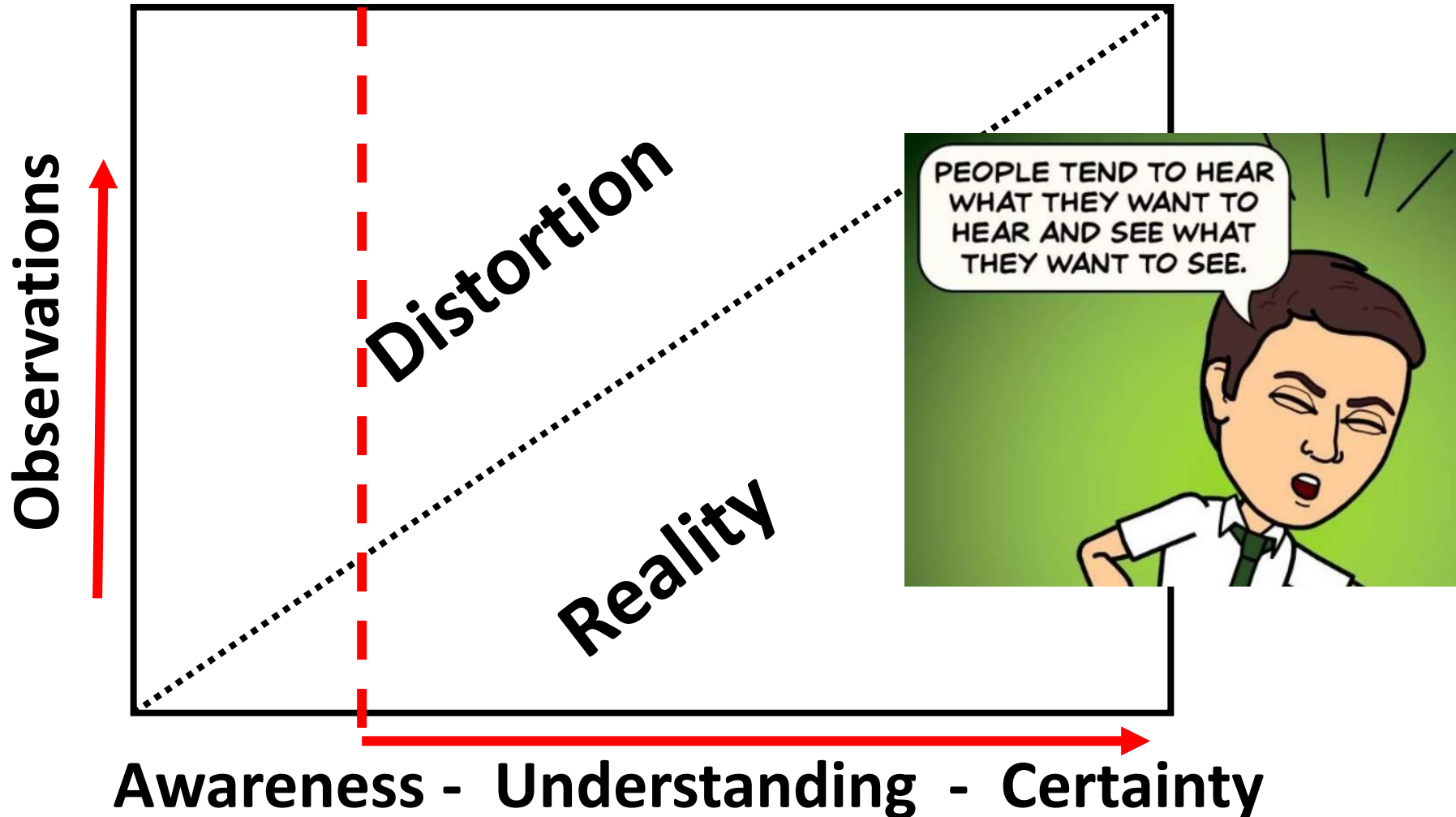
- ✓ Fierce Resolve
- ✓ Integrator
- ✓ Passion
- ✓ Authentic
- ✓ Customer/Partner Focused
- ✓ Can-DO-Attitude
- ✓ Innovator
- ✓ Communicator
- ✓ Facilitative Leader
- ✓ Integrity + Credibility + Character = TRUST
- ✓ Collaborator
- ✓ Knows Limitations
- ✓ Develop Star Teams (2 + 2 = 6)

## COMMUNICATION!!

- ✓ CLARITY
- ✓ CONVICTION
- ✓ COMPASSION
- ✓ CONSISTENCY
- ✓ CREDIBILITY

# PERCEPTION IS:

“How you focus your attention affects your perceptions. When you have an idea in your mind you tend to look for evidence that supports that idea and not pay attention to evidence that says the idea isn’t accurate. This is called confirmation bias.”



“As far as my work as a mediator is concerned, it is about getting people to see things from different perspectives. Thus, I must disagree with you.”



# CRITICAL INTERPERSONAL SKILLS

Speak with honesty.  
Think with sincerity.  
Act with integrity.



Watch your **thoughts**; they lead to attitudes.

Watch your **attitudes**; they lead to words.

Watch your **words**; they lead to actions.

Watch your **actions**; they lead to habits.

Watch your **habits**; they form your character.

Watch your **character**;  
it determines your **destiny**.

**Results  
Matter!  
They matter  
to your  
CREDIBILITY.**



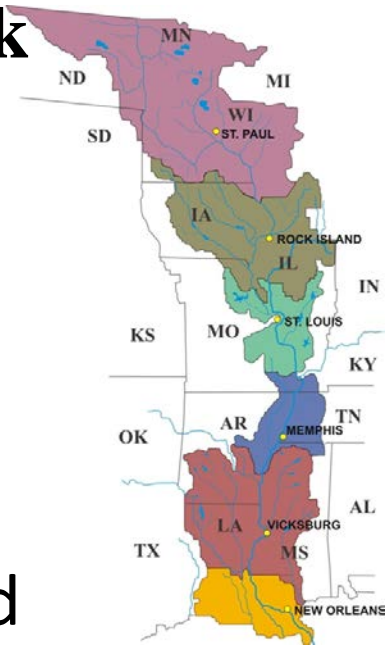
# Mississippi Valley Divisions' Regional Flood Risk Management Program

*"Understanding and Leading an RFRM Transformation"*

**DEFINED:** managing both floodwaters to reduce the probability of flooding and floodplains to reduce the consequences of flooding

**VISION:** to lead collaborative, comprehensive and sustainable flood risk management services and actions to improve public safety and reduce flood damages to the lives and livelihoods within the Mississippi Valley watershed

**MISSION:** to deliver vital flood risk management service and solutions, in collaboration with our partners, to secure our Nation, energize our economy and reduce risk from disaster.



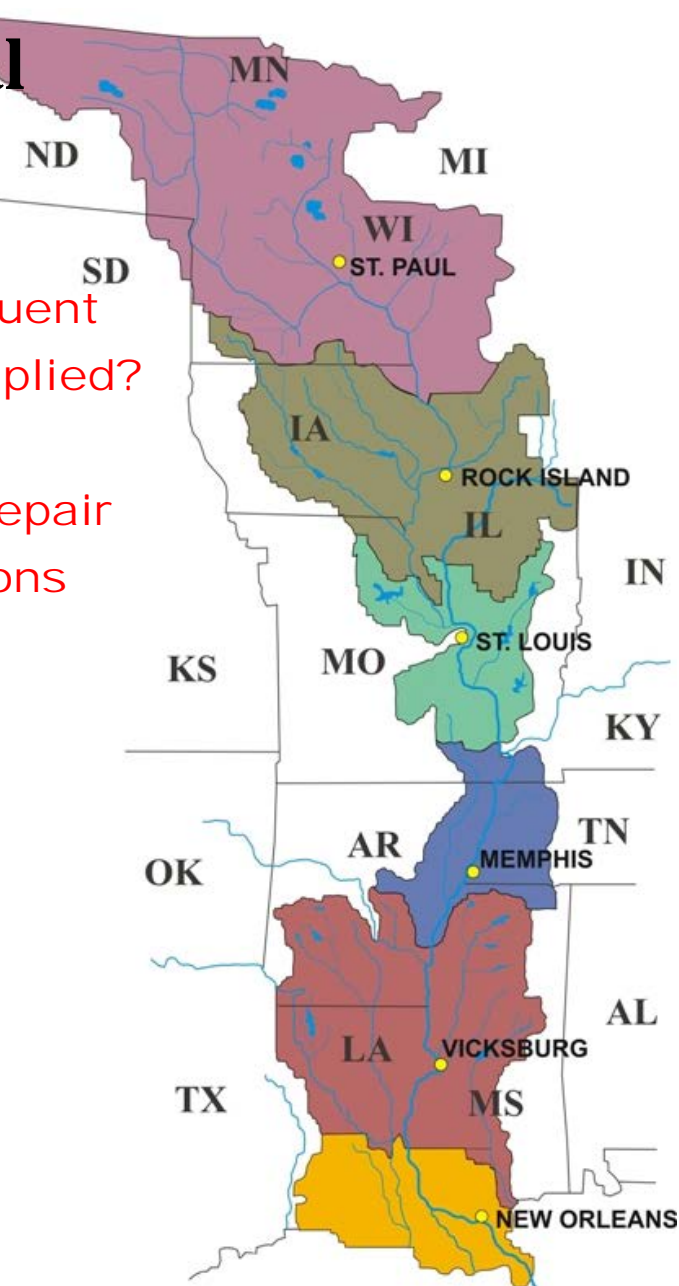
# Mississippi Valley Divisions' Regional Flood Risk Management Program

## PROBLEM SET:

- ✓ Flood events are getting more extreme and frequent
- ✓ Identity Crisis – What is FRM and SJ and how applied?
- ✓ Most are poorly informed on their Flood Risk
- ✓ Need to break cycle of damage-repair-damage-repair
- ✓ Aging infrastructure, Maintenance and Inspections
- ✓ Non-strategic FRM approaches prevail
- ✓ Lack of common vision or unified approach

## SOLUTION SET:

- ✓ FRM Tenets
- ✓ Strategic Alignment
- ✓ Organizational Structure
- ✓ Best Practices
- ✓ Challenges
- ✓ Improvement
- ✓ Results



# KEY RFRM TENETS

## te·net

*noun* \ 'te-nət also 'tē-nət\ : a principle, belief, or doctrine generally held to be true; *especially*: one held in common by members of an organization, movement, or profession

## #1 FRM LIFE CYCLE

## #2 SHARED RESPONSIBILITY

## #3 RISK INFORMED DECISIONMAKING

$$(1 + 2 = 3)$$

(Safety + Security = Prosperity)

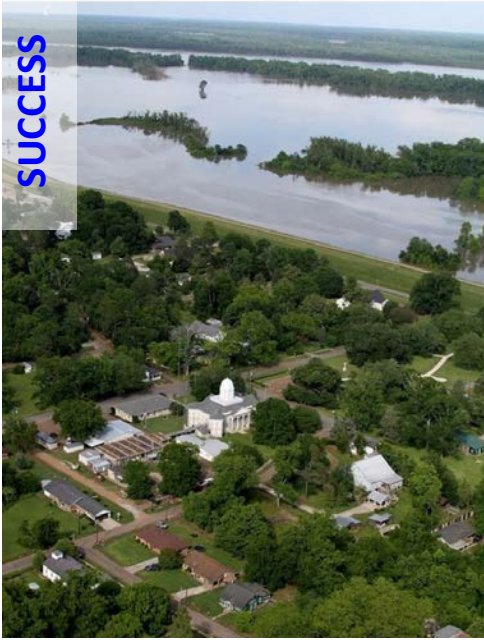
# STRATEGIC ALIGNMENT

*"Achieving Meaningful Risk Reduction Actions"*

- ✓ Drivers
- ✓ Allies
- ✓ Opportunities



- ✓ Constraints
- ✓ Antagonists
- ✓ Obstacles



*"GOAL LINE"*



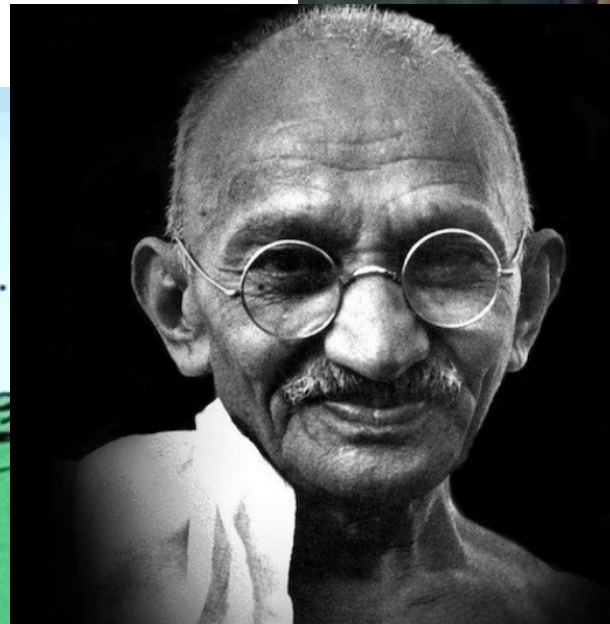


# Identity Crisis

- *Who are you?*
- *What is your experience level?*
- *What needs to change and why?*
- *Why is any of this relevant to me?*
- *How can I help?*



UNLESS someone like you  
cares a whole awful lot,  
nothing is going to get better.  
It's not. —*The Lorax*



You must be the change you  
wish to see in the world.

**-Mahatma Gandhi**

Helping others realize their  
true power and potential.



# Develop a "TOP 10" Challenge

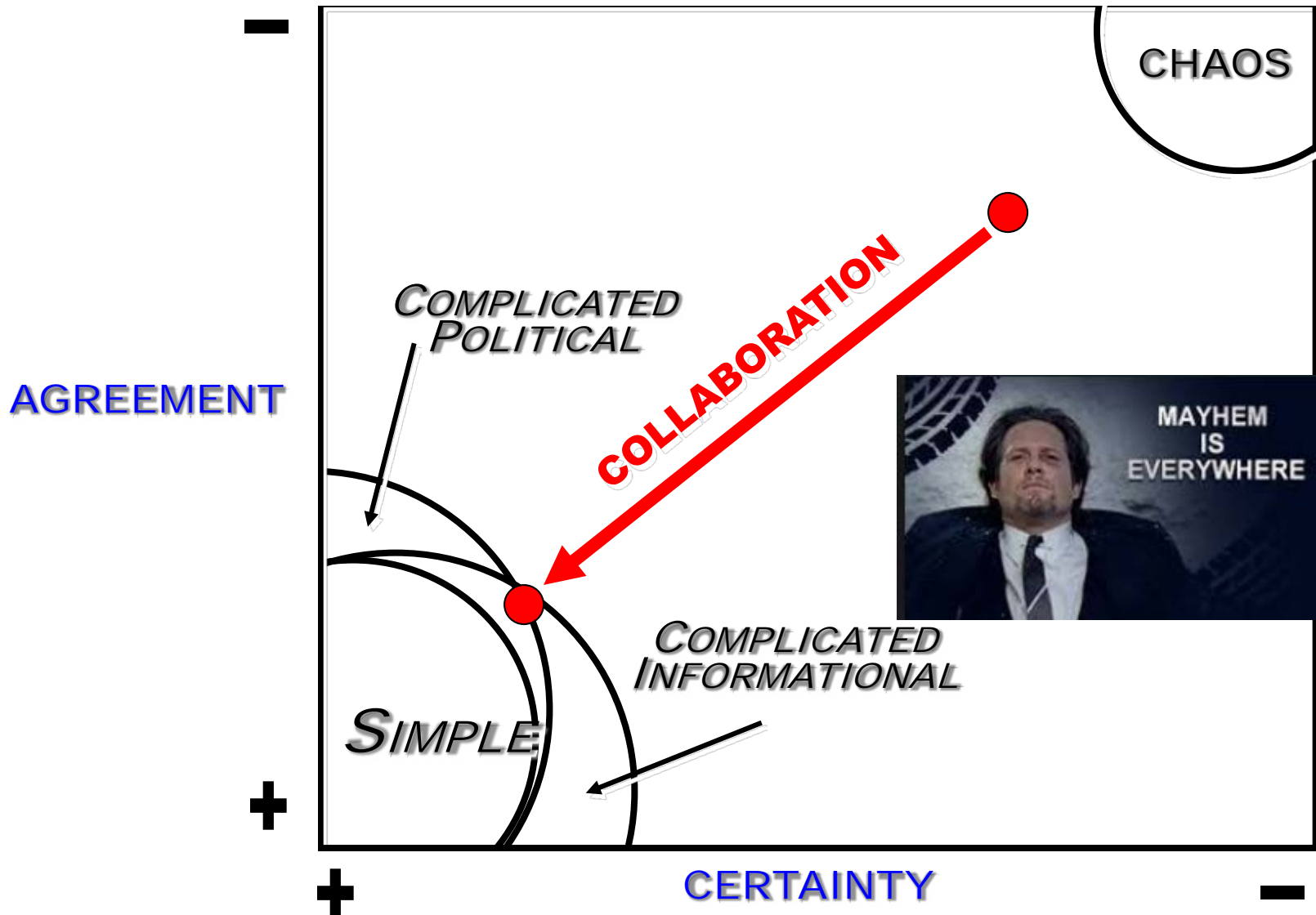
## -- BASELINE --

Challenge Description	Classification of Challenge						
	A	B	C	D	E	F	Avg
<i>Command Level Understanding and Support for FRM/SJ</i>	6	6	7	3	6	9	6.2
<i>Internal/External Collaboration and Communication on FRM/SJ challenges</i>	6	8	6	5	5	7	6.2
<i>Aging FRM Infrastructure with declining O&amp;M funding</i>	7	4	6	7	5	7	6.0
<i>FRM/SJ Education and Awareness (Public and Decision makers)</i>	7	7	6	4	5	6	5.8
<i>FRM Data Management</i>	3	4	5	4	3	4	3.8
<i>Systems or Watershed Perspective and Planning with respect to FRM</i>	7	6	7	5	2	7	5.7
<i>Levee Inspections, Risk Assessments, Accreditation and Certifications</i>	7	8	9	8	3	6	6.8
<i>Flood Damage Repairs</i>	7	5	8	8	2	7	6.2
<i>Flood Mitigation Opportunities</i>	3	2	7	8	2	3	4.2
<i>Flood Preparedness Training</i>	7	9	9	8	7	3	7.2
<b>COMPOSITE (Avg) SCORE</b>	<b>6.0</b>	<b>5.9</b>	<b>7.0</b>	<b>6.0</b>	<b>4.0</b>	<b>5.9</b>	<b>5.8</b>

### LEVEL OF RESOLUTION

- 1 Unrecognized challenge
- 2 Increasing Awareness
- 3 Forming Strategy to address
- 4 Aligning and Assigning Staff to Address
- 5 Making progress and notable improvements
- 6 Starting to observe positive results
- 7 Functional and fine tuning further improvements
- 8 Highly Successful resolution
- 9 Educating others on our success
- 10 Exemplary resolution, others seek to model

# RESOLVING COMPLEX ISSUES



After Ralph D. Stacey: Complexity and Creativity in Organizations

# Choose Your Team Carefully!



## Traditionalist

- Status Quo
- Tried and True
- Just Right
- Needs met
- Proven record



## Mentor

- Experienced
- Sharing
- Inspiring
- Guiding
- Building



## Facilitative Leader

- Strategic View
- Collaborative
- Opportunity
- Earned Trust
- Tactical Actions



## Trailblazer

- Seeking
- Exploring
- Testing
- Innovator
- Better Ways

- *We are mostly defined by our actions not our words!*
- *Some of the most meaningful and catalytic aspects of a transformation process is found in the individual and group interactions.*
- *Interactions serve to highlight past successes, identify common challenges and detail future actions that will serve to transform and improve.*



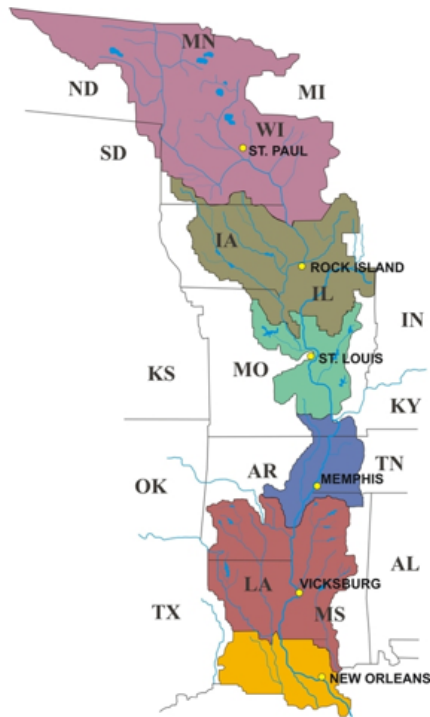
# BALANCING ACT!

- Effective RFRM seeks to:
  - ✓ provide necessary structure and formality to collaboration and communication!
  - ✓ provide awareness, education and action necessary to make informed decisions and policies that serve to reduce risk to deleterious and costly flood damages.
- RFRM activities cannot be considered in isolation and must often balance competing needs.
- An integrated approach to water resource planning considers RFRM as one of many objectives needed in a watershed.
- A collaborative approach to water resource planning and mgmt. engages multiple competing stakeholders in the development of watershed management plans to fulfill these needs.

# KNOWLEDGE TRANSFER

## Mississippi Valley Division's Regional Flood Risk Management Annex

*“Understanding and Leading an RFRM Transformation”*



Prepared by Scott D. Whitney  
MVD Regional Flood Risk Manager

**4 FEBRUARY 2014**

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# USACE Principles of Resilience

Resilience means the ability to **anticipate, prepare for, and adapt to changing conditions** and **withstand, respond to, and recover rapidly from disruptions.**”

Presidential Executive Order 13653, Preparing the U.S. for Impacts of Climate Change (NOV 2013)



# Qualities of Resilience

- Shifts in thinking related to resilience
  - **Proactive vs. Reactive** approaches
  - **Sustainable vs. Sacrificial** features
  - **Adaptive vs. Static** infrastructure
  - **Risk-Informed vs. Deterministic** design criteria
  - **System-wide vs. Component-based** considerations
  - **Diverse vs. 'robust-yet-fragile'** systems & solutions
- Resilience Ideals
  - Collaborative
  - Diverse
  - Holistic
  - ▶ Inclusive
  - ▶ Multi-beneficial
  - ▶ Proactive



# RISK INFORMED DECISIONMAKING



How Likely is it that the Hazard (flood, earthquake) will Occur?



How Will the Infrastructure Perform during this Hazard?



What are the Consequences for Non-Performance?



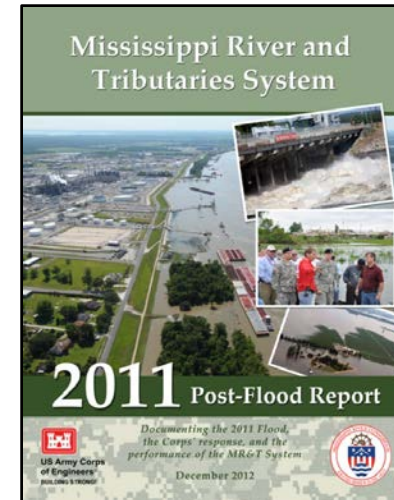
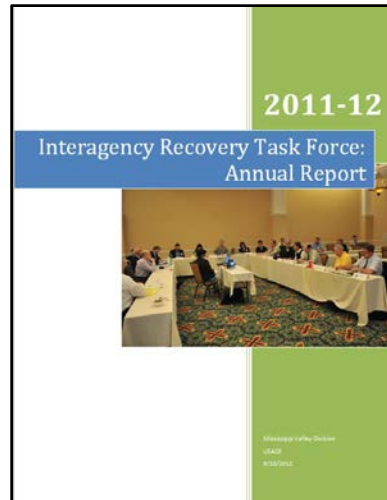
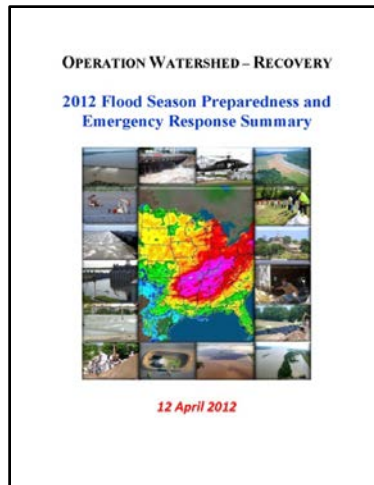
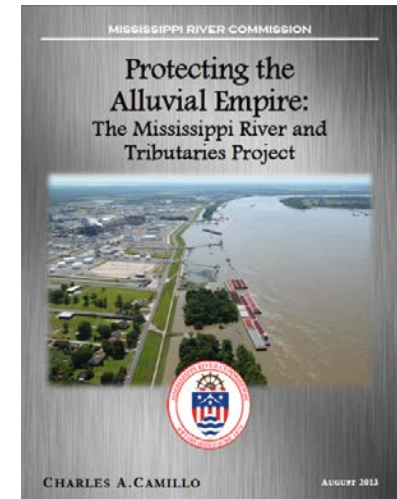
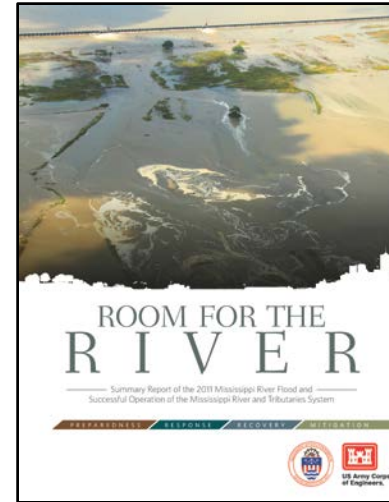
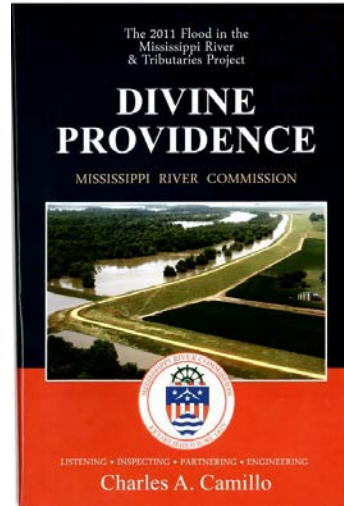
# MR&T 2011 Post-Flood Evaluation **PRODUCTS**

Jan 2012  
(45 pgs)

AUG 2012  
(312 pgs)

DEC 2012  
(36 pgs) \*

AUG 2013  
(33 pgs)



APR 2012  
(50 pgs + Appd)

AUG 2012  
(30 pgs)

DEC 2012  
(350 pgs + Appd) \*

# MVD RFRM WEBSITE

- ✓ USACE RFRM Links, Contacts and Resources
- ✓ Public documents & presentations
- ✓ Key Messages
- ✓ Operation Watershed Recovery Components
- ✓ Public, Partner and Stakeholder Accessibility

The screenshot shows the website header with the US Army Corps of Engineers logo and the text "US Army Corps of Engineers Mississippi Valley Division" and "BUILDING STRONG®". Below the header is a navigation bar with links: "WHO WE ARE", "MISSION", "Other USACE Links", and "MS River Commission (MRC)".

The main content area features the title "Regional Flood Risk Management Program" in large, bold letters. Below the title is a paragraph: "The U.S. Army Corps of Engineers (USACE) established the National Flood Risk Management Program in May 2006 for the purpose of integrating and synchronizing USACE flood risk management programs and activities, both internally and with counterpart activities of the Department of Homeland Security, Federal Emergency Management Agency (FEMA), other Federal agencies, state organizations, and regional and local agencies."

Below this paragraph is a section titled "Some of the specific goals of the National Flood Risk Management Program include:" followed by a bulleted list:

- Providing current and accurate floodplain information to the public and decision makers.
- Identifying and assessing flood hazards posed by aging flood damage reduction infrastructure.
- Improving public awareness and comprehension of flood hazards and risk, Integrating flood damage and flood hazard reduction programs across local, state and federal agencies.
- Improving capabilities to collaboratively deliver and sustain flood damage reduction and flood hazard mitigation services to the nation

On the right side of the page, there are two "Hot Topics" sections. The first is titled "2011 Fall Our Mississippi" and features a photograph of a flooded field. The second is titled "2012 Winter Our Mississippi" and features a photograph of a bird in flight.

On the left side of the page, there is a sidebar menu with the following items:

- Regional Flood Risk Management Programs
- Flood Season Preparedness
- Silver Jackets
- National Flood Risk Management Programs
- Operation Watershed Recovery
- Interagency Recovery Task Force
- MR&T Post Flood Report
- Damage Assessments
- Construction
- Press Releases
- Information Resources
- St. Paul District
- Rock Island District
- St. Louis District
- Memphis District
- Vicksburg District
- New Orleans District
- Contact Us

At the bottom of the page, there is a section titled "Points of contact:"

<http://www.mvd.usace.army.mil>



# CorpsMap - Flood Damaged Sites

- ✓ Web based site locator
- ✓ Pop-up window provides general overview of site specific flood damages.
- ✓ Provides access to project information papers as well as risk management and construction fact sheets
- ✓ Describes interim risk management measures

**US Army Corps of Engineers - Mississippi Valley Division**

**US Army Corps of Engineers**  
Mississippi Valley Division

Operation Watershed

Layers

- Expand All Collapse All All Off Redraw
- Operation Watershed
  - 2011 Levee Sites
  - 2011 Levee Sites(PL84-99)
  - 2011 Channel Improvement Site
  - 2011 Channel Improvement Site
  - 2011 Major Structures Sites
  - 2011 Major Structures Sites(PL8
  - 2011 Dredge Sites
  - 2011 Dredge Sites(PL84-99)
- Flood Season Preparedness
  - 2012
    - Risk Class 1 Site (See Leger
    - Risk Class 2 Site (See Leger
    - Risk Class 3 Site (See Leger
  - National Levee Database
  - USACE Civil Works
  - Federal
  - Current Weather
  - ESRI ArcOnline Services

Legend

Search

Map Ready

RI AR Off - SV Off - OV Off - TF

Query Layer

BaseMap - Scale: 1:1,733,376

Query Results

Name	Value
Issues	One
FRAGO Class	1
Risk Info.	Report
Report	Report
Risk Management	Risk Management

**US Army Corps of Engineers**  
Vicksburg District

**OPERATION WATERSHED RECOVERY - CRITICAL REPAIR SITES**

**Information Paper**  
**Buck Chute**

**Contacts**

**Kent Parrish**, MVD Regional MRL Team Leader  
Ph. 601-631-5306 fax 601-631-5151  
[Kent.Parrish@sac.army.mil](mailto:Kent.Parrish@sac.army.mil)

**Scott D. Whitney**, MVD Regional Flood Risk Manager  
Ph. (399) 794-5386 fax (399) 794-5710  
[scott.d.whitney@sac.army.mil](mailto:scott.d.whitney@sac.army.mil)

**OVERVIEW**

**DISTRICT:** Vicksburg District  
**TYPE:** Boils and Seepage  
**RM:** RM 459.6 (110-00-BEL)  
**FRAGO CLASS:** 1 - High Potential for Loss of Life  
**RISK:** 3,996 residents, \$188.5M infrastructure  
**REPAIR:** Berm, 30 Relief Wells, and 12 Horiz. drains  
**EST. REPAIR COST:** \$2,640,000

**Damage Assessment**

In early 2010, MVK was notified of multiple boils in the project area. In early summer of 2010, the boils were sandbagged as River Levels reached Flood stage and the flow of the boils increased. In February, 2011, when conditions in the project area were dry, two of the largest boils were pumped, revealing voids at boil sources as wide as 20 ft and as deep as 10 ft. The voids revealed no obvious "pipes" that continued downward or laterally from the void bottom. As River levels continued to rise and approach flood stages in March 2011, the boil area voids were backfilled with sand material, covered with a new woven filter fabric, and either sandbagged or earthen dams were constructed around them. In May 2011, an emergency berm was constructed over the area which encompassed the worst known boil areas. The top of the berm was constructed to approximate elevation 85.0 ft. Because of the high exit gradients for the predicted flood stages for the known boil areas, and the consequences of failure at this location, it was decided to flood the entire project site by raising water levels in Eagle Lake to approximate elevation 90.0 ft through the use of Muddy Bayou Control Structure. In order to reduce the risk of failure without raising water levels in Eagle Lake, remediation is recommended prior to the next high water season.

**Risk and Consequence**

If the East Bank Mississippi River Levee System were to fail at the Buck Chute site, the population at risk would be 3,996. The value of the non-residential structures is \$31,141,000, and the value of the 1,436 residential structures is \$157,396,000.

**Figure 1. Aerial view of Buck Chute during 2011 flood photo.**

**Critical Repairs**

The reset recommendation for this site includes a 1700 ft reach of earthen berm 200 to 240 ft wide and relief wells from Station 106+50 to 123+50. A 400 ft section of the berm includes a drainage and collection feature, including horizontal drains and a previous sand layer. The item includes 30 relief wells and 12 horizontal drains. In-place berm volumes will be approximately 13,600 cubic yards of sand for the drainage feature and 150,000 cubic yards for the remaining berm.

**Special Considerations**

The site is covered under the 1998 MRL SEIS, as item 458-L, and covers multiple work items. The SEIS does not cover planned relief wells for this site; however, an EA was prepared to cover these wells and a FONSI signed. Coordination under Section 9 of the Endangered Species Act has been completed. The 404 water quality permit for the project has been obtained, and all project impacts have been mitigated for, as this site is part of the existing MRL mitigation program. This segment of EBMRL is not currently certified, but this fix, along with other work MVK currently has planned in the area, will allow certification of the levee system. The Board of Mississippi Levee Commissioners has acquired the necessary ROW for the project.

**Schedule**

Bids solicited - 10 Aug 2011  
Contract Awarded - 30 Aug 2011  
Anticipated contract duration 120 days. Scheduled completion in January 2012.

**Acquisition Strategy**

Unrestricted competitive bid awarded 30 Aug 2011 to Phlyway Construction, LLC for \$3,100,225.00. This site was combined with No. 8 site, Althermar.

<http://www.mvd.usace.army.mil/>



# TRANSFORMING ACTIONS

**RFRM TENETS:** Embrace and implement three RFRM tenets in a more holistic fashion to ensure future flood risks are reduced by effective mitigation, preparedness, response, recovery, shared responsibility and risk informed decision.

**STRATEGIC ALIGNMENT:** Ensure strategic and complimentary alignment of key RFRM concepts and actions with Campaign Plan, NFRMP, MVD IPLAN, District OPLANS and partner initiatives.

**ORGANIZATIONAL STRUCTURE:** Strengthen linkages and leverage across full spectrum of RFRM organizational structure by creating regular communication forums and clarity on various roles and responsibilities. This is a TEAM endeavor!

**BEST PRACTICES:** Create regional database of RFRM Best Practices that is accessible and searchable to provide highlights and contacts for tested FRM approaches that have achieved desired results and provide potential examples or reference points for others to employ as means of overcoming similar challenges.

# TRANSFORMING ACTIONS

**CHALLENGES:** Many FRM challenges were revealed and discussed as result of this Annex development. A more concentrated effort should be initiated that seeks to regionally articulate, evaluate, baseline and prioritize RFRM challenges to secure support for collaborative solution pathways.

**ACTION PLANS:** Develop formal regional process to develop, review, prioritize, assign, approve, and report on meaningful RFRM action plans that have well developed and S.M.A.R.T action steps. These action steps should be designed to directly address challenges, transforming actions, and improve FRM service/performance.

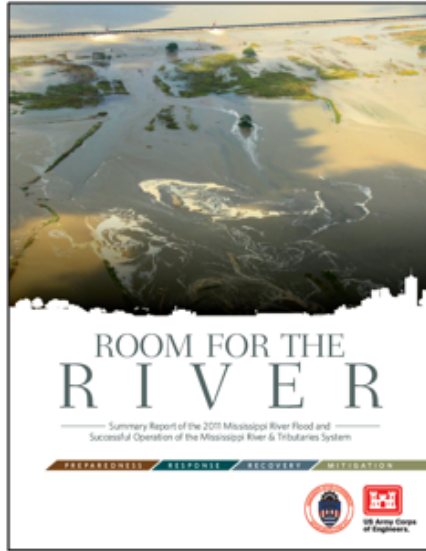
**RESOURCING OPPORTUNITIES:** Embracing concepts or recommendations found in the MVD RFRM Annex will create expanded or new opportunities for FRM project resourcing, cost/time savings and enhanced flood risk reduction. These opportunities should be identified and acknowledged as means to increase incentive and support for more challenging transformation actions.

# TRANSFORMING RESULTS

- ✓ Highly coordinated and effectual Flood Response
- ✓ Resiliency in Action, Nonstructural Mitigation very successful
- ✓ Two time USACE National Flood Risk Manager of the Year
- ✓ Silver Jacket Coordinator and Silver Jacket Team of the Year
- ✓ Highly effective FRM/SJ working relationships with partners
- ✓ Annual Regional and National FRM/SJ workshops – Lesson learned
- ✓ MVD Districts awarded more Silver Jacket Pilot Projects than any other USACE Division, >\$10M and climbing!
- ✓ Widely acclaimed and successful FPMS program, >\$1M/yr.
- ✓ FY18 FRM Supplemental Funded Projects, >\$900M (e.g. Cedar Rapids \$117M.)
- ✓ FRM Hydraulic Model for Mississippi River Phase I completed FY18
- ✓ Working with States on outreach, policy, rules and regulations
- ✓ FRM Strategic Communication Plans Best Practice Model

# FLOOD RISK MANAGEMENT

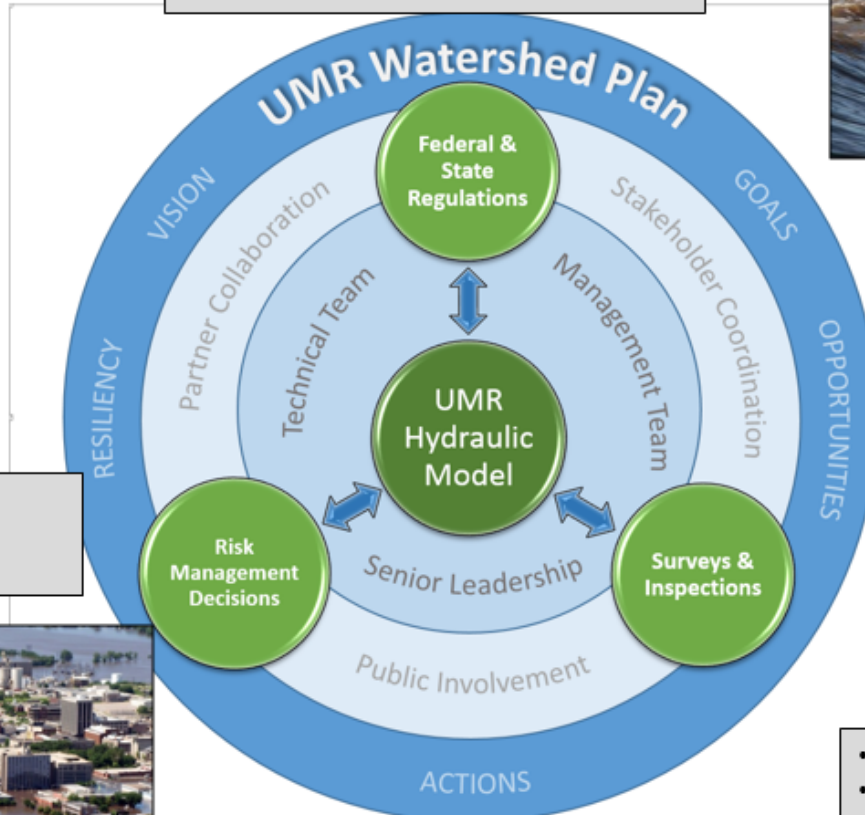
**VISION: An implementable UMR Flood Risk Management Strategy;  
goal is a predictable system**



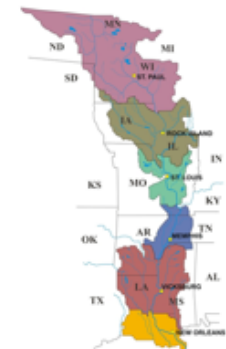
- Winning the Next Flood
- Innovate, Adapt and Improve
- Roadmap to the FUTURE



- Shared Responsibility
- Flood Risk Management Life Cycle
- Risk Informed Decision making



Mississippi Valley Division's  
Regional Flood Risk Management Annex  
"Understanding and Leading an RFRM Transformation"



Prepared by Scott D. Whitney  
MVD Regional Flood Risk Manager

4 FEBRUARY 2014

- Inform, transform & guide
- Integrated, holistic & resilient
- COLLABORATIVE

**'Finding a Common Voice'  
for unified and holistic UMR  
Flood Risk Management**



US Army Corps  
of Engineers.



U.S. ARMY

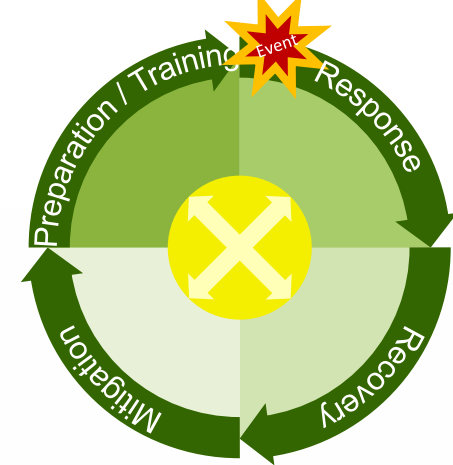


# QUESTIONS & DISCUSSION





# FRM LIFE CYCLE

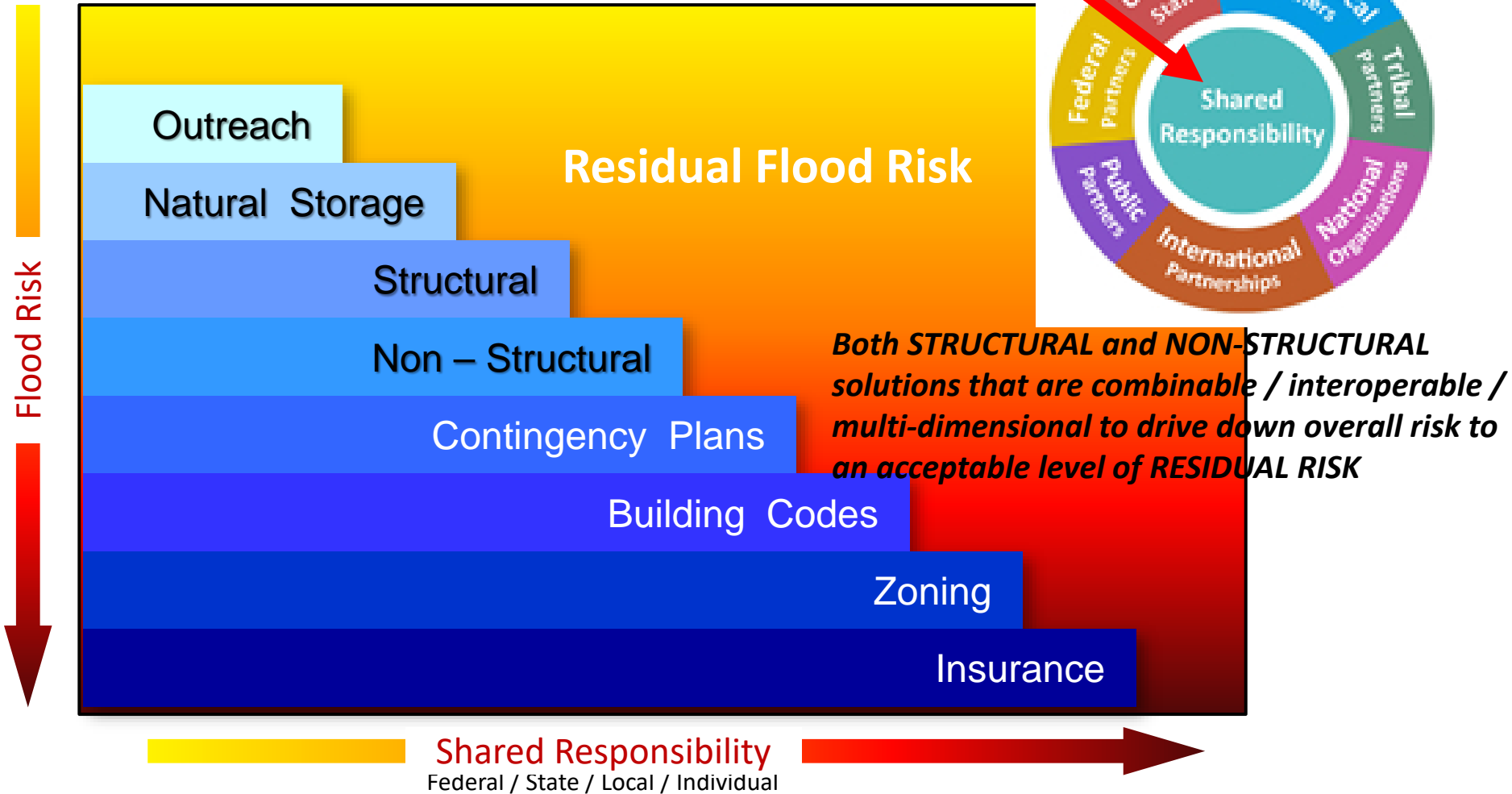


**Link Relevance**

# Shared Risk Management

*“Driving Down the Risks with an Informed and Engaged Public”*

*“Secure our Nation, energize our economy and reduce risk from disaster.”*



**All Stakeholders relevant roles in contributing risk reduction!**