



Emergency! Who's In Charge?

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Background

**AWIA Compliance
Required RRA and
ERP Review or
Development**

**EPA template provided
a starting point NOT
objective**

**First round emphasis
seemingly by default
was on RRA**

Next Compliance dates:

Population	RRA	ERP
>100,000	March 31, 2025	September 30, 2025
50,000 – 99,999	December 31, 2025	June 30, 2025
3,301 – 49,999	June 30, 2026	December 31, 2026

Observations From Round 1

01

Focus was on RRA, but ERP is functional part of process

02

Compliance met but not comfortable
ERPs rose to the level of functionality

03

Adequate for individual
isolated emergencies

04

ERPs did not carry over to
system-wide outages

05

Review and training was
lacking

06

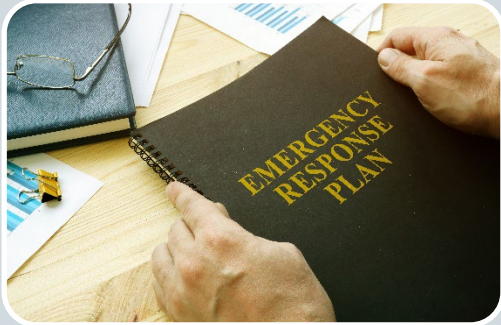
ERPs bogged down in detail OR
were too generic to be functional

07

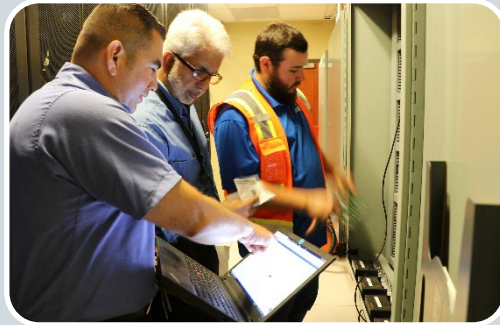
Weak clarity of authority

What's Your Status?

Who's in Charge?



**What is your
Command and
Control
structure?**



**Can everyone in
the utility
answer the
question?**



**What are the
contingency
roles and
responsibilities?**



**Is there a
Command and
Control
structure at
every level?**

What Emergencies Does Your ERP Address?



Operational? – Pipe Break



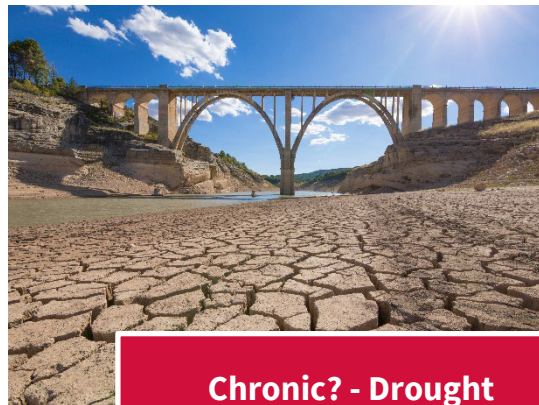
Isolated event? – Pressure zone booster station outage



Systemwide? - Flood



Acute? - Earthquake




























Chronic? - Drought



Intentional ? - Cyber

Not All Emergencies Are The Same, Nor Can Be Your Response

Hazard	Foreseen		Unforeseen	
	Acute	Chronic	Acute	Chronic
Pipe Break				
Drought				
Algal Bloom				
Extreme Temps				
Flooding				
Wildfire				
Winter Storm				
Tornado				
Hurricane				
Cyber Attack				
Distribution Contamination				
Source Contamination				
Earthquake				
Volcanic Eruption				
Tsunami				

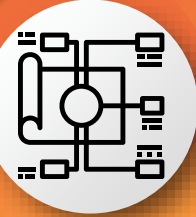
Where Does Your ERP Begin?



How Accessible is Your Plan?



Directions out of a sinking car, or reading material for 12-hour flight?



Print or Electronic?



Centralized or Distributed?

Is Interagency Cooperation Addressed?



Leveraging Locational Staff Resources



Does your system present areas of potential isolation?

Do you have a staff/hazard/capabilities map?

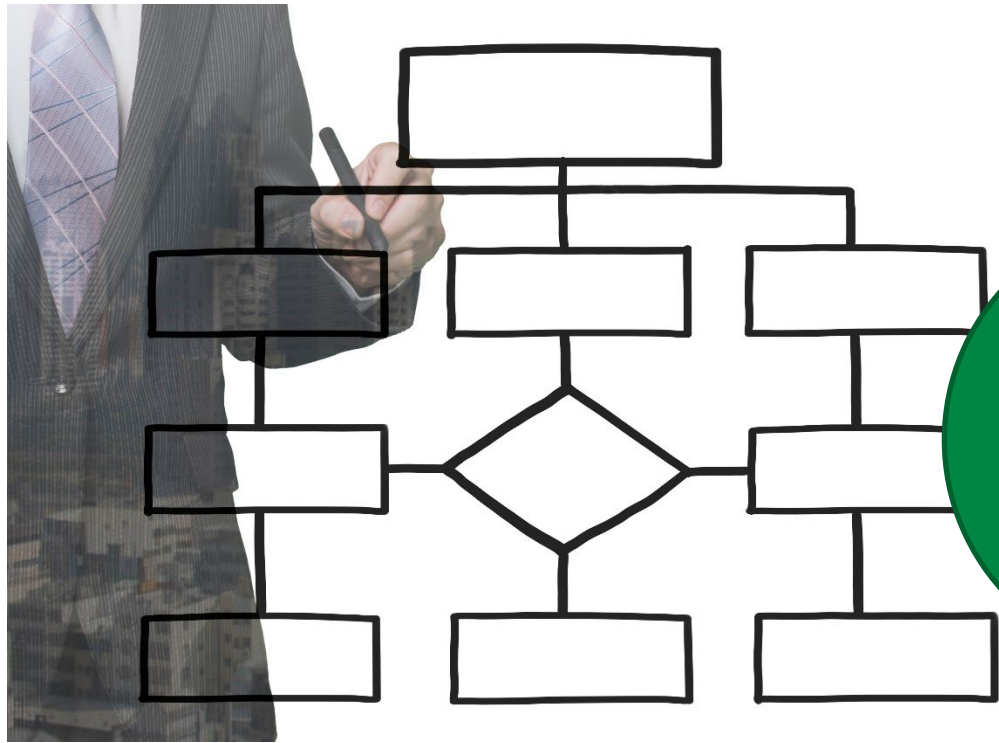
Can you benefit from vehicles in the field 24/7?

Can you leverage staff locations for dispersal of response equipment?

Would dispersed regional response centers provide response flexibility or resilience?

Do staff home locations provide response opportunities?

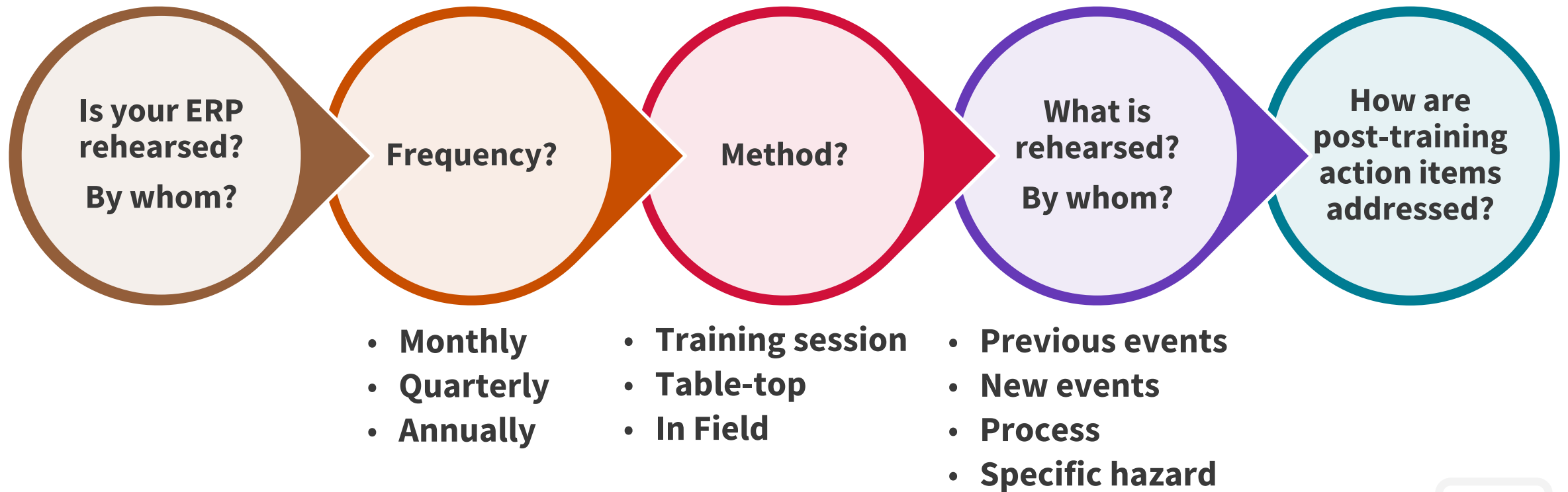
Are You Preparing to Respond or Planning for an Event



VS



Rehearsal – Identify and Address Weaknesses Prior To Event



ERP Modification





What is your Contingency Plan?

“Everybody has a plan, until they get punched in the face.”



- Mike Tyson

Managing Prevention and Mitigation

- Hazard
- Description of Risk
- Goal/Function/Assets at Risk
- Preventative Controls
- Mitigative Controls

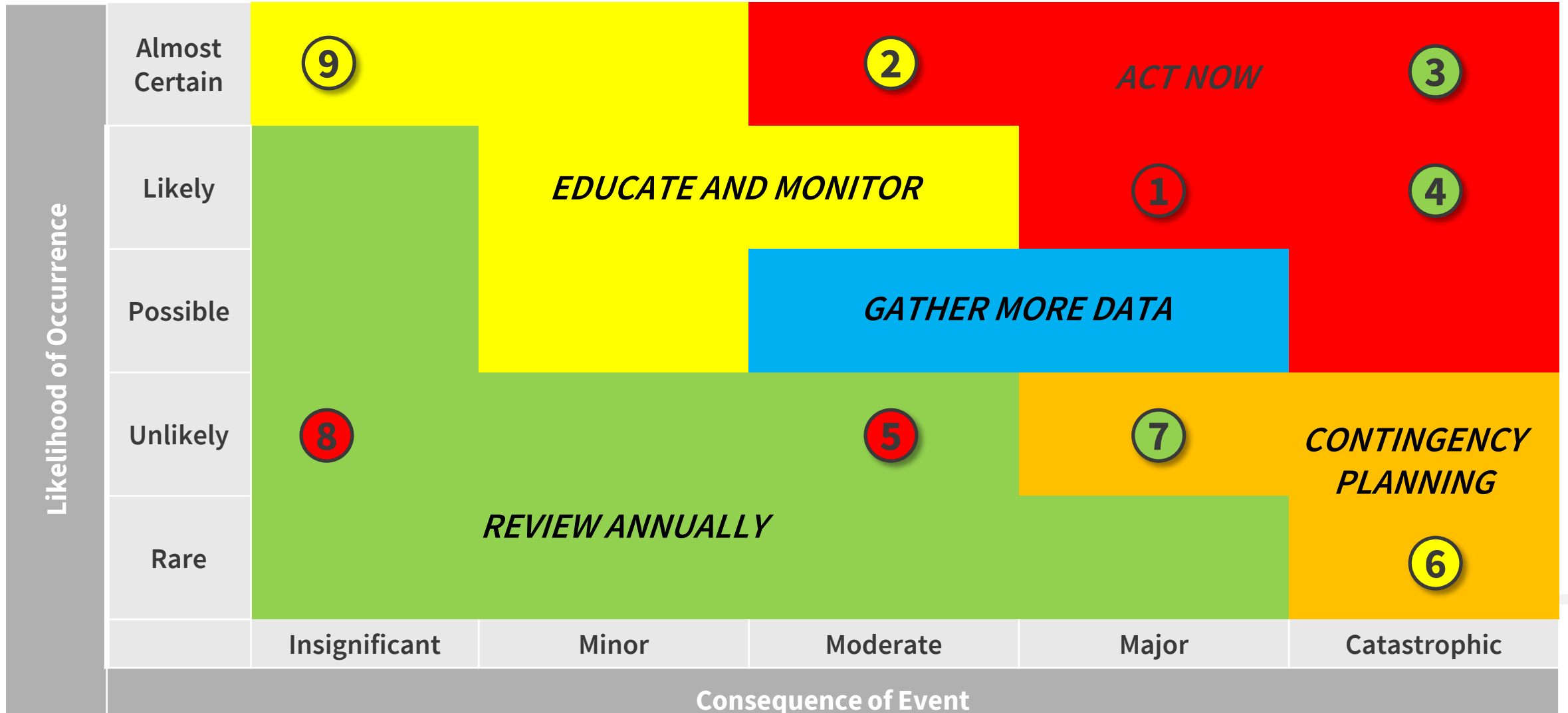
Score	Consequence	Score	Likelihood
1	Insignificant	1	Rare
2	Minor	2	Unlikely
3	Moderate	3	Possible
4	Major	4	Likely
5	Catastrophic	5	Almost Certain

Risk Score = Consequence x Likelihood

Uncertainty		
 High	 Medium	 Low

Source: Burlingame, Journal AWWA 2022

Response Resources Are Not Limitless - Prioritize



Emergency Response Hazard Planning Worksheet

Date: _____ Prepared by: _____

Hazard: _____

Description of Risk: _____

Goal/Function/Service at Risk: _____

Risk Source: Natural Human Dependency

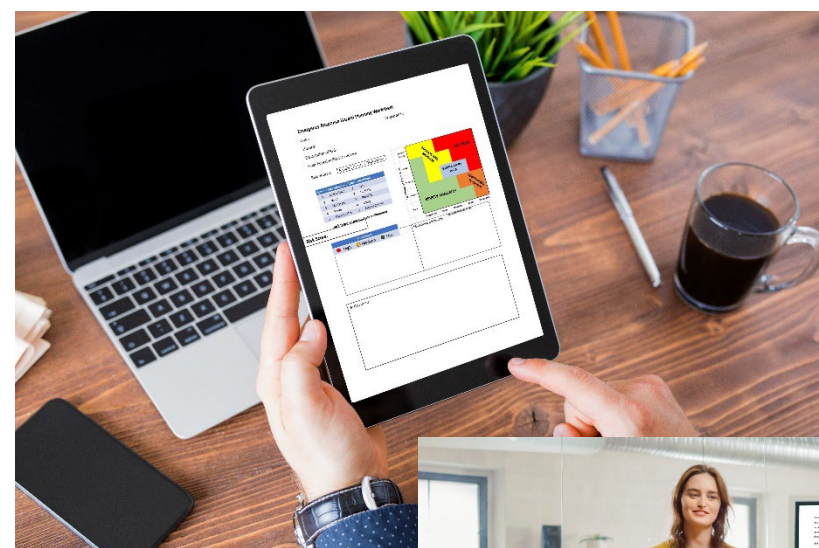
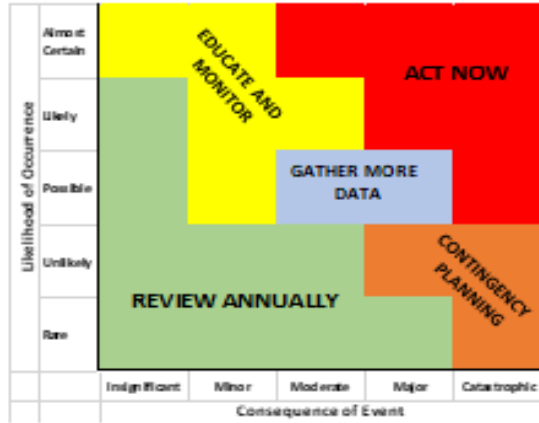
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Risk Score:
Consequence x Likelihood

Uncertainty
● High ● Medium ● Low

Preventative Measures:	Mitigative Measures:
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Action Items:



Summary

- You have *compliance*, but do you have *functionality*
- A self-evaluation doesn't have to wait until next AWIA update
- Consider flipping focus from RRA to ERP next cycle
- Review the usability and training of ERP
- RRA was a snap-shot assessment, ERP is on-going activity

Source: Burlingame, Journal AWWA 2022



Questions?

