

BROWARD COUNTY WATER & WASTEWATER SERVICES OPERATIONS DIVISION

Utility Risk and Resilience Assessments (RRAs): America's Water Infrastructure Act of 2018 (AWIA)

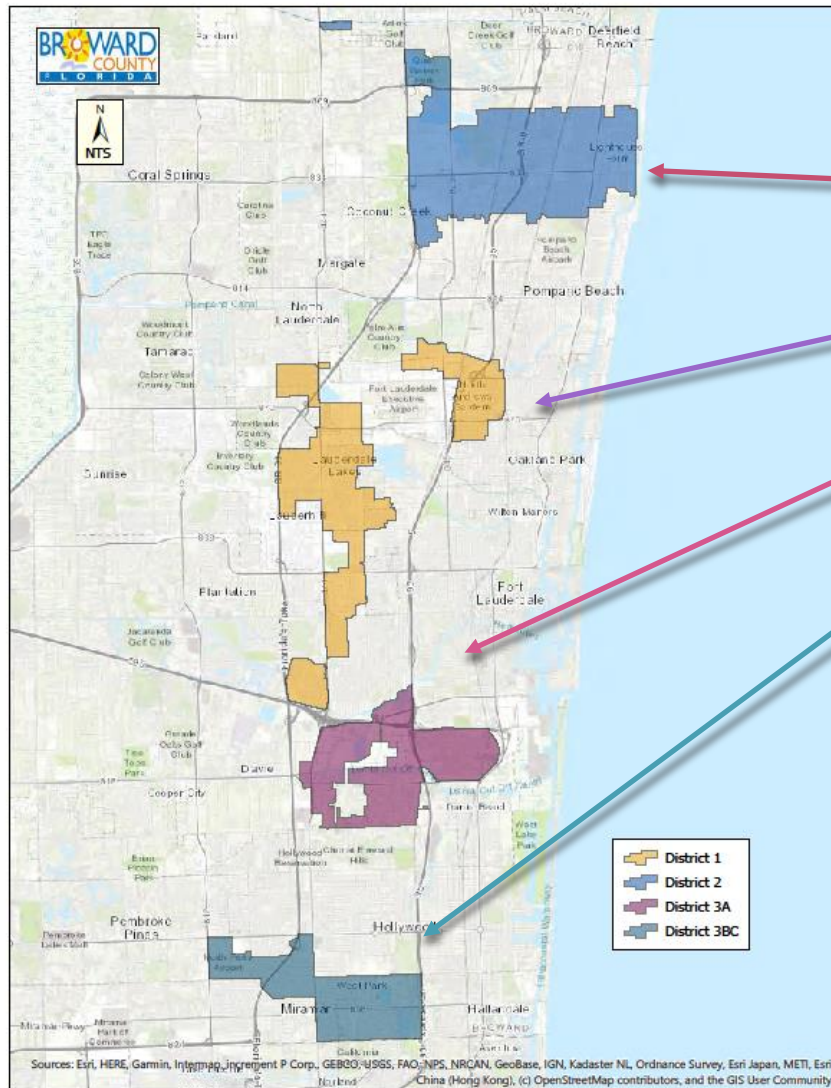
Carlos Garcia, PE, PMP



TOPICS

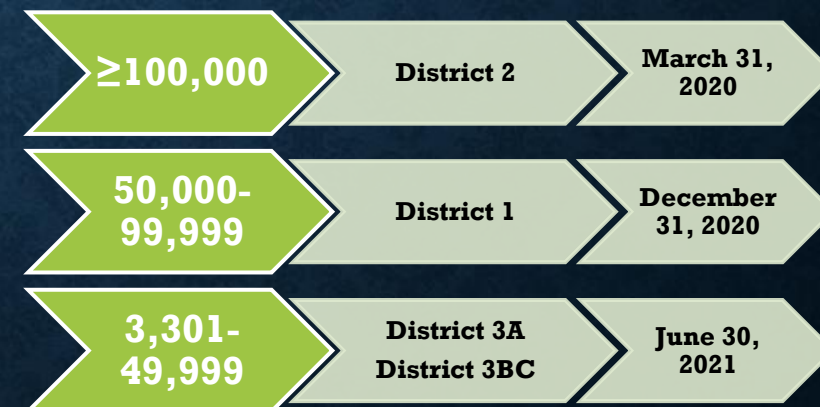
1. Broward County - Community Water Systems (CWSs)
2. Certification Process
3. Reviewing Risk and Resilience
4. Risk Mitigation

1. BROWARD COUNTY - COMMUNITY WATER SYSTEMS (CWSs)

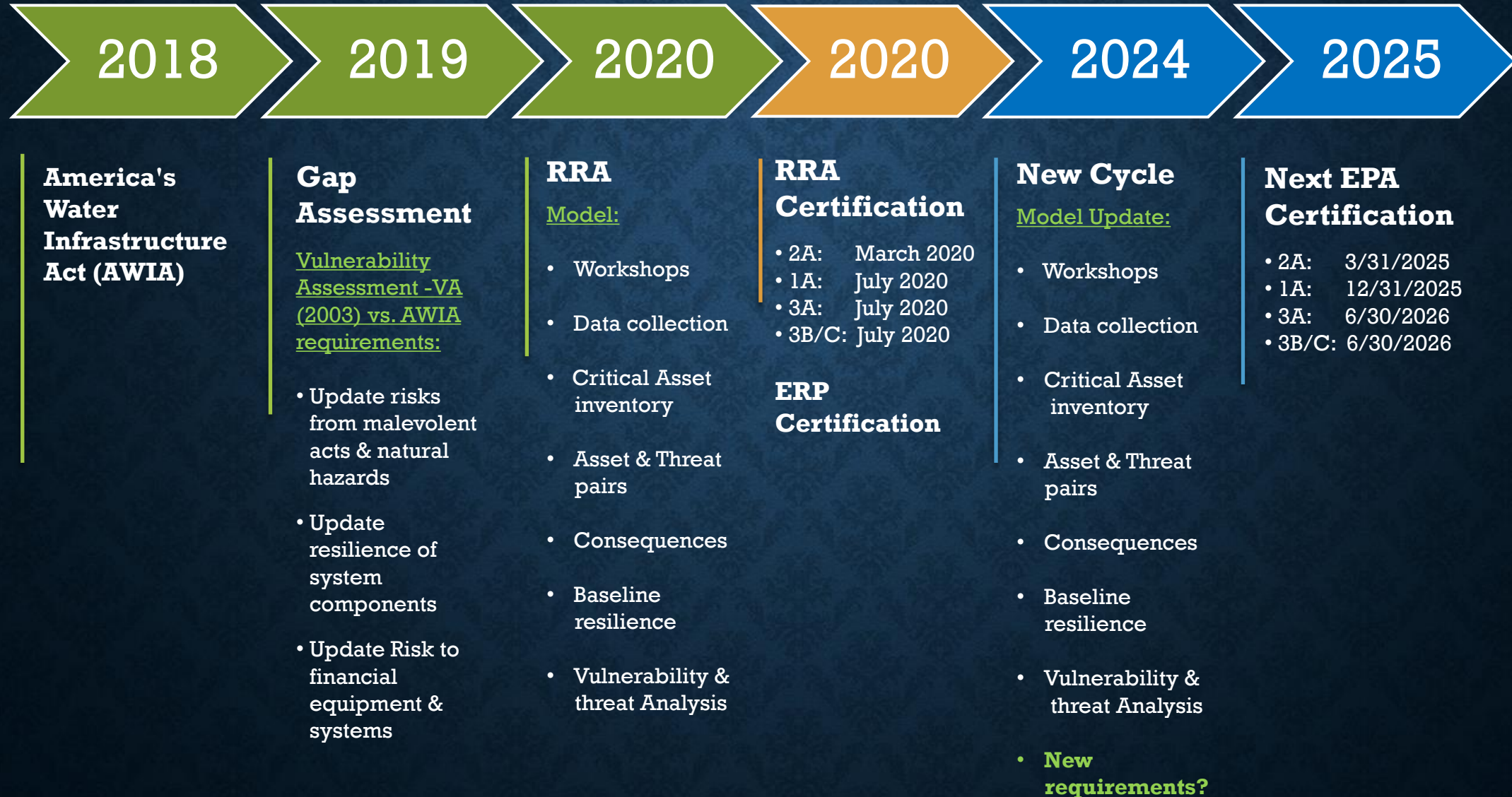


District	PWS ID	TOTAL POP	CITY
2	4060163	112,097	Pompano Beach
1	4060167	75,305	Lauderdale Lakes
3A	4060165	17,187	Fort Lauderdale
3B/C	4060162	32,721	Miramar

EPA Certification Deadlines



2. CERTIFICATION PROCESS



3. REVIEWING RISK AND RESILIENCE

Reference Documents:

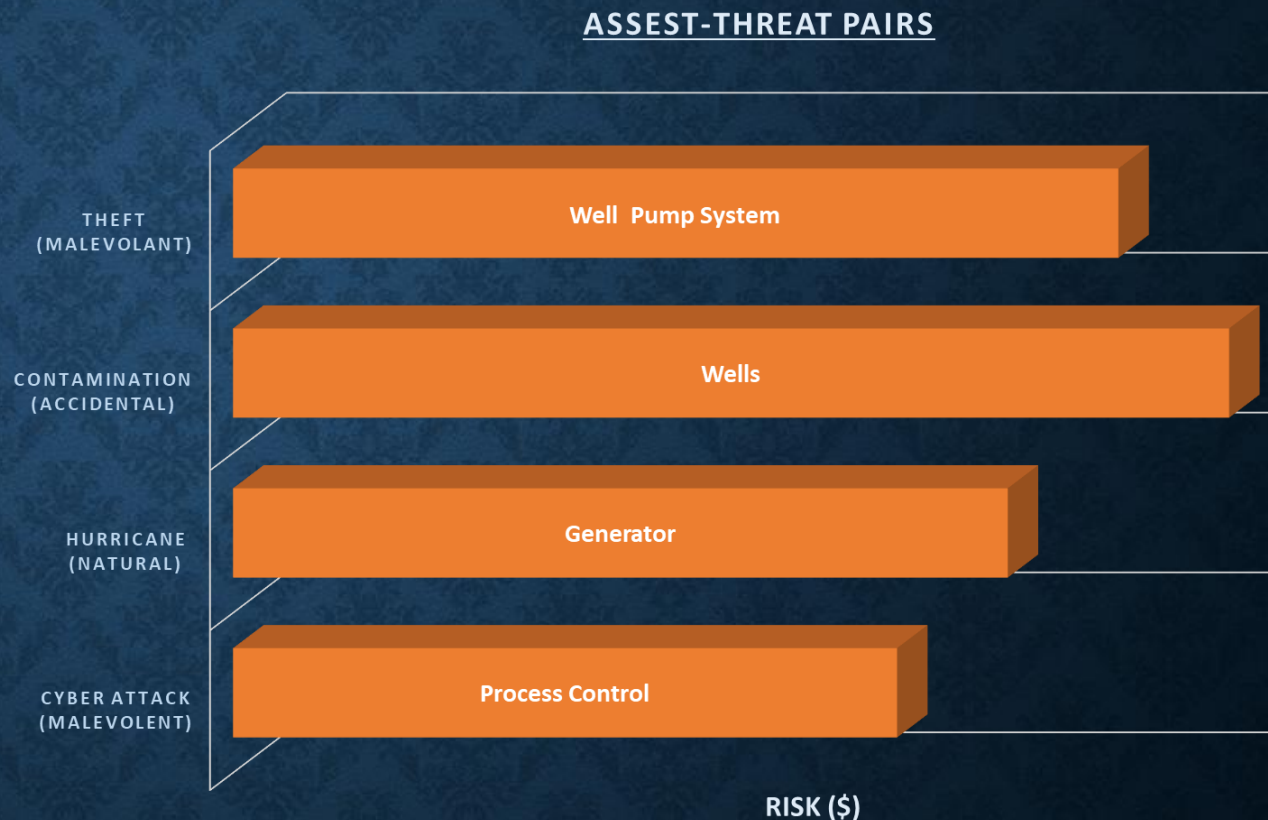
- Previous VAs
- AWWA J100-10(R13), or simply “J100”
- Baseline Information of Malevolent Acts (EPA, July 2019)
- AWWA Manuals M19, M60

Tools:

- EPA's web-based Vulnerability Self-Assessment Tool 2.0 (VSAT)
- EPA's Water Health and Economic Analysis Tool (WHEAT)



THREATS (CAT)



$$\text{Risk (\$)} = \text{Consequences (\$)} \times \text{Vulnerability} \times \text{Threat Likelihood}$$

$$\text{Resilience (Gal)} = \text{Duration (Days)} \times \text{Severity (Gal/day)} \times \text{Vulnerability} \times \text{Threat Likelihood}$$

4. RISK MITIGATION



THANK YOU...

Q&A : End of all Presentations

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