

2018 Colorado River Flood

Corrective Actions Implemented



Recommendations from Austin Water's After-Action Report and Improvement Plan

RECOMMENDATION	STATUS	NOTES
1. Develop protocols for sending alert notifications utility wide, including all internal stakeholders	Complete	Emergency Management staff worked with internal stakeholders to improve internal communications to AW staff via email and the implementation of an emergency management application.
2. Develop information sharing platform to improve situational awareness during incidents	Complete	Emergency Management staff developed a situational awareness dashboard in the emergency management application.
3. Develop policy/protocols for mass communications and social media – use of smartphone applications	Complete	Emergency Management staff implemented an emergency management application that provides a platform for internal communications during emergencies. COA policy also provides guidance on the use of approved cloud services. During Winter Storm Uri, AW utilized its new My ATX Water customer portal and coordinated with HSEM on the Warn Central Texas system. Nearly 950,000 messages were sent during the storm. These systems will continue to be utilized in mass communications, as well as through social media platforms.
4. Develop and disseminate Skype training to include use on laptops, smartphones, tablets, workstations, etc.	Complete	Skype was replaced by Teams, which has been used on laptops and other devices since March 2020 and was deployed during Winter Storm Uri.
5. Provide WebEOC training for AW personnel	Complete	Additional WebEOC training was provided to plant and field staff, and a Web EOC link appears on the situational awareness dashboard.
6. Develop a dedicated Department Operations Center for AW	Complete	The Department Operations Center was established at Waller Creek Center in early 2020.
7. Continue to provide ICS training and exercise for all IMT and other staff as required	Complete	ICS training and exercises were provided in 2018, 2019, and 2021. Online training was available in 2020.
8. Expand IMT staffing to include Situation Unit and Logistics, and to create depth across entire IMT	Complete	Incident Management Team (IMT) was expanded to include a Situation Unit and Logistics Section, which were deployed in Winter Storm Uri. Austin Water continues to build depth in the IMT and have launched a real-time IMT roster in the emergency management application.
9. Develop pre-incident “Triggers” to enhance early activation and mitigation decision making for use in all-hazards planning	Complete	Emergency Management created a Decision Matrix for activating the Incident Management Team during General Conditions and Extreme Cold Conditions. Pre-activation checklists have been created to aid in preparation for emergencies.
10. Develop IMT Meeting Agenda templates for use during activations; provide training on use	Complete	Templates have been created in the emergency management application, and IMT members have been trained on the standardized planning cycle that occurs during each shift.
11. Mitigate single point failures in Environmental Regulation and Wholesale Customer Services for IMT	Complete	Additional staff were assigned to serve in the IMT for Environmental Regulation and Wholesale Customer Services and were deployed in Winter Storm Uri.

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Actions Items from Austin Water-Austin Public Health Executive Debrief

RECOMMENDATION	STATUS	NOTES
1. AW and APH will update communication scripts, websites, and videos to reflect the 2-minute standard for boil water time.	Complete	AW Public information Office created a boil water video, updated boil water instructions on the AW website, and a boil water FAQ to reflect the 2-minute standard.
2. AW and APH will document flushing guidelines for private lines and various scenarios.	Complete	AW and APH staff determined that CDC procedures for flushing would be followed and both departments would coordinate public messaging through their respective Public Information staff. Information on flushing was included in the boil water FAQ on the AW website. AW staff also worked with APH regarding private flushing during the pandemic, referencing the CDC guidelines, to remind the community of safe return to workplace practices when buildings have been vacant for extended periods. AW staff also reference appropriate flushing guidance for the My ATX Water project. This is a key activity for customers after a meter exchange to clear lines of potential dirt and silt.
3. APH will provide feedback on sending a representative to AW's DOC.	Complete	During Winter Storm Uri, APH provided a virtual Agency Representative to AW's Department Operations Center (DOC).
4. AW will provide the following information to APH: AW's Incident Management Team rosters and DOC phone numbers.	Complete	AW sent DOC Contact information to APH, including AW's dedicated phone numbers for IMT positions when activated.
5. AW will notify APH whenever Austin Water's DOC is activated and will provide listings of on-duty staff in the DOC when activated.	Complete	APH information is in AW's DOC Manual and includes instructions for the DOC Manager to advise APH when AW activates the DOC.

Actions Items from Austin Water-Carollo Technical Review

RECOMMENDATION	STATUS	NOTES
1. Implement zeta potential instruments at all water treatment plants	Complete	Instruments were procured and are operational at each WTP. Staff have been trained to run samples. AW's Water Quality Lab (WQL) verified routing maintenance with Zetasizer manufacturer on all three units.
2. Standard Operating Procedures developed and revised for flood event preparation	Complete	"Lessons learned" from each treatment plant have been incorporated into procedures that are implemented when there is a threat of flooding or a drastic change in raw water quality.
3. Polymer feed system at Ullrich water treatment plant	Complete	Polymer feed system installation, training, and start-up are complete. Standard Operating Procedures have been developed, including polymer feed dosing levels.
4. Polymer feed systems at Davis and Handcox water treatment plants	In process	Design is complete, TCEQ approval for construction has been received, and the projects are advertised for contractor bids, due December 9. Handcox and Davis water treatment plants are equipped with emergency polymer feed systems that can be utilized if needed until construction of the permanent systems are complete.