

## MEMORANDUM

TO: Mayor and Council Members

FROM: Rey Arellano, Assistant City Manager

DATE: November 9, 2018

SUBJECT: October Boil Water Notification Timeline

During the period October 22 – 28, 2018, a preemptive "boil water notification" – and subsequently, a mandatory Boil Water Notice – was put into effect as a result of heavy rainfall and subsequent flooding along the Llano River. The purpose of this memo is to provide a timeline of the decisions and actions leading up to the issuance and subsequent lifting of the boil water notification in response to inquiries from Council Members.

## Background

The rainfall that occurred along the Llano River basin carried a significant amount of silt, dirt and debris into the river as a result of the extremely dry summer conditions in the region. Because the Llano River drains into the Colorado River, which is the source of intake water for Austin Water"s (AW) three water treatment plants, this had an impact on AW's ability to produce potable water that could meet the normal demands on the water system. It is important to note that during the period of the boil water requirement, water sample testing revealed no presence of harmful bacteria in the water being produced. The issue was the inability to produce water that met the clarity requirements.

## Timeline

Date	Event	
Tuesday October 16, 2018	<ul> <li>Lower Colorado River Authority (LCRA) notified Travis County Office of Emergency Management and the Homeland Security and Emergency Management (HSEM) of flooding on the Llano River.</li> </ul>	
	HSEM established a Situational Assessment Team in the Austin-Travis     County Emergency Operations Center (EOC).	
	LCRA reported 4 floodgates opened at Mansfield Dam. AW operated     Longhorn Dam flood gates in coordination with LCRA to maintain flow along     the river system. Water treatment plants operating normally.	

Date	Event			
Wednesday October 17	<ul> <li>LCRA predicted the need to open 4 additional flood gates (for a total of 8 gates) at Mansfield Dam as early as Thursday, which would result in flooding along Lake Austin, Lady Bird Lake and areas downstream of Longhorn Dam. Water treatment plants operating normally.</li> </ul>			
Thursday October 18	<ul> <li>City Manager approved activation of the EOC in anticipation of additional flood gates being opened at Mansfield Dam. An update was provided to City Council at the beginning of the Council meeting regarding City preparations in the EOC.</li> </ul>			
	AW activated its Department Operations Center (DOC) to standby mode; continued monitoring LCRA flood operations, plant conditions, and coordinated with water system agencies. Water treatment plants (WTP) operating normally; however, Handcox plant reported high turbidity intake water. All WTPs began addressing turbidity through increased chemical dosing.			
Friday	LCRA continued with 4 floodgates opened at Mansfield Dam.			
October 19	<ul> <li>Water treatment plants operating normally; AW operations staff reported high intake water turbidities at all treatment plants that are being addressed by plant and engineering staff.</li> </ul>			
Saturday October 20	<ul> <li>Increased intake water turbidities begin to impact WTP operations, resulting in reduced output capacity while addressing clogged filtration systems and maintaining acceptable turbidity levels at the output of the WTPs. Water production capability started falling behind system demand.</li> </ul>			
Sunday October 21	07:00am AW activated its DOC due to diminished WTP system capacity and challenges in maintaining output water turbidity.			
	11:30am AW notified Austin Fire Department (AFD) and Emergency Service Districts of water supply issue.			
	11:45am AW issued a media alert calling for the community to reduce water use.			
	O1:00pm AW held a media availability at Waller Creek to answer questions and re-emphasize need to reduce water use. AW initiated these restrictions due to intake water turbidities that have never been seen before.			
	O8:00pm AW Director recommended that the City Manager initiate boil water notification as a preemptive measure along with reducing consumption for AW customers due to (1) inability to keep up with demand, (2) challenges in maintaining output turbidity levels, and (3) maintaining system pressure and reserve levels should demand continue to exceed production.			
	08:00pm – 11:59pm			
	HSEM coordinated a conference call focused on (1) apprising key stakeholders of the situation, (2) identifying critical AW customer groups, (3) identifying sources of bottled water, and (4) developing a communication strategy. Additional personnel were called into the EOC.			

Date	Event			
Monday	12:00am – 06:00am			
October 22		etermined critical customer groups: (1) hospitals/medical facilities, pols, and (3) food establishments.		
	how m	orked with key partners in these groups in order to identify impacts, uch bottled water would be needed and when, and to coordinate unications.		
		ontacted Greater Austin Restaurant Association to advise them of the on and coordinate communications.		
		orked with the Texas Division of Emergency Management to begin s of requesting delivery of water resources from other agencies.		
	<ul> <li>Purchasing staff initiated an order for up to 1.25 million gallons/day for the priority medical facilities and schools. Staff also reached out to major retailers to advise them of anticipated demand for bottled water in their stores.</li> </ul>			
	Staff developed materials that would be needed once the boil water notification was made, which was planned to be released via press conference at 06:00am. Items that were needed included FAQs to be posted on the City's website and 3-1-1, press release, talking points. Arrangements were made to stage materials as appropriate.			
	<ul> <li>Staff determined appropriate means for communicating the boil water notification: press conference/TV stations/ATXN, print/digital media outlets, social media, email (EOC stakeholder distribution list), and direct telephone contact for key stakeholders. A website was set up for information to be posted and updated at austintexas.gov/boilh2o. Information posted was available in American Sign Language, Spanish, Arabic and Korean. Although considered, staff decided not to use reverse 9-1-1 as the public's health was never at risk as water quality still met regulatory requirements and the notification was a preemptive measure.</li> </ul>			
	06:00am	Press conference held at Austin City Hall to announce preemptive boil water notice.		
	07:44am	AW Director declared formal water use emergency restriction; AW staff prepared press release.		
	10:00am	AW released a press statement regarding the boil water notification. AW also held conference call with local schools to address water quality questions.		
	12:45pm	AW released a press statement regarding Emergency Water Use Restrictions.		
	05:25pm	Reverse 9-1-1 system was used to send out Water Conservation and Boil Water notice to all AW and wholesale customers due to the immediate concern of demand exceeding supply.		
	05:30pm	EOC released a press statement providing an update on the boil water and emergency water restrictions.		

Date	Event			
Tuesday October 23	O3:45pm Press conference held at City Hall regarding Boil Water Notification.  AW Director expressed cautious optimism that boil water notice may be lifted this weekend, depending on expected rainfall.  O4:45pm EOC released a press statement regarding Boil Water Notice and Emergency Water Restriction.			
	AW treatment plant output water experienced a brief spike in turbidity level during the afternoon that reached the threshold for a mandatory boil water notice. AW consulted with Texas Commission on Environmental Quality (TCEQ) for their review of the data. At 06:49pm, TCEQ notified AW that the boil water notice was now mandatory and was required to be announced within 24 hours.			
Wednesday October 24	O6:30am AW released a press statement issuing the TCEQ-required Mandatory Boil Water Notice. EOC released a press statement providing update on City efforts and urging residents to follow emergency usage restrictions.  O2:00pm AW held a media availability at Waller Creek to provide a technical update.  O4:45pm EOC released a press statement regarding Boil Water Notice and Emergency Water Restriction updates.			
Thursday – Saturday October 25-27	<ul> <li>AW continued to take action to address the high turbidity in the intake water, working closely with TCEQ and AW's wholesale customers.</li> <li>Communications focused on reducing water consumption during this period, locations of bottled water points of distribution for residents, and estimating that the boil water notice could be lifted by the end of the weekend.</li> </ul>			

Date	Event			
Sunday October 28	<ul> <li>Shortly before AW sent out their news release with the required TCEQ boil water notice language, the EOC sent its own prepared boil notice lift/water conservation news release to the EOC Liaison Officer for distribution to Council.</li> <li>EOC coordinated with CTM to post the boil notice lift/FAQs (in American Sign Language, Arabic, Korean, Spanish, simplified and traditional Chinese,</li> </ul>			
	and Vi 12:34pm	etnamese) to austintexas.gov/boilh2o.  TCEQ notified AW that we met all their criteria to rescind the boil water notice.		
	03:00pm	AW received notification that the last of their wholesale customers received their TCEQ approval to rescind the boil water notice.		
	03:30pm	AW released a press statement notifying the public that the Boil Water Notice was lifted. The EOC sent its press statement to the news media, posted it on the City of Austin website, and posted the notice to social media with a link to FAQs on the boilh2o website. The EOC initiated and sent out reverse 9-1-1 messaging to the public, sent out a media advisory announcing a news conference with City leadership outside of city hall, and arranged to have the press conference scheduled for 04:15pm made available for viewing on the City social media accounts. Lastly, an internal email detailing the boil water notice lift/water conservation on behalf of City Manager Spencer Cronk was sent to all City employees.		
	04:15pm	A press conference was held at City Hall to communicate that AW and all wholesale customers had lifted the boil water notice and to continue the emergency water restrictions while AW restored treatment plants to normal operations.		

cc: Spencer Cronk, City Manager
Executive Team
Juan Ortiz, Homeland Security and Emergency Management Director
Doug Matthews, Chief Communications Director