

Henderson Mill Road 48" Water Line Issue

Thursday, July 23, 2015 –
Monday, July 27, 2015



Situation

- A grass cutting crew working in the area hit a fire hydrant on Henderson Mill Road
- The fire hydrant was directly connected to a 48" main water transmission line buried 25 feet
- Dual 48 inch lines
 - One 48" line installed in 1958 is a steel line
 - Second 48' line installed in 1974 is ductile iron which had the hydrant on it
- The County made a conscious decision to work to repair the damage during off-peak hours so as to minimize the impact to customers.
 - Water could have been shut down "totally", leaving residents with minimal water for several days while repairs were underway





July 23, 2015 Thursday

- **Emergency crews responded to a damaged hydrant**
 - Hydrant shutoff valve located 20 feet deep and not accessible
 - Work scheduled that night for our staff to minimize disruption to residents



July 24, 2015 Friday AM to Early PM

- Could not access valve so ceased operation and restored system water pressure
- System sample collection began
- A contractor was secured to effect the repair
 - Two contractors visited the site, one declined to take on the job, the second contractor accepted the emergency repair job and work proceeded
- Work scheduled for midnight



July 24, 2015 Friday PM (continued)

- **A trial shutdown of a valve was scheduled however field crew expanded to another valve causing pressure reduction**
- DeKalb Public Information was on site, the information regarding the need to lower the water pressure was communicated to the press on site as well as posted on Twitter at #itsindekalb
- System pressure restored
- DEMA continued to work with hospitals and other critical facilities as well as Fire/Rescue to get 3,000 gallon water tenders into the County for fire suppression as well as support to hospitals if necessary
- DEMA opened EOC to better facilitate coordination with GEMA and others via conference calls



July 25, 2015 Friday Midnight into Saturday AM

- Shutdown started at midnight
- Contractor, while working, encountered a problem with lack of equipment that necessitated securing additional equipment
 - Could not get down to hydrant valve to shut off from lack of trench box
 - Made a rudimentary attempt at repairing the hydrant that failed in less than an hour



July 25, 2015 Saturday AM (continued)

- Testing of the water ongoing.
 - Thursday sample results good
- A boil water advisory was issued as a precaution in consultation with CEO, COO, EOC, DWM and HD
- Code Red notification was implemented for enrolled citizens
- All media outlets were kept abreast of the progress of the repair and provided updates in real time.
- The Emergency Operations Center was activated
 - Manning the EOC was not deemed feasible
 - Conference calls held with senior leadership, Watershed, hospitals and other critical facilities



July 25, 2015 Saturday PM (continued)

- Contractor delivered more equipment
- Hospital conference call about shutdown plans due to increased damage potential
- Valve closing began at 10:10pm for partial shutdown of flow
- System down at midnight and work began into Sunday



Pictures July 26, 2015



July 26, 2015 Sunday AM (continued)

- At completion of repair, valves began to be opened
- **The last 48" valve position was out of sequence and did not get positioned back correctly delaying re-pressurization**
- 25 feet down, 200 rounds and only a 6 inch hole to work with



2 inch nut about 20 feet down inside a 6 inch diameter pipe. Flapper can rotate 360 degrees

July 26, 2015 Sunday (continued)

- DEMA continued to work with hospitals, facilitated tankers to refill chillers to keep hospital temperatures down to prevent them having to shut down and evacuate
- Assisted Jail with refilling of chillers by tanker
- Five (5) 3,000 gallon tankers in the County now
- Fire/Rescue offloaded water to chillers
- Pressure Restored System wide in early PM



July 27, 2015 Monday AM

- Lab samples and data packaged and sent to EPD
 - Included partial for Sunday pending lab analysis completion at 18:30
 - Final data sent at 19:00
 - EPD questions answered and Boil Water Advisory rescinded at 19:48 hours
- Initial after action meetings and process status started



After Action Issues

- Communications
 - Hotline
 - Web
 - Reverse 911
- Internal/External Resources
- Ongoing discussions with critical facilities



DEMA

- DEMA is working to get final authorization from FEMA to send out EAS (IPAWS) notifications to residents via home phone, TVs and cellphone without the resident having to sign up
- This is a minimum of six months out



Staffing

- Will be looking at creating redundancy in departments
 - Enhance COOP plans
 - Watershed
- Technical staffing for Watershed
- People to answer phones, contact others, etc.
- On call contractors in several areas



Hospitals, Jail, et al

- Watershed continues to work with area hospitals and other critical facilities to have a back-up water supply available
 - Primary need was water to cool chillers
 - IT servers overheating due to lack of cooling systems
- Localized drinking water supply source for extended boil water advisory
- Recommend internal supply for critical facilities to supplement direct supply to mitigate disruptions
- Separate million gallon tank for jail fed by us but pumped out by them.



SUMMARY

- A hydrant on a 48" water line was damaged on Thursday, July 23, 2015.
 - Watershed responded to call as a broken fire hydrant.
 - Contractor called in to make repair, and water pressure lowered several times throughout late Thursday and early Sunday to effect repair to the line
- Situation was compounded by utilities being located on top of the water lines as the waterlines had been installed 40-50 years go
- Communication channels utilized to keep citizens abreast of the situation
- Going forward, County/Watershed will be seeking additional technology to enhance the existing communications channels



QUESTIONS

