



Saltwater Intrusion – SITUATIONAL REPORT

19 October 2023 – 10:30 am

Incident Snapshot

State Declaration: 154 JBE 2023	WebEOC Incident: 23-023 Saltwater Intrusion – Region 1 – Jun	Activation Level: 3 – Partial Activation
Fed Declaration: FEMA-3600-EM-LA	Total Resource Requests: 53	Incident Start Period: September 20, 2023

Incident Overview

Given the extended drought conditions, the fresh water flow rate coming down the Mississippi River has been low. An intrusion of sea water (saltwater) from the Gulf is making its way Northwest towards the lower parishes and has already affected Plaquemines Parish. Public drinking water, which feeds critical infrastructure as well as residential homes, is sanitized by Water Treatment Plants. The water source for Plaquemines, St. Bernard, Jefferson and Orleans is the fresh water from the Mississippi River.

Incident Objectives

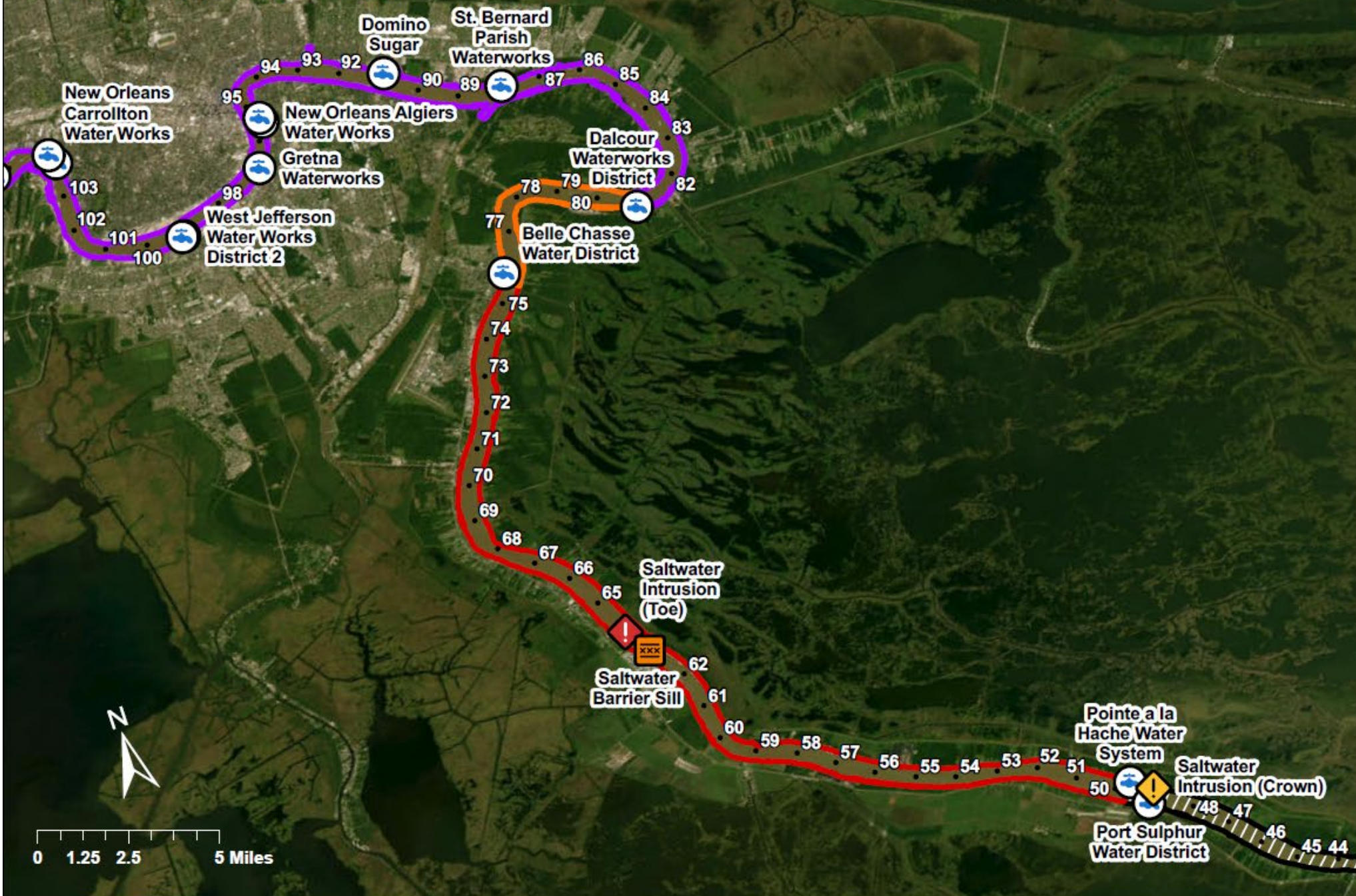
1. Protect life and property
2. Maintain ongoing messaging and communication to keep public and stakeholders informed
3. Support water needs for citizens until mitigation measures are present
4. Coordinate and manage all available resources effectively
5. Continue to provide effective incident management that is scalable and fiscally responsible

Weekly update calls: Wednesdays @ 10AM

Current Operations	Future Operations
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<p>GOHSEP remains postured to maintain ongoing coordination with Parishes, State Agencies and Federal Partners, NGOs, Business, and other stakeholders to support the following five lines of efforts:</p> <table border="0" style="width: 100%;"> <tr> <td>1) Technical Workgroup</td> <td>2) Public Messaging</td> <td>3) Public Health</td> </tr> <tr> <td>4) Private Sector Engagement</td> <td>5) Logistics Planning</td> <td></td> </tr> </table> <p>USACE continues to support multiple efforts to provide additional mitigation and technical assistance to maintain potable water within the parishes. Construction of an underwater sill in the Mississippi River at River Mile 64 to slow saltwater intrusion is 100% complete. The saltwater wedge toe is currently located at River Mile 63.9 and the crown is located at River Mile 48.9. Current flow rate of the river is 144K CFS. USACE 21 day forecast for river flow is 131K CFS. Recalculation of the progression timeline is ongoing by USACE. LDH maintains monitoring and contingency plans for drinking water as chloride levels less than 250ppm can impact distribution lines.</p>	1) Technical Workgroup	2) Public Messaging	3) Public Health	4) Private Sector Engagement	5) Logistics Planning		<p>Steady efforts in monitoring and support for intakes that are impacted and subject to be impacted are ongoing to support parishes and communities. These mitigation efforts include barging, tie-ins between systems, and reverse osmosis purification units (ROPU) installations and operations. Collaboration is ongoing with private sector, faith-based, social services, non profits and VOAD organizations to remain engaged to support water inventory, unified communication, and support for vulnerable populations. USACE will continue to receive updates from NWS concerning river stage forecast.</p> <p>GOHSEP will continue to monitor the situation to maintain inventory and support coordination with all federal, state and local partners until the incident ends.</p>
1) Technical Workgroup	2) Public Messaging	3) Public Health					
4) Private Sector Engagement	5) Logistics Planning						





Mississippi River Saltwater Intrusion WebEOC Incident 23-023



Points of Interest

-  Barrier
-  Saltwater Intrusion (Crown)
-  Saltwater Intrusion (Toe)
-  Water Intake Point
-  River Mile Marker

Forecast Inundation Date

-  September 20, 2023
-  November 13, 2023
-  November 18, 2023
-  No Forecast



This map was developed by the Louisiana Governor's Office of Homeland Security & Emergency Preparedness using data from LDH, USACE, and USGS.

Contact:
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Last Updated:
10/19/2023 8:03 AM

Location of Toe: 63.9





U.S. ARMY

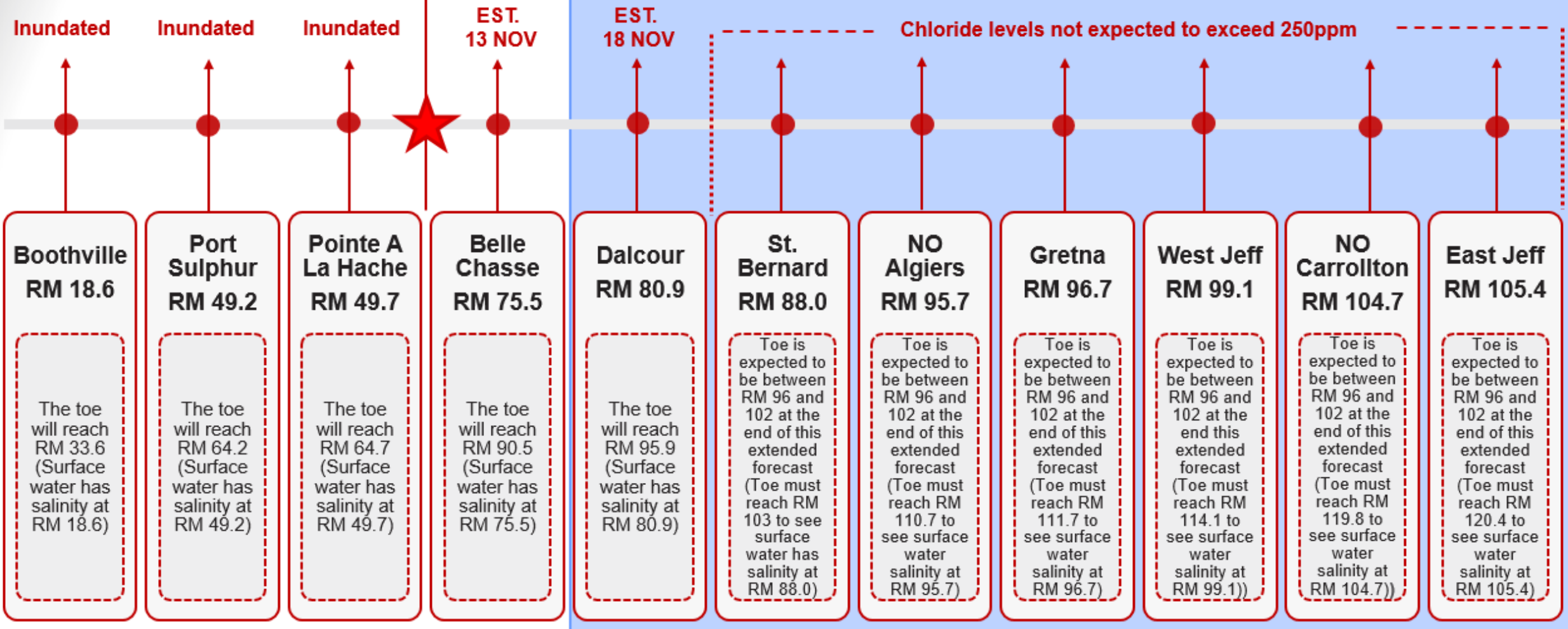
SALTWATER WEDGE TIMELINE WITH NOTCH SILL

TIMELINE REPRESENTS CURRENT NWS FORECAST, SURVEYED MOVEMENT OF THE SALTWATER TOE AND MODELED BENEFITS FROM AUGMENTING THE UNDERWATER SILL



SILL OVERTOPPED on 20 SEP

DATES ARE OUTSIDE OFFICIAL NATIONAL WEATHER SERVICE LOWER MISSISSIPPI RIVER 28-DAY FORECAST



PROJECTED TIMELINE IS ACCURATE AS OF THE NWS FORECAST FOR 16 OCT 2023 AND IS SUBJECT TO CHANGE.

AS OF 17OCT23

PLAQUEMINES PARISH

PARISH IMPACTS

- 23,303 Residents
- Naval Air Station Joint Reserve Base
- 11 Schools (5K students)
- 1 Prison (700 inmates)
- 1 Nursing Home (100 residents)
- 1 Urgent Care Clinic
- Citrus Farms and Livestock
- Chevron (reverse osmosis system is being installed by the facility)
- Reports of appliances damaged (water heaters, washers, ice machines, etc.)
- Reports of skin irritation and other health conditions from salt exposure

SALTWATER PROJECTIONS TO SURFACE INTAKE

- Saltwater inundated the Boothville water treatment intake at river mile 18.6
- Saltwater inundated the Port Sulphur water treatment intake at river mile 49.2
- Saltwater inundated the Pointe a la Hache water treatment intake at river mile 49.7
- Saltwater is forecasted to reach the Belle Chasse water treatment intake at river mile 75.5 by November 13
- Saltwater is forecasted to reach the Dalcour water treatment intake at river mile 80.9 by November 18



LIFELINE SUMMARIES – Food, Hydration, Shelter



LIFELINE SUMMARIES – Water Systems

CURRENT OPERATIONS

- Due to barging and ROPU the drinking water advisory has been lifted for Plaquemines Parish
 - Water distribution will end and it is safe to utilize public drinking water
- Boothville ROPU currently not operational and under repair; expected to be completed this week
- Port Sulphur utilizing barge water as their main source at this time
- Point a la Hache ROPU is in the testing process; once tests are clear, will become operational
- Belle Chasse ROPU arrived and awaiting Entergy for electrical connection
- Dalcour barge on site and operational
- Ongoing Joint Information Center (JIC) efforts in Region 1 to provide communications to citizens and stakeholders

FUTURE OPERATIONS

- Will continue to monitor the situation as it progresses and adjust operations as needed

ST. BERNARD PARISH

PARISH IMPACTS

- 44,258 Residents
- 13 Schools
- 1 Junior College (2,166 enrollment)
- 1 Prison (700 inmates)
- 1 Nursing Home
- 1 Hospital
- 2 Dialysis Centers

SALTWATER PROJECTIONS TO SURFACE INTAKE

- Chloride levels not expected to exceed 250ppm at the St. Bernard water treatment intake at river mile 88



LIFELINE SUMMARIES – Food, Hydration, Shelter



LIFELINE SUMMARIES – Water Systems

CURRENT OPERATIONS

- Barging contracted by USACE and awaiting arrival
- ROPU expected to arrive later in the month of October
- Ongoing Joint Information Center (JIC) efforts in Region 1 to provide communications to citizens and stakeholders

FUTURE OPERATIONS

- Will continue to monitor the situation as it progresses and adjust operations as needed

ORLEANS PARISH

PARISH IMPACTS

- 376,971 Residents
- 85 Public Schools (47,462)
- 56 Private Schools (19,154 students)
- 27 Hospitals
- 14 Nursing Homes
- 28 Dialysis Center
- Jail (1,500 inmates)

SALTWATER PROJECTIONS TO SURFACE INTAKE

- Chloride levels not expected to exceed 250ppm at the Algiers water treatment intake at mile marker 95.7
- Chloride levels not expected to exceed 250ppm at the NO Carrollton water treatment intake at mile marker 104.7



LIFELINE SUMMARIES – Food, Hydration, Shelter



LIFELINE SUMMARIES – Water Systems

CURRENT OPERATIONS

- Contract to barge water to Algiers awaiting completion
- Algiers water system is accepting bids to retrofit their intake to accommodate barging
- Contacting residents that are interested in lead and copper testing; will provide kits to complete
- Ongoing Joint Information Center (JIC) efforts in Region 1 to provide communications to citizens and stakeholders

FUTURE OPERATIONS

- Plan to begin testing water distribution lines for possible corrosion; will ask LDH contractor to assist
- Will continue to monitor the situation as it progresses and adjust operations as needed

JEFFERSON PARISH

PARISH IMPACTS

- 433,688 Residents
- 82 Public Schools (46,839 students)
- 56 Private Schools (18,935)
- 6 Tier 1 Hospitals
- 8 Tier 2 Hospitals
- Regional Trauma Center
- 10 Nursing Homes
- Prison (1,200 inmates)

SALTWATER PROJECTIONS TO SURFACE INTAKE

- Chloride levels not expected to exceed 250ppm at the Gretna water treatment intake at mile marker 96.7
- Chloride levels not expected to exceed 250ppm at the West Jefferson water treatment intake at mile marker 99.1
- Chloride levels not expected to exceed 250ppm at the East Jefferson water treatment intake at mile marker 105.4



LIFELINE SUMMARIES – Food, Hydration, Shelter



LIFELINE SUMMARIES – Water Systems

CURRENT OPERATIONS

- Flexible line construction further up river to maintain a continuous flow of fresh water expected to be completed this week
- Gretna contract for barging water is complete and awaiting signatures
- West and East Jefferson are not planning to barge water but will continue to monitor situation
- Engaging LDH, VOADs, hospice, home health and faith-based organizations to see how they can assist with water distribution and messaging efforts
- Ongoing Joint Information Center (JIC) efforts in Region 1 to provide communications to citizens and stakeholders

FUTURE OPERATIONS

- Gretna will begin barging water if surface intake reaches 75ppm chlorides
- Will continue to monitor situation as it progresses and adjust operations as needed