Surge of saltwater up the Mississippi River threatens New Orleans water supply

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Following several weeks of drought conditions in Southeast Louisiana, the Mississippi River has hit record lows. A surge of saltwater from the Gulf of Mexico now threatens the water supply to New Orleans and has already contaminated the water of towns to the south of the city near the Gulf Coast.

When normally the southerly flow of the river into the Gulf would be enough to keep saltwater from the Gulf from flowing upstream, climate change-influenced weather has created potentially disastrous conditions following a summer of record high heat and drought.

The denser saltwater has created a wedge that flows beneath the freshwater river and is creeping upstream into the water supplies for nearby towns. In a matter of weeks will reach New Orleans, threatening the city's 300,000 residents with the loss of access to safe drinking water as a result.

Last week, President Joe Biden declared a national emergency for the situation facing Louisiana after Democratic Governor John Bel Edwards requested the declaration for Orleans, Plaquemines, Jefferson, and St. Bernard parishes. Residents of Plaquemines Parish have been dealing for several weeks with the intrusion with rationed bottled water provided by the state and reverse osmosis units at treatment facilities for desalination.

Extreme drought has been present in the areas where the river flows into the Gulf and in regions north of Louisiana which feed into the Mississippi including Minnesota, Wisconsin, Iowa, and Missouri. After months of record heat and low rainfall, the wedge of saltwater threatens to overwhelm outdated water infrastructures.

This could not only cut off fresh water to the city of New Orleans but also has the potential to release dangerous lead into the water supply, possibly poisoning thousands. Lead pipes in New Orleans are still commonly used across the city. Excess levels of salt in the water flowing through the pipes could potentially corrode them enough to cause lead to leach into the water system.

Excess lead in drinking water has been shown in cities such as Flint, Michigan, to cause permanent damage to developing children and poisoning symptoms in adults and vulnerable populations exposed to the water. Underwater levees and freshwater pipelines are being built by the Army Corps of Engineers to potentially slow the surge, but officials expect it to reach New Orleans before the end of October when local treatment plants will be overwhelmed by the dense salt water.

Water levels in the Mississippi River have been dropping steadily since June, which has already disrupted transport and shipping up the river, which transports some 45 percent of the US's agricultural exports.

The saltwater wedge has been known to the Army Corps of Engineers for months. In early July the Corps announced construction on an underwater sill to slow the intrusion of salt water into the southern areas of the river. A similar sill was constructed late last year when levels were at a then-record low. The months since have seen the river sink to lower and lower levels as crews work to expand the underwater sills to slow the saltwater intrusion that has creeped upriver for several weeks.

Such an event previously occurred in 1988, when, due to droughts in the regions around the Missouri and Ohio river basins, a saltwater wedge intruded up the river from the Gulf. An underwater sill, or dam, was also built then to slow the intrusion, but saltwater did make it into parts of Kenner, Louisiana, and the

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outskirts of New Orleans before diluting to safe levels.

The most recent disaster, along with similar extreme weather events fueled by climate change across the country and around the world, are all part of an overall worsening of climate conditions caused by the capitalist system's rampant emission of carbon into the atmosphere in pursuit of profit.

Rising sea levels are leading to a loss of what some experts estimate about a football field worth of marshland every hour from Louisiana's coastline. As marshland is swallowed up into the Gulf, sea levels in the region are reaching dangerous heights, threatening life for hundreds of thousands of people in the coming years, in addition to the devastation of wildlife and fisheries. It is expected that by the year 2050, as much as a third of the Louisiana Gulf Coast will be lost.

This summer saw multiple instances of record-breaking heat across the state of Louisiana and throughout the Southeast United States. In what would normally be a month of heavy rainfall, August in Louisiana was marked with record heat and extreme drought which created prime conditions for the eruption of unusually intense wildfires across the state.

Globally this has been the hottest year so far recorded in human history, with the climate crisis showing no signs of slowing down. Capitalist production has devastated environments around the world as the weather warms to the breaking point. The irrational accumulation of profit is driving environmental collapse not just in Louisiana and the United States but around the world. Wildfires in Canada have burned an area equivalent to the state of Washington and in Europe fires have killed hundreds of people. Flooding events in China, Greece, Libya, and elsewhere have resulted in mass death.

Meanwhile, the capitalist ruling elite is allowing infrastructure to crumble and decay throughout the world, which is increasing the loss of life from extreme weather events. While the working class steadily loses access to something as basic as potable drinking water and is generally told by the capitalist parties to bear the brunt of these costs, hundreds of billions of dollars are made available for war.

Only socialist planning and the allocation of resources for human need over private profit will be enough to combat climate change. The response of the various world governments to the COVID-19 pandemic, which has killed as many as 30 million people, makes clear that the ruling classes will allow untold millions to die from disasters and wars before giving up on profit accumulation. It is only the working class which will bring about an end to these and other crises, not appeals to the politicians and their billionaire donors.

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