

INFRASTRUCTURE

Mississippi Capital City's Water System Fails After Decades of Decay

by Richard Freeman

Sept. 2—Most of the population of Jackson, Mississippi, a city of 160,000 people and the state capital, were without drinking or bathing water as of September 2; the school system has been put on virtual learning (there is almost no water in the schools); and sewage is floating in sections of the city. Mississippi's Pearl River, swollen by heavy rain, flooded into the O.B. Curtis Water Treatment plant in Jackson, which was already crippled, and overwhelmed its capacity to process or to treat (purify) water. This is the second failure of Jackson's water system in 18 months, and the freezing weather breakdown in February 2021 lasted for 18 days. The efficient cause is that Jackson's

water treatment and waste treatment system has crumbled, without replacement, during more than two decades. Jackson encapsulates the 40 years of deliberate neglect and devastation of America's infrastructure base under the policy of "controlled disintegration."

The city of Jackson's two water treatment plants—the 50 million gallon per day (mgd) O.B. Curtis plant, and the 25 mgd J.H. Fewell plant—underwent compliance inspections by the U.S. Environmental Protection Agency, Feb. 3–7, 2020. Its 24-page report, "Safe Drinking Water Act Compliance Investigation," presented a powder keg:



U.S. Army/Connie Jones

Flooding of the Pearl River overwhelmed Jackson, Mississippi's decrepit water treatment system, leaving the city of 160,000 without potable water for the second time in 18 months. Here, Mississippi National Guardsmen distribute emergency rations of bottled water at the State Fairgrounds, Sept. 1, 2022.



U.S. Army/Connie Jones

The Mississippi legislature has repeatedly declined to advance Jackson the funds necessary for long-term remediation. Here, a National Guardsman distributes cases of bottled water at the Smith-Wills Stadium, Sept. 1, 2022.

The City of Jackson’s water distribution system experiences numerous leaks and line breaks, with crews reportedly repairing 5 or 6 of these per day.... Loss of pressure associated with these incidents requires the City to issue “Boil Water Notices” (BWNs) [water must be boiled before one can drink it—ed.]; over 750 BWNs have been issued since 2016. The distribution lines are aging, and a master plan for pipe replacement issued by the city in 2013 is not being implemented. Instead, the City focuses on replacing [only] those line segments that require 10 to 15 repairs per year.... The city estimated water loss rates in the distribution system of 40 to 50 percent. As a result of these issues, three local hospitals have drilled their own wells and left the City of Jackson’s water system, in order to have access to reliable sources of drinking water.

The EPA inspectors found the O.B. Curtis and J.H. Fewell water treatment plants understaffed, lacking sufficient competent workers. They found that at the O.B. Curtis plant,

the raw water screens were rehabilitated in 2014. EPA inspectors found them to be nonfunctional [in 2020], and operators said that they had been nonfunctional since 2017.

Further, after water is filtered in a water treatment plant, it is “disinfected with ultra-violet (UV) lamps and discharged from the UV reactors to a clean well.” The EPA report documented many instances when the UV lamps did not work and were offline.

State, Federal Governments Not Interested

Jackson’s water treatment pumping systems had already run into major problems again in July of this year. The overflowing Pearl River merely detonated an existing problem. Last week, Mayor Chokwe Lumumba advised that Jackson would need \$200 million to fix the city’s water system. Samco Technologies, a Buffalo-based designer and manufacturer of custom water, wastewater, and process purification and separation equipment systems, reports that a standard new 200–1,000 gallon per minute (GPM) capacity raw water treatment system can be constructed at a cost of \$975,000 to \$3 million, depending upon water flow. It might be wise to consider construction of one plant of 100 mgd capacity to replace one of Jackson’s currently failing plants.

Anyone might assume that a state whose capital city lacks a reliable water system would move quickly to remedy the situation; but that is not true for Jackson, whose population is 82.5% Black. Mississippi’s budget to improve water systems is only \$75 million for the entire state. The EPA has dangled the figure of \$50 million, perhaps, for Mississippi water plant requirements. The Mississippi state legislature has demonstratively and repeatedly not advanced Jackson the necessary funds.

The Federal Congress has issued platitudes, not funds. Despite the Congress having passed an Infrastructure Investment and Jobs Act last November, and a \$54 million grant having then been announced by Rep. Bennie Thompson for roads in his district—which includes most of Jackson—there are thus far no Federal funds for Jackson water, either. On Aug. 30, Mississippi Gov. Tate Reeves said that repairs will take place in Jackson, but the city must pay half the cost, an absurdity in a city where incomes are very low.