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State of Mississippi  
Local Governments and Rural Water Systems Improvements Board  
Mississippi State Department of Health •  
570 East Woodrow Wilson Dr •  
Jackson, MS 39216

October 11, 2022

Dear Board Members:

I write on behalf of the City of Jackson (“the City”) during an extraordinary and unprecedented time of crisis. As you are aware, the City currently has \$50,506,216 in outstanding debt with the State of Mississippi’s Drinking Water Systems Improvements Revolving Loan Fund (DWSIRLF). These loans are instrumental for stabilizing the distribution of safe drinking water in Jackson and are critical for projects that will be completed during our recovery. The purpose of this letter is to request our unique and exceptional consideration for principal forgiveness and the refinance of the City of Jackson’s outstanding debt with the Local Governments and Rural Water Systems Improvements Board (“Board”).

In late August, historic, heavy rainfall caused significant flooding in the Jackson Metro area. The Pearl River flooded the Ross Barnett Reservoir, which is the main surface body of water for the O.B. Curtis water treatment plant. The severe rain events caused the Pearl River to flood. In turn, the flooding impacted the chemistry of the intake water from the Ross Barnett reservoir. The plant's aging infrastructure was not able to handle the significant and rapid chemistry change. As a result of the floodwaters infiltrating the reservoir, the increased sediment issues, and the sudden change in chemical concentrations in the surface water resources, the plant’s ability to treat the water was compromised—the system was quickly overloaded and shut down.

The 163,778 people residing in the City of Jackson—its 62,140 households, 3,326 businesses, and State Capitol facilities—spent nearly two months under a boil water notice only to have circumstances confounded by a loss of water pressure due to the flooding.<sup>12</sup> In the largest city in our state, we cannot allow a situation like this to ever happen again.

As the City plans for several years of infrastructure remediation and construction, I have examined our current debt to consider our upcoming needs. We believe that your fund is positioned to

<sup>1</sup> Bureau, U. S. C. (n.d.). American Community Survey B01003 TOTAL POPULATION 2020: ACS 5-Year Estimates Detailed Tables. Explore census data. Retrieved October 5, 2022, from <https://data.census.gov/cedsci/table?q=Jackson%2C+ms+B01003&tid=ACSDT5Y2020.B01003>.

<sup>2</sup> United States Census Bureau. (n.d.). U.S. Census Bureau quickfacts: Jackson City, Mississippi. QuickFacts Jackson city, Mississippi. Retrieved October 5, 2022, from <https://www.census.gov/quickfacts/fact/table/jacksoncitymississippi/INC110220>.

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exercise the maximum intent of the Environmental Protection Agency's (EPA) State Revolving Loan Fund programs. In order to incur additional debt as a city and provide matching funds required for the federal grants that we are in the process of applying for, I urge you to take all steps possible to relieve the City of Jackson of its debts to the Drinking Water Systems Improvements Revolving Loan Fund (DWSIRLF).

### **Refinancing at a Lower Interest Rate**

The Infrastructure Investment and Jobs Act (IIJA) programs, such as the **Building Resilient Infrastructure and Communities and Flood Mitigation Assistance Grants**, which can offer up to \$50 million in assistance with a required 25% local match, the city requires immediate availability of funds. We need to have the capital and bonding capacity necessary to qualify for the record amount of funding available through IIJA. Presently, our DWSIRLF loan two and three payments are scheduled to begin repayment in 2023 and 2025, respectively, during what will be a critical time for Jackson to have liquid assets on hand to fulfill match obligations and respond to immediate emergency needs.

Of the eight states in EPA Region 4, Mississippi and Alabama are the only two states that do not regularly exercise lower interest rates based on Disadvantaged Community criteria.<sup>3</sup> It is understood that a request for a special interest rate is a deviation from ordinary fund operations, but we feel it is indispensable for serving the Jackson community in this difficult challenge.

When considering the current interest rate for our DWSIRLF loans, please keep in mind that 1.95%, though well below the market rate, represents nearly \$13,000,000 over the life of the loans. This interest over time is a significant burden that would be passed on to ratepayers in some of most vulnerable parts of the state. If the current rate is left in place, the accrued interest will hamper the City's ability to access all of the federal programs available to deliver a reliable and safe drinking water system. Therefore, we respectfully request that you consider extending a refinance of the City of Jackson's current DWSIRLF loans at a **0% interest rate due** to our unique need during this time of crisis and beyond.

### **Principal Loan Forgiveness**

As laid out in the 2022 Drinking Water State Revolving Fund (DWSRF) Intended Use Plan, the Disadvantaged Community Program sets tiers for loan principal forgiveness. The City of Jackson, with a median household income of \$40,064, stands at 86% of the state of Mississippi's median household income. Therefore, the City would be eligible for a 25% principal forgiveness subsidy if not for the \$500,000 maximum set by the Board. However, the Intended Use Plan also notes that the Board may approve a waiver for additional subsidization.<sup>4</sup>

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<sup>3</sup> UNC School of Government Environmental Finance Center. (2018, May). Affordability and principal forgiveness in the State Revolving Fund ... Retrieved October 5, 2022, from <https://efc.sog.unc.edu/wp-content/uploads/sites/1172/2018/05/Updated-Final-Version.pdf>.

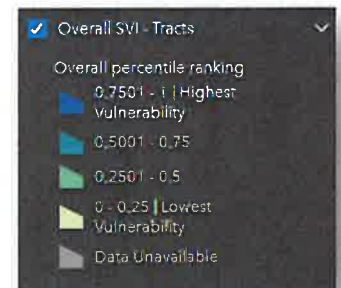
<sup>4</sup> STATE OF MISSISSIPPI DRINKING WATER SYSTEMS IMPROVEMENTS REVOLVING LOAN FUND PROGRAM FFY-2022 INTENDED USE PLAN. STATE OF MISSISSIPPI LOCAL GOVERNMENTS AND RURAL WATER SYSTEMS IMPROVEMENTS BOARD. (2022, August 26). Retrieved October 5, 2022, from [https://msdh.ms.gov/msdhsite/\\_static/resources/17153.pdf](https://msdh.ms.gov/msdhsite/_static/resources/17153.pdf).

The return on investments in drinking water improvements in the City is currently set at an especially high value per connection. The crisis is an issue not only facing the City but also the state and its national profile. For every connection served by the City of Jackson's Public Water System, an investment of one dollar will increase revenues across all industries by \$2.62, which will significantly help build an economy better suited to take on new indebtedness in the future.<sup>5</sup>

Understanding the interest rate and repayment of principal on loans is critical to the continued availability of the DWSIRLF, I ask the Board to take special consideration of the fact that for every dollar invested in water and sanitation infrastructure, it enables a \$4.3 return for reduced health care costs for individuals and society.<sup>6</sup> So, it is our hope that by relieving the City of Jackson of some of its financial burdens, we will be able to invest more money overall into our public water system as well as provide for a more resilient and economically vibrant future for all of Mississippi.

We recognize the value of the fund and we are certain of our need to draw upon on it again in the upcoming months and years. Therefore, we respectfully request a waiver of the \$500,000 cap on principal forgiveness and the extension of the full 25% principal forgiveness subsidy equal to \$12,626,554 to enable the City's capacity to accrue future debt and acquire matching funds for federal grants.

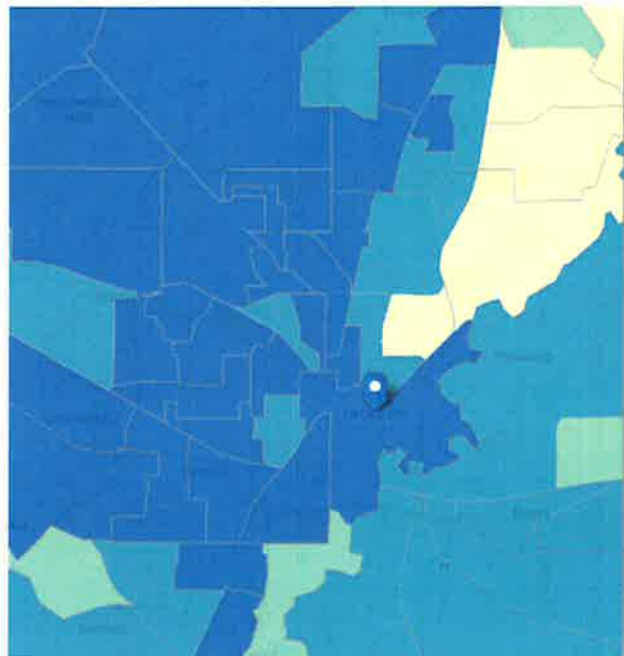
### Jackson's Unique Circumstances



<sup>5</sup> United States Environmental Protection Agency. (2017, June). Drinking Water State Revolving Fund Eligibility Handbook. United States Environmental Protection Agency. Retrieved October 5, 2022, from [https://www.epa.gov/sites/default/files/2017-06/documents/dwsrf\\_eligibility\\_handbook\\_june\\_13\\_2017\\_updated\\_508\\_version.pdf](https://www.epa.gov/sites/default/files/2017-06/documents/dwsrf_eligibility_handbook_june_13_2017_updated_508_version.pdf).

<sup>6</sup> United Nations. (2014, November 14). Every dollar invested in water, sanitation brings four-fold return in costs – UN. UN News Global perspective Human stories. Retrieved October 6, 2022, from <https://news.un.org/en/story/2014/11/484032>.

A number of factors, including poverty, lack of access to transportation, and crowded housing may weaken a community's ability to prevent human suffering and financial loss during and after a disaster. These factors are known as social vulnerability.<sup>7</sup> The Center for Disease Control scores census tracts from zero to one with one being the most vulnerable to hazardous events. The City of Jackson ranks in the top 25% most vulnerable communities nationally according to this index, with several tracts within the city scoring above 0.9.<sup>8</sup> Prior to the current water crisis, Jacksonians were at a major disadvantage in coping with any disaster. With the onset of the crisis, our more vulnerable citizens have been placed in a nearly unsurmountable situation around a basic need.



Many of the City's census tracts are in the 5% of Lowest Income Communities in the United States according to the EPA's Environmental Justice Screening Tool (EJScreen).<sup>9</sup> EJScreen is an environmental justice mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators.<sup>10</sup> The low-income status of many members of our community increases the urgency with which we must address the water crisis, and at the same time makes it less affordable for our community to carry the cost burden of the debt that will need to be incurred to deliver the safe drinking water.

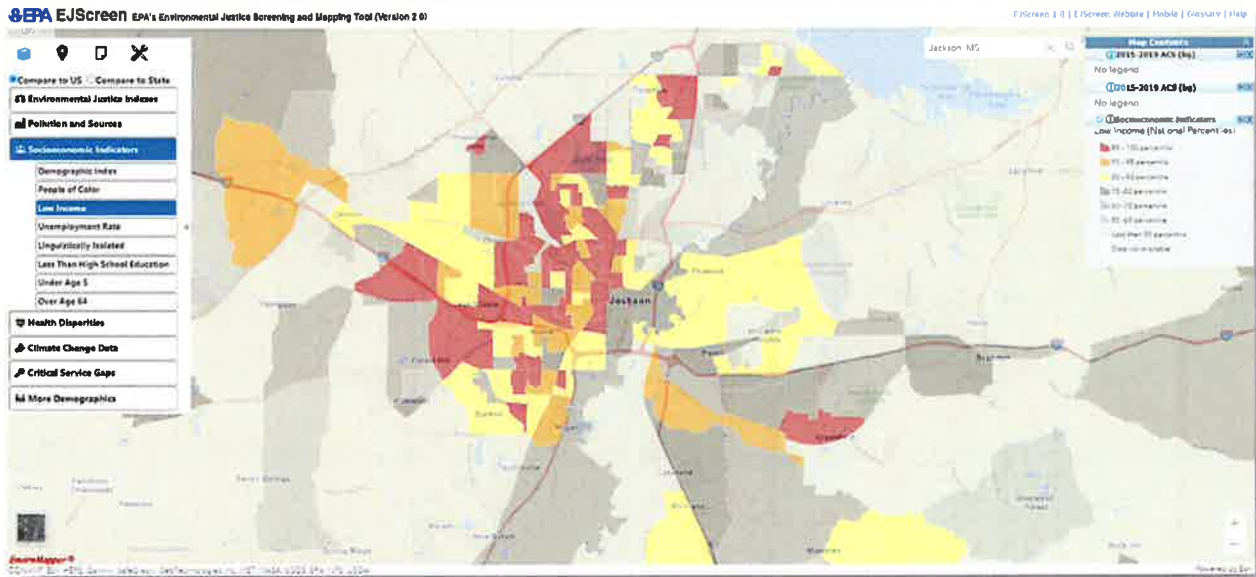
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<sup>7</sup> Centers for Disease Control and Prevention. (n.d.). CDC's Social Vulnerability index (SVI). Centers for Disease Control and Prevention. Retrieved October 5, 2022, from <https://svi.cdc.gov/map.html>.

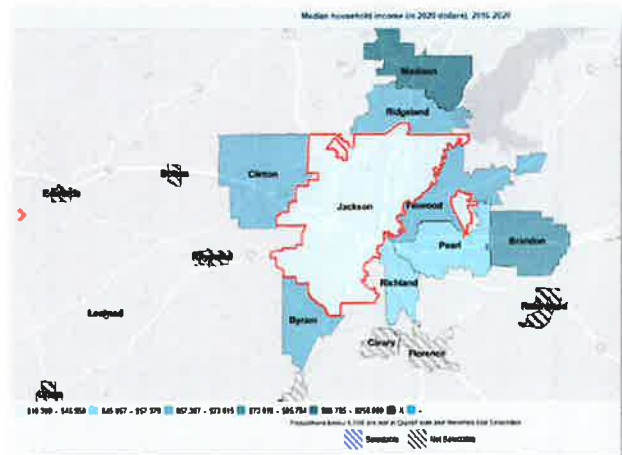
<sup>8</sup> *Ibid.*

<sup>9</sup> Environmental Protection Agency. (n.d.). EPA Environmental Justice Screening Tool. EPA. Retrieved October 5, 2022, from <https://www.epa.gov/ejscreen>.

<sup>10</sup> *Ibid.*

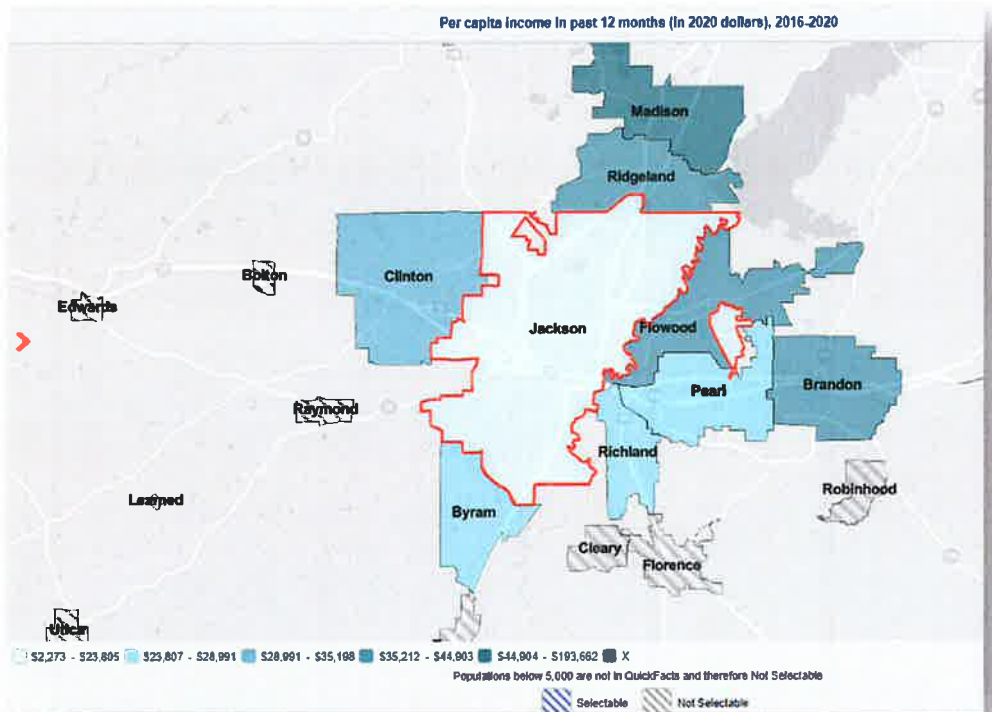


The affordability of water in Jackson is critical to the health and safety of its residents. However, the US Census Bureau demonstrates that median household income in Jackson is significantly lower than in surrounding communities.<sup>11</sup>

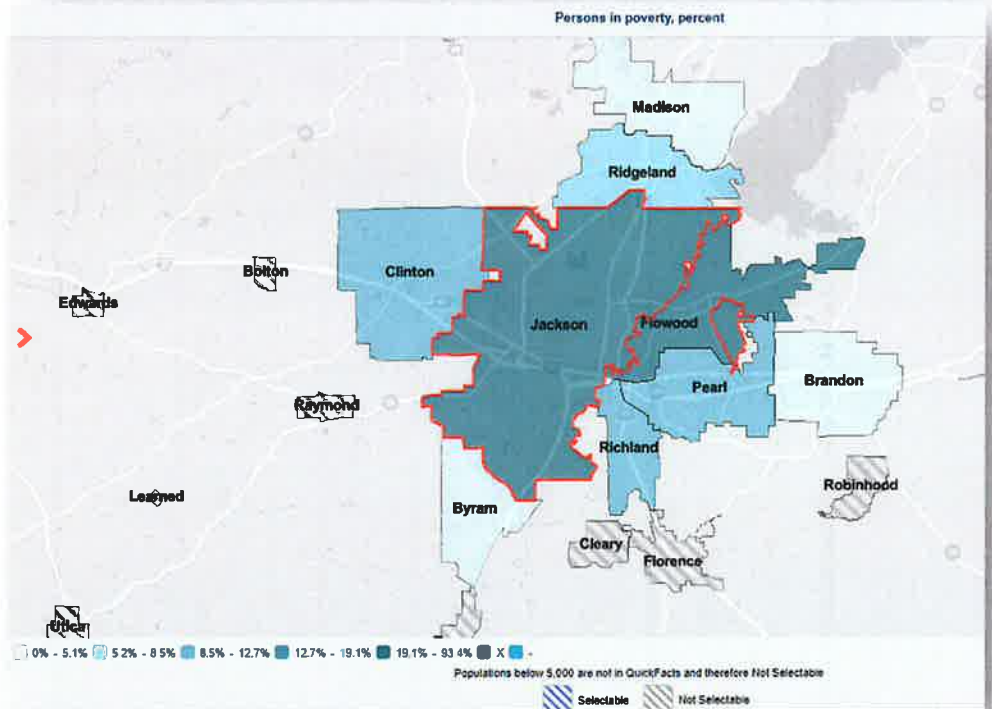


<sup>11</sup> United States Census Bureau. (n.d.). U.S. Census Bureau quickfacts: Jackson City, Mississippi. QuickFacts Jackson city, Mississippi. Retrieved October 5, 2022, from <https://www.census.gov/quickfacts/fact/table/jacksoncitymississippi/INC110220>.

Further, the average per capita income in Jackson averaged of 12-month periods from 2016-2020 shows an income level of only \$22,815. This is 64% of the national average and 11% below the State of Mississippi's per capita income level for the same period making those residents impacted by the water crisis those most vulnerable and least able to afford to fix it.<sup>12</sup>



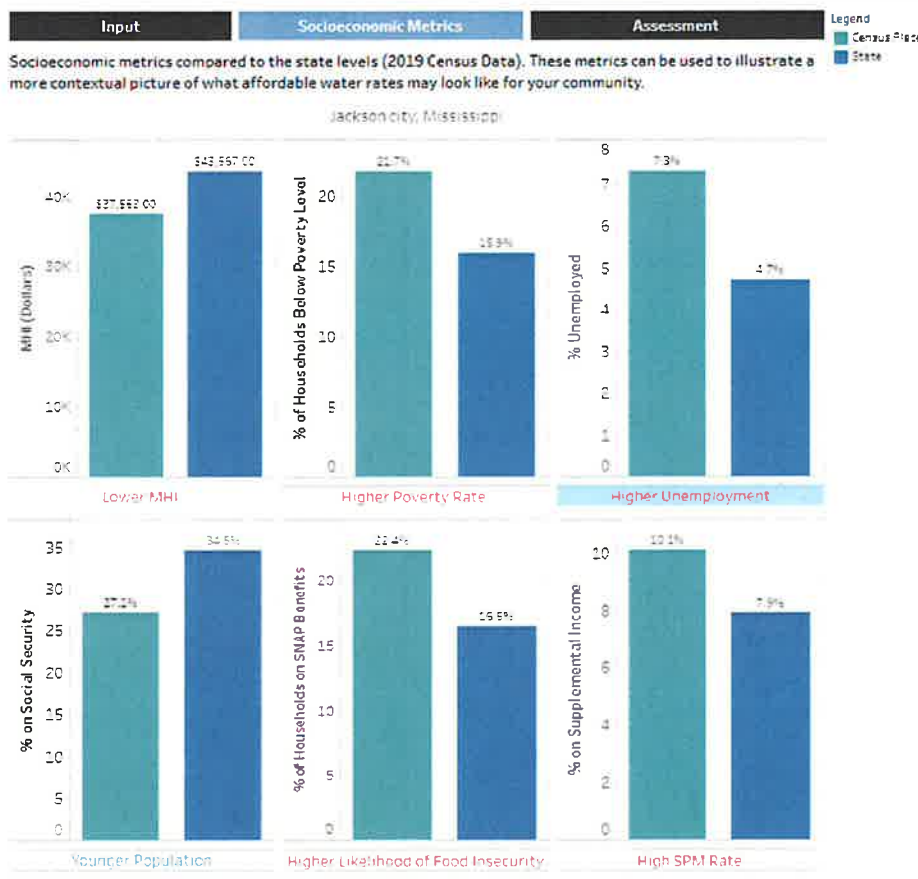
Should this Board be unable to move forward with principal forgiveness and refinancing, the burden of the expense to repair and replace the water system in Jackson will fall on a community where a quarter of residents live in poverty.<sup>13</sup>



<sup>12</sup> Ibid.

<sup>13</sup> Ibid.

The University of North Carolina Environmental Finance Center provides a Water and Wastewater Affordability Assessment tool that connects census data to show the impact of rates on all customers.<sup>14</sup> Using the **current average residential bill of \$62.50 per month** in the City, the tool highlights five key socioeconomic metrics driving the lack of affordability of this basic service in Jackson. In comparison to Mississippi at large, Jacksonians experience lower median household income, higher poverty rate, higher unemployment, higher likelihood of food insecurity, and a greater proportion of the population dependent on social assistance programs.



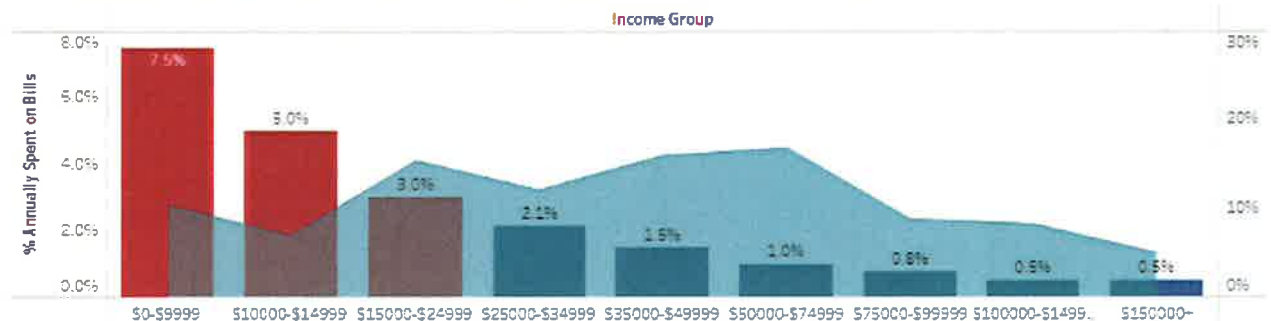
When the average residential cost of water services is analyzed in this context, the lowest-income Jacksonians are already experiencing highest cost burden. Around a third of the population spends more than 3% of their annual income on water utility bills. Incurring the expenses needed to repair and replace the water system in the City will require costs to be passed on to consumers. In turn, it will increase the percent of a consumer's income spent on water bills, unless the Board can assist us to alleviate this financial burden during this time of exceptional hardship.

<sup>14</sup> UNC Environmental Finance Center. (n.d.). Affordability Assessment Tool. Public.tableau.com. Retrieved October 5, 2022, from <https://public.tableau.com/app/profile/efcatunc/viz/AffordabilityAssessmentTool/Input>.

The Assessment dashboard automatically populates tables and charts to assist you in assessing the affordability of your utility's current and alternative rates for **low-income customers colored in red** and customers of varying ranges of income.

All Households vs. Homeowners  
 All Toggle switches between all households, including renter-occupied, and only owner-occupied households  
 Owner

Affordability of Water/Wastewater Rates for Jackson city, Mississippi at 2019 Income Levels



The green area graph represents the distribution of the population across the income groups. The percentage of annual income that is spent on bills is represented the blue columns.

### Drinking Water State Revolving Loan Fund Intent

The 2017 EPA Drinking Water State Revolving Loan Fund Eligibility Handbook highlights the flexibility of the program and the tools it makes available to you to assist a community in our unique situation. It states:

*The principal objective of the DWSRF is to facilitate compliance with national primary drinking water regulations or otherwise significantly advance the public health protection objectives of the SDWA. States are required to give priority for the use of DWSRF project funds to:*

- Address the most serious risks to human health
- Ensure compliance with the requirements of the SDWA
- Assist systems most in need on a per household basis according to state affordability criteria<sup>15</sup>

Based on the data, the City of Jackson is facing the **most serious risk** to human health in the State of Mississippi. The information supplied in this letter demonstrates that the **need per household** is also inarguably urgent.

We respectfully request that the Board authorizes a **25% principal forgiveness and a 0% interest** rate refinancing of the City's current loans to maximize our ability to take advantage of all funding sources available to support remediation and recovery efforts related to the unprecedented water crisis in our distinctly disadvantaged community.

<sup>15</sup> United States Environmental Protection Agency. (2017, June). Drinking Water State Revolving Fund Eligibility Handbook. United States Environmental Protection Agency. Retrieved October 5, 2022, from [https://www.epa.gov/sites/default/files/2017-06/documents/dwsrf\\_eligibility\\_handbook\\_june\\_13\\_2017\\_updated\\_508\\_version.pdf](https://www.epa.gov/sites/default/files/2017-06/documents/dwsrf_eligibility_handbook_june_13_2017_updated_508_version.pdf).



Thank you for your time and consideration of our requests for principal forgiveness and refinancing. I am available to discuss this request and answer any questions you have at 601-540-0664 or [fmalembeka@jacksonms.gov](mailto:fmalembeka@jacksonms.gov).

Sincerely,

A handwritten signature in black ink, appearing to read 'Fidelis Malembeka', followed by a long horizontal line that ends in a stylized flourish.

Fidelis Malembeka  
Chief Financial Officer  
City of Jackson, Mississippi