



WATER RESOURCES COMMISSIONER

Jim Nash



Water Affordability Solutions

AN INSIDE LOOK AT A WATER UTILITY'S PERSPECTIVE



Meet Our Team



Commissioner
Jim Nash



Attorney and Manager
Kelsey Cooke



Attorney
Sara Rubino



Chief Engineer
Tim Prince



Billing Supervisor
Mike Kasanic



Communications Supervisor
Trisha Bruzek



Community Liaison
Julia Ruffin



Affordability Coordinator
Demar Byas



Marketing Assistant
Brendan Lindberg

Not pictured: Chief Deputy Anne Vaara, Chief Engineer Amy Ploof,
Finance Supervisor Raphael Chirolla and Attorney John Basch



**Sometimes,
we must think
differently.**



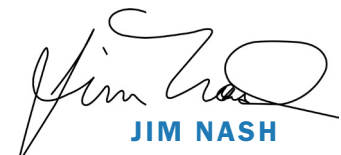
I am proud to release this report detailing the findings of the collective efforts to develop a sustainable water affordability plan for the Charter Township of Royal Oak and the City of Pontiac. These two communities have the most severe

affordability issues in Oakland County. This report is the culmination of a grant from the Michigan Department of Environment, Great Lakes, and Energy to develop a plan intended to make water more affordable for these two communities, and also serve as model for other municipalities throughout Michigan.

By “collective efforts” I’m referring to the many hours of planning, along with the dedicated and thoughtful research and direct interviews conducted by members of my staff with people in the communities, across the state and even around the nation. We organized a huge undertaking to understand all the impacts that make water unaffordable for too many families. We started with a stakeholder group that included members from both municipalities, water activists, elected officials, non-governmental organizations, religious and business leaders, the NAACP, the Sierra Club, and senior and cultural groups. In fact, everything we have done has been shared and discussed with our stakeholders and we have successfully worked to find shared answers. This report includes several appendices detailing our research and the process we followed to develop core components of the water affordability plan.

In the end, we have concluded that for an affordability plan to be successful anywhere, especially in overburdened communities, we must have statewide legislation to support it. We are asking legislators to approve a small fee of just 33 cents per month on everyone’s water bills to contribute to a state administered affordability fund that provides tiered income based discounts for those least able to pay. I’m convinced if Michigan hopes to make water affordable this is the best and most sustainable path forward.




JIM NASH

Special Thanks and Recognition

WRC Water Affordability Coalition Members and Organizations

Charter Township of Royal Oak
City of Pontiac
Detroit Water & Sewerage Department
El Centro Multicultural La Familia
Friends of Royal Oak Township
Great Lakes Water Authority Madison Merzlyakov
Great Lakes Water Authority Nicolette Bateson
Michigan Department of Environment, Great Lakes, & Energy
MI Representative Brenda Carter
Michigan State University Extension
Northern Oakland County NAACP
Oakland County Commissioner Angela Powell
Oakland County Commissioner Yolanda Smith Charles
Oakland County Commissioner Charlie Cavell
Oakland County Community Engagement Team

Oakland Livingston Human Service Agency
OHM Advisors
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People's Water Board Coalition
Pontiac Chamber of Commerce
Pontiac City Council
Pontiac Housing Commission
Pontiac Landlord Association
Pontiac Schools
Pontiac Zoning Committee
SEMCOG
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Ninah Sasy, *DHHS*
Scott Petz, *Dickinson Wright*
Alma Sobo, *Dickinson Wright*
Pete Webster, *Dickinson Wright*
Charles Bazner, *DTE*
Maria Christian, *DTE*
Eisha Branner, *E-Community Outreach Center*
Roger Colton, *Fisher, Sheehan & Colton*
Joanne Dahme, *Formerly with Philadelphia Water Department*
Samarhia Giffel, *Grand Rapids*
Nick Leonard, *Great Lakes Environmental Law Center*
Elizabeth Bowdring, *Homeserve*
Mike Chambers, *Homeserve*
John LaMacchia, *Michigan Municipal League*
Harmony Fierke-Gmazel, *Michigan State University Extension*
Holly Madill, *Michigan State University Extension*
Sylvia Orduno, *MI Welfare Right Organization and People's Water Board Coalition*
Brad Banks, *MPSC / LARA*
Anne Armstrong, *MPSC / LARA*
Mary Wilkins, *MPSC / LARA*
Angie Brunette, *MPSC / LARA*
Wanda Jones, *MPSC / LARA*

Oday Salim, *National Wildlife Federation*
Larry Levine, *National Resource Defense Council*
Cyndi Roeper, *National Resource Defense Council*
Erin Quetell, *Oakland County*
Robin Carter-Cooper, *Oakland County*
Barbara Jackson, *Oakland Livingston Human Service Agency*
Vicki Putala, *OHM Advisors*
Christine Spitzley, *OHM Advisors*
Isabelle Bester, *OHM Advisors*
Logan McMillian, *OHM Advisors*
Krista Takacs, *OHM Advisors*
Jessica Daighault, *OHM Advisors*
Chuck Hersey, *OHM Advisors*
Amanda Jones, *Promise Pay*
Juliet Ellis, *Promise Pay*
Andy Burnham, *Stantec*
Carol Malesky, *Stantec*
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Sean Scane, *United Way*
Jeff Miles, *United Way*
Shayla Zimmerman, *United Way*
Ashley Bishel, *University of Michigan Law School*
Sandy Sulzer, *University of Michigan Law School*
Jerome Drain, *Wayne Metro*
Megan Wilk, *Wayne Metro*
Shama Mounzer, *Wayne Metro*

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Chapter 1: Water Affordability Solutions

In May 2021, the office of the Oakland County Water Resources Commissioner (WRC) was awarded an Affordability and Planning Grant from the Michigan Department of Environment, Great Lakes, and Energy (EGLE) to create water affordability plans, comprised of multiple programs, that would improve customer affordability without compromising water quality or safety. The grant focuses on two municipalities—the City of Pontiac and the Charter Township of Royal Oak. While the water and wastewater systems of these two communities are operated by the WRC, the information compiled in this report provides resources and solutions that can be utilized by any water utility across Michigan and beyond.

Water Resources Commissioner Jim Nash and his staff, with the assistance of national and local consultants, are a project team of engineers, planners, finance experts, lawyers, as well as customer service and communication and marketing professionals. The project team researched, studied, evaluated, and met with leaders of a wide range of affordability programs and concepts regionally and across the nation.

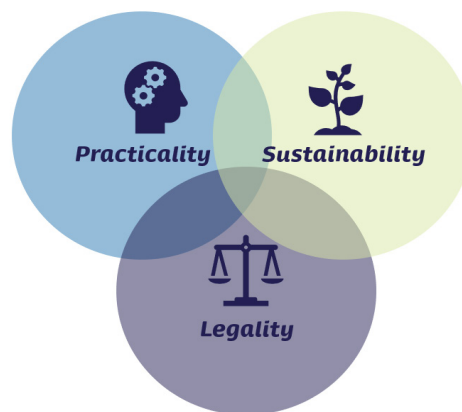
This report is generated from the incredible magnitude of work and includes step-by-step guidance on how the project team conducted its research, analysis, and planning process so other utilities can do the same. The report also includes proposed plans and implementation measures to work toward improving water affordability for both the City of Pontiac and for the Charter Township of Royal Oak. In addition, this report includes various appendices that provide a deeper dive into numerous areas of interest like legal challenges, rate analysis, communication and community outreach, assistance programs, and more.

Report Structure and Organization

Water affordability is a complex problem and there is no single program or policy that can fix it. Effective solutions require collective action by a wide range of actors. Utility and public health managers, along with elected officials and legislators, community-based groups and non-governmental organizations all play a critical role in developing solutions. This report is organized so these various actors can quickly locate information most pertinent to their role.

Executive Summary

Providing safe drinking water and reliable sewer services is a cornerstone of public health protection. Water utilities face the challenge of maintaining proper investment in water and sewer systems to ensure safe and reliable services, while simultaneously keeping



water rates to pay for those services affordable for customers. Water and sewer systems serve the community as a whole. When some water customers cannot afford to pay for the service provided, the entire community is impacted through potentially higher rates, delayed improvements or threats to public health. Water affordability affects *all* water customers.

There is a growing list of factors contributing to the increasing cost needed to properly invest in water and sewer systems to protect public health and safety. These include aging infrastructure and stricter water quality regulations. Utilities are also dealing with the long-term consequences of underinvestment, which is the higher costs of replacement compared to regular, routine maintenance. Ultimately, these costs are passed on to rate payers, making water bills unaffordable to more customers across the state. As a result, many are left at risk of water service disconnection.

Yet, even when water customers pay, it does not necessarily mean that the water bill is affordable, especially when the bill is paid at the sacrifice of other essential needs. It is critical to work toward solutions that balance a utility's financial needs to properly maintain and invest in water and sewer systems for public health and safety, with the financial realities of customers that may not be able to afford water services without forgoing other necessary costs of living. The objective of water affordability is providing water customers with a water bill they can afford to pay, without jeopardizing the resources utilities need to provide safe drinking water and reliable sewer services.

The recommended actions in this report are designed to address both water utility and water customer needs. It identifies what can be done now and, in the future. The report categorizes what partners are necessary to accomplish each needed change. Finally, the report sets forth clear affordability goals, program objectives, an implementation strategy, and measurements for success. The key findings below highlight the report's research and conclusions.

Chapter 2: Key Findings

1. The term “water affordability” has no single accepted definition. Its meaning varies among individuals who view affordability through a personal lens. The term conflates two separate, but interconnected, issues related to the costs of utilities providing water services to a community and the ability of individuals to pay for those services. Short-term water assistance measures do not equate to the goal of long-term sustained water affordability.
2. A water utility should not forego water and sewer system maintenance and improvement projects to keep customer rates low, particularly when that inaction would compromise the utility’s ability to provide safe and reliable water services. Short-term cost saving measurements to keep rates artificially low result in more expensive long-term financial consequences.
3. An income-based affordability program is necessary for low-income customers; however, a non-utility funding source is required for such a program to be sustainable.
4. In overburdened communities with primarily low-income household levels, increasing water rates to subsidize the lowest low-income water customers could expand the degree of unaffordability to include more households.
5. Increased community outreach and improved utility-customer relationships are integral to forming partnerships and stakeholder coalitions that can collaborate on the development of affordability measures and successfully select, develop, and implement affordability plans.
6. Water utilities can implement bill payment policies and processes that improve affordability for customers by offering easily accessible and flexible payment options that meet customers’ economic realities.
7. Affordability solutions must include many components for low-income customers including:
 - a. Arrearage assistance and flexible payment plans to eliminate water debt
 - b. Income-based monthly bills to keep payments consistent and affordable
 - c. Conservation programs that provide leak detection and plumbing repairs
 - d. Consideration for short-term hardships
 - e. Flexible and equitable customer service and payment options
 - f. Efficient operations and utility investment
8. Customers may look for water affordability resources from many different people and places, including friends, family, faith-based and community organizations, non-profits, government organizations, and utility providers. By developing partnerships utilities can provide many paths to help connect customers with accurate information and available resources.
9. Categorical eligibility for water affordability programs, or automatic enrollment with other programs, like the Supplemental Nutrition Assistance Program, or Michigan Energy Assistance Program, will reduce enrollment barriers and burdens for customers.
10. There is no federal or state strategy to provide comprehensive solutions to address water affordability. This results in fragmented and inequitable responses to the problem. A recent statewide affordability survey¹ showed that affordability is present in every geographic and demographic across the state. Therefore, a statewide plan is necessary to advance water affordability for all communities in Michigan.

¹ Read, J., Attal, N., Betanzo, E., Harrison, R., Stoltenberg, A. (2022, January). Water Service Affordability in Michigan: A Statewide Assessment. University of Michigan Water Center, Graham Sustainability Institute. Retrieved from graham.umich.edu/media/files/MI-statewide-water-affordability-assessment-report.pdf



Figure 1 Components of the Comprehensive Strategy

Chapter 3: Existing Challenges to Water Affordability

Water and sewer utilities are responsible for investing in the infrastructure needed to reliably operate and maintain the system to provide quality water service and protect public health. Under existing laws and financing structures, most of the operational and asset investment costs of meeting these responsibilities are passed on to customers.

Historically, the Water Resources Commissioner's office has collected nearly 100% of the costs passed on to customers through water and sewer bills. This was accomplished by utilizing water service disconnections in the event of non-payment, and the property tax certification process to collect unpaid bills. Unlike many other municipalities, customer collections and revenue recovery have not been an issue. The looming challenge is the sustainability and equitability of this practice, particularly as the needed costs to maintain and operate water and sewer systems are increasing while more households are experiencing economic strain.

The upward cost trend for water services is caused by many factors including, but not limited to, increased flooding, aging infrastructure, lead line replacement, non-regulated and emerging contaminants, including, the class of chemicals known as PFOS and PFAS. The Southeast Michigan Council of Governments (SEMCOG) recently estimated increased annual investment needed in the region to maintain and improve existing water infrastructure to "good" or "fair" condition is more than \$3.4 billion per year through 2045.² This is a clear indicator that the costs of continuing to provide safe and reliable water will continue and likely increase no matter how efficiently and effectively the utility operates. Recent influxes of federal funding through the American Rescue Plan Act of 2021 and the Infrastructure Investment and Jobs Act will help offset a portion of these costs but those funds are temporary and insufficient to meet projected needs.

In communities under the jurisdiction of the Water Resources Commissioner (WRC), water affordability challenges are currently the most prevalent in the City of Pontiac and Charter Township of Royal Oak. For additional detail on each community, see [Appendix A, City of Pontiac Background and Affordability Plan](#), and [Appendix B, Royal Oak Township Background and Affordability Plan](#).

While finding long-term solutions to water affordability will benefit all 15 municipalities the WRC serves, Pontiac and Royal Oak Township are the focus of this grant work due, in part, to historical underfunding these communities have experienced. This means that water systems are not at the same starting point as other communities. The level of investment to maintain and improve the water and sewer systems is higher, but the ability of rate payers to meet that investment is lower.

Unfortunately, this problem is widespread and not unique to Oakland County. Part of the WRC's grant work included an extensive research process to gain a better understanding of the challenges, and potential solutions, of other communities. See [Appendix C, Research and Findings](#). During this process, we identified several common challenges to addressing water affordability.

- **Funding and Sustainability:** Programs designed to address water affordability cannot have an end date and require a permanent and sustainable funding source. Additionally, the costs of developing and implementing a successful affordability plan takes a significant amount of up-front time and resources. Smaller municipalities or water service providers may lack the human and financial resources to develop and implement such plans.
- **Communication and Customer Trust:** Utilities need to improve customer communication to explain the extent and value of the services provided to protect public health. Customer confidence in water services is critical to demonstrating the true value of those services.
- **Enrollment in Existing Programs:** Low enrollment in existing water programs that help customers with water bills does not mean there is a low need for these programs. But if customers do not enroll in them, the programs are not considered successful, and there is a lack of demonstrative data to support the need for water affordability programs, policies, and plans.
- **Offering Worthwhile Solutions:** Programs that require a significant amount of time and effort for customers to apply, may not be worth the benefits received in the program. The opportunity costs for water customers must be considered.

² SEMCOG, Infrastructure: Investing with Impact (2021, July). Retrieved from https://semcog.org/desktopmodules/SEMCOG.Publications/GetFile.ashx?filename=Investing_with_Impact.pdf

- **Misperceptions:** Implicit biases and assumptions about customer behavior, financial choices and personal decisions are often a barrier to understanding and effectively addressing water affordability. Similarly, the antiquated perception that water utilities should not play a role in providing social services slows progressive solutions. Recognizing and removing these misperceptions can help utilities redefine their role in providing or connecting customers to programs that help with water bills.
- **Collaboration:** A water utility must provide meaningful opportunities for engagement with water customers and community stakeholders in any decisions impacting the water customers and their community. This should include the design of water affordability programs and policies.

Each of these challenges must be addressed to develop a successful and sustainable water affordability plan while also considering any legal implications. See [Appendix D, Legal Analysis and Mitigation Strategies](#).

Figure 2 Multiple Perspectives of Voices summarizes the various entities that were actively engaged to help our project team gain a better perspective on the water affordability challenges impacting Pontiac and Royal Oak Township. This insight helped develop the framework for the proposed affordability plans. For further information see [Appendix E, Community Water Partnerships, Public Outreach and Communications](#).



Figure 2 Multiple Perspectives of Voices

Chapter 4: Affordability Planning Goals and Objectives

Understanding the significant challenges to improving water affordability, the Water Resources Commissioner and his staff focused on creating an affordability plan that would advance five primary goals:

1. **Quality Services:** Improve the level of services provided to all water customers without additional burden to water customers.
2. **Zero Shutoffs:** Minimize households subject to water service disconnection due to non-payment by providing several paths for water customers to address past-due arrearages and manage current payments without sacrificing other essential needs.
3. **Water Security:** Increase the amount of funding each eligible household receives from a combination of regional, state, and federal programs to provide

immediate relief to households struggling to afford water bills. In addition, demonstrate the need for increased and long-term funding for residential customers facing water stress.

4. **Utility Stability:** Protect public health and the environment by ensuring the utility's revenue stream is sufficient to cover the full cost of service necessary to deliver clean and safe water.
5. **Community Water Partnerships:** Establish authentic, engaged, and active partnerships with community action agencies, regional providers, elected officials, and other stakeholders to advance principles of water equity as a collaborative effort to eliminate affordability issues to the extent possible.

To accomplish these goals, the project team developed key objectives and program considerations identified in Table 1.

Key Objective	Program Considerations
Reduce Arrearages	There are existing programs that provide arrearage assistance to customers in Pontiac and Royal Oak Township, but program enrollment is low and program funding is not fully utilized. Communication and outreach efforts should be increased to promote enrollment and leverage existing programs to help reduce or eliminate arrearages. Eliminating past water debt provides a foundation to help customers manage current water bills.
Work to Eliminate Intentional Service Interruption	Water equity requires the elimination of water shutoffs based on an inability to pay. Maintaining continuous access to water services is essential for the health and safety of customers and the community. Uninterrupted access provides water security to customers and reduces costs to the utility. The utilization of threats of terminating service to force payment does not make water more affordable. Other methods must be implemented to help connect customers with assistance.
Provide Fixed Monthly Bills Based on Income	Providing low-income customers fixed monthly bills that are based on household income prioritizes sustained affordability over short-term assistance. The WRC designed an affordability program that would provide tiered discounts based on federal poverty levels to reduce water bills to a fixed amount that is not more than approximately 4% of household income. A funding source is needed to recover this discount and implement this plan.
Utilize a Partner to Administer Programs	Outsourcing program administrative tasks can reduce utility costs and resources, while increasing the level of services to customers. Utilizing existing community action agencies that administer other affordability programs, will result in greater customer convenience and expand program enrollment.
Provide a Conservation and Household Plumbing Repair Program	If mandatory minimum bill requirements are not in place, water conservation may help customers reduce monthly bills. A plumbing repair program can also provide technical knowledge and resources to find and repair household leaks.
Identify and Obtain External Funding Sources	Restrictions on utility rate revenue and absent or insufficient local funding necessitate securing permanent and sustainable funding from sources outside of the utility.

Table 1 *Key Objectives and Affordability Program Considerations*

Chapter 5: Project and Report Overview

The grant project began with a series of steps designed to meet deliverables identified in the Affordability and Planning Grant application. A high-level overview of the project process that addressed each deliverable is provided in this report.

Appendices are included to provide further details and information on each specific deliverable.

1. Identify demographics and reasons for nonpayment of water bills. [Appendix A, City of Pontiac Background and Affordability Plan](#) and [Appendix B, Royal Oak Township Background and Affordability Plan](#).
2. Research and document affordability programs and short-list applicable ones. [Appendix C, Research and Findings](#).
3. Engage with local elected and public officials in the development of the plan and convene a task force to advise on customer education, engagement, and recruitment. [Appendix F, People-First Policies](#), [Appendix E, Community Water Partnerships, Public Outreach and Communications](#).
4. Identify legal hurdles associated with affordability programs. [Appendix D, Legal Analysis and Mitigation Strategies](#), [Appendix G, Landlord-Tenant Relationships](#).
5. Identify other community, state, and federal programs that could be leveraged. [Appendix E, Community Water Partnerships, Public Outreach and Communications](#).
6. Evaluate the long-term financial sustainability of an income-based customer program and develop a business case for the same. [Appendix H, Rate Structures and Affordability Planning](#).
7. Discover and utilize a framework to develop effective water affordability programs. [Appendix I, Gap Analysis](#).

This report is designed to be a comprehensive resource emphasizing the planning process used to develop the proposed affordability plan. The structure of the affordability plan is intended to be adjusted to scale so that it could work for both larger (Pontiac) and smaller (Royal Oak Township) communities and shared and adapted by other municipalities.



Downtown, City of Pontiac

Chapter 6: Creating Community Water Partnerships: A Guide to Develop an Affordability Plan

A. Terminology

Chapter 13 is a Water Terms Glossary to provide a common vocabulary for terms referenced throughout this report. It represents a compilation of definitions drawn from existing literature by water affordability experts. As we met with various community members, stakeholders, water advocates, and water industry experts, we quickly realized that disagreement on policy often stemmed from use of terminology, even down to the word “affordability.”

B. Creating a Community Stakeholder Coalition

Prior to receiving the affordability and planning grant, we already recognized the need to improve customer outreach, particularly in communities experiencing more frequent water shutoffs, like Pontiac and Royal Oak Township. Customers in both communities frequently contacted the WRC to gain a better understanding about the charges on their water bills and what services they were paying for. In response to these frequent inquiries, Commissioner Jim Nash directed the formation of two coalitions; one was comprised of community leaders and residents within the City of Pontiac, and the other included community leaders and residents within the Charter Township of Royal Oak. The first separate coalition meetings began in March 2021 and continued through June. All meetings took place via Zoom. These first few monthly meetings featured presentations concerning general topics like “how to read your water bill”, “how water and sewer rates are calculated” and “how to detect a leak”.

In May 2021, the WRC was awarded the affordability and planning grant and the two coalitions were combined. The coalition’s focus shifted to a dialogue around water affordability. Additional stakeholders, like regional leaders, elected officials, and representatives from governmental and non-governmental organizations joined as participants to form the “WRC Affordability Coalition”.

Since the first WRC Affordability Coalition meeting in July 2021, Commissioner Nash has been able to share updates and progress on the grant work with the coalition members and receive feedback from a large group with diverse perspectives on the topic. For additional detail on the WRC Affordability Coalition, see [Appendix E, Community Water Partnerships, Public Outreach and Communications](#).

C. Gaining Perspective Directly from Water Customers

The WRC Affordability Coalition highlighted the value of listening to and engaging with water customers who are experiencing water stress and will be directly impacted by the plans, policies and programs that result from the grant work. We determined that the best way to “listen” to our customers was through focused customer interviews.

Since the WRC does not maintain customers’ personal information like names or phone numbers, the first step was to identify possible interview participants. The project team reached out to non-governmental organizations to obtain names and contact information for water customers residing in Pontiac and Royal Oak Township. Next, the project team drafted a set of targeted and general questions to ask each interviewee. Finally, the National Charette Institute of Michigan State University-Extension (MSU) was hired as a third-party administrator to conduct the focus interviews. Following the interview, MSU compiled a report detailing the customers’ interview responses.

The report confirmed that the WRC could do better with both communication and public outreach. MSU’s report also provided valuable insight into customers’ perceptions of the WRC, thoughts about affordability, and the challenges and helpfulness of existing customer assistance programs. Some interview participants also shared information that was not directly related to the questions asked, but all the responses were captured and provided to WRC. The customers’ responses were considered and helped to influence the proposed affordability plan. For further details about the process see [Appendix E, Community Water Partnerships, Public Outreach and Communications](#).

D. Leveraging Knowledge and Experience through Community Organizations

Community organizations can be key partners in successfully implementing an affordability plan. They are often trusted sources of information for customers and are well positioned for grassroots efforts to share and market programs and resources. Community organizations can be any organized group of people who work to support community needs. They include governmental organizations like city councils, the housing administration, planning commissions, along with non-governmental organizations such as religious groups, foundations, coalitions, and neighborhood block groups.

However, during the grant work, we discovered that many community organizations were not aware of the WRC or what services it provides to the community. This was an important lesson learned because we cannot rely on community organizations to help communicate our message and promote our programs if they don't have foundational knowledge about how the WRC operates or accurate information about our affordability plan. The community organizations and WRC have a shared goal of wanting to deliver programs and resources to customers to help address affordability, but there has been a disconnect between the organizations and us. To help bridge this gap, and develop a partnership to promote affordability efforts, we engaged many leaders from community organizations to become members of the WRC Affordability Coalition and participate in the process of creating the affordability plan. For further details, see [Appendix E, Community Water Partnerships, Public Outreach and Communications](#).

E. Capturing Lessons Learned Elsewhere through Research and Interviews

It was encouraging to find that a significant amount of foundational research had already been conducted on the topic of water affordability and various customer assistance programs. The project team was determined to learn about the different types of programs, how the programs were implemented, and what measures for success were used. Therefore, a large portion of project resources was allocated to researching affordability programs, concepts, solutions, and ideas across the country, as well as meeting with leaders of these efforts to answer our questions. For further information see [Appendix C, Research and Findings](#).

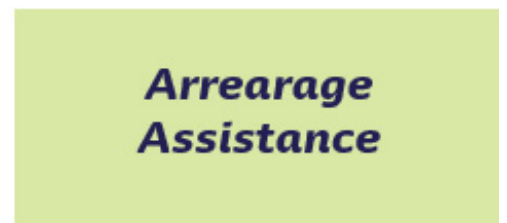
F. Providing a “One-Stop Shop”

A common theme we heard repeatedly was the need for a “one-stop shop” meaning a centralized location where customers could receive information and help regarding various programs and resources related to water bills and services. Navigating the different programs, as well as the respective program administrators, program benefits, and eligibility requirements was found to be a daunting task.

Information on current assistance programs can be found on WRC's website at www.oakgov.com/affordability and in [Appendix A, City of Pontiac Background and Affordability Plan](#), and [Appendix B, Charter Township of Royal Oak Background and Affordability Plan](#).



People-First Policies and Partnerships



Michigan electric and gas utilities are the closest we found to a local utility having a one-stop-shop for obtaining financial assistance for energy bills. The project team had several meetings with DTE Energy and Consumers Energy, as well as their administrative partner agencies, to learn more about the development and funding of their affordability programs. We also met with representatives of THAW and United Way, to better understand how energy programs are administered.

See [Appendix E, Community Water Partnerships, Public Outreach and Communications](#) for more information on leveraging other public programs.

Chapter 7: A Path to Resolving Water Affordability

A. People-First Policies

We are committed to ensuring that the financial management of each water and sewer system we operate is done in an efficient and cost-effective manner; however, we also recognize the need to look beyond the traditional business operations of our water and sewer systems and focus on the people we serve. One lesson we learned was that you cannot address water affordability without addressing water equity. Adopting the U.S. Water Alliance's definition of water equity, we developed the following Water Equity Statement.



WRC Water Equity Statement

The WRC acknowledges that many water systems are deeply entangled with social, economic, and environmental injustices that have accumulated over decades of purposeful decisions that have deprioritized or ignored the needs of certain communities, particularly communities of color.

We are committed to fully understanding these injustices and learning how they create barriers to water equity in the communities we serve.

With that knowledge, we are continually striving for water equity for all our customers.

We will focus policy decisions on the people who experience the consequences of our policies and create programs—in partnership with communities—designed to meet their needs.

Internal billing policies have immediate and direct impacts on water customers' finances. We saw this an opportunity to potentially improve water affordability by adjusting our billing policies and procedures to meet the economic realities of our customers. We developed a policy review process to review and adjust internal billing policies to align with our Water Equity Statement and become "People-First Policies."

Our water shutoff policy was central to this process. From a utility perspective, water shutoffs have been viewed as an effective tool to collect revenue. However, we recognize that many view shutoffs as an extreme and draconian measure that should be banned. Viewing the policy through a water equity lens, we identified many necessary adjustments including the need for increased customer communications, more time before a shutoff occurs, and convenient and flexible payment options. While water shutoffs will resume in 2023 for our two pilot communities, our revised policy will be focused on providing customers with many options to avoid or resolve past due payments prior to water service disconnection.

Adjustments to our leak detection, leak repair, and water loss forgiveness policies also have the potential to help improve affordability without impacting water rates. Leaks can be detected by the customer themselves or by the utility in recognizing an unusually high bill. Once a leak is detected, a billing adjustment can be made with proof that the leak has been repaired. Financial assistance with plumbing repairs is also offered through Great Lakes Water Authority's Water Residential Assistance Program (WRAP).

Another component of our People-First Policies will be ongoing customer education. How to combat unusually large water bills and how to detect home leaks are two examples. Others include how to read a water meter, how to understand charges on a water bill, methods for bill payment, and options for bill delivery.

We anticipate that policy modifications, along with public education, will not only help address water affordability, but will also improve our customer relationships. For further information see [Appendix F, People-First Policies](#).

B. Affordability Program: Income-Based, Tiered Discounts, Fixed Bills

The WRC designed an affordability program that would provide tiered discounts based on federal poverty levels to reduce water bills to a fixed amount that is not more than approximately 4% of household income. See Table 2 compares the WRC Affordability Program to the newly revised program offered by the Great Lakes Water Authority (GLWA), namely the Water Residential Assistance Program (WRAP). The challenge to implementing this affordability program is securing a funding source that is not based on higher charges to other customers. See [Appendix D, Legal Analysis and Mitigation Strategies](#).

To pilot the proof of concept in Pontiac and Royal Oak Township, we are exploring two potential funding sources. First is funding from GLWA, specifically funds allocated to Oakland County for WRAP. These funds have been significantly underutilized and result in reallocation to other GLWA communities outside of Oakland County. When WRC initially approached GLWA with the concept, we learned that GLWA was working on developing a similar concept that would modify WRAP’s existing flat \$25 monthly bill assistance payment to an income-based model that also considers household usage. While WRC is focused on increasing enrollment in WRAP, GLWA is still being considered as a potential funding source.

Another potential short-term funding source are funds from the American Rescue Plan Act of 2021 (ARPA).

A proposal to utilize Oakland County ARPA funds in compliance with federal regulations and local rules is the process of being developed.

Since WRAP and ARPA funds would only provide a temporary funding solution, we are focused on developing a permanent funding source for this program. We believe that a statewide affordability program, modeled from the Michigan Energy Assistance Program, could establish a sustainable funding source that would allow all participating utilities to offer income-based tiered discounts and fixed monthly bills similar to the WRC Affordability Program.

C. Arrearage Assistance

At least two programs currently exist specific to water customers for assistance with arrearages. One program, Low Income Household Water Assistance Program (LIHWAP), is federally funded. The second, the Water Residential Assistance Program (WRAP), is regionally funded. Both have limitations. LIHWAP is funded only through September 2023 and WRAP is estimated to become underfunded once enrollment increases above 10%-15% of eligible households in Oakland County.

WRAP is also insufficient in that it is available to customers, with limits, for up to two years. It is important to note that although both LIHWAP and WRAP are short-term solutions, it is critical that this arrearage assistance is used by eligible water customers to reduce or eliminate water debt.

WRC Affordability Program	Water Residential Assistance Program (2022 Revisions)
“Discount payment” from WRAP based on billed amount	Monthly credit paid to community (Budget basis)
Monthly payment required of household	Household expected to pay remaining bill
FPL Range 0-150%	FPL Range 0-200%
Levels of payment depending on FPL (4% of household income as target)	Unique credit for each household is calculated based on annual income and water bill (3% of household income as target)
Size of water bill not considered	Size of water bill inherently considered
WRAPfinity to all households under 100% FPL	WRAPfinity for seniors and household with disabilities; identify need for households with chronic need goes beyond regional resources (Federal/State)
Divert some arrearage funding to bill assistance	Arrearage assistance to remain at \$1,200/year (\$2,400 total) when needed; funding allocation amongst sub programs re-evaluated periodically

Table 2 WRC Draft Proposal vs New WRAP Program

D. Public Outreach and Enrollment

Effective public outreach and customer communication is essential for an affordability plan. Enrollment in existing and new programs that help customers with water bills is dependent on inclusive, clear, and effective communication. Easy to recognize branding and program marketing materials must be developed. Branding, including a logo and tagline, help deliver a consistent and recognizable message. Public outreach includes community inclusion in developing programs and policies, receiving customer feedback on programs and services, promoting programs and policies, and distributing conservation and other educational material. Strong public outreach will help with brand recognition and effective communication that inform customers about program benefits, eligibility requirements, and the enrollment process.

As part of the enrollment process, it is important to consider the relationship between landlords and tenants. There are programs available to help both landlords and tenants. Landlords may be eligible to receive financial assistance for plumbing repairs. Tenants may be eligible to receive bill payment assistance. Enrollment in these programs provide mutual benefits to both parties. For landlords, water bills become a lien on the property and, if left unpaid, get certified to property taxes. For tenants, unpaid bills can result in water service disconnection. Targeted outreach to landlords and tenants regarding programs can help increase enrollment and improve landlord-tenant relationships. See [Appendix G, Landlord-Tenant Relationships](#).

E. Affordability Considerations for Capital Replacement and Maintenance Programs

Water utility operators are required to meet health and safety standards in operations of both drinking water and sewage disposal services. However, the Oakland County Water Resources Commissioner goes beyond regulatory minimum standards. One example is the decision to repair versus replace water mains. A water main that experiences frequent breaks would better serve a community by being replaced, rather than having constant repairs. However, replacement can be cost-prohibitive for customers, leaving temporary repairs as the only viable option. This is particularly true in communities that are significantly overburdened, such as the Charter Township of Royal Oak. Major replacement projects often are only done when grant money is available because water service customers cannot afford a water rate increase to pay for this work. To help ensure effective and affordable capital replacement and system maintenance, the following items are important to consider.

- Without additional outside investment and funding, water rates must be set appropriately to generate enough revenue to cover costs associated with proper maintenance of the water and sewer system. Even when a system is properly managed, water rates cannot be decreased to achieve affordability because systems need sufficient funds to provide the expected and necessary level of service.
- Greater investment is needed from local, state, and federal agencies, as well as private individuals, industries and entities. Revenue sharing, grants, and donations will all help offset costs and improve affordability for customers.
- Utilities must communicate the value in the services they provide, and the vital role water resources play in the health, safety and economic prosperity of a community. Rate increases may be the only option to maintain these services, so understanding the value they provide to customers and the community is important messaging.

Five Outcomes We Work Towards:



Chapter 8: Broad-Based Institutional Support

Due to the recent influx of federal funding, state agencies have an opportunity to make significant investments to improve water infrastructure. Proper levels of investment would reduce financial burdens from being passed on to rate payers and play substantial role in improving water affordability. During the grant work, there was an important statewide dialogue regarding the allocation of Michigan's approximately \$6 billion in federal funding appropriated under the American Rescue Plan Act of 2021 (ARPA). WRC grant project managers and WRC advisors were asked to join the Coalition for a Strong and Prosperous Michigan³ to share their experience and participate in developing a comprehensive spending proposal for consideration by the legislature and the governor's office.

Through a collaborative effort, the Coalition for a Strong and Prosperous Michigan adopted a platform built, in part, on the investigations, analysis, public outreach, and recommended actions emerging from this report.⁴ The support from this coalition is crucial because it includes more than 60 members from both the public and private sector as well as representation from all corners of the state. Notably, the coalition endorsed the concept of a statewide water affordability plan as detailed in [Appendix H, Rate Structures and Affordability Planning](#).

³ <https://www.miroadmap.com/>

⁴ From Rescue to Prosperity: A Roadmap to Michigan's Future. Retrieved from https://www.miroadmap.com/_files/ugd/fb41f2_b853c1a8bbae443c99ca295ebeb03b48.pdf?index=true

The Nature Conservancy is also a member of the Coalition for a Strong and Prosperous Michigan. Recognizing the importance of legislation to address this problem, the Conservancy commissioned a statewide poll mirrored after the Coalition's proposal.⁵ Key findings of the survey are noted below.

- By a better than a 2-1 margin, voters believe in statewide programs to assist local governments with water infrastructure obligation while helping low-income residents to pay their water and sewer bills.
- Every major demographic group queried supports the proposed program to fund infrastructure and assist low-income households.
- In answer to the question "Do you believe there is a statewide program that helps people pay for their water and sewer bills?" 50% responded "yes."
- When asked if they would support a \$1 to \$2 monthly fee on everyone's water bill to support an assistance program, only 22% were opposed, 60% expressed support, and 14% did not know.
- Support is strongest if the monthly fee does not exceed \$1.

⁵ Six hundred registered voters were surveyed to achieve a margin of error of +/- of 4% with a 95% level of confidence. Source: Michigan Water Infrastructure Survey (December 2021)



Administration Office, Royal Oak Township

Chapter 9: Summary of Findings and Proposed Solutions

Finding	Reasoning	Barrier	Solution
Statewide affordability policy is needed	Statewide policy can provide sustainable funding	Change in Michigan law is necessary	Enact legislation to establish policy and a funding source
Existing assistance programs are not well coordinated	Many programs overlap in benefits and others are insufficient	Many different programs with different sources of funding, different administrators	Develop a “one-stop shop” at local, county, or state level
Barriers exist in qualifying and enrollment for financial aid	Lack of communication and information can create barriers	Literacy, information management, distrust, ease, time, insufficiency	Categorical eligibility – “you qualify for some form of assistance you qualify for it all”
Difference between chronic poverty and crisis assistance	Chronic poverty needs indefinite assistance	Many programs are limited in time	Statewide funding mechanism
Water policy can follow existing food and energy policy	Statewide policy and funding source already exists	Develop a way to make a similar program work for water	Enact legislation like the Michigan Energy Assistance Program
Leverage other assistance programs to free up funding for water bills	Assistance may be available for other household needs so water bills can be paid	Ineffective communication and no central location to discover various types of household assistance	Communicate a holistic assistance program approach to customers using effective caseworkers
Need robust customer outreach and education programs	Customer communication is key to affordability program success	Literacy, understanding, method of delivery	Frequent and direct communication is needed to stay ahead of not being able to pay a bill
Utilize community organizations for customer enrollment	Trusted groups within the community can serve as a source for communication to customers	Community group understanding of the utility and what services are provided and programs offered	Collaboration with community organizations to reach customers
Water shutoffs accelerate customer action	The threat of water service disconnection may cause customers to pay water bills at the sacrifice of other essential needs	Some customers are still not able to afford their water bill and will have their water service shut off	Income-based affordability program that considers the amount of water bill and household income
Income-based program is needed to help achieve water affordability	Not everyone is able to afford their water bill	Funding source	Statewide policy and funding source must be identified and enabled
Conservation and education must play a role with affordability	Customers can learn how to avoid incurring large water bills	Some customers are unable to diagnose issues and do not understand leak detection methods, also a lack of funds for household plumbing repairs to perform the work	Continuing education and direct notices to households with large bills, connecting them with licensed contractors

Table 3 Summary of Findings and Proposed Solutions

Chapter 10: Framework and Gap Analysis

Proposed affordability plans for the City of Pontiac and the Charter Township of Royal Oak, found at [Appendix A](#) and [Appendix B](#), respectively, were developed over the course of a year through a research process described further in [Appendix C, Research and Findings](#). They were developed through selecting components or various programs that were researched, studied, and then customized to fit the communities. The project team documented its processes and research to create the proposed framework.

The process of documenting the research and development process was intended to provide other municipalities with a roadmap to develop affordability plans for their communities.

Another avenue to developing an affordability plan is a seven-step process shared by two national consulting

firms, Stantec and Raftelis. With permission, that seven-step process is included in this report as an additional resource and framework for others. See [Appendix I, Gap Analysis](#).

WRC utilized the seven-step framework to conduct a “gap analysis” of the affordability plan components. This was to ensure that nothing was missed and that the proposed plan was consistent with best practices and industry standards. Through the gap analysis process, affordability goals were clearly defined, program objectives were identified, specific components of an affordability plan were selected and refined, program implementation requirements were defined, and program success measures were determined.

For details of the process and the results, see [Appendix I, Gap Analysis](#).



Downtown, City of Pontiac and Royal Oak Township



Chapter 11: Affordability Plan Summary and Implementation

Table 4 provides a summary of the proposed affordability plans including key components. For further details, see [Appendix A, City of Pontiac Background and Affordability Plan](#), and [Appendix B, Charter Township of Royal Oak Background and Affordability Plan](#).

Key Components	Program Considerations
Short-Term Affordability Program	Framework: WRC will promote the Great Lakes Water Authority's Water Residential Assistance Program (WRAP) that is being improved to include an income-based monthly bill assistance program. Discount tiers are based on the average household water and sewer bill, as a percent of household income. WRC has also developed the WRC Affordability Program that would provide tiered discounts based on federal poverty levels to reduce water bills to a fixed monthly amount that is not more than approximately 4% of household income. Both frameworks are being considered as concurrent or separate programs. Funding: WRAP is funded by one-half of 1% of GLWA budgeted revenues. Oakland County communities receive about \$800,000 annually for households enrolled in WRAP. WRC is pursuing options to fund the WRC Affordability Program with WRAP funds and/or Oakland County American Rescue Plan Act (ARPA). Marketing: WRC is developing a marketing and communication strategy to partner with community action agencies to promote and increase enrollment in WRAP which will help deliver immediate water assistance to customers and demonstrate the need for funding for the WRC Affordability Program.
Long-Term Affordability Program	When WRAP enrollment for eligible households exceeds between 10% and 15%, WRAP funding for Oakland County will be exhausted. If ARPA funds are utilized, they must be obligated by 12/31/2024 and spent by 12/31/2026. Temporary funding sources must be fully realized and depleted to demonstrate the need for a long-term affordability program. WRC has developed a proposed legislative framework, modeled after the Michigan Energy Assistance Program, that would expand the WRC Affordability Program to a permanent statewide low-income program. It would provide tiered discounts based on federal poverty levels to create fixed monthly household bills. A small state approved fee (less than \$1) on all water bills would create a sustainable and equitable funding source for the program.
Arrearage Assistance Program	WRC will promote enrollment in existing arrearage assistance programs. WRAP provides a 2-year program for arrearage assistance that can be extended for households with senior citizens and individuals with disabilities. Federal assistance for arrearages is also available through Low Income Household Water Assistance Program (LIHWAP) until September of 2024, when the program expires. If funding for LIHWAP is not extended, a permanent and long-term arrearage assistance program, through state legislation, will be considered.
Conservation and Household Plumbing Repair Program	WRAP currently provides a Conservation and Household Plumbing Repair Program. WRC will work with community action agencies implementing WRAP in Oakland County to promote this program. WRC is also exploring partnerships with gas and electric utilities to include water repairs in home energy audits, in addition to partnerships with Oakland County's Neighborhood and Housing Development Department. WRC will utilize leak detection technology to identify potential household leaks to prevent arrearages. In addition, WRC is revising its internal billing policy related to adjustments for water leaks.
Short-Term Hardship Assistance	A new WRC program is being developed to address unexpected short-term needs due to household hardships like loss of job, death or a family member, or accident. Funding sources being explored include donations, general funds, and ARPA funds.
People-First Policies and Procedures	All billing related policies and procedures are being internally evaluated and subjected to a review to determine if policy changes should be made to align with principles of water equity. The policies under review include special payment arrangements, late fees, and water shutoffs. WRC is also creating a process to develop, revise and review billing policies focused on advancing principles of water equity.
Communications and Public Outreach Plan	A strategic communications and outreach plan will be developed through collaboration with community partners and stakeholders. WRC is working to identify and implement best practices to improve customer communications, build community trust, increase enrollment in affordability programs and increase participation in WRC's Workforce Development Program.
Capital Replacement and Maintenance Programs	Existing capital replacement and maintenance programs will be evaluated on an ongoing basis, focusing on maintaining or improving the current level of service, using asset management tools, and leveraging external funding sources. New federal and state project funding opportunities will be considered.

Table 4 Affordability Plan Summary

Chapter 12: Step-by-Step Guide for Utilities to Develop a Water Affordability Plan



Step 1: Engage community stakeholders

From the start of the grant work, it was important to have community members and stakeholders involved in the development of the affordability plan. This was accomplished through monthly affordability coalition meetings. When the proposed plan was fully developed, the next step was to present it to all the water customers in the City of Pontiac and Charter Township of Royal Oak. This ensured customers were aware of the proposed plan and had an opportunity to review and provide feedback.

At the beginning of August 2022, Commissioner Nash sent letters to all water customers in Pontiac and Royal Oak Township with information regarding the affordability plan. The letters also included information regarding existing water assistance programs. In addition, the letter was published on the WRC's affordability webpage and copies were distributed in various locations throughout the communities. Following distribution of the letter, Commissioner Nash hosted a series of town hall meetings to discuss the components of the affordability plans with each community. After the public comment period, revisions and modifications to the proposed plan were evaluated and the plans were adjusted. At the time of this report, the project team is continuing to seek public comment as they move on to the next project phase, implementation.

Step 2: Assess reasons for bill nonpayment

To establish a successful affordability program, customers impacted by affordability must first be identified. Next, review of historical billing data can be used to identify trends in payment history, shutoff notices, tax certifications, and other collection methods. This can help to try and understand some reasons for nonpayment.

The next steps will be applying this information to customer demographics to determine if specific groups struggle more than others to pay their bills. A review of customer demographics regarding age, water use, household size, residence type, etc. will be important to gaining a better understanding of customers who struggle to pay. If the demographic information is not readily available, consideration will need to be given to a methodology for obtaining missing information or to evaluating customer demographics using other metrics. By surveying the demographic groups with the highest percentages of nonpayment, utilities can begin to understand specific challenges that cause delays or interruptions of payments.

Surveys can take place in a multitude of ways through existing communication channels. Social media can be engaged to raise the issue and promote community involvement and feedback.

However, to obtain information from those most affected, it will be important to connect directly with the people struggling to make payments and not with the broader community. Many customers who cannot pay their bills have other disadvantages such as lack of internet access and the inability to participate in community functions. Recommended methods to reach identified demographics include:

- Interview leaders who provide services to key demographic groups
- Facilitate focus groups that provide an opportunity for direct feedback
- Conduct surveys that allow customers to elaborate on their challenges and provide suggestions for alternatives such as monthly versus quarterly billing, discounts based on age and/or income and the like.

This step will also begin to build awareness and create a feedback loop between the customers and the water service provider. People involved in this step may evolve into a stakeholder group that can serve as a resource as the affordability plan is developed, and as ambassadors for the program as it is implemented in the community.

Step 3: Research affordability programs

The WRC has participated in numerous conferences throughout the United States allowing its staff to become educated in various affordability programs. Typical affordability programs include a bill discount either based on volume or income, leak repair or conservation measures, leveraging community or other government assistance, forgiving past due bills, and having a reserve to address critical needs. There is no “one size fits all” approach. But there is a wealth of information available to create the foundation for an affordability program.

As part of this scope, publications and presentations on water affordability programs from throughout the United States were reviewed. The project team interviewed leaders from various organizations and communities who have implemented an affordability program. They processed lessons learned, collected and organized information and identified the pros and cons of each approach. The various affordability plans should also be screened for the challenges facing “at risk” demographics in specific communities.

Utilities should study and research other affordability programs to learn about potential options that could be adopted in their community.

Step 4: Identify legal hurdles

Short-listed affordability approaches should be subjected to a legal review. In Michigan, all fees must be proportionate to the value the user receives.

Reducing the cost for customers in certain income brackets, while well intentioned, could pose legal challenges. A community’s legal counsel should monitor changes in state law and local ordinances and evaluate each affordability approach to determine the likelihood of a legal challenge.

Step 5: Leverage local, state and federal programs

There are a multitude of opportunities with other communities or other government-based agencies and programs which will enable an affordability program to provide the most value for the lowest cost.

Examples could include working with agencies that provide transportation so people can get to and from jobs. Subsidized childcare may allow single parents an opportunity to be gainfully employed. Community-based organizations can promote fundraising events to provide financial assistance to people unable to pay their water bill or could assist in the administration of an affordability program.

The work includes identifying project partners and programs that could work in concert with the affordability program.

Specific partners and programs capable of alleviating the challenges experienced, such as removing barriers to program enrollment, must be sought. Several brainstorming discussions should be held with the appropriate members to identify a suitable role these agencies and programs can provide.

Step 6: Create framework for an affordability plan

Begin with a series of workshops with leadership, legal counsel, community representatives, and other stakeholders to review the potential approaches, the pros and cons of each, potential project partners and converge on recommended affordability programs that could make up an overall plan. The Stantec-Raftelis seven-step framework is an excellent resource and can be found in [Appendix I, Gap Analysis](#).

Once an affordability plan is created and the water service provider or municipality is ready to enroll qualified customers, it will be important to promote the plan and its programs through trusted channels of communication. Utilizing official social media accounts, local papers, newscasts, billing materials, or online communication provides inexpensive publicity for the plan and programs. It will also be important to brand the plan and programs so that they are easy to remember and is readily recognizable. Contact information for the programs should likewise be straightforward. A water service provider will also need to consider the importance of customer service when the program opens. A successful program will need a seamless enrollment process that customers can easily navigate.

Step 7: Evaluate long-term financial sustainability

As asset management plans are implemented in multiple municipalities, the focus will shift to developing a rate structure and utility cash balances that sustain the water supply and sanitary sewer systems. We know that as water and sewer system infrastructure is rehabilitated, or improved, water rates charged to customers often increase to cover these costs.

Funding may be the number one challenge of implementing an affordability plan. Many existing programs currently receiving federal, state, or local funding can be leveraged to better serve a community's water customers. But the ideal affordability plan may require funding that is not yet available. Communities may choose to raise water rates on all customers to create funding to assist those most vulnerable. Alternatively, they may choose to help market and increase enrollment in existing programs to demonstrate the need for additional funding from other sources. Many are limited in funds and duration but if successful they could promote legislative solutions.

Affordability issues that impact communities today may become more severe soon. As part of the affordability plan, a water service provider or community will need to look at capital improvement plans, operations and maintenance costs, cost of purchasing water, cost of treating sewage, and the impact on future rates. The goal is to develop a framework for affordability that is dynamic and able to address current needs and those anticipated in the next five to 20 years.

Summary and Conclusions

Wide-ranging interest and support, along with the information and research in this report, indicate it is time for the state to develop a comprehensive water affordability policy, enact legislation establishing a statewide low-income water affordability program, and approve a sustainable funding mechanism for the same.

In addition to ensuring equitable access to water services to residents across Michigan, a statewide low-income water affordability fund would provide financial stability for utilities and bolster investment in infrastructure. This would prevent the postponement of critical maintenance and necessary improvements that may have otherwise been delayed to avoid raising customer rates. Action to address water affordability is required by many actors, but this step by the state would provide the momentum needed to secure water systems and the delivery of safe, clean, and reliable water services for all.

Act Now:

Utilities

- Engage with stakeholders and determine your community's affordability needs.
- Expand partnerships with your community, other utilities, regional partners, local leaders, state and federal government, and elected officials to find solutions to those needs.
- Identify, evaluate, and improve internal billing policies and procedures.
- Increase customer communications regarding awareness of billing practices, payment options, and existing programs that help with water bills.

Water Customers

- Implement water conservation techniques, including leak detection and plumbing repairs.
- Find out if you qualify for existing programs that offer financial assistance for water bills.

State Legislature

- Enact new laws to provide a statewide affordability program and secure a sustainable funding source.

Chapter 13: Water Terms Glossary

Water Affordability:

“The cost of essential water and sanitation should be inexpensive enough that cost does not prevent access, nor interfere with other essential expenditures.” Addressing customer water affordability—the amount charged to a given household for their water service—requires long-term and systemic change to the way that our water systems are funded and operated to ensure water systems remain safe and operational and customers do not lose access to clean water in their homes. This will take support from federal, state and local governments alike to find funding needed to ensure clean, safe and affordable water for all.

—Source: *River Network*

Water Assistance:

Water assistance is usually delivered in the form of a customer assistance program (CAP). It provides a stopgap for low-income households facing issues of water affordability by offering discounts or other assistance. While this system does not address the broader issue of water affordability, it can be a useful tool in providing immediate support for customers who would otherwise struggle to pay their water bills.

—Source: *River Network*

Water Equity:

Equity refers to just and fair inclusion—a condition in which everyone has an opportunity to participate and prosper. Water equity occurs when all communities have access to safe, clean affordable drinking water and wastewater services; are resilient in the face of floods, drought and other climate risks; have a role in decision-making processes related to water management in their communities; and share in the economic, social, and environmental benefits of water systems.

—Source: *U.S. Water Alliance*

Water Stress:

Occurs when individuals and communities face difficulty in accessing water services. It can include inadequate access to drinking water, wastewater, and stormwater services. Whether due to lack of infrastructure, difficulty paying for services, or poor water quality, water stress encompasses water-related climate impacts such as floods, droughts, and rising sea levels. Facilities like wastewater treatment plants can cause stress to residential communities in the surrounding areas. Water stress also affects people who rely on water for their livelihoods, such as farming communities.

—Source: *U.S. Water Alliance*

Water Bill Burden:

A bill burden is the bill as a percentage of income. If a household has a monthly income of \$5,000 and a monthly water bill of \$1,000, the “bill burden” is 20% ($1,000 / 5,000 = 0.20$). If a household has a monthly income of \$16,000 and a water bill of \$800, the bill burden is 5% ($800 / 16,000 = 0.05$). The concept of bill burdens is important because it captures the observation that a lower bill, or a higher income will not, standing alone, indicate a lesser or greater issue of unaffordability. Low bills coupled with low incomes can present an unaffordability problem. Similarly, higher bills coupled with higher incomes can avoid an unaffordability problem. The affordability question is not a question of how high the bill is, but rather how great of a burden does the bill impose on a customer as a percentage of income.

—Source: *The Guardian*

Vulnerable Communities:

Vulnerable communities face historic or contemporary barriers to economic and social opportunities and a healthy environment. The principal factors in community vulnerability are income, race or ethnicity, age, language ability, and geographic location. This may include low-income people, certain communities of color, immigrants, seniors, children, people with disabilities, people with limited English-speaking ability, unincorporated areas, people living in public housing, and currently or formerly incarcerated people.

—Source: *U.S. Water Alliance*

Resilience:

Resilience refers to the ability of an individual, community, or system to respond and adapt to crises, and to treat them as opportunities for transformation and improvement. It encompasses the capacity of all people—including those in vulnerable communities—to respond to shock and trauma of all kinds. In the context of water, resilience is generally discussed in terms of vulnerability to climate impacts and natural disasters.

—Source: *U.S. Water Alliance*

Appendix A: Pontiac Background and Affordability Plan

I. Oakland County Water Resources Commissioner

The office of the Oakland County Water Resources Commissioner (WRC) is a countywide elected office currently held by Jim Nash. The Oakland County Board of Commissioners, by resolution, delegated various responsibilities and authority to the Water Resources Commissioner including management of stormwater, drinking water, and wastewater services for residents throughout Oakland County. WRC performs operations and maintenance services for 22 local communities, including the City of Pontiac. The service provided to Pontiac water customers includes complete management and execution of operations, maintenance, infrastructure improvements, billing, and customer service for the city's drinking water and wastewater systems.

Countywide stormwater services include operations and maintenance of approximately 650 miles of storm drains; 450 miles are enclosed pipes, and the balance are open channels. In addition, the commissioner's office provides treatment of combined stormwater and wastewater at five retention treatment facilities. Drinking water services include operations and maintenance of numerous municipal water system that serve more than 270,000 people. There are more than 1,300 miles of water main and six water treatment facilities. Wastewater services include operations and maintenance of 17 municipal sewer systems, serving 300,000 people and five regional sewer systems, serving 1.5 million people. Responsibilities include maintenance of more than 1,610 miles of sewer lines, 191 sewage pump stations, and three wastewater treatment plants often referred to as water resource recovery facilities. One such facility, the Clinton River Water Resources Recovery Facility (CRWRRF) provides wastewater treatment for Pontiac and 13 adjacent municipalities.

The commissioner's office is staffed by more than 330 full-time employees who not only deal with stormwater, drinking water and wastewater operations, but also construction, asset management, water and sewer rates, and customer billing. Many have developed key relationships with industry leaders and organizations, both regionally and across the country. This keeps them abreast of changes and challenges in the industry and provides access to information, technical assistance, and pending water policy decisions. These relationships have also positioned WRC as a national leader, creating opportunities to develop and share innovative programming. The technical expertise, economies of scale, and overall talent provided by the



Oakland County Public Works, Waterford

commissioner's office represent significant benefits for Pontiac water customers and to residents in the other municipalities they serve. In addition, various Oakland County departments provide support services to the commissioner's office for finance and accounting, information technology, human resources, health and human services, vehicle and equipment maintenance.

II. History of WRC Water and Sewer Service for Pontiac

Pontiac serves as the county seat and is in the center of Oakland County, Michigan. It is approximately 20 square miles and has approximately 62,000 residents, according to the 2020 Census. The city consists of approximately 90% residential properties and 10% commercial properties. Many of the non-residential areas are currently undergoing significant redevelopment.

From 2009 to 2013, Pontiac was under the oversight of an emergency manager appointed by the State of Michigan to make executive and financial decisions for the city. During this time, operation and maintenance contracts for the water and sewer systems were executed with Oakland County. Specifically, on April 19, 2012, the former Oakland County Water Resources Commissioner and Pontiac's emergency manager signed an agreement granting the WRC executive and financial management authority and authorizing it to operate Pontiac's water system. A second agreement was signed by the same parties with the same terms for the city's sewer system. The term of the contracts is 40 years, or until such time that any debt with respect to the drinking water and sewer systems is paid in full. There are many hard feelings about this transfer of authority, and it created distrust between the community and government. WRC has been working to build trust.

It has developed and implemented comprehensive water system, sewer system, and asset management plans. These plans include 5-year and 20-year programs to replace critical infrastructure that was prone to failure. The plans also include maintenance and inspection programs to help determine infrastructure condition and to extend the useful life of existing infrastructure. Implementation of these programs has significantly improved the level of service provided to the residents of Pontiac.

III. Pontiac Drinking Water System Infrastructure

A. Description

Pontiac's drinking water system includes more than 315 miles of water main, 882 valves, 3,000 hydrants, two ground storage tanks, one elevated storage tank, one booster station, and several control valves. More than 40% of the city's drinking water infrastructure was built before 1930. Pontiac had another large growth period in the 1950s and 1960s, and an additional 30% of the system was constructed. The drinking water distribution system consists mainly of cast iron and ductile iron water mains. The useful life of water mains varies between 70 and 100 years, depending on the type of pipe and installation conditions. Based on these factors, about half of the city's water system is past its useful life.

B. Maintenance Programs

Specific maintenance programs for Pontiac's drinking water system include: 1) valve inspection and repair program; 2) hydrant inspection and repair program; and 3) pump station and storage facility predictive and preventive maintenance programs. The significant value provided by these maintenance programs justifies the annual cost of approximately \$1 million.

1. Valve Inspection and Repair Program

This program had a dramatic impact on the level of service for water customers in Pontiac. During initial inspections in 2015, many valves were found to be closed or inoperable. This caused significant drinking water system pressure surges and subsequent water main failures. A water main failure has a significant impact on the everyday life of nearby water customers because it causes an interruption in drinking water service. In many instances boil water directives are necessary to notify water customers to temporarily boil their water before using it for cooking or drinking. Implementing the valve-inspection program and correcting the valve deficiencies has significantly reduced these pressure surges. The ancillary benefits include fewer main breaks, improved customer service, and a reduction in operating costs. Also, prior to the program's implementation, fire flows, or the amount of



Water Tower, City of Pontiac

water available to fight fires, was found to be deficient in some areas of the city. In many cases, closed or broken valves were the cause. While the valve inspection and repair program has not completely solved deficient fire flows, it has made a noticeable difference and provides a greater level of public safety within the city.

2. Hydrant Inspection and Repair Program

This program has improved the level of service for households and businesses in the community by helping to ensure fire hydrants are fully operational when needed to fight a fire. The initial implementation of the program required significant attention, but over time the program has become a routine part of ongoing annual maintenance efforts.

3. Pump Station and Storage Facility Predictive and Preventive Maintenance Programs

Preventive maintenance programs are designed to prevent premature failure of infrastructure and to extend the useful life of equipment. Predictive maintenance programs help identify a problem before a failure occurs. This reduces service interruptions and costly emergency repairs, which are ultimately paid by water customers. In addition to these programs, the threat of frozen drinking water lines and customer service lines during extreme winter conditions has been significantly reduced. Because of this planning and work, many susceptible water lines have been replaced and physically lowered deeper into the ground to significantly reduce the threat of freezing.

C. Meter Replacement Program

Shortly after assuming operations and maintenance responsibilities of the Pontiac drinking water and sewer systems, the WRC embarked on a meter replacement program for all water customers in the water and sewer systems. Properly functioning meters are necessary for accurate billing. This is essential for accurate revenue collections to operate and maintain the water and sewer systems. Improvements to the metering system included developing a meter dashboard and reporting system that will help identify and prioritize water customer leaks which can have a significant impact on customer water and sewer bills if they remain undetected.

D. Water Main and Lead Service Line Replacement Program

Over the next five years, the focus will be on replacement of water mains that are prone to failure and past their useful life. In addition, replacement of customer service lines confirmed to be made of lead or galvanized material (all referred to as lead service lines pursuant to Michigan's Revised Lead and Copper Rule) will be targeted. There are approximately 8,000 lead service lines in Pontiac that need to be replaced over the next 20 years. To optimize the replacement cost of both water main and service line infrastructure, WRC has developed a program to replace lead service lines as a part of its planned water main replacement projects. This coordination ensures that customer disruption is minimized, and that pavement repair or replacement is only done once – after all water mains and lead services lines on the street have been replaced. Further, lead service lines are being replaced as they are discovered during routine maintenance of the system. Coordination with road improvement projects is also a key strategy to optimize water system replacement cost.

Based on this approach, approximately \$35 million for water main and service line replacement is planned over the next five years. Over the next 20 years, it is anticipated that the total drinking water system improvement costs will exceed \$200 million. These improvements will significantly improve the overall level of service for Pontiac water customers. While there is a reserve program for revenue financed infrastructure replacement, state and federal grant funding is continuously pursued to mitigate the impact of these improvements on drinking water rates.

IV. Pontiac Sewer System Infrastructure

A. Description

Pontiac's sewer system not only serves the City of Pontiac, but it also serves the City of Sylvan Lake and small portions of Waterford Township and Bloomfield Township. Most of the sewer system consists of clay sewer lines that date back to 1865 and many others



Hydrant, City of Pontiac

are 75 years old or older. More than half of the sewer lines have exceeded their useful life and are in need of rehabilitation, repair, or replacement. There are more than 272 miles of sewer lines, 6,130 manholes, and 11 sanitary pump stations in the city's sewer system.

B. Maintenance Programs

Specific maintenance programs include: 1) cleaning and inspecting pipes; 2) grouting and repair program; 3) manhole inspection and repair program; and 4) pump station predictive and preventive maintenance programs. The significant value provided by these programs justifies the annual cost of approximately \$2.5 million.

1. Cleaning and Televising Program

This program involves televising pipes with closed-circuit cameras prior to removing unwanted solids, roots, and grease from the sewer system to prevent blockage. The video produced is reviewed to evaluate the condition of the sewer line, and identify leaks and enhancement opportunities. This information is used to prioritize sewer line repairs and replacement.

This program is critical for identifying potential failures before they occur. Most repairs and even replacements can be done without digging up the sewer line if the sewer line has not collapsed. If a sewer line collapses, the cost of repair or an emergency replacement is much higher than proactive replacement. The frequency of cleaning and televising is based on the age, condition, and criticality of the sewer line.

2. Grouting and Repair Program

Chemical grouting is a long-lasting, cost-effective solution that stops infiltration caused by leaks and failing joints. It also helps prevent structural damage from developing in leaking pipes that are otherwise sound. Grouting eliminates unwanted leaks from entering the system, mitigates root intrusion and ensures the soil is stable around the pipe. Pipe repairs are made to ensure the sewer is structurally sound.

This work is prioritized and executed based on condition assessments of every pipe in the sewer system. Pipes found to have major problems are moved to the top of the repair list to reduce the risk of a sewer blockage or failure.

3. Manhole Inspection and Repair Program

Manholes provide the only access to the sewer system. The manhole inspection and repair program ensures that there is safe entry to the sewer system and provides an opportunity to identify manhole leaks or areas needing repair.

4. Pump Station Predictive and Preventive Maintenance

Preventive maintenance programs are designed to prevent premature failure and to extend the useful life of equipment. These programs help identify a problem before failures occur. This reduces service interruptions and costly emergency repairs.

In addition to these programs, the WRC provides 24/7 response to any sewer backups on private property by dispatching a crew to identify the cause. In most cases, the cause is a sewer blockage on private property which is the property owner's responsibility to fix. However, if it is determined that a sewer system blockage in Pontiac's sewer system is causing the backup, the crew will remove the blockage and televise the interior of the pipe to determine corrective action.

C. Rehabilitation and Replacement Program

The sewer rehabilitation and replacement program is at the core of a five-year plan that is updated annually. Condition assessment data obtained by the cleaning and televising program, along with on-site inspection of sewer



pump stations, is used to prioritize projects. Each year, as new data becomes available, the prioritized project list is updated. This methodology helps ensure the greatest value for investment.

Based on this approach, approximately \$20 million for sewer system improvement projects is planned over the next five years and more than \$120 million over the next 20 years. These improvements are needed to prevent catastrophic failures of the sewer system, reduce the frequency of basement backups and minimize sanitary sewer overflows. While the WRC has established for Pontiac a reserve program for revenue-financed infrastructure replacement, state and federal funding is continuously pursued to mitigate the impact of these significant costs have on sewer rates.

V. Pontiac Demographics

A. Description and Data

An assessment of the demographics of Pontiac's population helps provide insight into challenges customers face in paying for water service. Approximately 37% of customers in the city have water and sewer bills that exceed the Environmental Protection Agency's (EPA) affordability guideline.

Approximately 32% of Pontiac residents live in poverty. This includes 28.5% of households that are below the Federal Poverty Level (FPL). The FPL is determined by the Federal Department of Health and Human Services (DHHS).

Figure A.1 demonstrates how the FPL varies by household size. Pontiac’s unemployment rate is approximately 7%.The percentage of households by each income range is presented in the graph below.

Figures A.2 through A.4 detail other demographics used to develop a better understanding of Pontiac to improve communications with these customers.

Persons in Household	Poverty Guideline
1	\$12,880
2	\$17,420
3	\$21,960
4	\$26,500
5	\$31,040
6	\$35,580
7	\$40,120
8	\$44,660

Table A.1 2021 Poverty Guidelines for the 48 Contiguous States and the District of Columbia.



Downtown District, City of Pontiac

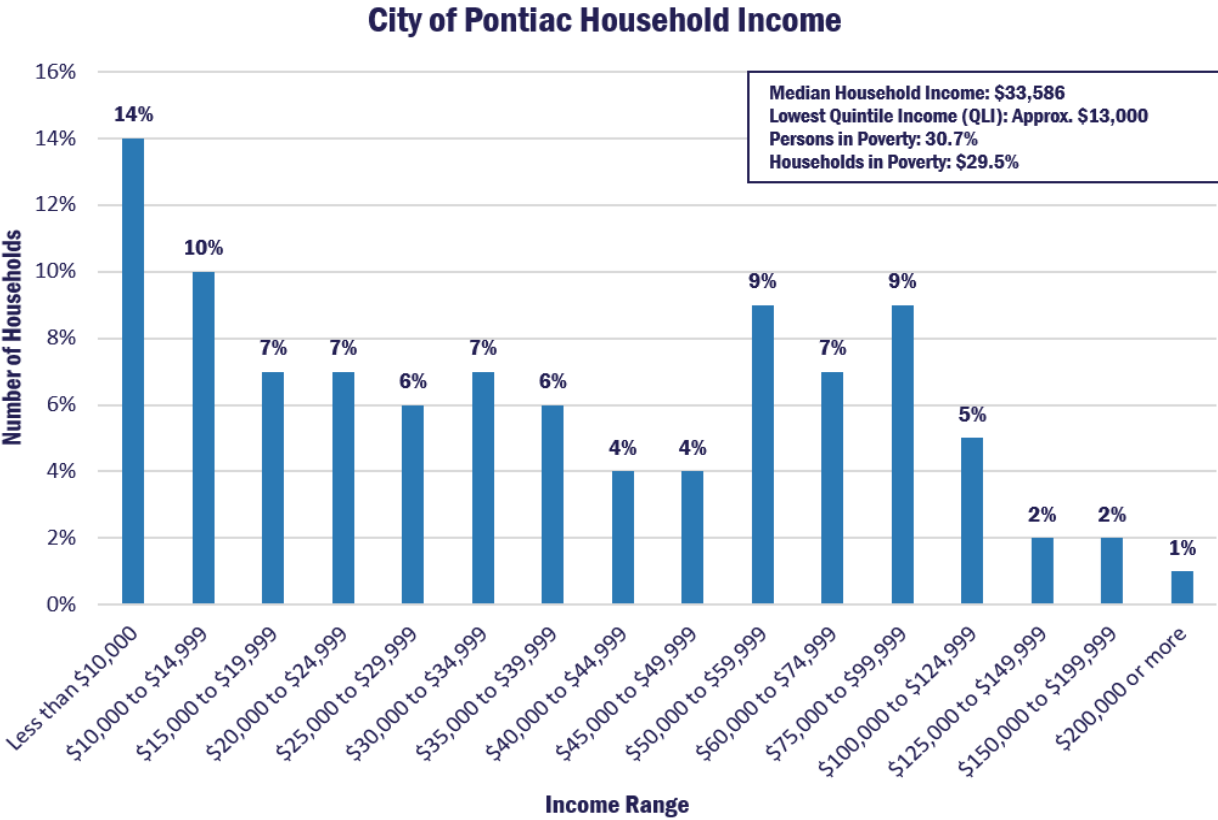


Figure A.1 Income Statistics and Distribution of Household Incomes in the City of Pontiac, MI. Source: 2015-2019 American Community Survey 5-Year Estimates

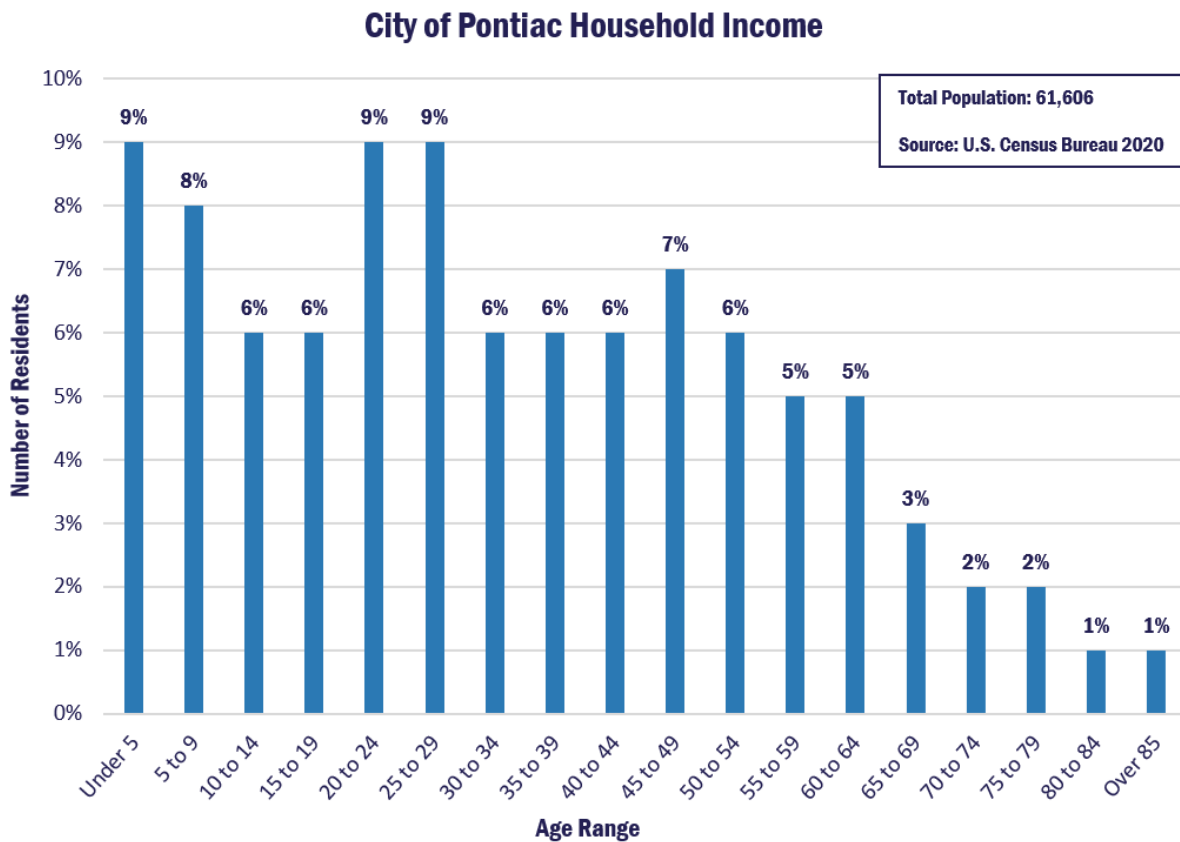


Figure A.2 Population and Distribution of Age in the City of Pontiac
 Source: 2015-2019 American Community Survey 5-Year Estimates

City of Pontiac Resident Race and Hispanic Origin

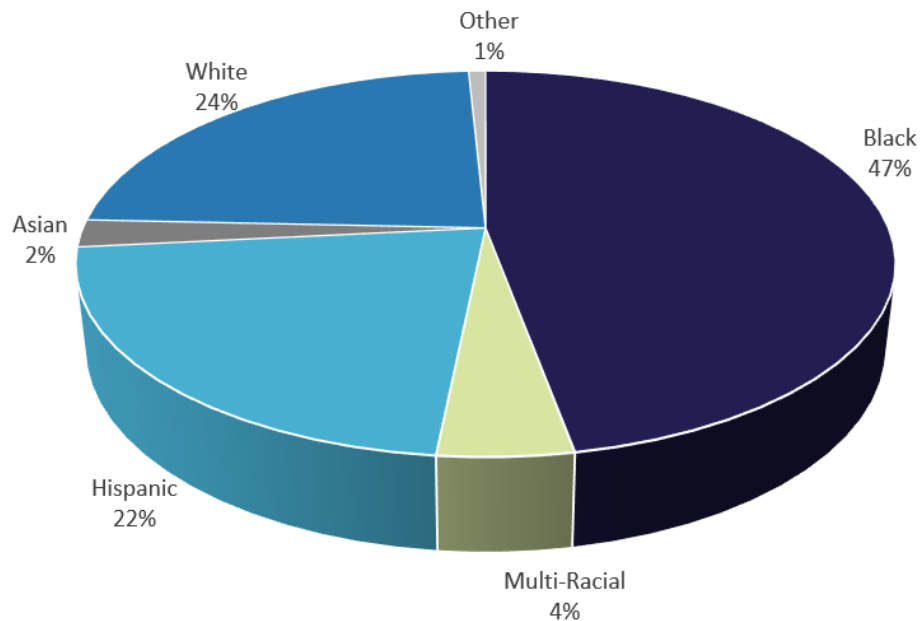


Figure A.3 Summary of Race and Hispanic Origin in the City of Pontiac
 Source: U.S. Census Bureau Decennial Census 2020

City of Pontiac Households

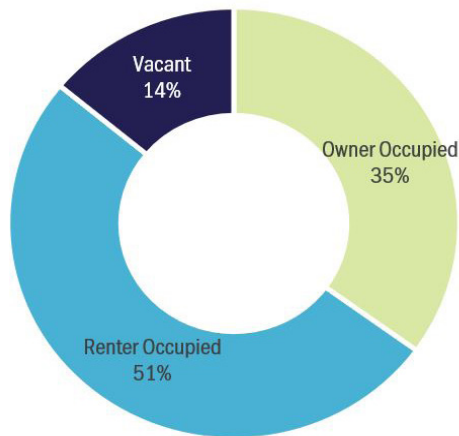


Figure A.4 Household Size and Composition in the City of Pontiac Source: 2015-2019 American Community Survey 5-Year Estimates Average Household Size: 2.5 Source: U.S. Census Bureau (2020)

B. Affordability Metrics

Various affordability metrics were evaluated to understand customers' affordability needs. The affordability metrics included median household income (MHI), average annual and monthly water bills, and various industry best practices to gauge the level of affordability. See [Appendix H, Rate Structures and Affordability Planning](#).

1. EPA Residential Indicator

The EPA uses a water customer's water and sewer bills, as a percentage of the MHI for a community, to measure the affordability of a water customer's bill. In practice, the EPA considers the affordability threshold to be 2% of the MHI for sewer charges and 2.5% for water charges. Table A.2 shows annual bills as a percentage of Pontiac's MHI. On average, Pontiac's annual water and sewer bills are within the EPA affordability guidance. However, this metric is not an indicator of affordability for individual water customers because the metric uses MHI for Pontiac's community at large and not the household income of each individual water customer.

Annual Water Bill As a Percentage of MHI	1%
Annual Sewer Bill As a Percentage of MHI	2%
Annual Water and Sewer Bill As a Percentage of MHI	3%

Table A.2 EPA Residential Indicator for Pontiac Average Annual Water and Sewer Bills

2. Lowest Quintile Residential Indicator

The national consulting firms of Stantec and Raftelis suggest using the Lowest Quintile Income Residential Indicator which lists water and sewer bill as a percentage

of the Lowest Quintile Income (LQI) for a community to measure affordability. In practice, the affordability threshold is 7% of the LQI for combined sewer and water charges.

Table A.3 shows Pontiac's annual bills as a percentage of LQI. Using this metric, Pontiac's average annual combined water and sewer bills are not within the affordability guidance.

Annual Water Bill As a Percentage of LQI	3%
Annual Sewer Bill As a Percentage of LQI	4%
Annual Water and Sewer Bill As a Percentage of LQI	7.4%

Table A.3 LQI Residential Indicator for Pontiac Average Annual Water and Sewer Bills

3. Hours at Minimum Wage

Another metric suggested by Stantec and Raftelis is hours at minimum wage. Under this metric, the monthly water bill should be less than, or equal to, eight hours of work at minimum wage. Table A.4 shows the average monthly bill for Pontiac residents in hours of work at minimum wage. Under this metric, the average monthly bill is more than eight hours of work at minimum wage.

Min Wage in MI 2022 (\$/hour)	\$9.87
Hours to Pay Avg Monthly Bill (hours)	8.11

Table A.4 Hours at Minimum Wage Metric for Pontiac Average Monthly Bill

4. Household Burden Assessment Matrix

Stantec and Raftelis also developed a household burden assessment matrix that uses the household burden indicator (HBI) and the poverty prevalence indicator (PPI) to determine the level of burden a community experiences with water affordability. The HBI is the water and sewer bill as a percentage of LQI. The PPI is the percentage of homes under 200% of the federal poverty level. As demonstrated in Table A.5, according to this matrix, the household burden in Pontiac is considered a "high burden."

Household Burden Indicator (HBI): Water Costs at Percentage of Income at LQI	7.4%
Poverty Prevalence Indicator (PPI): Percentage of Households below 200% FPL (Estimated based on household Avg size of 2.8)	>58%
Burden	"High Burden"

Table A.5 Household Burden Assessment in Pontiac

The various affordability metrics quantifiably confirms that Pontiac water customers have a high water burden and need a comprehensive affordability plan, including a well-developed customer assistance program.

VI. Rates and Affordability Strategies

A. Rates

The first step in establishing water and sewer rates is to develop an operating budget for both the water and sewer systems. Figures A.6 and A.7 show the fiscal year 2021 budget and fiscal year 2022 revenue requirement for Pontiac's water and sewer systems.

Pontiac Water: Fiscal Year Cash Based Requirements

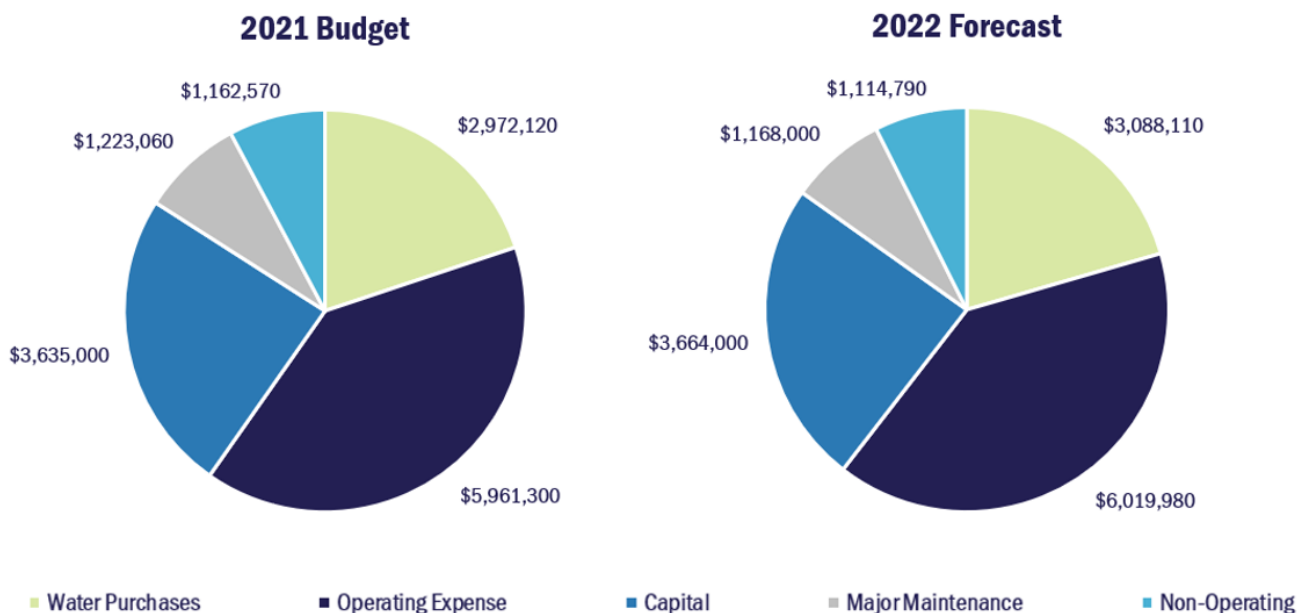


Figure A.6 City of Pontiac Water System Revenue Requirements

Pontiac Sewer: Fiscal Year Cash Based Requirements

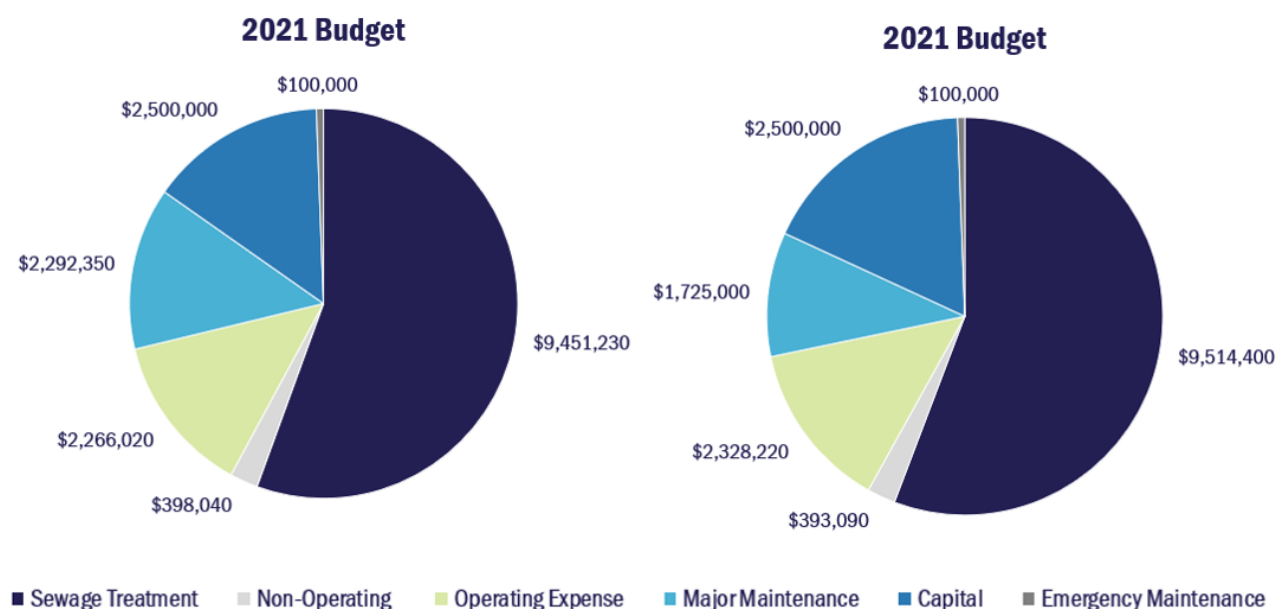


Figure A.7 City of Pontiac Sewer System Revenue Requirements

The next step is to establish water and sewer rates that generate sufficient revenue for both the water and sewer systems. This is done by using the rate methodology described below.

B. Rate Methodology

Pontiac water and sewer rates are comprised of two components: a fixed fee and a consumption charge. Approximately 50% of the total rate charged is a fixed fee, and the remaining amount, approximately 50%, is based on consumption. This methodology was in place when the WRC assumed responsibility for Pontiac's water and sewer systems. It's a common methodology for determining water and sewer rates.

The benefit of a fixed fee is that it provides rate stability by covering expenses that are not impacted by the amount of water used. It also represents "an ability to serve" charge. This means that water will be supplied through public water lines in a large enough amount to meet the demands of each water customer, as well as the needs for communitywide fire protection. The fixed fee is charged to all customers regardless of whether water is used or not.

The fixed fee for non-residential water customers is based on the size of the water meter serving the business (see Table A.2 for water system fixed fees). For example, a non-residential water customer (commercial) with a 1-inch meter is charged a fixed fee of \$49.50 per month, while a customer with a 2-inch meter is charged \$99 per month. Varying the fee based on meter size accounts for water customers with larger meters having the ability to use higher volumes of water throughout the day. Accordingly, there is a higher fixed fee or "ability to serve" charge.

The consumption charge is based on the amount of water used, as indicated on the water meter, and covers expenses related to water usage. The current water service consumption charge is \$32.15 per 1,000 cubic feet (MCF) or less than a penny per gallon. The current sewer system consumption charge is \$38.40 per MCF.

For calendar year 2021, the average single-family residential water customer in Pontiac used about 0.6 MCF per month, or about 150 gallons per day. The average single-family residential water and sewer bill was about \$80 per month. Residential water customers comprise about 90% of the customer base.

C. Utility Affordability Strategies

Affordability strategies employed for Pontiac's water and sewer utility systems include: 1) providing operational value and efficiency; 2) regional collaboration; 3) obtaining state and federal funding for infrastructure improvements; and 4) maintaining rate stability.

1. Providing Operational Value and Efficiency

The water and sewer system maintenance and replacement programs contribute to operational value and efficiency.

2. Regional Collaboration

Regional collaboration examples include the North Oakland County Water Authority (NOCWA) and the Clinton River Water Resources Recovery Facility Drainage District.

NOCWA was formed in the summer of 2014. Four adjacent communities, including Pontiac, collaborated to reduce the amount of water purchased from the Great Lakes Water Authority (GLWA) during peak hours of the day. This was accomplished by developing and implementing an operating plan to fully utilize existing storage facilities. The result of this collaboration is a reduced cost of the water representing an annual savings of \$2 million for the Pontiac water system. These savings have helped dramatically offset the rate impact of the water main and lead service line replacement program.

The Clinton River Water Resource Recovery Facility Drainage District was formed through a collaboration of Pontiac with 12 surrounding communities, to transform the former Pontiac Wastewater Treatment Plant from a local facility to a regional

Pontiac Water System Fixed Fees		
Meter Size	Meter Equivalent Unit	Fixed Charge
5/8" to 3/4", 1" Residential	1.0	\$19.80
1" Commercial	2.5	\$49.50
1 1/2"	5.0	\$99.00
2"	8.0	\$158.40
3"	16.0	\$316.80
4"	25.0	\$495.00
6"	50.0	\$990.00
8"	80.0	\$1,584.00
10"	115.0	\$2,277.00
12"	170.0	\$3,366.00

Table A.2 Pontiac Water System Fixed Fees

facility. Prior to the formation of this drainage district, the facility primarily received sewage from the cities of Pontiac and Sylvan Lake. Today, it also accepts a certain percentage of flow from 11 additional municipalities which share the cost for operations, maintenance, and capital replacement. The cost split is approximately 45% to surrounding communities and 55% to Pontiac. This provided an ongoing annual savings in sewage disposal cost for the city. These savings have helped dramatically offset the rate impact of the sewer system rehabilitation and replacement program.

3. Obtaining State and Federal Funding for Infrastructure Improvements

As detailed in Table A.3, state and federal funding has been secured for water system infrastructure improvements. While \$270 million in funding was released by the State of Michigan Department of Environment, Great Lakes, and Energy (EGLE) for statewide water system improvement projects, anticipated funding for wastewater protection has not yet been released.

4. Maintaining Rate Stability

Maintaining rate stability for Pontiac water and sewer customers is one of the biggest challenges faced by the WRC. This is particularly true when considering the growing need to replace aging infrastructure. Nearly 25% of Pontiac water and sewer rates are budgeted to replace aging infrastructure. The affordability strategies covered in Section VI (C) are designed to contribute to rate stability. In the development of an affordability plan for Pontiac, the need for rate stability was a top priority. Further, efforts were made to avoid recommendations that would have contributed to significant rate increases.

VII. Billing Services

A. General Overview

Water bills are provided to Pontiac customers on a monthly basis as opposed to the quarterly bills received by most Oakland County municipalities. This allows Pontiac water customers to monitor and manage their bills on a more frequent basis. The bills include the date the customer's meter was read, the breakout of water and sewer charges and whether the meter was read or is an estimate. Other important messaging is included as well. Since the meter replacement program began in Pontiac, the number of "actual" reads has been dramatically increased. This allows water customers to quickly recognize abnormal usage patterns that may be due to leaks. Bill inserts and messaging are also included with monthly bills as another communication tool. WRC's Billing Services office administers past due bill collection, negotiates payment arrangements, and provides information about assistance programs.

During the COVID-19 Pandemic, WRC's physical offices were temporarily closed to the public. Prior to this closure, many Pontiac customers paid with cash at the WRC Billing Services office. To assist water customers who traditionally paid by cash, water customers were given instructions on how their bill could be paid with cash at local retailers, including Family Dollar, CVS, and 7-Eleven. A barcode was added to water bills for retailers to scan. The payment data from participating retailers was provided almost immediately and water customers were given a receipt of the transaction. This payment option remains available to Pontiac water customers. Cash payments are no longer accepted at the WRC Billing Services office.

State and Federal Funding Summary – Pontiac Water System (February 2022)					
Funding Source	Description	Total Cost	Expected Funding	Anticipated Local Match	Status
EGLE 100% Grant	Similar to SAW grants. Verify public/private service line materials at stop box and interior. Asset management work.	\$456,600	\$456,600	\$0	Funding secured. Need to bid out verifications.
EGLE 100% Principal Forgiveness Loan	Disadvantaged community lead service line replacement program – booker funds.	\$5,000,000	\$5,000,000	\$0	Funding secured. Replacements bid. Need to finalize county approvals for loan.
Federal Infrastructure Bill Earmarked by Con. Lawrence	Watermain and service line replacement	\$1,000,000	\$800,000	\$200,000	Application submitted. Hopeful for funding.
EGLE 100% Grant	Water Affordability Plan	\$444,600	\$444,600	\$0	Underway

Table A.3 State and Federal Funding Summary – Pontiac Water System

City of Pontiac – Shutoff and Tax Certification Data							
Year	Customers	Shutoff Notices	Actual Shut Offs	Payment Arrangements	Tax Certification Notices	Actual Tax Certifications	Amount Certified
2019	19,377	3,393	304	1,602	719	545	\$665,000
2020	19,392	0	0	0	2,575	1,857	\$1,780,000

Table A.4 *City of Pontiac - Shutoff and Tax Certification Data (includes all customers)*

B. Past Due Bill Collection

In the event of non-payment, customers faced the possibility of a service shutoff, and/or having the past due amount added to their property tax bill. In March of 2020, Michigan’s governor signed an Executive Order implementing a moratorium on water shutoffs due to customer non-payment. Although the Executive Order expired in June 2021, the WRC has continued the moratorium.

Prior to the shutoff moratorium, WRC’s non-payment collection process began during the spring and extended into the summer. The first step was to advise water customers with a past due balance of more than \$200 that was more than 60 days past due, that they were subject to their water service being disconnected. This shutoff notice provided water customers with approximately 30-days to take action to avoid a shutoff. Information about available customer assistance programs was included with the shutoff notice. Customers were also advised that partial or delayed payment arrangements may be available to avoid a shutoff.

C. Tax Certification

Tax certification involves adding any past due water and sewer charges to the property tax bill. Property owners are responsible for payment of their property tax bills. Tax certifications take place in the late summer or early fall, following the past due collection process described above. Water customers who have entered payment arrangements are not included in the “pool” of water customer accounts subject tax certification. Customers with past due amounts of \$300 or more that are at least 180 days delinquent, are subject to tax certification.

Like the past due bill collection process, property owners are provided 30 days written notice to take action to avoid past due water and sewer charges being subject to the tax certification process. Tax certification can significantly increase the amount ultimately paid for the water and sewer services provided due to late fees, penalties, and even interest, that may be charged by the Oakland County Treasurer. The cost for water and sewer services can double if past due amount payments are carried all the way through the entire tax certification process.

Since the March 2020 moratorium on water shutoffs, there has been an increase in the number of water customers subject to tax certifications in 2020 and 2021. The amounts owed has increased as well. When compared to 2019, the number of accounts certified to taxes in 2020 was more than three and a half times higher, and the dollar amount was more than two and a half times higher (see Table A.4).

D. Landlord-Tenant Relationships

Approximately 50% of the residential households in the City of Pontiac are rental properties. Some landlords include the water and sewer bill in their rental fee while others have the bill paid by the tenant. In the later scenario, when a tenant moves out, any past due balance remains the responsibility of the landlord. Some landlords may pay the past due amount, before a new tenant moves in. However, if this does not occur, the new tenant will see the past due amount on their first monthly bill.

Another common landlord-tenant issue relates to household leaks, particularly in older or neglected rental properties. Internal household plumbing leaks can cause high water bills, especially if the leaks remain undetected. However, even when leaks are identified, a landlord and tenant may disagree regarding repairing the plumbing leaks. If, under the terms of the lease, a tenant is responsible for payment of water and sewer bills, the additional costs related to a plumbing leak can cause water to become unaffordable.

Additionally, tax certifications can be problematic in landlord-tenant relationships. During the tax certification process, notice that a past due balance will be certified to taxes is sent to the “Current Resident” of the property. As detailed above, the tax certification notice provides 30 days to take action to prevent certification of the past due amount. However, if a tenant is responsible for paying the water and sewer bills and they fail to take any action, the past due amount could be certified to the property taxes. The property owner may only become aware of the past due amount when it appears on the property tax bill.

VIII. Water Residential Assistance Program and Other Customer Assistance Programs (CAPs)

A. WRAP Background

WRAP is a regional, multi-county assistance program that provides financial assistance to qualifying low-income households in the Great Lakes Water Authority (GLWA) service area. It was established in 2016 as one of the provisions during the formation of the GLWA (formerly, Detroit Water and Sewerage Department). WRAP benefits include direct bill payment assistance, arrearage assistance, and conservation assistance and minor plumbing repairs. In addition, households enrolled in WRAP cannot have their water shut off.

Originally, WRAP was only available for water and sewer customers who resided in any participating municipality that either directly or indirectly purchased drinking water or received sewage disposal services from the GLWA. For participating Oakland County municipalities, the program was administered through Oakland Livingston Human Service Agency (OLHSA). Since Pontiac purchases drinking water from GLWA, eligible households could apply for WRAP through OLHSA. In June 2020, GLWA evaluated WRAP for effectiveness and to identify opportunities for improvement. Two years later, in June 2022, the GLWA Board of Directors approved many significant changes to WRAP. Some of the program modifications began during this grant work and included a temporary transfer of the administration of WRAP in Oakland County from OLHSA to another community action agency, Wayne Metro. Beginning July 1, 2022, until the end of the calendar year, Wayne Metro will administer WRAP in Oakland County until United Way takes over in 2023.

Another significant change underway to WRAP is a shift in direct bill payment assistance from a flat \$25 payment to a sliding scale of assistance that considers water usage and the residential bill by community and household income. For GLWA service areas outside of the City of Detroit, this new program is named the WRAP Income-Based Plan (WRAP IBP). The WRAP IBP is funded by 0.5% of GLWA revenues. As of the time of this report, the new bill payment assistance model was approved but not yet implemented.

B. Key Components of WRAP

1. Customer Eligibility

- Reside in GLWA service territory
- Demonstrate household income at or below 200% of the FPL
- Provide proof of income (or lack thereof)
- Establish responsibility for water and/or sewer bill
- Live in a home that is owned or rented



Great Lakes Water Authority, WRAP Program

2. Arrearage Assistance

- 2-year program with a credit of up to \$1,200 per year for combined water and sewer bill

3. Bill Payment Assistance/WRAP IBP

- 2-year program
- Currently, a credit of \$25 per month for combined water and sewer bill but transitioning to sliding scale of assistance based on water usage and residential bill by community and household income
- Must maintain on-time bill payment
- WRAPfinity allows seniors and individuals with disabilities to remain on the program after two years

4. Conservation/Household Leak and Plumbing Repairs

- Program includes plumbing inspection, water conservation education, repairs to eliminate leaks or to address health concerns
- Households eligible for up to \$2,000 for repairs

C. Other Customer Assistance Programs

In addition to WRAP, several other Customer Assistance Programs (CAPs) are available for Pontiac households. These are identified in Table A.5 on the next page.

D. Affordability Gaps: Existing Assistance Programs

While WRAP and the other existing CAPs will be utilized as part of the affordability plan developed for Pontiac, the existing programs have gaps that must be addressed to develop a more comprehensive and sustainable affordability plan. The primary gaps that have been identified are: 1) customer outreach; 2) consideration for household income; and 3) program duration.

1. Customer Outreach

Customer outreach is not a direct reflection of CAPs, but there is a gap that needs to be addressed with existing and future CAPs. Table A.6 on the next page illustrates that even during the highest enrollment period for WRAP, in 2017, only 485 customers were enrolled. That is less than 5% of those who met WRAP eligibility requirements.

Program Name	Administrator	Bill Assistance Arrearage Relief Service Restoration	Maximum Program Support (\$)	Income Eligibility	Primary Eligibility Requirements	Documentation Required
Water Residential Assistance Program (WRAP)	Oakland Livingston Human Service Agency (OLHSA)	All	\$1,500 per year as: • \$25 monthly bill assistance • Up to \$1,200 for arrearage payment	Household income at or below 200% of Federal Poverty Level	- Stay current on monthly bill payment - Disabled and seniors may qualify for WRAPFinity, allowing participation beyond two years	Provide proof of: • Residency • Income • Responsibility for water on lease
Low Income Household Water Assistance Program (LIHWAP)	Michigan Department of Health and Human Services (MDHHS) through OLHSA	- Arrearage Relief - Service Restoration	\$1,000 per fiscal year	150% Federal Poverty Level	- Households must not exceed countable assets of \$15,000 - Communities must sign MOU for resident participation	Complete MI-Bridges application and requirements
Covid Emergency Rental Assistance (CERA)	Michigan State Housing Development Authority (MSHDA) through OLHSA, Community Housing Network, and Lighthouse	All + Future bill assistance up to \$1,000 based on AMI qualifications	\$2,500	- Renter households under 80% of Area Median Income (AMI) - Individual(s) in household qualified for unemployment benefits or experienced reduction in household income, incurred significant costs, or experienced financial hardship due to coronavirus	Individual(s) in household demonstrate risk of homelessness or housing instability by being past due on utilities or rent	<u>Tenants must provide:</u> - Past-due documentation for unpaid rent after 3/13/20 - Copy of State ID Or Passport - Proof of income or other assistance - Copies of past due utility - Document outlining COVID Hardship <u>Landlords must provide:</u> - Completed CERA Landlord Application - Copy of the lease - Ledger showing payment history - W-9
State Emergency Relief (SER)	MDHHS via numerous partners	- Arrearage Relief - Service Restoration	Varies	Local MDHHS partners make eligibility determinations based on the number of people in household, income, assets, type of service requested and other factors.	Emergency must: - Threaten health or safety - Not have been caused by persons seeking assistance - Be resolved by the payment - Not likely to happen again	- Proof of assets - Birth Certificates - Social Security cards for household members - Shut off notice on a water bill for the household
Enbridge Fueling Futures Water Assistance Program	The Heat and Warmth Fund (THAW)	- Bill Assistance - Arrearage Relief	\$1,200	Income is at or below 250% of the Federal Poverty Level	- Must have a past due balance - Account is in the applicant's name - Water service must be on	- Driver's license or state-issued ID - Social Security card for all household members - Proof of household income for the past 60 days or Zero Income Affidavit - Copy of most recent utility bill
Catholic Community Response Team	Pontiac Vicariate of the Detroit Archdiocese	Avoid shut-off	Case by case	Case by case	Pontiac residents only	Application with various requirements
Let's Keep The Lights On	Here to Help Foundation	Bill Assistance	\$500	Monthly income must be greater than monthly expenses	- Must not be a temporary solution - Circumstances of emergency must be beyond individual's control - ID Card with Oakland County address - Must have a source of income - If bill exceeds \$500, must have ability to pay remaining balance - Must be current on all other household expenses and bills	Application with various requirements
Michigan Homeowner Assistance Fund (MIHAF)	Michigan State Housing Development Authority	- Arrearage Relief - Service Restoration	\$500	Household income under 150% of Area Median Income (AMI)	- Must be primary residence - Must have and explain a financial hardship directly related to COVID-19 on or after January 21, 2020	Utility must sign up to participate

Table A.5 Oakland County - Water Assistance Program Summary

Pontiac Water Residential Assistance Program Enrollment						
Calendar Year	2016	2017	2018	2019	2022	2021
Households Enrolled	354	485	369	236	172	153

Table A.6 City of Pontiac - WRAP Enrollment

2. Consideration for Household Income

CAPs are generally geared toward reducing arrearages for low-income households and do not adequately provide for long-term, ongoing rate assistance that is necessary to keep households that are significantly below the federal poverty level from continuously accumulating arrearages. Consideration of household income is necessary to determine the appropriate level of ongoing rate assistance to stop the cycle of having to accumulate large arrearage amounts before receiving assistance. It's more difficult for a four-person household with an annual income of \$15,000 to pay their monthly water and sewer bill than it is for a four-person household with an annual income of \$50,000.

GLWA recognized this issue, specifically that the \$25 monthly credit provided under WRAP may be meaningful to some households, but not to others. Flat rate assistance provided regardless of income is not effective because those needing assistance the most get the same amount of assistance as those needing it the least. This is an affordability gap that the proposed affordability plan attempts to address through an income-based rate discount affordability program.

3. Program Duration

Many of the programs are not sustainable because there is no guaranteed funding mechanism. Also, although WRAP has a reliable funding source, it only has a 2-year duration for most participants in the program. This may be helpful for households above the federal poverty level, but it does not provide a sustainable program for households below the poverty level.



The Water Residential Assistance Program is a two-year program that provides funding to eligible, low-income homeowners to assist with water bills, water conservation, and self-sufficiency initiatives.



IX. Need for Comprehensive Affordability Plan

Utility Perspective:

Tim Prince, WRC Chief Engineer



Since the WRC assumed responsibility for Pontiac's water and sewer system, its primary focus has been on how to provide operational efficiency and value, while striving to improve the level of service for water customers. Issues related to affordability did not receive much attention, likely because billing collection and tax certification processes resulted in nearly full water system cost recovery and assistance programs, like WRAP, were available.

However, the COVID-19 pandemic prompted a closer look at social implications and health issues, related to water shutoffs and tax certifications. To address those challenges, the Water Resources Commissioner's office was awarded the Affordability Planning Grant by EGLE enabling it to develop a comprehensive and sustainable affordability plan for the City of Pontiac.

Community Perspective:

Khalfani Stephens, Pontiac Deputy Mayor



A water affordability plan is needed for all water customers and not just the City of Pontiac because water is a basic human right. Without having good access to clean water, all of us are in danger.

Being a part of the WRC Affordability Coalition has been a great opportunity. It's been great to speak with a number of people and figure out how we can bring safe, affordable water to all of our constituents because water is fundamental to our well being. I'm looking forward to seeing how this plan positively impacts all our residents.

X. Pontiac Water Affordability Plan Components

A. Short-Term Customer Assistance Programs

The WRC's existing customer assistance program is WRAP. Another existing program is the Low-Income Household Water Assistance Program (LIHWAP). The WRC has developed an income-based assistance program that would provide a fixed monthly bill for eligible customers. However, before the WRC can offer this program, a funding source must be secured.

B. Long-Term Statewide Assistance Program

To demonstrate the need for long-term water assistance programs, existing short-term customer assistance programs must be fully utilized and depleted. Short-term customer assistance programs, like WRAP and LIHWAP, are necessary steppingstones to develop permanent and sustainable affordability programs.

Based on the success of other low-income assistance programs, the WRC has developed a proposed a legislative framework, modeled after laws forming the Michigan Energy Assistance Program, that would create a permanent statewide low-income water assistance program with fixed monthly household bills based on income level. Assistance to reduce past due amounts would also be included.

C. Hardship Assistance Program

The WRC is creating a hardship assistance program to address unexpected, short-term needs due to hardships, like loss of job, death of a household member, or significant medical expenses. The hardship assistance program may be funded through private donations, Oakland County general funds, temporary federal funds or a program in which customers have their water bill "rounded up" to the next whole dollar amount. The United Way has been identified as a potential partner to administer the program.



Oakland Towne Center, City of Pontiac

D. Workforce Development Program

WRC's workforce development program maximizes economic benefits to the community by providing education, training, and opportunities for careers in the areas of water sustainability, preservation, and treatment.

E. People-First Policies

In addition to adopting a Water Equity Statement, the WRC identified six internal billing policies that are being reviewed and revised as needed to promote principles of water equity. The billing policies under review include:

- Service disconnection for nonpayment¹
- Landlord-requested service disconnection
- Tax certifications where the unpaid amount is added to the tax roll
- Payment arrangements²
- Late-Fee penalties and interest
- Billing disputes—water loss

F. Communications and Public Outreach Strategic Plan

A strategic communications and outreach plan is being developed through collaboration with community partners and stakeholders, to identify and implement best practices to improve customer communications, build community trust, increase enrollment in customer assistance programs, and grow participation in WRC's workforce development program.

G. Capital Replacement and Maintenance Programs

Existing capital replacement and maintenance programs focus on long-term strategic improvements to water and sewer system infrastructure. We prioritize and plan projects that will provide customers with the most value and look for the best ways to pay for these projects, including grants or low-interest loans.

These existing programs will be evaluated on an ongoing basis. New federal and state funding opportunities through the American Rescue Plan Act and Infrastructure and Investment Jobs Act will be aggressively pursued.

¹ Shutoffs in Pontiac and Royal Oak Township will resume in 2023. The new non-payment service disconnection policy will be revised to encourage customer payment through clear, effective, and compassionate communication strategies. Water service shutoffs will be utilized as a last resort, with many established intervention points and payment paths for customers.

² The WRC will be modifying its current payment arrangement policy to offer options that provide extended, flexible, and customized payment plans designed to meet a customer's individual affordability needs while providing greater customer convenience.

Appendix B: Charter Township of Royal Oak Background and Affordability Plan

I. Water Resources Commissioner Background

The office of the Oakland County Water Resources Commissioner (WRC) is a countywide elected office currently held by Jim Nash. The Oakland County Board of Commissioners, by resolution, delegated various responsibilities and authority to the Water Resources Commissioner including management of stormwater, drinking water, and wastewater services for residents throughout Oakland County. WRC performs water operations and maintenance services to more than 15 local municipalities including the Charter township of Royal Oak. Services provided to the township includes operations, maintenance, infrastructure improvement projects, billing and customer service for both the township's drinking water and wastewater systems.

Countywide stormwater services include operations and maintenance of approximately 650 miles of storm drains; 450 miles are enclosed pipes, and the balance are open channels. In addition, WRC provides treatment of combined stormwater and wastewater at five retention treatment facilities. Drinking water services include operations and maintenance of numerous municipal water system that serve more than 270,000 people. There are more than 1,300 miles of water main and six water treatment facilities. Wastewater services include operations and maintenance of 17 municipal sewer systems, serving 300,000 people and five regional sewer systems, serving 1.5 million people. Responsibilities include maintenance of more than 1,610 miles of sewer lines, 191 sewage pump stations, and three wastewater treatment plants often referred to as water resource recovery facilities.

WRC is staffed by more than 330 full-time employees who not only deal with stormwater, drinking water and wastewater operations, but also construction, asset management, water and sewer rates, and customer billing. Many have developed key relationships with industry leaders and organizations, both regionally and across the country. This keeps them abreast of changes and challenges in the industry and provides access to information, technical assistance, and pending water policy decisions. These relationships have also positioned the WRC as a national leader, creating opportunities to develop and share innovative programming. The technical expertise, economies of scale, and overall talent provided by the WRC represent significant benefits for township water customers and to residents in the other municipalities they serve. In addition, various Oakland County departments

provide support services for finance and accounting, information technology, human resources and health and human services and vehicle and equipment maintenance.

II. History of WRC Water and Sewer Service for the Charter Township of Royal Oak

The Charter Township of Royal Oak is in the southeastern corner of Oakland County, just north of the City of Detroit. The total township area comprises approximately 0.55 square miles (352 acres) within Oakland County. The township was originally a 36-mile section of Oakland County, but gradually diminished in size between 1921 and 1950 as portions broke off and became incorporated cities. There are 2,374 people living in the township according to the 2020 Census.

On September 18, 1990, an Oakland County Circuit Court order established a services agreement transferring control of the operations and maintenance of the township's water and sewer systems from the township to Oakland County. The transfer of control was intended to ensure payment of outstanding balances owed by the township to Oakland County and the City of Detroit. On May 12, 2017, following payment in satisfaction of the outstanding debts, the order was terminated, and control of the water and sewer systems was returned to the township. On July 13, 2017, the township established new water and sewer operations and maintenance agreements with Oakland County.

While the WRC has established maintenance and repair programs for the township's water and sewer systems, little investment in the systems for infrastructure replacement has occurred due to funding and affordability issues.

III. Charter Township of Royal Oak Drinking Water System Infrastructure

A. Description

The township's drinking water system includes approximately 11.7 miles of water main ranging in size from 6-inches to 12-inches, 103 hydrants, and 115 valves used to open and close pipes as a flow control measure during routine or emergency repairs. The majority of the system was constructed in the mid-1940s which means that today more than half of the water lines are at or past their useful life. This is confirmed by an increasing number of water main breaks. Of the system's 103 fire hydrants, five are past their useful life. The same is true for five valves. In addition, all customer service lines comprised of lead material (lead service lines) need to be replaced within the next 15 years.

B. Maintenance Programs

Specific maintenance programs for the township's drinking water system include: 1) valve inspection and repair; and 2) hydrant inspection and repair. About \$26,000, or 5%, of the township's water system annual budget goes toward these important programs.

1. Valve Inspection and Repair

This program provides periodic inspection of water system valves and subsequent valve repairs or replacement, if needed. The program is critical to ensure water main breaks can be quickly isolated and repaired.

2. Hydrant Inspection and Repair

This program provides periodic inspection of water system fire hydrants and subsequent hydrant repairs or replacement, if needed. The program helps ensure fire hydrants are fully operational when needed to fight a fire.

C. Water Main and Lead Service Line Replacement Program

Four sections of water main along four streets have been identified as having a high frequency of water main breaks. These locations have been targeted for replacement over the next five years. Replacement will eliminate the cost of emergency repairs, eliminate disruption of water service to customers, and provide better overall water quality. Also, several locations for new water mains have been identified to improve water quality and fire protection, which is defined as the volume of water required to fight a fire. The total estimated cost for those improvements is \$3.7 million. There are approximately 770 customer service lines in the township; nine confirmed as lead service lines, 68 confirmed as non-lead service lines, and 693 service lines with unknown material. All lead service lines in the township must be identified and will be subsequently replaced within the next 15 years.



Hydrant, Charter Township of Royal Oak

Over the next 20 years, it is anticipated that the total water main and lead service line improvement costs will exceed \$12 million. These improvements will significantly improve the overall level of service for the township's drinking water system customers.

The WRC staff has been working with the township to secure state and federal funding for these infrastructure improvements. The township has applied for more than \$6 million in state and federal water system infrastructure funding. A total of \$3.7 million has already been secured and the balance of approximately \$2.3 million is pending. This funding will allow water rates to remain stable, while critical water system improvements are made, and lead service lines are replaced on an accelerated schedule.

IV. Charter Township of Royal Oak Sewer System Infrastructure

A. Description

The township's sewer system was originally constructed in the 1940s as a combined stormwater and wastewater sewer system. The system includes approximately 15 miles of sanitary and combined sewers ranging between 6-inch and 48-inch pipes, and 333 sanitary and combined manholes. The sewer system consists mostly of clay sewers which are 75 years old or older. More than half are at or past their useful life and in need of rehabilitation, repair, or replacement.



Community Outreach, Royal Oak Township

The township's combined stormwater and wastewater sewers drain to localized interceptor sewers. The interceptor sewers collect and transport sanitary sewage, and, when it rains, also collect and transport stormwater. During dry weather, all flow is ultimately discharged to the Great Lakes Water Authority (GLWA) collection system where it is treated at GLWA's Water Resource Recovery Facility and then discharged to the Detroit River. Due to the limited capacity of the GLWA collection system, when it rains, some of the flow is diverted to the George W. Kuhn Retention Treatment Facility in Madison Heights. This facility, operated by WRC, provides state-mandated treatment of the combined sewage before it is discharged to the Red Run Drain. The treatment provides environmental protection for the Clinton River and Lake St Clair, which are both downstream from the facility. Approximately \$600,000, or 68%, of the annual budget for the township's sewer system goes toward conveyance and treatment at GLWA's Water Resource Recovery Facility and George W. Kuhn Retention Treatment Facility.

B. Maintenance Programs

Specific maintenance programs include: 1) cleaning and televising program; 2) grouting and repair program; and 3) manhole inspection and repair program. The significant value provided by these programs, as detailed below, justifies the annual cost of approximately \$75,000 which is approximately 12% of the annual budget.

1. Cleaning and Televising Program

This program involves televising pipes with closed-circuit cameras prior to removing unwanted solids, roots, and grease from the sewer system to prevent blockage. The video produced is reviewed to evaluate the condition of the sewer line, and identify leaks and other enhancement opportunities. This information is used to prioritize sewer line repairs and replacement.

This program is critical for identifying potential failures before they occur. Most repairs and even replacements can be done without digging up the sewer line if the

sewer line has not collapsed. If a sewer line collapses, the cost of repair or an emergency replacement is much higher than proactive replacement. The frequency of cleaning and televising is based on the age, condition, and criticality of the sewer line.

2. Grouting and Repair Program

Chemical grouting is a long-lasting, cost-effective solution that stops infiltration caused by leaks and failing joints. It also helps prevent structural damage from developing in leaking pipes that are otherwise sound. Grouting eliminates unwanted leaks from entering the system, mitigates root intrusion and ensures the soil is stable around the pipe. Pipe repairs are made to ensure the sewer is structurally sound. This work is prioritized and executed based on condition assessments of every pipe in the sewer system. Pipes found to have major problems are moved to the top of the repair list to reduce the risk of a sewer blockage or failure.

3. Manhole Inspection and Repair Program

Manholes provide the only access to the sewer system. The manhole inspection and repair program ensures that there is safe entry to the sewer system and provides an opportunity to identify manhole leaks or areas needing repair.

In addition to these programs, the WRC provides 24/7 response to any sewer backups on private property by dispatching a crew to identify the cause. In most cases, the cause is a sewer blockage on private property which is the property owner's responsibility to fix. However, if it is determined that a sewer system blockage in the township's sewer system is causing the backup, the crew will remove the blockage and televise the interior of the pipe to determine corrective action.

C. Rehabilitation and Replacement Program

The sewer rehabilitation and replacement program is a five-year plan that is updated annually. Condition assessment data obtained by the cleaning and televising program is used to prioritize projects.



Residential Homes, Royal Oak Township

Each year, as new data becomes available, the prioritized project list is updated. This methodology helps ensure the township receives the greatest value for the investment. Based on this approach, approximately \$8 million is needed for sewer system improvement projects over the next 20 years. These improvements are needed to prevent catastrophic failures of the sewer system, reduce basement backups and minimize sanitary sewer overflows.

It is difficult to significantly fund this program through rates without unduly creating a significant financial burden for the ratepayers. Between December 2017 and December of 2020, \$500,000 worth of improvements were funded by grants from the State of Michigan Department of Environment, Great Lakes, and Energy (EGLE). In 2020, \$1 million of funding was secured through a Clean Water State Revolving Fund loan with principal forgiveness.

The availability of state and federal funding is critical to sustaining this program. While significant state grants for future water system improvements have been secured by the township, anticipated grants for sewer system improvements are not yet available.

V. Charter Township of Royal Oak Demographics
A. Description and Data

An assessment of the demographics of the township's population helps provide insight into challenges water customers face in paying for water services. Approximately 57% of water customers in the township have a water and sewer bill above the Environmental Protection Agency's (EPA) affordability guideline.

Approximately 23% of township residents live in poverty. This includes 28% of the households that are below the Federal Poverty Level (FPL). The FPL is determined by the Federal Department of Health and Human Services (DHHS). Table B.1 demonstrates how the FPL varies by household size. The unemployment percentage of the township's population is approximately 5%.

The percentage of households by each income range is presented in Figure B.1.

Figures B.2 through B.4 detail other demographics used to develop a better understanding of township customers and how to improve communications with these customers.

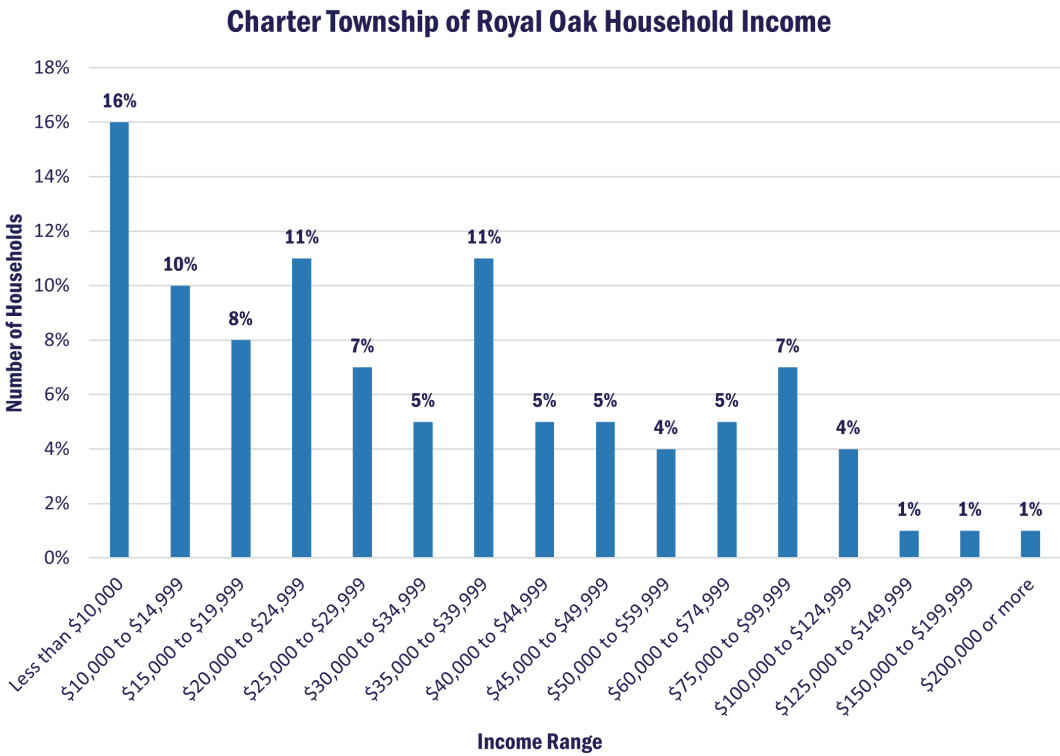


Figure B.1 Income Statistics and Distribution of Household Incomes in the Charter Township of Royal Oak, MI

Persons in Household	Poverty Guideline
1	\$12,880
2	\$17,420
3	\$21,960
4	\$26,500
5	\$31,040
6	\$35,580
7	\$40,120
8	\$44,660

Table B.1 2021 Poverty Guidelines for the 48 Contiguous States and the District of Columbia

Charter Township of Royal Oak Resident Age

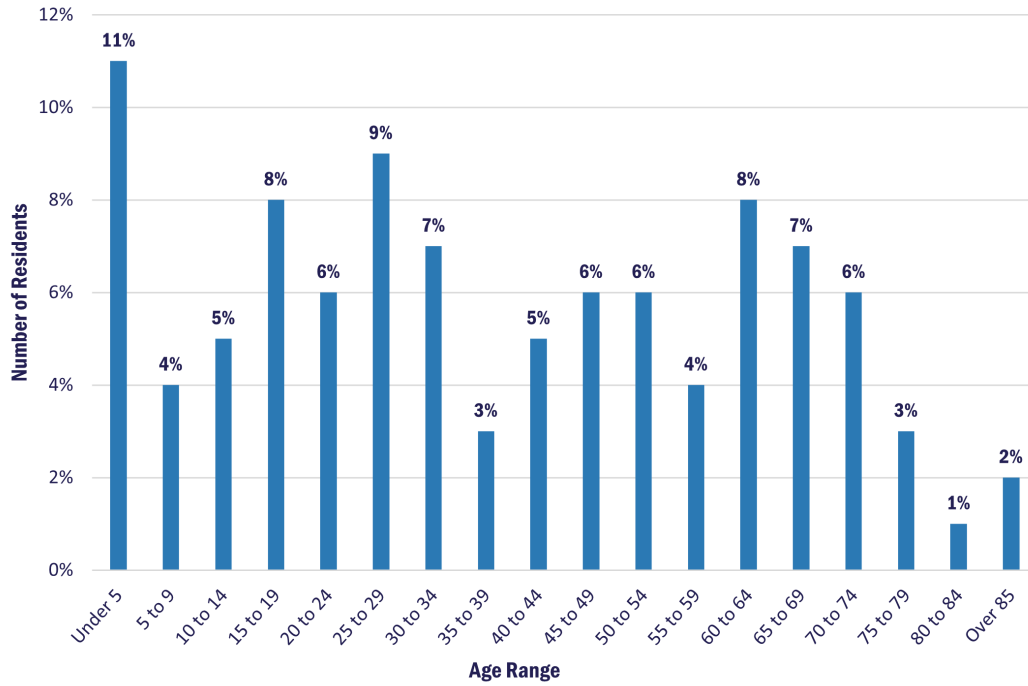


Figure B.2 Population and Age Distribution

Charter Township of Royal Oak Resident Race and Hispanic Origin

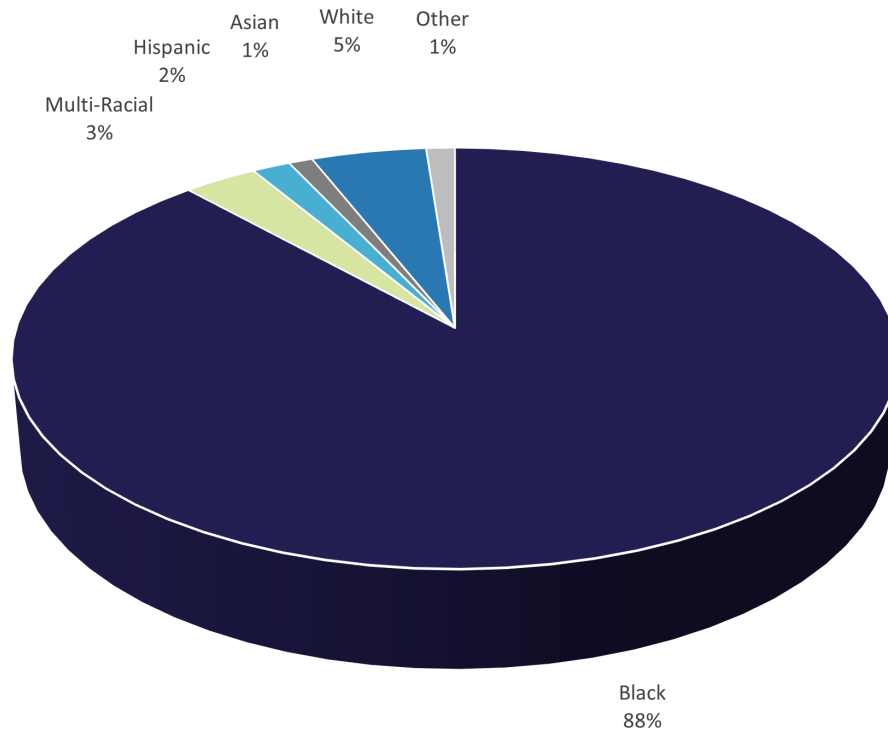


Figure B.3 Summary of Race and Hispanic Origin in the Township

Charter Township of Royal Oak Households

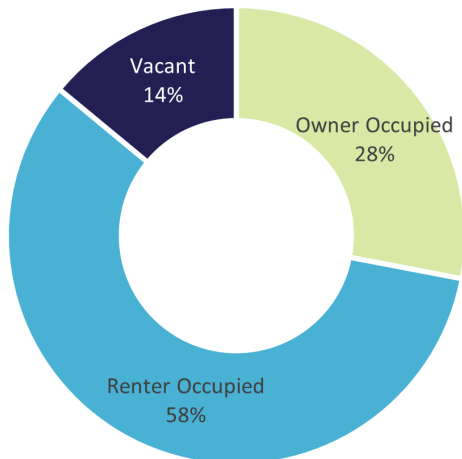


Figure B.4 Household Size and Composition

B. Affordability Metrics

Various affordability metrics for the township were evaluated to understand the customers' affordability needs. The affordability metrics included median household income (MHI), average annual and monthly water bills, and various industry best practices to gauge the level of affordability. See [Appendix H, Rate Structures and Affordability Planning](#).

1. EPA Residential Indicator

The EPA uses a water customer's water and sewer bills, as a percentage of the MHI for a community, to measure the affordability of a water customer's bill. In practice, the EPA considers the affordability threshold to be 2% of the MHI for sewer charges and 2.5% for water charges. Table B.2 shows the annual bills as a percentage of the township's MHI. Under EPA Residential Indicator, the township's sewer bills exceed the EPA affordability guidance, but water bills are within the EPA affordability guidance. However, this metric is not an indicator of affordability for individual water customers because the metric uses MHI for the township's community at large and not the household income of each individual water customer.

Annual Water Bill As a Percentage of MHI	2%
Annual Sewer Bill As a Percentage of MHI	3%
Annual Water and Sewer Bill As a Percentage of MHI	5%

Table B.2 EPA Residential Indicator for the Township's Average Annual Water and Sewer Bills

2. Lowest Quintile Residential Indicator

The national consulting firms of Stantec and Raftelis suggest using the Lowest Quintile Income Residential Indicator which uses the water and sewer bill as a

percentage of the Lowest Quintile Income (LQI) for a community to measure affordability. In practice, the affordability threshold is 7% of the LQI for combined sewer and water charges. The table shows the township's annual bills as a percentage of LQI. Using this metric, the township's average annual combined water and sewer bills are not within the affordability guidance.

Annual Water Bill As a Percentage of LQI	4%
Annual Sewer Bill As a Percentage of LQI	7%
Annual Water and Sewer Bill As a Percentage of LQI	11%

Table B.3 LQI Residential Indicator for the Royal Oak Township Average Annual Water and Sewer Bills

3. Hours at Minimum Wage

Another metric suggested by Stantec and Raftelis is hours at minimum wage. Under this metric, the monthly water bill should be less than, or equal to, eight hours of work at minimum wage. The table below shows the average monthly bill for the township in hours of work at minimum wage. Under this metric, the average monthly bill is more than eight hours of work at minimum wage.

Min Wage in MI 2022 (\$/hour)	\$9.87
Hours to Pay Avg Monthly Bill (hours)	11.14

Table B.4 Hours at Minimum Wage Metric for the Township's Average Monthly Bill

4. Household Burden Assessment Matrix

Stantec and Raftelis also developed a household burden assessment matrix that uses the household burden indicator (HBI) and the poverty prevalence indicator (PPI) to determine the level of burden a community experiences with water affordability. The HBI is the water and sewer bill as a percentage of LQI. The PPI is the percentage of homes under 200% of the federal poverty level. As demonstrated in Table B.5, according to this matrix, the household burden in the township is considered a "very high burden."

Household Burden Indicator (HBI): Water Costs at Percentage of Income at LQI	11%
Poverty Prevalence Indicator (PPI): Percentage of Households below 200% FPL (Estimated based on household Avg size of 2.8)	>68%
Burden	"Very High Burden"

Table B.5 Household Township Burden Assessment

The various affordability metrics quantifiably confirms that township water customers have a high water burden and need a comprehensive affordability plan.

VI. Rates and Affordability Strategies

A. Rates

The first step in establishing water and sewer rates is to develop an operating budget for both the water system and sewer system. Figures B.6 and B.7 show the fiscal year 2021 budget and fiscal year 2022 revenue requirements for the township's water and sewer systems.

Royal Oak Township Water: Fiscal Year Cash Based Requirements

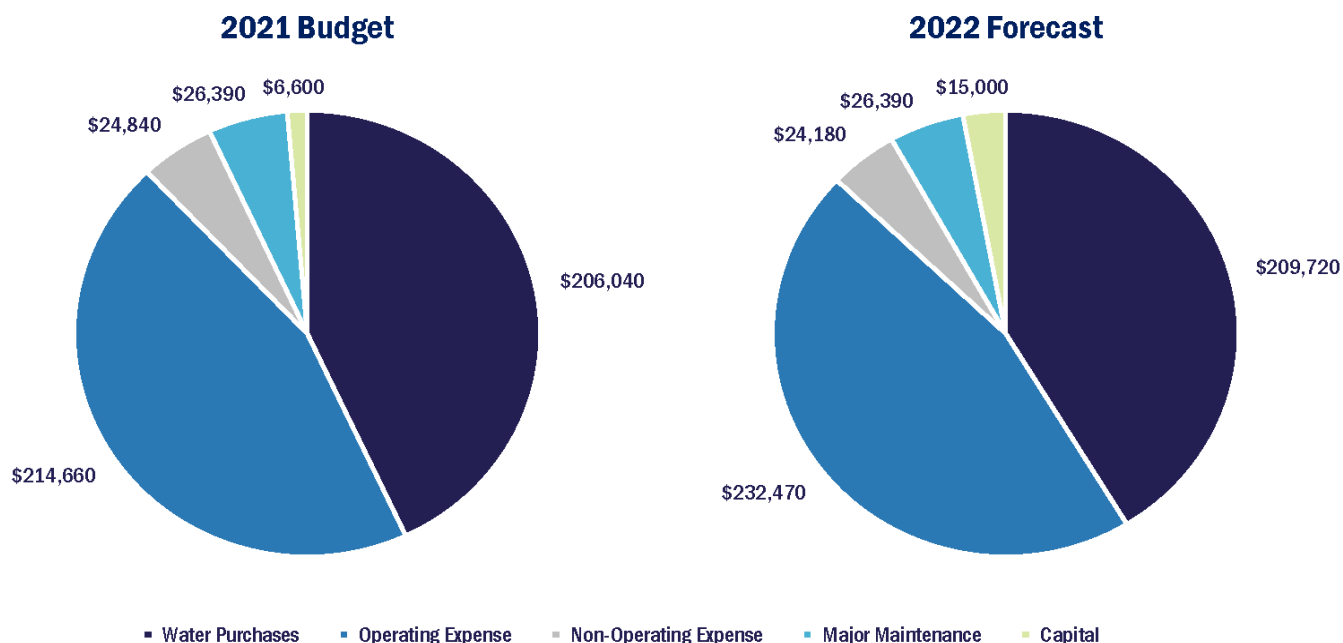


Figure B.6 Water System Revenue Requirements for Royal Oak Township

Royal Oak Township Sewer: Fiscal Year Cash Based

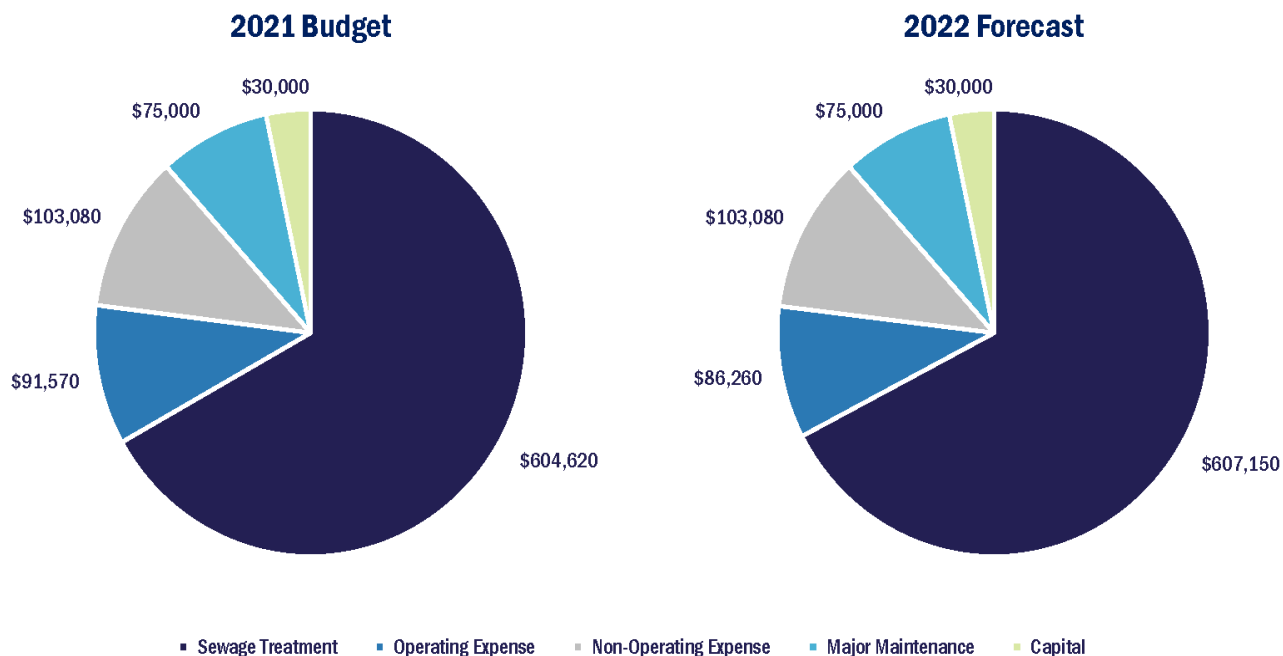


Figure B.7 Sewer System Revenue Requirements for Royal Oak Township

The next step is to establish water and sewer rates that generate sufficient revenue for both the water and sewer systems. This is done by using the rate methodology described as follows.

B. Rate Methodology

The township's water and sewer rates are comprised of two components: a minimum charge and a consumption charge. This methodology was in place when the WRC assumed responsibility for the water and sewer systems. It's a common methodology for determining water and sewer rates.

The minimum charge provides rate stability and represents "an ability to serve" charge. This means that water will be supplied through public water lines in an amount large enough to meet the demands of each water customer and the needs for communitywide fire protection. A minimum charge is applied to all customers' water and sewer bills regardless of whether the water is used or not. The current water service minimum charge is \$33.61 and the sewer service minimum charge is \$61.31.

The consumption charge is based on the amount of water used, as indicated on the water meter. The current water service consumption charge is \$48.01 per 1,000 cubic feet (MCF) and the sewer service consumption charge is \$87.59 per MCF. For the 2021 calendar year, the average single family residential household water usage was about 0.5 MCF per month, or about 125 gallons per day. The average single family residential household water and sewer bill was about \$110 per month. Residential customers comprise about 90% of the customer base.

C. Affordability Strategies

Affordability strategies include: 1) providing operational value and efficiency; 2) GLWA Wastewater Master Plan collaboration; 3) obtaining state and federal funding for infrastructure improvements; and 4) maintaining rate stability.

1. Providing Operational Value and Efficiency

The water and sewer system maintenance and replacement programs contribute to operational value and efficiency.

2. GLWA Wastewater Master Plan Collaboration

GLWA developed its Wastewater Master Plan with collaboration and input from key stakeholders, including two representatives from the WRC. The major challenge of the Master Plan was identifying a plan that is affordable to all, while also addressing the region's wastewater service and source water protection for the next 40 years. Significant emphasis was placed on improvements and optimization of existing assets so that optimal performance is achieved with existing infrastructure before new facilities are constructed. This strategy helped mitigate the cost of future GLWA infrastructure improvements while continuing to meet the regulatory requirements of the plan. Continued participation in the implementation phase of the Master Plan, as regional collaboration and alignment, is critical to the plan's success.

By collaborating with the GLWA and other key stakeholders, a Master Plan was developed that helped mitigate the cost of future GLWA wastewater system improvements which, ultimately, benefits the township by mitigating future sewage disposal costs.

3. Obtaining State and Federal Funding for Infrastructure Improvements

As detailed further in Table B.6, WRC has worked closely with the township to secure state and federal funding for water system infrastructure improvements. While \$270 million in funding was released by EGLE for statewide water system projects in 2021, anticipated funding for wastewater protection has not yet been released.

State and Federal Funding Summary – Charter Township of Royal Oak Water System (February 2022)

Funding Source	Description	Total Cost	Expected Funding	Anticipated Local Match	Status
OC ARPA funds, 100% Grant	Service line replacement administrative costs	\$450,000	\$450,000	\$0	Application submitted. Funding anticipated.
EGLE 100% Grant	Similar to SAW grants. Verify public/private service line materials at stop box and interior. Asset management work.	\$329,780	\$329,780	\$0	Funding secured. Need to bid out verifications.
EGLE 100% Principal Forgiveness Loan	Disadvantaged community lead service line replacement program – booker funds.	\$3,400,000	\$3,000,000	\$400,000	Funding secured. Work is underway.
Federal Infrastructure Bill Earmarked by Con. Lawrence	Watermain and service line replacement	\$1,000,000	\$800,000	\$200,000	Application submitted. Hopeful for funding.
Michigan Treasury Financially Distressed CVT	Watermain replacement	\$1,000,000	\$1,000,000	\$0	Application submitted. 50% chance of funding.
EGLE 100% Grant	Water Affordability Plan	\$444,600	\$444,600	\$0	Underway

Table B.6
Township's State and Federal Funding

4. Maintaining Rate Stability

Maintaining rate stability for the township's water and sewer customers is one of the biggest challenges faced by the WRC. This is particularly true when considering the growing need to replace aging infrastructure. The affordability strategies covered in Section VI(C) all contribute to rate stability. In the development of an affordability plan for the township, the need for rate stability was a top priority. Further, efforts were made to avoid recommendations that would have contributed to significant rate increases.

VII. Billing Services

A. General Overview

Water bills are provided to township customers on a monthly basis, as opposed to the quarterly bills received by most Oakland County municipalities. This allows water customers to monitor and manage their bills on a more frequent basis. The bills include the date the customer's meter was read, the breakout of water and sewer charges and whether the meter was actually read or is an estimate. Other important messaging is included as well.

Bill inserts and messaging is also provided with monthly bills as a communication tool. WRC's Billing Services office administers past due bill collection, negotiates payment arrangements, and provides information about assistance programs.

During the COVID-19 Pandemic, WRC's physical offices were temporarily closed to the public. Prior to this closure, many customers paid with cash at the WRC Billing Services office. To assist water customers who traditionally paid by cash on how their bill could be paid with cash at local retailers, including Family Dollar, CVS, and 7-Eleven. A barcode was added to the water bill for retailers to scan. The payment data from participating retailers was provided almost immediately and water customers were given a receipt of the transaction. This payment option remains available to township water customers. Cash payments are no longer accepted at the WRC Billing Services office.

B. Past-Due Bill Collections

The goal of past-due bill collections is to recover past due amounts from water customers so that the costs of operating the water system are fully recovered and to prevent water customers from being subject to a water shutoff due to non-payment.

In March of 2020, due to the COVID-19 Pandemic, Michigan's governor signed an Executive Order implementing a moratorium on water shutoffs due to non-payment.

Although the Executive Order expired in June 2021, the township elected to continue the moratorium. The past-due collection process and use of water shutoffs described below was the process in place prior to Governor Gretchen Whitmer's shutoff moratorium. It has not been utilized since March 2020.

Prior to the original shutoff moratorium, the collection process began during the spring and extended into the summer. The first step was to advise water customers with a past due balance of more than \$200 that was more than 60 days past due, that they were subject to their water service being disconnected. This shutoff notice provided the water customer with approximately 30-days to take action to avoid a shutoff. Information about available customer assistance programs was included with the shutoff notice. Customers also were advised that partial or delayed payment arrangements may be available to avoid a shutoff.

C. Tax Certification

Tax certification involves adding any past due water and sewer charges to the property tax bill. Property owners are responsible for payment of their property tax bills. Tax certifications take place in the late summer or early fall, following the past due collection process described above. Water customers who have entered payment arrangements are not included in the "pool" of water customer accounts subject tax certification. Customers with past due amounts of \$300 or more that are at least 180 days delinquent, are subject to tax certification.

Like the past due bill collection process, property owners are provided 30 days written notice to take action to avoid past due water and sewer charges being subject to the tax certification process. Tax certification can significantly increase the amount ultimately paid for the water and sewer services provided due to late fees, penalties, and even interest, that may be charged by the Oakland County Treasurer. The cost for water and sewer services can double if past due amounts payments are carried all the way through the entire tax certification process.

Since the March 2020 moratorium on water shutoffs, there has been an increase in the number of water customers subject to tax certifications in 2020 and 2021. The amounts owed has increased as well. When compared to 2019, the number of accounts certified to taxes in 2020 was more than five and a half times higher, and the dollar amount was more than two and a half times higher (see Table B.7 on the next page).

Charter Township of Royal Oak – Shutoff and Tax Certification Data							
Year	Customers	Shutoff Notices	Actual Shutoffs	Payment Arrangements	Tax Certification Notices	Actual Tax Certifications	Amount Certified
2019	759	151	17	88	24	20	\$41,000
2020	763	0	0	0	134	86	\$180,000

Table B.7 Township – Shutoff and Tax Certification Data (includes all customers)

D. Landlord-Tenant Relationships

Approximately 60% of residential households in the township are rental properties. Water and sewer bills are sent to the “Current Resident” of a property. Additional copies of the bills may be sent to another address if requested by the property owner. When a property is rented out by the property owner, responsibility for payment of the water and sewer bills is a contractual matter between the landlord and tenant. Some landlords include water and sewer charges in tenant rental fees. In other cases, the water and sewer bills are to be paid directly by the tenant. Landlord-tenant relationships create specific affordability challenges for water customers and property owners.

One common scenario is when a tenant who was responsible for payment of water and sewer bills during the occupancy of a rental property vacates the rental property with a past-due balance for water and sewer charges. If the landlord is unaware of the past-due balance or cannot, or does not, pay the past-due amount before a new tenant moves in, the new tenant may receive a bill that includes the former tenant’s past-due balance. In this scenario, additional past-due water debt will burden either the landlord or new tenant.

Another common landlord-tenant issue relates to household leaks, particularly in older or neglected rental properties. Internal household plumbing leaks can cause high water bills, especially if the leaks remain undetected. However, even when leaks are identified, a landlord and tenant may disagree regarding repairing the plumbing leaks. If a tenant is responsible for payment of water and sewer bills, the additional costs related to a plumbing leak may make water more expensive to the tenant. For a landlord, the costs of repairing the plumbing leak may not be affordable.

Additionally, tax certifications can be problematic in landlord-tenant relationships. During the tax certification process, a notice that a past due balance will be certified to taxes is sent to the “Current Resident” of the property.

As detailed above, the tax certification notice provides 30 days to take action to prevent certification of the past due amount. If, under the terms of the lease, a tenant is responsible for paying the water and sewer bills and they fail to take any action, the past due amount will be certified to the property taxes. The property owner may only become aware of the past due amount when it appears, with additional charges, on the property tax bill.

VIII. Water Residential Assistance Program (WRAP) and other Customer Assistance Programs (CAPs)

A. WRAP Background

WRAP is a regional, multi-county assistance program that provides financial assistance to qualifying low-income households in the Great Lakes Water Authority (GLWA) service area. It was established in 2016 as one of the provisions during the formation of the GLWA (formerly, Detroit Water and Sewerage Department). WRAP benefits include direct bill payment assistance, arrearage assistance, and conservation assistance and minor plumbing repairs. In addition, households enrolled in WRAP cannot have their water shut off. Originally, WRAP was only available for water and sewer customers who resided in any participating municipality that either directly or indirectly purchased drinking water or received sewage disposal services from the GLWA. For participating Oakland County municipalities, the program was administered through Oakland Livingston Human Service Agency (OLHSA). Since the Township purchases drinking water from GLWA, eligible households could apply for WRAP through OLHSA.

In June 2020, GLWA evaluated WRAP for effectiveness and to identify opportunities for improvement. Two years later, in June 2022, the GLWA Board of Directors approved many significant changes to WRAP.

Some of the program modifications began during this grant work and included a temporary transfer of the administration of WRAP in Oakland County from OLHSA to another community action agency, Wayne Metro. Beginning July 1, 2022, until the end of the calendar year, Wayne Metro will administer WRAP in Oakland County until United Way takes over in 2023.

Another significant change underway to WRAP is a shift in the direct bill payment assistance from a flat \$25 payment to a sliding scale of assistance that considers water usage and the residential bill by community and household income. For GLWA service areas outside of the City of Detroit, this new program is named the WRAP Income-Based Plan (WRAP IBP). The WRAP IBP is funded by 0.5% of GLWA revenues. As of the time of this report, the new bill payment assistance model was approved but not yet implemented.

B. Key Components of WRAP

1. Customer Eligibility

- Reside in GLWA service territory
- Demonstrate household income at or below 200% of the FPL
- Provide proof of income (or lack thereof)
- Establish responsibility for water and/or sewer bill
- Live in a home that is owned or rented

2. Arrearage Assistance

- 2-year program with a credit of up to \$1,200 per year for combined water and sewer bill

3. Bill Payment Assistance/WRAP IBP

- 2-year program
- Currently, a credit of \$25 a month for combined water and sewer bill but transitioning to sliding scale of assistance based on water usage and residential bill by community and household income.
- Must maintain on-time bill payment
- WRAPfinity allows seniors and individuals with disabilities to remain on the program after two years

4. Conservation and Household Leak and Plumbing Repairs

- Program includes plumbing inspection, water conservation education, repairs to eliminate leaks or to address health concerns
- Households eligible for up to \$2,000 for repairs

C. Other Assistance Programs

In addition to WRAP, several other assistance programs are available for Township water customers, as identified and summarized in Table B.8.

Program Name	Administrator	Bill Assistance Arrearage Relief Service Restoration	Maximum Program Support (\$)	Income Eligibility	Primary Eligibility Requirements	Documentation Required
Water Residential Assistance Program (WRAP)	Oakland Livingston Human Service Agency (OLHSA)	All	\$1,500 per year as: • \$25 monthly bill assistance • Up to \$1,200 for arrearage payment	Household income at or below 200% of Federal Poverty Level	• Stay current on monthly bill payment • Disabled and seniors may qualify for WRAPfinity, allowing participation beyond two years	Provide proof of: • Residency • Income • Responsibility for water on lease
Low Income Household Water Assistance Program (LIHWAP)	Michigan Department of Health and Human Services (MDHHS) through OLHSA	• Arrearage Relief • Service Restoration	\$1,000 per fiscal year	150% Federal Poverty Level	• Households must not exceed countable assets of \$15,000 • Communities must sign MOU for resident participation	Complete MI-Bridges application and requirements
Covid Emergency Rental Assistance (CERA)	Michigan State Housing Development Authority (MSHDA) through OLHSA, Community Housing Network, and Lighthouse	All + Future bill assistance up to \$1,000 based on AMI qualifications	\$2,500	• Renter households under 80% of Area Median Income (AMI) • Individual(s) in household qualified for unemployment benefits or experienced reduction in household income, incurred significant costs, or experienced financial hardship due to coronavirus	• Individual(s) in household demonstrate risk of homelessness or housing instability by being past due on utilities or rent	<u>Tenants must provide:</u> • Past-due documentation for unpaid rent after 3/13/20 • Copy of State ID Or Passport • Proof of income or other assistance • Copies of past due utility • Document outlining COVID Hardship <u>Landlords must provide:</u> • Completed CERA Landlord Application • Copy of the lease • Ledger showing payment history • W-9
State Emergency Relief (SER)	MDHHS via numerous partners	• Arrearage Relief • Service Restoration	Varies	Local MDHHS partners make eligibility determinations based on the number of people in household, income, assets, type of service requested and other factors.	Emergency must: • Threaten health or safety • Not have been caused by persons seeking assistance • Be resolved by the payment • Not likely to happen again	• Proof of assets • Birth Certificates • Social Security cards for household members • Shut off notice on a water bill for the household
Enbridge Fueling Futures Water Assistance Program	The Heat and Warmth Fund (THAW)	• Bill Assistance • Arrearage Relief	\$1,200	Income is at or below 250% of the Federal Poverty Level	• Must have a past due balance • Account is in the applicant's name • Water service must be on	• Driver's license or state-issued ID • Social Security card for all household members • Proof of household income for the past 60 days or Zero Income Affidavit • Copy of most recent utility bill
Catholic Community Response Team	Pontiac Vicariate of the Detroit Archdiocese	Avoid shut-off	Case by case	Case by case	Pontiac residents only	Application with various requirements

Table B.8 Oakland County - Water Assistance Program Summary

Program Name	Administrator	Bill Assistance Arrearage Relief Service Restoration	Maximum Program Support (\$)	Income Eligibility	Primary Eligibility Requirements	Documentation Required
Let's Keep The Lights On	Here to Help Foundation	Bill Assistance	\$500	Monthly income must be greater than monthly expenses	• Must not be a temporary solution • Circumstances of emergency must be beyond individual's control • ID Card with Oakland County address • Must have a source of income • If bill exceeds \$500, must have ability to pay remaining balance • Must be current on all other household expenses and bills	Application with various requirements
Michigan Homeowner Assistance Fund (MIHAF)	Michigan State Housing Development Authority	• Arrearage Relief • Service Restoration	\$500	Household income under 150% of Area Median Income (AMI)	• Must be primary residence • Must have and explain a financial hardship directly related to COVID-19 on or after January 21, 2020	Utility must sign up to participate

Table B.8 Oakland County - Water Assistance Program Summary, continued

Charter Township of Royal Oak Water Residential Assistance Program Enrollment						
Calendar Year	2016	2017	2018	2019	2022	2021
Households Enrolled	12	17	8	3	2	1

Table B.9 Charter Township of Royal Oak - WRAP Enrollment

D. Affordability Gaps

While WRAP and the other existing CAPs will be utilized as part of the affordability plan developed for the township, the existing programs have gaps that must be addressed to develop a more comprehensive and sustainable affordability plan.

The primary gaps that have been identified are: 1) customer outreach; 2) consideration for household income; and 3) program duration.

1. Customer Outreach

Customer outreach is not a direct reflection of CAPs, but there is a gap that needs to be addressed with existing and future CAPs. Table B.9 illustrates that even during the highest enrollment period for WRAP, in 2017, only 17 customers were enrolled, or about 5% of those who met the eligibility requirements.

2. Consideration for Household Income

CAPs are generally geared toward reducing arrearages for low-income households and do not adequately provide for long-term, ongoing rate assistance that is necessary to keep households that are significantly below the federal poverty level from continuously accumulating arrearages.

Consideration of household income is necessary to determine the appropriate level of ongoing rate assistance to stop the cycle having to accumulate large arrearage amounts before receiving assistance. For example, it's much more difficult for a four-person household with an annual income of \$15,000 to pay their monthly water and sewer bill than it is for a four-person household with an annual income of \$50,000. GLWA recognized this issue, specifically that the \$25 monthly credit provided under the WRAP may be meaningful to some households, but not to others. Flat rate assistance provided regardless of income is not effective because those needing assistance the most get the same amount of assistance as those needing it the least. This is an affordability gap that the proposed affordability plan attempts to address through an income-based rate discount affordability program.

3. Program Duration

Many programs are not sustainable because there is no guaranteed funding mechanism. Also, although the WRAP has a reliable funding source, it only has a 2-year duration for most participants in the program. This may be helpful for households above the federal poverty level, but it does not provide a sustainable program for households below the poverty level.

IX. Need for Comprehensive Affordability Plan

Utility Perspective:

Jim Nash, Oakland County Water Resources Commissioner



Royal Oak Township has been left behind economically in a lot of ways. Part of our social responsibility is to make sure everyone can have a sustainable life. We have to make sure everyone has access to clean water for them to maintain their health and safety.

The coalition we've built has been terrific. Our monthly meetings are made up of community stakeholders from all aspects of the communities. We've looked to these leaders for their input, and we've taken advantage of tremendous resources across the state and country.

Our team has been dedicated and incredibly thorough while analyzing what other regions and communities are doing. We've been in constant contact with our communities to make sure they're included in creating this comprehensive plan.

Community Perspective:

Donna Squalls, Royal Oak Township Supervisor



I would like to thank Commissioner Nash and his staff at WRC for recognizing the financial challenges of Royal Oak Township. Much of the community is composed of single-family residents and seniors who struggle daily to make ends meet. With the aftermath of Covid and the rising inflation costs, the need for a more comprehensive and sustainable water affordability plan is the key to enhancing the quality of life.

WRC has recognized how the cost to consume and operate water has affected less affluent communities, such as Royal Oak Township. For over a year Mr. Nash and his staff have dedicated themselves to organizing and hosting the Water Affordability Coalition for Royal Oak Township and our sister community, the City of Pontiac.

This coalition exists for the purpose of research and extensive planning through introducing programs from non-governmental organizations as well as local, state, and federal assistance programs. This initiative is greatly appreciated by the residents.

X. Royal Oak Township Water Affordability Plan Components

A. Short-Term Customer Assistance Programs

The WRC's existing monthly customer assistance program is WRAP. Another existing program is the Low-Income Household Water Assistance Program (LIHWAP). The WRC has developed an income-based assistance program that would provide a fixed monthly bill for eligible customers. The amount of the fixed bill would be based on the Federal Poverty Level. However, before the WRC can offer this program, a funding source must be secured.

B. Long-Term Statewide Assistance Program

To demonstrate the need for long-term water assistance programs, existing short-term customer assistance programs must be fully utilized and depleted. Short-term customer assistance programs, like WRAP and LIHWAP, are necessary steppingstones to develop permanent and sustainable affordability programs.

Based on the success of other low-income programs, the WRC has developed a legislative framework, modeled after laws forming the Michigan Energy Assistance Program, that would create a permanent statewide low-income water assistance program with fixed monthly household bills based on income level. Assistance to reduce past due amounts would also be included in this program.

C. Hardship Assistance Program

The WRC is creating a hardship assistance program to address unexpected, short-term needs due to hardships, like loss of job, death of household member, or significant medical expenses. The Hardship Assistance Program will be funded through private donations, Oakland County, temporary general funds, federal funds, or a program in which customers have their water bill "rounded up" to the next whole dollar amount. The United Way has been identified as a potential partner to administer the program.

D. Workforce Development Program

WRC's existing workforce development program maximizes economic benefits to the community by providing education, training, and opportunities for careers in the areas of water sustainability, preservation, and treatment.

E. People-First Policies

In addition to adopting a water equity statement, the WRC identified six internal billing policies that are being reviewed and revised as needed to promote principals of water equity.

The billing policies under review include:

- Service disconnection for nonpayment¹
- Landlord-requested service disconnection
- Tax certifications where the unpaid amount is added to the tax roll
- Payment arrangements²
- Late-fee penalties and interest
- Billing disputes—water loss

¹ Shutoffs will resume in 2023. The new non-payment service disconnection policy will be revised to encourage customer payment through clear, effective, and compassionate communication strategies. Water service shutoffs will be utilized as a last resort, with many established intervention points and payment paths for customers.

² The WRC will be modifying its current payment arrangement policy to offer options that provide extended, flexible, and customized payment plans designed to meet a customer's individual affordability needs while providing greater customer convenience.

F. Communications and Public Outreach Strategic Plan

A strategic communications and outreach plan is being developed through collaboration with community partners and stakeholders to identify and implement best practices to improve customer communications, build community trust, increase enrollment in customer assistance programs, and grow participation in the workforce development program.

G. Capital Replacement and Maintenance Programs

Existing capital replacement and maintenance programs focus on long-term strategic improvements to water and sewer system infrastructure. We prioritize and plan projects that will provide customers with the most value and look for the best ways to pay for these projects, including grants or low-interest loans. These existing programs will be evaluated on an ongoing basis. New federal and state funding opportunities through the American Rescue Plan Act and Infrastructure and Investment Jobs Act will be aggressively pursued.

Appendix C: Research and Findings

I. Research Overview and Objectives

The affordability plans developed by the office of the Oakland County Water Resources Commissioner (WRC) for the City of Pontiac and the Charter Township of Royal Oak were the result of an extensive research effort to understand, catalog, and adapt existing affordability programs. Our research was specifically focused on water affordability programs, which differ from customer assistance programs that typically provide short-term financial assistance and do not take into consideration what a household can afford to pay. We refer to customer assistance programs as CAPs.

The WRC's primary research objectives were to:

1. Learn about efforts municipalities and utilities across the country have already undertaken to address water service affordability issues in their respective communities.
2. Understand the relative successes and failures of existing affordability programs and customer assistance programs, as well as the barriers to household water service affordability.
3. Determine what CAPs, or components of existing CAPs, could be incorporated into the affordability plans for Pontiac and Royal Oak Township.

To carry out these research objectives, we implemented a multi-pronged approach that included the following:

1. A comprehensive review of existing literature.
2. Participation in water industry events, including presentations, webinars, and conferences.
3. Technical assistance from the Water Center at the University of Pennsylvania.
4. Exploratory meetings with a variety of organizations and individuals including water and other utility experts, municipal leaders, WRC Water Affordability Coalition members, customers, consultants, educators, advocates, and service providers.

Our formal research process expanded over a 12-month period and key findings are detailed in this appendix. In sharing these research methods and findings, we hope to provide a shortcut for others interested in developing affordability measures or implementing affordability plans for their communities.

As a result of our research, we were able to target a short list of affordability programs and CAPs that appeared promising for Pontiac and the Charter Township of Royal Oak. The list included: (1) an income-based rate discount program; (2) a hardship/emergency assistance program; and (3) water conservation programs that include leak detection and

home plumbing repairs. These short-listed programs were then subject to legal review to determine the feasibility of adapting or implementing them in both communities. The legal analysis, as well as legal mitigation measures, are provided in [Appendix D, Legal Analysis and Mitigation Strategies](#). While this appendix outlines our research process and findings, it is not an exhaustive review of the existing research or limitation to possible and potential solutions. Outside the scope of this grant work, the WRC is committed to continuing to learn from the growing body of literature, available data, and community dialogue.

II. Research Process

A. Literature Review

The first step in our research process was a literature review regarding CAPs and existing affordability programs across the country. The most useful resources were compendiums prepared by several organizations including Moonshot Missions, the National Association of Clean Water Agencies (NACWA), the American Water Works Association (AWWA), the Water Environment Federation (WEF), the Mayor's Innovation Project, the US Water Alliance, and the United States Environmental Protection Agency (EPA). The compendiums contained case studies on specific municipalities or utilities and highlighted affordability efforts and CAPs which they had implemented. As a research tool, these are a great resource to provide a snapshot of affordability efforts across the country. A summary of notable reports is provided below.

Moonshot Missions, NACWA (May 2021)

[Addressing the Affordability of Water and Wastewater Services in the U.S.: Case Studies of Utility Affordability Programs and Rate Structures](#)

Compendium of 20 utility case studies describing various approaches to responding to the affordability of water services for low-income customers. A summary of the programs is included, as well as the funding mechanisms for the programs, and the success factors and challenges encountered with the programs.

AWWA and WEF (June 2018)

[Transformative Issues Symposium on Affordability: Special Content Collection](#)

This booklet was prepared for the first Transformative Issues Symposium on Affordability and contains a compendium of more than a dozen articles about affordability for various AWWA and WEF publications and events written by members of the AWWA and WEF. The affordability topics range from better defining

affordability to important questions about environmental justice. They explore a range of customer assistance programs. Included in the booklet is an article co-authored by Gary A. Brown, director of the City of Detroit Water and Sewerage Department (DWSD), that includes case studies from Detroit that illustrates programs for addressing affordability and customer assistance.

The Mayors Innovation Project (December 2019)

[Setting the Agenda: A Mayor's Guide to Water Affordability](#)

This paper is one report in a series of water briefs that provides a roadmap to consider water affordability programs as a means to address aging and failing infrastructure and diminishing access to clean and affordable water. The paper describes best practices and innovative solutions so that utilities can address the aging state of water infrastructure systems, while also ensuring residents have equitable access to clean water and reliable wastewater services. Additionally, the paper highlights the importance of assessing the varying needs of a specific city, county or region.

US Water Alliance (2017)

[An Equitable Water Future: A National Briefing Paper](#)

This is a comprehensive document on the interconnectedness between water management and equity in the United States. The paper is divided into two parts; the first part describes critical challenges facing the water sector and how vulnerable communities are impacted. The second part presents a water equity framework designed around three “pillars” of water equity. The three pillars are: (1) ensure all people have access to clean, safe, affordable water service; (2) maximize the community and economic benefits of water infrastructure investment; and (3) foster community resilience in the face of changing climate. Each pillar describes an “issue area” along with strategies to address the issue. It also includes case studies of utilities that have implemented the recommended strategies.

US Water Alliance (2018)

[An Equitable Water Future: Opportunities for the Great Lakes Region](#)

Similar to the US Water Alliance's National Briefing Paper, this document is organized around the three pillars of water equity, but it focuses on challenges specific to the Great Lakes region and describes strategies to address them through a series of case studies.

United States Environmental Protection Agency (April 2016)

[Drinking Water and Wastewater Utility Customer Assistance Programs](#)

This compendium is very thorough. It documents how drinking water and wastewater utilities are implementing customer assistance programs to provide better access to water services via case studies from across the country. It also provides step-by-step instructions for implementing a customer assistance program and troubleshooting common challenges.

University of North Carolina Environmental Finance Center (2017)

[Navigating Legal Pathways to Rate-Funded Customer Assistance Programs: A Guide for Water and Wastewater Utilities](#)

This comprehensive compendium provides detailed summaries of regulatory policies on the design and funding of customer assistance programs in all 50 states, the District of Columbia, and Puerto Rico. It focuses on funding mechanisms for customer assistance programs. In addition, the document includes case studies that describe various methods used to address, not only water affordability challenges, but also methods used by other essential service utilities in the United States.

In addition to reading the compendiums listed above and other published literature, we also conducted follow-up research by reviewing other information and data regarding specific CAPs published on municipal or utility websites.

B. Water and Utility Industry Events

Water and utility industry events, including workshops, conferences, meetings, presentations, and webinars, provided an opportunity for us to learn about various affordability plans and CAPs being implemented both locally, and nationally, directly from those involved in developing, implementing, and administering the plans. Some of those events are detailed below.



Mayors Innovation Project Water Affordability Academy

In partnership with the Water Center, this was a 5-part workshop series attended by several WRC staff members. The series offered presentations from, and connections to, utility leaders with many of the country's

most respected utility innovators. They helped to identify, assess, and establish a path for affordability. The topics in this workshop included:

- Water Affordability 101: Introductions and the basics of water affordability.
- Operational efficiencies: Explore options through technology, data use and management, and investments that reduce operational costs such as lights, efficiency pumps, and more.
- Rates and Customer programs: Work with experts to determine the financial health of your utility, potential water rate options that fit best for your city, and the infrastructure needs of the utility.
- Community Engagement and Communications: Help identify current relationships with your community to improve engagement around water affordability.
- Implementing Your Utility's Plan: Help implement your plans.



Water Affordability webinar series presented by the Michigan Section of the AWWA

As part of a larger strategic initiative, MI-AWWA hosted a series of educational webinars and forums for AWWA members about water affordability. The webinars were based around six “pillars” of water affordability with six different webinars addressing a separate pillar. The series topics and presenters were:

1. Funding and Finance, presented by Professor Janice Beecher, Michigan State University
2. Ratemaking, presented by Professor Janice Beecher, Michigan State University
3. Billing and Payment Practices, presented by Samarhia Giffel, Administrative Services Officer, City of Grand Rapids; and Mike Kasanic, Billing Supervisor, WRC
4. Data and Why We Need It, presented by Cyndi Roper, Senior Policy Advocate for the Natural Resource Defense Council; and Sylvia Orduno, an organizer, coordinator, and activist with the People's Water Board Coalition and Michigan Advisory Council on Environmental Justice
5. Public Engagement, presented by Liesl Clark, Director of the Michigan Department of Environment, Great Lakes, and Energy (EGLE); Damon Garrett, P.E., President of Metro Consulting Associates; Wayne Jerberg, Water Systems Manager for the City of Grand Rapids, and Sue McCormick, CEO of 4Leaders, LLC
6. Economic and Community Drivers, presented by Kris Donaldson, P.E., Clean Water Public Advocate for EGLE and Ninah Sasy, Policy and Planning Director, Michigan Department of Health and Human Services

The series concluded with an in-person Water Affordability Summit in Lansing that discussed lessons learned from the six-part series and provided a snapshot into the role water systems play in water affordability from a study by the University of Michigan's Water Center. Leadership from AWWA also provided a national perspective on water affordability.

WRC Attorney and Special Projects Manager, Kelsey Cooke, presented on the legal and legislative landscape that impacts water affordability in Michigan. The summit culminated in a facilitated discussion to help MI-AWWA members identify a path forward for influencing policy that impacts water affordability in Michigan.



Michigan Environmental Justice Virtual Conference hosted by EGLE

This three-day conference included presenters from the Office of the Environmental Justice Public Advocate, the Michigan Advisory Council on Environmental Justice, the Michigan Interagency Environmental Justice Response Team, and EGLE. Topics included federal environmental justice priorities, the intersection of climate and equity, meaningful public engagement, just transitions in environmental justice communities, and the future of infrastructure.

There was also a water equity session presented by Sylvia Orduno, Member, Michigan Advisory Council on Environmental Justice, Monica Lewis-Patrick, President & CEO, We the People of Detroit, Ninah Sasy, in her role as Executive Director, Michigan Infrastructure Council, and Oday Salim, Staff Attorney for the Great Lakes Regional Center, National Wildlife Federation and Director of the University of Michigan Law School's Environmental Law and Sustainability Clinic.



Water Affordability: Measurement and Meaning webinar (recording from 2019) presented by CLOSUP and MML

This webinar was jointly hosted by the University of Michigan Ford School of Public Policy's Center for Local, State, and Urban Policy (CLOSUP) and the Michigan Municipal League (MML) and featured Professor Manny Teodoro from Texas A&M University, speaking on water

and sewer system finance and policy matters including how to measure affordability, and policy options for rate structures and related issues.



Intro to LIHWAP webinar presented by the United States Department of Health and Human Services (USDHHS), NACWA and the National Energy & Utility Affordability Coalition (NEUAC)

The Low-Income Household Water Assistance Program (LIHWAP) is intended to provide funds to assist low-income households with their water and wastewater bills. LIHWAP grants are available to states, the District of Columbia, U.S. Territories, and federally and state-recognized Indian Tribes and tribal organizations that received fiscal year 2021 Low Income Household Energy Assistance Program (LIHEAP) grants. The Consolidated Appropriations Act, 2021 (Public Law No.: 116-260) signed on December 27, 2020, included \$638 million in funding with instructions for the USDHHS to administer these grants.

Additionally, on March 11, 2021, the American Rescue Plan Act of 2021 (Public Law No.: 117-2) appropriated an additional \$500 million to the new LIHWAP effort. This webinar included an overview of the structure of the program at all levels, coordination of assistance for households, federal requirements of the program, and addressed water provider questions.



LIHWAP Water Service Providers Meeting hosted by the Office of Community Services

Following the “Intro to LIHWAP” session, the Office of Community Services hosted a special webinar session for public and private water utilities to provide information on LIHWAP implementation, review possible challenges, share community success stories, and provide an opportunity for water service providers to give feedback on LIHWAP participation.

In addition, the meeting provided a review of the LIHWAP Data Dashboard, an interactive computer platform that provides information and updates on LIHWAP implementation.



2022 Utility Management Conference presented by Water Environmental Federation (WEF) and American Water Works Association (AWWA)

The WEF is a not-for-profit technical and educational organization of 30,000 individual members and 75 affiliated member associations representing water quality professionals around the world. Since 1928, the federation and its members have protected public health and the environment. As a global water sector leader, their mission is to connect water professionals; enrich the expertise of water professionals; increase awareness of the impact and value of water; and provide a platform for water sector innovation. The 2022 Utility Management Conference presented by the WEF, in collaboration with the AWWA, provided several water-affordability related technical sessions.

A WRC staff member attended a full-day workshop at the conference presented by moderators and panelists from the consulting firms Stantec and Raftelis titled “Solving the Affordability Riddle: Creating a Framework for Customer Assistance Programs that Bridge Legal Barriers and are Financially Sound.” Additional conference programs included, “Understanding the ‘Why’ Behind Utility Rate Structures and Customer Assistance Programs” along with “Ready to be Rescued: How Utilities and Their Customers are Accessing Low Income Households Water Assistance Program Funds”. As detailed below, WRC utilized a seven-step CAP framework presented by Stantec-Raftelis to conduct an internal analysis of its affordability plans.



Community Affordability Webinar Series hosted by the University of North Carolina (UNC) School of Government Environmental Finance Center

The UNC School of Government Environmental Finance Center, in partnership with the Southwest Environmental Finance Center and Wichita State University Environmental Finance Center, hosted a four-part “Community Affordability” webinar series designed to host a series of conversations about how utility rates impact ratepayers. The topics covered in each of the series included:

- Session 1, Understand Affordability. This session provided definitions, metrics, and tools to measure affordability.
- Session 2, Customer Empathy. This session discussed awareness around how rates impact customers.
- Session 3, Rate Structures Design and Policies. This session described how to structure rates to address affordability.
- Session 4, Customer Assistance Programs. This final session showcased various CAPs and explained how they can be used to improve revenue stability, avoid costs, and communicate positively to customers.



Massachusetts Institute of Technology (MIT) Water Affordability Workshop sponsored by Department of Urban Studies and Planning and Abdual Latif Jameel Water and Food Systems Lab

Over the course of two days, MIT Professors Gabriella Carolini and Lawrence Susskind and their research team in the Department of Urban Studies and Planning at MIT convened a diverse group of community advocates, federal officials, and utility representatives to envision solutions to America's water affordability crisis. Participants shared experiences and practices in utility management, research, advocacy, and customer assistance innovations to support household water affordability in cities across the United States. The event also served as an opportunity to discuss priority policies and reforms needed to generate more equitable policy and program design to establish paths to safe, clean, and affordable household water for all.

C. Technical Assistance from the Water Center

The Water Center is a trans-disciplinary applied research center focused on solving urban water challenges. Aligning the University of Pennsylvania's academic resources with water practitioner expertise, the Water Center has combined policy, science, and technology to create equitable, resilient and sustainable solutions (<https://watercenter.sas.upenn.edu/about-us/>). In the Fall of 2020, several WRC staff members participated in the Mayors Innovation Water Affordability Academy that was hosted in partnership with the Water Center. The Water Affordability Academy brought together 15 water utilities from across the

country to present possible solutions to water affordability and aid participants in addressing and overcoming many common barriers, including:

- Efficiency and conservation (both in utility operations and on the customer side);
- Establishing assistance programs to help low-income customers;
- Changing rate structures to more equitably distribute costs based on the ability to pay and to protect the most vulnerable communities; and
- How to communicate effectively with the residents who need this support the most.

Following its participation in the Water Affordability Academy, the Water Center provided ongoing technical assistance to the WRC via monthly virtual meetings. The meetings provided in-depth insight into water affordability programs throughout the country, including Philadelphia's Tiered Assistance Program (TAP), and connected the WRC to an extensive resource library that included, among other things, research, reports, and various affordability tools created or used by a variety of municipalities and utilities across the country.

D. Exploratory Meetings

As part of the affordability research process, the WRC conducted both formal and informal meetings with a variety of water and other utility experts, municipal leaders, coalition members, customers, consultants, educators, advocates, and service providers. Generally, meetings were intended to explore existing affordability plans and CAPs implemented by other municipalities and communities and learn about their challenges and successes. The Water Center arranged some meetings as part of the technical assistance provided, and other meetings were set up through a cold-call or email that explained WRC's grant work.

A request to speak with someone to get additional information about a program of interest also was made. The cold-call meeting requests were always well received, and we found a community of professionals across the country willing to share information about their affordability programs. Many valuable informal discussions occurred organically during events, meetings, and other interactions with community members and professionals. The following table details many of organizations and individuals we spoke with over the course of the past year. See Table C.1 on the next page.

Names / Organizations	Meeting Topic(s)
Madison Merzlyakov, Affordability Coordinator, Great Lakes Water Authority (GLWA)	GLWA's Water Residential Assistance Program (WRAP)
Nicolette Bateson, Chief Financial Officer, GLWA	GLWA's WRAP
Barbara Jackson, Deputy Director, Oakland Livingston Human Service Agency (OLSHA)	Administration of The Heat And Warmth (THAW) fund, the Low-Income Household Water Assistance Program (LIWHAP) and GLWA's WRAP
Samarhia Giffel, Business Manager, Grand Rapids Water System	City of Grand Rapids Water Customer Assistance Programs
Oday Salim, Attorney, National Wildlife Federation and Professor at the University of Michigan School of Law	Local, state, and federal laws governing water assistance programs
Nick Leonard, Attorney and Founder, Great Lakes Environmental Law Center	Legal Pathways to Income-Based Rates Article
Charter Township of Royal Oak WRC Customers	Confidential customer interviews
City of Pontiac WRC Customers	Confidential customer interviews
Brigitte Hall, President, Friends of Royal Oak Charter Township	WRC Affordability Coalition Member Interview / Assistance Programs
Barry Rubin, Cass Charrette Members of the People's Water Board Coalition	Income Based CAPs / Shutoffs / Studies and Plans by Roger Colton
HomeServe	Water Leak Insurance
PromisePay	Flexible Payment Plan Technology
City of Sacramento, California	Affordability and Leak Detection Programs
City of Toledo, Ohio	Low-Income Customer Assistance Programs
Consumers Energy	Low-Income Customer Assistance Programs
DTE	Low-Income Customer Assistance Programs
Roger Colton	Income-Based Water Assistance Programs, Hardship Programs / NRDC Pilot Program
National Resource Defense Council	Pilot Program
Detroit Water and Sewerage Department	WRAP, Lifeline Program, Payment Plans
Michael Johnson, CFO, Birmingham Water Works	CAPs in Birmingham, AL
Michael Sweeny, Toho Water Authority	CAPs in Toho, FL
George Hawkins, DC Water	CAPs in Washington, D.C.
Maria DeChellis, AccessH2O	Water Utility Support on Affordability Issues and Assistance Programs
United Way	Administration of CAPs, including, THAW, WRAP, Michigan Energy Assistance Program (MEAP), Emergency Assistance Programs
Michigan Public Services Commission	MEAP and State Emergency Assistance Programs
Michigan Department of Health and Human Services	Administration of Multiple Public Assistance Programs
City of Kalamazoo	Customer Assistance Programs and Water Affordability Planning

Table C.1 Individuals and Organizations We Worked With

We would like to specifically highlight two impactful exploratory meetings that helped shape the components of the affordability plans we developed.

First were meetings surrounding TAP, Philadelphia's affordability program that was rolled out in 2017. We had the opportunity to talk in depth with leaders involved in developing, implementing, and administering the program. During those discussions, we discovered that TAP provided a great model for an income-based water assistance program; however, we also received candid feedback about struggles with enrollment, customer participation projections, and program funding. Additionally, during our research, we watched how the city handled water shutoffs, and other pandemic-related challenges, including disputes over significant water rate increases. Philadelphia's program details were closely studied and provided critical insight to the development of our income-based tiered rate discount program. Some key factors from public records regarding TAP are provided below.

- Low-income customers pay reduced water and sewer rates based upon a percentage of their household income as established by local ordinance. Monthly bills were capped at 2%-4% of monthly income, depending on Federal Poverty Level (FPL) with no portion of the payments being used to reduce arrearages. For income levels between 151%-250% of the FPL, monthly payments toward arrears were set so the total monthly bill would amount to about 4% of monthly income.
- TAP allowed forgiveness of all water and sewer bill debt after 24 months of on-time payments.
- Primary goals of TAP were: (1) affordable monthly bills; (2) protection against shutoff and foreclosure; and (3) encouragement for timely payments.
- In April 2017, before implementing TAP, Philadelphia's poverty rate was approximately 26% and 40,000 residential properties were in "shutoff status."
- The costs associated with TAP included \$1 million in start-up costs (FY2017), \$3 million in ongoing administrative costs, and \$18 million for TAP benefits (FY2018) based on 80% enrollment. The pre-launch estimate of revenue loss for FY2018 was \$16.3 million and the post-launch estimate of revenue loss was \$3.9 million.
- During the entire 2020 year, more than 9,650 TAP applications were processed, and 4,791 customers were enrolled. As of December 2020, there were 16,433 active participants in the program.
- Due to the economic strain of the COVID-19

pandemic, Philadelphia's water department proposed a rate hike of 17.6% over the next two years which was introduced in early 2021. Special proceedings have been underway to determine what the final rate increase will be.

- As of January 2022, some 231,000 customers, or about 45% of Philadelphia water department's 496,000 accounts, have fallen behind on payments and more than 69,000 households were facing water shutoffs.

Studying TAP, and having discussions with those familiar with the program, helped us craft informed solutions to avoid experiencing some of the same challenges Philadelphia has faced. Most importantly, we learned that a sustainable funding source is imperative to the success of an income-based rate customer assistance program.

We also had the opportunity to participate in a series of meetings with representatives from Michigan utility companies, including Consumers Energy and DTE Energy, regarding CAPs offered to gas and electric customers. In addition, we met with representatives from the state regulatory agency, the Michigan Department of Licensing and Regulatory Affairs, as well the state agencies involved in the administration of energy CAPs, the Michigan Public Services Commission (MPSC), and the Michigan Department of Health and Human Services (MDHHS). Compared to most Michigan water utilities that are publicly owned and operated and not subject to economic regulations, most Michigan energy utilities are privately owned and operated and are subject to state economic regulation. Despite these significant differences, energy utilities provide an excellent example for the development, implementation, and administration of large-scale statewide CAPs. There is a clear link between energy and water utilities, and we were interested in exploring the potential to expand existing energy utility assistance program structures to include water assistance to provide holistic household utility assistance.

We quickly learned that the foundation of energy CAPs stems from statutory authorization. In 2012, the Michigan Energy Assistance Act was enacted to require MDHHS to establish and administer the Michigan Energy Assistance Program (MEAP), a statewide energy assistance program for eligible low-income households. MEAP is funded from fees collected through participating energy utility providers, as well as through state and federal funds, when available. The MPSC, together with MDHHS, are responsible for administering MEAP.

MDHHS determines eligibility for assistance and MPSC contracts with local non-profits, local governments, and public and private entities to administer MEAP at a local level. Under the act, there are a variety of CAPs offered as identified below.

The CARE Program

(Consumers Affordable Resource for Energy)

- 24-month affordable payment plan. Enrollment is on a first-come, first-served basis.
- CARE members receive the following benefits:
 - A portion of monthly bill paid by the program.
 - Any past due balance will gradually be forgiven as a reward for on time payments.
 - May also be eligible to receive no-cost, in-home energy efficiency upgrades to help reduce energy costs through our Helping Neighbors Program.
- Eligibility Requirements
 - Must receive an energy related SER from DHHS in order to be considered income eligible.
 - Total account balance must be less than \$4,000.
 - Must be an active residential account.
 - Must not have unaddressed theft or fraud on the account.

The Budget Program

- If past due balance is less than \$75 the Budget Plan offers an effective solution to avoid unexpectedly high bills during times of higher energy use. The Budget Plan is an option to have a bill that's predictable from month-to-month, but the customer cannot have a past due balance of more than \$75 and cannot have defaulted on a payment more than two times in the last year.

Shutoff Protection Plan

- Year-round protection from shutoff for all seniors (65 and older) and qualifying customers. An initial down payment is required and then annual energy costs are spread out into equal monthly payments based on expected monthly energy use, plus monthly portions of past due balance.

Winter Protection Program

- This plan is available to seniors (65 or older) and qualifying customers guarding against a shutoff and high payments during the winter. An initial down payment is required. From November through March, the customer pays 7% of their estimated annual bill along with a portion of any past due amount. In April, the customer reconciles their bill for the previous months and pays 9% of estimated annual bill plus a portion of past due balance.

State Emergency Relief (SER)

- SER is available year-round to assist income qualified households with a heat or electric past due notice, shutoff notice, or need for deliverable fuel.

Assistance for Renters

- COVID Emergency Rental Assistance (CERA) is a new program available to help tenants facing pandemic-related hardships avoid eviction. The program offers up to 12 months of rental assistance, three months of which can be future payments. Assistance for past due and future electricity, heat, water, sewer, and trash costs. Funds are managed by the Michigan State Housing Development Authority's network of nonprofit agencies.

Michigan 2-1-1 Program

- Supported by the United Way, 2-1-1 is a free service linking people with information or agencies for help with energy assistance and other needs. Calls are confidential and answered 24 hours a day, seven days a week, 365 days a year.

Home Heating Credit (Tax Credit)

- The Home Heating Credit is a way the State of Michigan helps pay some heating expenses for qualified Michigan homeowners or renters. A Home Heating Credit Claim Form (MI-1040CR-7) must be filed to determine if the customer qualifies for the credit. The credit, for most people, is based on a comparison between either standard credit allowance or actual heating costs and total household resources. The credit is designed to provide assistance to low-income, deaf, disabled or blind persons and disabled veterans. Michigan residents who are not in these groups may also qualify for the credit.

Through our exploratory meetings with those involved with administering energy-related CAPs, we learned that the MEAA was developed through the efforts of a collaborative process to develop a sustainable statewide energy assistance program. A workgroup was convened with a diverse set of stakeholders who would all be impacted by the program including large energy suppliers, fuel providers, and small energy co-ops. Interestingly, participation from each organization was limited to ensure everyone had a seat at the table and had equal opportunity to provide input. One factor the workgroup proposed was separating funding from the program design and dealing with those issues in two separate pieces of legislation. This approach ensured that if program funding sources changed, the program

design itself would not need to be modified. Other key insights the workgroup focused on was ensuring that all affordability plans and CAPs offered to customers were consistent, and that funds paid into the program would be returned to the communities from where they originated. At the time MEAA was being developed, energy utilities all operated their own separate CAPs and it was a challenge to transition from independent programs to statewide programs. However, they noted that this may not be an issue for water utilities because most lack customer assistance programs.

The opportunity to speak with those involved in the administration of energy CAPs has been tremendously beneficial and will continue after this grant work is complete. The primary lesson we learned from studying and discussing energy CAPs is the need for enabling legislation to provide explicit authorization for water utilities to develop and fund water affordability programs. As described in this report, enacting legislation to establish a statewide low-income water affordability program is part of the proposed water affordability plan. The workgroup that gathered to develop to the MEAA provides a great example for how legislative leaders could develop similar legislation to create a sustainable statewide water affordability program.

III. Affordability Research Summary

A. Key Findings

Based on the research conducted, WRC identified the following key findings regarding water affordability and customer assistance programs designed to address them.

1. There is a strong desire for income-based affordability programs

A common theme echoed throughout the literature, presentations, interviews, and meetings is that assistance, particularly short-term, temporary, or emergency assistance, for water bills does not make water affordable. There are a variety of federal, state, and local assistance programs designed to help households pay past-due water bills. These programs fall short because the assistance is only intended to relieve past due water bills and does not address current or future water bills. The concept around income-based rates, discounts, or CAPs is to charge households an amount tailored to their income level so they can afford to regularly pay for water services. The benefits of consistent affordable bills include avoiding shutoffs, avoiding large past-due bills, and reducing the need for temporary assistance programs. There also is a strong push for, and industry movement

toward, designing rates, discounts, and CAPs that are based on household income levels. For example, at the time of this report, the Great Lakes Water Authority (GLWA) approved changes to its Water Residential Assistance Program (WRAP) to transition from a flat payment of \$25 toward bill assistance to a program based on household income level and water usage. Similarly, the Detroit Water and Sewerage Department unveiled its new Lifeline Plan to provide qualifying customers up to 4,500 gallons of water per month at a fixed rate based on their household income.

2. Michigan energy utility customer assistance programs provide a great model, and potential partner, for water customer assistance programs

The Michigan Energy Assistance Program (MEAP) has an established program infrastructure, stable funding source, administrative partners, and assistance delivery method that could be used or adapted to include a similar statewide water assistance program. Energy utilities, with enabling legislation and financial support from state and federal programs, have already developed a tiered income-based assistance program. Our research found the link between energy and water utility affordability issues provides an ideal opportunity to take a streamlined and holistic approach to address all household affordability issues in a unified utility affordability program.

3. Low enrollment in customer assistance programs is common

Research shows that there is a large discrepancy between households that are eligible for CAPs versus households that are enrolled in CAPs. This is a well-known challenge throughout the water industry and is frequently discussed in writings, presentations, and meetings. Barriers to enrollment have some similarities throughout the country, including arduous application processes and lack of knowledge about programs. There are a wide range of solutions being implemented to boost enrollment levels for eligible individuals. Those efforts primarily focus on increased marketing, community outreach, and partnerships between local government agencies, non-government agencies, and non-profit organizations. Other options suggested to boost enrollment include using categorical eligibility, meaning eligibility for another CAP or public benefit program would be used to determine eligibility for another CAP, self-attestation, and automatic (also known as “opt-out”) enrollment.

4. Funding sources for affordability programs can vary widely

Funding sources for CAPs may include customer rates, private donations, taxes, and grants. The most common funding source comes from rates paid by customers. The most successful affordability programs have been developed by larger utilities with heterogeneous income levels that can bear the costs of providing assistance to lower-income residents in the community. Accordingly, under-served and smaller communities with a homogeneous low-income population are less likely to have adequate funding or resources to sustain customer assistance programs. However, some states strictly prohibit rate-funded CAPs. For municipalities and utilities in those states, private donation programs ranging from rounding up customer bills to the nearest dollar amount, to annual special event fundraisers, have provided significant resources to fund a CAP.

B. Affordability Program Success Factors

In addition to the key research findings above, the WRC also identified several success factors for customer assistance programs.

1. Rate Studies

Municipalities or utilities that conducted rate studies have an advantage in designing customer assistance programs because they have evaluated their community's affordability needs and can develop a rate or business case model to meet that need. Rate or affordability studies can also evaluate customers' income characteristics which allows them to consider various CAP opportunities, including the impact on revenue and expenditures.

2. Partnerships

Affordability programs appear to be most successful when they are developed, implemented, and administered in partnership with a Community-Based Organizations or Community Action Agencies. We found that they often administer many assistance programs directed to low-income households including CAPs for housing, food, and energy. Local representatives from these organizations described the benefits of having many "doors" for customers to enter. That is, a customer may come to one of these agencies for help enrolling in an energy CAP and walk out with assistance for other services, like rent or water assistance.

3. Community Trust

Community trust builds from consistent messaging, marketing campaigns, community outreach, and customer success stories. A consistent finding throughout our research was the importance of having

a strong marketing and communications team behind any affordability program.

4. Enabling Legislation or Regulation

Water affordability programs will be more successful in states that have enabling legislation that specifically authorizes water subsidies and rate-funded CAPs, in addition to having regulating authorities that authorize rate structures that are not tied exclusively to cost recovery.

5. Engaged Role in Social Services

Customer assistance programs alone will not be sufficient to solve large-scale poverty issues. However, if utilities and municipalities are willing to recognize and accept a role to address underlying social, economic, and legal causes of poverty, they are more likely to have successful customer engagement in assistance programs.

C. Affordability Program Challenges

Potential challenges to developing and funding affordability programs include:

1. Lack of enabling legislation or regulation

Many states, like Michigan, lack laws that expressly allow water subsidies or rate-funded affordability programs. In addition, Michigan is one of only six states that is not subject to economic regulation by a regulatory agency, like the Michigan Public Services Commission, that protects consumers from monopolies and monitors utilities' financial stability.

2. Lack of permanent funding

The federal government has developed several permanent low-income assistance programs for food, energy, and medical care, but there are no similar programs for water. Similarly, there is no statewide waster assistance program or funding source for local municipalities or public utilities. The lack of funding is further exacerbated for many communities that are required to set rates based on the cost of service and are not allowed to increase that rate across the customer bases to provide benefits to low-income ratepayers. This type of prohibition significantly reduces the sources of funding for programs even further.

3. Implementation and Administration Expenses

Programs designed to support low-income ratepayers are expensive to research, design, and implement. Many successful CAPs are sponsored by larger utilities that can spread the cost across a broader customer base or have a larger community from which to secure funding support.

4. Need for More Political Champions

Elected officials and lawmakers are needed to implement change, modify laws, and allocate funding necessary to support CAPs designed to provide financial assistance to water customers and help make their bills more affordable.

IV. Short-List of Customer Assistance Programs

Based on the research described in this appendix, we focused on three specific customer assistance programs as part of the recommend affordability plans. These include, (1) an income-based tiered bill discount program; (2) a hardship/emergency program; and (3) a conservation program that would include leak detection and plumbing repairs. To evaluate the feasibility of incorporating these programs into the affordability plans, and address any potential legal challenges, we utilized in-house and outside legal counsel to conduct a legal

analysis of these approaches. For further details, please see [Appendix D, Legal Analysis and Mitigation Strategies](#).

In addition, we also utilized a framework developed by two national consulting firms, Stantec and Raftelis, to conduct a gap analysis of our proposed affordability plan.

Following this process, we were able to further develop the short-listed CAPs into components of our affordability plans. For more information regarding the gap analysis process, see [Appendix I, Gap Analysis](#).

Appendix D: Legal Analysis and Mitigation Measures

I. Introduction

Through its research process, the office of the Oakland County Water Resources Commissioner (WRC) developed a “short list” of customer assistance programs to further analyze and determine what, if any, legal risk would be involved in implementing them in the affordability plans for the City of Pontiac or the Charter Township of Royal Oak. The programs that were subject to the legal analysis included the following three categories:

1. Income-based rate assistance programs;
2. Hardship programs; and
3. Water efficiency, conservation, or plumbing repair programs.

Although each program is unique, they share a common underlying legal issue, namely, the mechanism in which it can be funded. Fees charged for drinking water and sewer services are the primary source of revenue for public water utilities that operate on a not-for-profit basis. However, water utility providers are subject to many laws and legal restrictions regarding fee setting, including the way the fees are collected, and how collected fee revenue can be spent. Accordingly, the primary legal analysis focuses on funding these programs.

To aid in the legal analysis, this appendix first provides an overview of the existing laws governing how public water utilities in Michigan are owned, operated, and funded. Next, the appendix identifies the primary potential legal challenges for affordability programs in Michigan. Finally, the appendix offers mitigation measures that reduce legal risks and challenges related to these important programs.

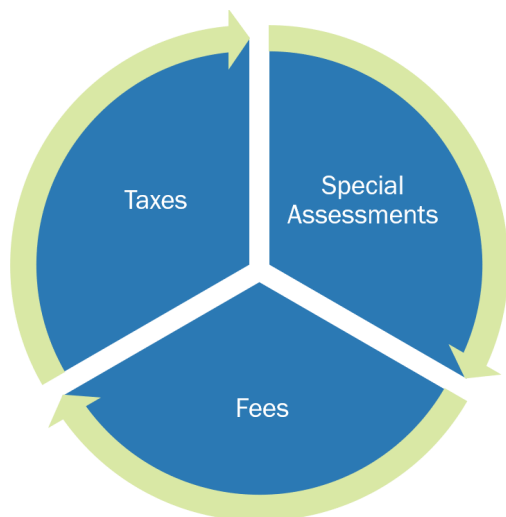


Figure D.1 Means to Raise Revenue



II. Legal Overview: How Public Water Utilities are Owned, Operated and Funded

A. Authority to Own and Operate a Water Utility

At the broadest level, the Michigan Constitution authorizes cities and villages in Michigan to acquire, own, and operate their own water and wastewater facilities. Mich. Const. Art. VII, Sec. 24. Statutory authority permits townships to provide water for township use by purchase or by ownership of the township (MCL 41.331-.350(u)) and to provide water and sewage and waste disposal systems (MCL 123.231-.236). Caselaw established that townships also have authority to purchase, construct, or extend a water supply system to own, operate and maintain it. See *Seltzer v Sterling Twp*, 371 Mich 214 (1963).

B. Authority to Finance Water Services:

Municipalities are subject to a restrictive set of rules regarding the financing of local government operations. When a municipality provides certain services, like delivery of drinking water or treatment of wastewater, it has three basic avenues to raise revenue to pay for those services: taxes, special assessments, and user fees. All three of these options, described further below, have common elements but with very different restrictions. Distinguishing one from another is not always simple and has resulted in confusing, and often contradictory, results.

1. Taxes

Under the Michigan Constitution, Mich. Const. Art IX, Sec. 3, the legislature must provide for the uniform general taxation of real and personal property not exempt from law.

The Michigan General Property Tax Act, MCL 211.1 et seq., subjects certain real and personal property in Michigan to tax. Ad valorem taxes most commonly known as property taxes that are levied as a millage rate multiplied by a portion of the property's market value, known as taxable value. MCL 211.10.

2. Special Assessments

A special assessment is a charge assessed by a local government, or governmental entity such as a drainage district, to pay for special projects like improvements or services, located within a specific geographic region. Special assessments are not a property tax and are not used to offset the general expenses of government in the same way as ad valorem taxes. "The theory of special assessment is that a special benefit has been conferred, over and above that conferred upon the community itself." *Fluckey v Plymouth*, 358 Mich 447, 453 (1960). The market value of real property subject to a special assessment must increase as a direct and specific result of the project. To impose a special assessment, there must be statutory authority for the project to assess. There are more than a dozen statutes, in addition to individual city, village, and township ordinances, providing authority for a multitude of special assessment projects.

3. User Fees

A user fee or charge is used as a means of allocating a cost to a user or beneficiary of a specific service or commodity provided. The charge imposed must relate directly to the value of the individual use of the service or benefit and to the cost of producing the commodity or service. See *Ripperger v Grand Rapids*, 338 Mich 682, (1954) and *Jones v Board of Water Commissioners*, 34 Mich 273 (1876). One way to distinguish user fees from special assessments is that special assessments provide a special value or service for the property, whereas user fees benefit the user or occupant of the property and must bear a direct relation to the cost of providing the service to the ratepayer. Accordingly, the value to one user may differ from another depending on the individual need or consumption. Most importantly, a user fee cannot be used to raise general revenue for providing public services in addition to covering the costs of providing the service. See *Rouge Parkway Assoc v Wayne*, 423 Mich 411 (1985). Accordingly, revenues derived from user fees or charges must be segregated from other municipal funds and applied solely to the expense of providing the service. See *Dukesherer Farms, Inc v Ball*, 405 Mich 1, 272 (1979). User fees are the most common mechanism municipalities use for providing drinking water and wastewater services.



Oakland Towne Center, City of Pontiac

C. Authority to Charge Fees and Set Service Rates

The primary statutory authority for the imposition of rates and charges for the "services, facilities, commodities furnished by ... public improvements" is the Revenue Bond Act of 1933, 1933 PA 94 (MCL 141.101 et seq.). The Bond Act is focused on the authority of municipalities to issue bonds. The Bond Act also expressly provides that the powers granted in the act, including the powers to establish rates and charges, may be exercised even if no bonds are issued. Most importantly, the Bond Act expressly prohibits providing services without charge: "free service shall not be furnished by a public improvement to a person, firm, or corporation, public or private, or to a public agency or instrumentality." MCL 141.118(1).

Aside from the Bond Act authorizing the imposition of rates and charges, there is minimal statutory guidance regarding how those rates are set and municipalities have seemingly broad rate-setting authority with few restrictions. The following are the other statutes that address this issue.

- MCL 486.315 prohibits utilities from establishing rates that are "undue or excessive."
- MCL 123.141(2) provides that rates charged for water furnished outside of a local government's territorial limits must be based on the actual cost of service. There is no similar rule for services provided within territorial boundaries.

It is also notable that Michigan is one of only six states not subject to economic regulations by state public utility or public service commissions, so each utility has discretion without state oversight to set rates under these broad guidelines.

User charges for water services are authorized through the adoption of a rate ordinance. Local utilities generally develop rates that are based on their annual revenue need which is tied to the utilities' cost of service.

Accordingly, customers are billed for both the capital and operating costs incurred by the utilities with minimal, if any, unused funds available for unexpected maintenance or upgrades. Local ordinances vary widely but usually include provisions regarding the scope of water services to be provided, user classifications (residential, business, or agricultural), the time and method of bill payments, along with penalties for non-payment and other enforcement provisions.

D. Enforcement Authority and Collection of User Charges

Michigan law provides public water utilities with certain enforcement mechanisms to ensure recovery of the costs of providing water services, including automatic liens, disconnection to services, and general debt collection. Each of these options is described below.

1. Liens

Under the Municipal Water Lien Act of 1939, MCL 123.161-167, a lien is established on real property receiving service “as security” for the collection of charges for services furnished to the property. MCL 123.162. The lien is effective “immediately upon distribution of the water” but the lien cannot be enforced more than five years after it becomes effective or from the date the service was received. MCL 123.162. The statute also provides for notice of the lien. MCL 123.164. While the liens are automatic and mandatory, municipalities are granted discretion with respect to the manner of collection on the lien. This Municipal Water Lien Act was enacted after the Bond Act and is intended to supplement the provisions in the Bond Act that similarly permit liens.

2. Certification

Under the Bond Act, charges delinquent for six months or more may be certified annually to the proper tax assessing authority. The assessor may then enter a lien in the amount certified against the property on the next tax roll. That lien would then be enforced in the same manner provided for the collection of unpaid property taxes. The Bond Act provides municipalities with discretion to “adopt an ordinance relating to the exercise of the powers granted in this act and to other matters necessary or desirable to effectuate this act, to provide for the adequate operation of a public improvement established under this act...” MCL 141.106.

3. Disconnection of Service

The Bond Act permits the enforcement of payment obligations by disconnection of service to the premises, including shutoff of water service for non-payment of water or sewer bills. MCL 141.121. The Municipal Water Lien Act also authorizes the discontinuation of water service or sewage system service in the event of non-payment. MCL 123.166.

4. Debt Collection

Under the Water Lien Act, traditional debt collection methods are also permissible. The Municipal Water Lien Act states, in pertinent part, “... a municipality’s attempts to collect these sewage system or water rates, assessments, charges, or rentals by any process shall not invalidate or waive the lien upon the premises.” MCL 123.166.

III. Potential Legal Challenges

The primary obstacle public water utilities face in implementing any kind of affordability plan that would include water rate assistance, hardship assistance, or plumbing assistance, is the lack of a permanent funding source. There is no federal or state water program akin to food assistance, like the Supplemental Nutrition Assistance Program (SNAP), or energy assistance, like the Low-Income Heating and Energy Assistance Program (LIHEAP) and Michigan Energy Assistance Program (MEAP). SNAP and LIHEAP are customer assistance programs funded by federal appropriations. MEAP is funded through a combination of state appropriated funds and customer charges. Additionally, unlike private energy companies, public water utilities operate on

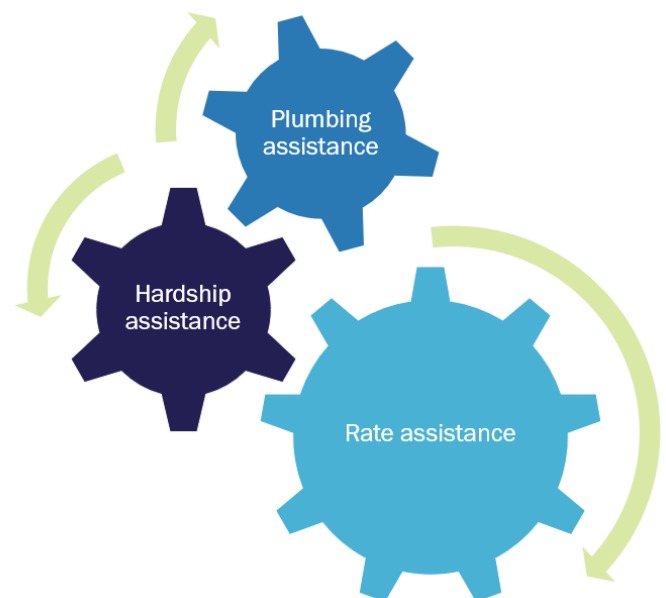


Figure D.2 Permanent Need for Funding

a not-for-profit basis and are subject to the legal and financial restrictions described above. Without external funding from the federal or state government, public water utilities operated by local governments and municipalities are limited to utilizing one of the permissible mechanisms to fund a water affordability program, namely, taxes, special assessments, and fees. Special assessments are limited to special projects related to improvements for a specific area and would not be a viable funding source. This leaves public water utilities with two limited options: taxes and user fees. Both are vulnerable to a legal challenge.

A. Taxes: Limits under the Headlee Amendment and Proposal A

In Michigan, local governments are prohibited from increasing taxes without voter approval. Starting in the 1970s, a series of constitutional, legislative, and judicial decisions began affecting how local governments could finance government services and operations. These changes were primarily a response to a “tax revolt” stemming from California’s Proposition 13 where voters sought greater control over the amount of taxes they could be charged. In 1978, Michigan voters approved sweeping amendments, generally known as the “Headlee Amendment,” to the state constitution to limit the state’s ability to tax its citizens. Under the Headlee Amendment, Mich. Const. Art. IX, Sec. 31, local governments are prohibited from increasing taxes without voter approval.



In 1994, Michigan voters also approved the Michigan Finance Amendment, commonly known as Proposal A, as a legislatively referred constitutional amendment. The purpose of Proposal A was to reform the Michigan educational financial system; however, in the context of property taxes, there were two key provisions that dramatically decreased the amount of property taxes paid by Michigan residents and limited future property tax increases. First, taxable value increases were limited to 5% or the rate of inflation, whichever is less. Second, when property is sold, the tax base reverts to the State Equalized Value and annual taxable values are then capped once again.³

The Headlee Amendment and Proposal A may not seem relevant to water affordability or assistance programs; however, they are at the core of the problem because these constitutional changes greatly limited the financial resources of local governments. A local government’s ability to finance government services, including water

services, through taxes was hampered by the Headlee Amendment and Proposal A because any new tax must be placed on a ballot and approved by voters. Taxes in general are unpopular, disfavored, and challenging to get approved by voters. While it is legally permissible for a local government or municipality to charge a tax to fund a water assistance program, under the Headlee Amendment and Proposal A, it would be considered a new tax subject to voter approval. The true challenge then becomes less of a legal one and more of political one in finding a champion for a new tax and garnering enough public support to approve it.

B. Fees: Challenged as a “Disguised Taxes”

Following passage of the Headlee Amendment and Proposal A, local governments became more reliant on fees for services because fees did not require voter approval. However, over time, the line between fees and taxes became blurred and resulted in litigation regarding claims that fees were unauthorized or “disguised” taxes. This issue came to a head in the case, *Bolt v City of Lansing*, 459 Mich 152 (1998). In the *Bolt* case, the plaintiff claimed that a stormwater charge was a disguised tax that violated the Headlee Amendment. The Michigan Supreme Court ruled that the stormwater charge (a user fee) exceeded the actual cost of service and was an invalid tax. In reaching its holding, the court in *Bolt* laid out a three-prong test. First, the court held that a user fee is meant for regulation, whereas a tax is meant to generate revenues. Second, the court continued that a user fee must be proportionate to the necessary cost of service. Finally, the court determined that, unlike taxes, fees should be voluntary, meaning that people have the right to refuse use of the commodity.

In sum, the court found that the utility charge imposed on property owners to finance infrastructure changes needed to separate stormwater and wastewater sewers was a tax, not a fee. Further, the court held that the tax was not legally imposed because it had not been approved by the voters.

In the subsequent case of *Jackson Co v City of Jackson*, 302 Mich App 90 (2013), the Michigan Court of Appeals found that a stormwater charge assessed by the City of Jackson was not a fee but instead was a tax. Applying the *Bolt* factors, the court in *Jackson* stated that the stormwater charge served dual purposes. A regulatory purpose was furthered by financing the protection of local waterways from solid pollutants carried in stormwater discharged from properties, and a general revenue-raising purpose was served by shifting the funding of preexisting government activities from declining general and street fund revenues to a stormwater charge.

³ https://www.canr.msu.edu/news/a_refresher_on_proposal_a_and_local_property_taxes

The court also found that the charge was not proportionate to the necessary costs of service nor was the fee voluntary.

While neither the Headlee Amendment, nor any other law, directly prohibits a public water utility from utilizing rate revenue to fund a water affordability program, subsequent caselaw interrupting the amendment, particularly the *Bolt* and *Jackson* cases, raise significant concerns that any rate-funded water affordability programs would be considered an invalid tax. The Headlee Amendment, and the Supreme Court's interpretation of it, suggest that those opposed to such programs might claim that setting rates or charging fees to generate revenues, which would then be used to subsidize service for some customers, is an improper tax. If a court finds that the primary purpose of the fee would be to raise revenue for a water affordability program, it could be found to be an invalid tax under the *Bolt* and *Jackson* cases. Opponents may also argue that any fees to fund the program would not be proportionate or necessary to the costs of service, or that the fee is not voluntary.

Many water advocates argue that the broad discretionary rate-setting authority afforded to utilities insulates them from legal challenges under the Headlee Amendment and *Bolt* and *Jackson* caselaw; however, that argument does not prevent lawsuits from being brought against utilities that must address the allegations, regardless of the merits, and evaluate the economic realities of protracted litigation with settlement. Through a partnership with the National Wildlife Federation, and the University of Michigan Law School, Environmental Law & Sustainability Clinic, an analysis of Headlee Amendment challenges from 2015 to 2022 was conducted to determine if a rate increase to fund a water affordability program would be vulnerable to similar lawsuits under the Headlee Amendment. Based on the findings of the analysis, which was narrowed to cases in Michigan's Sixth Circuit, no plaintiff had successfully overcome the presumption of reasonableness in favor of municipal rate-setting in the appellate court in the past seven years. However, pending litigation originating from the City of Detroit may change this pattern.

Two combined cases arising out of Detroit, namely, *Binns v. City of Detroit* and *Detroit All. Against Rain Tax (DAART) v. City of Detroit* (citations omitted), involved plaintiffs challenging a Detroit Water and Sewerage Department (DWSD) and Detroit Board of Water Commissioners (BWC) drainage charge. The plaintiffs claimed this charge was an unconstitutional tax. In an unpublished opinion, the Court of Appeals applied the

Bolt criteria and concluded that the charge was a fee. First, the charge served a regulatory purpose because removal and treatment of stormwater runoff was a service required by federal regulations. Additionally, there was no evidence of a revenue-generating purpose that would outweigh this regulatory purpose.

As to the second *Bolt* factor, the court found the drainage charge was proportionate to the costs of service, as it was calculated based on aerial photography of impervious areas and city assessor data. Turning to the third factor, the court found that the charge was compulsory. Considered together, however, the factors weighed toward finding the drainage charge a fee, not a tax.

The plaintiffs filed an application for leave to appeal the findings of the Court of Appeals. The Supreme Court vacated the judgment and remanded the case back to the Court of Appeals for reconsideration and the consolidated cases were separated with the *DAART* case being held in abeyance while the *Binns* case is being decided. A concurrence noted that whatever analysis applied to *Binns* will also be applied to *DAART*. The Court of Appeals was instructed to refer *Binns* to a judicial circuit for proceedings for further factual findings that were not answered in the original pleadings. The matter is now before the Chief Judge of the Wayne County Circuit Court for further fact-finding, particularly for the proportionality prong.

In a concurrence to the *DAART* remand, Justice Elizabeth T. Clement clarified that she believed a remand was appropriate because the current facts do not give the Court of Appeals a way to assess how proportional the drainage charges are. She suggests investigating the overall cost of the sewer system, the portion of the system that is ascribed to the storm sewer, how the cost is apportioned among property owners, and if the city's assumptions about permeable/impermeable runoff are reasonable. In a separate concurrence to the *Binns* remand, Justice Zahra singled out the proportionality factor as critical for the analysis on remand and cited plaintiff's amicus brief which claimed that Detroit did not collect drainage charges from parcels owned by the Detroit Land Bank Authority (DLBA). Justice Zahra also noted that the lost revenues from not charging drainage fees from this parcel are made up through higher drainage rates imposed on other landowners and indicated that subsidizing the drainage costs of city-owned property cannot be proportional to the costs of service, and that this weighs in favor of finding the charge as a fee. However, Justice Clement noted that there is no Headlee jurisprudence that states

municipalities may not provide services at less than their cost, even to city-owned properties; only that no landowner may be charged more than the reasonable cost of the service conferred.

At the time of this report, the *Binns* case was still active but there have been no findings or final rulings issued from the circuit court proceedings; however, the outcome of the case will likely have implications for future proportionality analysis in Headlee challenges. *Binns* is likely to provide more clarity on what a “proportional” charge is.

Specifically, it may determine whether it is constitutional to charge certain property owners less than the reasonable cost of service without running afoul of the Headlee Amendment. Depending on how the court treats the DLBA issue, it may also offer insight to whether the argument that a charge is a tax because it subsidizes certain properties is persuasive to the court. However, even if the court finds that the charge subsidizes drainage for city-owned properties, it does not necessarily foreclose an income-based water rate because the facts are slightly different. In an income-based water rate, all users would be paying into the fund, whereas in *Binns*, city-owned properties paid nothing at all.

While appellate courts have been deferential to municipalities in recent cases, by remanding *Binns* the Supreme Court may be signaling that it disapproves of the current approach. However, until this case is decided, it is difficult to predict where the court will come out. In the meantime, it’s likely that the potential for Headlee lawsuits will continue to have a chilling effect on utilities from utilizing rate revenue to fund affordability plans, including affordability programs that form any type of rate subsidization.

C. Income-Based Rates

Although income-based rates did not make the “short list” of options for further legal analysis, it is important to note the consideration given to income-based rates as part of the overall affordability plans. For purposes of this report, we will use the definition of income-based found in the National Wildlife Federation Legal Pathways to Income-Based Drinking Water Rates in Michigan (Legal Pathways) report, which states: “an income-based drinking water rate or income rate is a rate that applies to a set of residential households whose monthly income is at or below a certain percentage of the federal poverty rate.” In theory, income-based rates, as opposed to traditional assistance programs, make

water equitable and affordable because they are based on the ability to pay. As explained in the Legal Pathway’s report, “the income rate yields individual household water bills that are affordable because the rate ties to the amount charged for water to the household income.” Philadelphia’s Income-Based Water Rate Assistance Program is the most well-known example of an income-based water rate plan.

As part of this grant work, the WRC considered a variety of rate structures, including income-based rate structures, to evaluate the impact each structure would have on water customer affordability and utility viability. Further information on our rate evaluation can be found in [Appendix H, Rate Structures and Affordability Planning](#). Due to the income demographics of Pontiac and Royal Oak Township, an income-based rate structure would not improve water affordability and would likely exacerbate the problem and make water less affordable for more water customers. Both communities lack the population size and income diversity, in both its residential customer base and commercial customer base, to support an income-based rate structure for their respective water systems. In her Policy Note: A Universal Equity—Efficiency Model for Pricing Water, economist Janice A. Beecher, Ph. D. discusses a variety of rate designs but notes regarding the implementation of any rate design that: “All are easier to implement for systems of scale with broad and diverse (possibly regional) customer bases, higher levels of economic activity and property ownership, lower levels of poverty, and manageable costs of service.” In the case of Pontiac and Royal Oak Township, implementing an income-based rate model did warrant further legal analysis because they lack a broad and diverse customer base and are not systems of scale. Income-based rates are not economically feasible regardless of their legality.

D. Income-Based Discounts

Although an income-based rate structure is not part of the affordability plans, an income-based affordability program is central to the plans. Specifically we focused on income based discounts. An income-based discount differs from an income-based rate structure because all residential water customers would be charged the same water rates. Rate assistance, in the form of a discount, would be available for eligible water customers with household income at or below a certain threshold of the Federal Poverty Level (FPL). A funding source would be used to pay the difference between the water bill and discount. This would allow the utility to recover the full cost of service while the customer pays an affordable amount for the same.

The discount amounts would be tiered with different discounts provided based on what percentage of the FPL the water customer's household income falls into. The discounts are designed to provide qualifying customers with fixed monthly payments that do not exceed approximately 4% of household income. For further information on our income-based rate affordability program, see [Appendix H, Rate Structures and Affordability Planning](#).

E. Equal Protection Challenges

State and federal equal protection laws require governments to treat an individual in the same manner as others in similar conditions and circumstances. With additional assistance from the National Wildlife Federation, and the University of Michigan Law School Environmental Law and Sustainability Clinic, legal analysis was conducted to determine if income-based rate structures or discounts would violate any equal protection rights. The findings were that a challenge brought under state or federal equal protection jurisprudence would be highly unlikely to succeed. A challenge to a utility rate or discount under the U.S. Constitution would be subject to a rational basis review and would require plaintiffs to meet the high burden of negating every possible basis which might support state action. Challenges under Michigan's Equal Protection clause are subject to an additional test referred to as the "Alexander Test" which applies only to legislative enactments and analyzes whether the government entity has legitimately distinguished between groups in a way that serves legislative goals, or if members of the same group are arbitrarily treated unequally.

An equal protection challenge from a commercial customer who did not qualify for an income-based rate or discount, would be extremely unlikely to succeed. Commercial customers are not similarly situated as residential customers, and it is well established that a utility can charge different rates for commercial customers and residential customers, and even different types of commercial customers. However, an equal protection suit challenging two different classes of residential ratepayers based upon income would be a case of first impression in Michigan. A potential plaintiff would likely argue that an income-based rate or discount is illegitimate because it improperly differentiates between two groups that cost the same to service.

Defending an income-based rate or discount would require successfully demonstrating that differently charged groups are distinct from each other because charging different groups differently is permissible.

Arguably, income levels measured in terms of a percentage of the Federal Poverty Level is a constitutionally acceptable manner to distinguish groups of people because many government programs are already based upon this method. For example, the Supplemental Nutrition Assistance Program (SNAP), the Low-Income Heating and Energy Assistance Program (LIHEAP), and the Michigan Energy Assistance Program (MEAP) all utilize income levels to determine benefit eligibility. An income-based water rate or discount that relies on similar income criteria would likely survive an equal protection challenge.

IV. Mitigation Strategies

Most legal challenges surrounding efforts to address water affordability stem from local utilities' ability, or lack thereof, to fund affordability programs. Accordingly, most of the proposed strategies are focused on developing permanent and sustainable funding sources. However, these strategies require action beyond a public water utility's control at a federal, state, and local level. The mitigation strategies listed below are divided into actions that can be taken at each respective level.

A. Federal Level

- Develop a National Strategy to Address Water Affordability. In the United States, responsibility for water services, along with related health and social services, are fragmented among and across all levels of government. As a result, there is no clear person or agency in charge of this very complicated problem, and the burden most frequently falls on local governments. While some states, cities, and municipalities have begun taking action to prioritize water equity and affordability, there is a lack of coordination and cooperation to address the variety of challenges surrounding water affordability. The federal government is best situated to garner national attention around the issue and develop a top-down approach to ensure that every American has access to safe and affordable water. A federal declaration that access to water is a human right subject to constitutional protection would not solve the affordability crisis, but would provide a foundational step to developing new laws, policies, and procedures.
- Create a Permanent Federal Low-Income Household Water Assistance Program. In response to the COVID-19 pandemic, the Low-Income Household Water Assistance Program (LIHWAP) was developed and funded as a temporary federal program to help water customers reduce water arrearsages which

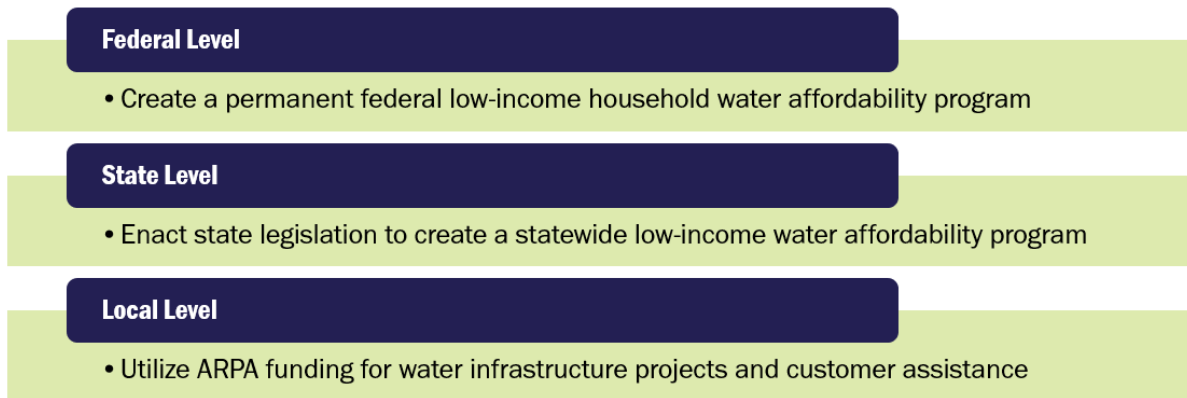


Figure D.3 Mitigation Strategies

were exacerbated during the pandemic. LIHWAP must be developed into a permanent program and expanded to include permanent financial rate assistance. The federal government already funds several permanent assistance programs to support low-income households, including food assistance through SNAP and heating assistance through the LIHEAP. The addition of a permanent federal water assistance program will ensure that low-income households can not only reduce their water debt, but also can make it more affordable to pay for water services in the future.

B. State Level

- **Enact State Legislation.** State legislation will have the most immediate and powerful impact to remove legal barriers, support water affordability efforts, and protect the sustainability of approximately 1,500 community water suppliers.
- **Expressly Authorize Water Affordability Programs That Include Customer Assistance Programs and the Use of Rate Revenue to Fund Them.** A change in the law authorizing the use of rate-funded affordability programs would remove legal uncertainty and the potential for challenges under the Headlee Amendment and *Bolt* and *Jackson* line of cases. Additionally, it would ensure individual household access to water which helps protect the health and safety of communities as a whole. Providing utilities with express legislative authorization to charge fees designed to fund affordability programs would provide legal protection and a source of revenue to increase local affordability efforts.
- **Create a Statewide Water Affordability Program.** State laws should also be developed to create a robust statewide water affordability program.

A legislative framework, funding model, and administrative network already exist to deliver food and energy assistance to households across the state. There is no need to reinvent the wheel when it comes to the delivery of water assistance. Building off existing programs can reduce administrative burdens and help ensure that all of a household's basic needs are met.

- **Mandate Affordability Metrics for State Revolving Funds.** Under the Infrastructure Investment and Jobs Act (IIJA), enacting the Bipartisan Infrastructure Law (BIL), \$50 billion was allocated to the U.S. EPA to strengthen the nation's drinking water and wastewater systems. The BIL amends the Clean Water Act (CWA) and Safe Drinking Water Act (SDWA) to include several new provisions that apply to both base state revolving fund (SRF) programs as well as projects funded in whole or in part with funds made available by the BIL. Key priorities related to water affordability under the BIL increase investment in disadvantaged communities. The BIL explicitly seeks to ensure that disadvantaged communities have access to funds to improve their wastewater infrastructure to protect public health and improve water quality. The U.S. EPA has directed states to review their definitions of "disadvantaged communities" to ensure that they are sufficient to address affordability issues.

According to SEMCOG, under the recently enacted Public Act 132 of 2022, the Michigan Department of Environment, Great Lakes, and Energy (EGLE) was directed develop definitions for the terms "overburdened community" and "significantly overburdened community" to replace the term "disadvantaged community" and update scoring criteria for the state's SRF program.

Clear and accessible definitions of overburdened and significantly overburdened communities are critical to easily identify qualifying municipalities and deliver funding where it is most needed. However, under proposed definitions presented by EGLE to stakeholders in August 2022, the primary indicator used to identify overburdened communities would be Median Household Income (MHI). The problem is that MHI may obscure the prevalence of households in poverty, especially in communities with widely skewed income distribution. Geographical boundaries of “areas served by a project” do not always align with those used by the U.S. Census Bureau to report MHI. This means that a community’s MHI may not accurately reflect the income of the actual water system users. MHI may capture the community’s overall income level, but it cannot determine whether a subset of its population can afford a rate increase associated with existing or new water infrastructure debt. To address existing affordability impacts, as required under the new law, further revisions to the proposed definitions are necessary to ensure that subset populations are not further disadvantaged and that the relationship between costs and means is meaningfully considered.

- **Leverage Existing Resources for Data Collection.** Funding for affordability programs is often tied to data demonstrating a need for that funding. However, water affordability is difficult to measure due, in part, to the lack of available data on customers and their personal information. Efforts to collect data to measure water affordability burdens on households should be implemented; however, it is critical that those measures do not take the form of unfunded mandates placed on local utilities that may be underfunded and understaffed. State and local agencies that already collect personal information and maintain affordability data to determine eligibility public income-based programs are better equipped to undertake the efforts necessary to gather this information and ensure it is safely stored. State and local agencies should be deployed to partner with local utilities to collect and analyze information necessary to measure water affordability across the state. Similar data-sharing methods that exist between state agencies and energy companies should be extended to include water utilities.

C. Local Level

- Utilize federal funds from the American Rescue Plan Act of 2021 (ARPA). The Coronavirus State and Local Recovery Funds (SLFRF), part of the ARPA, delivered \$350 billion to state, local, and Tribal governments to support their response and recovery from the COVID-19 pandemic. Michigan’s local SLFRF distribution included \$1.8 billion to 49 Michigan cities and townships, \$1.98 billion to 83 Michigan counties, and \$644 million to Non-Entitlement Units of Local Government. SLFRF may be used under four broad categories, including investments in water and sewer infrastructure, making necessary investments to improve access to clean drinking water and to support vital wastewater and stormwater infrastructure. Under the SLFRF program, funds must be used to cover costs incurred on or after March 3, 2021. Further, funds must be obligated by December 31, 2024, and expended by December 31, 2026.
- These funds provide a rare opportunity for local units of government to address their community’s specific water affordability needs without passing costs of needed infrastructure projects on to rate payers. Local units of government have extensive discretionary use of these funds and must obligate the funds in a relatively short period of time. While ARPA funds will not provide long-term water affordability solutions, they can be utilized to provide some immediate relief to households and communities, particularly related to infrastructure projects.

Appendix E: Community Water Partnerships, Public Outreach and Communication

The Oakland County Water Resources Commissioner's Office (WRC) recognizes that many government agencies, Non-Government Organizations (NGOs), and Community-Based Organizations (CBOs) are critical partners in developing, supporting, and maintaining water affordability plans for the Charter Township of Royal Oak and the City of Pontiac. This appendix identifies specific organizations, details the role they played in the development of the affordability plans and discusses how they can be utilized in the communities moving forward.

I. Government Agencies, Nongovernmental Organizations and Community-Based Organizations

A. Government Agencies, NGOs, and CBOs

Government agencies traditionally take the lead in sharing important public information; however, community mistrust and troubles of accessibility have been historically prevalent in vulnerable or overburdened communities. Community members often rely on Nongovernmental Organizations (NGOs) and Community-Based Organizations (CBOs) to receive information regarding public services, including financial assistance programs and support services. NGOs and CBOs are non-profit organizations that may include faith-based institutions, community groups, grassroots organizations, educational institutions, parent groups, neighborhood associations, multicultural service providers, and others.

In most cases, NGOs are humanitarian-driven advocacy groups that are self-governing and operate outside the government sector. This allows the organizations to mobilize quickly and address various social and economic concerns at an intimate level while monitoring government performances and advocating for improvements.

CBOs usually consists of local residents who have first-hand experience dealing with challenges and hardships in the area or community where they operate. CBOs can offer a flexible and informal approach to community work. CBOs prioritize involving residents in the problem-solving process and value input into the design and implementation of programs to address local issues.

Services of government agencies, NGOs and CBOs are typically geared toward promoting economic sustainability and community stability. Their expertise plays a vital role in creating and implementing an affordability plan. The importance of these groups stems from their ability to connect with their community

members through innovative methods. For example, CBOs are often able to remedy transportation challenges and cultural disconnects like language barriers by centralizing headquarters within each community. Developing a spirit of partnership with government agencies, NGOs and CBOs is key to successful community collaboration because they can serve as liaisons and bridge communication gaps between communities and water utilities.

Support, collaboration, and partnerships with other key water service stakeholders and agencies is also needed for the development and approval of a statewide water affordability program. These partnerships could include the Michigan Section of the American Water Works Association (MI-AWWA), the Southeast Michigan Council of Governments (SEMCOG), the Michigan Department of Health and Human Services (MDHHS), the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Great Lakes Water Authority (GLWA), the Detroit Water and Sewerage Department (DWSD), Grand Rapids' Water Department, and other Michigan-based water service providers.

B. Identifying and Assessing Potential Community Partners

To start building community water partnerships, the WRC reached out to groups it previously collaborated with on various community outreach efforts. Potential first-time partners were also identified through research efforts, and at the request of community members. To learn more about each potential partner, the project team researched the background and history of each organization. This helped the WRC understand if the organizations could support it in the following key tasks:

- Assist the WRC in creating an affordability plan by participating in the WRC Affordability Coalition.
- Connect the WRC with residents experiencing water affordability issues in Pontiac and Royal Oak Township to gain participation in customer interviews.
- Work with the WRC in implementing the affordability plan by communicating and promoting affordability programs and assisting customers with the program enrollment.

Initial contact with government agencies, NGOs and CBOs was made through phone calls, emails, and on-site visits. During this initial contact, project team members shared information regarding the WRC's grant work and gauged potential interest in partnering with WRC to advance its water affordability efforts.

Organizations identified for potential partnerships with the WRC were assessed based on the following criteria:

- Active, trusted, and credible relationships in the community
- Relationships to low-income customers
- Experience with low-income financial assistance programs
- Interest in the water affordability
- Length of service in the community
- Accessibility and willingness to partner with WRC
- Strong communication capabilities

While assessing various organizations, WRC also considered the respective community demographics and

resources available to customers in Pontiac and Royal Oak Township. Pontiac has a population size of nearly 60,000 residents benefit from a close geographically proximity to many NGOs. Comparatively, Royal Oak Township's population is approximately 2,600 and residents tend to rely more heavily on governmental agencies and CBOs.

Some organizations initially identified by the project team as potential partners were no longer active organizations or were unable to support the affordability plan as potential partners for various reasons. The identification, assessment, and filtering process resulted in a list of approximately 30 organizations as community water partners.

Table E.1 *Future Partnerships for Collaboration*

Organization	Type	Municipality
Area Agency on Aging 1-B	NGO	Both
Centro Multicultural La Familia	NGO	Both
Community Citizen District Council	NGO	Pontiac
Friends of Royal Oak Township (FOROT)	NGO	Royal Oak Twp.
Golden Opportunities Club	NGO	Pontiac
Great Lakes Water Authority	Government	Both
Greater Pontiac Coalition and Committee of 50	NGO	Pontiac
Helping Families in Need Nonprofit Organization	NGO	Pontiac
Jewish Family Services Resource Center	CBO	Both
Lighthouse of Oakland County	NGO	Both
National Association for the Advancement of Colored People (NAACP)	NGO	Pontiac
Oakland County Community & Home Improvement	Government	Both
Oakland Family Services	NGO	Both
Oakland Forward	NGO	Both
Oakland Livingston Human Service Agency (OLHSA)	NGO	Both
Oakland County Senior Advisory Council	Government	Both
Oakland County Veterans Services	Government	Both
Oakland County Youth Assistance	Government	Both
Parent University Pontiac School District	Government	Pontiac
People's Water Board Coalition (PWBC)	NGO	Both
Pontiac Academy of Excellence District	Government	Pontiac
Pontiac Community Foundation	NGO	Pontiac
Pontiac Housing Commission (Section 8)	Government	Pontiac
Pontiac Landlord Association	NGO	Pontiac
Pontiac Public Library	Government	Pontiac
Pontiac School District	Government	Pontiac
Pontiac Sun Time Bank	NGO	Pontiac
Royal Oak Township Public Library	Government	Royal Oak Twp.
The Heat and Warmth Fund (THAW)	NGO	Both
United Way	NGO	Both
Welcome Baptist Church	NGO	Pontiac
Prospect Church	NGO	Pontiac
New Birth Church	NGO	Pontiac
Springfield Church	NGO	Pontiac
Salvation Army	NGO	Both

C. Working with Community Water Partners

1. WRC Affordability Coalition

Prior to receiving the affordability and planning grant, we already recognized the need to improve customer outreach, particularly in communities experiencing more frequent water shutoffs, like Pontiac and Royal Oak Township. Customers in both communities frequently contacted the WRC to gain a better understanding about the charges on their water bills and what services they were paying for. Communities were also concerned about the cost of lead service line replacements and increases in water rates. In response to these frequent inquiries, Commissioner Jim Nash directed the formation of two volunteer coalitions; one was comprised of community leaders and residents within the City of Pontiac, and the other included community leaders and residents within the Charter Township of Royal Oak. The first separate coalition meetings began in March 2021 and continued through June 2021. All meetings took place via Zoom. These first few monthly meetings featured presentations concerning general topics like “how to read your water bill,” “how water and sewer rates are calculated” and “how to detect a leak.”

In May 2021, the WRC was awarded the affordability and planning grant and the two separate coalitions were combined to form the “WRC Affordability Coalition” with a focus on engaging in a community dialogue around water affordability. Commissioner Nash was committed to convening an inclusive group of stakeholders and the coalition expanded over time to include regional leaders, elected officials, academic researchers, and representatives from governmental agencies, NGOs, and CBOs. In addition, water advocacy groups, community leaders from civil rights groups, environmental organizations, faith-based groups, social groups, landlords, and neighborhood groups also became active members of the coalition.

Since the first combined meeting in July 2021, Commissioner Nash and the project team have been able to share regular updates and progress on the grant work and receive feedback from the large group with diverse perspectives on a variety of affordability topics. A special meeting was held in February 2022 to examine the controversial practice of shutting off drinking water services for lack of payment. Establishing an additional community water partner, WRC reached out to the National Charette Institute (NCI) at Michigan State University (MSU) to serve as the facilitator for the special meeting. Through the facilitated discussion, small breakout groups consisting of coalition members and the



Town Hall, Royal Oak Township

project team members explored the effectiveness and impact of prior shutoff practices, as well as practices that could be implemented to reduce shutoffs and improve communications regarding bill payment and shutoffs. This dialogue provided valuable insight and made WRC more aware of customer demand for greater payment flexibility. This finding was instrumental in forming components of the affordability plans, especially development of the People-First Policies.

2. Water Customer Interviews

In addition to the insight provided by the WRC Affordability Coalition, the project team wanted to hear directly from customers in Pontiac and Royal Oak Township that would be most impacted by the affordability plans. Through a process of trial and error, the project team concluded that one-on-one interviews would be the most efficient method to collect customer feedback and gain specific insight to aid in developing the affordability plan. The project team’s goal was to receive candid feedback from water customers about personal experiences with other assistance programs, like the Water Residential Assistance Program (WRAP), as well as communication, outreach, and program preferences.

To encourage water customers to participate in water customer interviews, the project team asked community water partners, including, government agencies, NGOs, and CBOs, to promote the interviews with marketing materials and direct communication. WRC created a marketing flyer to help advertise the purpose of the interviews and solicit participants. As noted on the flyer, participants were offered a \$75 Visa gift card in recognition of their time and participation in the interviews.

The flyer was distributed throughout both communities by the WRC and community water partners. More than 37 interviews were conducted in February 2022. To encourage frank and honest responses from interviewees, WRC partnered again with the National Charrette Institute (NCI) at Michigan State University to conduct the customer interviews. The project team did not participate in the 45-minute interviews.

Customer interviewees were asked a variety of questions to gauge what affordability programs they were familiar with and may have participated in. In addition, interviewers sought feedback about how those

programs could be improved. Many customers noted they'd like to see more frequent communication around available programs. Interviewees also stated that they rely on the WRC as a trusted source of information. Customer interviewees expressed a strong desire to pay their bill. A key takeaway from these interviews was that customers did not have an expectation of free water. Additionally, customers are desirous of more frequent communications regarding their water services and programs that could help lower the cost of their water bills. Customer interviewees preferred mail communication, followed by telephone calls, and then emails.

The goal was to conduct individual customer interviews with water customers of Pontiac and Royal Oak Township to gain specific insight to aid in developing the affordability plan that benefits the respective community members.

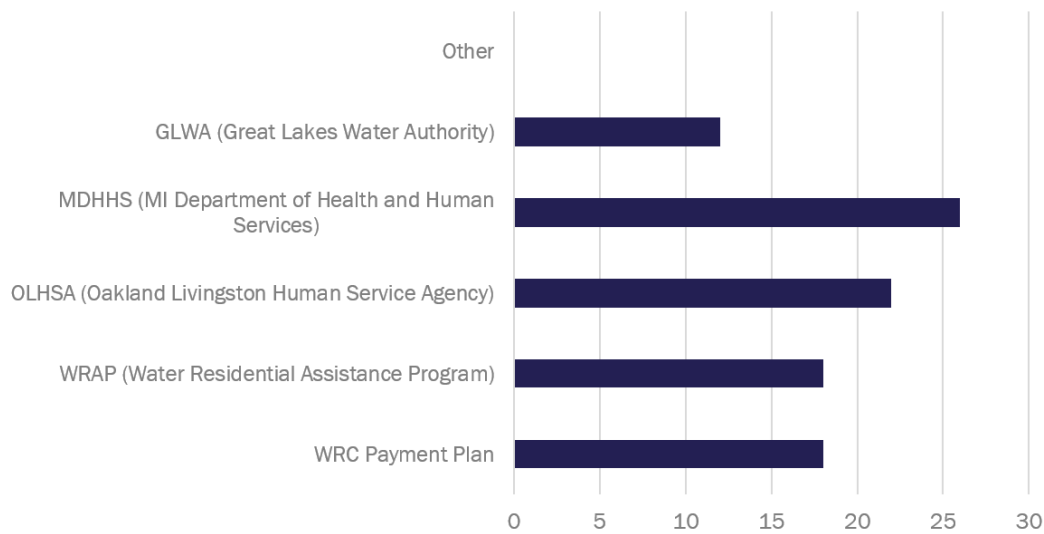


Table E.2 Awareness of Water Assistance Programs

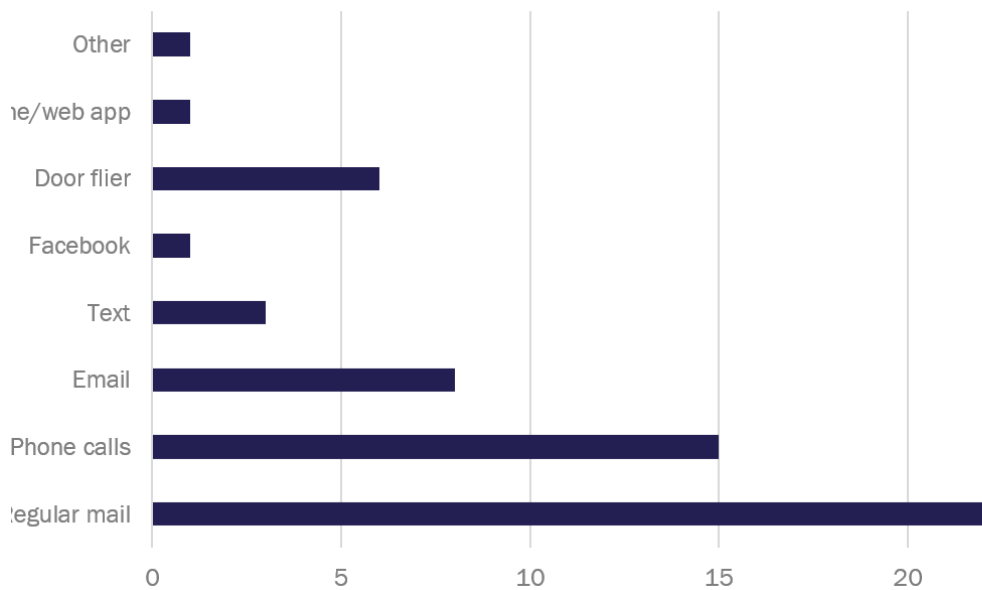


Table E.3 Preferred Communication Type

3. Input on Affordability Plan Development

Community water partners, including government agencies, NGOs and CBOs, further supported the affordability planning process by providing valuable input during the research and development stages. During the research phase of the grant work, many agencies and organizations met with project team members to discuss various affordability programs, policies, and processes that they were involved in developing or administering. For example, project team members had a series of meetings with United Way, the Michigan Department of Health and Human Services, and Consumers Energy to learn about the development, funding, and implementation of low-income energy assistance programs.

Similarly, the project team had many meetings with GLWA to discuss program improvements to WRAP and how to best leverage the influx of federal funding. These discussions were helpful in the development of various components of the affordability plans.

Additionally, the project team was able to utilize community water partners, including some members of the WRC Affordability Coalition, to review of preliminary drafts of the affordability framework and provide feedback on the same. To solicit additional community feedback, Commissioner Nash sent a letter to every water customer in Pontiac and Royal Oak Township to request their review and comments on the plan. Commissioner Nash also hosted town hall meetings in August 2022 in both Pontiac and Royal Oak Township to provide more detail about the affordability plans, answer customer questions, and receive further input.

4. Affordability Plan Outreach and Implementation

Outreach and public education are primary drivers for improving enrollment in existing and future water affordability programs. Enrollment level is a performance measure for determining the success of such programs.



Town Hall, City of Pontiac

The WRC has decided to focus initial affordability outreach and public education efforts on increasing enrollment in WRAP and the Low-Income Household Water Assistance Program (LIHWAP). WRAP and LIHWAP are the primary water assistance programs available in Oakland County. Partnering with GLWA, Wayne Metro (Oakland County WRAP administrator) and Oakland Livingston Human Services Agency (OLHSA - Oakland County LIHWAP administrator), is critical to achieve our goal of improving enrollment in current programs. Without utilizing these existing programs, there is a lack of substantive data to demonstrate the need for more robust and permanent affordability programs.

Program enrollment challenges exist, in part, because there are a variety of programs targeted to low-income populations, each of the programs are administered by various agencies and may have different eligibility criteria. This can make it confusing and difficult for some water customers to determine where to go for assistance and which programs to apply for. Making the application process for programs as simple and easy as possible will go a long way toward improving enrollment.

The WRC partnerships with GLWA, Consumers Energy, DTE Energy, OLHSA and the United Way were formed to tackle this challenge. The WRC's focus has been to develop a one-stop application process, whereby one application provides categorical eligibility for multiple and potentially diverse assistance programs. For example, income information provided for the gas and electric assistance programs can be transmittable to water assistance programs, thereby alleviating the need for customers to gather the same required documentation.

Community partners, especially NGOs and CBOs, can also support implementation of the affordability plans in a variety of other ways, including:

- Assisting with public outreach and messaging. This could include providing cultural and community insight to help create effective communication and marketing materials.
- Partnering to help promote affordability program communications and messaging by utilizing public relations and outreach resources to share information with the community.
- Serving as a partner advocate for the water affordability plans.
- Continuing to advise and supply water affordability program feedback.

Government agencies can help the WRC build enrollment and support customer engagement in affordability programs by:

- Increasing program awareness and advocating for program funding;
- Serving as a location for customer enrollment applications; and
- Providing technical support or assistance with the application process.

Continued partnerships with elected officials and lawmakers are necessary to implement the WRC's long-term affordability goal of a statewide affordability program. A legislative change is needed to establish such a program. That requires political resources to garner the widespread support needed to pass laws supporting water affordability. As an alternative to a statewide program, the WRC is also evaluating an Oakland County ballot proposal to secure a sustainable funding source for local affordability programs. This would require the development of a completely different list of partners and political advocates to foster the necessary local support for sustainable funding.

5. WRC Affordability Coordinator

The WRC converted an existing permanent staff position into the role of the WRC Affordability Coordinator. The WRC Affordability Coordinator will serve as a liaison to support and connect the office of the water resources commissioner, and its various departments, with the community water partners, including customers, government agencies, NGOs, and CBOs. The WRC Affordability Coordinator will be responsible for maintaining the WRC Affordability Coalition, and will develop performance metrics to track the success of the affordability plans within the communities. The WRC Affordability Coordinator will work directly with customers who need additional affordability resources. This is a key position to help the WRC continually evaluate and improve its affordability efforts.

II. WRC Public Outreach and Communication Strategy

Public outreach and communication enable the WRC to gain trust within the community and continually learn about customer concerns related to their water services, including affordability. This provides an opportunity for our office to focus our communication strategy and develop effective messaging for educational materials related to specific customer concerns.

Key goals of our public outreach and communication strategy are to:

- Improve the relationship between water customers and the WRC
- Encourage and promote equitable water service
- Generate increased knowledge and involvement in the services provided by WRC

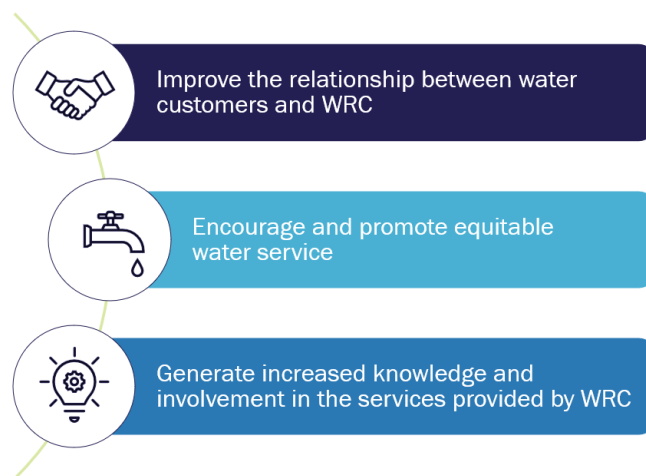


Figure E.1 *Future Partnerships for Collaboration*

A. Community Water Partnership Branding

The project team developed the logo and slogan for the affordability plan “Community Water Partnership: A path to water affordability.” The intent of the logo messaging and imagery was to highlight the community and need for partnerships to accomplish the goal of developing a path to make water affordable and accessible to all.

The name focuses on the community and partnership through water with a nod to the path it takes to get to water affordability. The branding will generally be used on materials that are produced for the affordability plan specific to the WRC; however, when the project team is publishing or promoting other assistance programs, such as WRAP, the WRC brand may not be included to avoid customer confusion.



B. Public Education Materials

Water customer education is an important part of the affordability plan. The project team developed several marketing materials to provide simple, concise, and clear explanations of the various aspects of the WRC's billing practices including seeking assistance and providing an overview of the affordability plan.

The marketing materials speak to the following topics:

- A Guide to Tenant and Landlord Water Payments
- How to Read Water and Sewer Bills
- The Components of Water Affordability
- What Customers Need to Know About Water Shutoff Moratoriums
- We Are Here To Help



Marketing Materials, WRC

C. Relationship Management

Connecting with water customers and maintaining positive relationships is important to building trust between the WRC and the people it serves. The project team recognizes that forming and maintaining positive relationships with water customers will be an ongoing process. Below are some steps that the WRC is taking to build customer relationships and develop a partnership in addressing water affordability.

- Creation of a WRC Water Affordability Coordinator
- Expansion of communication methods between WRC staff and water customers.
- Participation in diversity, equity, and inclusion training for WRC staff.
- Increase availability for customers to speak with WRC Billing Services representatives.
- Revise messaging on customer water bills.
- Increase direct mail flyers and post cards.
- Utilize phone calls, text messaging, social media posts, and email blasts to share critical water service and affordability information.
- Creation of the WRC affordability web page found at oakgov.com/affordability.

D. Targeted Outreach

As a part of the affordability plan, the project team is developing a targeted outreach plan to improve communication methods to connect with customers most in need of water affordability services. The following elements may be included in the targeted outreach plan:

- Utilize move-in and move-out renter information from local sources to receive updated contact information for occupants. This information will allow the WRC to address mail to a person instead of “Current Resident” and expand to other platforms like email and phone.
- Update communication clarity and frequency associated with overdue bills and service interruptions.
- Host a user-friendly, easily accessible web page where customers can locate educational materials, affordability program details, and contact information.
- Run educational campaigns to promote the affordability plan to water customers through direct mail, telephone, text, email, and social media, in addition to attending and hosting community events.
- Distribute video testimonials from community members showcasing the partnership between the project team and the communities involved.
- Utilize meter data to develop and implement a plan to provide targeted and repeated WRAP conservation and plumbing repair customer outreach and communication.
- Develop and maintain “best available” customer profile information (name, home phone, mobile phone, email) for targeted customer outreach and communication.



Community Outreach Event, Royal Oak Township

Appendix F: People-First Policies

I. Introduction

The mission of the Oakland County Water Resources Commissioner (WRC) states that we are dedicated to building trust, protecting public health, improving the environment, and delivering quality services. To carry out this mission, water and sewer systems operated by the WRC must be properly funded through revenue collected by customers for the provided services. The revenue is used to deliver safe and acceptable levels of water and sanitary sewer service that protect public health and the environment. The WRC is a not-for-profit governmental organization and is almost entirely dependent on revenue from water customers to operate and maintain water and sewer systems. While this reality works for many communities – it is failing other communities. The problem is captured in a report from the 2021 Virtual Aspen-Nicholas Water Affordability Roundtable Services.

Where the WRC operates and maintains water and sewer systems located and supported by customers in municipalities with higher poverty levels, like the City of Pontiac and the Charter Township of Royal Oak, it is increasingly challenging to provide the same level of service that other communities receive. This results in inequities among communities and customers.

Commissioner Nash is committed to continuing to ensure that the financial aspect of each water system is operated in an efficient and cost-effective manner but also recognizes the need to identify inequities and help to change them. This requires supporting principles of water equity. Water equity, as defined by the U.S. Water Alliance, is present when all communities:

1. Have access to safe, clean, affordable drinking water and wastewater services;
2. Are resilient in the face of flood, drought, and other climate risks;
3. Have a role in the decision-making processes related to water management in their communities; and
4. Share in the economic, social, and environmental benefits of water systems.⁴

Based on the above definition, the WRC developed the a Water Equity Statement shown here. The Water Equity Statement, combined with the mission of the WRC, are the driving forces behind our “Community Water Partnership” campaign and newly developing “People-First Policies.”

4 US Water Alliance. 2017. An Equitable Water Future: A National Briefing Paper.



WRC Water Equity Statement

The WRC acknowledges that many water systems are deeply entangled with social, economic, and environmental injustices that have accumulated over decades of purposeful decisions that have deprioritized or ignored the needs of certain communities, particularly communities of color.

We are committed to fully understanding these injustices and learning how they create barriers to water equity in the communities we serve.

With that knowledge, we are continually striving for water equity for all our customers.

We will focus policy decisions on the people who experience the consequences of our policies and create programs—in partnership with communities—designed to meet their needs.

II. Policy Review Process

For many customers, their primary contact with our office is through billing. The WRC Billing Services staff is on the front line of addressing customer questions and concerns, including affordability concerns. This touchpoint provides an opportunity to improve and develop trusted relationships with our customers, as well as provide information to help connect customers to affordability resources. Through our grant research, we also recognized that our billing policies and procedures have the potential to make water bills more manageable and affordable for our customers. As part of the affordability plans for Pontiac and Royal Oak Township, we developed a three-step process to review our primary billing policies and to determine what changes, if any, should be made to enhance affordability, improve our level of service, and promote principles of water equity.

	Utility	Feasibility	Propriety	Accuracy	Equity
Primary Questions	What is the purpose of the policy or procedure?	Is the policy or procedure practical for the utility to implement?	Is the policy or procedure being applied equitably across all water customers?	Is the policy or procedure achieving the desired purpose?	What are the consequences of the policy on our water customers
Additional Considerations	What problem was the policy or procedure trying to solve?	Are resources in place to enforce the policy?	Is the policy or procedure in writing and translated?	How do we determine or measure if the desired result is achieved?	Does the policy meet the current needs of the community?
	Does the purpose of the policy and procedure fit into the overall mission of the WRC?	Is the policy easy to understand?	Is the policy or procedure accessible to all water customers?	Is anyone left out or harmed by this policy?	What solutions/programs currently exist to solve the problem the policy is designed to address?
	Who is benefiting or harmed by the policy?	Does the policy provide practical and viable operations to water customers?	Are exceptions to the policy or procedure being made? By whom?	Is the policy or procedure flexible enough to allow for changes if it's not achieving the desired purpose?	Does the policy create barriers or pathways to the solution?

Table F.2 Policy Review Evaluation Criteria

The policies reviewed in this process include:

1. Service Disconnection for Nonpayment
2. Service Disconnection Requested by Landlord
3. Debt “Certified” to Property Tax
4. Payment Arrangements to Cure Arrearages
5. Late Fee Penalties and Interest
6. Billing Disputes – Water Loss

Step 1: Identification: The first step in the policy review process was to identify and detail in writing the current WRC Billing Services policy. This step has been completed and a high-level overview of each policy is provided in this appendix.

Step 2: Evaluation: The second step in the policy review process is to evaluate the current policy using the following criteria: 1) utility, 2) feasibility, 3) propriety, 4) accuracy, and 5) equity. Each of these criteria is described in Table F.2. The evaluation process is still being conducted internally.

Step 3: Modification: As each policy is identified and evaluated, we are exploring modifications to improve or realign policies to enhance affordability, improve our level of services, and promote principles of water equity. While we are still working on this step, a list of potential policy and process modifications being considered are provided in section IV of this appendix.

III. Identification of WRC Billing Service Policies

A. Service Disconnection Policy for Nonpayment

Due to the COVID-19 Pandemic, the WRC has not enforced its water service disconnection for nonpayment policy, or shutoff policy, in the City of Pontiac or the Charter Township of Royal Oak since the annual process concluded in the summer of 2019. While service disconnection for nonpayment in the other municipalities operated by the WRC resumed in 2021, Commissioner Nash continued the shutoff moratorium in Pontiac and Royal Oak Township until affordability plans for both municipalities were prepared. The policy described below was the policy in place in 2019 and for several years prior.

Water service disconnections due to nonpayment occurred annually with the process generally beginning in March. The process began with WRC Billing Services creating a report to identify delinquent water service accounts. The delinquency threshold for 2019 flagged accounts with a \$300 balance that were more than 60 days past due. In 2020, the threshold was scheduled to be decreased to \$200 and more than 60 days past due.

After delinquent accounts were identified, shutoff notice letters were sent via first-class mail. Due to the number of customers in Pontiac, the letters would be sent in cycles to stagger the customers going through the shutoff process.

In Royal Oak Township, all shutoff notice letters were sent at the same time. In both municipalities, the letters advised customers that they had approximately 14 days to make payment or their water service would be shut off. The letter also included an informational flier regarding the Water Residential Assistance Program (WRAP), offered by the Great Lakes Water Authority, that could potentially provide financial assistance with the water bill. A customer's enrollment in WRAP would prevent water service disconnection.

If no action was taken to resolve the delinquent water bill within the time specified in the letter, another shutoff notice was tagged to the customer's front door. The door tag provided at least one additional week for the customer to resolve the delinquent account. The door tag also provided contact information for WRC Billing Services.

If the delinquent account was still not paid within the time noted in the door tag, WRC Billing Services would issue a work order to stop drinking water service. Field staff would be deployed to the property address to shut off service by closing the stop box valve at the property's boundary between the water main in the roadway and the private water line into the home. If payment was not made, the total water service disconnection process usually occurs within five weeks.

- Week 1: Shutoff Notice Sent to Service Address
- Week 3: Payment Due Date
- Week 4: Door Tags Placed at Water Service Address
- Week 5: Water Service is Disconnected

If a customer contacted the WRC Billing Services office regarding a shutoff notice letter during that five-week period, the policy allowed for customers to prevent the shutoff from occurring if one of the following conditions were met.

1. The customer makes payment in full.
2. The customer agrees to a payment arrangement under terms and conditions approved by the Billing Services staff. Special payment arrangements are discussed further below.
3. The customer enrolls in a water assistance program like WRAP.

B. Landlord-Requested Water Service Disconnection Policy

If a property owner requests a water service disconnection it could be for a variety of reasons including vacancy, to protect the property from damage caused by freezing pipes, or to avoid fixed "ready to

serve" charges. The WRC's policy requires staff to inquire if a residence is vacant or occupied by a tenant prior to disconnecting water service. If the property owner states that the property is vacant, a maintenance mechanic will visit the property to perform the service disconnection. If, during the visit, it is discovered that the property is occupied, the water service will not be disconnected at that time.

If a landlord requests water service disconnection for a property that is occupied, the landlord is required to complete a written form that provides contact information for both the requesting landlord and tenant. Once the form is completed, WRC Billing Services sends a letter to the tenant notifying them that the landlord has requested water service disconnection to the property and that the shutoff will occur in 30 days. The notice also advises the tenant to contact the landlord.

C. Property Tax Certification Policy

Under the Michigan Revenue Bond Act, unpaid water and sewer bills delinquent for six months or more may be certified, meaning transferred, to property taxes. This allows delinquent water and sewer bills to be placed as a lien on the property and collected along with property tax bills. State law, specifically MCL 141.121(3), states, in pertinent part:

Charges for services furnished to a premises may be a lien on the premises, and those charges delinquent for 6 months or more may be certified annually to the proper tax assessing officer or agency who shall enter the lien on the next tax roll against the premises to which the services shall have been rendered, and the charges shall be collected and the lien shall be enforced in the same manner as provided for the collection of taxes assessed upon the roll and the enforcement of the lien for the taxes. The time and manner of certification and other details in respect to the collection of the charges and the enforcement of the lien shall be prescribed by the ordinance adopted by the governing body of the public corporation.

When unpaid water and sewer bills are certified to property taxes, the utility is made whole. That is, the delinquent amounts are recovered at the time of the tax certification. This allows utilities to recover all delinquent amounts and recover nearly 100 percent for services billed.

While the tax certification process is a beneficial tool for utilities, it can result in customers paying much more for water services.

After the delinquent water and sewer bill amounts are transferred from the WRC to the Oakland County Treasurer, they are added to the customer's property tax bill and subject to penalties and interest. If unpaid property taxes become delinquent, a 4% administrative fee is added to the balance, along with interest beginning to accrue at a rate of 12% per year. If the property taxes remain unpaid, additional fees are added to cover administrative costs. After one year, the interest rate is retroactively reset to and remains at 18%. If the debt remains unpaid for two and a half years, the property is subject to foreclosure and can be sold at auction.

Foreclosure proceeds are applied in a priority order dictated by Michigan law. Property tax debt is paid first, and water and sewer debts would be paid subsequently. If foreclosure proceeds remain after all debts are paid, the balance is paid to the property owner. If the foreclosure proceeds are not sufficient to pay the water and sewer debts, including applied penalties and interest, the Oakland County Treasurer may charge that amount back the WRC. In this event, the WRC would "write-off" the debt.

It is WRC's policy to certify unpaid water and sewer balances that are more than 180 days past due. Tax certification amounts and dates are determined by each municipality. In Pontiac, tax certification notices are sent in August or September to water customers with balances greater than \$300. Payments are due in early October. In Royal Oak Township, tax certification notices are sent in July to water customers with balances greater than \$100. The due date follows in August. The certification process begins 30 days prior to balances aging to 180 days past due by sending a letter via first-class mail. The letter states that nonpayment of the portion of the water balance that is 180 days past due will be certified to the property tax roll unless payment is made.

There are two exclusions to this policy. First, water customers enrolled in a water assistance program, like WRAP, will not have unpaid balances certified to the property tax bill. Second, under Michigan law, a landlord and tenant may sign a sworn statement shifting financial responsibility for water services to the tenant for the duration of a lease agreement. If a sworn statement has been received, any unpaid balance cannot be certified to property taxes. For additional details regarding this process, see [Appendix G, Landlord-Tenant Relationships](#).

D. Special Payment Arrangement Policy

The WRC offers special payment arrangements for water customers who have a past due balance and are subject to water service disconnection. Special payment arrangements allow customers to pay down their past due balance in fixed monthly payments that are paid in addition to current monthly bill amounts. Customers in a special payment arrangement will not be subject to water service disconnection. In addition, delinquent amounts will not be subject to tax certification.

To request a special payment arrangement, a customer must contact WRC Billing Services and speak with a Financial Services Technician. At the time of the initial contact, customers are provided information about water assistance programs, like WRAP, that may be available to help the customer with their water bill. WRC Financial Services Technicians are permitted to offer special payment arrangements that meet the following criteria:

- A down payment that is equal to or greater than 10% of the delinquent balance amount noted on the customer's water shutoff notice letter.
- Monthly payments, consisting of the customer's monthly bill amount and special payment arrangement amount, that are at least two times the monthly average amount billed over the past 12 months. For example, if an average water bill is \$100, then a monthly payment of at least \$200 is required.
- The term length of the special payment arrangement is calculated based on how many months it takes to pay off the past due balance but cannot exceed eight months.
- The start of the monthly payments may begin within 45 days of the down payment.

Once the terms of the special payment arrangement are determined, and the customer makes the agreed down payment amount, a special payment arrangement letter is sent to the customer to confirm the terms of the special payment arrangement.

Customers in a special payment arrangement are allowed to extend their payment due date just once during the term of the special payment arrangement, up to an additional 15 days. Upon the customer's request, all subsequent due dates may then be moved to one month after the new date.

In the event the customer does not make a payment in accordance with the terms of the special payment arrangement, the following process is followed.

- One week following the missed payment, a shutoff notice is placed on the front door of the customer's home. The notice states that the customer has one additional week to make the missed payment or contact WRC Billing Services.
- If the customer does not make the missed payment, or contact WRC Billing Services, then water service will be disconnected. The disconnection occurs two weeks after the missed payment.
- After the shutoff occurs, the customer is allowed to enter another special payment arrangement if they pay at least half of the remaining original delinquent balance. The same special payment arrangement process starts over again.

If a customer defaults on the second payment arrangement, they will not be permitted to enter into another special payment arrangement. They must pay the balance of the original delinquent amount to avoid water service disconnection.

E. Interest and Late Fee Policy

Customers in Pontiac and Royal Oak Township are not charged interest. In March 2020, along with other policy adjustments due to the COVID-19 pandemic, Commissioner Nash also suspended the late fee policy. The policy has not been reinstated.

Prior to March 2020, the WRC charged a late fee to delinquent water customers in Pontiac and Royal Oak Township in the amount of 10% of the current bill or total balance due, whichever was lower. Customers could request removal of the late fee once during any 12-month period.

Late fees were not charged to customers enrolled in a low-income assistance program, like WRAP. Customers in a special payment arrangement who suffered a catastrophe, or a back-billing event may, at the discretion of WRC Billing Services, also have late fees waived.

F. Billing Dispute – Water Loss Policy

Water bills typically fluctuate, especially during certain months or seasons. The WRC can research and track historical billing patterns. If a customer receives a water bill that they believe is higher than they would typically receive during that time of year, they may contact WRC Billing Services to dispute the bill and seek a billing

adjustment. In most cases, high water bills are due to a leak, or water loss from a broken pipe, dripping faucet, or irrigation left running.

The WRC allows customers to receive a billing adjustment once per ownership of the home. To qualify for a water loss adjustment, consumption must be greater than two times the three-year average for like billing periods. WRC's billing dispute policy requires that requests for adjustments be made in writing and provide an explanation, if known, for how the water loss occurred. Once a written request is made, the following process is followed.

- A meter re-read from inside the home to determine if water use remains high.
- If the re-read indicates that water use remains high, a series of in-home tests (i.e., toilet dye test, read the meter before and after a period of no known usage) are conducted to determine whether a leak exists.
- If a leak is detected, the customer must hire a plumber to repair the leak.
- The customer must submit a written billing adjustment request and include verification that the leak has been repaired.
- For qualifying customers, the disputed bill is then adjusted to the wholesale water rate for the above average consumption and the sewer portion of the bill is reduced to the three-year average.
- If a leak is not detected, but the water use is back to normal, and the customer otherwise qualifies, they may receive a bill adjustment by submitting a written request acknowledging no leak was found and the water loss was due to unknown reasons
- If the customer does not qualify for any billing adjustment, they are offered a water meter test at an independent testing location.
- If the meter is not within plus or minus 2% accuracy, the water bill is adjusted to the average cost for that billing period and the WRC will pay for the meter test.
- If the meter is within accuracy, no adjustment is made, and the customer is billed for the meter test.

IV. Potential Policy Revisions

During the internal policy review process, the project team have identified several opportunities to modify the described policies and adjust certain processes to enhance affordability, improve services, and promote principles of water equity in the community. The potential policy and processes include:



Downtown District, City of Pontiac

- In advance of resuming water service disconnection due to nonpayment, enhance community outreach and targeted customer communications regarding the affordability plans and available water bill assistance and conservation programs.
- Extend the time between an initial water shutoff notice letter and the date of the water shutoff.
- Revise and increase customer communications related to a water shutoff. Revise customer communications related to water shutoffs to reflect the needs of the community. [Appendix E. Community Water Partnerships, Public Outreach and Communications.](#)
- Expand the role of the WRC Affordability Coordinator to conduct direct customer outreach and coordinate with community partners to prevent the interruption of water service due to nonpayment.
- Establish a billing review committee to provide an opportunity for customer appeals.
- Provide and promote internal and external Diversity, Equity, and Inclusion training opportunities for WRC staff, and additional educational and empathy training for staff that communicates directly with customers.
- Offer community educational opportunities regarding landlord-tenant rights and duties related to water services.
- Utilizing modern technology, offer customized, flexible, and convenient payment plans for all customers that meet their economic needs.
- Eliminate late fees or offer exemptions for customers enrolled in assistance programs.
- Revise the current water loss calculation procedure to credit a customer for the entire amount of their water loss.
- Permit water loss adjustments more frequently than once per ownership of the home.
- Establish an annual policy review process to ensure policies are operating effectively.
- Make applicable billing policies publicly available and accessible to customers.

Appendix G: Landlord-Tenant Relationships

Landlord-tenant relationships play a large role in water affordability within many urban and suburban communities served by the office of the Oakland County Water Resources Commissioner (WRC), including the City of Pontiac and the Charter Township of Royal Oak. Through our grant research, community outreach, and internal customer service experience, we determined that our proposed affordability plans need to consider the property ownership status of our customers, as well as Michigan laws governing landlord-tenant relationships. Both Pontiac and the Charter Township of Royal Oak have significant rental populations as described in Table G.1 and Table G.2.

I. Michigan Water Lien Act and Rental Properties

The Michigan Water Lien Act (Public Act 178 of 1939) provides that, from the moment a water utility provides water services to real property, the cost of that service attaches to the real property becoming an automatic lien. No formal or legal paperwork is necessary to establish the lien, it simply exists pursuant to Michigan law for up to five years from the date of service. This means that the water bill is a debt associated with the real property, opposed to a debt associated with the individual recipient of the water services.

This can be problematic in rental situations where tenants who occupy the property are not the owners of the property. If water services are not included as part of the tenant's rent, the tenant is expected to pay the water bill directly to the water utility.

If the tenant does not pay the water bill, the tenant may not have any personal liability. Rather, the debt would become a lien attached to the property. To remove the lien and clear title to the property, the landlord/property owner would need to pay the water debt and any accumulated late fees and interest.

Under Michigan law, landlords can protect their property from becoming subject to a lien by formally shifting responsibility for the water bill to the tenant. Pursuant to MCL 141.121(3), a landlord and tenant may execute a signed sworn statement stating that the tenant is responsible for water services provided to the property during the term of the lease. A deposit may be taken by the utility to ensure payment for water services. If the tenant does not pay the water bill, the resulting debt cannot be certified to the tax roll against the landlord's real property. From a utility perspective, this arrangement is disfavored because it eliminates the utility's ability to recover the costs of water services through the tax certification process. It also would require that the utility pursue traditional and more arduous personal debt-collection methods from the tenant.

II. Billing Tenants for Water Use

If a tenant is making monthly rental payments and water services also are billed on a monthly basis, we found that landlords require that tenants pay for water services using several different methods.

- Include an estimated cost of the monthly water bill within the monthly rent. For example, the landlord may charge \$100 more than the standard rent each month to apply to the water bill.

Housing Tenure	Households	Percent of Total Households
Owner Occupied	9,308	35%
Renter Occupied	13,667	51%
Vacant	3,767	14%
Housing Tenure	Households	Percent of Total Households

Table G1. Pontiac Housing Tenure (American Community Survey 2019)

Housing Tenure	Households	Percent of Total Households
Owner Occupied	349	28%
Renter Occupied	723	58%
Vacant	170	14%
Housing Tenure	Households	Percent of Total Households

Table G.2 Royal Oak Township Housing Tenure (American Community Survey 2019)



Co-Op Office, Royal Oak Township

- Include the water bill with the monthly rent. In this situation, the landlord would receive the water bill and then inform the tenant of the water bill amount and direct that the amount be added to the monthly rental payment.
- Direct the tenant to pay the water bill. A landlord may allow water bills to be sent directly to the rental property and advise the tenant to pay the water bill directly to the utility.

III. Affordability Challenges for Landlords

There are two types of water affordability challenges for landlords. One challenge is when the landlord relies solely on the tenant to pay the water bills. In that situation, there is a risk that water bills will go unpaid if the tenant is unable to afford the water bills, vacates the property, or withholds payment. If the landlord does not receive a copy of the water bills being sent to the rental property, they may be unaware if a water bill is unpaid.

In fact, a landlord might not find out a water bill is delinquent until the debt goes through a tax certification process and becomes part of the property taxes. In that scenario, a landlord may be notified for the first time about unpaid water bills through a property tax bill. If the landlord cannot afford to pay the property tax bill, fees and interest are added to the cost of the water bill debt. The property may then be subject to foreclosure.

Another affordability challenge exists when a landlord has a rental property occupied by a low-income tenant who may qualify for financial assistance programs which could help pay for water bills or other essential goods and services.

A landlord may indirectly benefit from a tenant's participation in financial assistance programs, but landlords cannot require a tenant to enroll in the same.

As a best practice, the WRC recommends that landlords be aware of low-income programs, have resources about programs on hand to offer tenants, and communicate their willingness to work with tenants in applying for any programs.

IV. Affordability Challenges for Tenants

In addition to other affordability challenges discussed in this report, tenants may face specific water affordability challenges related to their tenancy. For example, tenants may move into a rental property that has a water bill balance from previous tenants. The landlord may rent the property to new tenants without ensuring that the water bill from a prior tenant has been paid. In some cases, landlords may insist a new tenant pay the balance from a prior tenant as a condition to moving in.

On the other hand, the tenant may not become aware of the prior water debt until after they have moved in and subsequently receive a shutoff notice. As a result, tenants may bear the additional financial burden of paying a prior tenant's water debt. As a best practice, the WRC strongly recommends that tenants moving into a new rental property inquire about any outstanding water bill balance before signing a lease or moving in. In addition, the WRC encourages tenants to take time to understand their water bill and how water services are charged.



Township Maintenance, Royal Oak Township



Residential Homes, Royal Oak Township

Tenants may also face obstacles related to plumbing repairs. Generally, a landlord is responsible for properly maintaining or repairing a home's plumbing. If maintenance or repairs are left unresolved, the financial cost and burden of repair may fall on the tenant. While plumbing repair programs exist, they may be limited to the property owners and exclude tenants from participation.

V. Solutions for Landlords and Tenants

Customer education, increased communication, and community outreach are all steps that can improve affordability challenges unique to landlord-tenant relationships. Customer education can help educate landlords and tenants about their respective rights and duties under Michigan law, as well as applicable local ordinances. Clear and frequent communication between landlords and tenants regarding each parties' expectations related to water services, payment of water bills, and plumbing repairs will help reduce unpaid and unexpected water expenses.

Finally, increased community outreach from utilities, community organizations, and other community water partners regarding available water bill assistance and plumbing repair programs will help drive awareness and participation in programs to help make water more affordable for both landlords and tenants.

As part of our proposed affordability plans, we are committed to developing communication tools specific to assisting landlords and tenants understand their respective rights and responsibilities relative to water services provided by the WRC. In addition, components of the affordability plan include outreach to direct both landlords and tenants to available affordability programs.

See [Appendix E, Community Water Partnerships, Public Outreach and Communications](#), for more information about communications related to landlord-tenant issues.

Appendix H: Rate Structures and Affordability Planning

I. Introduction

The office of the Oakland County Water Resources Commissioner (WRC) has designed water affordability plans for the City of Pontiac and Charter Township of Royal Oak customized to meet the unique needs of each community. Critical components of the affordability plans include the water rate design and bill assistance programs. This appendix discusses the current rate structure and revenue requirements of the systems. It also discusses various alternative rate structures and the feasibility of implementing these structures. Additionally, the development of an income-based affordability program is provided.

II. Level of Service

The WRC is committed to providing a high level of service to ensure the health and safety of its customers and the communities. Elements of a high level of service are:

- Minimized water main breaks and other water service interruptions
- Quality drinking water and minimal boil-water advisories
- Adequate water pressure for fighting fires
- Minimized sewer system backups and sanitary sewer overflows

- Minimized sewer system emergency repairs
- Proper sewer infrastructure to provide for disposal of wastewater
- Responsive operations and maintenance personnel
- A safe work environment for WRC employees

Capital improvements and maintenance are critical to keep the water infrastructure in good working condition. The system must be maintained by performing routine inspections and fixing breaks. The water and sewer infrastructure in Pontiac and Royal Oak Township is near the end of its useful life. That means even with proper maintenance, it requires ongoing water main replacement, sewer line replacement and more expensive capital improvements. It is important to plan for capital improvements to avoid catastrophic failures. Planning for these improvements involves advanced budgeting, coordinating with other local projects, and taking advantage of grant funding when available.

III. Water and Sewer Rate Revenue Requirement

The water rate revenue requirement is the amount of money that the systems must generate from water customers to pay for all the components of the water and sewer systems. Though this document uses the term “water rate revenue requirement,” it should not be confused with revenue in a business sense in which the entity is profiting by maximizing earnings.

Elements of High-Level Service



Figure H.1 *Elements of High Level of Service*

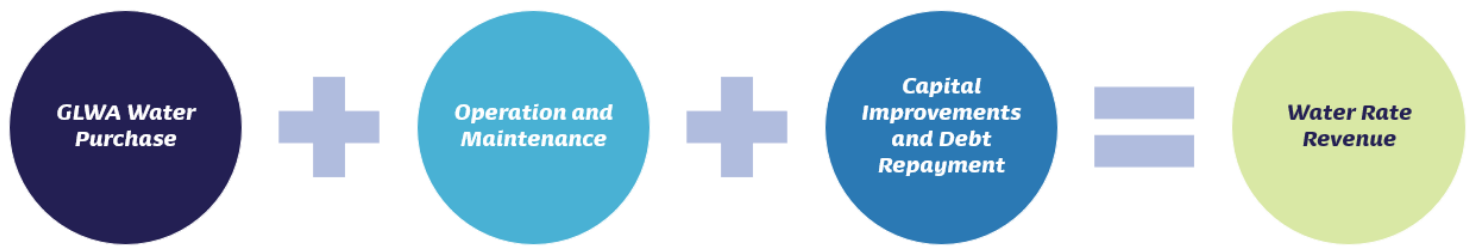


Figure H.2 *Water Rate Revenue Requirement*

The WRC is a public, not-for-profit government entity which means that all the money collected from customers is utilized for the system.

As shown in Figure H.2, the water rate revenue requirement is comprised of three components including: the Great Lakes Water Authority (GLWA) water purchase, operation and maintenance, and capital improvements and debt repayment. Each municipality has its own water rate revenue requirement.

The GLWA water purchase is the projected cost of water from GLWA based on several factors, including maximum day usage, peak-hour usage, and annual volume. The cost is calculated for each wholesale customer or municipality. Sixty percent of this cost is fixed. That means the systems pay GLWA for 60% of the estimated water rate revenue requirement, regardless of how much water is used. The remaining 40% is billed on the actual amount used.

Revenue collected for operation and maintenance is for operating, maintaining and repairing infrastructure of the local system, as well as the costs of system administration such as billing and communications. While most of these costs are fixed, a portion of the cost varies with water usage because the more water that is used, the more operation and maintenance costs increase.

Capital improvements and debt repayment are the costs the systems must pay for local water infrastructure projects, such as water main replacement. Those improvements increase the life of the assets. This also includes the debt service on any previous borrowings for large projects. Capital improvements require advanced planning to ensure that there are enough funds to complete the projects.

Each component of the water rate revenue requirement is shown in Figure H.3.

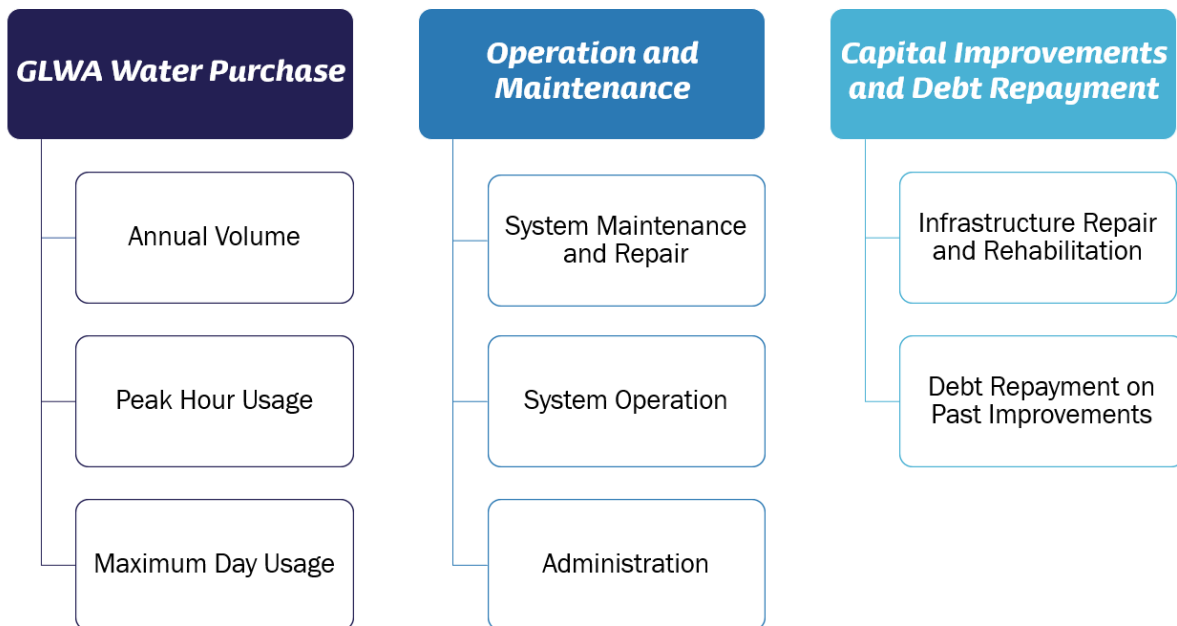


Figure H.3 *Water Rate Revenue Requirement Components*

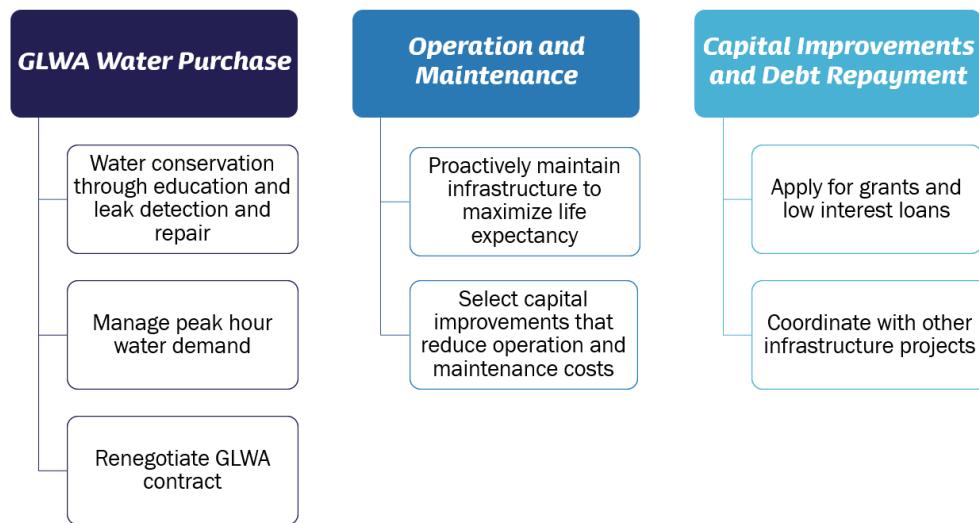


Figure H.4 *Methods Used by WRC to Minimize Water Rate Revenue*

There are several ways that the WRC assists in keeping the water rate revenue requirement as low as possible while providing quality water at a preferred level of service for its customers. This includes water conservation, maintaining the system, and being aware of grants and opportunities for savings. The reduction methods can be seen in Figure H.4.

IV. Summary of Water and Sewer Rate Structures

There are several different rate structures that can be used for water, some of which are described below. These structures are discussed only pertaining to the water rates but, they are also applicable to sewer rates. A summary of the structures and the advantages and disadvantages of each are shown in Table H.1.

A. Fixed Fee

All customers are charged a fixed fee, regardless of the amount of water used. The purpose of the fixed fee is to ensure that the water service provider recovers

all its costs, without depending on water sales. This methodology eliminates the need and expense of meter-based billing. A fixed-fee rate structure fails to promote water conservation and may present an affordability challenge to those with lower water use or those on a fixed income.

B. Uniform Volumetric Rate

All customers are charged the same rate for all usage. The amount billed to the customer increases proportionally to the volume of water used. Volumetric rates require metering at the residence to determine the amount of usage. This methodology provides customers with the ability to impact their water bill by adjusting the amount of water they use.

Charging for water based on volume alone may cause instability in system revenue because a water system still has fixed costs that must be paid.

Name	Description	Advantages	Disadvantages
Fixed Charge	Same flat charge to all customers	- Simple for customers to understand - Lower administrative costs	- Does not promote water conservation - Not equitable for variation of usage.
Uniform Volumetric Rate (Usage Rate)	One rate in which water is charged based on usage	- Appropriate for users with similar characteristics - Simple for customers to understand - Promotes water conservation	- Some inequity for distinct usage classes - Does not ensure that enough revenue is collected to cover fixed costs
Block Rate (Multiple volumetric rates or Lifeline Rate)	Multiple volumetric rates that vary by usage	- Promotes water conservation - Indirectly addresses distinct usage classes	- Increased administrative costs - Could increase costs for larger households that have higher usage
One-Part Fee	Bill is based solely on either a Fixed Fee, Uniform Volumetric Rate or a Block Rate structure	Simple for customers to understand	- If all volumetric – Does not ensure that enough revenue is collected to cover fixed costs - If all fixed – Causes conservative pricing that is more expensive to customer

Table H.1 *Comparison of Rate Structures*

C. Block Rates

Block rates are a type of volumetric rate in which the customer is charged a certain rate based on the volume of water used. A block is a distinct volume of usage associated with a volumetric rate. Block rates that increase in price as the usage increases are also known as conservation rates. Meaningful blocks should be determined by analyzing the type of customers and usage statistics.

D. Lifeline Rate

A lifeline rate is a type of increasing block rate structure in which the first block is considered the “lifeline” usage. The lifeline volume should be enough to cover basic sanitary usage in the home like water for drinking, dish washing, showers and baths, and toilets. This amount is determined by examining demographics and usage statistics and may vary between communities. The lifeline rate is at a lower cost than higher usage blocks.

V. One-Part Fees vs. Two-Part Fees

A. One-Part Fees

If a utility decides to use one of the above-mentioned structures on its own, it is considered a one-part fee. The fee can either be fixed or volumetric, and each has advantages and disadvantages. One-part fees are easiest for customers to understand. However, if it is a volumetric rate, the utility cannot easily plan for fixed costs like water purchase price and capital improvement planning. On the other hand, implementing an entirely fixed fee has no incentive for water conservation and will likely result in overall higher customer bills.

B. Two-Part Fees

Two-part fees are made up of a fixed fee and a volumetric fee. The fixed portion of the two-part fees is a fee that does not change each month and is billed regardless of water usage. The fixed portion provides revenue stability and covers fixed costs like capital improvements and debt repayment. The volumetric charge is based on how much water the customer uses which can vary monthly (uniform volumetric, block rates, or any other type of volumetric rate). Pontiac and of Royal Oak Township both use two-part fees with a uniform volumetric rate. Two-part fees are beneficial because the utility can plan for fixed costs while leaving some of the water rate revenue variable based on usage. This is one of the most common methodologies for water rate structures according to the American Water Works Association (AWWA) 2021 Water and Wastewater Rate Survey.

VI. Rate Structure Review & Analysis: City of Pontiac

Pontiac utilizes a two-part rate structure for water and sewer bills that includes a fixed charge component and a uniform volumetric rate component. Fixed operating costs for the water and sewer systems are paid for by a fixed charge based on the meter size. Volumetric costs for operating the water and sewer systems are paid for by uniform volumetric rates. This rate methodology follows industry standards and is a common rate structure for determining water and sewer rates.

From a practical standpoint there is no need to modify the rate structure for Pontiac. However, some other municipalities or water service providers have modified their rate structures as part of their affordability plans. Block rates and lifeline rates are two structures that are often considered.

For Pontiac, approximately 30% of the households are below the Federal Poverty Level (FPL) and more than 65% are below the 200% FPL. In addition, 90% of the customers are residential households.

As a result, while block rates would reduce costs for some of the households in need, it would increase costs for others in need, particularly for larger families that use more water. As a result, the WRC determined that customers would be served more equitably by maintaining Pontiac’s current rate structure, while increasing enrollment in existing or new affordability programs.

VII. Rate Structure Review & Analysis: Royal Oak Township

Royal Oak Township has historically used a one-part uniform volumetric rate structure for water and sewer bills that includes a provision for a minimum bill. All customers under this methodology were subject to minimum water and sewer bills, based on a consumption of 7 Mcf (1 Mcf = a thousand cubic feet or about 7,481 gallons), regardless of the amount of water they use. This means that a one-person household using 2 Mcf is paying the same as a 6-person household using 7 Mcf. This rate structure has been in place for more than 20 years and the original basis for it was not documented. WRC developed a recommendation to replace the rate structure with one that is better aligned with industry standards.

As a result, the following rate structures were evaluated for Royal Oak Township: 1) one-part uniform volumetric rate, 2) two-part, fixed charge and uniform volumetric, and 3) block rates.

The two-part, fixed charge and uniform volumetric rate was ultimately chosen by the township as the new rate structure. Its advantage over the other two options is the ability to account for both fixed and volumetric operating costs, while the other two options do not.

Like Pontiac, and other communities managed by the WRC, a meter equivalent unit (MEU) was assigned to each meter size to determine the meter charge or fixed fee. The meter charge is calculated by determining the fixed costs, which are 60% of GLWA purchased water, capital improvements and debt repayment, and dividing by the total number of customer MEUs.

A. Rate Comparison

The previous rate structure consisting of a volumetric rate with a minimum bill was compared to the new two-part structure consisting of a volumetric rate and fixed charge. Figure H.5 shows the monthly combined water

and sewer cost to customers for each structure based on usage. This illustrates that customers who don't use much water will see substantial savings with the proposed structure. Households using above 9 Mcf will also see a reduced bill.

B. Results

The new two-part rate structure for Royal Oak Township was reviewed and approved by the Township Board on June 27, 2022. The approved rates are in effect as of July 1, 2022.

VIII. City of Pontiac Water Rate Revenue Requirement

The water rate revenue requirement for the City of Pontiac for GLWA fiscal year (FY) 2023 (July 2022 – June 2023) is \$13,800,000. The sewer rate revenue requirement for FY2023 is \$15,900,000. The water and sewer rate revenue requirement breakdown can be seen in Figures H.6 and H.7.

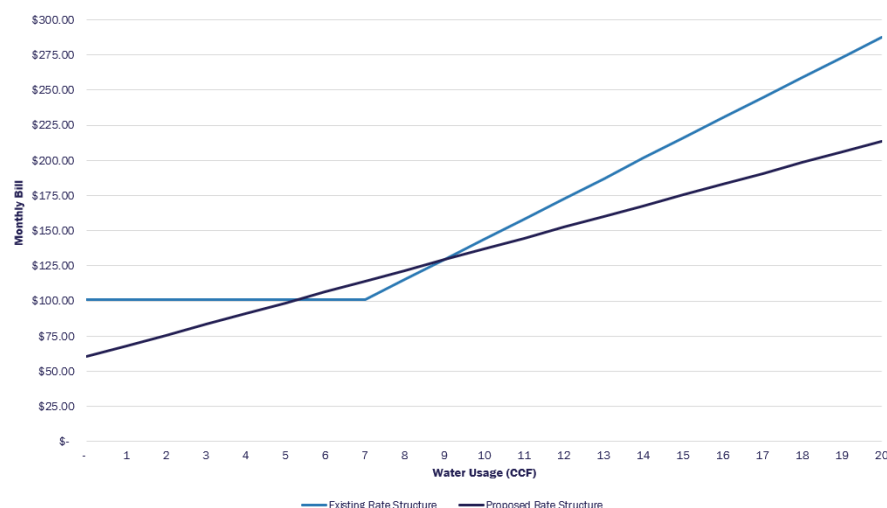


Figure H.5
Rate Structure Comparison

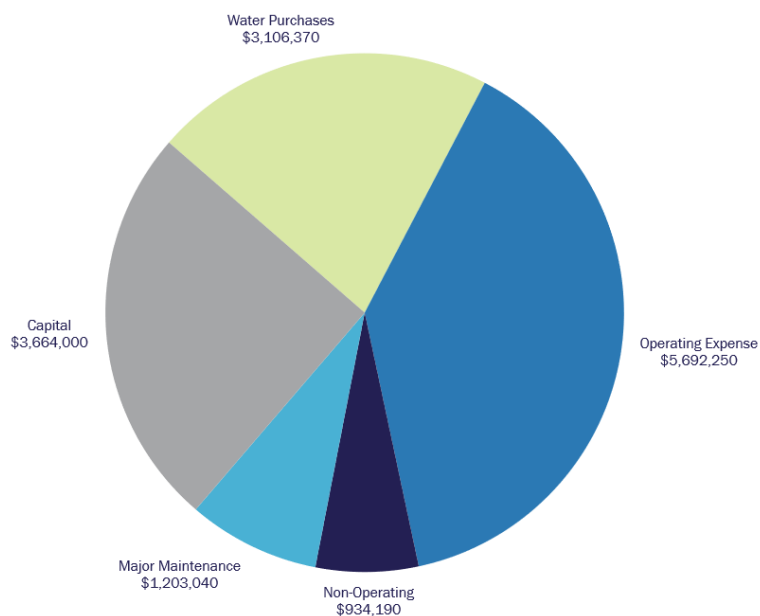


Figure H.6
The City of Pontiac's Water Rate Revenue Requirement for FY2023

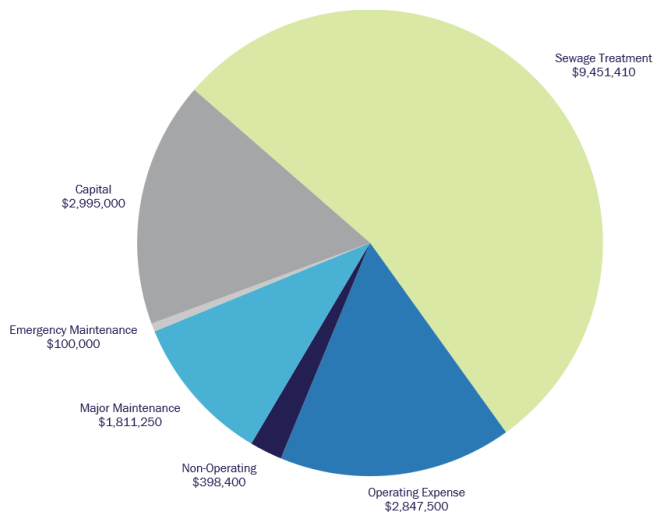


Figure H.7 The City of Pontiac's Sewer Rate Revenue Requirement for FY2023

A. Water Rates and Charges

1. Fixed Charge

Pontiac has a fixed charge. This charge is applied to the bill regardless of whether any water is used. The fixed charge is calculated based on 60% of the GLWA purchased water expense and the capital improvements and debt repayment expense. The fixed charge varies based on the meter size, but most residential accounts have meter sizes of 5/8 of an inch or 1 inch. The monthly FY2023 fixed charge for these residential meter sizes is \$19.10.

2.Usage Rate

The usage rate for FY2023 is \$33.55 per thousand cubic feet (Mcf) (1 Mcf = about 7,481 gallons). This rate is multiplied by the volume of water that the customer uses each month to determine their usage charge. The charge recovers operation and maintenance expenses and 40% of the cost of water purchased from GLWA.

B. Sewer Rates and Charges

1. Fixed Charge

Pontiac's wastewater is entirely treated at the Clinton River Water Resource Recovery Facility, located within the city limits. There are also fixed charges for this facility and the sewer collection system, similar to the types of fixed charges associated with drinking water. The monthly FY2023 fixed charge for 5/8 of an inch and 1-inch residential meters is \$21.87 per month.

2.Usage Rate

The usage rate for FY2023 is \$43.78 per Mcf. This rate is multiplied by the volume of water that the customer uses each month to determine their usage charge. It is assumed that the amount of water coming into the house ultimately goes into the sewer system, whether it is water for washing dishes or flushed down the toilet.

X. Royal Oak Township Water Rate Revenue Requirement

The water rate revenue requirement for Royal Oak Township for GLWA FY2023 is \$498,000. The sewer rate revenue requirement for FY2023 is \$930,000. The water and sewer rate revenue requirement breakdown can be seen in Figures H.8 and H.9.

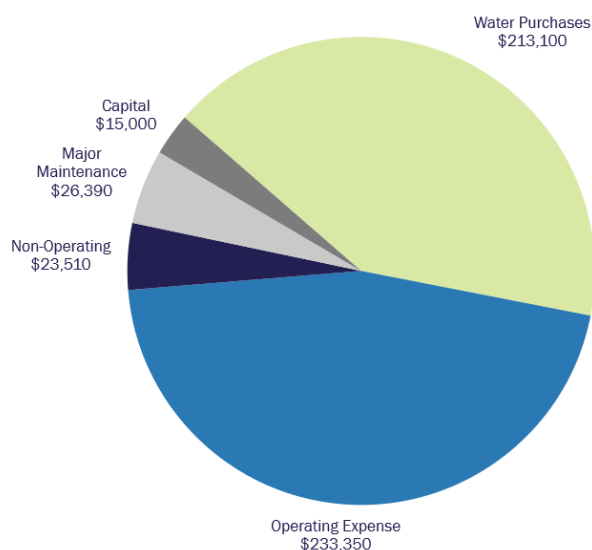


Figure H.8 Royal Oak Township's Water Rate Revenue Requirement for FY2023

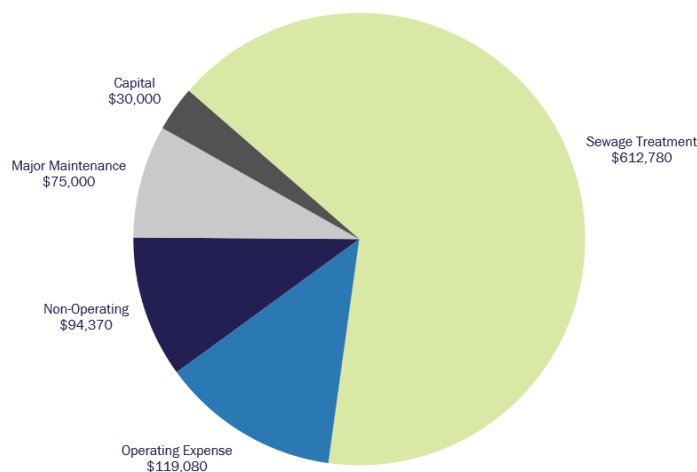


Figure H.9 Royal Oak Township's Sewer Rate Revenue Requirement for FY2023

A. Water Charges

1. Fixed Charge

Royal Oak Township has a fixed charge. This charge is applied to the bill regardless of whether any water is used. The fixed charge is calculated based on the cost of 60% of the GLWA purchased water expense and the capital improvements and debt expense. The fixed charge varies based on the meter size, but most residential accounts have meter sizes between 5/8 of an inch and 1-inch. The monthly FY2023 fixed charge for these meter sizes is \$14.90.

2. Usage Rate

The usage rate for FY2023 is \$33.70 per thousand cubic feet (Mcf) (1 Mcf = about 7,481 gallons). This rate is multiplied by the volume of water that the customer uses that month to determine their usage charge. The charge recovers operation and maintenance expense and 40% of the GLWA purchased water expenses.

B. Sewer Charges

Like the Pontiac, the Royal Oak Township customers also pay a portion of their total bill for sewer services. For sewage disposal services, Royal Oak Township pays the George W. Kuhn Drainage District (GWKDD) which transports flow to GLWA, where it is ultimately treated and discharged to the Detroit River. Also, depending on the amount of rainwater, the GWKDD provides sewage treatment for flow that is discharged to the Red Run Drain. This is different from Pontiac due to the township's geographic location and the fact that the township has a combined sewer system, designed to convey both rainwater and wastewater. The rate structure for sewer charges is currently the same as the water charges—a usage charge with a fixed fee.

1. Fixed Charge

The FY2023 fixed charge for 5/8 of an inch and 1-inch meters is \$45.36 per month.

2. Usage Charge

The FY2023 usage charge is \$43.04 per Mcf.

XI. Income-Based Financial Assistance

In communities that have a high bill burden, as described in more detail below, a rate structure change alone is usually not enough to make an impactful difference in the affordability of water bills for most customers. This is the case for both Pontiac and Royal Oak Township. In addition, reducing rates is a temporary and artificial means to address affordability that adversely impacts the level of service provided to the customers of the system. For this reason, income-based programs are the preferred method of providing

financial assistance. Financial assistance can reduce the water bills for low-income households. While financial assistance programs may not completely address the broader issue of water affordability, they provide immediate support for households who would otherwise struggle to pay their water bill.

Income-based financial assistance is one method of a multi-pronged approach in achieving water affordability. Customers at or below a certain income level will qualify for financial assistance with water bills. Common income indicators used are 150–200% a percentage of Federal Poverty Line (FPL) but vary across programs. This method of assistance is beneficial because it can be applied to nearly any type of existing rate structure and can better target customers in need. The objective of income-based assistance is to ensure sustainable bill payments, that customers can better afford, when combined with other affordability plan elements. Assistance programs are sometimes funded by the community as a small charge on all customers' monthly water bills unless outside funding can be obtained. In Michigan, assistance program funding raises potential legal implications. The WRC has identified and discussed legal considerations in [Appendix D, Legal Analysis and Mitigation Strategies](#).

A. Percentage of Income Assistance

This type of assistance is based on the concept of water bill burden. A bill burden is the bill as a percentage of income. If a household has an annual income of \$50,000 and an annual water bill of \$1,000, the “bill burden” is 2% ($1,000 / 50,000 = 0.02$). Bill burden describes the water bill in relation to the household income and is important because it emphasizes that a lower bill, or a higher income, alone will not determine affordability. The affordability calculation is therefore not a question of how high the bill is, but rather how much of a burden does the bill impose on a customer as a percentage of the customer's income.

Percentage of income assistance has qualifying customer bills capped at a percentage of their annual income based on measurement and affordability. A customer may qualify for assistance if they meet the income-eligibility, and their annual bill exceeds what is deemed affordable based on the percentage criteria. There are two ways of providing assistance: fixed payment and fixed credit.

B. Fixed Bills Based on a Percentage of Income

The fixed bill is the same every month. The basis for the fixed bill is the bill burden percentage, as determined by the service provider. The customer's annual household

income is then multiplied by the bill burden percentage to determine the annual cost of water and sewer service for the customer. This calculation is done for each customer, based on their annual household income.

Example: If a household's income is \$36,000 per year, and the maximum bill burden criteria, is 5% of a household's annual income, 5% of \$36,000 equates to \$1,800 annually, or a fixed cost of \$150 per month for water and sewer service.

B. Fixed Bill Credit Based on a Percentage of Income

A fixed credit based on a percentage of household income is implemented in a similar way as a fixed bill but does not include the levelization of monthly bills. First, the household's annual usage is estimated based on a previous year and is used to calculate an estimated annual bill. Second, a calculation is done to determine an affordable bill based upon a set percentage of income. Third, the difference between the estimated annual bill and the annual bill based on a set percentage of income is calculated. The difference is then divided by 12 to calculate a monthly bill credit.

Example: If a household's income is \$36,000 per year and the maximum bill burden percentage is set at 5% of a household's annual income (\$1,800), then based on historical annual usage, the estimated annual bill is calculated to be \$2,400. The difference between \$2,400 and \$1,800, or \$600 per month, is the credit applied to the water bill.

D. Fixed Payment / Tiered Fixed Payment

This type of assistance is based on the same concept described under percentage of income assistance,

using the fixed bill methodology. However, the tiered fixed payment is not required to be based on the water bill burden or percentage of income. The credit is determined by statistical analysis of usage, income, and revenue required to operate the system. In Michigan, gas and electric utilities use this type of assistance in which customers have a fixed payment based on the Federal Poverty Level (FPL) criterion that they meet.

E. Percentage Discount / Tiered Percentage Discount

Qualifying customers, based on income level, receive a discount on their monthly water bill. The utility can implement one flat discount or tier the discounts to target certain levels of low-income households. Example: Households at 0-50% of the FPL receive a 75% discount on their water bill. Households at 50-100% of the FPL receive a 50% discount on their water bill. Households at 100-150% of the FPL receive a 25% discount on their water bill.

F. Dollar Credit / Tiered Dollar Credit

Qualifying customers, based on income, receive a credit toward their monthly water bill. The utility can implement one flat credit or tier the credits to target certain levels of low-income households. Example: Households at 0-50% of the FPL receive a \$40 credit toward their water bill. Households at 50-100% of the FPL receive a \$30 credit toward their water bill. Households at 100-150% of the FPL receive a \$20 credit toward their water bill.

G. Assistance Program Comparison

Table H.2 summarizes these assistance programs and the advantages and disadvantages of each.

Name	Description	Benefits	Drawbacks
Fixed Bills Based on Percentage of Income	Fixed monthly bill is provided on an individual customer basis, based on household income	- Directly assists low-income households - Bill is directly proportional to their income - Allows customers to budget for water bills	- Case-by-case calculations require advanced administration that smaller utilities may not be able to afford or provide - Requires data maintenance to calculate bill burden that increases the cost of the program - No incentive for water conservation
Fixed Credit Based on Percentage of Income	Fixed monthly credit is provided on an individual customer basis, based on consumption history and household income	- Directly assists low-income households - Bill is directly proportional to income	- Case-by-case calculations require advanced administration that smaller utilities may not be able to afford or provide - Requires data maintenance to calculate bill burden that increases the cost of the program - More difficult to budget for - May lack previous usage history
Fixed Payment / Tiered Fixed Payment	Bill is based on customer's income as a percent of FPL	- Familiar in Michigan as gas and electric utilities use this method - Allows customer to budget for water bills - Moderate administrative burden	- No incentive for water conservation - More administration required compared to percentage discount and dollar credit discount
Percentage Discount	Household receives a percentage discount on monthly bills	Easier to implement than Percentage of Income methods	Possibility of some households being under-assisted and some being over-assisted
Dollar Credit	Household receives a flat credit towards monthly bills	Easier to implement than Percentage of Income methods	Possibility of some households being under-assisted and some being over-assisted

Table H.2
Comparison of Income-Based Assistance Methods

XII. Potential Affordability Criteria

There is no universally accepted manner to determine what is considered an affordable water bill. However, there are a variety of methods used to set affordability criteria.

A. Percentage of Income

The United States Environmental Protection Agency (EPA) provides affordability guidance for small water systems that serve 10,000 or fewer customers. The WRC is using the guidance as a measure of affordability to compare with the analysis.

Royal Oak Township falls into the small water system category while Pontiac does not. The EPA defines affordability as a water and sewer bill that is less than 5% of the Median Household Income (MHI). For the water portion alone, the guidance is 2.5% of the MHI.

The City of Pontiac:

- MHI: \$33,568.00 (American Community Survey (ACS) 2019)
- Annual Water Bills at 2.5% of MHI: \$839.20
- Average Monthly Water Bill at 2.5% of MHI: \$69.93

Royal Oak Township:

- MHI: \$28,311 (ACS 2019)
- Annual Water Bills at 2.5% of MHI: \$707.78
- Average Monthly Water Bill at 2.5% of MHI: \$58.98

The EPA affordability guideline is communitywide based on the population's MHI. For analysis purposes, the WRC applied the guideline of 5% to each income bracket as defined by the Southeast Michigan Council of Governments (SEMCOG) shown in Table H.3.

Income Range (\$)	Income Range (\$)	Annual Bill (\$)	Monthly Bill (\$)
<10,000	10,000	500	41.67
10,000	14,999	750	62.50
15,000	19,999	1,000	83.33
20,000	24,999	1,200	104.16
25,000	29,999	1,500	125.00
30,000	34,999	1,750	145.83
35,000	39,999	2,000	166.66
40,000	44,999	2,250	187.50
45,000	49,999	2,500	208.33
50,000	59,999	3,000	250.00
60,000	74,999	3,750	312.50
75,000	99,999	5,000	416.66
100,000	124,999	6,250	520.83
125,000	149,999	7,500	625.00
150,000	199,999	10,000	833.33
200,000	>200,000	-	-

Table H.3 *Income Range, Annual Bill and Monthly Bill at 5% of Household Income*

Through this analysis, the WRC looked at various percentages of income criteria to determine how many accounts would be eligible for assistance. Further, we evaluated the impact this would have on customer bills, in addition the amount of potential funding to support a program based on the criteria.

B. Federal Poverty Level (FPL)

The U.S. Census Bureau defines poverty as below “the minimum level of resources that are adequate to meet basic needs.” The Census Bureau establishes poverty thresholds based on family size, type of unit, and age of household members. FPL, established by the Federal Department of Health and Human Services (HHS), is based on the poverty thresholds. The FPL is commonly used in assistance programs to determine eligibility of a household or person for participation in the program, often as a percentage of the FPL. The FPL varies by household size, as seen in Table H.4, and are the same for all of the 48 contiguous states.

Federal Poverty Level (2022)	
Persons in Household	Annual Income (\$)
1	13,590
2	18,310
3	23,030
4	27,750
5	32,470
6	37,190
7	41,910
8	46,630

Table H.4 *2022 Poverty Guidelines for the 48 Contiguous States and the District of Columbia*

Federal Poverty Level (2022) – City of Pontiac		
FPL %	Average Persons in Family/Household	Annual Income (\$)
100	2.8	21,956
150	2.8	32,935
200	2.8	43,913

Table H.5 Federal Poverty Level Based on Pontiac Average Household Size

Federal Poverty Level (2022) – Charter Township of Royal Oak		
FPL %	Average Persons in Family/Household	Annual Income (\$)
100	2.3	19,603
150	2.3	29,405
200	2.3	39,206

Table H.6 Federal Poverty Level Based on Royal Oak Township average Household Size

Tables H.5 and H.6 show the average household size of each community and the corresponding annual income, based on FPL percentage.

The 2019 American Community Survey (ACS) conducted by the U.S. Census Bureau states that 30.7% of persons in the City of Pontiac are in poverty and 29.5% of households are in poverty. This is equal to approximately 17,903 persons and 6,778 households respectively.

The average household size in Pontiac is 2.8 persons for household. The 2019 ACS states that 22.8% of persons in Royal Oak Township are in poverty and 27.8% of households are in poverty. This is roughly equal to approximately 538 persons and 298 households in poverty. The average household size in Royal Oak Township is 2.3 persons per household.

XIII. Bill Assistance Analysis

The following income-based assistance models were analyzed for Pontiac and Royal Oak Township:

- Percentage of Income
- Percentage Discount / Tiered Discount
- Dollar Credit / Tiered Credit

A. Method for Modeling Income-Based Bill Assistance

Each method below was modeled using 2021 average billing data for single-family accounts and community income data obtained from the 2019 ACS.

1. Percentage of Income

The bill burden was calculated for each income bracket based on a selected percentage of income criteria. The household savings were determined by calculating the difference between average annual bills and bill burden

based on selected percentage of income. The household savings were multiplied by the number of households receiving assistance to estimate the total amount of funding needed.

2. Fixed Payment / Tiered Fixed Payment

Fixed payments were applied to households falling under varying levels of the FPL. The household savings were determined by calculating the difference between average annual bills and the fixed payments. The household savings were multiplied by the number of households receiving assistance to estimate the total amount of funding needed.

3. Percentage Discount / Tiered Discount

Discounts, as a percentage of the overall bill, were applied to households falling under varying levels of the FPL. The total amount of assistance needed was determined by multiplying the discount amount by the number of households receiving the discounts.

4. Dollar Credit / Tiered Credit

Credits, as a fixed dollar amount, were applied to households falling under varying levels of the FPL. The total amount of assistance needed was determined by multiplying the amount discounted by the number of households receiving the discounts.

B. Results

The project team determined that a income-based discount with a tiered fixed payment is the preferred form of bill assistance for the proposed affordability plans. The WRC Affordability Program will address low-income residential water accounts by providing them with a water bill that is proportional to their income level without excess charges for additional usage.

The fixed monthly bill will benefit customers by providing the same and reliable water bill each month. This is utilized for gas and electric bill assistance. Adopting a similar method for water bill assistance may help to gain support for statewide legislation.

XIV. WRC Affordability Program Considerations

A. Income Verification and Program Administration

The WRC recommends using local and/or state agencies to verify customer income and administer the WRC Affordability Program. Gas and electric utilities utilize the Michigan Department of Health and Human Services (MDHHS) for income verification and partner with agencies across the state to administer their programs. The WRC is exploring opportunities to optimize enrollment and streamline program administration by collaborating with potential program partners that already administer income-based energy assistance programs. Customers should be required to re-verify their income and residence on an annual basis to continue to remain on the program.

B. Eligibility and Estimated Enrollment

To accurately predict the impact and cost of the WRC Affordability Program, we analyzed how many accounts are currently eligible for the program in each municipality. Eligibility was granted to single-family residential accounts that meet the FPL criteria in which the occupant is responsible for the water bill. In Pontiac, approximately 8,738 accounts meet the criteria. In Royal Oak Township, approximately 334 accounts meet the criteria. After understanding how many accounts were eligible, we estimated projected participation rates based on similar programs across the nation. For example, Philadelphia's Tiered Assistance Program (TAP) has a participation rate of 25%, and San Antonio's affordability discount program has a participation rate of 30%.

Due to the low participation from the communities in GLWA's Water Residential Assistance Program (WRAP), we used 25% as an estimated participation rate for the analysis. Table H.7 shows the number of accounts enrolled in WRAP in recent years. Table H.8 summarizes the eligibility and estimated participation enrollment for the WRC Affordability Program.

Pontiac WRAP Enrollment						
Calendar Year	2016	2017	2018	2019	2020*	2021*
# Of Households Enrolled	354	485	369	236	172	153
Percent of Eligible Households Enrolled	3.9%	5.3%	4.0%	2.6%	1.9%	1.7%
Royal Oak Township WRAP Enrollment						
Calendar Year	2016	2017	2018	2019	2020*	2021*
# Of Households Enrolled	12	17	8	3	2	1
Percent of Eligible Households Enrolled	2.9%	4.1%	1.9%	0.7%	0.5%	0.2%

*Shutoff Moratorium in place for 2020 and 2021

Table H.7 Pontiac and Royal Oak Township WRAP Customer Enrollment

Municipality	Single-Family Residential Accounts	Households Meeting FPL Criteria (< 200% of the FPL)	Eligible Households	Long-Term Estimated Enrollment
Pontiac	16,902	9,790	9,133	2,283
Royal Oak Township	650	443	413	103
Total	17,552	10,233	9,546	2,386

Table H.8 Eligibility and Enrollment Participation Estimates for the WRC Affordability Program

C. Estimated Program Funding Requirement

The cost of the WRC Affordability Program depends on enrollment levels and tiered levels of income. Based on these criteria, Table H.9 provides the long-term estimated funding requirement for the recommended tiered affordability program. It is expected that participation would grow gradually over a 4-year period.

The projected participation rates are as follows: 10% year 1, 15% year 2, 20% year 3 and 25% year 4. The short-term estimated funding requirement is shown in Table H.10. Table H.11 summarizes the projected participation and costs for the first four years of the WRC Affordability Program.

Pontiac - Monthly Income Based Assistance Program Annual Long-Term Funding Estimate (does not include administrative costs)					
Household Income (% of FPL)	Estimated Household Enrollment ¹	Monthly Household Payment (4% of Household Income)	Avg Monthly Discount per Household ²	Avg Annual Discount per Household ^{2,3}	Annual Funding Estimate (25% Participation)
0 - 50%	557	\$30	\$50	\$600	\$334,113
50% - 100%	675	\$50	\$30	\$360	\$242,957
100% - 150%	515	\$80	\$15	\$180	\$92,761
150% - 200%	536	\$115	\$5	\$60	\$32,156
Total	2283	n/a	n/a	n/a	\$701,986
Royal Oak Township - Monthly Income Based Assistance Program Annual Long-Term Funding Estimate (does not include administrative costs)					
Household Income (% of FPL)	Estimated Household Enrollment ¹	Monthly Household Payment (4% of Household Income)	Avg Monthly Discount per Household ³	Avg Annual Discount per Household ^{2,3}	Annual Funding Estimate (25% Participation)
0 - 50%	24	\$30	\$80	\$960	\$22,995
50% - 100%	27	\$50	\$60	\$720	\$19,377
100% - 150%	28	\$80	\$40	\$480	\$13,527
150% - 200%	24	\$115	\$8	\$96	\$2,300
Total	103	n/a	n/a	n/a	\$58,199

1. Pontiac and Royal Oak Township enrollment estimates are based on 25% enrollment of eligible households

2. Estimate for 100% to 150% of FPL is based on May 2021 data for residential household bills over \$80

3. Estimate for 150% to 200% of FPL is based on May 2021 data for residential household bills over \$115

Table H.9 WRC Affordability Program Annual Long-Term Funding Estimate

Pontiac Monthly Income-Based Assistance Program Annual Short-Term Funding Estimate (does not include administrative costs)				
Household Income (% of FPL)	Year 1 10% Enrollment	Year 2 15% Enrollment	Year 3 20% Enrollment	Year 4 25% Enrollment
0 - 50%	\$133,645	\$200,468	\$267,290	\$334,113
50% - 100%	\$97,183	\$145,774	\$194,366	\$242,957
100% - 150%	\$37,104	\$55,657	\$74,209	\$92,761
150% - 200%	\$12,862	\$19,293	\$25,724	\$32,156
Total	\$280,795	\$421,192	\$561,589	\$701,986
Royal Oak Township Monthly Income-Based Assistance Program Annual Short-Term Funding Estimate (does not include administrative costs)				
Household Income (% of FPL)	Year 1 10% Enrollment	Year 2 15% Enrollment	Year 3 20% Enrollment	Year 4 25% Enrollment
0 - 50%	\$9,198	\$13,797	\$18,396	\$22,995
50% - 100%	\$7,751	\$11,626	\$15,502	\$19,377
100% - 150%	\$5,411	\$8,116	\$10,821	\$13,527
150% - 200%	\$920	\$1,380	\$1,840	\$2,300
Total	\$23,279	\$34,919	\$46,559	\$58,199
Combined Total	\$304,074	\$456,111	\$608,148	\$760,185

Table H.10 Income-based Assistance Program Annual Short-Term Funding Estimate

WRAP Income Base Plan – Annual Oakland County Funding Gap					
Calendar Year	2022	2023	2024	2025	2026
% Enrollment	5%	10%	15%	20%	25%
Available WRAP Funding	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000
Required WRAP Funding	\$469,232	\$1,067,436	\$2,181,532	\$2,910,735	\$3,637,913
Funding Gap	-\$330,768	\$267,436	\$1,381,532	\$2,110,735	\$2,837,913

Table H.11 WRAP Funding Gap

D. Funding The WRC Affordability Program

Through our analysis we conclude that it would not be economically feasible for Pontiac or Royal Oak Township to independently fund the proposed program through rate revenue or donations. The recommended funding source is local, state, and federal dollars with the initial funds coming from ARPA money. In the long term, a statewide funding source is necessary to sustain the program. In the immediate future, WRC intends to leverage other available water assistance programs, including WRAP and LIHWAP.

1. Leveraging WRAP and LIHWAP

A sustainable statewide funding source for affordability programs is a long-term goal that will require considerable collaboration and the political will. While this initiative moves forward, the WRC will focus on working with GLWA to implement WRAP improvements and increase program enrollment in Oakland County. WRAP is currently transitioning from a fixed \$25 monthly credit to an income-based credit.

This change will dramatically improve assistance for lower income customers, particularly those in communities with higher water and sewer bills. For example, some households in Royal Oak Township will receive a \$75 monthly credit, as opposed to the current \$25 monthly credit. In Pontiac, some households will receive a \$60 monthly credit as opposed to the current \$25 monthly credit. We anticipate this increased financial benefit will help raise enrollment in the program.

In addition, the WRC has begun working with the WRAP administrator to improve customer outreach and awareness of the program to improve enrollment levels.

Historically, Oakland County is annually allocated approximately \$800,000 in WRAP funding from GLWA, for monthly billing assistance, semi-annual arrearage assistance and the WRAP conservation and household plumbing repair program. The Low-Income Household Water Assistance Program (LIHWAP) is a federal program, administered by the state, that also assists customers with bill arrearages. This program runs until September 30, 2023.

WRC's strategy is to increase customer enrollment in LIHWAP for arrearages before utilizing WRAP funding. This will maximize WRAP direct bill assistance by reducing the amount of WRAP funds used for arrearages.

2. Projected Need

An analysis was performed to identify the funding gap between WRAP funding allocated to Oakland County with projected increases of 5% enrollment each year, until the end of 2026. See Table H.11.

We estimated that approximately 9,100 households in Pontiac and 400 households in Royal Oak Township are eligible for WRAP. As a result, approximately \$2.8 million would be needed to supplement the program at 25% enrollment in 2026.

Appendix I: Gap Analysis

Components of the affordability plans for Pontiac and Royal Oak Township, and in particular, the WRC Affordability Program, were developed through researching existing programs and then customizing them to fit the needs and resources of Pontiac and Royal Oak Township. This research and development process, described further in [Appendix C, Research and Findings](#), was developed through a series of actions that flowed from the initial grant application to the trial and error of learning what was possible for both communities. Recognizing the benefit of having a defined method to develop an affordability plan, we documented our research and development process to provide other communities with a [step-by-step guide](#) to help the development of their own affordability plans.

In February 2022, toward the end of our research phase, an Oakland County Water Resources project team member attended a full day workshop at the 2022 Utility Management Conference. The workshop was focused on a framework, created by two national consulting firms, Stantec and Raftelis, to develop a customer assistance program, or CAP, which is described in this appendix. We recognize that water affordability extends farther than a single assistance program, but CAPs are a vital part of the proposed affordability plans.

The project team took many of the actions outlined in the CAP framework, but did so in a much different manner based, in part, on providing required information for the grant application. For example, a needs assessment based on service area demographics was prepared as part of the grant application.

Similarly, we were able to identify that an income-based program was a key objective based on WRC Affordability Coalition feedback.

Notwithstanding, we saw tremendous value in utilizing the CAP framework to evaluate our affordability plans, including the WRC Affordability Plan we developed to determine what program development gaps, if any, may have been overlooked in our process. In addition, we identified the CAP framework as a valuable tool for other municipalities wanting to conduct a similar gap analysis. With permission from the framework creators, we included the Stantec-Raftelis CAP framework in this appendix.

I. Preliminary Needs Assessment

The preliminary needs assessment outlined in the framework suggests that a utility review community background information in the following categories: customer data, demographics, and affordability metrics. Each item includes criteria that determine if a community needs an affordability program. The framework refers to the criteria as “considerations” and the following sub-sections identify WRC’s consideration of the same in this report.

A. Customer Data

Customer data includes information obtained by reviewing customer accounts and other billing information. Table I.1 shows data suggested by the CAP framework, as well as additional data that WRC utilized. This review process did not identify any gaps in customer data from what we originally compiled. Accordingly, no updates were needed.

Data	Value/Unit	Report Location
Shutoffs	Number per year (2019)	Appendix A, Pontiac Appendix B, Royal Oak Township
Arrearages	Total arrearages and balance aging	Not included in the report.*
Assistance Requests (WRAP)	Number per year (2019)	This information was not provided by the program administrator.
Water/Sewer Usage	Residential average cubic feet per month	Appendix A, Pontiac Appendix B, Royal Oak Township (Average single-family water and sewer bill for calendar year 2021.)
Customer Service Complaints	Number per 1,000	This information is not currently tracked.
Additional Data not Outlined in Framework		
Tax Certifications	Number of notices and actual certifications, amount certified (2019 and 2020)	Appendix A, Pontiac Appendix B, Royal Oak Township (2019 and 2020)
WRAP Enrollment	Number enrolled each year	Appendix A, Pontiac Appendix B, Royal Oak Township (2016 to 2021)

*WRC Billing Services reviews customer arrearages on an annual basis to identify customers that have accounts which are past due for more than 180 days. If the past due amount remains unpaid, it is certified to the property tax role and the WRC is made whole. For additional information on the tax certification process, see Appendix F, People-First Policies.

Table I.1 Summary of Customer Data

B. Demographics

Table I.2, describes demographic information suggested by the CAP framework and its consideration in this report. The demographic data in this report is from 2019.

C. Affordability Metrics

Affordability metrics measure the ability of customers to pay their water bills. It is based on the relationship between the amount of their bills and their income level. Affordability metrics are the main determining factor of the need for an affordability program. Table I.3 describes the location of the demographic information in this report. The demographic information is from calendar year 2019.

Data	Value/Unit	Report Location
GIS Account Mapping	Accounts in service area	Information was not found to be useful for these communities. Affordability issues are pervasive.
Census Tracts	Number	Information was not found to be useful for these communities. Affordability issues are widespread.
Median Household Income & Lowest Quintile Income	Annual income	Appendix A, Pontiac Appendix B, Royal Oak Township Appendix H, Rate Structures and Affordability Planning
Poverty	% at FPL for a family of 4	Appendix H, Rate Structures and Affordability Planning
Unemployment*	%	Appendix A, Pontiac Appendix B, Royal Oak Township Appendix H, Rate Structures and Affordability Planning
Age Distribution	Household and income distribution of seniors	Appendix A, Pontiac Appendix B, Royal Oak Township
Owners/Tenants	% of Households	Appendix A, Pontiac Appendix B, Royal Oak Township

Table I.2 Summary of Demographic Information

*Unemployment information was not included in the demographic data originally compiled. As a result, it was added to Appendix A, City of Pontiac Background and Affordability Plan, and Appendix B, Charter Township of Royal Oak Background and Affordability Plan. There were no other gaps identified in this review process.

Metric	Value/Unit	Report Location
EPA Residential Indicator*	Annual water and sewer bill as % of Median Household Income	Appendix A, Pontiac Appendix B, Royal Oak Township Appendix H, Rate Structures and Affordability Planning
Lowest Quintile Residential Indicator*	Annual water and sewer bill as % of LQI	Appendix A, Pontiac Appendix B, Royal Oak Township
Hours at Minimum Wage*	Monthly water + sewer bill / minimum wage = hours	Appendix A, Pontiac Appendix B, Royal Oak Township
Affordability Ratio at the 20th Percentile	Monthly water + sewer bill / monthly disposable income = %	Information was not found to be useful for these communities.
Assessment Matrix (HBI/PPI) *	Burden	Appendix A, Pontiac Appendix B, Royal Oak Township

Table I.3 Affordability Metrics

*These metrics were not included in the data originally compiled and were identified as gaps. As a result, these metrics were added to the report.

D. Determination of Need

Although the Water Residential Assistance Program (WRAP) is a CAP offered to customers in Pontiac and Royal Oak Township through the Great Lakes Water Authority (GLWA), these metrics confirm that improvements to WRAP are needed to fully address affordability for these two communities. Pontiac was assessed with a high affordability burden and Royal Oak Township was assessed with a very high affordability burden. These are the two highest categories for assessing affordability.

II. Program Objectives

Once the need for an affordability program was confirmed, the next step of the framework is to identify the key objectives of such a program. To do this, we designed a survey for staff working on the grant to prioritize the list of possible objectives suggested in the framework. The survey results allowed us to eliminate three objectives due to their ranking. The remainder of the objectives were then sorted into the following similar categories:

- Address emergency needs
- Address current changes
- Minimize service shutoffs
- Reduce low-income bill impacts
- Tier assistance based on income or need, to develop an equitable program
- Make essential usage more affordable
- Minimize administrative burden
- Streamline the customer experience

- Work with existing service providers on ease of implementation
- Maximize program enrollment
- Incentivize conservation
- Aid with household plumbing repairs
- Identify and obtain external funding sources

While these objectives were all considered in the plan we created, they were not specifically identified as a comprehensive list of objectives. As a result, the list was refined, as shown below, and included in this report.

- Minimize service shutoffs
- Provide monthly bill assistance
- Provide annual arrearage assistance
- Utilizing a CAP partner for program administrative
- Provide conservation and household plumbing repair
- Identify and obtain external funding sources

III. Affordability Components

In May 2022, we held a meeting with WRC staff, advisors, and consultants that contributed to the grant work to review potential affordability plan components identified as part of the research process. The meeting helped to determine which components would be included in the proposed affordability plans. The components identified by this process were then merged with the framework’s suggested list of possible components. From there, further edits and refinements were made to finalize the list, as illustrated in Table I.4, and included in this report.

Affordability Planning Grant: Key Affordability Plan Components		
1	Short-Term Tiered Assistance Program	(a) Framework: GLWA's WRAP is being improved to include an income based monthly bill assistance program. Discount tiers are based on the average household water and sewer bill, as a percent of household income. WRC has developed its own income-based tiered assistance program that would provide a fixed monthly bill with the fixed amount being tiered based upon income as a percentage of the Federal Poverty Level. Both frameworks are being considered as concurrent or separate programs. (b) Funding: WRAP is funded by one-half of 1% of GLWA budgeted revenues. Oakland County receives about \$800k annually for households enrolled in WRAP. WRC is pursuing options to fund its income-based tiered assistance program via WRAP funds and/or Oakland County ARPA funds. (c) Marketing: WRC is developing a marketing and communication strategy to partner with community action agencies to promote the new WRAP which will help deliver immediate water assistance to customers and demonstrate the need for additional ARPA funds for water assistance.
2	Long-Term (Permanent) Assistance Program	Once enrollment for eligible households exceeds between 10% and 15%, WRAP funding for Oakland County will be exhausted. If County ARPA funds are utilized, they must be obligated by 12.31.2024 and spent by 12.31.2026. Temporary funding sources must be fully realized and depleted to demonstrate the need for a long-term tiered assistance program. WRC has developed a legislative framework, modeled after the Michigan Energy Assistance Program legislation, that would establish a permanent statewide low-income water assistance program with fixed monthly household bills based on Federal Poverty Levels, along with a proposed sustainable funding source for the program via a small fee (less than \$1) on all water bills.

Table I.4 Affordability and Planning Grant: Key Affordability Plan Components

Affordability Planning Grant: Key Affordability Plan Components		
3	Arrearage Assistance Program	WRC will promote enrollment in existing arrearage assistance programs. GLWA's WRAP provides a 2-year program for arrearage assistance that can be extended for households with senior citizens and individuals with disabilities. Federal assistance for arrearages is also available through LIHWAP (until September of 2024, when the program expires). If funding for LIHWAP is not extended, a permanent and long-term arrearage assistance program, through the statewide legislation, will be considered.
4	Conservation and Household Plumbing Repair Program	(a) Promotion of Existing Program: GLWA's WRAP currently provides a Conservation and Household Plumbing Repair Program. Historically, there have been problems with administration of the program, which have directly impacted enrollment. With recent changes in administration of the program, this impediment should be resolved. WRC will work with the new CAAs implementing WRAP in Oakland County to promote this program. (b) Development of Partnerships: WRC is exploring partnerships with gas and electric utilities to include water repairs in home energy audits, in addition to partnerships with Oakland County's Building and Home Improvement Program. (c) Leak Identification Technology: WRC will utilize a meter reporting tool to identify potential household leaks and target outreach for households with arrearages. (d) WRC is revising its internal billing policy related to adjustments for water leaks.
5	Short-Term Hardship Assistance	A new WRC assistance program is being developed to address short term needs due to household hardships (loss of job, medical bills, etc.). Funding will be provided through new private donation programs.
6	Extended / Affordable Payment Plans	Payment arrangements, where customers are expected to pay more than their average bill each month, can create a greater affordability burden. Therefore, a new WRC program for extended, flexible, and truly affordable payment plans will be implemented beginning at the end of calendar year 2022, or early 2023, in conjunction with the return of a water shut-off process. Utilizing a third-party provider to market and manage the payment plans should improve WRC's level of service and customer convenience and ensure payment plans are tailored and affordable for each customer.
7	Waiver for Late Payment Penalties/Fees	The current WRC policy for late payment penalties / fees is one waiver every 12 months. This policy will be continued and further adjustments made, if necessary, in accordance with the People First Policies and Procedures below.
8	Service Shutoff Deferral	The shutoff moratorium in affect for 2020 through 2022 will be lifted in 2023; however, WRC's shutoff policy is in the process of being revised to encourage customer payment through clear, effective, and compassionate communication strategies. Water service shutoffs remain an option for nonpayment but it will be utilized as a last resort, opposed to a primary driver, with many intervention points and paths to provide customers with alternatives to loss of water service.
9	People-First Policies and Procedures	The WRC created a Water Equity statement and all billing related policies and procedures are being internally evaluated and subjected to a review to determine if policy changes should be made to align with the Water Equity statement. WRC is also

Table I.4 Affordability and Planning Grant: Key Affordability Plan Components, continued

IV. Affordability Requirements

The affordability CAP framework includes a checklist of program requirements that should be considered. These requirements are documented below with a description of how they were addressed by us as part of the grant work.

A. Application Process

WRAP, the primary short-term CAP for the affordability plans, is provided by GLWA. The application process for this program was recently streamlined by GLWA. In addition, GLWA is transitioning to a new administrative partner for Oakland County, in part, as a strategy to

increase enrollment in WRAP. We have been integrally involved with GLWA during this process. The partnerships and ongoing collaboration between GLWA, our office, and the administrative provider is critical.

As we continue to pursue a long-term, statewide water affordability program, the application process will be an area of focus. We recognize that this process is critical to the success of any affordability plan.

B. IT Systems Considerations

Many of the information technology (IT) considerations identified by the framework were previously addressed

when WRAP was initially implemented. However, additional considerations are being pursued in conjunction with the affordability plans to utilize modern technology.

For example, Pontiac uses an Automatic Meter Interface (AMI) metering system for customer billing. One of the benefits of the system is its ability to identify household leaks that can cause high water bills. We are working with a local consultant to provide a meter system dashboard that integrates with the AMI system and provides high-level reporting of potential household leaks. This information will be used to provide targeted outreach for the WRAP conservation and household plumbing repair program.

We are also looking to potentially interface or share customer profile information with other utility providers to improve the program's outreach. While some WRC billing system customer profiles include customer names and phone numbers, most accounts only include the address and are billed to the "current resident."

This dramatically decreases the opportunity for targeted outreach and communication options for most customers. Sharing customer profile information with another service provider was determined to be a cost-effective method of obtaining and updating this information. This option is under review to ensure legal compliance with sharing customer profile information. In addition, the WRC recently purchased a new customer billing system. Implementation of the new system is projected to be completed by the end of calendar year 2023. The new system is expected to include the following features: 1) a customer portal and website; 2) links to electronic forms or application; 3) payment reminders; 4) links to payment alternatives; and 5) various reporting capabilities. The WRC Billing Services team intends to utilize these features support the affordability plans and improve customer access.

As we continue to pursue a long-term statewide affordability program, integration with IT systems will be a significant consideration. We recognize IT integration is critical to the success of any affordability plan.

C. Staffing

Our office has budgeted to add two full-time positions for customer billing in anticipation of a revised shutoff program in the calendar year 2023. In addition, a full-time Affordability Coordinator position was added during the spring of 2022. The WRC will continue to monitor and optimize the staffing needs of

the program for long-term sustainability, as the program is modified and improved over time.

D. Training

The WRC Billing Services team was trained on GLWA's original WRAP. Additional training opportunities have been identified to address the new changes to WRAP, as well as the temporary assistance available under LIHWAP, and onboarding of new Community Action Agencies (CAAs).

In addition, as part of the grant work, our office is working toward defining the role we will play in marketing and administering an affordability program. While we are not a traditional social services provider, we are an anchor institution that community members rely on for information regarding water services, water assistance, and other related government-provided services and assistance. The WRC Billing Services team is on the front line of addressing water customer questions and concerns and provides a touchpoint to connect water customers with opportunities that can help address water and other household affordability concerns. To maximize our potential to assist customers and continually improve our level of service, we are exploring opportunities to partner with CAAs to receive training not only on affordability program administration, but also diversity, equity, and inclusion.

E. Documentation

The deliverables identified in our grant application provide the basis for documentation of the Pontiac and Royal Oak Township affordability plans. This includes documenting goals, objectives, program components, performance measures, and revised policies and procedures.

F. Partnerships

[Appendix E, Community Water Partnerships, Public Outreach and Communications](#), of this report discusses the partnerships developed and maintained during the grant period. These partnerships will continue to grow as the affordability plans are implemented and improved over time.

G. Communications and Outreach

Communications and outreach are critical to the affordability plans, particularly relating to program enrollment. If water customers do not enroll in an affordability program, the program is not effective. Details regarding communications and outreach are covered in [Appendix E, Community Water Partnerships, Public Outreach and Communications](#).

Performance measures for enrollment are being established to measure the success of the affordability plan communications and outreach efforts. This includes performance measures to determine which communication and outreach methods are effective and which ones are not, so resources can be effectively allocated.

V. Implementation

The CAP framework includes a three-step process for implementation: 1) estimate enrollment levels; 2) estimate program budget; and 3) apply design concepts to your utility. Estimated enrollment levels and CAP budget projections are included in [Appendix H, Rate Structures and Affordability Planning](#).

These projections will continue to be refined and updated based on the success of the communications and outreach program and the WRAP improvements. In addition, we have retained Stantec to develop a business case evaluation to help optimize the program within identified cost and revenue constraints.

Implementation of the water affordability program components will begin in the second half of calendar year 2022 and most likely will extend into calendar year 2023. The design concepts identified by the framework will be considered during implementation of the program.

VI. Review Water Affordability Program Objectives

The CAP framework also includes a series of questions to help review and re-evaluate the program objectives. Some of the questions include: Have practical considerations caused you to stray away from your objectives? What enrollment level risks are there? What barriers to success can be eliminated through staffing, partnerships or technology? Will the program cost or administrative burden interfere with other mission-critical priorities? These questions will be considered during implementation of the affordability plan components and will help identify potential modifications.

VII. Sustainability (Program Follow-Through)

Using the performance measures identified in the CAP framework as a starting point, the performance measures in Table I.5 were developed for the affordability plans. These metrics provide a qualitative method to determine whether the goals of the plans are being met and the overall success of the plans. Using continuous improvement opportunities identified by the framework as a starting point, the continuous improvement opportunities in Table I.6 were developed for the affordability plans. These opportunities will be pursued outside of the grant period.

Affordability Plan Performance Metrics: Primary Goals of the Affordability Plan



Minimize service disconnections due to non-payment



Reduce tax certifications due to non-payment



Maximize program awareness and household funding



Improve service to water and sewer customers



Lessen write offs for uncollected billing revenue

Customer Assistance Program Performance Metrics		
Description	Update Frequency	Notes
Delinquent Accounts	Quarterly	Track the number and amount (\$) of delinquent accounts
Service Disconnections	Annual	Track the number of service disconnections for non-payment
Tax Certifications	Annual	Track the number and amount (\$) of tax certifications
Customer Assistance Plan for Arrearage Reduction	Quarterly	Track Arrearage reductions (\$) for households enrolled

Table I.5 Affordability and Planning Performance Metrics

Customer Outreach and Communications Performance Metrics		
Description	Update Frequency	Notes
Customer Assistance Plan Enrollment	Quarterly	Establish goals and track annual household enrollment (# enrolled and amount (\$) distributed)
Public Engagements	Quarterly	Establish goals and track public engagements
Metrics to identify what for of outreach or communication is most effective for CAP enrollment	Every 6 months	Collaborate with Wayne Metro to establish these metrics
Other considerations: customer surveys, public perception and media coverage		
Capital Improvement Performance Metrics		
Description	Update Frequency	Notes
Total Funds Utilized for Capital Replacement	Annual	Track for Water System and Sewer System Capital Improvements
External Funding for Capital Replacement	Annual	Track external funding received for Water and Sewer System Capital Improvements
Financial Performance Measures		
Description	Update Frequency	Notes
Budget vs. Actual – Household Assistance Provided (\$)	Quarterly	Track for all Customer Assistance Programs (arrearage, bill assistance, conservation/plumbing repairs and hardship assistance)
Budget vs Actual – WRC Customer Assistance Program Administrative Costs	Quarterly	WRC Administrative costs include customer billing, outreach and communications, and general administration

Table I.5 Affordability and Planning Performance Metrics

Affordability Plan – Continuous Improvement Opportunities	
1)	Develop an Affordability Plan dashboard to include performance metrics and other affordability plan information.
2)	Integrate a methodology to obtain customer profile information (name, phone number, email address) with new customer billing system.
3)	Update CAP long term funding estimates based on enrollment projections and actual CAP expenses, every 6 months.
4)	Develop planning document to gain support and approval for a long-term sustainable CAP (statewide program) to include outreach, CAP structure and funding sources.
5)	Optimize ongoing program administrative costs (customer billing, outreach and communications, general administration).
6)	Other considerations: Do participants need more support? Are there pinch points in the processes? Can we improve the experience? Are we equipped to handle outreach?

Table I.6 Continuous Improvement Opportunities



BUILDING AN AFFORDABILITY PLAN

Oakland County WRC



248-858 - 0958 | One Public Works Drive Building 95 West Waterford, MI 48328 | www.oakgov.com/water



Kelsey Cooke
Attorney and Special Projects Manager
Oakland County Water Resources



Christine Spitzley
Principal
OHM Advisors



Water Affordability Solutions Video: **An Inside Look At A Water Utility's Perspective**



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Impetus

Need + Commitment + Opportunity



 **Purely Resourceful**

The Human Right to Water does not imply that it should be free.

Indeed, to do so would endanger the financial sustainability of water and sanitation systems, undermining quality of service for future generations.

However, the Human Right to Water does imply that public entities have a responsibility to consider affordability for low-income customers and assist households who have difficulty paying for essential expenses.

Feinstein, Laura. Measuring Progress Toward Universal Access to Water and Sanitation in California: Defining Goals, Indicators, and Performance Measures. Pacific Institute (September 2018).



Affordability vs Assistance

Affordability

A **household** can pay for water and sewer without undue hardship.

A **community** can support their system's operations and maintenance in order to deliver safe, reliable water.

Goal: Long-term and sustainable ability to pay for services and operate systems based on economic realities.

Assistance

Limited and temporary financial aid or resources, such as debt forgiveness or plumbing repairs. Usually tied to emergency need or unexpected circumstances.

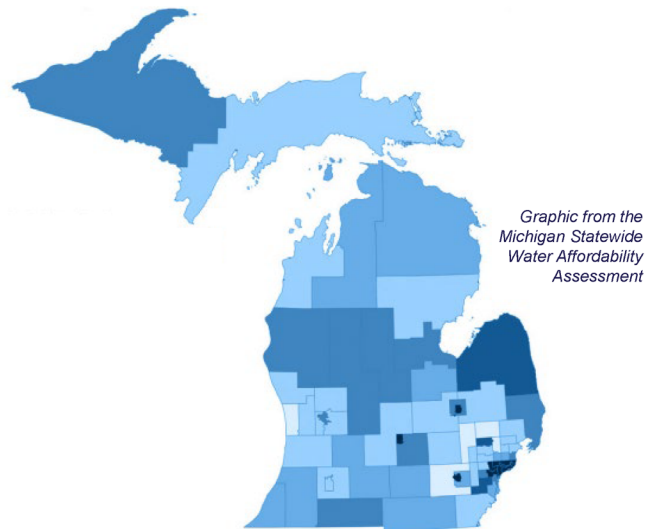
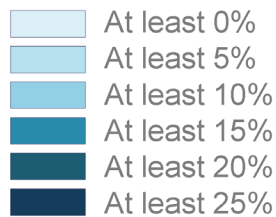
Goal: Short-term relief that provides a stopgap to loss of service. Not intended as permanent fix or solution to chronic issues related to poverty.



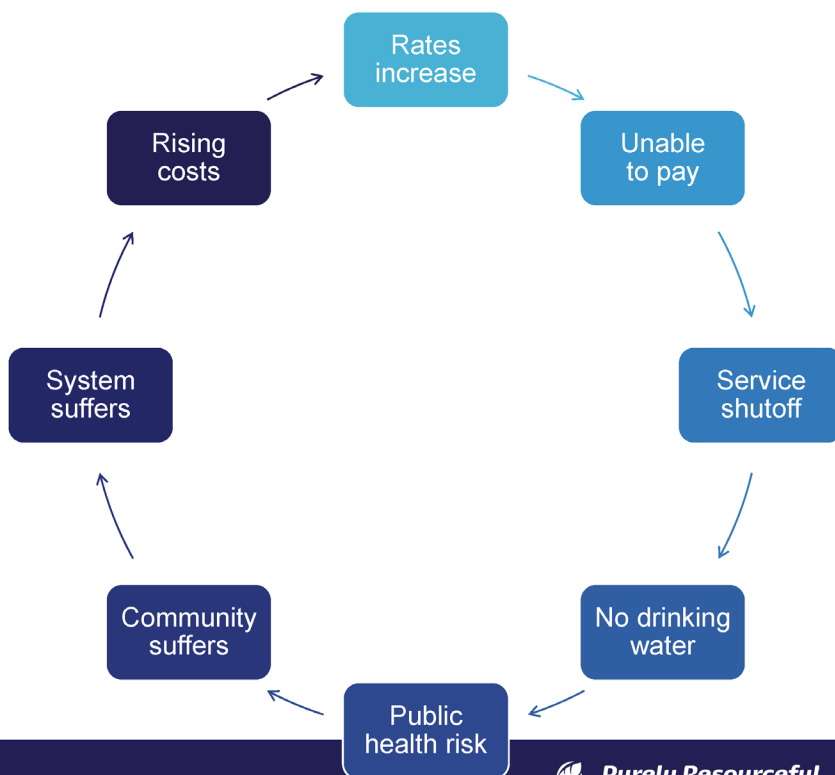
The Need

More *households* are struggling to pay for the **increasing costs of water statewide**.

Percentage of disposable household income spent on water and sewer:



Read, J., Attal, N., Betanzo, E., Harrison, R., Stollenberg, A. (2022, January). Water Service Affordability in Michigan: A Statewide Assessment. University of Michigan Water Center, Graham Sustainability Institute. Retrieved from graham.umich.edu/media/files/MI-statewide-water-affordability-assessment-report.pdf

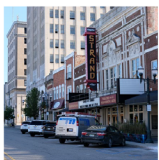


The Cycle of Affordability

Initial Reaction and Opportunity

- How can we create a program for communities that already have little funding?
- Who is going to pay for this program and how?
- What are the true economics?
- What didn't we know?
- EGLE MI Clean Water Plan: Affordability and Planning Grant
- Oakland County Water Resources Commissioner's office internal resources

Pilot Communities



City of Pontiac

- 20 square miles
- 61,606 residents
- 315 miles of water main
- Over 40% of the city's water infrastructure was built before 1930



Charter Township of Royal Oak

- 0.55 square miles
- 2,374 residents
- 11.7 miles of water main
- Majority of the system was constructed in the mid-1940s

Oakland County Water Resources



Commissioner
Jim Nash



Attorney and Manager
Kelsey Cooke



Attorney
Sara Rubino



Chief Engineer
Tim Prince



Billing Supervisor
Mike Kasanic



Communications Supervisor
Trisha Bruzek



Community Liaison
Julia Ruffin



Affordability Coordinator
Demar Byas



Marketing Assistant
Brendan Lindberg

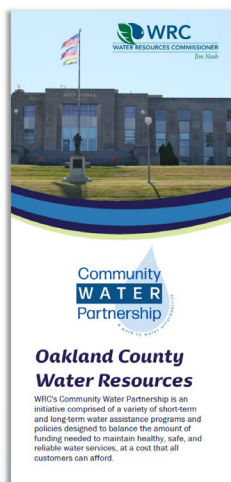
Purely Resourceful

Collaborative Partners



Purely Resourceful

Community Water Partnership



Charter Township of Royal Oak and City of Pontiac Resident Town Hall Meetings



Marketing Materials for Residents



WRC Water Affordability Coalition



Water Affordability Coalition Members

Charter Township of Royal Oak	MI Representative Brenda Carter	Pontiac Housing Commission
City of Pontiac	Michigan State University	Pontiac Landlord Association
Detroit Water & Sewer Department	NAACP (Northern OC)	Pontiac Schools
El Centro Multicultural La Familia	OC Board of Commissioners	Pontiac Zoning Committee
Friends of Royal Oak Township	OC Community Engagement	SEMCOG
Great Lakes Water Authority	Oakland Livingston Human Service Agency (OLHSA)	Sierra Club
Greater Pontiac Community Coalition	People's Water Board	U.S. Representative Brenda L. Lawrence
Michigan Department of Environment, Great Lakes, and Energy (EGLE)	Pontiac Chamber of Commerce	U.S. Representative Elissa Slotkin
	Pontiac City Council	U.S. Senator Gary Peters



Coalition Meeting Topics



- Understanding Water Meters, Water Usage and Water Bills
- Rate Refresher
- Fixed Costs
- Water & Sewer Funding Opportunities
- Review of EGLE Grant Goals
- Matrix of Community Commonalities and Differences
- Non-Government Organizations
- Local, State & Federal Assistance Program
- Public Outreach and Focus Groups
- Water Affordability Program Goals and Elements
- WRAP Program



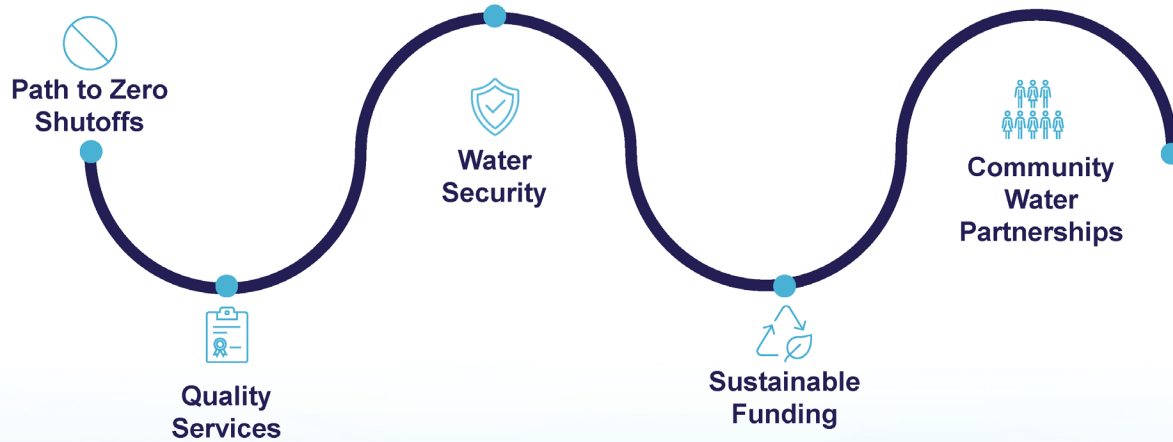
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Research, Methodology and Analysis



Purely Resourceful

Affordability Plan Development



Top Five Lessons Learned

1. Involve the community

2. Do your research

3. Set realistic expectations

4. Seek to understand equity and inclusion

5. Develop shared definitions



Water Affordability Solutions

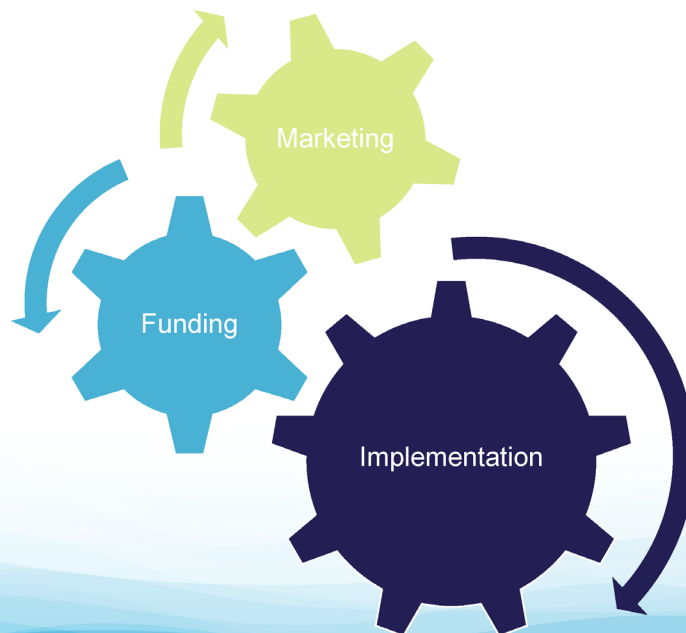
AN INSIDE LOOK AT A WATER UTILITY'S PERSPECTIVE

WRC Report

Final report will be found at
www.oakgov.com/affordability



Next Steps to Sustainability





WATER RESOURCES COMMISSIONER

Jim Nash

**Oakland County
Water Resources Commissioner's Office**

One Public Works Drive
Building 95W

Waterford, MI 48328-1907

www.oakgov.com/affordability

affordability@oakgov.com

248-858-0958

Five outcomes we're working towards:

- 1. Protecting public health and safety**
- 2. Maintaining reliable, high-quality service**
- 3. Ensuring value of investment**
- 4. Preserving natural resources and a healthy environment**
- 5. Contributing to economic prosperity**

This report was funded by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) through a Planning and Affordability grant from the "MI Clean Water Plan."

Dawsons Millpond,
City of Pontiac