Des Moines Water Works

## Water Rate Affordability Study

2 RAFTELIS

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## 1. Executive Summary

Raftelis was engaged by Des Moines Water Works (DMWW) to complete an analysis of water bill affordability in the City of Des Moines and the full service areas DMWW provides retail water service to. Overall, the analysis found that water is generally affordable in the area. The low fixed charge of $\$ 6$ per month for a Des Moines customer with a $5 / 8^{\prime \prime}$ meter ensures that customers have a great deal of control over their water bill and that users can significantly reduce their bills through conservation efforts.

Table 1 provides a summary of the analysis. A water bill for 4,000 gallons (an amount sufficient for normal indoor use for a 2.2 person household) in each service area is compared to the incomes for the lowest quintile household and the median household to determine the percent of income needed for modest water use. A common threshold for affordability is $2 \%$ of income; in the DMWW service area, only two small communities require more than $1 \%$ of median income. Table 1 also includes the hours of work required to pay a typical water bill. Though there is no target or commonly accepted threshold against which to compare, it is important to note that nearly all customers can afford a typical monthly bill with less than a full day's labor at minimum wage. These factors lead Raftelis to conclude that there is no widespread water affordability problem in the Des Moines area.

Table 1: DMWW Service Area Monthly Water Bill Summary

|  |  |  | Lowest Quintile |  | Median |  | Hours Worked to Pay Bill |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Service Area | Number of Accounts | $\begin{gathered} \text { 4,000 } \\ \text { Gal. Bill } \end{gathered}$ | Income | Bill \% | Income | Bill \% | Min. Wage | Lowest Quintile | MHI |
| Des Moines | 69,951 | \$ 29.56 | \$ 26,234 | 1.4\% | \$ 58,444 | 0.6\% | 4.1 | 2.3 | 1.0 |
| Des Moines Outside City | 529 | 35.28 | 39,161 | 1.1\% | 74,325 | 0.6\% | 4.9 | 1.8 | 0.9 |
| Alleman | 171 | 53.65 | 70,500 | 0.9\% | 115,000 | 0.6\% | 7.4 | 1.5 | 0.9 |
| Berwick | 223 | 21.48 | 17,360 | 1.5\% | 53,764 | 0.5\% | 3.0 | 2.5 | 0.8 |
| Cumming | 179 | 50.71 | 71,000 | 0.9\% | 135,000 | 0.5\% | 7.0 | 1.4 | 0.8 |
| Greenfield Plaza | 671 | 35.28 | 18,682 | 2.3\% | 34,886 | 1.2\% | 4.9 | 3.8 | 2.0 |
| Pleasant Hill | 3,869 | 49.36 | 43,090 | 1.4\% | 76,371 | 0.8\% | 6.8 | 2.3 | 1.3 |
| Pleasant Hill Outside City | 5 | 78.68 | 43,090 | 2.2\% | 76,371 | 1.2\% | 10.9 | 3.7 | 2.1 |
| Polk County | 7,929 | 57.48 | 57,874 | 1.2\% | 109,413 | 0.6\% | 7.9 | 2.0 | 1.1 |
| PCRWD 1 | 469 | 25.68 | 36,371 | 0.8\% | 73,042 | 0.4\% | 3.5 | 1.4 | 0.7 |
| Runnells | 205 | 46.17 | 40,167 | 1.4\% | 88,095 | 0.6\% | 6.4 | 2.3 | 1.0 |
| Windsor Heights | 2,138 | 29.00 | 32,430 | 1.1\% | 79,073 | 0.4\% | 4.0 | 1.8 | 0.7 |

However, there are still households with low income who may struggle to pay their water bill. A customer assistance program is the best way to provide aid to these customers. Utilities have a wide range of discretion in determining both eligibility for such a program and the level of assistance provided. The example proposed by Raftelis would require participation in a similar program for low income residents such as LIHEAP or SNAP in order to minimize DMWW's administrative burden. The benefit would be linked to the cost of a typical bill in each service area, ensuring that every participant could receive meaningful assistance. However, depending on the size of the benefit and participation level, the program would require substantial funding from a rate increase on all retail customers.

An alternative approach to providing water rate relief is the adoption of an inclining block rate structure in which the first units of water are charged a lower rate than successive units, resulting in a lower bill for small water users. However, this rate structure would apply to all residential customers, providing some benefit to those who may not need it and reducing the benefit any one customer could receive.

## 2. Affordability of Water Rates

An affordability analysis ultimately compares typical water bills to incomes in the area. Key metrics include the percent of income required and the number of hours of work required to pay for a water bill. Water rates and demographic data are key to completing this analysis.

### 2.1. Current Rate Structures

DMWW currently provides retail water service to residents of the City of Des Moines and 11 additional "full service" areas outside the City. Each of these areas has a unique set of water rates designed to fully support water service operations in that area with no subsidy from DMWW inside city customers or another full service area. Although the rates are different, they generally share a common rate structure for residential customers, who pay a monthly fixed charge based on the size of their water meter and a volumetric charge per 1,000 gallons of water used. Several service areas use a declining block rate structure applied to all customers in which the rate charged for a unit of water decreases the more water is used. Though this rate structure was once commonly used to recognize differences in the cost of service for different types of customers, many utilities with declining blocks have transitioned a structure that directly recognizes customer classes and charges them different rates. This is a change Raftelis believes DMWW should consider making in the future. The declining block rates used in the DMWW area have a second step breakpoint of 5,000 gallons, which is high enough to ensure that very few residential water bills have any step two water use and effectively functions as a uniform rate for these customers.

Overall, rates in DMWW service areas are low compared to similarly sized cities. The monthly fixed charge for Des Moines residents with a $5 / 8^{\prime \prime}$ water meter is only $\$ 6$ per month, which greatly reduces the monthly bill for low water users. The highest $5 / 8^{\prime \prime}$ fixed charge is $\$ 10$ for customers in the Pleasant Hill Outside City area, which is closer to average but still modest.

The corresponding volume rates are also generally reasonable. Des Moines residents pay $\$ 5.89$ per 1,000 gallons. Many utilities with similarly low fixed charges must have high volume charges, but volume rates for the City of Des Moines, which includes most DMWW customers, are still modest. However, volume rates in many of the full service areas are significantly higher. The rate per 1,000 gallons in Alleman, Cumming, Pleasant Hill Inside and Outside City, Polk County, and Runnells are above \$9, which is above average and could create affordability issues for average customers. A full schedule of FY 2023 rates for all service areas is presented in Appendix $1^{1}$.

The primary advantage of a low fixed charge is that it allows customers a great deal of control over their water bill. The proportionally higher volume charge will allow for a greater impact of any conservation efforts customers undertake. If customers are struggling to pay their water bill, conservation can have a significant benefit for them. However, the disadvantage is relatively low revenue stability for DMWW. If water use falls, either due to customer conservation efforts or simply cool, wet weather, the utility will see a significant drop in revenue. Balancing these two key issues is a key consideration when developing water rates.

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### 2.2. Des Moines Demographic Data

Since DMWW does not collect demographic data on the demographics of its customers such as income or household size, the data required for this study came from the American Community Survey conducted by the Census Bureau, which is the best available at the level of detail required for this analysis. Many DMWW service areas, including the City of Des Moines, are specifically identified and reported in the ACS data. Others, such as PCRWD 1 and the portion of Polk County served by DMWW, are not; in these cases, Raftelis utilized data at the census tract level to narrow the information to DMWW customers as much as possible. Table 2 below provides a summary of key data for the City of Des Moines and each full service area. A substantial portion of residents of the City of Des Moines live below $200 \%$ of the federal poverty level, although both median household income and income at the lowest quintile ( $20 \%$ of households have income below this amount) are higher than many other similarly sized cities.

Table 2: Des Moines Census Data

| Description | Demographics |  | Household Income |  | Population <br> Below 200\% <br> FPL |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Population | Households | MHI | 20\% |  |
| United States | 329,725,481 | 124,010,992 | \$ 69,021 | \$ 30,623 | 28.6\% |
| Des Moines | 213,545 | 86,992 | 58,444 | 26,234 | 35.8\% |
| Des Moines Outside City | 4,246 | 1,896 | 74,325 | 39,161 | 12.1\% |
| Alleman | 423 | 166 | 115,000 | 70,500 | 2.4\% |
| Berwick | 2,822 | 1,185 | 53,764 | 17,360 | 30.8\% |
| Cumming | 643 | 224 | 135,000 | 71,000 | 9.2\% |
| Greenfield Plaza | 2,850 | 1,154 | 34,886 | 18,682 | 47.8\% |
| Pleasant Hill | 10,203 | 3,766 | 76,371 | 43,090 | 18.1\% |
| Polk County | 22,295 | 7,721 | 109,413 | 57,874 | 9.5\% |
| PCRWD 1 | 6,959 | 2,622 | 73,042 | 36,371 | 16.1\% |
| Runnells | 459 | 172 | 88,095 | 40,167 | 19.6\% |
| Windsor Heights | 5,208 | 2,137 | 79,073 | 32,430 | 21.6\% |

Table 3 contains information about the federal poverty level and two alternative poverty measures for Polk County, the MIT Living Wage and the United Way ALICE Survival Budget ${ }^{2}$. A common criticism of the federal poverty level is that it is based on an outdated breakdown of common expenses. These alternatives include a more modern estimate of the cost of living and working based on budgets that include housing, childcare, food, transportation, health care, and technology.

[^1]Table 3: Poverty Measures

| Description | Required Income |  |  |
| :---: | :---: | :---: | :---: |
|  | MIT Living Wage | ALICE Budget | FPL |
| One Adult | \$ 33,625 | \$ 28,248 | \$ 14,580 |
| One Adult, One Child | 69,714 | 40,200 | 19,720 |
| Two Adults | 53,805 | 42,528 | 19,720 |
| Two Adults, One Child | 77,864 | 58,536 | 24,860 |
| Two Adults, Two Children | 99,298 | 64,524 | 30,000 |

Although there is no ACS data that will directly inform how many Polk County households fall below the MIT and ALICE thresholds, there are several data points that provide a useful frame of reference. The median household income for a 4-person household in Polk County is $\$ 111,199$ and $\$ 80,259$ in Des Moines, both of which are above both income thresholds. Additionally, approximately $44 \%$ of all households (of any size) in the County and $55 \%$ in Des Moines have income above $\$ 65,000$ per year.

### 2.3. Monthly Water Bill Impacts

Table 4: Des Moines Inside City Monthly Water Bill ImpactsTable 4 below presents detailed water bill affordability data for Des Moines Inside City customers. Each row shows a water bill at a different level of water use, shown in 1,000 gallon units in the leftmost column. The next column calculates the average per capita water use allowed at that monthly total for Des Moines average household size of 2.45 people. For example, 4,000 gallons per month is 54.3 gallons per person per day. This bill corresponds to a commonly accepted estimate of indoor water use of 55 gallons per person per day. Indoor water use is often considered a minimum required level of water use - it is a responsible amount for cooking, cleaning, hygiene needs, etc, but does not include any outdoor irrigation or other discretionary use.

The next three columns present information from DMWW's billing data. The most common water bill size is 3,000 gallons per month, while nearly $90 \%$ use 6,000 gallons or less. There are very few residential water bills larger than 20,000 gallons per month. The billing data is followed by breakdown of the monthly water bill, including the fixed charge and the volumetric charges.

The remaining columns provide common metrics of water affordability, including the percent of the lowest quintile income and median income required to pay for a water bill at each level of usage as well as the number of hours of work necessary to pay the corresponding water bill at minimum wage and hourly equivalents of the lowest quintile and median household incomes.

A common threshold for water bill affordability is $2 \%$ of income. As shown in the highlighted blue and green rows, ratepayers earning the lowest quintile income can afford 6,000 gallons of water per month; the median income household can afford 15,000 gallons. These amounts are higher than an affordable amount of water in many other cities and higher than a water bill for average indoor use in Des Moines.

Bill impact tables for all service areas are available in Appendix 2.

Table 4: Des Moines Inside City Monthly Water Bill Impacts

| Des Moines Inside City |  |  | Water Use Data |  |  | Monthly Water Bill |  |  | Bill \% of Income |  | Hours Worked |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | \# of Bills | Cumulative \% of Bills | Cumulative \% of Usage | Fixed | Volume | Total | Lowest Quintile | MHI | Min. Wage | Lowest Quintile | MHI |
| Incomes |  |  |  |  |  |  |  |  | $\$ 26,234$ | \$58,444 |  | \$ 13.12 | \$ 29.22 |
| Volume g/p/d |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | - |  | 29,906 | 3.9\% | 0.0\% | \$ 6.00 | \$ | \$ 6.00 | 0.3\% | 0.1\% | 0.8 | 0.5 | 0.2 |
| 1 | 13.6 |  | 79,818 | 14.5\% | 25.1\% | 6.00 | 5.89 | 11.89 | 0.5\% | 0.2\% | 1.6 | 0.9 | 0.4 |
| 2 | 27.2 |  | 150,533 | 34.3\% | 47.4\% | 6.00 | 11.78 | 17.78 | 0.8\% | 0.4\% | 2.5 | 1.4 | 0.6 |
| 3 | 40.7 |  | 163,438 | 55.8\% | 64.6\% | 6.00 | 17.67 | 23.67 | 1.1\% | 0.5\% | 3.3 | 1.8 | 0.8 |
| 4 | 54.3 | Indoor Use | 120,338 | 71.7\% | 76.1\% | 6.00 | 23.56 | 29.56 | 1.4\% | 0.6\% | 4.1 | 2.3 | 1.0 |
| 5 | 67.9 |  | 81,667 | 82.5\% | 83.5\% | 6.00 | 29.45 | 35.45 | 1.6\% | 0.7\% | 4.9 | 2.7 | 1.2 |
| 6 | 81.5 | 2\% LQI | 51,221 | 89.2\% | 88.1\% | 6.00 | 35.34 | 41.34 | 1.9\% | 0.8\% | 5.7 | 3.2 | 1.4 |
| 7 | 95.1 |  | 29,577 | 93.1\% | 90.9\% | 6.00 | 41.23 | 47.23 | 2.2\% | 1.0\% | 6.5 | 3.6 | 1.6 |
| 8 | 108.6 |  | 17,120 | 95.4\% | 92.7\% | 6.00 | 47.12 | 53.12 | 2.4\% | 1.1\% | 7.3 | 4.0 | 1.8 |
| 9 | 122.2 |  | 10,815 | 96.8\% | 93.9\% | 6.00 | 53.01 | 59.01 | 2.7\% | 1.2\% | 8.1 | 4.5 | 2.0 |
| 10 | 135.8 |  | 6,672 | 97.7\% | 94.7\% | 6.00 | 58.90 | 64.90 | 3.0\% | 1.3\% | 9.0 | 4.9 | 2.2 |
| 11 | 149.4 |  | 4,239 | 98.2\% | 95.3\% | 6.00 | 64.79 | 70.79 | 3.2\% | 1.5\% | 9.8 | 5.4 | 2.4 |
| 12 | 162.9 |  | 2,844 | 98.6\% | 95.8\% | 6.00 | 70.68 | 76.68 | 3.5\% | 1.6\% | 10.6 | 5.8 | 2.6 |
| 13 | 176.5 |  | 1,877 | 98.8\% | 96.2\% | 6.00 | 76.57 | 82.57 | 3.8\% | 1.7\% | 11.4 | 6.3 | 2.8 |
| 14 | 190.1 |  | 1,443 | 99.0\% | 96.5\% | 6.00 | 82.46 | 88.46 | 4.0\% | 1.8\% | 12.2 | 6.7 | 3.0 |
| 15 | 203.7 | 2\% MHI | 1,046 | 99.2\% | 96.7\% | 6.00 | 88.35 | 94.35 | 4.3\% | 1.9\% | 13.0 | 7.2 | 3.2 |
| 16 | 217.3 |  | 817 | 99.3\% | 97.0\% | 6.00 | 94.24 | 100.24 | 4.6\% | 2.1\% | 13.8 | 7.6 | 3.4 |
| 17 | 230.8 |  | 646 | 99.4\% | 97.1\% | 6.00 | 100.13 | 106.13 | 4.9\% | 2.2\% | 14.6 | 8.1 | 3.6 |
| 18 | 244.4 |  | 509 | 99.4\% | 97.3\% | 6.00 | 106.02 | 112.02 | 5.1\% | 2.3\% | 15.5 | 8.5 | 3.8 |
| 19 | 258.0 |  | 415 | 99.5\% | 97.5\% | 6.00 | 111.91 | 117.91 | 5.4\% | 2.4\% | 16.3 | 9.0 | 4.0 |
| 20 | 271.6 |  | 354 | 99.5\% | 97.6\% | 6.00 | 117.80 | 123.80 | 5.7\% | 2.5\% | 17.1 | 9.4 | 4.2 |

## 3. Affordability Assistance

There are two primary methods to approach addressing affordability issues for Des Moines ratepayers: a direct assistance program or an inclining block rate structure. An assistance program would likely have the largest impact on those who participate but would require additional funding both for water bill assistance and program administration. An inclining block structure, if properly designed, is self-funded but would apply to all residential customers and have a smaller impact on the monthly water bill.

### 3.1. Direct Assistance Program

A direct assistance program is a common way to provide meaningful targeted assistance to the ratepayers who need it most. Such a program would provide a credit to the water bill of eligible customers, reducing the amount they are required to pay. There are several considerations when developing an assistance program. The first is administration: the program would require staff effort to develop and operate on an ongoing basis. Determining eligibility of applicants is likely the most intensive aspect of program administration, though this could be minimized by linking participation in any DMWW assistance program with another program, such as the Low Income Heat and Energy Assistance Program (LIHEAP) or the Supplemental Nutrition Assistance Program (SNAP). If a ratepayer can demonstrate that they receive benefits from a program such as these, DMWW could consider them eligible for enrollment in the water rate assistance program with no other administrative burden.

The second primary consideration is the amount of assistance to provide, a decision for which DMWW has a great deal of discretion. Many utilities provide a flat amount, such as $\$ 20$ per month, to all enrolled ratepayers. A significant downside to this approach for DMWW is that it does not recognize the differences in rates among the service areas. Twenty dollars would cover nearly an entire 4,000 gallon bill in Berwick, but only $35 \%$ of the same bill in Polk County. This program would cost approximately $\$ 2.1$ million, funded by a one-time $4.75 \%$ rate increase. Fixed assistance could be more targeted by providing a credit equal to each service areas monthly fixed charge. One challenge with this approach is that the amount of assistance is relatively small and may not be impactful - the fixed charge for Des Moines Inside City customers is $\$ 6$, or about $20 \%$ of a typical bill. In Polk County, the area with the highest typical bill, the fixed charge is only $12 \%$ of the bill. Eliminating the fixed charge for program enrollees would cost about $\$ 650,000$, requiring a $1.5 \%$ rate increase.

Other programs cap the amount of the monthly water bill, ensuring that no matter how much water is used an enrolled ratepayer will not receive a bill for more than $\$ 25$, for example. However, this creates a moral hazard by removing any link between the use of the water service and the price paid.

Raftelis developed an example based on providing a credit to each enrolled ratepayer equal to $50 \%$ of a 4,000 gallon bill in their service area. A customer in the City of Des Moines could receive $\$ 14.28$ per month, while one in Cumming could receive $\$ 25.36$. An approach like this would target assistance to where it is needed most, which is a key benefit of a direct assistance program.

Another consideration is the amount of funding provided to the program. In order to be effective, the program must be funded to help all or most of those who apply. Analysis of Census data indicates that there are approximately 35,000 households in the DMWW service area at or below $200 \%$ of the federal poverty level,
which is the eligibility for LIHEAP assistance in Iowa. IMPACT, DMWW's current assistance program partner, currently administers LIHEAP assistance to approximately 8,500 households. The funding required to provide a $50 \%$ bill credit to all of these households is approximately $\$ 1.7$ million per year, which could be funded through a one-time $3.75 \%$ rate increase on all retail customers in the Des Moines and full-service areas.

Finally, DMWW must consider how water bill assistance would interact with other services charged on the same monthly bill. In most cases, failure to pay the complete "water bill," potentially including water, wastewater, trash service, or more, would result in water service being turned off. Assistance through this program would not apply to other services or prevent the customer from falling behind on the remainder of the payment. DMWW should consider working with other communities and utilities to determine how the water assistance credit may impact billing procedures, as well as encourage the development of similar assistance programs to help disadvantaged customers from falling behind on payments for other services.

### 3.2. Alternative Rate Structure

Another option to address affordability is the development of an alternative rate structure using inclining block rates. In this structure, the first units of water used in a month are charged at a lower rate than successive units. High water users would pay more than lower water users. Inclining block rate structures are generally developed for the residential class, with a corresponding uniform volume rate for commercial, industrial, and irrigation customers. An advantage to this approach is that it does not require any additional funding. The rates are calculated to recover the amount of revenue needed by the utility, with the higher rates offsetting the lower rates. Table 5 shows an example ${ }^{3}$ of inclining block rates for Des Moines ratepayers that would collect the same amount of revenue as the current rates. The rate for the first 3,000 gallons would be lower than the current rate, but all additional units would cost more.

Table 5: Example Inclining Block Rates

| Step | Use | Alternative Rate |  | Current Rate |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1 to 3 | \$ | 4.90 | \$ | 5.89 |
| 2 | 4 to 10 |  | 7.35 |  | 5.89 |
| 3 | Above 10 |  | 9.79 |  | 5.89 |

Another benefit is that the rate structure applies to all customers automatically, requiring no administrative effort to provide. However, this can also be a disadvantage. Since the benefit is spread to all customers, regardless of their need, the benefit to any one customer is small. Table 6 shows a comparison of water bills under the example rate structure compared to the current. The maximum benefit is less than $\$ 3$ per month on a water bill for 3,000 gallons. Bills for 5,000 gallons or less would benefit, while all others would increase.

[^2]
## Table 6: Monthly Water Bills Under Example Rates

| Volume | Water Bill Comparison |  |  |
| :---: | ---: | ---: | :---: |
|  | Current | Alternative | Savings / <br> (Cost) |
| 0 | $\$$ | 6.00 | $\$$ |
| 1 | 11.89 | 6.00 | $\$$ |
| 2 | 17.78 | 15.90 | - |
| 3 | 23.67 | 20.70 | 1.98 |
| 4 | 29.56 | 28.05 | 1.51 |
| 5 | 35.45 | 35.40 | 0.05 |
| 6 | 41.34 | 42.75 | $(1.41)$ |
| 7 | 47.23 | 50.10 | $(2.87)$ |
| 8 | 53.12 | 57.45 | $(4.33)$ |
| 9 | 59.01 | 64.80 | $(5.79)$ |
| 10 | 64.90 | 72.15 | $(7.25)$ |

### 3.3. Communications

No matter which option is selected, the success of the program will depend on DMWW's ability to communicate the value to customers. It will be important for the utility to target messages based on the stakeholder with whom it is communicating - for example, the message to someone who qualifies for the program will differ from the message to elected officials.

A variety of communication tools should be developed, based on a careful review of stakeholders and target audiences. Some potential tools include:

- Bill stuffers
- Website content
- Social media posts and graphics
- Short "explainer" video(s)
- FAQs
- Fact Sheet / Infographics
- Direct mail
- Paid advertising
- Slide decks and presentations to civic organizations, etc.

Depending on demographic factors, DMWW should consider making these pieces available in all the languages that are commonly spoken in the homes of its customers.

Each program discussed in this report could be communicated using language such as:

### 3.3.1. Direct Assistance Program

The Des Moines Water Works is proud to provide a direct assistance program aimed at helping our neighbors in greatest need afford their monthly water bills. We see access to clean and safe water as crucial for fostering a healthier and more equitable society, and believe that everyone, regardless of their financial situation, should have clean water for their daily needs.

Water is not just a utility; it's a vital resource for health, hygiene, and well-being. This assistance program aligns with the values of community solidarity and compassion, reinforcing the interconnectedness and responsibility shared among neighbors to ensure that no one in Des Moines is left behind. By lending a helping hand to those in need, customers of the Des Moines Water Works actively contribute to fostering a more supportive, resilient, and caring community for all its members.

### 3.3.2. Inclining Block Rates

Implementing an inclining block rate water rate structure substantially benefits the Des Moines community by ensuring access to affordable water for low water users. Our tiered pricing model enables households with lower water consumption to pay a lower rate for their usage, thereby promoting affordability and equity in water access.

By charging a lower rate for essential volumes of water and gradually increasing the cost for higher consumption levels, the inclining block rate structure encourages conservation and responsible usage among all residents. This system not only incentivizes efficient water use but also assists low-income households by offering more affordable rates for their essential water needs, ultimately fostering a more sustainable and inclusive community where access to vital resources remains attainable for all residents.

## APPENDIX 1:

## DMWW Water Rates

| Water Rates-2023 | Step Breakpoints |  | Monthly Fixed Charges |  |  | Water Rates per 1,000 Gal. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Lower | Upper | DMWW | Local | Total | Water | Capital | Total |
| Des Moines Inside City |  |  | 6.00 |  | 6.00 |  |  | - |
| Step 1 (Daily) | - | 5,000 |  |  |  | 5.64 | 0.25 | 5.89 |
| Step 2 (Daily) | 5,001 | 15,000 |  |  |  | 3.79 | 0.17 | 3.96 |
| Step 3 (Daily) | 15,001 | > |  |  |  | 2.91 | 0.13 | 3.04 |
| Des Moines Outside City |  |  | 8.00 |  | 8.00 |  |  |  |
| Step 1 (Daily) | - | 5,000 |  |  |  | 6.82 |  | 6.82 |
| Step 2 (Daily) | 5,001 | 15,000 |  |  |  | 5.13 |  | 5.13 |
| Step 3 (Daily) | 15,001 | > |  |  |  | 3.66 |  | 3.66 |
| Alleman |  |  | 6.00 | 1.85 | 7.85 | 11.45 |  | 11.45 |
| Berwick |  |  | 3.00 |  | 3.00 | 4.62 |  | 4.62 |
| Cumming |  |  | 8.00 | 4.15 | 12.15 | 9.64 |  | 9.64 |
| Greenfield Plaza |  |  | 8.00 |  | 8.00 |  |  |  |
| Step 1 (Daily) | - | 5,000 |  |  |  | 6.82 |  | 6.82 |
| Step 2 (Daily) | 5,001 | 15,000 |  |  |  | 5.13 |  | 5.13 |
| Step 3 (Daily) | 15,001 | > |  |  |  | 3.66 |  | 3.66 |
| Pleasant Hill Inside City |  |  | 8.00 |  | 8.00 |  |  |  |
| Step 1 (Monthly) | - | 20,000 |  |  |  | 10.34 |  | 10.34 |
| Step 2 (Monthly) | 20,001 | > |  |  |  | 8.72 |  | 8.72 |
| Pleasant Hill Outside City |  |  | 10.00 |  | 10.00 | 17.17 |  | 17.17 |
| Polk County |  |  | 7.00 |  | 7.00 |  |  | - |
| Step 1 (Daily) | - | 5,000 |  |  |  | 11.12 | 1.50 | 12.62 |
| Step 2 (Daily) | 5,001 | 15,000 |  |  |  | 6.80 | 0.82 | 7.62 |
| Step 3 (Daily) | 15,001 | > |  |  |  | 5.31 | 0.71 | 6.02 |
| PCRWD 1 |  |  | 4.00 |  | 4.00 | 5.42 |  | 5.42 |
| Runnells |  |  | 6.00 | 2.77 | 8.77 | 9.35 |  | 9.35 |
| Windsor Heights |  |  | 6.00 |  | 6.00 | 5.75 |  | 5.75 |

## APPENDIX 2:

## Detailed Monthly Water Bill Impacts

The tables presented on the following pages provide detailed bill impacts for each service area similar to the one shown in Table 4 above. The column labeled " $\mathrm{g} / \mathrm{p} / \mathrm{d}$ " (gallons per person per day) is unique for each service area based on census data regarding the average household size in the area; 4,000 gallons per month provides a different daily personal use allowance for different household sizes. The bill highlighted for indoor use is based on 55 gallons per person per day. In most areas, this bill is for 4,000 gallons per month, though in areas with larger average household sizes it increases to 5,000 per month.

|  | Water Use Data |  |  | Monthly Water Bill |  |  | Bill \% of Income |  | Hours Worked |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Des Moines Inside City | \# of Bills | Cumulative \% of Bills | Cumulative \% of Usage | Fixed | Volume | Total | Lowest Quintile | MHI | Min. Wage | Lowest Quintile | MHI |

## Incomes

$\begin{array}{lllll}\$ 26,234 & \$ 58,444 & \$ .25 & \$ 13.12 & \$ 29.22\end{array}$
Volume $\mathrm{g} / \mathrm{p} / \mathrm{d}$

| 0 | - |  | 29,906 | 3.9\% | 0.0\% | \$ | 6.00 | \$ | \$ 6.00 | 0.3\% | 0.1\% | 0.8 | 0.5 | 0.2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 13.6 |  | 79,818 | 14.5\% | 25.1\% |  | 6.00 | 5.89 | 11.89 | 0.5\% | 0.2\% | 1.6 | 0.9 | 0.4 |
| 2 | 27.2 |  | 150,533 | 34.3\% | 47.4\% |  | 6.00 | 11.78 | 17.78 | 0.8\% | 0.4\% | 2.5 | 1.4 | 0.6 |
| 3 | 40.7 |  | 163,438 | 55.8\% | 64.6\% |  | 6.00 | 17.67 | 23.67 | 1.1\% | 0.5\% | 3.3 | 1.8 | 0.8 |
| 4 | 54.3 | Indoor Use | 120,338 | 71.7\% | 76.1\% |  | 6.00 | 23.56 | 29.56 | 1.4\% | 0.6\% | 4.1 | 2.3 | 1.0 |
| 5 | 67.9 |  | 81,667 | 82.5\% | 83.5\% |  | 6.00 | 29.45 | 35.45 | 1.6\% | 0.7\% | 4.9 | 2.7 | 1.2 |
| 6 | 81.5 | 2\% LQI | 51,221 | 89.2\% | 88.1\% |  | 6.00 | 35.34 | 41.34 | 1.9\% | 0.8\% | 5.7 | 3.2 | 1.4 |
| 7 | 95.1 |  | 29,577 | 93.1\% | 90.9\% |  | 6.00 | 41.23 | 47.23 | 2.2\% | 1.0\% | 6.5 | 3.6 | 1.6 |
| 8 | 108.6 |  | 17,120 | 95.4\% | 92.7\% |  | 6.00 | 47.12 | 53.12 | 2.4\% | 1.1\% | 7.3 | 4.0 | 1.8 |
| 9 | 122.2 |  | 10,815 | 96.8\% | 93.9\% |  | 6.00 | 53.01 | 59.01 | 2.7\% | 1.2\% | 8.1 | 4.5 | 2.0 |
| 10 | 135.8 |  | 6,672 | 97.7\% | 94.7\% |  | 6.00 | 58.90 | 64.90 | 3.0\% | 1.3\% | 9.0 | 4.9 | 2.2 |
| 11 | 149.4 |  | 4,239 | 98.2\% | 95.3\% |  | 6.00 | 64.79 | 70.79 | 3.2\% | 1.5\% | 9.8 | 5.4 | 2.4 |
| 12 | 162.9 |  | 2,844 | 98.6\% | 95.8\% |  | 6.00 | 70.68 | 76.68 | 3.5\% | 1.6\% | 10.6 | 5.8 | 2.6 |
| 13 | 176.5 |  | 1,877 | 98.8\% | 96.2\% |  | 6.00 | 76.57 | 82.57 | 3.8\% | 1.7\% | 11.4 | 6.3 | 2.8 |
| 14 | 190.1 |  | 1,443 | 99.0\% | 96.5\% |  | 6.00 | 82.46 | 88.46 | 4.0\% | 1.8\% | 12.2 | 6.7 | 3.0 |
| 15 | 203.7 | 2\% MHI | 1,046 | 99.2\% | 96.7\% |  | 6.00 | 88.35 | 94.35 | 4.3\% | 1.9\% | 13.0 | 7.2 | 3.2 |
| 16 | 217.3 |  | 817 | 99.3\% | 97.0\% |  | 6.00 | 94.24 | 100.24 | 4.6\% | 2.1\% | 13.8 | 7.6 | 3.4 |
| 17 | 230.8 |  | 646 | 99.4\% | 97.1\% |  | 6.00 | 100.13 | 106.13 | 4.9\% | 2.2\% | 14.6 | 8.1 | 3.6 |
| 18 | 244.4 |  | 509 | 99.4\% | 97.3\% |  | 6.00 | 106.02 | 112.02 | 5.1\% | 2.3\% | 15.5 | 8.5 | 3.8 |
| 19 | 258.0 |  | 415 | 99.5\% | 97.5\% |  | 6.00 | 111.91 | 117.91 | 5.4\% | 2.4\% | 16.3 | 9.0 | 4.0 |
| 20 | 271.6 |  | 354 | 99.5\% | 97.6\% |  | 6.00 | 117.80 | 123.80 | 5.7\% | 2.5\% | 17.1 | 9.4 | 4.2 |
| 21 | 285.2 |  | 343 | 99.6\% | 97.7\% |  | 6.00 | 123.69 | 129.69 | 5.9\% | 2.7\% | 17.9 | 9.9 | 4.4 |
| 22 | 298.7 |  | 286 | 99.6\% | 97.8\% |  | 6.00 | 129.58 | 135.58 | 6.2\% | 2.8\% | 18.7 | 10.3 | 4.6 |
| 23 | 312.3 |  | 248 | 99.6\% | 97.9\% |  | 6.00 | 135.47 | 141.47 | 6.5\% | 2.9\% | 19.5 | 10.8 | 4.8 |
| 24 | 325.9 |  | 194 | 99.7\% | 98.0\% |  | 6.00 | 141.36 | 147.36 | 6.7\% | 3.0\% | 20.3 | 11.2 | 5.0 |
| 25 | 339.5 |  | 177 | 99.7\% | 98.1\% |  | 6.00 | 147.25 | 153.25 | 7.0\% | 3.1\% | 21.1 | 11.7 | 5.2 |
| 26 | 353.1 |  | 156 | 99.7\% | 98.2\% |  | 6.00 | 153.14 | 159.14 | 7.3\% | 3.3\% | 22.0 | 12.1 | 5.4 |
| 27 | 366.6 |  | 143 | 99.7\% | 98.3\% |  | 6.00 | 159.03 | 165.03 | 7.5\% | 3.4\% | 22.8 | 12.6 | 5.6 |
| 28 | 380.2 |  | 131 | 99.7\% | 98.3\% |  | 6.00 | 164.92 | 170.92 | 7.8\% | 3.5\% | 23.6 | 13.0 | 5.8 |
| 29 | 393.8 |  | 137 | 99.8\% | 98.4\% |  | 6.00 | 170.81 | 176.81 | 8.1\% | 3.6\% | 24.4 | 13.5 | 6.1 |
| 30 | 407.4 |  | 118 | 99.8\% | 98.5\% |  | 6.00 | 176.70 | 182.70 | 8.4\% | 3.8\% | 25.2 | 13.9 | 6.3 |
| 31 | 420.9 |  | 119 | 99.8\% | 98.5\% |  | 6.00 | 182.59 | 188.59 | 8.6\% | 3.9\% | 26.0 | 14.4 | 6.5 |
| 32 | 434.5 |  | 82 | 99.8\% | 98.6\% |  | 6.00 | 188.48 | 194.48 | 8.9\% | 4.0\% | 26.8 | 14.8 | 6.7 |
| 33 | 448.1 |  | 71 | 99.8\% | 98.6\% |  | 6.00 | 194.37 | 200.37 | 9.2\% | 4.1\% | 27.6 | 15.3 | 6.9 |
| 34 | 461.7 |  | 89 | 99.8\% | 98.7\% |  | 6.00 | 200.26 | 206.26 | 9.4\% | 4.2\% | 28.4 | 15.7 | 7.1 |
| 35 | 475.3 |  | 72 | 99.8\% | 98.7\% |  | 6.00 | 206.15 | 212.15 | 9.7\% | 4.4\% | 29.3 | 16.2 | 7.3 |
| 36 | 488.8 |  | 58 | 99.8\% | 98.8\% |  | 6.00 | 212.04 | 218.04 | 10.0\% | 4.5\% | 30.1 | 16.6 | 7.5 |
| 37 | 502.4 |  | 53 | 99.9\% | 98.8\% |  | 6.00 | 217.93 | 223.93 | 10.2\% | 4.6\% | 30.9 | 17.1 | 7.7 |
| 38 | 516.0 |  | 59 | 99.9\% | 98.8\% |  | 6.00 | 223.82 | 229.82 | 10.5\% | 4.7\% | 31.7 | 17.5 | 7.9 |
| 39 | 529.6 |  | 45 | 99.9\% | 98.9\% |  | 6.00 | 229.71 | 235.71 | 10.8\% | 4.8\% | 32.5 | 18.0 | 8.1 |
| 40 | 543.2 |  | 38 | 99.9\% | 98.9\% |  | 6.00 | 235.60 | 241.60 | 11.1\% | 5.0\% | 33.3 | 18.4 | 8.3 |
| 41 | 556.7 |  | 42 | 99.9\% | 98.9\% |  | 6.00 | 241.49 | 247.49 | 11.3\% | 5.1\% | 34.1 | 18.9 | 8.5 |
| 42 | 570.3 |  | 38 | 99.9\% | 99.0\% |  | 6.00 | 247.38 | 253.38 | 11.6\% | 5.2\% | 34.9 | 19.3 | 8.7 |
| 43 | 583.9 |  | 43 | 99.9\% | 99.0\% |  | 6.00 | 253.27 | 259.27 | 11.9\% | 5.3\% | 35.8 | 19.8 | 8.9 |
| 44 | 597.5 |  | 36 | 99.9\% | 99.0\% |  | 6.00 | 259.16 | 265.16 | 12.1\% | 5.4\% | 36.6 | 20.2 | 9.1 |
| 45 | 611.1 |  | 31 | 99.9\% | 99.1\% |  | 6.00 | 265.05 | 271.05 | 12.4\% | 5.6\% | 37.4 | 20.7 | 9.3 |
| 46 | 624.6 |  | 29 | 99.9\% | 99.1\% |  | 6.00 | 270.94 | 276.94 | 12.7\% | 5.7\% | 38.2 | 21.1 | 9.5 |
| 47 | 638.2 |  | 22 | 99.9\% | 99.1\% |  | 6.00 | 276.83 | 282.83 | 12.9\% | 5.8\% | 39.0 | 21.6 | 9.7 |
| 48 | 651.8 |  | 18 | 99.9\% | 99.1\% |  | 6.00 | 282.72 | 288.72 | 13.2\% | 5.9\% | 39.8 | 22.0 | 9.9 |
| 49 | 665.4 |  | 27 | 99.9\% | 99.2\% |  | 6.00 | 288.61 | 294.61 | 13.5\% | 6.0\% | 40.6 | 22.5 | 10.1 |
| 50 | 679.0 |  | 26 | 99.9\% | 99.2\% |  | 6.00 | 294.50 | 300.50 | 13.7\% | 6.2\% | 41.4 | 22.9 | 10.3 |



Volume g/p/d

| 0 | - |  | 873 | 16.6\% | 0.0\% | \$ | 8.00 | \$ | \$ 8.00 | 0.2\% | 0.1\% | 1.1 | 0.4 | 0.2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 14.9 |  | 444 | 25.1\% | 21.5\% |  | 8.00 | 6.82 | 14.82 | 0.5\% | 0.2\% | 2.0 | 0.8 | 0.4 |
| 2 | 29.8 |  | 705 | 38.5\% | 40.9\% |  | 8.00 | 13.64 | 21.64 | 0.7\% | 0.3\% | 3.0 | 1.1 | 0.6 |
| 3 | 44.7 |  | 851 | 54.7\% | 56.7\% |  | 8.00 | 20.46 | 28.46 | 0.9\% | 0.5\% | 3.9 | 1.5 | 0.8 |
| 4 | 59.5 | Indoor Use | 715 | 68.3\% | 68.4\% |  | 8.00 | 27.28 | 35.28 | 1.1\% | 0.6\% | 4.9 | 1.8 | 0.9 |
| 5 | 74.4 |  | 617 | 80.0\% | 76.6\% |  | 8.00 | 34.10 | 42.10 | 1.3\% | 0.7\% | 5.8 | 2.2 | 1.1 |
| 6 | 89.3 |  | 332 | 86.4\% | 81.8\% |  | 8.00 | 40.92 | 48.92 | 1.5\% | 0.8\% | 6.7 | 2.5 | 1.3 |
| 7 | 104.2 |  | 188 | 89.9\% | 85.3\% |  | 8.00 | 47.74 | 55.74 | 1.7\% | 0.9\% | 7.7 | 2.8 | 1.5 |
| 8 | 119.1 | 2\% LQI | 140 | 92.6\% | 87.9\% |  | 8.00 | 54.56 | 62.56 | 1.9\% | 1.0\% | 8.6 | 3.2 | 1.7 |
| 9 | 134.0 |  | 107 | 94.7\% | 89.8\% |  | 8.00 | 61.38 | 69.38 | 2.1\% | 1.1\% | 9.6 | 3.5 | 1.9 |
| 10 | 148.8 |  | 70 | 96.0\% | 91.2\% |  | 8.00 | 68.20 | 76.20 | 2.3\% | 1.2\% | 10.5 | 3.9 | 2.1 |
| 11 | 163.7 |  | 37 | 96.7\% | 92.2\% |  | 8.00 | 75.02 | 83.02 | 2.5\% | 1.3\% | 11.5 | 4.2 | 2.2 |
| 12 | 178.6 |  | 21 | 97.1\% | 93.1\% |  | 8.00 | 81.84 | 89.84 | 2.8\% | 1.5\% | 12.4 | 4.6 | 2.4 |
| 13 | 193.5 |  | 28 | 97.6\% | 93.8\% |  | 8.00 | 88.66 | 96.66 | 3.0\% | 1.6\% | 13.3 | 4.9 | 2.6 |
| 14 | 208.4 |  | 22 | 98.0\% | 94.4\% |  | 8.00 | 95.48 | 103.48 | 3.2\% | 1.7\% | 14.3 | 5.3 | 2.8 |
| 15 | 223.3 |  | 12 | 98.3\% | 94.9\% |  | 8.00 | 102.30 | 110.30 | 3.4\% | 1.8\% | 15.2 | 5.6 | 3.0 |
| 16 | 238.2 |  | 12 | 98.5\% | 95.4\% |  | 8.00 | 109.12 | 117.12 | 3.6\% | 1.9\% | 16.2 | 6.0 | 3.2 |
| 17 | 253.0 | 2\% MHI | 7 | 98.6\% | 95.8\% |  | 8.00 | 115.94 | 123.94 | 3.8\% | 2.0\% | 17.1 | 6.3 | 3.3 |
| 18 | 267.9 |  | 5 | 98.7\% | 96.1\% |  | 8.00 | 122.76 | 130.76 | 4.0\% | 2.1\% | 18.0 | 6.7 | 3.5 |
| 19 | 282.8 |  | 4 | 98.8\% | 96.5\% |  | 8.00 | 129.58 | 137.58 | 4.2\% | 2.2\% | 19.0 | 7.0 | 3.7 |
| 20 | 297.7 |  | 8 | 99.0\% | 96.8\% |  | 8.00 | 136.40 | 144.40 | 4.4\% | 2.3\% | 19.9 | 7.4 | 3.9 |
| 21 | 312.6 |  | 8 | 99.1\% | 97.0\% |  | 8.00 | 143.22 | 151.22 | 4.6\% | 2.4\% | 20.9 | 7.7 | 4.1 |
| 22 | 327.5 |  | 5 | 99.2\% | 97.3\% |  | 8.00 | 150.04 | 158.04 | 4.8\% | 2.6\% | 21.8 | 8.1 | 4.3 |
| 23 | 342.3 |  | 4 | 99.3\% | 97.5\% |  | 8.00 | 156.86 | 164.86 | 5.1\% | 2.7\% | 22.7 | 8.4 | 4.4 |
| 24 | 357.2 |  | 4 | 99.4\% | 97.7\% |  | 8.00 | 163.68 | 171.68 | 5.3\% | 2.8\% | 23.7 | 8.8 | 4.6 |
| 25 | 372.1 |  | 6 | 99.5\% | 97.8\% |  | 8.00 | 170.50 | 178.50 | 5.5\% | 2.9\% | 24.6 | 9.1 | 4.8 |
| 26 | 387.0 |  | 4 | 99.5\% | 98.0\% |  | 8.00 | 177.32 | 185.32 | 5.7\% | 3.0\% | 25.6 | 9.5 | 5.0 |
| 27 | 401.9 |  |  | 99.6\% | 98.1\% |  | 8.00 | 184.14 | 192.14 | 5.9\% | 3.1\% | 26.5 | 9.8 | 5.2 |
| 28 | 416.8 |  | - | 99.6\% | 98.2\% |  | 8.00 | 190.96 | 198.96 | 6.1\% | 3.2\% | 27.4 | 10.2 | 5.4 |
| 29 | 431.7 |  | 1 | 99.6\% | 98.3\% |  | 8.00 | 197.78 | 205.78 | 6.3\% | 3.3\% | 28.4 | 10.5 | 5.5 |
| 30 | 446.5 |  | 3 | 99.7\% | 98.4\% |  | 8.00 | 204.60 | 212.60 | 6.5\% | 3.4\% | 29.3 | 10.9 | 5.7 |
| 31 | 461.4 |  | 1 | 99.7\% | 98.5\% |  | 8.00 | 211.42 | 219.42 | 6.7\% | 3.5\% | 30.3 | 11.2 | 5.9 |
| 32 | 476.3 |  | - | 99.7\% | 98.6\% |  | 8.00 | 218.24 | 226.24 | 6.9\% | 3.7\% | 31.2 | 11.6 | 6.1 |
| 33 | 491.2 |  | 1 | 99.7\% | 98.6\% |  | 8.00 | 225.06 | 233.06 | 7.1\% | 3.8\% | 32.1 | 11.9 | 6.3 |
| 34 | 506.1 |  | - | 99.7\% | 98.7\% |  | 8.00 | 231.88 | 239.88 | 7.4\% | 3.9\% | 33.1 | 12.3 | 6.5 |
| 35 | 521.0 |  | 2 | 99.8\% | 98.8\% |  | 8.00 | 238.70 | 246.70 | 7.6\% | 4.0\% | 34.0 | 12.6 | 6.6 |
| 36 | 535.8 |  | 1 | 99.8\% | 98.8\% |  | 8.00 | 245.52 | 253.52 | 7.8\% | 4.1\% | 35.0 | 12.9 | 6.8 |
| 37 | 550.7 |  | 1 | 99.8\% | 98.9\% |  | 8.00 | 252.34 | 260.34 | 8.0\% | 4.2\% | 35.9 | 13.3 | 7.0 |
| 38 | 565.6 |  | 1 | 99.8\% | 99.0\% |  | 8.00 | 259.16 | 267.16 | 8.2\% | 4.3\% | 36.8 | 13.6 | 7.2 |
| 39 | 580.5 |  | 1 | 99.8\% | 99.0\% |  | 8.00 | 265.98 | 273.98 | 8.4\% | 4.4\% | 37.8 | 14.0 | 7.4 |
| 40 | 595.4 |  | 1 | 99.8\% | 99.1\% |  | 8.00 | 272.80 | 280.80 | 8.6\% | 4.5\% | 38.7 | 14.3 | 7.6 |
| 41 | 610.3 |  | - | 99.8\% | 99.1\% |  | 8.00 | 279.62 | 287.62 | 8.8\% | 4.6\% | 39.7 | 14.7 | 7.7 |
| 42 | 625.2 |  | - | 99.8\% | 99.1\% |  | 8.00 | 286.44 | 294.44 | 9.0\% | 4.8\% | 40.6 | 15.0 | 7.9 |
| 43 | 640.0 |  | 1 | 99.9\% | 99.2\% |  | 8.00 | 293.26 | 301.26 | 9.2\% | 4.9\% | 41.6 | 15.4 | 8.1 |
| 44 | 654.9 |  | 1 | 99.9\% | 99.2\% |  | 8.00 | 300.08 | 308.08 | 9.4\% | 5.0\% | 42.5 | 15.7 | 8.3 |
| 45 | 669.8 |  | - | 99.9\% | 99.2\% |  | 8.00 | 306.90 | 314.90 | 9.6\% | 5.1\% | 43.4 | 16.1 | 8.5 |
| 46 | 684.7 |  | 1 | 99.9\% | 99.3\% |  | 8.00 | 313.72 | 321.72 | 9.9\% | 5.2\% | 44.4 | 16.4 | 8.7 |
| 47 | 699.6 |  | - | 99.9\% | 99.3\% |  | 8.00 | 320.54 | 328.54 | 10.1\% | 5.3\% | 45.3 | 16.8 | 8.8 |
| 48 | 714.5 |  | - | 99.9\% | 99.3\% |  | 8.00 | 327.36 | 335.36 | 10.3\% | 5.4\% | 46.3 | 17.1 | 9.0 |
| 49 | 729.3 |  | 1 | 99.9\% | 99.3\% |  | 8.00 | 334.18 | 342.18 | 10.5\% | 5.5\% | 47.2 | 17.5 | 9.2 |
| 50 | 744.2 |  | - | 99.9\% | 99.4\% |  | 8.00 | 341.00 | 349.00 | 10.7\% | 5.6\% | 48.1 | 17.8 | 9.4 |


| Alleman | Water Use Data |  |  | Monthly Water Bill |  |  | Bill \% of Income |  | Hours Worked |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \# of Bills | Cumulative $\%$ of Bills | Cumulative \% of Usage | Fixed | Volume | Total | Lowest Quintile | MHI | Min. Wage | Lowest Quintile | MHI |

## Incomes

$\begin{array}{lllll} & 70,500 & \$ 115,000 & \$ 7.25 & \$ 35.25\end{array} \$ 57.50$
Volume $\mathrm{g} / \mathrm{p} / \mathrm{d}$

| 0 | - |  | 18 | 1.0\% | 0.0\% | \$ | 7.85 | \$ - | \$ 7.85 | 0.1\% | 0.1\% | 1.1 | 0.2 | 0.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 13.1 |  | 78 | 5.2\% | 21.9\% |  | 7.85 | 11.45 | 19.30 | 0.3\% | 0.2\% | 2.7 | 0.5 | 0.3 |
| 2 | 26.2 |  | 233 | 17.8\% | 42.9\% |  | 7.85 | 22.90 | 30.75 | 0.5\% | 0.3\% | 4.2 | 0.9 | 0.5 |
| 3 | 39.2 |  | 504 | 45.0\% | 61.1\% |  | 7.85 | 34.35 | 42.20 | 0.7\% | 0.4\% | 5.8 | 1.2 | 0.7 |
| 4 | 52.3 | Indoor Use | 337 | 63.2\% | 73.3\% |  | 7.85 | 45.80 | 53.65 | 0.9\% | 0.6\% | 7.4 | 1.5 | 0.9 |
| 5 | 65.4 |  | 254 | 76.9\% | 81.4\% |  | 7.85 | 57.25 | 65.10 | 1.1\% | 0.7\% | 9.0 | 1.8 | 1.1 |
| 6 | 78.5 |  | 161 | 85.6\% | 86.5\% |  | 7.85 | 68.70 | 76.55 | 1.3\% | 0.8\% | 10.6 | 2.2 | 1.3 |
| 7 | 91.6 |  | 77 | 89.8\% | 89.7\% |  | 7.85 | 80.15 | 88.00 | 1.5\% | 0.9\% | 12.1 | 2.5 | 1.5 |
| 8 | 104.6 |  | 53 | 92.7\% | 92.0\% |  | 7.85 | 91.60 | 99.45 | 1.7\% | 1.0\% | 13.7 | 2.8 | 1.7 |
| 9 | 117.7 | 2\% LQI | 43 | 95.0\% | 93.6\% |  | 7.85 | 103.05 | 110.90 | 1.9\% | 1.2\% | 15.3 | 3.1 | 1.9 |
| 10 | 130.8 |  | 21 | 96.1\% | 94.7\% |  | 7.85 | 114.50 | 122.35 | 2.1\% | 1.3\% | 16.9 | 3.5 | 2.1 |
| 11 | 143.9 |  | 17 | 97.0\% | 95.6\% |  | 7.85 | 125.95 | 133.80 | 2.3\% | 1.4\% | 18.5 | 3.8 | 2.3 |
| 12 | 157.0 |  | 10 | 97.6\% | 96.2\% |  | 7.85 | 137.40 | 145.25 | 2.5\% | 1.5\% | 20.0 | 4.1 | 2.5 |
| 13 | 170.1 |  | 7 | 97.9\% | 96.7\% |  | 7.85 | 148.85 | 156.70 | 2.7\% | 1.6\% | 21.6 | 4.4 | 2.7 |
| 14 | 183.1 |  | 7 | 98.3\% | 97.2\% |  | 7.85 | 160.30 | 168.15 | 2.9\% | 1.8\% | 23.2 | 4.8 | 2.9 |
| 15 | 196.2 |  | 5 | 98.6\% | 97.6\% |  | 7.85 | 171.75 | 179.60 | 3.1\% | 1.9\% | 24.8 | 5.1 | 3.1 |
| 16 | 209.3 | 2\% MHI | 2 | 98.7\% | 97.9\% |  | 7.85 | 183.20 | 191.05 | 3.3\% | 2.0\% | 26.4 | 5.4 | 3.3 |
| 17 | 222.4 |  | 6 | 99.0\% | 98.2\% |  | 7.85 | 194.65 | 202.50 | 3.4\% | 2.1\% | 27.9 | 5.7 | 3.5 |
| 18 | 235.5 |  | - | 99.0\% | 98.4\% |  | 7.85 | 206.10 | 213.95 | 3.6\% | 2.2\% | 29.5 | 6.1 | 3.7 |
| 19 | 248.5 |  | 1 | 99.1\% | 98.6\% |  | 7.85 | 217.55 | 225.40 | 3.8\% | 2.4\% | 31.1 | 6.4 | 3.9 |
| 20 | 261.6 |  | 2 | 99.2\% | 98.8\% |  | 7.85 | 229.00 | 236.85 | 4.0\% | 2.5\% | 32.7 | 6.7 | 4.1 |
| 21 | 274.7 |  | - | 99.2\% | 99.0\% |  | 7.85 | 240.45 | 248.30 | 4.2\% | 2.6\% | 34.2 | 7.0 | 4.3 |
| 22 | 287.8 |  | 3 | 99.4\% | 99.2\% |  | 7.85 | 251.90 | 259.75 | 4.4\% | 2.7\% | 35.8 | 7.4 | 4.5 |
| 23 | 300.9 |  | 2 | 99.5\% | 99.3\% |  | 7.85 | 263.35 | 271.20 | 4.6\% | 2.8\% | 37.4 | 7.7 | 4.7 |
| 24 | 313.9 |  | 1 | 99.5\% | 99.4\% |  | 7.85 | 274.80 | 282.65 | 4.8\% | 2.9\% | 39.0 | 8.0 | 4.9 |
| 25 | 327.0 |  | 2 | 99.6\% | 99.5\% |  | 7.85 | 286.25 | 294.10 | 5.0\% | 3.1\% | 40.6 | 8.3 | 5.1 |
| 26 | 340.1 |  | 1 | 99.7\% | 99.6\% |  | 7.85 | 297.70 | 305.55 | 5.2\% | 3.2\% | 42.1 | 8.7 | 5.3 |
| 27 | 353.2 |  | 2 | 99.8\% | 99.7\% |  | 7.85 | 309.15 | 317.00 | 5.4\% | 3.3\% | 43.7 | 9.0 | 5.5 |
| 28 | 366.3 |  | - | 99.8\% | 99.7\% |  | 7.85 | 320.60 | 328.45 | 5.6\% | 3.4\% | 45.3 | 9.3 | 5.7 |
| 29 | 379.4 |  | 2 | 99.9\% | 99.8\% |  | 7.85 | 332.05 | 339.90 | 5.8\% | 3.5\% | 46.9 | 9.6 | 5.9 |
| 30 | 392.4 |  | - | 99.9\% | 99.8\% |  | 7.85 | 343.50 | 351.35 | 6.0\% | 3.7\% | 48.5 | 10.0 | 6.1 |
| 31 | 405.5 |  | 1 | 99.9\% | 99.8\% |  | 7.85 | 354.95 | 362.80 | 6.2\% | 3.8\% | 50.0 | 10.3 | 6.3 |
| 32 | 418.6 |  | - | 99.9\% | 99.8\% |  | 7.85 | 366.40 | 374.25 | 6.4\% | 3.9\% | 51.6 | 10.6 | 6.5 |
| 33 | 431.7 |  | - | 99.9\% | 99.9\% |  | 7.85 | 377.85 | 385.70 | 6.6\% | 4.0\% | 53.2 | 10.9 | 6.7 |
| 34 | 444.8 |  | - | 99.9\% | 99.9\% |  | 7.85 | 389.30 | 397.15 | 6.8\% | 4.1\% | 54.8 | 11.3 | 6.9 |
| 35 | 457.8 |  | - | 99.9\% | 99.9\% |  | 7.85 | 400.75 | 408.60 | 7.0\% | 4.3\% | 56.4 | 11.6 | 7.1 |
| 36 | 470.9 |  | - | 99.9\% | 99.9\% |  | 7.85 | 412.20 | 420.05 | 7.1\% | 4.4\% | 57.9 | 11.9 | 7.3 |
| 37 | 484.0 |  | - | 99.9\% | 99.9\% |  | 7.85 | 423.65 | 431.50 | 7.3\% | 4.5\% | 59.5 | 12.2 | 7.5 |
| 38 | 497.1 |  | - | 99.9\% | 99.9\% |  | 7.85 | 435.10 | 442.95 | 7.5\% | 4.6\% | 61.1 | 12.6 | 7.7 |
| 39 | 510.2 |  | - | 99.9\% | 99.9\% |  | 7.85 | 446.55 | 454.40 | 7.7\% | 4.7\% | 62.7 | 12.9 | 7.9 |
| 40 | 523.2 |  | - | 99.9\% | 99.9\% |  | 7.85 | 458.00 | 465.85 | 7.9\% | 4.9\% | 64.3 | 13.2 | 8.1 |
| 41 | 536.3 |  | - | 99.9\% | 100.0\% |  | 7.85 | 469.45 | 477.30 | 8.1\% | 5.0\% | 65.8 | 13.5 | 8.3 |
| 42 | 549.4 |  | - | 99.9\% | 100.0\% |  | 7.85 | 480.90 | 488.75 | 8.3\% | 5.1\% | 67.4 | 13.9 | 8.5 |
| 43 | 562.5 |  | - | 99.9\% | 100.0\% |  | 7.85 | 492.35 | 500.20 | 8.5\% | 5.2\% | 69.0 | 14.2 | 8.7 |
| 44 | 575.6 |  | - | 99.9\% | 100.0\% |  | 7.85 | 503.80 | 511.65 | 8.7\% | 5.3\% | 70.6 | 14.5 | 8.9 |
| 45 | 588.7 |  | 1 | 100.0\% | 100.0\% |  | 7.85 | 515.25 | 523.10 | 8.9\% | 5.5\% | 72.2 | 14.8 | 9.1 |
| 46 | 601.7 |  | - | 100.0\% | 100.0\% |  | 7.85 | 526.70 | 534.55 | 9.1\% | 5.6\% | 73.7 | 15.2 | 9.3 |
| 47 | 614.8 |  | - | 100.0\% | 100.0\% |  | 7.85 | 538.15 | 546.00 | 9.3\% | 5.7\% | 75.3 | 15.5 | 9.5 |
| 48 | 627.9 |  | - | 100.0\% | 100.0\% |  | 7.85 | 549.60 | 557.45 | 9.5\% | 5.8\% | 76.9 | 15.8 | 9.7 |
| 49 | 641.0 |  | - | 100.0\% | 100.0\% |  | 7.85 | 561.05 | 568.90 | 9.7\% | 5.9\% | 78.5 | 16.1 | 9.9 |
| 50 | 654.1 |  | - | 100.0\% | 100.0\% |  | 7.85 | 572.50 | 580.35 | 9.9\% | 6.1\% | 80.0 | 16.5 | 10.1 |


|  | Water Use Data |  |  | Monthly Water Bill |  |  | Bill \% of Income |  | Hours Worked |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Berwick | \# of Bills | Cumulative \% of Bills | Cumulative $\%$ of Usage | Fixed | Volume | Total | Lowest Quintile | MHI | Min. Wage | Lowest Quintile | MHI |
| Incomes |  |  |  |  |  |  | \$17,360 | \$53,764 | \$ 7.25 | \$ 8.68 | \$ 26.88 |


| Volume | g/p/d |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | - |  | 122 | 4.8\% | 0.0\% | \$ | 3.00 | \$ | \$ 3.00 | 0.2\% | 0.1\% | 0.4 | 0.3 | 0.1 |
| 1 | 14.0 |  | 165 | 11.3\% | 17.0\% |  | 3.00 | 4.62 | 7.62 | 0.5\% | 0.2\% | 1.1 | 0.9 | 0.3 |
| 2 | 28.0 |  | 392 | 26.7\% | 32.8\% |  | 3.00 | 9.24 | 12.24 | 0.8\% | 0.3\% | 1.7 | 1.4 | 0.5 |
| 3 | 42.0 |  | 566 | 48.9\% | 45.9\% |  | 3.00 | 13.86 | 16.86 | 1.2\% | 0.4\% | 2.3 | 1.9 | 0.6 |
| 4 | 56.0 | Indoor Use | 359 | 63.0\% | 55.0\% |  | 3.00 | 18.48 | 21.48 | 1.5\% | 0.5\% | 3.0 | 2.5 | 0.8 |
| 5 | 70.0 | 2\% LQI | 270 | 73.6\% | 61.6\% |  | 3.00 | 23.10 | 26.10 | 1.8\% | 0.6\% | 3.6 | 3.0 | 1.0 |
| 6 | 84.0 |  | 193 | 81.2\% | 66.3\% |  | 3.00 | 27.72 | 30.72 | 2.1\% | 0.7\% | 4.2 | 3.5 | 1.1 |
| 7 | 98.0 |  | 117 | 85.7\% | 69.7\% |  | 3.00 | 32.34 | 35.34 | 2.4\% | 0.8\% | 4.9 | 4.1 | 1.3 |
| 8 | 112.0 |  | 73 | 88.6\% | 72.2\% |  | 3.00 | 36.96 | 39.96 | 2.8\% | 0.9\% | 5.5 | 4.6 | 1.5 |
| 9 | 126.0 |  | 51 | 90.6\% | 74.2\% |  | 3.00 | 41.58 | 44.58 | 3.1\% | 1.0\% | 6.1 | 5.1 | 1.7 |
| 10 | 140.0 |  | 41 | 92.2\% | 75.9\% |  | 3.00 | 46.20 | 49.20 | 3.4\% | 1.1\% | 6.8 | 5.7 | 1.8 |
| 11 | 154.0 |  | 30 | 93.4\% | 77.3\% |  | 3.00 | 50.82 | 53.82 | 3.7\% | 1.2\% | 7.4 | 6.2 | 2.0 |
| 12 | 168.0 |  | 23 | 94.3\% | 78.5\% |  | 3.00 | 55.44 | 58.44 | 4.0\% | 1.3\% | 8.1 | 6.7 | 2.2 |
| 13 | 182.0 |  | 15 | 94.9\% | 79.5\% |  | 3.00 | 60.06 | 63.06 | 4.4\% | 1.4\% | 8.7 | 7.3 | 2.3 |
| 14 | 196.0 |  | 13 | 95.4\% | 80.4\% |  | 3.00 | 64.68 | 67.68 | 4.7\% | 1.5\% | 9.3 | 7.8 | 2.5 |
| 15 | 210.0 |  | 9 | 95.8\% | 81.2\% |  | 3.00 | 69.30 | 72.30 | 5.0\% | 1.6\% | 10.0 | 8.3 | 2.7 |
| 16 | 224.0 |  | 7 | 96.0\% | 82.0\% |  | 3.00 | 73.92 | 76.92 | 5.3\% | 1.7\% | 10.6 | 8.9 | 2.9 |
| 17 | 238.0 |  | 3 | 96.2\% | 82.7\% |  | 3.00 | 78.54 | 81.54 | 5.6\% | 1.8\% | 11.2 | 9.4 | 3.0 |
| 18 | 251.9 |  | 3 | 96.3\% | 83.4\% |  | 3.00 | 83.16 | 86.16 | 6.0\% | 1.9\% | 11.9 | 9.9 | 3.2 |
| 19 | 265.9 | 2\% MHI | 8 | 96.6\% | 84.0\% |  | 3.00 | 87.78 | 90.78 | 6.3\% | 2.0\% | 12.5 | 10.5 | 3.4 |
| 20 | 279.9 |  | 15 | 97.2\% | 84.6\% |  | 3.00 | 92.40 | 95.40 | 6.6\% | 2.1\% | 13.2 | 11.0 | 3.5 |
| 21 | 293.9 |  | 11 | 97.6\% | 85.1\% |  | 3.00 | 97.02 | 100.02 | 6.9\% | 2.2\% | 13.8 | 11.5 | 3.7 |
| 22 | 307.9 |  | 13 | 98.1\% | 85.6\% |  | 3.00 | 101.64 | 104.64 | 7.2\% | 2.3\% | 14.4 | 12.1 | 3.9 |
| 23 | 321.9 |  | 6 | 98.4\% | 85.9\% |  | 3.00 | 106.26 | 109.26 | 7.6\% | 2.4\% | 15.1 | 12.6 | 4.1 |
| 24 | 335.9 |  | 4 | 98.5\% | 86.2\% |  | 3.00 | 110.88 | 113.88 | 7.9\% | 2.5\% | 15.7 | 13.1 | 4.2 |
| 25 | 349.9 |  | 1 | 98.5\% | 86.5\% |  | 3.00 | 115.50 | 118.50 | 8.2\% | 2.6\% | 16.3 | 13.7 | 4.4 |
| 26 | 363.9 |  | - | 98.5\% | 86.7\% |  | 3.00 | 120.12 | 123.12 | 8.5\% | 2.7\% | 17.0 | 14.2 | 4.6 |
| 27 | 377.9 |  | 2 | 98.6\% | 87.0\% |  | 3.00 | 124.74 | 127.74 | 8.8\% | 2.9\% | 17.6 | 14.7 | 4.8 |
| 28 | 391.9 |  | - | 98.6\% | 87.2\% |  | 3.00 | 129.36 | 132.36 | 9.1\% | 3.0\% | 18.3 | 15.2 | 4.9 |
| 29 | 405.9 |  | 2 | 98.7\% | 87.5\% |  | 3.00 | 133.98 | 136.98 | 9.5\% | 3.1\% | 18.9 | 15.8 | 5.1 |
| 30 | 419.9 |  | 1 | 98.7\% | 87.7\% |  | 3.00 | 138.60 | 141.60 | 9.8\% | 3.2\% | 19.5 | 16.3 | 5.3 |
| 31 | 433.9 |  | - | 98.7\% | 87.9\% |  | 3.00 | 143.22 | 146.22 | 10.1\% | 3.3\% | 20.2 | 16.8 | 5.4 |
| 32 | 447.9 |  | 2 | 98.8\% | 88.1\% |  | 3.00 | 147.84 | 150.84 | 10.4\% | 3.4\% | 20.8 | 17.4 | 5.6 |
| 33 | 461.9 |  | - | 98.8\% | 88.4\% |  | 3.00 | 152.46 | 155.46 | 10.7\% | 3.5\% | 21.4 | 17.9 | 5.8 |
| 34 | 475.9 |  | 2 | 98.9\% | 88.6\% |  | 3.00 | 157.08 | 160.08 | 11.1\% | 3.6\% | 22.1 | 18.4 | 6.0 |
| 35 | 489.9 |  | 2 | 99.0\% | 88.8\% |  | 3.00 | 161.70 | 164.70 | 11.4\% | 3.7\% | 22.7 | 19.0 | 6.1 |
| 36 | 503.9 |  | 1 | 99.0\% | 88.9\% |  | 3.00 | 166.32 | 169.32 | 11.7\% | 3.8\% | 23.4 | 19.5 | 6.3 |
| 37 | 517.9 |  | 2 | 99.1\% | 89.1\% |  | 3.00 | 170.94 | 173.94 | 12.0\% | 3.9\% | 24.0 | 20.0 | 6.5 |
| 38 | 531.9 |  | 2 | 99.2\% | 89.3\% |  | 3.00 | 175.56 | 178.56 | 12.3\% | 4.0\% | 24.6 | 20.6 | 6.6 |
| 39 | 545.9 |  | - | 99.2\% | 89.4\% |  | 3.00 | 180.18 | 183.18 | 12.7\% | 4.1\% | 25.3 | 21.1 | 6.8 |
| 40 | 559.9 |  | - | 99.2\% | 89.6\% |  | 3.00 | 184.80 | 187.80 | 13.0\% | 4.2\% | 25.9 | 21.6 | 7.0 |
| 41 | 573.9 |  | 3 | 99.3\% | 89.7\% |  | 3.00 | 189.42 | 192.42 | 13.3\% | 4.3\% | 26.5 | 22.2 | 7.2 |
| 42 | 587.9 |  | 1 | 99.3\% | 89.8\% |  | 3.00 | 194.04 | 197.04 | 13.6\% | 4.4\% | 27.2 | 22.7 | 7.3 |
| 43 | 601.9 |  | - | 99.3\% | 90.0\% |  | 3.00 | 198.66 | 201.66 | 13.9\% | 4.5\% | 27.8 | 23.2 | 7.5 |
| 44 | 615.9 |  | - | 99.3\% | 90.1\% |  | 3.00 | 203.28 | 206.28 | 14.3\% | 4.6\% | 28.5 | 23.8 | 7.7 |
| 45 | 629.9 |  | - | 99.3\% | 90.2\% |  | 3.00 | 207.90 | 210.90 | 14.6\% | 4.7\% | 29.1 | 24.3 | 7.8 |
| 46 | 643.9 |  | - | 99.3\% | 90.3\% |  | 3.00 | 212.52 | 215.52 | 14.9\% | 4.8\% | 29.7 | 24.8 | 8.0 |
| 47 | 657.9 |  | 1 | 99.4\% | 90.4\% |  | 3.00 | 217.14 | 220.14 | 15.2\% | 4.9\% | 30.4 | 25.4 | 8.2 |
| 48 | 671.9 |  | - | 99.4\% | 90.6\% |  | 3.00 | 221.76 | 224.76 | 15.5\% | 5.0\% | 31.0 | 25.9 | 8.4 |
| 49 | 685.9 |  | - | 99.4\% | 90.7\% |  | 3.00 | 226.38 | 229.38 | 15.9\% | 5.1\% | 31.6 | 26.4 | 8.5 |
| 50 | 699.9 |  | - | 99.4\% | 90.8\% |  | 3.00 | 231.00 | 234.00 | 16.2\% | 5.2\% | 32.3 | 27.0 | 8.7 |


| Cumming | Water Use Data |  |  | Monthly Water Bill |  |  | Bill \% of Income |  | Hours Worked |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \# of Bills | Cumulative \% of Bills | Cumulative $\%$ of Usage | Fixed | Volume | Total | Lowest Quintile | MHI | Min. Wage | Lowest Quintile | MHI |

Incomes
$\$ 71,000 \quad \$ 135,000 \quad \$ 7.25$ \$ 35.50 \$ 67.50

| Volume | $\mathrm{g} / \mathrm{p} / \mathrm{d}$ |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | - | 75 | 4.6\% | 0.0\% | \$ 12.15 | \$ | \$ 12.15 | 0.2\% | 0.1\% | 1.7 | 0.3 | 0.2 |
| 1 | 11.6 | 115 | 11.7\% | 17.3\% | 12.15 | 9.64 | 21.79 | 0.4\% | 0.2\% | 3.0 | 0.6 | 0.3 |
| 2 | 23.2 | 199 | 24.0\% | 33.4\% | 12.15 | 19.28 | 31.43 | 0.5\% | 0.3\% | 4.3 | 0.9 | 0.5 |
| 3 | 34.8 | 279 | 41.3\% | 47.2\% | 12.15 | 28.92 | 41.07 | 0.7\% | 0.4\% | 5.7 | 1.2 | 0.6 |
| 4 | 46.4 | 271 | 58.0\% | 57.9\% | 12.15 | 38.56 | 50.71 | 0.9\% | 0.5\% | 7.0 | 1.4 | 0.8 |
| 5 | 58.1 Indoor Use | 209 | 71.0\% | 65.5\% | 12.15 | 48.20 | 60.35 | 1.0\% | 0.5\% | 8.3 | 1.7 | 0.9 |
| 6 | 69.7 | 109 | 77.7\% | 70.8\% | 12.15 | 57.84 | 69.99 | 1.2\% | 0.6\% | 9.7 | 2.0 | 1.0 |
| 7 | 81.3 | 81 | 82.7\% | 74.8\% | 12.15 | 67.48 | 79.63 | 1.3\% | 0.7\% | 11.0 | 2.2 | 1.2 |
| 8 | 92.9 | 60 | 86.4\% | 78.0\% | 12.15 | 77.12 | 89.27 | 1.5\% | 0.8\% | 12.3 | 2.5 | 1.3 |
| 9 | 104.5 | 45 | 89.2\% | 80.4\% | 12.15 | 86.76 | 98.91 | 1.7\% | 0.9\% | 13.6 | 2.8 | 1.5 |
| 10 | 116.1 | 26 | 90.8\% | 82.4\% | 12.15 | 96.40 | 108.55 | 1.8\% | 1.0\% | 15.0 | 3.1 | 1.6 |
| 11 | 127.7 2\% LQI | 23 | 92.2\% | 84.1\% | 12.15 | 106.04 | 118.19 | 2.0\% | 1.1\% | 16.3 | 3.3 | 1.8 |
| 12 | 139.3 | 23 | 93.6\% | 85.5\% | 12.15 | 115.68 | 127.83 | 2.2\% | 1.1\% | 17.6 | 3.6 | 1.9 |
| 13 | 151.0 | 12 | 94.4\% | 86.7\% | 12.15 | 125.32 | 137.47 | 2.3\% | 1.2\% | 19.0 | 3.9 | 2.0 |
| 14 | 162.6 | 9 | 94.9\% | 87.7\% | 12.15 | 134.96 | 147.11 | 2.5\% | 1.3\% | 20.3 | 4.1 | 2.2 |
| 15 | 174.2 | 8 | 95.4\% | 88.6\% | 12.15 | 144.60 | 156.75 | 2.6\% | 1.4\% | 21.6 | 4.4 | 2.3 |
| 16 | 185.8 | 11 | 96.1\% | 89.4\% | 12.15 | 154.24 | 166.39 | 2.8\% | 1.5\% | 23.0 | 4.7 | 2.5 |
| 17 | 197.4 | 10 | 96.7\% | 90.1\% | 12.15 | 163.88 | 176.03 | 3.0\% | 1.6\% | 24.3 | 5.0 | 2.6 |
| 18 | 209.0 | 5 | 97.0\% | 90.7\% | 12.15 | 173.52 | 185.67 | 3.1\% | 1.7\% | 25.6 | 5.2 | 2.8 |
| 19 | 220.6 | 5 | 97.3\% | 91.3\% | 12.15 | 183.16 | 195.31 | 3.3\% | 1.7\% | 26.9 | 5.5 | 2.9 |
| 20 | 232.2 | 3 | 97.5\% | 91.8\% | 12.15 | 192.80 | 204.95 | 3.5\% | 1.8\% | 28.3 | 5.8 | 3.0 |
| 21 | 243.9 | 1 | 97.6\% | 92.2\% | 12.15 | 202.44 | 214.59 | 3.6\% | 1.9\% | 29.6 | 6.0 | 3.2 |
| 22 | 255.5 2\% MHI | 3 | 97.8\% | 92.6\% | 12.15 | 212.08 | 224.23 | 3.8\% | 2.0\% | 30.9 | 6.3 | 3.3 |
| 23 | 267.1 | 3 | 98.0\% | 93.0\% | 12.15 | 221.72 | 233.87 | 4.0\% | 2.1\% | 32.3 | 6.6 | 3.5 |
| 24 | 278.7 | 3 | 98.1\% | 93.4\% | 12.15 | 231.36 | 243.51 | 4.1\% | 2.2\% | 33.6 | 6.9 | 3.6 |
| 25 | 290.3 | 2 | 98.3\% | 93.8\% | 12.15 | 241.00 | 253.15 | 4.3\% | 2.3\% | 34.9 | 7.1 | 3.8 |
| 26 | 301.9 | 4 | 98.5\% | 94.1\% | 12.15 | 250.64 | 262.79 | 4.4\% | 2.3\% | 36.2 | 7.4 | 3.9 |
| 27 | 313.5 | 1 | 98.6\% | 94.3\% | 12.15 | 260.28 | 272.43 | 4.6\% | 2.4\% | 37.6 | 7.7 | 4.0 |
| 28 | 325.1 | 1 | 98.6\% | 94.6\% | 12.15 | 269.92 | 282.07 | 4.8\% | 2.5\% | 38.9 | 7.9 | 4.2 |
| 29 | 336.8 | 2 | 98.8\% | 94.8\% | 12.15 | 279.56 | 291.71 | 4.9\% | 2.6\% | 40.2 | 8.2 | 4.3 |
| 30 | 348.4 | 2 | 98.9\% | 95.1\% | 12.15 | 289.20 | 301.35 | 5.1\% | 2.7\% | 41.6 | 8.5 | 4.5 |
| 31 | 360.0 | 1 | 98.9\% | 95.3\% | 12.15 | 298.84 | 310.99 | 5.3\% | 2.8\% | 42.9 | 8.8 | 4.6 |
| 32 | 371.6 | - | 98.9\% | 95.5\% | 12.15 | 308.48 | 320.63 | 5.4\% | 2.9\% | 44.2 | 9.0 | 4.8 |
| 33 | 383.2 | 1 | 99.0\% | 95.7\% | 12.15 | 318.12 | 330.27 | 5.6\% | 2.9\% | 45.6 | 9.3 | 4.9 |
| 34 | 394.8 | - | 99.0\% | 95.8\% | 12.15 | 327.76 | 339.91 | 5.7\% | 3.0\% | 46.9 | 9.6 | 5.0 |
| 35 | 406.4 | 1 | 99.1\% | 96.0\% | 12.15 | 337.40 | 349.55 | 5.9\% | 3.1\% | 48.2 | 9.8 | 5.2 |
| 36 | 418.0 | - | 99.1\% | 96.2\% | 12.15 | 347.04 | 359.19 | 6.1\% | 3.2\% | 49.5 | 10.1 | 5.3 |
| 37 | 429.7 | - | 99.1\% | 96.3\% | 12.15 | 356.68 | 368.83 | 6.2\% | 3.3\% | 50.9 | 10.4 | 5.5 |
| 38 | 441.3 | 1 | 99.1\% | 96.5\% | 12.15 | 366.32 | 378.47 | 6.4\% | 3.4\% | 52.2 | 10.7 | 5.6 |
| 39 | 452.9 | 2 | 99.3\% | 96.7\% | 12.15 | 375.96 | 388.11 | 6.6\% | 3.4\% | 53.5 | 10.9 | 5.7 |
| 40 | 464.5 | 2 | 99.4\% | 96.8\% | 12.15 | 385.60 | 397.75 | 6.7\% | 3.5\% | 54.9 | 11.2 | 5.9 |
| 41 | 476.1 | - | 99.4\% | 96.9\% | 12.15 | 395.24 | 407.39 | 6.9\% | 3.6\% | 56.2 | 11.5 | 6.0 |
| 42 | 487.7 | - | 99.4\% | 97.0\% | 12.15 | 404.88 | 417.03 | 7.0\% | 3.7\% | 57.5 | 11.7 | 6.2 |
| 43 | 499.3 | - | 99.4\% | 97.1\% | 12.15 | 414.52 | 426.67 | 7.2\% | 3.8\% | 58.9 | 12.0 | 6.3 |
| 44 | 510.9 | 1 | 99.4\% | 97.3\% | 12.15 | 424.16 | 436.31 | 7.4\% | 3.9\% | 60.2 | 12.3 | 6.5 |
| 45 | 522.6 | 1 | 99.5\% | 97.4\% | 12.15 | 433.80 | 445.95 | 7.5\% | 4.0\% | 61.5 | 12.6 | 6.6 |
| 46 | 534.2 | - | 99.5\% | 97.4\% | 12.15 | 443.44 | 455.59 | 7.7\% | 4.0\% | 62.8 | 12.8 | 6.7 |
| 47 | 545.8 | - | 99.5\% | 97.5\% | 12.15 | 453.08 | 465.23 | 7.9\% | 4.1\% | 64.2 | 13.1 | 6.9 |
| 48 | 557.4 | - | 99.5\% | 97.6\% | 12.15 | 462.72 | 474.87 | 8.0\% | 4.2\% | 65.5 | 13.4 | 7.0 |
| 49 | 569.0 | 1 | 99.6\% | 97.7\% | 12.15 | 472.36 | 484.51 | 8.2\% | 4.3\% | 66.8 | 13.6 | 7.2 |
| 50 | 580.6 | - | 99.6\% | 97.8\% | 12.15 | 482.00 | 494.15 | 8.4\% | 4.4\% | 68.2 | 13.9 | 7.3 |


| Greenfield Plaza | Water Use Data |  |  | Monthly Water Bill |  |  | Bill \% of Income |  | Hours Worked |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \# of Bills | Cumulative \% of Bills | Cumulative \% of Usage | Fixed | Volume | Total | Lowest Quintile | MHI | Min. <br> Wage | Lowest Quintile | MHI |
| Incomes |  |  |  |  |  |  | \$18,682 | \$34,886 | \$ 7.25 | \$ 9.34 | \$ 17.44 |


| Volume | g/p/d |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | - | 1,628 | 17.4\% | 0.0\% | \$ | 8.00 | \$ | \$ 8.00 | 0.5\% | 0.3\% | 1.1 | 0.9 | 0.5 |
| 1 | 13.5 | 704 | 24.9\% | 25.1\% |  | 8.00 | 6.82 | 14.82 | 1.0\% | 0.5\% | 2.0 | 1.6 | 0.8 |
| 2 | 27.0 | 1,451 | 40.4\% | 48.0\% |  | 8.00 | 13.64 | 21.64 | 1.4\% | 0.7\% | 3.0 | 2.3 | 1.2 |
| 3 | 40.5 2\% LQI | 1,805 | 59.6\% | 66.1\% |  | 8.00 | 20.46 | 28.46 | 1.8\% | 1.0\% | 3.9 | 3.0 | 1.6 |
| 4 | 54.0 Indoor Use | 1,423 | 74.8\% | 78.4\% |  | 8.00 | 27.28 | 35.28 | 2.3\% | 1.2\% | 4.9 | 3.8 | 2.0 |
| 5 | 67.5 | 873 | 84.1\% | 86.0\% |  | 8.00 | 34.10 | 42.10 | 2.7\% | 1.4\% | 5.8 | 4.5 | 2.4 |
| 6 | 81.0 | 621 | 90.7\% | 90.9\% |  | 8.00 | 40.92 | 48.92 | 3.1\% | 1.7\% | 6.7 | 5.2 | 2.8 |
| 7 | 94.5 2\% MHI | 343 | 94.4\% | 93.7\% |  | 8.00 | 47.74 | 55.74 | 3.6\% | 1.9\% | 7.7 | 6.0 | 3.2 |
| 8 | 108.0 | 188 | 96.4\% | 95.4\% |  | 8.00 | 54.56 | 62.56 | 4.0\% | 2.2\% | 8.6 | 6.7 | 3.6 |
| 9 | 121.5 | 112 | 97.6\% | 96.5\% |  | 8.00 | 61.38 | 69.38 | 4.5\% | 2.4\% | 9.6 | 7.4 | 4.0 |
| 10 | 135.0 | 60 | 98.2\% | 97.2\% |  | 8.00 | 68.20 | 76.20 | 4.9\% | 2.6\% | 10.5 | 8.2 | 4.4 |
| 11 | 148.5 | 37 | 98.6\% | 97.7\% |  | 8.00 | 75.02 | 83.02 | 5.3\% | 2.9\% | 11.5 | 8.9 | 4.8 |
| 12 | 162.0 | 26 | 98.9\% | 98.1\% |  | 8.00 | 81.84 | 89.84 | 5.8\% | 3.1\% | 12.4 | 9.6 | 5.2 |
| 13 | 175.5 | 20 | 99.1\% | 98.5\% |  | 8.00 | 88.66 | 96.66 | 6.2\% | 3.3\% | 13.3 | 10.3 | 5.5 |
| 14 | 189.0 | 11 | 99.2\% | 98.7\% |  | 8.00 | 95.48 | 103.48 | 6.6\% | 3.6\% | 14.3 | 11.1 | 5.9 |
| 15 | 202.5 | 16 | 99.4\% | 99.0\% |  | 8.00 | 102.30 | 110.30 | 7.1\% | 3.8\% | 15.2 | 11.8 | 6.3 |
| 16 | 216.0 | 10 | 99.5\% | 99.1\% |  | 8.00 | 109.12 | 117.12 | 7.5\% | 4.0\% | 16.2 | 12.5 | 6.7 |
| 17 | 229.5 | 9 | 99.6\% | 99.3\% |  | 8.00 | 115.94 | 123.94 | 8.0\% | 4.3\% | 17.1 | 13.3 | 7.1 |
| 18 | 242.9 | 3 | 99.6\% | 99.4\% |  | 8.00 | 122.76 | 130.76 | 8.4\% | 4.5\% | 18.0 | 14.0 | 7.5 |
| 19 | 256.4 | 5 | 99.7\% | 99.5\% |  | 8.00 | 129.58 | 137.58 | 8.8\% | 4.7\% | 19.0 | 14.7 | 7.9 |
| 20 | 269.9 | 2 | 99.7\% | 99.6\% |  | 8.00 | 136.40 | 144.40 | 9.3\% | 5.0\% | 19.9 | 15.5 | 8.3 |
| 21 | 283.4 | 5 | 99.8\% | 99.7\% |  | 8.00 | 143.22 | 151.22 | 9.7\% | 5.2\% | 20.9 | 16.2 | 8.7 |
| 22 | 296.9 | 8 | 99.9\% | 99.8\% |  | 8.00 | 150.04 | 158.04 | 10.2\% | 5.4\% | 21.8 | 16.9 | 9.1 |
| 23 | 310.4 | 3 | 99.9\% | 99.8\% |  | 8.00 | 156.86 | 164.86 | 10.6\% | 5.7\% | 22.7 | 17.6 | 9.5 |
| 24 | 323.9 | 4 | 99.9\% | 99.8\% |  | 8.00 | 163.68 | 171.68 | 11.0\% | 5.9\% | 23.7 | 18.4 | 9.8 |
| 25 | 337.4 | - | 99.9\% | 99.9\% |  | 8.00 | 170.50 | 178.50 | 11.5\% | 6.1\% | 24.6 | 19.1 | 10.2 |
| 26 | 350.9 | 2 | 100.0\% | 99.9\% |  | 8.00 | 177.32 | 185.32 | 11.9\% | 6.4\% | 25.6 | 19.8 | 10.6 |
| 27 | 364.4 | - | 100.0\% | 99.9\% |  | 8.00 | 184.14 | 192.14 | 12.3\% | 6.6\% | 26.5 | 20.6 | 11.0 |
| 28 | 377.9 | - | 100.0\% | 99.9\% |  | 8.00 | 190.96 | 198.96 | 12.8\% | 6.8\% | 27.4 | 21.3 | 11.4 |
| 29 | 391.4 | - | 100.0\% | 99.9\% |  | 8.00 | 197.78 | 205.78 | 13.2\% | 7.1\% | 28.4 | 22.0 | 11.8 |
| 30 | 404.9 | - | 100.0\% | 99.9\% |  | 8.00 | 204.60 | 212.60 | 13.7\% | 7.3\% | 29.3 | 22.8 | 12.2 |
| 31 | 418.4 | 1 | 100.0\% | 99.9\% |  | 8.00 | 211.42 | 219.42 | 14.1\% | 7.5\% | 30.3 | 23.5 | 12.6 |
| 32 | 431.9 | - | 100.0\% | 99.9\% |  | 8.00 | 218.24 | 226.24 | 14.5\% | 7.8\% | 31.2 | 24.2 | 13.0 |
| 33 | 445.4 | - | 100.0\% | 100.0\% |  | 8.00 | 225.06 | 233.06 | 15.0\% | 8.0\% | 32.1 | 25.0 | 13.4 |
| 34 | 458.9 | 1 | 100.0\% | 100.0\% |  | 8.00 | 231.88 | 239.88 | 15.4\% | 8.3\% | 33.1 | 25.7 | 13.8 |
| 35 | 472.4 | 1 | 100.0\% | 100.0\% |  | 8.00 | 238.70 | 246.70 | 15.8\% | 8.5\% | 34.0 | 26.4 | 14.1 |
| 36 | 485.9 | - | 100.0\% | 100.0\% |  | 8.00 | 245.52 | 253.52 | 16.3\% | 8.7\% | 35.0 | 27.1 | 14.5 |
| 37 | 499.4 | - | 100.0\% | 100.0\% |  | 8.00 | 252.34 | 260.34 | 16.7\% | 9.0\% | 35.9 | 27.9 | 14.9 |
| 38 | 512.9 | - | 100.0\% | 100.0\% |  | 8.00 | 259.16 | 267.16 | 17.2\% | 9.2\% | 36.8 | 28.6 | 15.3 |
| 39 | 526.4 | - | 100.0\% | 100.0\% |  | 8.00 | 265.98 | 273.98 | 17.6\% | 9.4\% | 37.8 | 29.3 | 15.7 |
| 40 | 539.9 | - | 100.0\% | 100.0\% |  | 8.00 | 272.80 | 280.80 | 18.0\% | 9.7\% | 38.7 | 30.1 | 16.1 |
| 41 | 553.4 | - | 100.0\% | 100.0\% |  | 8.00 | 279.62 | 287.62 | 18.5\% | 9.9\% | 39.7 | 30.8 | 16.5 |
| 42 | 566.9 | - | 100.0\% | 100.0\% |  | 8.00 | 286.44 | 294.44 | 18.9\% | 10.1\% | 40.6 | 31.5 | 16.9 |
| 43 | 580.4 | 1 | 100.0\% | 100.0\% |  | 8.00 | 293.26 | 301.26 | 19.4\% | 10.4\% | 41.6 | 32.3 | 17.3 |
| 44 | 593.9 | - | 100.0\% | 100.0\% |  | 8.00 | 300.08 | 308.08 | 19.8\% | 10.6\% | 42.5 | 33.0 | 17.7 |
| 45 | 607.4 | - | 100.0\% | 100.0\% |  | 8.00 | 306.90 | 314.90 | 20.2\% | 10.8\% | 43.4 | 33.7 | 18.1 |
| 46 | 620.9 | - | 100.0\% | 100.0\% |  | 8.00 | 313.72 | 321.72 | 20.7\% | 11.1\% | 44.4 | 34.4 | 18.4 |
| 47 | 634.4 | - | 100.0\% | 100.0\% |  | 8.00 | 320.54 | 328.54 | 21.1\% | 11.3\% | 45.3 | 35.2 | 18.8 |
| 48 | 647.9 | - | 100.0\% | 100.0\% |  | 8.00 | 327.36 | 335.36 | 21.5\% | 11.5\% | 46.3 | 35.9 | 19.2 |
| 49 | 661.4 | - | 100.0\% | 100.0\% |  | 8.00 | 334.18 | 342.18 | 22.0\% | 11.8\% | 47.2 | 36.6 | 19.6 |
| 50 | 674.9 | - | 100.0\% | 100.0\% |  | 8.00 | 341.00 | 349.00 | 22.4\% | 12.0\% | 48.1 | 37.4 | 20.0 |


| Pleasant Hill Inside City | Water Use Data |  |  | Monthly Water Bill |  |  | Bill \% of Income |  | Hours Worked |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \# of Bills | Cumulative $\%$ of Bills | Cumulative \% of Usage | Fixed | Volume | Total | Lowest Quintile | MHI | Min. Wage | Lowest Quintile | MHI |
| Incomes |  |  |  |  |  |  | \$43,090 | \$76,371 | \$ 7.25 | \$ 21.55 | \$ 38.19 |


| Volume | $\mathrm{g} / \mathrm{p} / \mathrm{d}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | - |  | 504 | 1.3\% | 0.0\% | \$ | 8.00 | \$ | \$ 8.00 | 0.2\% | 0.1\% | 1.1 | 0.4 | 0.2 |
| 1 | 12.3 |  | 2,803 | 8.3\% | 25.8\% |  | 8.00 | 10.34 | 18.34 | 0.5\% | 0.3\% | 2.5 | 0.9 | 0.5 |
| 2 | 24.6 |  | 7,254 | 26.6\% | 49.7\% |  | 8.00 | 20.68 | 28.68 | 0.8\% | 0.5\% | 4.0 | 1.3 | 0.8 |
| 3 | 36.9 |  | 9,229 | 49.9\% | 68.8\% |  | 8.00 | 31.02 | 39.02 | 1.1\% | 0.6\% | 5.4 | 1.8 | 1.0 |
| 4 | 49.2 |  | 7,971 | 70.0\% | 81.9\% |  | 8.00 | 41.36 | 49.36 | 1.4\% | 0.8\% | 6.8 | 2.3 | 1.3 |
| 5 | 61.5 | Indoor Use | 5,179 | 83.1\% | 89.7\% |  | 8.00 | 51.70 | 59.70 | 1.7\% | 0.9\% | 8.2 | 2.8 | 1.6 |
| 6 | 73.8 | 2\% LQI | 3,003 | 90.7\% | 94.1\% |  | 8.00 | 62.04 | 70.04 | 2.0\% | 1.1\% | 9.7 | 3.3 | 1.8 |
| 7 | 86.1 |  | 1,686 | 94.9\% | 96.5\% |  | 8.00 | 72.38 | 80.38 | 2.2\% | 1.3\% | 11.1 | 3.7 | 2.1 |
| 8 | 98.4 |  | 885 | 97.2\% | 97.9\% |  | 8.00 | 82.72 | 90.72 | 2.5\% | 1.4\% | 12.5 | 4.2 | 2.4 |
| 9 | 110.7 |  | 444 | 98.3\% | 98.6\% |  | 8.00 | 93.06 | 101.06 | 2.8\% | 1.6\% | 13.9 | 4.7 | 2.6 |
| 10 | 123.0 |  | 231 | 98.9\% | 99.0\% |  | 8.00 | 103.40 | 111.40 | 3.1\% | 1.8\% | 15.4 | 5.2 | 2.9 |
| 11 | 135.3 | 2\% MHI | 139 | 99.2\% | 99.3\% |  | 8.00 | 113.74 | 121.74 | 3.4\% | 1.9\% | 16.8 | 5.7 | 3.2 |
| 12 | 147.6 |  | 103 | 99.5\% | 99.5\% |  | 8.00 | 124.08 | 132.08 | 3.7\% | 2.1\% | 18.2 | 6.1 | 3.5 |
| 13 | 159.9 |  | 52 | 99.6\% | 99.7\% |  | 8.00 | 134.42 | 142.42 | 4.0\% | 2.2\% | 19.6 | 6.6 | 3.7 |
| 14 | 172.2 |  | 42 | 99.7\% | 99.8\% |  | 8.00 | 144.76 | 152.76 | 4.3\% | 2.4\% | 21.1 | 7.1 | 4.0 |
| 15 | 184.6 |  | 32 | 99.8\% | 99.8\% |  | 8.00 | 155.10 | 163.10 | 4.5\% | 2.6\% | 22.5 | 7.6 | 4.3 |
| 16 | 196.9 |  | 12 | 99.8\% | 99.9\% |  | 8.00 | 165.44 | 173.44 | 4.8\% | 2.7\% | 23.9 | 8.1 | 4.5 |
| 17 | 209.2 |  | 29 | 99.9\% | 99.9\% |  | 8.00 | 175.78 | 183.78 | 5.1\% | 2.9\% | 25.3 | 8.5 | 4.8 |
| 18 | 221.5 |  | 14 | 99.9\% | 100.0\% |  | 8.00 | 186.12 | 194.12 | 5.4\% | 3.1\% | 26.8 | 9.0 | 5.1 |
| 19 | 233.8 |  | 12 | 100.0\% | 100.0\% |  | 8.00 | 196.46 | 204.46 | 5.7\% | 3.2\% | 28.2 | 9.5 | 5.4 |
| 20 | 246.1 |  | 9 | 100.0\% | 100.0\% |  | 8.00 | 206.80 | 214.80 | 6.0\% | 3.4\% | 29.6 | 10.0 | 5.6 |
| 21 | 258.4 |  | - | 100.0\% | 100.0\% |  | 8.00 | 215.52 | 223.52 | 6.2\% | 3.5\% | 30.8 | 10.4 | 5.9 |
| 22 | 270.7 |  | - | 100.0\% | 100.0\% |  | 8.00 | 224.24 | 232.24 | 6.5\% | 3.6\% | 32.0 | 10.8 | 6.1 |
| 23 | 283.0 |  | - | 100.0\% | 100.0\% |  | 8.00 | 232.96 | 240.96 | 6.7\% | 3.8\% | 33.2 | 11.2 | 6.3 |
| 24 | 295.3 |  | - | 100.0\% | 100.0\% |  | 8.00 | 241.68 | 249.68 | 7.0\% | 3.9\% | 34.4 | 11.6 | 6.5 |
| 25 | 307.6 |  | - | 100.0\% | 100.0\% |  | 8.00 | 250.40 | 258.40 | 7.2\% | 4.1\% | 35.6 | 12.0 | 6.8 |
| 26 | 319.9 |  | - | 100.0\% | 100.0\% |  | 8.00 | 259.12 | 267.12 | 7.4\% | 4.2\% | 36.8 | 12.4 | 7.0 |
| 27 | 332.2 |  | - | 100.0\% | 100.0\% |  | 8.00 | 267.84 | 275.84 | 7.7\% | 4.3\% | 38.0 | 12.8 | 7.2 |
| 28 | 344.5 |  | - | 100.0\% | 100.0\% |  | 8.00 | 276.56 | 284.56 | 7.9\% | 4.5\% | 39.2 | 13.2 | 7.5 |
| 29 | 356.8 |  | - | 100.0\% | 100.0\% |  | 8.00 | 285.28 | 293.28 | 8.2\% | 4.6\% | 40.5 | 13.6 | 7.7 |
| 30 | 369.1 |  | 1 | 100.0\% | 100.0\% |  | 8.00 | 294.00 | 302.00 | 8.4\% | 4.7\% | 41.7 | 14.0 | 7.9 |
| 31 | 381.4 |  | 1 | 100.0\% | 100.0\% |  | 8.00 | 302.72 | 310.72 | 8.7\% | 4.9\% | 42.9 | 14.4 | 8.1 |
| 32 | 393.7 |  | - | 100.0\% | 100.0\% |  | 8.00 | 311.44 | 319.44 | 8.9\% | 5.0\% | 44.1 | 14.8 | 8.4 |
| 33 | 406.0 |  | - | 100.0\% | 100.0\% |  | 8.00 | 320.16 | 328.16 | 9.1\% | 5.2\% | 45.3 | 15.2 | 8.6 |
| 34 | 418.3 |  | - | 100.0\% | 100.0\% |  | 8.00 | 328.88 | 336.88 | 9.4\% | 5.3\% | 46.5 | 15.6 | 8.8 |
| 35 | 430.6 |  | - | 100.0\% | 100.0\% |  | 8.00 | 337.60 | 345.60 | 9.6\% | 5.4\% | 47.7 | 16.0 | 9.1 |
| 36 | 442.9 |  | - | 100.0\% | 100.0\% |  | 8.00 | 346.32 | 354.32 | 9.9\% | 5.6\% | 48.9 | 16.4 | 9.3 |
| 37 | 455.2 |  | - | 100.0\% | 100.0\% |  | 8.00 | 355.04 | 363.04 | 10.1\% | 5.7\% | 50.1 | 16.9 | 9.5 |
| 38 | 467.5 |  | - | 100.0\% | 100.0\% |  | 8.00 | 363.76 | 371.76 | 10.4\% | 5.8\% | 51.3 | 17.3 | 9.7 |
| 39 | 479.8 |  | - | 100.0\% | 100.0\% |  | 8.00 | 372.48 | 380.48 | 10.6\% | 6.0\% | 52.5 | 17.7 | 10.0 |
| 40 | 492.1 |  | - | 100.0\% | 100.0\% |  | 8.00 | 381.20 | 389.20 | 10.8\% | 6.1\% | 53.7 | 18.1 | 10.2 |
| 41 | 504.4 |  | - | 100.0\% | 100.0\% |  | 8.00 | 389.92 | 397.92 | 11.1\% | 6.3\% | 54.9 | 18.5 | 10.4 |
| 42 | 516.7 |  | - | 100.0\% | 100.0\% |  | 8.00 | 398.64 | 406.64 | 11.3\% | 6.4\% | 56.1 | 18.9 | 10.6 |
| 43 | 529.1 |  | - | 100.0\% | 100.0\% |  | 8.00 | 407.36 | 415.36 | 11.6\% | 6.5\% | 57.3 | 19.3 | 10.9 |
| 44 | 541.4 |  | - | 100.0\% | 100.0\% |  | 8.00 | 416.08 | 424.08 | 11.8\% | 6.7\% | 58.5 | 19.7 | 11.1 |
| 45 | 553.7 |  | - | 100.0\% | 100.0\% |  | 8.00 | 424.80 | 432.80 | 12.1\% | 6.8\% | 59.7 | 20.1 | 11.3 |
| 46 | 566.0 |  | - | 100.0\% | 100.0\% |  | 8.00 | 433.52 | 441.52 | 12.3\% | 6.9\% | 60.9 | 20.5 | 11.6 |
| 47 | 578.3 |  | - | 100.0\% | 100.0\% |  | 8.00 | 442.24 | 450.24 | 12.5\% | 7.1\% | 62.1 | 20.9 | 11.8 |
| 48 | 590.6 |  | - | 100.0\% | 100.0\% |  | 8.00 | 450.96 | 458.96 | 12.8\% | 7.2\% | 63.3 | 21.3 | 12.0 |
| 49 | 602.9 |  | - | 100.0\% | 100.0\% |  | 8.00 | 459.68 | 467.68 | 13.0\% | 7.3\% | 64.5 | 21.7 | 12.2 |
| 50 | 615.2 |  | - | 100.0\% | 100.0\% |  | 8.00 | 468.40 | 476.40 | 13.3\% | 7.5\% | 65.7 | 22.1 | 12.5 |


| Pleasant Hill Outside City | Monthly Water Bill |  |  | Bill \% of Income | Hours Worked |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fixed | Volume | Total | Lowest <br> Quintile | MHI | Min. <br> Wage | Lowest <br> Quintile | MHI |

Incomes
$\$ 43,090 \quad \$ 76,371 \quad \$ 7.25 \quad \$ 21.55 \quad \$ 38.19$
Volume g/p/d

| 0 | - |  | \$ 10.00 | \$ - | \$ 10.00 | 0.3\% | 0.2\% | 1.4 | 0.5 | 0.3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 12.3 |  | 10.00 | 17.17 | 27.17 | 0.8\% | 0.4\% | 3.7 | 1.3 | 0.7 |
| 2 | 24.6 |  | 10.00 | 34.34 | 44.34 | 1.2\% | 0.7\% | 6.1 | 2.1 | 1.2 |
| 3 | 36.9 | 2\% LQI | 10.00 | 51.51 | 61.51 | 1.7\% | 1.0\% | 8.5 | 2.9 | 1.6 |
| 4 | 49.2 |  | 10.00 | 68.68 | 78.68 | 2.2\% | 1.2\% | 10.9 | 3.7 | 2.1 |
| 5 | 61.5 | Indoor Use | 10.00 | 85.85 | 95.85 | 2.7\% | 1.5\% | 13.2 | 4.4 | 2.5 |
| 6 | 73.8 |  | 10.00 | 103.02 | 113.02 | 3.1\% | 1.8\% | 15.6 | 5.2 | 3.0 |
| 7 | 86.1 | 2\% MHI | 10.00 | 120.19 | 130.19 | 3.6\% | 2.0\% | 18.0 | 6.0 | 3.4 |
| 8 | 98.4 |  | 10.00 | 137.36 | 147.36 | 4.1\% | 2.3\% | 20.3 | 6.8 | 3.9 |
| 9 | 110.7 |  | 10.00 | 154.53 | 164.53 | 4.6\% | 2.6\% | 22.7 | 7.6 | 4.3 |
| 10 | 123.0 |  | 10.00 | 171.70 | 181.70 | 5.1\% | 2.9\% | 25.1 | 8.4 | 4.8 |
| 11 | 135.3 |  | 10.00 | 188.87 | 198.87 | 5.5\% | 3.1\% | 27.4 | 9.2 | 5.2 |
| 12 | 147.6 |  | 10.00 | 206.04 | 216.04 | 6.0\% | 3.4\% | 29.8 | 10.0 | 5.7 |
| 13 | 159.9 |  | 10.00 | 223.21 | 233.21 | 6.5\% | 3.7\% | 32.2 | 10.8 | 6.1 |
| 14 | 172.2 |  | 10.00 | 240.38 | 250.38 | 7.0\% | 3.9\% | 34.5 | 11.6 | 6.6 |
| 15 | 184.6 |  | 10.00 | 257.55 | 267.55 | 7.5\% | 4.2\% | 36.9 | 12.4 | 7.0 |
| 16 | 196.9 |  | 10.00 | 274.72 | 284.72 | 7.9\% | 4.5\% | 39.3 | 13.2 | 7.5 |
| 17 | 209.2 |  | 10.00 | 291.89 | 301.89 | 8.4\% | 4.7\% | 41.6 | 14.0 | 7.9 |
| 18 | 221.5 |  | 10.00 | 309.06 | 319.06 | 8.9\% | 5.0\% | 44.0 | 14.8 | 8.4 |
| 19 | 233.8 |  | 10.00 | 326.23 | 336.23 | 9.4\% | 5.3\% | 46.4 | 15.6 | 8.8 |
| 20 | 246.1 |  | 10.00 | 343.40 | 353.40 | 9.8\% | 5.6\% | 48.7 | 16.4 | 9.3 |
| 21 | 258.4 |  | 10.00 | 360.57 | 370.57 | 10.3\% | 5.8\% | 51.1 | 17.2 | 9.7 |
| 22 | 270.7 |  | 10.00 | 377.74 | 387.74 | 10.8\% | 6.1\% | 53.5 | 18.0 | 10.2 |
| 23 | 283.0 |  | 10.00 | 394.91 | 404.91 | 11.3\% | 6.4\% | 55.8 | 18.8 | 10.6 |
| 24 | 295.3 |  | 10.00 | 412.08 | 422.08 | 11.8\% | 6.6\% | 58.2 | 19.6 | 11.1 |
| 25 | 307.6 |  | 10.00 | 429.25 | 439.25 | 12.2\% | 6.9\% | 60.6 | 20.4 | 11.5 |
| 26 | 319.9 |  | 10.00 | 446.42 | 456.42 | 12.7\% | 7.2\% | 63.0 | 21.2 | 12.0 |
| 27 | 332.2 |  | 10.00 | 463.59 | 473.59 | 13.2\% | 7.4\% | 65.3 | 22.0 | 12.4 |
| 28 | 344.5 |  | 10.00 | 480.76 | 490.76 | 13.7\% | 7.7\% | 67.7 | 22.8 | 12.9 |
| 29 | 356.8 |  | 10.00 | 497.93 | 507.93 | 14.1\% | 8.0\% | 70.1 | 23.6 | 13.3 |
| 30 | 369.1 |  | 10.00 | 515.10 | 525.10 | 14.6\% | 8.3\% | 72.4 | 24.4 | 13.8 |
| 31 | 381.4 |  | 10.00 | 532.27 | 542.27 | 15.1\% | 8.5\% | 74.8 | 25.2 | 14.2 |
| 32 | 393.7 |  | 10.00 | 549.44 | 559.44 | 15.6\% | 8.8\% | 77.2 | 26.0 | 14.7 |
| 33 | 406.0 |  | 10.00 | 566.61 | 576.61 | 16.1\% | 9.1\% | 79.5 | 26.8 | 15.1 |
| 34 | 418.3 |  | 10.00 | 583.78 | 593.78 | 16.5\% | 9.3\% | 81.9 | 27.6 | 15.5 |
| 35 | 430.6 |  | 10.00 | 600.95 | 610.95 | 17.0\% | 9.6\% | 84.3 | 28.4 | 16.0 |
| 36 | 442.9 |  | 10.00 | 618.12 | 628.12 | 17.5\% | 9.9\% | 86.6 | 29.2 | 16.4 |
| 37 | 455.2 |  | 10.00 | 635.29 | 645.29 | 18.0\% | 10.1\% | 89.0 | 30.0 | 16.9 |
| 38 | 467.5 |  | 10.00 | 652.46 | 662.46 | 18.4\% | 10.4\% | 91.4 | 30.7 | 17.3 |
| 39 | 479.8 |  | 10.00 | 669.63 | 679.63 | 18.9\% | 10.7\% | 93.7 | 31.5 | 17.8 |
| 40 | 492.1 |  | 10.00 | 686.80 | 696.80 | 19.4\% | 10.9\% | 96.1 | 32.3 | 18.2 |
| 41 | 504.4 |  | 10.00 | 703.97 | 713.97 | 19.9\% | 11.2\% | 98.5 | 33.1 | 18.7 |
| 42 | 516.7 |  | 10.00 | 721.14 | 731.14 | 20.4\% | 11.5\% | 100.8 | 33.9 | 19.1 |
| 43 | 529.1 |  | 10.00 | 738.31 | 748.31 | 20.8\% | 11.8\% | 103.2 | 34.7 | 19.6 |
| 44 | 541.4 |  | 10.00 | 755.48 | 765.48 | 21.3\% | 12.0\% | 105.6 | 35.5 | 20.0 |
| 45 | 553.7 |  | 10.00 | 772.65 | 782.65 | 21.8\% | 12.3\% | 108.0 | 36.3 | 20.5 |
| 46 | 566.0 |  | 10.00 | 789.82 | 799.82 | 22.3\% | 12.6\% | 110.3 | 37.1 | 20.9 |
| 47 | 578.3 |  | 10.00 | 806.99 | 816.99 | 22.8\% | 12.8\% | 112.7 | 37.9 | 21.4 |
| 48 | 590.6 |  | 10.00 | 824.16 | 834.16 | 23.2\% | 13.1\% | 115.1 | 38.7 | 21.8 |
| 49 | 602.9 |  | 10.00 | 841.33 | 851.33 | 23.7\% | 13.4\% | 117.4 | 39.5 | 22.3 |
| 50 | 615.2 |  | 10.00 | 858.50 | 868.50 | 24.2\% | 13.6\% | 119.8 | 40.3 | 22.7 |


| Polk County | Water Use Data |  |  | Monthly Water Bill |  |  | Bill \% of Income |  | Hours Worked |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \# of Bills | Cumulative $\%$ of Bills | Cumulative \% of Usage | Fixed | Volume | Total | Lowest Quintile | MHI | Min. Wage | Lowest Quintile | MHI |

Incomes
$\begin{array}{llllll} & \$ 57,874 & \$ 109,413 & \$ 7.25 & \$ 28.94 & \$ 54.71\end{array}$

| Volume | $\mathrm{g} / \mathrm{p} / \mathrm{d}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | - |  | 2,819 | 3.4\% | 0.0\% | \$ | 7.00 | \$ | \$ 7.00 | 0.1\% | 0.1\% | 1.0 | 0.2 | 0.1 |
| 1 | 11.5 |  | 6,586 | 11.3\% | 20.7\% |  | 7.00 | 12.62 | 19.62 | 0.4\% | 0.2\% | 2.7 | 0.7 | 0.4 |
| 2 | 23.1 |  | 13,492 | 27.4\% | 39.7\% |  | 7.00 | 25.24 | 32.24 | 0.7\% | 0.4\% | 4.4 | 1.1 | 0.6 |
| 3 | 34.6 |  | 16,882 | 47.6\% | 55.3\% |  | 7.00 | 37.86 | 44.86 | 0.9\% | 0.5\% | 6.2 | 1.6 | 0.8 |
| 4 | 46.2 |  | 14,028 | 64.4\% | 66.5\% |  | 7.00 | 50.48 | 57.48 | 1.2\% | 0.6\% | 7.9 | 2.0 | 1.1 |
| 5 | 57.7 | Indoor Use | 9,897 | 76.3\% | 74.1\% |  | 7.00 | 63.10 | 70.10 | 1.5\% | 0.8\% | 9.7 | 2.4 | 1.3 |
| 6 | 69.3 |  | 6,490 | 84.0\% | 79.2\% |  | 7.00 | 75.72 | 82.72 | 1.7\% | 0.9\% | 11.4 | 2.9 | 1.5 |
| 7 | 80.8 | 2\% LQI | 3,948 | 88.7\% | 82.6\% |  | 7.00 | 88.34 | 95.34 | 2.0\% | 1.0\% | 13.2 | 3.3 | 1.7 |
| 8 | 92.3 |  | 2,369 | 91.6\% | 85.0\% |  | 7.00 | 100.96 | 107.96 | 2.2\% | 1.2\% | 14.9 | 3.7 | 2.0 |
| 9 | 103.9 |  | 1,572 | 93.5\% | 86.8\% |  | 7.00 | 113.58 | 120.58 | 2.5\% | 1.3\% | 16.6 | 4.2 | 2.2 |
| 10 | 115.4 |  | 1,091 | 94.8\% | 88.2\% |  | 7.00 | 126.20 | 133.20 | 2.8\% | 1.5\% | 18.4 | 4.6 | 2.4 |
| 11 | 127.0 |  | 770 | 95.7\% | 89.4\% |  | 7.00 | 138.82 | 145.82 | 3.0\% | 1.6\% | 20.1 | 5.0 | 2.7 |
| 12 | 138.5 |  | 521 | 96.3\% | 90.3\% |  | 7.00 | 151.44 | 158.44 | 3.3\% | 1.7\% | 21.9 | 5.5 | 2.9 |
| 13 | 150.1 |  | 428 | 96.8\% | 91.1\% |  | 7.00 | 164.06 | 171.06 | 3.5\% | 1.9\% | 23.6 | 5.9 | 3.1 |
| 14 | 161.6 | 2\% MHI | 362 | 97.3\% | 91.7\% |  | 7.00 | 176.68 | 183.68 | 3.8\% | 2.0\% | 25.3 | 6.3 | 3.4 |
| 15 | 173.2 |  | 287 | 97.6\% | 92.3\% |  | 7.00 | 189.30 | 196.30 | 4.1\% | 2.2\% | 27.1 | 6.8 | 3.6 |
| 16 | 184.7 |  | 215 | 97.9\% | 92.8\% |  | 7.00 | 201.92 | 208.92 | 4.3\% | 2.3\% | 28.8 | 7.2 | 3.8 |
| 17 | 196.2 |  | 201 | 98.1\% | 93.3\% |  | 7.00 | 214.54 | 221.54 | 4.6\% | 2.4\% | 30.6 | 7.7 | 4.0 |
| 18 | 207.8 |  | 160 | 98.3\% | 93.7\% |  | 7.00 | 227.16 | 234.16 | 4.9\% | 2.6\% | 32.3 | 8.1 | 4.3 |
| 19 | 219.3 |  | 130 | 98.5\% | 94.1\% |  | 7.00 | 239.78 | 246.78 | 5.1\% | 2.7\% | 34.0 | 8.5 | 4.5 |
| 20 | 230.9 |  | 118 | 98.6\% | 94.4\% |  | 7.00 | 252.40 | 259.40 | 5.4\% | 2.8\% | 35.8 | 9.0 | 4.7 |
| 21 | 242.4 |  | 109 | 98.7\% | 94.7\% |  | 7.00 | 265.02 | 272.02 | 5.6\% | 3.0\% | 37.5 | 9.4 | 5.0 |
| 22 | 254.0 |  | 85 | 98.8\% | 95.0\% |  | 7.00 | 277.64 | 284.64 | 5.9\% | 3.1\% | 39.3 | 9.8 | 5.2 |
| 23 | 265.5 |  | 93 | 98.9\% | 95.2\% |  | 7.00 | 290.26 | 297.26 | 6.2\% | 3.3\% | 41.0 | 10.3 | 5.4 |
| 24 | 277.0 |  | 61 | 99.0\% | 95.5\% |  | 7.00 | 302.88 | 309.88 | 6.4\% | 3.4\% | 42.7 | 10.7 | 5.7 |
| 25 | 288.6 |  | 65 | 99.1\% | 95.7\% |  | 7.00 | 315.50 | 322.50 | 6.7\% | 3.5\% | 44.5 | 11.1 | 5.9 |
| 26 | 300.1 |  | 54 | 99.2\% | 95.9\% |  | 7.00 | 328.12 | 335.12 | 6.9\% | 3.7\% | 46.2 | 11.6 | 6.1 |
| 27 | 311.7 |  | 47 | 99.2\% | 96.0\% |  | 7.00 | 340.74 | 347.74 | 7.2\% | 3.8\% | 48.0 | 12.0 | 6.4 |
| 28 | 323.2 |  | 52 | 99.3\% | 96.2\% |  | 7.00 | 353.36 | 360.36 | 7.5\% | 4.0\% | 49.7 | 12.5 | 6.6 |
| 29 | 334.8 |  | 35 | 99.3\% | 96.4\% |  | 7.00 | 365.98 | 372.98 | 7.7\% | 4.1\% | 51.4 | 12.9 | 6.8 |
| 30 | 346.3 |  | 46 | 99.4\% | 96.5\% |  | 7.00 | 378.60 | 385.60 | 8.0\% | 4.2\% | 53.2 | 13.3 | 7.0 |
| 31 | 357.9 |  | 25 | 99.4\% | 96.7\% |  | 7.00 | 391.22 | 398.22 | 8.3\% | 4.4\% | 54.9 | 13.8 | 7.3 |
| 32 | 369.4 |  | 39 | 99.4\% | 96.8\% |  | 7.00 | 403.84 | 410.84 | 8.5\% | 4.5\% | 56.7 | 14.2 | 7.5 |
| 33 | 380.9 |  | 30 | 99.5\% | 96.9\% |  | 7.00 | 416.46 | 423.46 | 8.8\% | 4.6\% | 58.4 | 14.6 | 7.7 |
| 34 | 392.5 |  | 24 | 99.5\% | 97.0\% |  | 7.00 | 429.08 | 436.08 | 9.0\% | 4.8\% | 60.1 | 15.1 | 8.0 |
| 35 | 404.0 |  | 29 | 99.5\% | 97.1\% |  | 7.00 | 441.70 | 448.70 | 9.3\% | 4.9\% | 61.9 | 15.5 | 8.2 |
| 36 | 415.6 |  | 25 | 99.6\% | 97.2\% |  | 7.00 | 454.32 | 461.32 | 9.6\% | 5.1\% | 63.6 | 15.9 | 8.4 |
| 37 | 427.1 |  | 13 | 99.6\% | 97.3\% |  | 7.00 | 466.94 | 473.94 | 9.8\% | 5.2\% | 65.4 | 16.4 | 8.7 |
| 38 | 438.7 |  | 24 | 99.6\% | 97.4\% |  | 7.00 | 479.56 | 486.56 | 10.1\% | 5.3\% | 67.1 | 16.8 | 8.9 |
| 39 | 450.2 |  | 18 | 99.6\% | 97.5\% |  | 7.00 | 492.18 | 499.18 | 10.4\% | 5.5\% | 68.9 | 17.3 | 9.1 |
| 40 | 461.7 |  | 20 | 99.7\% | 97.6\% |  | 7.00 | 504.80 | 511.80 | 10.6\% | 5.6\% | 70.6 | 17.7 | 9.4 |
| 41 | 473.3 |  | 11 | 99.7\% | 97.6\% |  | 7.00 | 517.42 | 524.42 | 10.9\% | 5.8\% | 72.3 | 18.1 | 9.6 |
| 42 | 484.8 |  | 12 | 99.7\% | 97.7\% |  | 7.00 | 530.04 | 537.04 | 11.1\% | 5.9\% | 74.1 | 18.6 | 9.8 |
| 43 | 496.4 |  | 8 | 99.7\% | 97.8\% |  | 7.00 | 542.66 | 549.66 | 11.4\% | 6.0\% | 75.8 | 19.0 | 10.0 |
| 44 | 507.9 |  | 14 | 99.7\% | 97.8\% |  | 7.00 | 555.28 | 562.28 | 11.7\% | 6.2\% | 77.6 | 19.4 | 10.3 |
| 45 | 519.5 |  | 10 | 99.7\% | 97.9\% |  | 7.00 | 567.90 | 574.90 | 11.9\% | 6.3\% | 79.3 | 19.9 | 10.5 |
| 46 | 531.0 |  | 8 | 99.7\% | 97.9\% |  | 7.00 | 580.52 | 587.52 | 12.2\% | 6.4\% | 81.0 | 20.3 | 10.7 |
| 47 | 542.6 |  | 12 | 99.8\% | 98.0\% |  | 7.00 | 593.14 | 600.14 | 12.4\% | 6.6\% | 82.8 | 20.7 | 11.0 |
| 48 | 554.1 |  | 8 | 99.8\% | 98.1\% |  | 7.00 | 605.76 | 612.76 | 12.7\% | 6.7\% | 84.5 | 21.2 | 11.2 |
| 49 | 565.6 |  | 4 | 99.8\% | 98.1\% |  | 7.00 | 618.38 | 625.38 | 13.0\% | 6.9\% | 86.3 | 21.6 | 11.4 |
| 50 | 577.2 |  | 9 | 99.8\% | 98.2\% |  | 7.00 | 631.00 | 638.00 | 13.2\% | 7.0\% | 88.0 | 22.0 | 11.7 |



| Volume g/p/d |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | - |  | 217 | 4.0\% | 0.0\% | \$ | 4.00 | \$ | \$ 4.00 | 0.1\% | 0.1\% | 0.6 | 0.2 | 0.1 |
| 1 | 12.6 |  | 69 | 5.3\% | 21.3\% |  | 4.00 | 5.42 | 9.42 | 0.3\% | 0.2\% | 1.3 | 0.5 | 0.3 |
| 2 | 25.1 |  | 1,522 | 33.6\% | 42.3\% |  | 4.00 | 10.84 | 14.84 | 0.5\% | 0.2\% | 2.0 | 0.8 | 0.4 |
| 3 | 37.7 |  | 1,088 | 53.9\% | 57.0\% |  | 4.00 | 16.26 | 20.26 | 0.7\% | 0.3\% | 2.8 | 1.1 | 0.6 |
| 4 | 50.2 |  | 119 | 56.1\% | 67.2\% |  | 4.00 | 21.68 | 25.68 | 0.8\% | 0.4\% | 3.5 | 1.4 | 0.7 |
| 5 | 62.8 | Indoor Use | 1,305 | 80.4\% | 76.9\% |  | 4.00 | 27.10 | 31.10 | 1.0\% | 0.5\% | 4.3 | 1.7 | 0.9 |
| 6 | 75.4 |  | 330 | 86.5\% | 81.3\% |  | 4.00 | 32.52 | 36.52 | 1.2\% | 0.6\% | 5.0 | 2.0 | 1.0 |
| 7 | 87.9 |  | 30 | 87.1\% | 84.3\% |  | 4.00 | 37.94 | 41.94 | 1.4\% | 0.7\% | 5.8 | 2.3 | 1.1 |
| 8 | 100.5 |  | 304 | 92.7\% | 87.1\% |  | 4.00 | 43.36 | 47.36 | 1.6\% | 0.8\% | 6.5 | 2.6 | 1.3 |
| 9 | 113.0 |  | 83 | 94.3\% | 88.7\% |  | 4.00 | 48.78 | 52.78 | 1.7\% | 0.9\% | 7.3 | 2.9 | 1.4 |
| 10 | 125.6 | 2\% LQI | 8 | 94.4\% | 90.0\% |  | 4.00 | 54.20 | 58.20 | 1.9\% | 1.0\% | 8.0 | 3.2 | 1.6 |
| 11 | 138.2 |  | 99 | 96.2\% | 91.3\% |  | 4.00 | 59.62 | 63.62 | 2.1\% | 1.0\% | 8.8 | 3.5 | 1.7 |
| 12 | 150.7 |  | 39 | 97.0\% | 92.1\% |  | 4.00 | 65.04 | 69.04 | 2.3\% | 1.1\% | 9.5 | 3.8 | 1.9 |
| 13 | 163.3 |  | 6 | 97.1\% | 92.8\% |  | 4.00 | 70.46 | 74.46 | 2.5\% | 1.2\% | 10.3 | 4.1 | 2.0 |
| 14 | 175.8 |  | 21 | 97.5\% | 93.4\% |  | 4.00 | 75.88 | 79.88 | 2.6\% | 1.3\% | 11.0 | 4.4 | 2.2 |
| 15 | 188.4 |  | 36 | 98.1\% | 94.0\% |  | 4.00 | 81.30 | 85.30 | 2.8\% | 1.4\% | 11.8 | 4.7 | 2.3 |
| 16 | 200.9 |  | 6 | 98.3\% | 94.4\% |  | 4.00 | 86.72 | 90.72 | 3.0\% | 1.5\% | 12.5 | 5.0 | 2.5 |
| 17 | 213.5 |  | 3 | 98.3\% | 94.8\% |  | 4.00 | 92.14 | 96.14 | 3.2\% | 1.6\% | 13.3 | 5.3 | 2.6 |
| 18 | 226.1 |  | 12 | 98.5\% | 95.2\% |  | 4.00 | 97.56 | 101.56 | 3.4\% | 1.7\% | 14.0 | 5.6 | 2.8 |
| 19 | 238.6 |  | - | 98.5\% | 95.5\% |  | 4.00 | 102.98 | 106.98 | 3.5\% | 1.8\% | 14.8 | 5.9 | 2.9 |
| 20 | 251.2 |  | 4 | 98.6\% | 95.8\% |  | 4.00 | 108.40 | 112.40 | 3.7\% | 1.8\% | 15.5 | 6.2 | 3.1 |
| 21 | 263.7 |  | 7 | 98.7\% | 96.1\% |  | 4.00 | 113.82 | 117.82 | 3.9\% | 1.9\% | 16.3 | 6.5 | 3.2 |
| 22 | 276.3 | 2\% MHI | 1 | 98.8\% | 96.4\% |  | 4.00 | 119.24 | 123.24 | 4.1\% | 2.0\% | 17.0 | 6.8 | 3.4 |
| 23 | 288.9 |  | - | 98.8\% | 96.7\% |  | 4.00 | 124.66 | 128.66 | 4.2\% | 2.1\% | 17.7 | 7.1 | 3.5 |
| 24 | 301.4 |  | 7 | 98.9\% | 96.9\% |  | 4.00 | 130.08 | 134.08 | 4.4\% | 2.2\% | 18.5 | 7.4 | 3.7 |
| 25 | 314.0 |  | 5 | 99.0\% | 97.2\% |  | 4.00 | 135.50 | 139.50 | 4.6\% | 2.3\% | 19.2 | 7.7 | 3.8 |
| 26 | 326.5 |  | 2 | 99.0\% | 97.4\% |  | 4.00 | 140.92 | 144.92 | 4.8\% | 2.4\% | 20.0 | 8.0 | 4.0 |
| 27 | 339.1 |  | 7 | 99.1\% | 97.6\% |  | 4.00 | 146.34 | 150.34 | 5.0\% | 2.5\% | 20.7 | 8.3 | 4.1 |
| 28 | 351.7 |  | 10 | 99.3\% | 97.8\% |  | 4.00 | 151.76 | 155.76 | 5.1\% | 2.6\% | 21.5 | 8.6 | 4.3 |
| 29 | 364.2 |  | 5 | 99.4\% | 98.0\% |  | 4.00 | 157.18 | 161.18 | 5.3\% | 2.6\% | 22.2 | 8.9 | 4.4 |
| 30 | 376.8 |  | 4 | 99.5\% | 98.1\% |  | 4.00 | 162.60 | 166.60 | 5.5\% | 2.7\% | 23.0 | 9.2 | 4.6 |
| 31 | 389.3 |  | 1 | 99.5\% | 98.2\% |  | 4.00 | 168.02 | 172.02 | 5.7\% | 2.8\% | 23.7 | 9.5 | 4.7 |
| 32 | 401.9 |  | 1 | 99.5\% | 98.3\% |  | 4.00 | 173.44 | 177.44 | 5.9\% | 2.9\% | 24.5 | 9.8 | 4.9 |
| 33 | 414.5 |  | 2 | 99.6\% | 98.4\% |  | 4.00 | 178.86 | 182.86 | 6.0\% | 3.0\% | 25.2 | 10.1 | 5.0 |
| 34 | 427.0 |  | 2 | 99.6\% | 98.5\% |  | 4.00 | 184.28 | 188.28 | 6.2\% | 3.1\% | 26.0 | 10.4 | 5.2 |
| 35 | 439.6 |  | 1 | 99.6\% | 98.6\% |  | 4.00 | 189.70 | 193.70 | 6.4\% | 3.2\% | 26.7 | 10.7 | 5.3 |
| 36 | 452.1 |  | - | 99.6\% | 98.7\% |  | 4.00 | 195.12 | 199.12 | 6.6\% | 3.3\% | 27.5 | 10.9 | 5.5 |
| 37 | 464.7 |  | 5 | 99.7\% | 98.8\% |  | 4.00 | 200.54 | 204.54 | 6.7\% | 3.4\% | 28.2 | 11.2 | 5.6 |
| 38 | 477.3 |  | - | 99.7\% | 98.8\% |  | 4.00 | 205.96 | 209.96 | 6.9\% | 3.4\% | 29.0 | 11.5 | 5.7 |
| 39 | 489.8 |  | - | 99.7\% | 98.9\% |  | 4.00 | 211.38 | 215.38 | 7.1\% | 3.5\% | 29.7 | 11.8 | 5.9 |
| 40 | 502.4 |  | 2 | 99.8\% | 99.0\% |  | 4.00 | 216.80 | 220.80 | 7.3\% | 3.6\% | 30.5 | 12.1 | 6.0 |
| 41 | 514.9 |  | 1 | 99.8\% | 99.0\% |  | 4.00 | 222.22 | 226.22 | 7.5\% | 3.7\% | 31.2 | 12.4 | 6.2 |
| 42 | 527.5 |  | - | 99.8\% | 99.1\% |  | 4.00 | 227.64 | 231.64 | 7.6\% | 3.8\% | 32.0 | 12.7 | 6.3 |
| 43 | 540.0 |  | 1 | 99.8\% | 99.1\% |  | 4.00 | 233.06 | 237.06 | 7.8\% | 3.9\% | 32.7 | 13.0 | 6.5 |
| 44 | 552.6 |  | - | 99.8\% | 99.2\% |  | 4.00 | 238.48 | 242.48 | 8.0\% | 4.0\% | 33.4 | 13.3 | 6.6 |
| 45 | 565.2 |  | - | 99.8\% | 99.2\% |  | 4.00 | 243.90 | 247.90 | 8.2\% | 4.1\% | 34.2 | 13.6 | 6.8 |
| 46 | 577.7 |  | 1 | 99.8\% | 99.2\% |  | 4.00 | 249.32 | 253.32 | 8.4\% | 4.2\% | 34.9 | 13.9 | 6.9 |
| 47 | 590.3 |  | - | 99.8\% | 99.3\% |  | 4.00 | 254.74 | 258.74 | 8.5\% | 4.3\% | 35.7 | 14.2 | 7.1 |
| 48 | 602.8 |  | - | 99.8\% | 99.3\% |  | 4.00 | 260.16 | 264.16 | 8.7\% | 4.3\% | 36.4 | 14.5 | 7.2 |
| 49 | 615.4 |  | 1 | 99.8\% | 99.4\% |  | 4.00 | 265.58 | 269.58 | 8.9\% | 4.4\% | 37.2 | 14.8 | 7.4 |
| 50 | 628.0 |  | 2 | 99.9\% | 99.4\% |  | 4.00 | 271.00 | 275.00 | 9.1\% | 4.5\% | 37.9 | 15.1 | 7.5 |


|  | Water Use Data |  |  | Monthly Water Bill |  |  | Bill \% of Income |  | Hours Worked |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Runnells | \# of Bills | Cumulative $\%$ of Bills | Cumulative \% of Usage | Fixed | Volume | Total | Lowest Quintile | MHI | Min. Wage | Lowest Quintile | MHI |

## Incomes

$\$ 40,167$ \$88,095 $\quad \$ 7.25 \quad \$ 20.08$ \$ 44.05

| Volume | $\mathrm{g} / \mathrm{p} / \mathrm{d}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | - |  | 85 | 3.8\% | 0.0\% | \$ | 8.77 | \$ | \$ 8.77 | 0.3\% | 0.1\% | 1.2 | 0.4 | 0.2 |
| 1 | 12.5 |  | 223 | 13.8\% | 24.8\% |  | 8.77 | 9.35 | 18.12 | 0.5\% | 0.2\% | 2.5 | 0.9 | 0.4 |
| 2 | 25.0 |  | 353 | 29.7\% | 47.1\% |  | 8.77 | 18.70 | 27.47 | 0.8\% | 0.4\% | 3.8 | 1.4 | 0.6 |
| 3 | 37.5 |  | 496 | 52.0\% | 65.2\% |  | 8.77 | 28.05 | 36.82 | 1.1\% | 0.5\% | 5.1 | 1.8 | 0.8 |
| 4 | 50.0 |  | 454 | 72.4\% | 77.6\% |  | 8.77 | 37.40 | 46.17 | 1.4\% | 0.6\% | 6.4 | 2.3 | 1.0 |
| 5 | 62.5 | Indoor Use | 272 | 84.7\% | 84.7\% |  | 8.77 | 46.75 | 55.52 | 1.7\% | 0.8\% | 7.7 | 2.8 | 1.3 |
| 6 | 74.9 | 2\% LQI | 133 | 90.6\% | 88.7\% |  | 8.77 | 56.10 | 64.87 | 1.9\% | 0.9\% | 8.9 | 3.2 | 1.5 |
| 7 | 87.4 |  | 85 | 94.5\% | 91.1\% |  | 8.77 | 65.45 | 74.22 | 2.2\% | 1.0\% | 10.2 | 3.7 | 1.7 |
| 8 | 99.9 |  | 55 | 96.9\% | 92.5\% |  | 8.77 | 74.80 | 83.57 | 2.5\% | 1.1\% | 11.5 | 4.2 | 1.9 |
| 9 | 112.4 |  | 31 | 98.3\% | 93.3\% |  | 8.77 | 84.15 | 92.92 | 2.8\% | 1.3\% | 12.8 | 4.6 | 2.1 |
| 10 | 124.9 |  | 6 | 98.6\% | 93.7\% |  | 8.77 | 93.50 | 102.27 | 3.1\% | 1.4\% | 14.1 | 5.1 | 2.3 |
| 11 | 137.4 |  | 5 | 98.8\% | 94.1\% |  | 8.77 | 102.85 | 111.62 | 3.3\% | 1.5\% | 15.4 | 5.6 | 2.5 |
| 12 | 149.9 |  | 6 | 99.1\% | 94.4\% |  | 8.77 | 112.20 | 120.97 | 3.6\% | 1.6\% | 16.7 | 6.0 | 2.7 |
| 13 | 162.4 |  | 5 | 99.3\% | 94.6\% |  | 8.77 | 121.55 | 130.32 | 3.9\% | 1.8\% | 18.0 | 6.5 | 3.0 |
| 14 | 174.9 |  | 3 | 99.5\% | 94.8\% |  | 8.77 | 130.90 | 139.67 | 4.2\% | 1.9\% | 19.3 | 7.0 | 3.2 |
| 15 | 187.4 | 2\% MHI | 1 | 99.5\% | 95.0\% |  | 8.77 | 140.25 | 149.02 | 4.5\% | 2.0\% | 20.6 | 7.4 | 3.4 |
| 16 | 199.9 |  | 1 | 99.6\% | 95.1\% |  | 8.77 | 149.60 | 158.37 | 4.7\% | 2.2\% | 21.8 | 7.9 | 3.6 |
| 17 | 212.3 |  | 4 | 99.7\% | 95.2\% |  | 8.77 | 158.95 | 167.72 | 5.0\% | 2.3\% | 23.1 | 8.4 | 3.8 |
| 18 | 224.8 |  | 1 | 99.8\% | 95.3\% |  | 8.77 | 168.30 | 177.07 | 5.3\% | 2.4\% | 24.4 | 8.8 | 4.0 |
| 19 | 237.3 |  | - | 99.8\% | 95.3\% |  | 8.77 | 177.65 | 186.42 | 5.6\% | 2.5\% | 25.7 | 9.3 | 4.2 |
| 20 | 249.8 |  | - | 99.8\% | 95.4\% |  | 8.77 | 187.00 | 195.77 | 5.8\% | 2.7\% | 27.0 | 9.7 | 4.4 |
| 21 | 262.3 |  | 1 | 99.8\% | 95.4\% |  | 8.77 | 196.35 | 205.12 | 6.1\% | 2.8\% | 28.3 | 10.2 | 4.7 |
| 22 | 274.8 |  | - | 99.8\% | 95.5\% |  | 8.77 | 205.70 | 214.47 | 6.4\% | 2.9\% | 29.6 | 10.7 | 4.9 |
| 23 | 287.3 |  | - | 99.8\% | 95.5\% |  | 8.77 | 215.05 | 223.82 | 6.7\% | 3.0\% | 30.9 | 11.1 | 5.1 |
| 24 | 299.8 |  | - | 99.8\% | 95.6\% |  | 8.77 | 224.40 | 233.17 | 7.0\% | 3.2\% | 32.2 | 11.6 | 5.3 |
| 25 | 312.3 |  | - | 99.8\% | 95.6\% |  | 8.77 | 233.75 | 242.52 | 7.2\% | 3.3\% | 33.5 | 12.1 | 5.5 |
| 26 | 324.8 |  | - | 99.8\% | 95.7\% |  | 8.77 | 243.10 | 251.87 | 7.5\% | 3.4\% | 34.7 | 12.5 | 5.7 |
| 27 | 337.3 |  | - | 99.8\% | 95.7\% |  | 8.77 | 252.45 | 261.22 | 7.8\% | 3.6\% | 36.0 | 13.0 | 5.9 |
| 28 | 349.7 |  | - | 99.8\% | 95.8\% |  | 8.77 | 261.80 | 270.57 | 8.1\% | 3.7\% | 37.3 | 13.5 | 6.1 |
| 29 | 362.2 |  | - | 99.8\% | 95.8\% |  | 8.77 | 271.15 | 279.92 | 8.4\% | 3.8\% | 38.6 | 13.9 | 6.4 |
| 30 | 374.7 |  | - | 99.8\% | 95.9\% |  | 8.77 | 280.50 | 289.27 | 8.6\% | 3.9\% | 39.9 | 14.4 | 6.6 |
| 31 | 387.2 |  | - | 99.8\% | 95.9\% |  | 8.77 | 289.85 | 298.62 | 8.9\% | 4.1\% | 41.2 | 14.9 | 6.8 |
| 32 | 399.7 |  | - | 99.8\% | 95.9\% |  | 8.77 | 299.20 | 307.97 | 9.2\% | 4.2\% | 42.5 | 15.3 | 7.0 |
| 33 | 412.2 |  | - | 99.8\% | 96.0\% |  | 8.77 | 308.55 | 317.32 | 9.5\% | 4.3\% | 43.8 | 15.8 | 7.2 |
| 34 | 424.7 |  | - | 99.8\% | 96.0\% |  | 8.77 | 317.90 | 326.67 | 9.8\% | 4.4\% | 45.1 | 16.3 | 7.4 |
| 35 | 437.2 |  | - | 99.8\% | 96.1\% |  | 8.77 | 327.25 | 336.02 | 10.0\% | 4.6\% | 46.3 | 16.7 | 7.6 |
| 36 | 449.7 |  | - | 99.8\% | 96.1\% |  | 8.77 | 336.60 | 345.37 | 10.3\% | 4.7\% | 47.6 | 17.2 | 7.8 |
| 37 | 462.2 |  | - | 99.8\% | 96.2\% |  | 8.77 | 345.95 | 354.72 | 10.6\% | 4.8\% | 48.9 | 17.7 | 8.1 |
| 38 | 474.7 |  | - | 99.8\% | 96.2\% |  | 8.77 | 355.30 | 364.07 | 10.9\% | 5.0\% | 50.2 | 18.1 | 8.3 |
| 39 | 487.1 |  | - | 99.8\% | 96.3\% |  | 8.77 | 364.65 | 373.42 | 11.2\% | 5.1\% | 51.5 | 18.6 | 8.5 |
| 40 | 499.6 |  | - | 99.8\% | 96.3\% |  | 8.77 | 374.00 | 382.77 | 11.4\% | 5.2\% | 52.8 | 19.1 | 8.7 |
| 41 | 512.1 |  | - | 99.8\% | 96.4\% |  | 8.77 | 383.35 | 392.12 | 11.7\% | 5.3\% | 54.1 | 19.5 | 8.9 |
| 42 | 524.6 |  | - | 99.8\% | 96.4\% |  | 8.77 | 392.70 | 401.47 | 12.0\% | 5.5\% | 55.4 | 20.0 | 9.1 |
| 43 | 537.1 |  | - | 99.8\% | 96.5\% |  | 8.77 | 402.05 | 410.82 | 12.3\% | 5.6\% | 56.7 | 20.5 | 9.3 |
| 44 | 549.6 |  | - | 99.8\% | 96.5\% |  | 8.77 | 411.40 | 420.17 | 12.6\% | 5.7\% | 58.0 | 20.9 | 9.5 |
| 45 | 562.1 |  | - | 99.8\% | 96.6\% |  | 8.77 | 420.75 | 429.52 | 12.8\% | 5.9\% | 59.2 | 21.4 | 9.8 |
| 46 | 574.6 |  | - | 99.8\% | 96.6\% |  | 8.77 | 430.10 | 438.87 | 13.1\% | 6.0\% | 60.5 | 21.9 | 10.0 |
| 47 | 587.1 |  | 1 | 99.9\% | 96.6\% |  | 8.77 | 439.45 | 448.22 | 13.4\% | 6.1\% | 61.8 | 22.3 | 10.2 |
| 48 | 599.6 |  | - | 99.9\% | 96.7\% |  | 8.77 | 448.80 | 457.57 | 13.7\% | 6.2\% | 63.1 | 22.8 | 10.4 |
| 49 | 612.1 |  | - | 99.9\% | 96.7\% |  | 8.77 | 458.15 | 466.92 | 13.9\% | 6.4\% | 64.4 | 23.2 | 10.6 |
| 50 | 624.5 |  | - | 99.9\% | 96.7\% |  | 8.77 | 467.50 | 476.27 | 14.2\% | 6.5\% | 65.7 | 23.7 | 10.8 |


| Windsor Heights | Water Use Data |  |  | Monthly Water Bill |  |  | Bill \% of Income |  | Hours Worked |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \# of Bills | Cumulative \% of Bills | Cumulative \% of Usage | Fixed | Volume | Total | Lowest Quintile | MHI | Min. Wage | Lowest Quintile | MHI |
| Incomes |  |  |  |  |  |  | \$32,430 | \$79,073 | \$ 7.25 | \$ 16.22 | \$ 39.54 |


| Volume | g/p/d |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | - |  | 676 | 2.8\% | 0.0\% | \$ | 6.00 | \$ | \$ 6.00 | 0.2\% | 0.1\% | 0.8 | 0.4 | 0.2 |
| 1 | 13.7 |  | 2,176 | 12.0\% | 24.3\% |  | 6.00 | 5.75 | 11.75 | 0.4\% | 0.2\% | 1.6 | 0.7 | 0.3 |
| 2 | 27.4 |  | 4,499 | 31.0\% | 46.2\% |  | 6.00 | 11.50 | 17.50 | 0.6\% | 0.3\% | 2.4 | 1.1 | 0.4 |
| 3 | 41.0 |  | 4,912 | 51.7\% | 63.5\% |  | 6.00 | 17.25 | 23.25 | 0.9\% | 0.4\% | 3.2 | 1.4 | 0.6 |
| 4 | 54.7 | Indoor Use | 3,966 | 68.4\% | 75.5\% |  | 6.00 | 23.00 | 29.00 | 1.1\% | 0.4\% | 4.0 | 1.8 | 0.7 |
| 5 | 68.4 |  | 2,808 | 80.2\% | 83.4\% |  | 6.00 | 28.75 | 34.75 | 1.3\% | 0.5\% | 4.8 | 2.1 | 0.9 |
| 6 | 82.1 |  | 1,788 | 87.8\% | 88.4\% |  | 6.00 | 34.50 | 40.50 | 1.5\% | 0.6\% | 5.6 | 2.5 | 1.0 |
| 7 | 95.7 |  | 1,051 | 92.2\% | 91.4\% |  | 6.00 | 40.25 | 46.25 | 1.7\% | 0.7\% | 6.4 | 2.9 | 1.2 |
| 8 | 109.4 | 2\% LQI | 597 | 94.7\% | 93.4\% |  | 6.00 | 46.00 | 52.00 | 1.9\% | 0.8\% | 7.2 | 3.2 | 1.3 |
| 9 | 123.1 |  | 372 | 96.3\% | 94.7\% |  | 6.00 | 51.75 | 57.75 | 2.1\% | 0.9\% | 8.0 | 3.6 | 1.5 |
| 10 | 136.8 |  | 219 | 97.2\% | 95.6\% |  | 6.00 | 57.50 | 63.50 | 2.3\% | 1.0\% | 8.8 | 3.9 | 1.6 |
| 11 | 150.5 |  | 143 | 97.8\% | 96.3\% |  | 6.00 | 63.25 | 69.25 | 2.6\% | 1.1\% | 9.6 | 4.3 | 1.8 |
| 12 | 164.1 |  | 105 | 98.2\% | 96.9\% |  | 6.00 | 69.00 | 75.00 | 2.8\% | 1.1\% | 10.3 | 4.6 | 1.9 |
| 13 | 177.8 |  | 81 | 98.6\% | 97.3\% |  | 6.00 | 74.75 | 80.75 | 3.0\% | 1.2\% | 11.1 | 5.0 | 2.0 |
| 14 | 191.5 |  | 65 | 98.9\% | 97.7\% |  | 6.00 | 80.50 | 86.50 | 3.2\% | 1.3\% | 11.9 | 5.3 | 2.2 |
| 15 | 205.2 |  | 44 | 99.0\% | 98.0\% |  | 6.00 | 86.25 | 92.25 | 3.4\% | 1.4\% | 12.7 | 5.7 | 2.3 |
| 16 | 218.8 |  | 39 | 99.2\% | 98.2\% |  | 6.00 | 92.00 | 98.00 | 3.6\% | 1.5\% | 13.5 | 6.0 | 2.5 |
| 17 | 232.5 |  | 38 | 99.4\% | 98.4\% |  | 6.00 | 97.75 | 103.75 | 3.8\% | 1.6\% | 14.3 | 6.4 | 2.6 |
| 18 | 246.2 |  | 17 | 99.4\% | 98.6\% |  | 6.00 | 103.50 | 109.50 | 4.1\% | 1.7\% | 15.1 | 6.8 | 2.8 |
| 19 | 259.9 |  | 24 | 99.5\% | 98.7\% |  | 6.00 | 109.25 | 115.25 | 4.3\% | 1.7\% | 15.9 | 7.1 | 2.9 |
| 20 | 273.6 |  | 17 | 99.6\% | 98.8\% |  | 6.00 | 115.00 | 121.00 | 4.5\% | 1.8\% | 16.7 | 7.5 | 3.1 |
| 21 | 287.2 |  | 9 | 99.7\% | 98.9\% |  | 6.00 | 120.75 | 126.75 | 4.7\% | 1.9\% | 17.5 | 7.8 | 3.2 |
| 22 | 300.9 | 2\% MHI | 10 | 99.7\% | 99.0\% |  | 6.00 | 126.50 | 132.50 | 4.9\% | 2.0\% | 18.3 | 8.2 | 3.4 |
| 23 | 314.6 |  | 9 | 99.7\% | 99.1\% |  | 6.00 | 132.25 | 138.25 | 5.1\% | 2.1\% | 19.1 | 8.5 | 3.5 |
| 24 | 328.3 |  | 6 | 99.8\% | 99.1\% |  | 6.00 | 138.00 | 144.00 | 5.3\% | 2.2\% | 19.9 | 8.9 | 3.6 |
| 25 | 341.9 |  | 3 | 99.8\% | 99.2\% |  | 6.00 | 143.75 | 149.75 | 5.5\% | 2.3\% | 20.7 | 9.2 | 3.8 |
| 26 | 355.6 |  | 3 | 99.8\% | 99.2\% |  | 6.00 | 149.50 | 155.50 | 5.8\% | 2.4\% | 21.4 | 9.6 | 3.9 |
| 27 | 369.3 |  | 8 | 99.8\% | 99.3\% |  | 6.00 | 155.25 | 161.25 | 6.0\% | 2.4\% | 22.2 | 9.9 | 4.1 |
| 28 | 383.0 |  | 4 | 99.8\% | 99.3\% |  | 6.00 | 161.00 | 167.00 | 6.2\% | 2.5\% | 23.0 | 10.3 | 4.2 |
| 29 | 396.7 |  | 4 | 99.9\% | 99.4\% |  | 6.00 | 166.75 | 172.75 | 6.4\% | 2.6\% | 23.8 | 10.7 | 4.4 |
| 30 | 410.3 |  | 1 | 99.9\% | 99.4\% |  | 6.00 | 172.50 | 178.50 | 6.6\% | 2.7\% | 24.6 | 11.0 | 4.5 |
| 31 | 424.0 |  | 1 | 99.9\% | 99.5\% |  | 6.00 | 178.25 | 184.25 | 6.8\% | 2.8\% | 25.4 | 11.4 | 4.7 |
| 32 | 437.7 |  | 5 | 99.9\% | 99.5\% |  | 6.00 | 184.00 | 190.00 | 7.0\% | 2.9\% | 26.2 | 11.7 | 4.8 |
| 33 | 451.4 |  | 5 | 99.9\% | 99.5\% |  | 6.00 | 189.75 | 195.75 | 7.2\% | 3.0\% | 27.0 | 12.1 | 5.0 |
| 34 | 465.0 |  | 1 | 99.9\% | 99.5\% |  | 6.00 | 195.50 | 201.50 | 7.5\% | 3.1\% | 27.8 | 12.4 | 5.1 |
| 35 | 478.7 |  | 1 | 99.9\% | 99.6\% |  | 6.00 | 201.25 | 207.25 | 7.7\% | 3.1\% | 28.6 | 12.8 | 5.2 |
| 36 | 492.4 |  | 3 | 99.9\% | 99.6\% |  | 6.00 | 207.00 | 213.00 | 7.9\% | 3.2\% | 29.4 | 13.1 | 5.4 |
| 37 | 506.1 |  | 2 | 99.9\% | 99.6\% |  | 6.00 | 212.75 | 218.75 | 8.1\% | 3.3\% | 30.2 | 13.5 | 5.5 |
| 38 | 519.8 |  | 2 | 99.9\% | 99.6\% |  | 6.00 | 218.50 | 224.50 | 8.3\% | 3.4\% | 31.0 | 13.8 | 5.7 |
| 39 | 533.4 |  | - | 99.9\% | 99.6\% |  | 6.00 | 224.25 | 230.25 | 8.5\% | 3.5\% | 31.8 | 14.2 | 5.8 |
| 40 | 547.1 |  | 1 | 99.9\% | 99.7\% |  | 6.00 | 230.00 | 236.00 | 8.7\% | 3.6\% | 32.6 | 14.6 | 6.0 |
| 41 | 560.8 |  | 1 | 99.9\% | 99.7\% |  | 6.00 | 235.75 | 241.75 | 8.9\% | 3.7\% | 33.3 | 14.9 | 6.1 |
| 42 | 574.5 |  | - | 99.9\% | 99.7\% |  | 6.00 | 241.50 | 247.50 | 9.2\% | 3.8\% | 34.1 | 15.3 | 6.3 |
| 43 | 588.1 |  | 1 | 100.0\% | 99.7\% |  | 6.00 | 247.25 | 253.25 | 9.4\% | 3.8\% | 34.9 | 15.6 | 6.4 |
| 44 | 601.8 |  | 2 | 100.0\% | 99.7\% |  | 6.00 | 253.00 | 259.00 | 9.6\% | 3.9\% | 35.7 | 16.0 | 6.6 |
| 45 | 615.5 |  | - | 100.0\% | 99.7\% |  | 6.00 | 258.75 | 264.75 | 9.8\% | 4.0\% | 36.5 | 16.3 | 6.7 |
| 46 | 629.2 |  | - | 100.0\% | 99.7\% |  | 6.00 | 264.50 | 270.50 | 10.0\% | 4.1\% | 37.3 | 16.7 | 6.8 |
| 47 | 642.9 |  | 1 | 100.0\% | 99.7\% |  | 6.00 | 270.25 | 276.25 | 10.2\% | 4.2\% | 38.1 | 17.0 | 7.0 |
| 48 | 656.5 |  | - | 100.0\% | 99.7\% |  | 6.00 | 276.00 | 282.00 | 10.4\% | 4.3\% | 38.9 | 17.4 | 7.1 |
| 49 | 670.2 |  | 1 | 100.0\% | 99.8\% |  | 6.00 | 281.75 | 287.75 | 10.6\% | 4.4\% | 39.7 | 17.7 | 7.3 |
| 50 | 683.9 |  | - | 100.0\% | 99.8\% |  | 6.00 | 287.50 | 293.50 | 10.9\% | 4.5\% | 40.5 | 18.1 | 7.4 |


[^0]:    ${ }^{1}$ Raftelis has reviewed the rates proposed for FY 2024 and does not believe the changes materially affect the analysis in this report.

[^1]:    ${ }^{2}$ Additional information about the alternative poverty measures is available at https://www.unitedforalice.org/household-budgets/iowa and https://livingwage.mit.edu/counties/19153

[^2]:    ${ }^{3}$ These rates are only intended to serve as an example in this affordability report and should not be adopted without further analysis. If DMWW were interested in developing an inclining block rate structure, Raftelis recommends that this be completed as part of a comprehensive Cost of Service study.

