



The Cost of Clean:

2007 Wisconsin
Sewer User Charge
Survey Report

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ACKNOWLEDGEMENTS

I would like to personally thank those of you who took the time to fill out a survey form or answer our calls, allowing us to obtain the raw data on which this report is based. I recognize that everyone has more work than time to do it in, and filling out a survey form requires some of that time. Your contribution has benefited others statewide by allowing us to provide meaningful and valuable data.

I would also like to recognize the following individuals and their agencies for their assistance in providing data for this study. You have all been great supporters of this effort.

- Bruce Schmidt Wisconsin Public Service Commission
- Jeanne Cargill Wisconsin Department of Natural Resources
- Jack Sanderson Wisconsin Department of Commerce
- Virginia Morgan USDA Rural Development

Finally I would like to thank the following individuals at MSA Professional Services, Inc. for their contributions:

- Dave Murphy for conceiving of this effort eleven years ago;
- Joseph Parchem for his enthusiasm and technical wizardry;
- Dan Greve for wordsmithing;
- Deborah Preskar for applying the final coat of polish;
- Dawn Blacker and Leslie Blaize for their energy in moving this forward;
- Nick Wagner for setting the standard in 2004 and setting the table for 2007; and
- Peter Wisniewski for grinding through a mountain of data with always a smile.

GAH

April 30, 2007

EXECUTIVE SUMMARY

Background

This report summarizes the data collected by MSA Professional Services, Inc. (MSA) as part of the **2007 Wisconsin Sewer User Charge Survey**. The survey has been performed by MSA every two to three years since 1996 to document the cost of sanitary sewer service in Wisconsin. It was born out of the need of communities to be able to compare their current and/or proposed sewer rates with the rates in surrounding communities, and to the rates in similar communities elsewhere in the state. Without this information, people are often uncertain as to whether the amount they are paying for sewer service is consistent with the rates in comparable communities.

The 2007 survey contains data from 447 Wisconsin communities that own and operate a sanitary sewer collection system, and represents approximately 55% of the publicly owned collection systems in the state. Most of these systems also include a publicly owned wastewater treatment facility, however some are connected to a regional treatment facility owned by another public entity.

Sewer rate data was compiled and used to determine the average residential cost for sewer service. A statewide average use of 55,000 gallons per year per household was used to allow for a direct comparison of sewer rates between communities based on a uniform level of service. Average and median sewer service costs were calculated for communities as categorized by size, county, type of treatment, etc., to identify trends and relationships.

Findings

The most significant and consistent relationship identified in the sewer user charge survey is between population and rates. The economies of scale that exist in the construction and operation of centralized wastewater treatment facilities allow for larger populations to be served at a lower cost per household. On average, the cost per household for sewer service in smaller communities (populations less than 2,000) is approximately twice that in the largest communities (populations greater than 50,000). Communities with populations 2,000 and less represent about 60% of the sewer service communities in the Wisconsin. The difference in the average cost of sewer service between small and large communities is currently about \$16 per month.

The disparity in the cost of sewer service between large and small communities has increased over the 11-years that this survey has been performed. The average annual cost per household is increasing more rapidly in the smaller communities.

The smaller communities also show a much greater variability in the cost of wastewater service. While some small communities enjoy lower rates due to the use of low-cost treatment systems such as lagoons, and/or treatment systems that were constructed (and paid for) many years ago, those faced with a major upgrade are likely to experience rate increases to levels that are unheard of in the largest communities. An increasing number of small communities are already faced with residential sewer rates of \$60 to 70 per month.

As rates continue to increase, communities are more likely to find other ways to generate revenue for the sewer utility. The use of property taxes to supplement the revenue from sewer charges is increasingly common among small communities. In some cases property taxes represent a

significant component of the utility's revenue. This "hidden" cost of wastewater service in many small communities adds to the disparity in the cost of sewer service based on population.

The cost of wastewater service is impacted by factors other than population. The report presents data on a number of these factors and illustrates their role in the cost of wastewater service in Wisconsin. Additional factors for which data is presented include:

- Age of treatment facility;
- Type of treatment technology
- Use and cost of sewer connection and/or impact fees;
- Length of time since last increase;
- Rates charged to industry and waste haulers

Affordability and Funding

The report documents the general decline in grant funding available for wastewater projects in Wisconsin from three major state and federal sources. Adjusted for inflation, the amount of grant funds available from these programs has experienced a five-fold decline since 1998.

The major funding programs all rely, to some degree, on the affordability of sewer service when determining grant eligibility. An affordability level of 2% of the community's Median Household Income (MHI) is commonly used to determine eligibility for grant funding. The maximum amount of grant funding per project, however, is fixed at a (declining) percentage of total project cost, leaving small communities with the distinct disadvantage of having to pay for the non-grant portion of the project with a smaller population base. The report presents data on the current cost of sewer service as a percentage of MHI. The median household income is shown to increase as population increases, up to populations of 50,000. With lower incomes and higher sewer rates, it is clear that the residents of small communities as a group are required to pay a larger share of their income for wastewater service.

Conclusions

The primary conclusion drawn from the data in the Sewer User Charge Survey is that, without the availability of additional grant funds, households in small communities will on average continue to dedicate twice as much of their income to sewer service charges than residents of large communities. The historic trends indicate that sewer user charges will continue to rise at a higher rate in small communities, placing the residents and businesses in small towns throughout Wisconsin at an economic disadvantage.

The solution for correcting the economic disparity in the cost of wastewater service between large and small communities would seem to depend on the increased availability of funding to offset the effect of the economies of scale inherent in wastewater facility construction. In addition, the formulas used by funding agencies to determine grant eligibility would need to be revised so that small communities are required to pay for a smaller portion of the cost of construction for new wastewater facilities. Reducing the burden on small communities for the cost of construction of wastewater facilities would help to offset the economies of scale inherent in the cost of operation and maintenance of these facilities.