

City of Springfield, Missouri  
**Wastewater Improvements Task Force**  
**Recommendations to City Council**  
**4/26/2011**

**Introduction**

The Wastewater Improvements Task Force includes members from a wide variety of stakeholder groups, representing many points of view. Over a series of eight (8) meetings, members worked together to develop a set of recommendations to guide future decisions about the Wastewater Improvements program. The focus of the conversations were around how to pay for needed improvements to the system to meet regulations, protect public health and improve water quality. Twenty-four Task Force members participated in the meeting process and stakeholder groups were informed and invited to listen in on meetings. Over 40 additional stakeholders attended Task Force meetings and provided input when requested.

**Guiding Principles**

Task Force members were asked to identify the common community values, what is important to those who live and work in Springfield, by completing the Guiding Principles Survey. Based on the survey results and subsequent discussions with the Task Force, Guiding Principles were established. The Task Force used these principles to evaluate recommendations regarding the rate structure and the wastewater improvement program. The Guiding Principles are detailed in the table below.

Wastewater Improvements Task Force Guiding Principles	
<b>Ability to Pay</b>	<ul style="list-style-type: none"> <li>• Increased rates could affect lower-income households and those organizations that serve them. Efforts that don't jeopardize the overall goals of the program will be made to use existing resources and programs to assist those customers.</li> </ul>
<b>Conservation</b>	<ul style="list-style-type: none"> <li>• Efficiently use resources to minimize environmental impact.</li> </ul>
<b>Cost Effectiveness</b>	<ul style="list-style-type: none"> <li>• Investments must be made that have the most impact for the dollar spent resulting in the best value.</li> </ul>
<b>Ease of Administration</b>	<ul style="list-style-type: none"> <li>• There is a need for effective administration to control costs and hold the system accountable. The rate structure should be uncomplicated and predictable.</li> </ul>
<b>Economic Development</b>	<ul style="list-style-type: none"> <li>• Rates should be competitive with other jurisdictions to help attract and retain businesses, citizens and customers. This will need to be balanced with fairness of rates so that they are not set artificially low.</li> </ul>

## Wastewater Improvements Task Force Guiding Principles

<b>Environmental Stewardship</b>	<ul style="list-style-type: none"> <li>• It is important to protect drinking water sources and improve the quality of water in streams in Southwest Missouri.</li> </ul>
<b>Equity/Fairness</b>	<ul style="list-style-type: none"> <li>• Ratepayer fees should be linked directly to cost of the service.</li> </ul>
<b>Financial Burden</b>	<ul style="list-style-type: none"> <li>• Springfield should invest a reasonable amount of funds to reduce SSOs so as not to overburden ratepayers.</li> </ul>
<b>Innovations and Planning</b>	<ul style="list-style-type: none"> <li>• The City should continue to invest in their wastewater system to ensure future growth is allowed.</li> <li>• The long-term plan for wastewater improvements should be flexible to adapt to new technologies and innovations. Springfield should measure and evaluate how well the improvements are working before investing in future projects.</li> </ul>
<b>Intergenerational Equity</b>	<ul style="list-style-type: none"> <li>• Wastewater improvements to meet regulatory requirements should be paid for over time, to distribute costs over multiple-generations who will use the system.</li> </ul>
<b>Understandability/Public Education</b>	<ul style="list-style-type: none"> <li>• Citizens should be made aware of how they can help address the wastewater problems.</li> <li>• Ratepayers, citizens and impacted communities should understand how wastewater improvements help water quality and protect public health.</li> <li>• Springfield must meet all regulatory requirements.</li> </ul>

## Funding Recommendations

Task Force members were asked to develop a number of recommendations regarding appropriate fund balance levels, implementation of rate increases, changes to the rate/fee structure. The Task Force was also asked to weigh in on an existing funding assistance program to reduce building backups and private infiltration/inflow. The following are the final recommendations of the Task Force members.

### Rate Structure

The Task Force discussed a number of options for making the rate structure more fair and equitable. For some of the changes that were discussed there was not sufficient support to recommend these changes to the current structure. The Task Force discussed how detailed the customer classes should be to increase the fairness of the charge. While additional categories of customers could be developed to increase the equity of the charges, simplicity is also important.

- The Task Force recommended the current customer classifications for the customer charge and volume charge stay as is (residential and non-residential) rather than adding additional classifications for customer and volume charge.

- The same logic applies to the question of adding a surcharge rate for wastewater strength parameters such as ammonia, nitrogen and phosphorus in addition to the biochemical oxygen demand and suspended solids surcharge that currently exist. The Task Force agreed that the potential revenue to be collected was not worth the complexity of establishing new charges for ammonia, nitrogen and phosphorus. The Task Force recommends an educational program to reduce the production of phosphorus by these high strength customers and all citizens.
- The Task Force also discussed whether to charge a return on investment similar to what other utilities charge. A return on investment charge recognizes the higher level of risk and investment a customer has in the system inside the city limits versus outside. The Task Force discussed charging this rate of return to retail customers outside the city limits and wholesale customers. There wasn't support for the return on investment charge to retail customers outside the city limits. The Task Force also felt there were limited options to adopt the fee for wholesale customers due to existing contractual agreements.

There are several costs associated with collecting, conveying and treating wastewater that can be attributed to certain categories of customers. It is recommended that the current rate structure be modified to recognize these additional costs associated for providing special services to these customers. These recommendations, while they had the support of the Task Force, were not unanimous. It is recommended that the following charges be enacted to better capture costs:

- *Industrial Pretreatment & Monitoring Charge:* The costs to administer the industrial pretreatment program and other monitoring costs should be charged to those customers participating in the industrial pretreatment program.
- *FOG Program Charge:* The costs to administer the Fats, Oils and Grease (FOG) program. These costs will be charged to FOG program participants.

These costs are currently spread over the monthly customer charge (fixed charge) for nonresidential customers. By enacting these new charges, the costs previously assigned to the nonresidential fixed charge are now more equitably allocated to those causing the utility to incur those costs. The result of this shift means the monthly customer charge (fixed charge) is the same for both residential and nonresidential. The nonresidential customer charge is currently higher to account for the costs to perform industrial pretreatment and monitoring services and to cover the FOG program.

The Task Force also recommended that the staff negotiate with City Utilities to change to a "per bill administrative charge" to send out bills instead of a percentage of revenue for future wastewater billing services.

## Fund Balance

In the recent past, to keep rate increases at a minimum, Springfield has spent down the wastewater utility fund balance. The Task Force recommends the City of Springfield build back up the fund balance to cover operating reserves, repair and replacement reserves, emergency reserves, rate stabilization reserves, insurance reserves and bond reserves. It is recommended the City not let reserves fall below the current \$8 million and that they build back reserve levels to \$15 - \$20 million over time.

## Strategy to Implement Rate Increases

The Task Force discussed how to best implement the rate increases. A desirable approach would be to implement incremental increases over time because ratepayers could then better budget and adjust to increases. Because of the need to build back the fund balance and the \$50 million needed to fund the Early Action Program over the next

seven (7) years, this will not be possible. The Task Force recommends that the substantial increase needed in the early years be spread over the first two years with less substantial increases in the following years to ease the impact of rate increases on ratepayers and still meet the financial needs of the utility.

## **Customer Assistance**

With the need for increased rate levels, the Task Force discussed whether a low-income assistance program was needed to help customers pay their wastewater bill. Because customers pay their electric, water and wastewater bills together on one bill, existing customer assistance program for these utilities were discussed. The Task Force recognized that increased rate levels could affect lower-income households and those organizations that serve them. Efforts that don't jeopardize the overall goals of the wastewater improvements program will be made to use existing resources and programs to assist those customers. No specific program was identified at this time. As the wastewater program evolves and the rates go up, it is recommended that the staff and City Council consider customer's ability to pay so as not to jeopardize the overall financial health of the utility and the need for fairness and equity in rates/charges.

## **Building Backup Program**

The Task Force recognizes that it is in the public interest to reduce sewage backups on private property because building backups negatively impact the community's property values. Building backups are internal to buildings. Since 1994, the City of Springfield has provided low-interest loans (up to \$3,000) for the installation of a backflow preventer. The Task Force recommends that the City make modifications to enhance participation in the current loan program.

## **Private Infiltration & Inflow Program**

Extraneous water (stormwater & groundwater) that doesn't belong in the sanitary sewer system is the cause of wet weather Sanitary Sewer Overflows (SSOs). The extraneous water is called infiltration and inflow (I/I). In some areas of the City, over 50% of the I/I water comes from sources on private property. The Task Force recognizes that it is in the public interest to eliminate SSOs in that they negatively impact public health and the environment. The Task Force recommends that the City spend public dollars to reduce infiltration and inflow from private property sources. Those dollars should be targeted on the most cost-effective sources of private I/I and be coordinated with public infrastructure investments. The Task Force recommends that the City develop an effective program to cost-effectively reduce private I/I guided by the following considerations:

### *Private Sewer Laterals:*

- It is the responsibility of the private property owner to maintain their private sewer lateral (the private service line from the house to the public main) The work to repair the private lateral and the financial responsibility is not the City's responsibility.
- The City should identify private lateral problem properties.
- The City should educate property owners about their responsibility to maintain their private sewer lateral and how not doing so can negatively impact their property values and the environment and make the City's wastewater program more expensive.
- The City should educate property owners about what they can do to properly maintain their private lateral and provide technical assistance for proper repair.

- The City should require property owners to repair their private laterals at their own expense but consider the financial impact on the property owner and the timeframe the property owner has to make the repair. For example, the following ideas should be considered as part of the private lateral program:
  - Require the property owner to repair but provide a grace period for compliance to allow the property owner to financially plan for the repairs.
  - Provide some sort of financing mechanism so the property owner can better afford to have the work completed. City funds can be used to fund the improvement up front but must be paid back by the property owner over time.
  - Consider implementing some sort of financial incentive to complete the work sooner and some sort of financial penalty if the work is not completed within a reasonable timeframe.
  - Consider a low income assistance program for property owners who cannot afford to pay for the repair to ensure the work is accomplished.

*Improper Connections to the Sanitary Sewer:*

- Sump pumps, area/foundation/driveway drains, downspouts on private property should not be connected to the public sanitary sewer system. This allows water that doesn't belong into the sanitary sewer system causing overflows and increased treatment costs. A cost-effective program to address these private sources should be developed.
- It is the responsibility of the private property owner to disconnect.
- The City should identify private improper connections to the sanitary sewer system.
- The City should educate property owners about their responsibility to disconnect these connections and how not doing so can negatively impact their property values and the environment and make the City's wastewater program more expensive.
- The City should educate property owners about how they can disconnect these improper connections and to provide technical assistance so that stormwater drainage problems are not created.
- The City should require property owners to disconnect these improper connections at their own expense but some sort of financial incentive to complete the work sooner and some sort of financial penalty if the work is not completed within a reasonable timeframe should be implemented.
- The City should consider a low income assistance program for property owners who cannot afford to pay for the repair to ensure the work is accomplished.
- Since 1934 when the plumbing code was adopted, the practice of connecting these improper sources to the sanitary sewer system has been prohibited. It is important to eliminate these sources regardless of whether the property was built before the ordinance prohibiting was enacted. While it is the responsibility of the property owner to disconnect; it is recommended that some sort of additional consideration be given to property owners where connections were not illegal when the property was built.