



SANITARY SEWER OVERFLOW CONTROL PROGRAM

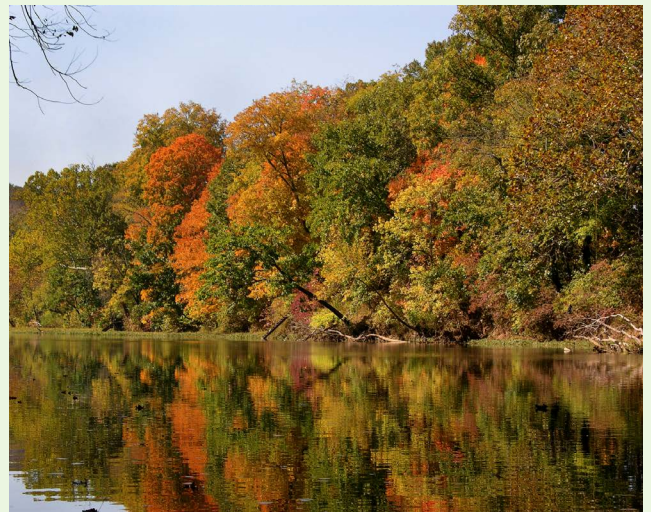
*Protecting water for
future generations*

Fall 2014

What's the Issue?

The City of Springfield has invested heavily in upgrades to the sanitary sewer collection and treatment system over the years to serve the citizens of Springfield and to protect the water quality of the region, but work remains. State and federal enforcement of the federal Clean Water Act is becoming stringent as the city's wastewater infrastructure continues to age and requiring expensive maintenance. Hundreds of millions of dollars will be needed to address the aging infrastructure and required system improvements, impacting the fees paid by ratepayers.

Under the Clean Water Act of 1972, Sanitary Sewer Overflows are not permitted. The City is working with regulators regarding the next phase of improvements needed to reduce Sanitary Sewer Overflows.



The Department of Environmental Services Clean Water Services Division is preparing a sound plan for Springfield to reduce Sanitary Sewer Overflows. The goals are to protect water quality, safeguard public health, meet state/federal regulations and support future development/redevelopment in a manner more affordable to our community. The innovative plan is based upon Springfield's environmental priorities as established in the Integrated Plan. Springfield is one of the first communities in the country to develop an Integrated Plan looking how better to manage regulatory requirements for air, water and land resources. This wise and targeted investment in the community's aging infrastructure creates local jobs and stimulates the economy.

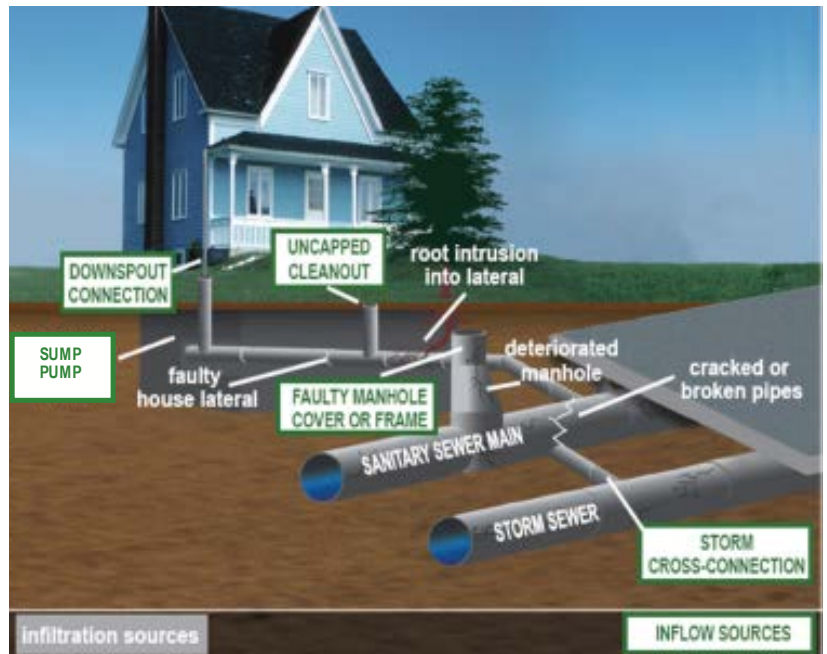
What is an SSO or Sanitary Sewer Overflow?

Springfield, Missouri has a complex system of pipes and treatment facilities to transport and treat wastewater. **Wastewater** is the used water and sewage that goes down toilets, sinks, and drains in homes and businesses. As in most communities, wastewater is collected by an extensive system of pipes, and transported to a treatment plant where it is treated and discharged to a river or stream.

The City also has a separate, complex system of culverts, drains, and pipes to carry **rainwater**. One pipe system carries wastewater, and another separate pipe system carries rainwater. Springfield has a **Separate Sewer System** because there are two separate systems for wastewater and rainwater.

Sometimes during heavy rains, water seeps into the sanitary sewer system through breaks in the pipes that may be caused by age or tree roots. Extra rainwater can also enter the sanitary sewer system through improperly connected building downspouts and drains. In those cases, the capacity of the pipes may be exceeded, and the excess water may overflow untreated to the streams and rivers. It may also back up into basements. When there is too much water in the sanitary sewer system, it can overflow. These are called Sanitary Sewer Overflows (SSOs).

Underground water that seeps into the sanitary sewer is called "infiltration." Rainwater that drains directly into the sanitary sewer is called "inflow." The problem is commonly called Infiltration/Inflow (I/I). The publicly owned part of the system, located in the street, can have leaky manholes or broken pipes. Property owners own the pipes from the street to their home or building. About half of the water that does not belong in the wastewater system comes from private property. Springfield is working on both the public and privately owned system to get the rainwater out that doesn't



belong in the system. You can be part of the solution by making simple improvements on your property such as inspecting your home or business to see if your downspouts, yard drains or sump pumps are connected to the wastewater system. If so, they should be disconnected to avoid the cost of transporting and treating rainwater that doesn't belong in the pipes.

Is this problem unique to Springfield?

Springfield is not the only city dealing with the issue of Sanitary Sewer Overflows (SSOs). While Sanitary Sewer Overflows are not allowed by state and federal regulators, most systems across the country experience them. Nationwide, most wastewater systems are not designed to handle rainwater and groundwater that doesn't belong in wastewater pipes. U.S. Environmental Protection Agency (EPA) and the Missouri Department of Natural Resources (MDNR) both regulate overflows. Regulators are currently working with many communities in Missouri to reduce overflows. Springfield is committed to protecting public health and water quality and has taken substantial efforts to address Sanitary Sewer Overflows. Springfield will continue to invest to benefit the citizens of Springfield and the communities downstream.



Amended Consent Judgment

In 2012, Springfield entered into an Amended Consent Judgment with the Missouri Department of Natural Resources. The Amended Consent Judgment is a result of cooperative negotiations between the City of Springfield and the Missouri Department of Natural Resources. The agreement outlines the agreed to plan for improvements and rehabilitation to the Springfield, Missouri sewer system which need to be done within a certain timeframe to implement state and federally mandated improvements.

The 2012 Amended Consent Judgment included the Early Action Program and called for the City to submit a plan for the next phase of improvements in December 2014. The City's latest plan, called a Overflow Control Plan, will result in a second Amended Consent Judgment. These documents are Amendments to the 1995 Consent Judgment regarding the Springfield Overflow Control Program.

What is Springfield's plan to reduce overflows?

Since 1990, Springfield has committed several hundred million dollars on wastewater system improvements. In 2011, the City began its \$50 million Early Action Program. The City accomplished the following under the Early Action Program:

- » Repairs to nearly 200,000 linear feet of clay pipe;
- » Construction of the Spring Branch trunk sewer to increase system reliability;
- » Disconnection of provide property sources of rainwater; and
- » Construction of an ozone system upgrade at the Southwest Treatment Plant to improve water quality.

The Overflow Control Plan, which will be submitted to regulators later this year, will continue the City's program to fix leaky sewers and make much-needed improvements to the aging system. It also includes SSO removal projects in targeted areas. The cost of the Overflow Control Plan is \$200 million to be spent between 2016 and 2025. This spending is in addition to regular utility operations and the Early Action Program.

The Overflow Control Plan includes the following improvements:

- » Continue the rehabilitation and replacement of aging pipes (some parts of the system are nearly 100 years old);
- » Expand the private sewer repair program to address rainwater from private sources reducing long-term costs;
- » Upgrade treatment facilities and improve energy efficiency of treatment operations;
- » Target projects to reduce SSOs where citizen most likely would come in contact with them;
- » Increase sewer maintenance staffing to reduce overflows and improve system reliability;
- » Update and adapt the improvement program through enhanced monitoring of system performance; and
- » Continue public outreach to involve the community in the program.

Funding the Overflow Control Plan

- » Springfield's wastewater infrastructure is a vital community asset that requires additional investment. More stringent enforcement of environmental regulations requires additional improvements to the system. Wastewater rate increases are needed to cover these costs.
- » Springfield is in the process of implementing its Early Action Program and will complete this phase of improvements in 2017. Rate increases were approved through 2017 to fund this program.
- » To define the next phase of improvements, Springfield has developed the draft Overflow Control Plan, which will be submitted to regulators in December. If approved, it will require Springfield ratepayers to fund additional improvements totaling \$200 million between 2016 and 2025. Regulators could require more (or different) improvements that would result in higher costs.

How can you participate?

- » Invite an Environmental Services staff member to attend your organization and present information on this important issue.
- » Learn more by going to the City's website at www.springfieldmo.gov/cleanwater.
- » Disconnect your downspouts, area drain and sump pump from the wastewater system.
- » Become informed about the issue.



For more information, contact Environmental Services
Clean Water Services Division

(417) 864-1923

www.springfieldmo.gov/cleanwater

This information plays an important part in the
Springfield - Greene County, Mo
Integrated Plan for the Environment



In 2012, The U.S. Environmental Protection Agency (EPA) released its "Integrated Municipal Stormwater and Wastewater Planning Approach Framework" which emphasized a commitment to work with states and communities to implement an integrated planning approach to address environmental objectives. In response to this opportunity, leaders from the City of Springfield, Greene County and City Utilities developed a local approach to integrated planning. This holistic approach proposes to use local knowledge to examine our environmental resources in regards to air, water and land taking into account affordability.

For more information, visit www.springfieldintegratedplan.com.