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Dear Neighbors,

Our community is about to embark on one of the largest public works projects in our history - a comprehensive sewer improvement program that will leave our City cleaner, safer and more pleasant. Wapakoneta is not alone in this effort. We will join more than 772 communities across the country that must make these much-needed upgrades, as required by Clean Water act regulations and state and federal mandates.

Every year, when it rains, millions of gallons of raw sewage mixed with storm water overflow from our sewers into the Auglaize River. This happens because our sewer system – like the vast majority of other systems in America – was built to perform that way. When the system fills up during storms and the sewer pipes and treatment plants become overloaded, the excess water is sent directly into the Auglaize River.

In the past, that was OK. Today, it's not. We expect more. We demand more. We deserve more.

The City of Wapakoneta has developed a plan to reduce these sewer overflows and improve public health. This Long Term Control Plan takes a long-range view at the problem and outlines long-term solutions. The program is now available to be presented to the public.

The work proposed in the Long Term Control Plan will affect each and every one of us. We strongly encourage you to learn more about the issues and what Wapakoneta is proposing to do about them.

This guide will get you started. It outlines the problems and the recommended solutions. It also identifies where the work will take place and how much it's going to cost. To learn even more, we urge you to attend one of the community meetings Wapakoneta will be hosting over the next couple of weeks.

As residents and business owners in the community, the sewer system belongs to you. This is your chance to participate in a project that is going to impact you, your family and our community for generations. This is about more than just sewers – it's about the quality of life in the community we all call home.

The Honorable Rodney Metz Mayor City of Wapakoneta

Rex Katterheinrich, P.E. Director of Public Service and Safety City of Wapakoneta



## Investing in Your Quality of Life

When it rains, raw sewage mixed with storm water is spilling into the Auglaize River that you, your children and your neighbors rely on for recreation and aesthetics, and that much of our natural environment relies on for survival. As a community, we cannot ignore this threat to our public health, prosperity and quality of life.

As a user and an owner of the sewer system, you pay a service fee every month. This fee is your individual investment in the care and maintenance of this very important community resource.

But our sewer system is old. It's deteriorating in some areas. In others, it's not big enough to handle all the storm water that enters the system. Just as we all invest in maintaining our cars and homes, we need to invest in major sewer system improvements to ensure it will continue to meet our needs today and in the future.

The City of Wapakoneta has developed a comprehensive Long Term Control Plan to address this public health issue. Through this program, you – as an owner of the sewer system – will be reinvesting in this vital piece of our community's infrastructure and making a positive impact on the quality of life we all enjoy.

The Long Term Control Plan is your program. It's your investment in your community. Find out more. **Get involved.** 

# A Regulatory Commitment

Wapakoneta's Long Term Control Plan is a necessity. Not just because it is the right thing to do, but also because it is mandated by state and federal agencies.

For several decades now, Wapakoneta has been concerned about sewer overflows and has been working to reduce the. In 1994, Ohio EPA implemented the U.S. EPA's Combined Sewer Overflow (CSO) Policy. This policy required the reduction or elimination of CSO discharges to our nation's waterways.

Our Long Term Control Plan will require the reduction of combined sewer overflows in a typical year.

Our approach and the subsequent development of the Long Term Control Plan was to balance potential costs with benefits and environmental impacts. We established three goals:

- 1 Meet state and federal regulations by comply with the Clean Water Act.
- 2 Improve local water quality
- 3 Keep efforts affordable for our ratepayers

These goals have guided all of our activities up to this point and will carry on through the Long Term Control Plan implementation.

Wapakoneta will continually report its progress on the Long Term Control Plan to the state and Ohio EPA. They are responsible for providing final program approval, overseeing its implementation and ensuring that Wapakoneta continues to meet the goals set forth in the Long Term Control Plan.

## What is the Problem?

Millions of gallons of untreated sewage mix with storm water overflow from our sewers into the Auglaize River each year.

Overflows happen when storm water overloads our antiquated and aging sewer system, typically after rainstorms. To relive pressure in the system and minimize backups into homes and businesses, excess sewage is released into local waterways.

Approximately 44.9 million gallons of untreated sewage and storm water enter our waterways in a typical year. Overflows occur as many as 129 times per year, with fewer overflows occurring in dry years and more in wet years.

- Overflows cause offensive odors and leave toilet paper and other unsanitary debris along the banks of some streams.
- Although the water may not be safe in wet weather, people can access the river near where sewers overflow.
- Habitat for fish and other aquatic life can be degraded.
- Overflows from combined sewers are the primary source of *E. coli* bacterial in affected waterways, although urban storm water runoff also contributes to the problem.
- You can get sick if you swallow water that has high levels of *E. coli* bacteria in it.

State and federal regulations require Wapakoneta to develop long-term plans to reduce overflows from combined sewers. Wapakoneta's Long Term Control Plan addresses these issues. Its goals are to:

- Reduce sanitary sewer system overflows to four (4) in a typical year.
- Reduce and control combined sewer overflows in an affordable and cost-effective manner.

## Why Do Our Sewers Overflow?

Wapakoneta's first sewers were built in the 1800s to carry rainwater away from homes, business and streets. In those horse-and-buggy days, our city didn't have sewage treatment or even indoor plumbing.

Later, when indoor plumbing came, home and business owners hooked their sewerage lines to the existing storm sewers, combining storm water and raw sewerage into one pipe. The pipes emptied directly into the nearest river, stream or ditch, which carried the untreated sewage to the Auglaize River.

Our first wastewater treatment plant began operating in 1936. The combined sewer system remained in place, and overflow pipes were installed to relive the system when its gets overloaded – or full of too much water – during wet weather.

During dry weather, this "combined" sewer system works much like a sanitary (or sewage-only) sewer – carrying all waste to the treatment plant for treatment and disinfection. However, when it rains, these sewers can be overloaded with incoming storm water. When this happens, the sewers are designed to overflow into the Auglaize River to prevent sewage from backing up into homes and businesses.

Today, we build separate sewers for storm water and sewage. However, even sanitary sewers can develop cracks and breaks, or become clogged by tree roots or grease. Sometimes an area's population grows beyond the capacity of the sewer system. These problems can cause the sanitary sewers to overflow into waterways or even backup into basements.

# The Plan

Wapakoneta's Long Term Control Plan is made up of 2 or 3 individual projects. Together, these projects will:

- Eliminate all but 4 combined sewer overflows in a typical year.
- Reduce sewage odors in rivers and streams.
- Reduce sewer debris in streams.
- Help make streams safer and more pleasant after heavy rains.

Projects will be completed along the South Interceptor which is along the south bank of the Auglaize River, from the City's Wastewater Treatment Plant to Water Street. The work will be completed over 10 to 15 years, beginning in 2009. The total construction cost is currently estimated at approximately \$20.7 million, measured in 2008 dollars.

### **Project Selection Process**

Wapakoneta partnered with one of the nation's leading wastewater management consultants to select the best solutions to be included in the Long Term Control Plan.

Together, we conducted comprehensive water quality studies, researched pollution levels and their impacts in local waterways, developed and analyzed sophisticated computer models of the sewer system and Auglaize River, and performed comprehensive cost-benefit analysis of possible alternatives. We studied a broad range of alternatives and assessed each based on a number of criteria:

- Impact on existing conditions
- Effect on general public heath and water quality
- Expected future needs
- Community values
- Cost/benefit analyses
- Affordability

### **Program Implementation**

The projects included in the Long Term Control Plan will be completed over a period of 10 to 15 years, beginning in 2009.

It is physically and financially impossible to complete all the projects at once. Instead each project will be completed in order of priority.

### **Next Steps**

Following a comprehensive review of the Long Term Control Plan by the City of Wapakoneta, and the general public, we will make any necessary modifications to the plan and submit a final version to the state government for review by the end of February. We expect to begin construction once the Ohio EPA has approved the plan – likely in 2009.

# **Project Categories**

The projects included in the Long Term Control Plan fit within two categories: New Sewers and Storage Facilities.

#### **New Sewers**

New sewers will either replace existing sewers that are old, deteriorating or too small, or supplement existing systems at locations where additional capacity is needed. The goal for installing new sewers is to improve the system's ability to carry increased volumes of wastewater to our treatment plant.

### Storage Facilities

Instead of being released directly into rivers and streams, excess wastewater can be diverted to storage facilities during period of heavy flow. Storage facilities will hold the sewage until the sewer system is able to handle the additional volume. Wastewater can be stored in above or below ground tanks built in different sizes to accommodate different size storm events. In some cases, sections of the sewer system not being used at capacity during wet weather can also be used as temporary storage facilities.

## The Value of Your Investment

To implement the Long Term Control Plan in its entirety, our community must make one of the largest public works investments in our history. At a construction cost of approximately \$20.7 million, this investment can't and won't be made all at once. Instead, it will be spread across the life of the program.

Our program estimate encompasses all costs related to implementing the individual projects throughout our service area. Together, these projects will protect public health and improve the quality of life in our neighborhoods. More specifically, these projects will:

- Eliminate all but 4 combined sewer overflows in a typical year
- Reduce sewage odors in the Auglaize River
- Prevent toilet paper, sanitary waste and other unsightly materials from being released into the environment
- Help make streams safer and more pleasant after heavy rains

## Are Sewer Overflows a Problem in Other Cities?

Yes, many other cities are facing the same sewer problems that Wapakoneta is facing.

Combined sewer systems serve roughly 772 communities containing about 40 million people, according to the U.S. Environmental Protection Agency. Most communities with combined sewer systems are located in the Northeast and Great Lakes regions and in the Pacific Northwest, as shown in the map on the right. Ohio has about 87 such communities, ranging from small, rural villages to large metropolitan areas like Columbus, Cleveland, Cincinnati and Toledo.

Sanitary sewer overflows affect every city with a sewer system, but especially those areas with older sewers that have deteriorated and aged over time.

Like Wapakoneta, other cities are working to resolve their sewer overflow problems.

# Where Do Overflows Occur in Wapakoneta?

Wapakoneta sewers spill a mixture of storm water and raw sewage into the Auglaize River as many as 129 times in a typical year.

Wapakoneta's three combined sewer overflows are located at Hamilton Street, Park Street and Water Street. All of the CSOs discharge into the south side of the Auglaize River.

# Paying for a Cleaner Future

Our local sewer system belongs to you, its customers. Wapakoneta does not receive tax money or appropriations to pay for the system's operation or improvements. Instead, we are funded entirely by the rates paid by system users. Wapakoneta works very hard to provide the highest quality service at the lowest possible price.

The changes recommended in the Long Term Control plan are necessary...not only to improve efficiency, but also to improve our community's quality of life. We have to do this, and we will have to pay for it together.

Sewer rates have not increased. However, we anticipate that they will and we expect rates will continue to rise over the life of the program.

We don't like that any more than you do. We know, however, it is absolutely necessary if we are to stop the flow of raw sewage into our waterways.

We will work to limit the annual rate increases over the course of the project. But, keep in mind that predicting rates five years from now, much less 15 or 20 years from now, is difficult. There is a lot on uncertainty. The economy, construction costs, the size of our customer base and inflation are all question marks. We will constantly look for the best solutions at the fairest price, keeping your safety – as well as your pocketbook in mind.

In fact, the community's ability to pay has already been a key factor in our decision making. Keeping service rates affordable for customers is one of our primary goals. And, proposed solutions were evaluated based on anticipated costs to the community. Those costs helped us determine which projects we ultimately selected for the program.

We want a great system. But we want an affordable system too. So we'll continue to look for ways to minimize costs and streamline our operations. We will also seek other means to supplement program funding. In addition, we are actively supporting a growing movement to create a national trust fund for sewer improvements. This fund would help communities like ours subsidize the costs of implementing federally mandated sewer system improvements and programs like Wapakoneta's Long Term Control Plan.

### Did you know?

The rates Wapakoneta customers pay depend on the number of people using the system. The more people paying for the service, the more Wapakoneta can spread costs among its customers. If the number of residents grows or major businesses move into our community, costs per customer could decrease. However, if people and companies leave our community, the costs per customer may increase.

# **Frequently Asked Questions**

#### Q: What is a sewer overflow?

A: A sewer overflow is a discharge of raw sewage mixed with storm water into local waterways. Overflows occur when there is too much wastewater for the sewer system or treatment plants to handle, such as after heavy rainstorms. To relieve pressure in the system and minimize backups into homes and businesses, excess sewage is sent into local waterways. State and federal regulations require Wapakoneta and sewer agencies across the country to reduce overflows and meet Clean Water Act requirements.

### Q: Why are overflows a concern?

**A:** Sewer overflows increase the level of *E. coli* bacteria in our streams. *E coli* is an indicator that human or animal waste and disease-causing organisms are in the water. Some *E. coli* in a waterway is natural. However, high levels have been linked to stomach cramps, diarrhea and other gastrointestinal illnesses among people who ingest or swallow contaminated water during recreation.

### Q: Are we required to eliminate sewer overflows?

A: There are different requirements for managing overflows from the combined sewer system (CSOs) and overflows from the sanitary sewer system (SSOs). The volume coming from CSOs is much greater than from SSOs; however, regulations are more stringent for SSOs since sanitary sewers are not supposed to release untreated sewage into the environment at all. Our goal is to eliminate SSOs and implement affordable controls for CSOs.

### Q: What is a combined sewer?

**A:** A combined sewer is a sewer that carries both storm water and sanitary sewage (wastewater from your drains and toilets) to a treatment plant for treatment. A combined sewer overflow (CSO) is a release of untreated wastewater from a combined sewer directly into the environment. Typically, this happens during a rainstorm.

### Q: What is a sanitary sewer?

**A:** A sanitary sewer is designed to transport only sanitary sewage (wastewater from your drains and toilets) to the treatment plant for treatment. A sanitary sewer overflow (SSO) is a discharge of raw, untreated sewage from this system into local waterways. Like CSOs, this typically happens during rainstorms.

### Q: Do other cities have sewage overflows:

**A:** Yes. Most cities in the United States are in the same situation as Wapakoneta when it comes to sewer overflows. Most communities with combined sewer systems, like ours, are located in the Northeast and Great Lakes regions. Ohio has about 87 such communities, ranging from small, rural villages to large metropolitan areas like Cleveland, Cincinnati and Toledo.

#### Q: How much will the Long Term Control Plan cost?

**A:** The estimated construction cost to implement the Long Term Control Plan is approximately \$20.7 million (in 2008 dollars).

#### Q: How much are my rates going to go up?

A: Wapakoneta expects service rates will continue to rise over the life of the Long Term Control Plan. We will work to limit increases. But, predicting rates five years from now – much less 15 or 20 years from now – is difficult. There is a lot of uncertainty. The economy, construction costs, the size of our customer base and inflation are all question marks.

However, we will constantly look for the best solutions at the fairest price, keeping your safety – as well as your pocketbook in mind.

### Q: When will you start to fix overflows?

**A:** We have already begun. Wapakoneta has been concerned about overflows for several decades and has been continually improving the sewer system to keep raw sewage out of our waterways. In fact, two overflow points were removed in 2003.

### Q: How can I help improve water quality?

A: We need you to join us in solving the problem of raw sewage and pollution in our waterways. Everyone has a role: individual citizens, government, non-profit organizations, businesses, industry and community groups. You can help by:

- Disposing of household chemicals and used oil properly, and not pouring them down the drain or down a storm sewer;
- Inviting the Public Works Department to make a presentation to your civic association or neighborhood group;
- Learning how you can reduce water use in your homes and businesses, and helping keep pollution out of the storm drains.