Frequently Asked Questions

What is a Consent Decree?
A consent decree is an agreement or settlement to resolve a dispute without admission of liability. The parties ask the court to approve their agreement, and the court maintains supervision over the implementation of the decree which may include monetary exchanges and/or restructured interactions. Consent decrees are frequently used by federal courts to ensure that businesses and industries adhere to regulatory laws.

What is required by the Consent Decree?
The Consent Decree requires Tyler Water Utilities to develop and implement a Capacity, Management, Operation and Maintenance (CMOM) Program.

What is a CMOM program?
CMOM is a program that will provide the framework for TWU to perform a comprehensive review of our wastewater collection system and enhance our current operation and maintenance practices so that we can:

- Better manage, operate and maintain its wastewater collection system.
- Better identify areas in the collection system with potential capacity constraints.
- Better respond to unauthorized discharges.

Components of the CMOM program will include:

1. System Cleaning:
   - Develop schedules for cleaning every pipe in the sanitary sewer system a minimum of once every ten years.
   - Identify pipe segments that may need cleaning more frequently (quarterly, biannually, annually).
2. Condition Assessments:
   - Pipe assessments - TV inspections and/or smoke testing of all 690+ miles of sewer mains in the system.
   - Manhole assessments - Visual and/or TV inspections of all 9000+ manholes in the sewer system.
   - Lift station assessments - Visual and operational inspections of every pump and force main at all 22 lift stations.

- Develop schedules to repair or replace pipes, manholes and pumps that are identified during the various assessments that are in need of repair or replacement.

3. Capacity Assessments:
   - Update our existing computer model to assess the capacity of the existing sanitary sewer system using several different scenarios, such as existing and anticipated future wastewater flows during dry and wet weather.

   - Develop schedules to replace pipes or pumps that are identified by the model to be undersized.

4. Develop new procedures or update existing procedures for:
   - Routine and preventative maintenance of the sewer system.

   - Controlling grease and roots in the sewer system.

   - Employee training.

   - Responses to sewer overflows.

What is the benefit of implementing the program?
There are many benefits to implementing this program. It will:

1. Provide comprehensive, written documentation of TWU's operation and maintenance procedures.

2. Ensure that all staff are properly trained.

3. Allow TWU to be proactive rather than reactive as we will be able to:
   - Identify and repair damaged sewer mains before they break.

   - Identify and clean blockages from sewer lines before they cause an SSO.

4. Integrate operations, capital planning and budget management for better control of the wastewater system capital improvements program.

The primary goal is to reduce or eliminate sanitary sewer overflows (SSOs) by:

- Enhancing our existing maintenance program by ensuring routine inspections and cleaning of the entire sanitary sewer system,

- Upgrading our existing sanitary sewer infrastructure when needed with a well-defined repair and replacement program, and

- Ensuring adequate capacity in our system now, and in the future as Tyler continues to grow.

Our goal is to make significant capital investment in our sewer infrastructure now, creating a sustainable system that serves the health and safety needs of Tyler residents and businesses and protects our environment for years to come.

Why do we need it?

On December 1, 1917, the City of Tyler purchased the privately owned Tyler Sewer Company which included 62,877 linear feet, or nearly 12 miles, of sewer mains in sizes ranging from 4-inches to 10-inches in diameter. Since then, Tyler has grown in both size and population and the wastewater collection system has necessarily grown along with it. Today, the City owns and maintains over 690 miles of sewer mains in sizes ranging from 6-inches to 54-inches in diameter and more than 9,000 manholes, as well as 22 sewage pump stations (also known as lift stations). In total, these pipes, manholes and lift stations make up the City's wastewater collection system that conveys untreated sewage from all parts of the City to one of two wastewater treatment plants.

As wastewater infrastructure ages, weather and soil conditions may cause pipes and manholes to crack and break. Sewer pipes also experience blockages from grease, roots and other debris that can cause overflows. And, as cities grow, certain segments of the sewer system may no longer be adequately sized to carry the expected wastewater flows generated in that area.

Pipes, manholes and pump station equipment may need to be repaired or replaced in order to reduce or eliminate future releases of untreated wastewater.

What is the average age of the City's sewer collection system?

A breakdown of the age of the sewer system is as follows:

Age Range (years)	Percent of System
0 – 10	14%
10 – 20	9%
20 – 30	8%
30 – 50	22%
50+	47%

Approximately 69% of the existing system is more than 30 years old.

How much will these improvements cost?
It will be difficult to accurately estimate the cost of the needed sewer system improvements until all of the condition and capacity assessments are complete, as we won't know the extent of the needed repairs and replacements until then. However, at this time, we are anticipating to spend a minimum of $28.5 million to correct existing deficiencies within the existing sewer system. This will include repair or replacement of broken pipes, manholes and pump station equipment and replacement of undersized pipes and pumps to ensure adequate capacity.

Why has it taken so long for this program to happen?

We did not receive a draft agreement from the EPA until 2014, five years after they initially approached us. During that time, we provided them with copious amounts of requested information so that they could understand our system.

What we provided them showed that the City of Tyler has portions of the CMOM program already in place. However, we had to wait to launch the comprehensive CMOM program until our agreement with the EPA was finalized, ensuring that we correctly fund projects that have been verified as necessary and sustaining.

The CMOM program will tie everything together, ensuring that our procedures are updated and that we have a comprehensive program to maintain our system. Importantly, as a result of negotiations, our plan will not be a "one-size fits all" approach. Rather, it will address the specific needs and challenges of our community.

What is a sanitary sewer?
Sanitary sewers are the transport for wastewater (used water from sinks, baths and toilets) that goes down the drains of our homes and businesses.

What is an SSO?
A sanitary sewer overflow (SSO) occurs when untreated wastewater is discharged from a sanitary sewer into the environment prior to reaching sewage treatment facilities.

Why do sewers overflow?
There are many reasons why an SSO occurs. Frequent causes of SSOs include:

1) <u>Blockages</u>:
   Blockages in sewer lines may occur for a variety of reasons, such as:
   - Accumulations of grease which can come from restaurants with inadequate grease trap systems or from private residences when citizens dispose of used cooking oils down a kitchen drain,

- Tree roots that enter a sewer line through the pipe joints or other cracks along the length of a pipe in search of water,

- Accumulations of dirt or sand that enters a sewer system through cracks in pipes and manholes, and

- Rags, wet wipes, diapers and other debris that are flushed down toilets instead of thrown into a trash can, or are intentionally put into the sewer system in an act of vandalism.

Blockages will disrupt the normal flow of the sewage resulting in a backup behind the blockage.

2) Infiltration/Inflow of Stormwater:
Infiltration and inflow occur in sewer systems when Stormwater enters into the system through joints, cracks or breaks in pipes and manholes. It can also occur when people remove the lids from manholes to drain an area of Stormwater. Excessive amounts of Stormwater may create more flow in a sewer system than it was designed to carry which may result in discharges when the system is too full to contain all of the water in it. Infiltration and inflow may also carry dirt or sand into the sewer system which may result in a blockage.

3) Malfunctioning equipment and/or electrical power failures:
Sewage pump stations are designed to reduce SSOs through the use of redundant equipment and alternate power sources. Unfortunately, even those protections cannot completely eliminate SSOs, particularly during extreme weather conditions.

4) Broken sewer lines or manholes:
Sewer lines and manholes may break or become damaged due to age, weather-related events or other types of accidents. For example, sewer lines that run across or near creeks may be damaged by floating debris or break when creek banks are eroded leaving the sewer lines or manholes without adequate support. Other examples include manholes that are damaged when they are hit by vehicles.

What are the causes of Tyler's SSOs?
Data from the years 2001 through 2016 show that grease and roots are the two main causes of SSOs in Tyler's system, as those make up 65% of all SSOs.

SSO's By Cause 2001 through 2016 to-date	
Cause	**Average**
Grease	42.29%
Roots	22.86%
Miscellaneous Debris	11.87%
Broken Main	8.40%
Erosion	3.68%
Unknown	3.64%
Rags	1.68%
Power Failure	1.67%
Dirt/Sand	1.00%
Damage By Others - Unintentional	0.93%
Damage By Others - Intentional	0.76%
Excessive Rain	0.63%
Equipment Failure	0.59%
Broken Manhole	0.00%

Will the City of Tyler have a new policy towards grease traps?
We will be developing a comprehensive program to address Fats, Oils and Grease (FOG), which will include a more comprehensive FOG control ordinance. Currently, grease traps are required in accordance with the International Plumbing Code which only specifies sizing requirements. However, City ordinances provide little enforcement authority so that City staff can inspect grease traps and ensure that they are properly maintained. At this time, we are reviewing ordinances from other cities but do not have a draft ordinance of our own. We don't anticipate significant changes related to the types of facilities that are required to have a grease trap or to the sizing requirements of grease traps. However, we will be developing better inspection and record-keeping procedures so that all FOG generators covered by the ordinance are inspected annually, at a minimum. The impact of an enhanced inspection program may mean that facilities will need to pump their grease traps more frequently than they do now.

Will the City of Tyler have any funding or utility credits available for small businesses to retrofit their operations?
At this time, we do not have funding available to offer to small businesses that may need to retrofit the operations. However, that may change as we further develop our FOG program.

How many SSO's have occurred?
From January 1, 2005 through September 30, 2016, the City of Tyler has reported 577 SSO's, or an average of 48 per year.

Where and why did the SSO's occur?
SSOs have occurred throughout the City, but primarily in residential areas and areas with a high concentration of restaurants. The two main causes of SSOs in Tyler are blockages in the sewer main due to either tree roots growing into the lines and/or accumulations of fats, oils and grease that are put down drains.

Did the City of Tyler construct SSO Locations?
Yes, prior to the implementation of the Clean Water Act in 1972.

If so, why?
To relieve sanitary sewer back-ups due to blocked sewer lines which could have resulted in overflows in people's homes. At the time, this was common practice.

How many are there?
Less than 10.

What were the costs involved in these activities?
As these were constructed prior to 1972, we do not have record of those costs. Our estimation is that they were minimal.

Was this construction permitted at the time they were created? Are they still in use?
These overflows were created prior to the passage of the Clean Water Act of 1972 and were not prohibited at the time of construction. They are no longer in use and have been sealed.

Where did the diverted wastewater flows go?
Various receiving streams.

Are SSOs harmful?
They can be. Untreated sewage contains a mixture of human waste and wastewater from non-industrial human activities such as bathing, washing, and cleaning. Untreated sewage can pose a risk to human health since it contains waterborne pathogens that

can cause serious human illness. It can also pollute aquatic ecosystems and kill aquatic plants and animals by depleting oxygen in the water to levels too low to sustain life.

Sewage backups that occur inside your home can be hazardous to your health and can result in expensive cleaning and plumbing repair bills. Sewage backups that occur outside in your yard or in the street can be hazardous to the environment. Keeping untreated wastewater inside the sewer pipes protects the health and safety of our community and the quality of our drinking water.

If you think you have experienced an SSO event, visit https://www.cityoftyler.org/Departments/TylerWaterUtilities/WaterServiceCenter/SewerProblems.aspx.

Have these SSOs negatively affected our drinking water quality?
There has been no impact on the quality of the potable drinking water produced and distributed by the City of Tyler.

Whenever possible, our crews contain the spill and then use a vacuum truck to vacuum up as much of the untreated wastewater as possible. After the spill is removed, the site is flushed with clean (potable) water and then disinfected by spreading dry chlorine granules - similar to what is used in swimming pools - around the site.

If the spill cannot be contained and vacuumed up for whatever reason, the spill is diluted as much as possible by flushing the site with clean water and the site is disinfected. Any untreated wastewater that enters a water body will be treated and disinfected at a water treatment plant before being distributed throughout the potable water system.

To learn more about Tyler's water quality, visit https://www.cityoftyler.org/Departments/TylerWaterUtilities/WaterProduction/WaterQualReportsPublicNotices.aspx.

Could SSOs have contributed to the events that lead to the haloacetic acid spike in 2015?
No. Our SSOs have declined over time, while we experienced a spike in haloacetic acids within our water distribution system in late 2015. Haloacetic acids are a common by-product of the disinfection process and are formed by the interaction of naturally occurring organic materials in the raw water and the chlorine compounds used for disinfection. We believe that the unusually heavy rainfalls experienced in 2015 washed large amounts of organic materials into the lakes that are used as the raw water source for the City.

What is a private service line?
A private sewer service line (also known as a private lateral) is a pipe that takes an individual building's wastewater to the public sewer main in the street. These private laterals are owned by the building owner and are essential for directing wastewater away from homes, churches, schools and businesses to a publicly owned wastewater collection and treatment system.

Will the City repair my private sewer line?
Owners of buildings own the private service line from the building up to, and including, the point of connection at the public main and are responsible for maintenance of the full length of the private service line. However, the City may assist owners with repairs when they occur in the portion of the service line that is located under a City street.

How do I maintain my private sewer line?
Property owners are encouraged to inspect their private service line at least once every five to 10 years to determine if it is defective or if a blockage is building up in the line. If problems exist, a licensed plumber should be hired to correct the problem.

What would it cost to build the current system we have in today's dollars?
The City's current sanitary sewer system includes 690 miles of sanitary sewer mains, ranging in size from 6-inches to 54-inches, more than 9000 manholes and 22 lift stations. It would take roughly $330 million dollars to build this system in its entirety from scratch today.

What does it take to adequately maintain a system of this size?
There are 25 authorized positions in the Wastewater Collection System department who are responsible for the day-to-day operation and maintenance of the sewer mains and manholes. In addition, there are 3 authorized positions in the Water Quality department who are responsible for the day-to-day operation and maintenance of lift stations. The total annual budget for these positions, is approximately $2.3 million.

When did we first engage with the EPA over this issue?
2009. However, the City of Tyler has been actively working to satisfy increasing EPA regulatory requirements since 1998.

What regulatory changes have we seen over the years?
In 2001, the EPA attempted to pass a rule that would define SSOs and implement the "capacity, management, operations and maintenance" (CMOM) program. EPA's administrator signed the notice of the proposed rule on January 4, 2001. The White

House declined to proceed with this proposed rule and it was never filed with the federal register.

After the rule was dropped, EPA has negotiated a series of Consent Decrees that require municipal wastewater system operators to implement the CMOM program in order to address SSOs or face the threat of a lawsuit for violations of the Clean Water Act, with fines up to $37,500 for each violation.

Is it possible to eliminate all SSOs?
While a great number of SSOs may be reduced or eliminated through a comprehensive maintenance program, it may not be possible to eliminate all SSOs.

Unfortunately, the causes of some SSOs are completely out of our control. Tyler has experienced SSOs in the past due to accidental damage by others, such as contractors who may break a sewer line in the course of their construction on an unrelated project. In other instances, we have experienced vandalism where manhole lids are removed and foreign objects such as bricks, wooden boards, basketballs, and other unusual items are put into the system causing blockages. Finally, flooding and other extreme weather events may also result in SSOs.

In fact, the EPA made statements in the preamble to the CMOM rule that they proposed in 2001 noting the difficulty in eliminating SSOs:

> "The Agency notes that even municipal collection systems that are operated in an exemplary fashion may experience unauthorized discharges under exceptional circumstances." (Proposed Rule at 114)
>
> "EPA recognizes, however, that notwithstanding the best design and optimal operation and maintenance efforts, some discharges may yet occur that are beyond the reasonable control of the system operator." (Proposed Rule at 116)

What do Federal and State regulators require?
Under the Consent Decree, the City will be required to implement a Capacity, Management, Operation and Maintenance (CMOM) program. Components of the CMOM program will include:

1. System Cleaning
2. Condition Assessments and rehabilitation where needed
3. Capacity Assessments and rehabilitation where needed
4. Written CMOM manual

Any deficiencies in the sewer system that are discovered during the condition and capacity assessments will be evaluated and prioritized by severity so that multi-year plans for repairs or replacements can be developed over the 10 years of the Consent Decree.

Are SSO's unique to Tyler?
SSOs are not unique to the City of Tyler. The EPA estimates that "there are at least 23,000 - 75,000 SSOs per year (not including sewage backups into buildings) in the U.S." (https://www.epa.gov/npdes/sanitary-sewer-overflows-ssos)

The EPA currently lists 64 settlement cases with various cities, counties and other public and private utility providers across the country since 1999. (https://cfpub.epa.gov/enforcement/cases/)

How will Tyler eliminate SSOs?
The City of Tyler will endeavor to eliminate and prevent all SSO events within our system through the implementation of the CMOM. We acknowledge that even with adequate funding and a strong program plan, this will be difficult, as SSOs occur for a variety of reasons even within exemplary systems.

Does the consent decree specifically state a minimum of $28.5 million will be spent on improvements over the next 10 years?
The Consent Decree does not state a dollar amount to be spent on improvements over the next 10 years. Staff is estimating that a minimum of $28.5 million will be spent on improvements based on several projects that were identified by our Wastewater System Master Plan which was completed in 2010.

As part of the Master Plan, a hydraulic model of the sewer system was developed and several projects were identified to address future potential capacity issues. These projects included upsizing existing sewer mains and lift station pumps. Under the Consent Decree, TWU will be required to perform a capacity assessment by updating the hydraulic model using certain criteria that is specified in the Consent Decree, such as specific population and rainfall data that was not used for the original model.

The changes to those criteria may mean that one or more of the original $28.5 million in projects may drop off of our CIP or that the design parameters for one or more of the projects will change from the original recommendations. In other words, if the original model indicated that a 10-inch pipe needed to be upsized to a 12-inch pipe, the new model may indicate that it needs to be a 15-inch pipe or larger. It is also very likely that the new model will identify new, previously unidentified projects to address capacity issues in the system. Any deficiencies related to capacity that are found using the updated will be reviewed and ranked so that required improvements can be identified and prioritized.

In addition, we will be required to perform condition assessments using visual and TV inspections, smoke testing, etc., on every manhole, gravity main, force main and lift station pump in the system (i.e., "assets"). Any deficiencies that are found during these

condition assessments will also be reviewed and ranked for severity so that a required improvements can be identified and prioritized.

Until all of the condition assessments are complete and the hydraulic model is updated, we really have no way of knowing what types or number of improvements will be required or the full cost of those improvements.

How many projects on TWU's 10-year CIP plan will be directly related to this consent decree?
The current CIP includes projects that address needs related to water distribution and water treatment, as well as wastewater collection and wastewater treatment. The water distribution system, water treatment plants and wastewater treatment plants are not covered by the Consent Decree. However, projects to address those needs will remain on our CIP, as they currently are.

In addition, there will always be wastewater collection system projects that will need to be done that are not related to the Consent Decree but require capital funding. An example would be relocating sewer lines to eliminate conflicts with work performed for a TxDOT project, such as widening Loop 323. These projects are on the 10-year CIP under the heading "503-0745 - Wastewater Collection".

All projects that will be related to the Consent Decree will appear on the 10-year CIP under the heading "Bond Funding – Wastewater". The $28.5 million in projects that were identified by the original model, and that we expect will end up being required once the updated model is complete, appear under this heading. As we complete the condition and capacity assessments and identify additional projects that will be required under the Consent Decree, those projects will also be scheduled on the 10-year plan under this heading.

How many miles of sewer main are we replacing?
At this time, we don't know the extent of the needed repairs or replacements until the capacity and condition assessments are completed.

What is the expected timeline for making improvements to the system?
The capacity assessment, which includes updating our hydraulic model, reviewing and ranking deficiencies and identifying required improvements is expected to take about 3.5 years. All improvements identified by the updated model will need to be complete within the 10 years of the Consent Decree.

The condition assessments will begin immediately after the Consent Decree becomes effective. The lift station and force main condition assessments will be completed within the first 18 months, at which time any required improvements will be identified and prioritized. The lift station improvements will need to be complete within 5 years after

the effective date of the Consent Decree and the force main improvements will need to be completed within 4.5 years date of the Consent Decree.

The gravity main condition assessments will be completed during years 1 through 8 of the Consent Decree, with 1/8th of the system being assessed every year, while the manhole condition assessments will be completed during years 1 through 5 of the Consent Decree, with 1/5th of the system being assessed every year. At the end of every year, the deficiencies identified during that year's assessment will be reviewed and prioritized and any improvements will need to be completed within three years after that assessment is completed.

A summary of the assessment schedules is as follows:

Task	Time to Complete Assessment	Time to Complete Required Improvements
Capacity Assessment – Updated Hydraulic Model	3.5 Years after Effective Date	Within 10 years after Effective Date
Condition Assessment – Lift Stations	18 months after Effective Date	5 years after the Effective Date
Condition Assessment – Force Mains	18 months after Effective Date	4.5 years after the Effective Date
Condition Assessment – Gravity Mains	1/8th of the system to be completed every year during Years 1 - 8	Improvements identified after every assessment period must be complete within 3 years after the assessment
Condition Assessment – Manholes	1/5th of the system to be completed every year during Years 1 - 5	Improvements identified after every assessment period must be complete within 3 years after the assessment

Tyler Water Utilities recently completed a rate study that recommended rate increases due to an estimated capital improvements need of nearly $47 million. What part of that $47 million is directly related to this EPA consent decree?
The $47 million in projects referenced by the rate study performed earlier this year was based on every project listed in our CIP forecast for FY 16 through FY 20, whether related to the Consent Decree or not. The breakdown of the funding by department is as follows:

Department	FY 16	FY 17	FY 18	FY 19	FY 20	5-Year Total (By Dept)
741 - Admin	$422,500	$0	$0	$0	$0	$422,500
743 - Water Distribution	$1,102,652	$900,000	$1,581,160	$4,085,990	$2,484,350	$10,154,152
744 - Water Treatment	$920,813	$332,478	$608,750	$654,385	$65,000	$2,581,426
745 - Wastewater Collection	$2,912,161	$300,000	$705,000	$705,000	$300,000	$4,922,161
746 - Wastewater Treatment	$978,707	$897,600	$2,962,500	$1,900,000	$2,025,000	$8,763,807
747 - Lake Tyler	$453,590	$475,000	$0	$0	$0	$928,590
1746 - Sludge	$1,002,829	$820,000	$0	$0	$0	$1,822,829
Bond - Water	$4,233,656	$4,613,083	$0	$0	$1,029,845	$9,876,584
Bond-Wastewater	$0	$0	$1,980,410	$3,349,004	$2,155,920	$7,485,334
Total	$12,026,908	$8,338,161	$7,837,820	$10,694,379	$8,060,115	**$46,957,383**

Only the projects listed in the "Bond – Wastewater" department are related to the Consent Decree. The value of those projects through FY 20 is estimated at approximately $7.5 million, or 16% of the total 5-year CIP. However, as mentioned previously, those projects are based on a hydraulic model that was performed in 2010 and will likely change after the model is updated in the next couple of years. We will not know the full extent and value of the improvements that will be required until all of the capacity and condition assessments are completed. The final condition assessment will be in Year 8 of the Consent Decree.

Did the rate study adequately address the amount of money that it will take to complete all requirements of the Consent Decree?

The rate study was performed to look at the cash requirements for the entire system, including both operational expenses and capital outlay. The rate study recommended water and sewer rate increases through FY 20 to ensure that we adequately recoup the cost of providing water and wastewater services to our customers, as well as to ensure adequate cash reserves in accordance with City policy. The evaluation of the cash reserves took into account all of the projects on the CIP for the next 5 years.

All of the work required by the Consent Decree, including the condition and capacity assessments, as well as the capital projects that are developed as a result of those

assessments, will be paid for through a combination of cash generated through our rate structure and through the sale of bonds which will eventually be paid off with cash generated through our rate structure. TWU will evaluate water and sewer rates going forward at least every 4 to 5 years, and potentially every 1 to 2 years as projects begin to be identified to ensure that we can meet the obligations of the Consent Decree.

What is our current bond debt in our water utility enterprise?
Our current debt is $ 59,685,000. Total debt service, which includes principal and interest, is $82,828,781.

What is the annual principal reduction in said debt?
Principal reduction varies by year because of the combined bond series and refunding's that we have. The average annual principal reduction over the next ten years is approximately $3.5 million with a corresponding average debt service of $5.4 million per year.

What is the estimated increase in cash available for capital improvements as a result of the rate increase that took effect on October 1, 2016?
The rate increase initiated for FY 2017 is expected to generate $2,668,617 if elasticity demand stays flat. This will ensure the budgeted transfer of $4M to the Water Capital Fund.

What is the total cash available for capital improvements?
The average amount of cash available for projects over the past 5 years was $12,802,823. The estimated cash available for projects in FY 2017 is $15,283,826.

What is the ratio of cash investment versus debt over the next five years?
Currently, we are looking at 37% debt and 63% cash over the next five years.

How many new water utility staff have been hired in the last four years in anticipation of this consent decree?
We have added 10 positions to the Wastewater Collection Department since FY 2014, as follows:

	No. Positions Added
FY 14	4
FY 15	2
FY 16	2
FY 17	2

The department currently has 27 authorized positions. Of those 22 are currently filled and 5 are currently vacant.

What new sewer cleaning or repair equipment have we purchased in anticipation of this consent decree?
We bought a jet scan camera system in May, 2016 which mounts on the end of a vactor hose so that you can record simultaneously while you are a cleaning a line. This is an addition to our existing equipment which includes:

- 2 vactor (vacuum) trucks,
- 2 water rigs,
- 2 rod trucks, and
- 1 camera truck.

Are we now fully staffed to deal with cleaning the system? If not or do we have a plan to outsource cleaning?
Earlier this year, we awarded a contract for root control services and a separate contract for sewer cleaning and inspection services. These were small contracts for "pilot programs" so that we could evaluate these companies now to determine if we will be able to use them to achieve our goals during the Consent Decree. City staff is still evaluating the performance of these companies.

Have we been under other consent decrees in the past?
Tyler Water Utilities has not been under any Consent Decrees in the past. However, in 1999, TWU entered into an Administrative Order (AO) with the EPA relating to sanitary sewer overflows. As a result of that AO, we completed a system-wide evaluation which included TV inspections and smoke testing, we purchased a vacuum truck and TV camera truck to enhance our maintenance program and we completed several sewer system repair throughout the City. The AO was complete in 2005.

Do most consent decrees have the same 10-year period as ours will?
Based on our discussions with the EPA, as well as our review of other cities' Consent Decrees, it appears that most Consent Decrees are issued for 10-year periods.

Are other cities under Consent Decrees?
The EPA has a listing of significant civil and cleanup cases and settlements dating back to 1998 available on their website at:
https://cfpub.epa.gov/enforcement/cases/index.cfm.

This list includes both public and private utilities, as well as private industries, and includes cases involving several different environmental regulations (i.e. Clean Air Act, Clean Water Act, etc.).

Sorting the list to include only public and private utilities, and only cases involving the Clean Water Act, shows that there are currently 64 public and private utilities currently under a Consent Decree involving Clean Water Act violations.

The entities appear to be located all over the country and appear to be of all sizes. The smallest population on the list is represented by Unalaska, AK with a population of 4,319. The largest population on the list is represented by Miami-Dade County with a population of 2,496,435. The following is random sample of entities from the list:

City	Population
Unalaska, AK	4,319
Lebanon, NH	13,151
Hammond, IN	80,830
Atlanta, GA	463,878
Dallas, TX	1,300,092
Miami-Dade County	2,496,435

How many cities are currently under threat by the EPA?
Negotiations with the EPA are considered confidential as it relates to potential litigation. Therefore, there is no way to know how many cities across the country are currently negotiating with the EPA for Consent Decrees.

How many violations of any kind items are listed on the EPA website?
The EPA website provides a list of the cases and settlements since 1998 on its website. However, it does not provide the number of violations for the entities on the list. The EPA estimates that there are at least 23,000 - 75,000 SSOs per year in the U.S. (https://www.epa.gov/npdes/sanitary-sewer-overflows-ssos)

Has the EPA directly invested any money to improve any city's sewer system in the last few years?
The EPA does not provide money, either in the form of loans or grants, to cities needing to improve their sewer system.

How much in total fines has been collected from Americans in 2015?
According to the EPA's FY 2015 Enforcement Annual Report, they collected **$404 million** in combined federal administrative, civil judicial penalties and criminal fines during that fiscal year. Since the annual report does not provide any breakdown of that number, it is assumed that this includes both cities and industries, and is for violations of any type (Clean Water Act, Clean Air Act, etc.).
(https://www.epa.gov/enforcement/enforcement-annual-results-fiscal-year-fy-2015)