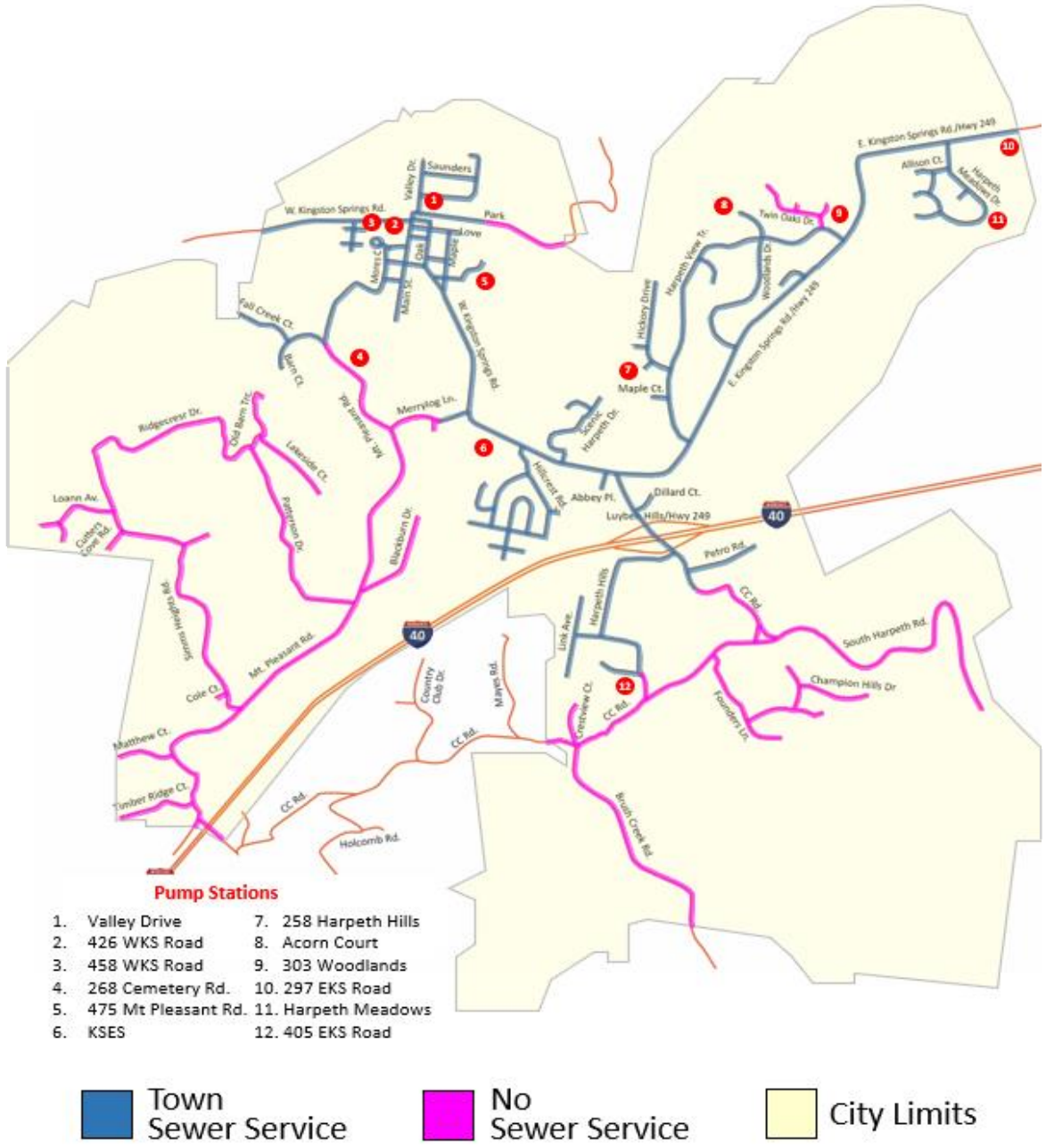
About the KS Sewer System

- System established in 1989
- Step System – Gravity Fed with 12 Pump Stations
- Treatment Plant with output into the Harpeth River.
- Number of Sewer customers: 750 (+/-).
- Daily, Weekly, Monthly testing and reporting to the Tennessee Department of Environment and Conservation (TDEC).



About the KS Sewer Enterprise Fund

Who pays for the sewer?

- Only the customers on the sewer system pay for the operations, repairs, and maintenance of the sewer system.
- The sewer system was established to provide a service and must be self sustaining through the sewer rates received.
- Laws or regulations require that the activity's costs of providing services, including capital costs, be recovered with fees and charges instead of taxes or similar revenues
- Pricing policies of enterprise funds are designed to recover the costs of the activity (including capital costs).

About the KS Sewer System: Operating and Revenue Expenses

	2017	2018	2019	2020	2021
Operating Revenue	$372,417.00	$430,599.00	$422,565.00	$471,912.00	$411,525.00
Operating Expenses	($253,664.00)	($219,594.00)	($250,398.00)	($293,091.00)	($230,677.00)
Depreciation	($100,835.00)	($107,851.00)	($107,850.00)	($138,693.00)	($142,407.00)
Total Income	**$17,918.00**	**$103,154.00**	**$64,317.00**	**$40,128.00**	**$38,441.00**

- The fund is established to provide a service and must be self sustaining
- 2 consecutive years of non-sustainability mandates TDEC oversight

About the Tennessee Department of Environment and Conservation

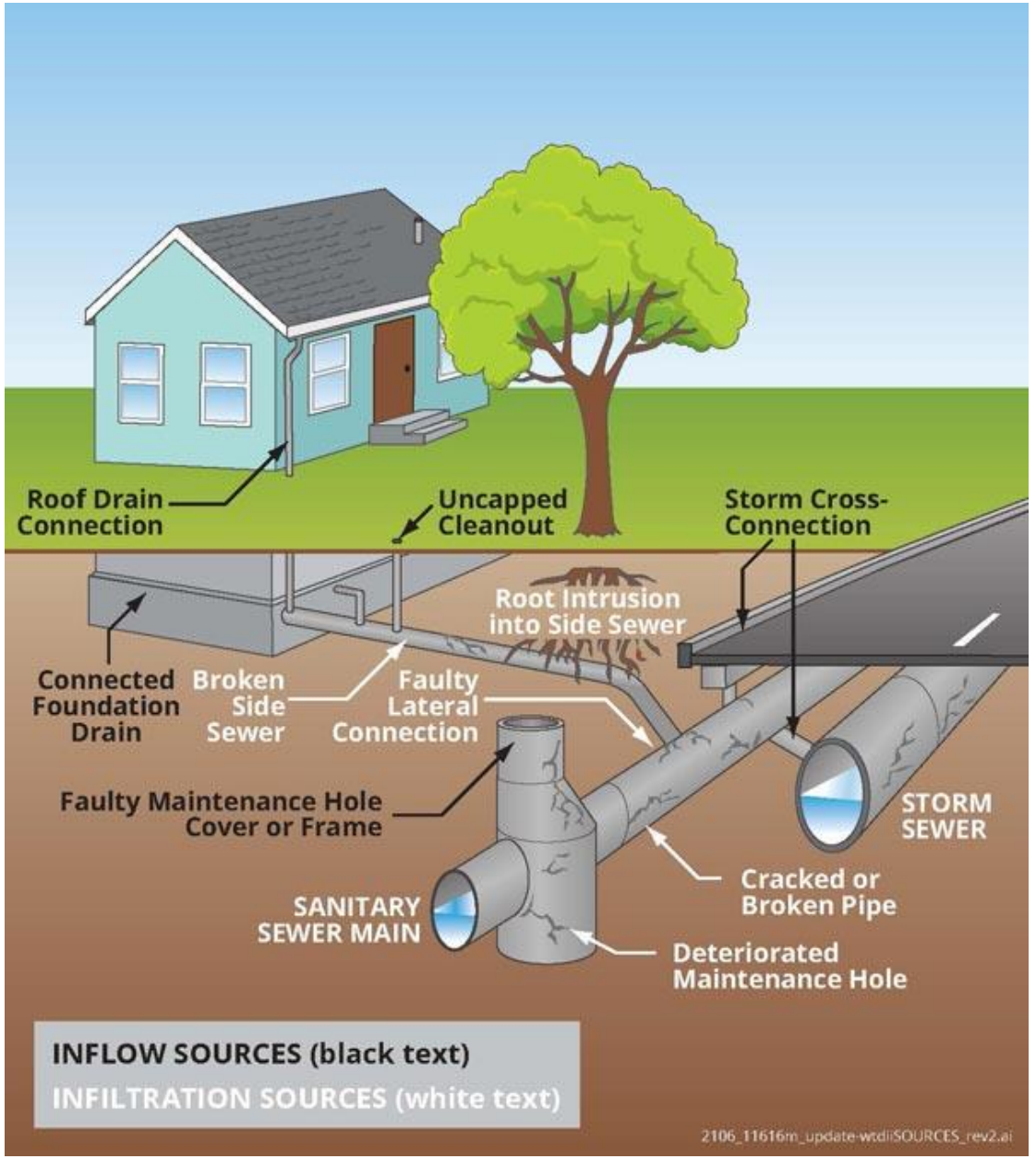
Department of
Environment & Conservation

TDEC monitors the environmental health of the State of Tennessee, collecting information and setting priorities to address opportunities for environmental improvements in a timely manner.

About the KS Sewer System

What is Inflow and Infiltration?

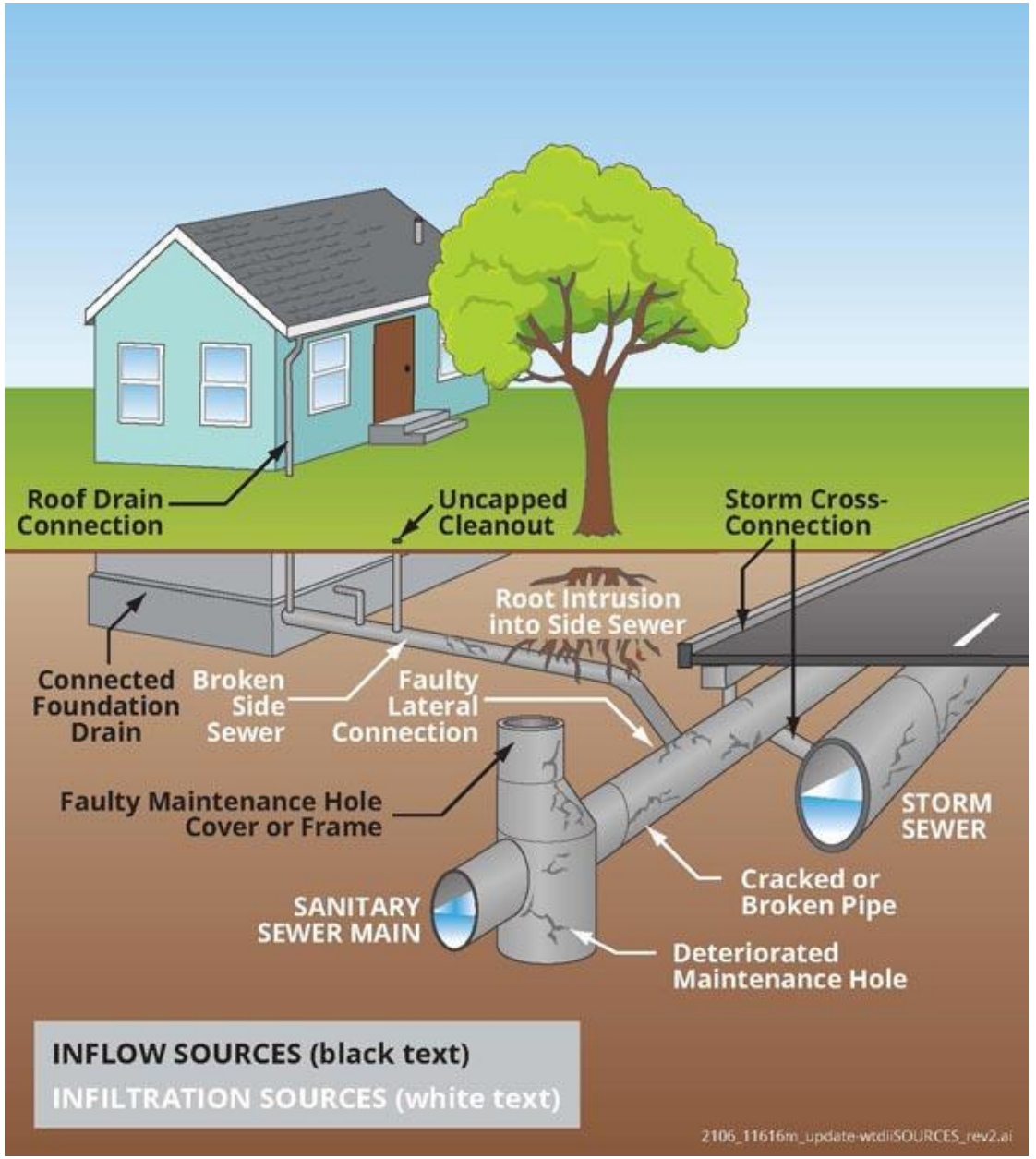
- **Inflow** is surface water that enters the wastewater system from yard, roof, and footing drains, and occurs as a result of storm events such as rainfall and contributes to excessive sewer flows.
- **Infiltration** is groundwater that enters sewer pipes through holes, breaks, joint failures, connection failures and other openings.
- ***Most I/I is caused by aging infrastructure that needs maintenance or replacement.***



About the KS Sewer System

Why is this Important?

- In 2020 the Town closed a Directors Order from TDEC it had received in 2016 after corrective action were taken.
- Although not part of the initial order the town was required to submit a plan of action related to repairing the system to limit violations in I&I.
- The Town continues to receive limit violations on inflow readings to our wastewater treatment plant that are higher than TDEC allows.



About Repairing the KS Sewer System: I&I Issues - 2-Step Process

1. Inspection and Mapping (estimated)

DESCRIPTION	UNIT COSTS	TOTAL COSTS
SCADA SYSTEM	$200,000.00	$200,000.00
SEWER CLEANING, INSPECTION AND MAPPING	$6.00	$696,000.00
MANHOLE INSPECTION AND MAPPING	$500.00	$58,000.00
CLEANOUT INSPECTION AND MAPPING	$150.00	$160,500.00
LATERAL INSPECTION AND MAPPING	$500.00	$390,000.00
SEPTIC TANK INSPECTION AND MAPPING	$750.00	$585,000.00
TOTAL ESTIMATED CONSTRUCTION COSTS		**$2,089,500.00**
ENGINEERING		$125,370.00
INSPECTION (PART TIME)		$50,000.00
LEGAL ALLOWANCE		$25,000.00
CONTINGENCY		$460,130.00
TOTAL ESTIMATED PROJECT COST		**$2,750,000.00**

2. Repair and/or Replace (estimated)

DESCRIPTION	UNIT COSTS	TOTAL COSTS
PIPE REHABILITATION	$100.00	$2,900,000.00
MANHOLE REHABILITATION	$3,500.00	$101,500.00
CLEANOUT REPLACEMENT	$3,000.00	$802,500.00
SEPTIC TANK EFFLUENT LINE REPLACEMENT	$35.00	$887,250.00
PUMP STATION LINE REHABILITATION	$5,000.00	$15,000.00
TOTAL ESTIMATED CONSTRUCTION COSTS		**$4,706,250.00**
ENGINEERING		$408,141.00
PRELIMINARY SEWER MAPPING		$15,000.00
SEWER MAP UPDATES		$15,000.00
INSPECTION		$200,000.00
PERMITING		$50,000.00
CONTINGENCY		$1,509,509.00
TOTAL ESTIMATED PROJECT COST		**$6,903,900.00**

About the KS Sewer System: Future Operating and Revenue Expenses

	2017-18	2018-19	2019-20	2020-21	2021-22
Rate Increase	3%	3%	3%	3%	3%

Rate Increases

- 2022-2023 Increase: **10% + ?**
- Estimated Repair/Replace cost: $9M+
- Each $1M Loan = **16% rate increase**
- Potential for 25%-35% increases each year

Other Options

- ARP funds of $800,000 over 2 years
- Leverage ARP Funds for potential $700,000 TDEC Grants

Only the people that use the service pay for the service and its maintenance

About Selling the KS Sewer System: How do you do it and who is interested?

Consultations on Process

- Municipal Technical Advisory Service (MTAS)
- Tennessee Association of Utility Districts (TAUD)
- Tennessee Comptrollers Office
- Tennessee Public Utility Commission
- Other Municipalities

Potential Interested Parties

- Other Utility Districts – No interest
- Other Municipalities – No interest
- Private Companies – Expressed interest

About Selling the KS Sewer System: How do you do it and who is interested?

Private Company Requirements

- Company appears before the Tennessee Public Utility Commission to establish ability to perform.
- Initial Rate Structure established in agreement with Town.
- Any future rate adjustments require company to undergo a Rate Case Proceeding with the Tennessee Public Utility Commission.
- Commission performs audit to assure proposed new rates are fair and reasonable.
- Process allows customers and stakeholders to provide input.
- Private Companies still fall under TDEC requirements for collection and output