

CONSENT DECREE UPDATE

YVONNE FORREST, DIRECTOR HOUSTON WATER



PURPOSE

together we create a strong foundation for Houston to thrive



5 TO THRIVE VALUES

integrity teamwork ownership communication respect



WASTEWATER CONSENT DECREE

court-approved legal document

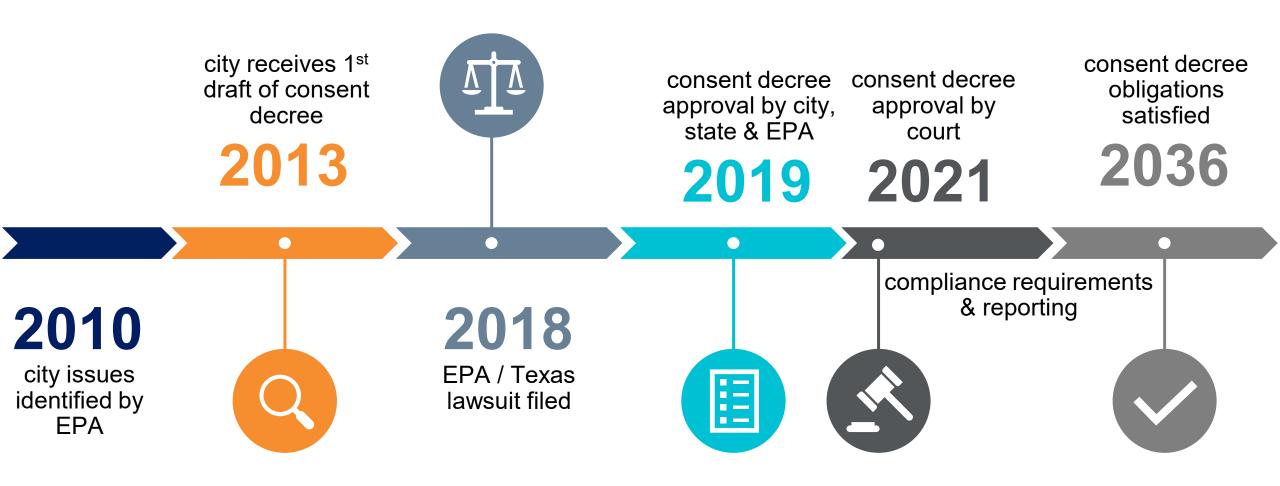
Houston's consent decree was approved March 31, 2021

formalizes program to improve wastewater system performance

complete work within 15 years

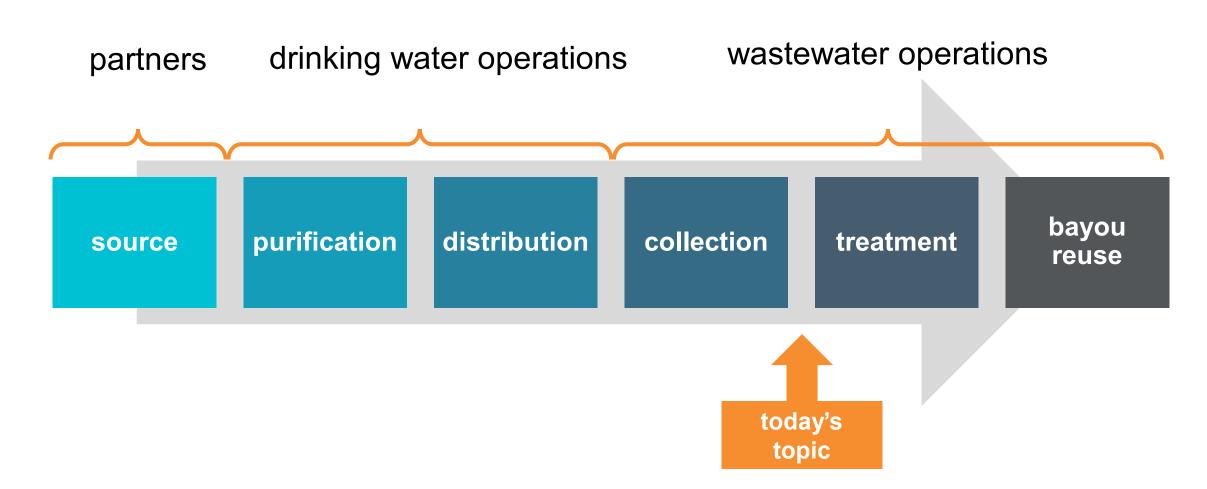


TIMELINE





WATER CYCLE





SANITARY SEWER OVERFLOWS

release of raw sewage from wastewater lines and manholes

causes	impacts
fats, oils & grease	threaten human health
tree roots	contaminate environment
heavy rainfall	damage property
illegal connections	





INVESTING IN HOUSTON

primary work categories

early action projects

capacity assessment & remediation

condition assessment & remediation

capacity, management, operations & maintenance

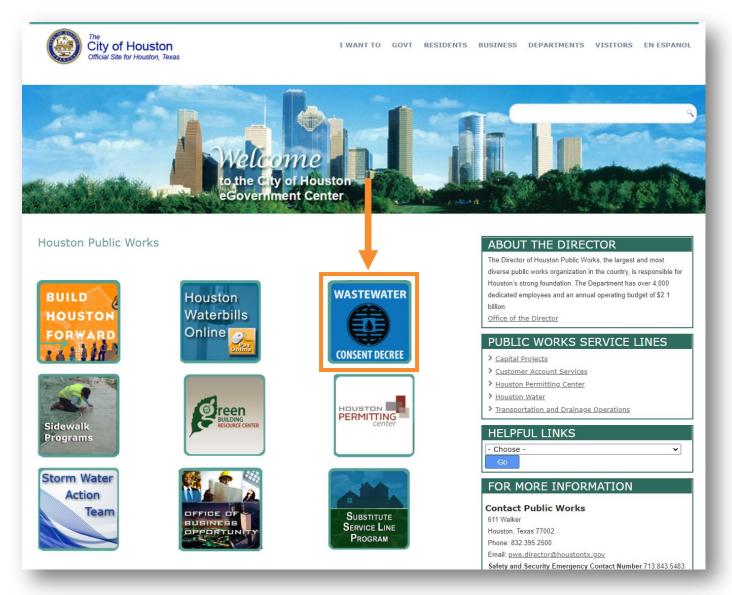
wet weather facilities evaluation & remedy

advanced sewer monitoring



WEBSITE SNAPSHOT

PUBLICWORKS.HOUSTONTX.GOV





THE WASTEWATER SYSTEM





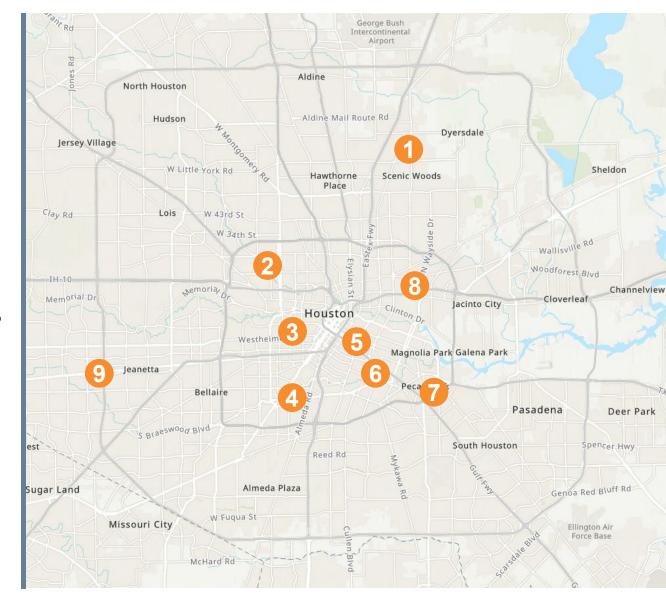
EARLY ACTION PROJECTS

SCOPE	WORK TO BE DONE	WORK COMPLETED	COMPLETION DATE
lift station renewal & replacement CD Section V, Paragraph 11a	107 lift stations	12 lift stations	2030
force main renewal & replacement CD Section V, Paragraph 11b	74K linear feet of force main	19K linear feet of force main	2030
consolidation projects CD Section V, Paragraph 11c	33 lift stations 8 WWTP 143K linear feet of force main	13 lift stations 1 WWTP 27K linear feet force main	2028
wastewater treatment plants (WWTP) CD Section V, Paragraph 11d	8-10* WWTP	5 WWTP	2026



CAPACITY ASSESSMENT& REMEDIATION

9 areas - repeat SSOs during rainfall develop plan to fix each area in 2 years complete work in 10 to 15 years







CAPACITY ASSESSMENT & REMEDIATION

identify new areas with repeat SSOs develop plan to fix each new area



CONDITION ASSESSMENT & REMEDIATION

wastewater treatment plant

inspect & assess condition & operation of 39 plants every 5 years

implement remedial measures to address any issues

wastewater collection system

inspect & assess structural condition of entire system every 10 years





129,600MANHOLES



381 LIFT STATIONS

rehabilitate/renew or replace

2.5% or ~155 miles of gravity sewer mains per year5% or ~19 lift stations per year



CAPACITY, MANAGEMENT, OPERATIONS & MAINTENANCE

clean high SSO areas in first 2 years

clean all gravity sewers every 10 years

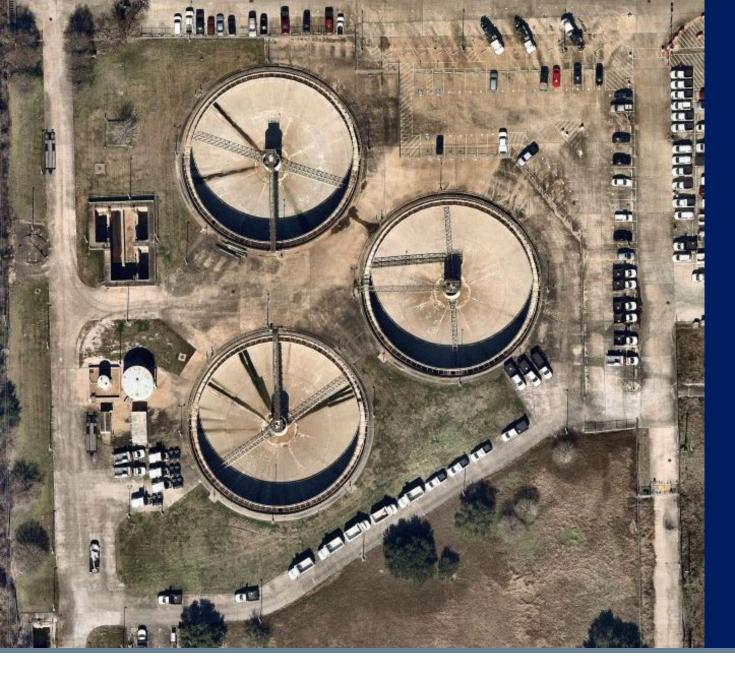
implement preventative sewer cleaning program for repeat SSO areas

continue fats, oil & grease education program

ProtectOurPipes.org







WET WEATHER FACILITIES

operate during storm events when stormwater inundates wastewater system

new alternate method of storing & treating wastewater must be designed

EPA requires upgrading or elimination of wet water facilities discharge in 13 to 15 years



WORK TO BE DONE

COMPLIANCE REQUIREMENTS

advanced sewer system monitoring

install 3,000 new "smart" manholes

- allows Houston Public Works to see real time flow conditions in sewer pipes
- enables Houston Public Works to anticipate & prevent SSOs



CIVIL PENALTIES & ATTORNEY'S FEES

PENALTY / FEES	
civil penalty - Texas	\$2.2M
civil penalty - EPA	\$2.2M
attorney's fees - Texas Attorney General	\$0.2M
total	\$4.6M

resolves civil claims of the US & Texas against Houston for alleged wastewater violations since 2005



STIPULATED PENALTIES

failure to timely complete requirements

\$1,000 - \$4,500 per deliverable per day (depending on length of delay)

wastewater treatment plant effluent exceedances & sanitary sewer overflows

\$300 - \$5,000 per violation per day (depending on duration, volume & date of occurrence)

stipulated penalty assessment

future noncompliance with consent decree terms or Clean Water Act United States & State reserve right to assess or waive



FINANCIAL CONSIDERATIONS

- cost of work identified in consent decree is estimated to be a total of \$6B which represents an increase in our normal wastewater budget of \$2B over 15 years
- costs to implement the consent decree over the next year are in the FY21 budget already approved & FY22 budget that will be presented to council
- water & wastewater rate update set for council action in May 2021 includes consent decree costs for next 10 years
- wastewater rates proposed in the current rate study are below EPA's affordability threshold of 2% of median household income



TAKEAWAYS

consent decree obligates Houston to implement a scope of work to improve the wastewater system throughout the city under defined timelines

penalties apply for non-compliance

consent decree scope of work is an investment that will improve Houston's wastewater system for future generations as it aligns with goal 26.1 of the Resilient Houston plan



thank you!



houstonpublicworks.org



