



NORTH HOUSTON ASSOCIATION WATER COMMITTEE MEETING

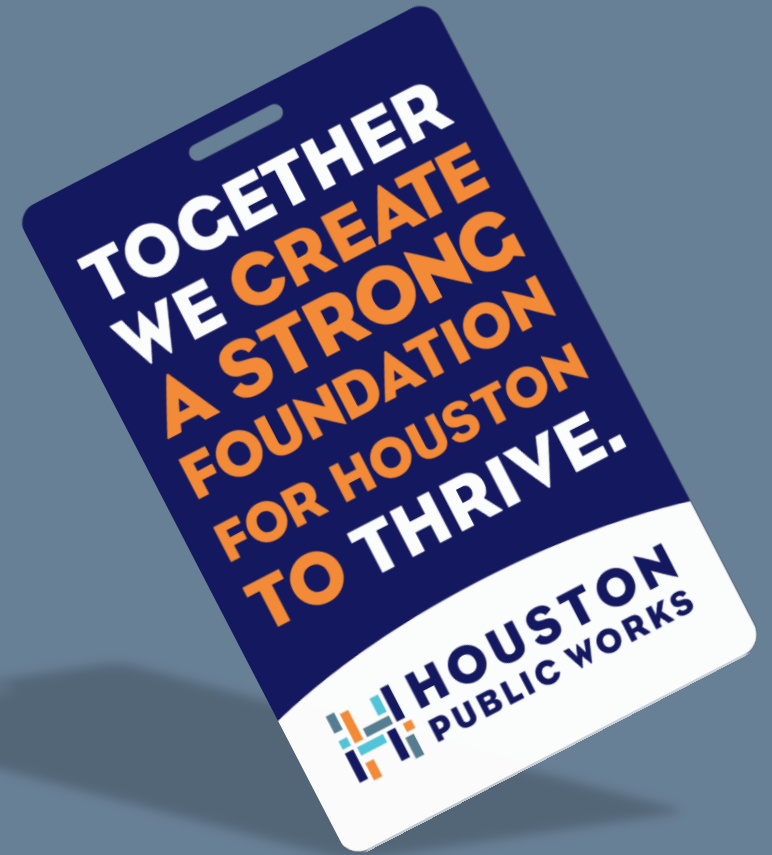
DIRECTOR CAROL HADDOCK

OCTOBER 5, 2023



PURPOSE

together we create a strong foundation
for Houston to thrive



5 TO THRIVE VALUES

respect | ownership | communication | integrity | teamwork

SERVICE LINES



**CAPITAL
PROJECTS**



**CUSTOMER
ACCOUNT
SERVICES**



**HOUSTON
PERMITTING
CENTER**




**HOUSTON
WATER**




**TRANSPORTATION
AND DRAINAGE
OPERATIONS**

HOUSTON PUBLIC WORKS


16,000 
LANE MILES OF
STREETS


 **3,900**
MILES OF
STORM DRAINS


163B 
GALLONS OF WATER
TREATED PER YEAR

 **2,450**
TRAFFIC SIGNALS

2,800 
MILES OF
ROADSIDE DITCHES

 **5.8M**
WATERBILLS
SENT PER YEAR

467 
TYPES OF PERMITS

\$2.7B 
ANNUAL BUDGET

 **4,200**
EMPLOYEES

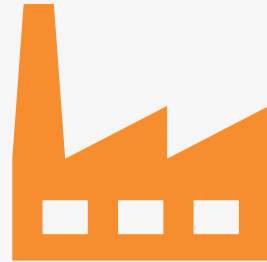


SURFACE WATER TRANSMISSION PROGRAM

BY THE NUMBERS



Population: **2.3 Million**
Greater Metro Area:
7.2 Million



- **3 Water Purification Plants**
 - **7 Re-Pump Stations**



670 Square Miles
Within City Limits
300 Miles of
Transmission Lines



- Water Supplier to:
- **1,500+** Square Miles
 - **4 Counties**
 - **4.3 Million** People Served

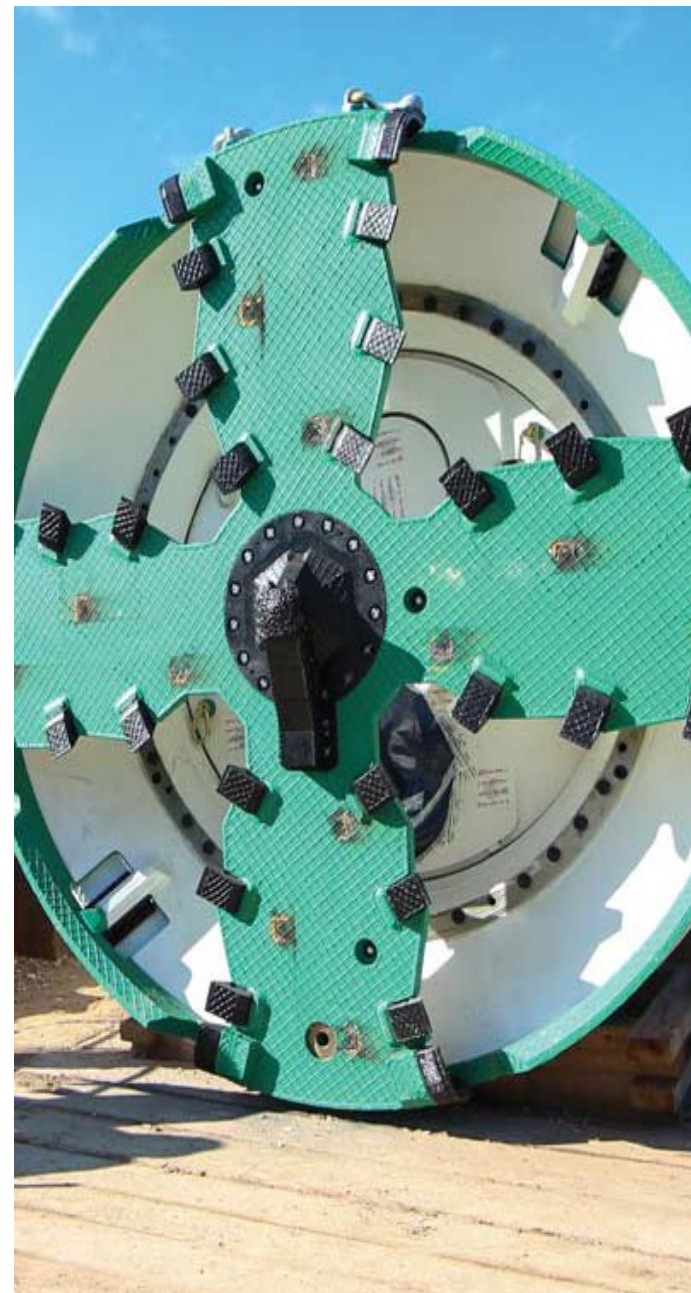
HISTORY

Surface Water Transmission Program (SWTP):

- Created by Houston Public Works in 1980's
- Response to Harris-Galveston Subsidence District (**HGSD**)
- Intended to increase surface water versus groundwater usage

Why?

- Prevent future ground subsidence
- Alleviate infrastructure damage and flooding
- Increase water system pressures
- Address other large diameter water line issues
- Respond to needs of rapid population growth



NORTHEAST TRANSMISSION LINE:

- **Partnership: North, Central and West Harris County Regional Water Authorities and North Ft. Bend.**
- **Began in 2018**
- **16.5 miles**
- **13 contracts**
- **365 million gallons/day**
- **6,200 LF of 108-inch waterline**
- **2,200 LF of roadway reconstruction**
- **165 LF tunnel under a 7-lane highway**
- **Cost: \$450M**
- **Homes served upon NE Water Purification Plant Expansion: 900K**



NORTHEAST WATER PURIFICATION PLANT (NEWPP) EXPANSION

NEWPP EXPANSION BY THE NUMBERS



Collaboration with **5 water providers:**

- North Harris County Regional Water Authority (NHCRWA)
- West Harris County Regional Water Authority (WHCRWA)
- Central Harris County Regional Water Authority (CHCRWA)
- North Fort Bend Water Authority (NFBWA)
 - City of Houston



Construction Began: **2018**
Completely Online: **2025**



400 Million Gallons/Day will
Occupy **150 Acres** of
the **252 Acre Site**



Project Cost:
\$1.765 Billion



Increase of Freshwater by **320 Million Gallons Per Day**

NEWPP EXPANSION

1

Phase 1: 80 million Gallons a Day

**Scheduled Completion:
End of October 2023**

2

Phase 2: Remaining 240 Million Gallons a Day

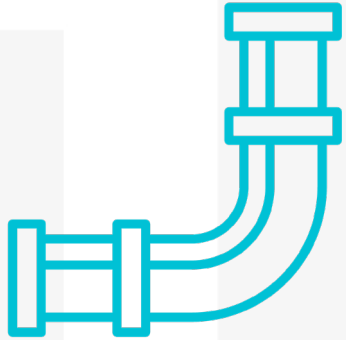
**Scheduled Completion:
End of July 2025**



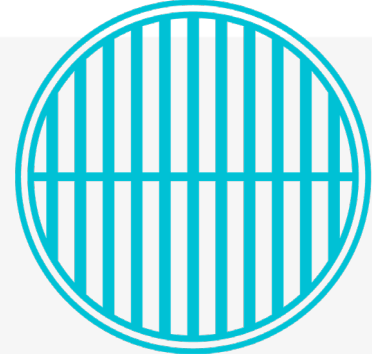


FLOOD CONTROL AND DRAINAGE IMPROVEMENT PROJECTS

BY THE NUMBERS



3,900 Miles
Stormwater Lines



Approximately **250,000** related
infrastructure
(manholes, inlets, other)



100 Miles
Off-Road/Major
Drainage Ditches



2,500 Miles
Roadside Ditches
(Both Sides of Street)



35 Stormwater
Detention Basins

ROADSIDE DITCH

RE-ESTABLISHMENT PROGRAM

✓ Citywide Inspection

✓ Plan, Investigate, Survey

✓ Repair Driveways/Culverts

✓ Re-Establish Ditches

✓ Flush Culverts



Planned 5-Year Service Cycle Proactive Work with Best Value Citywide



Midlothian Lane – Roadside Ditch

ROADSIDE DITCH REESTABLISHMENT PROGRAM

Proactive Planned- 5-Year Inspection and Re-establishment Cycle (500 miles / year)
Priority to Northeast and Complete Communities during Transition Period

- Additional One-Time Resources FY24 Approved for Equipment and Contract Procurement
- Fixed Annual In-House Staffing and Contract Resources Required after FY25

FY24

FY25

FY26

FY27

FY28

- 1,500 miles of roadside ditches inspected in Northeast and Complete Communities
- \$15M Equipment Procurement
- \$25M Contracts Procurement

- 1,000 miles of roadside ditches inspected in remaining areas
- 450 miles re-established in Northeast and Complete Communities *
- 50 miles re-established in remaining areas

- 450 miles re-established in Northeast and Complete Communities
- 50 miles re-established in remaining areas

- 300 miles re-established in Northeast and Complete Communities
- 200 miles re-established in remaining areas

- 500 miles inspected and re-established in remaining areas

5-Year Cycle Starts

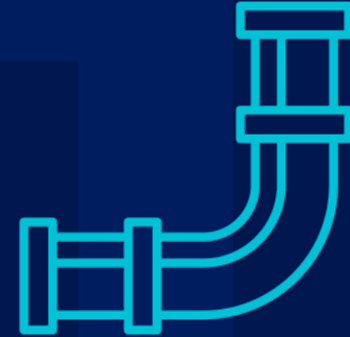
STORMWATER ACTION TEAM (SWAT) NUMBERS FOR NORTH HOUSTON ASSOCIATION

20



Active/Completed Projects

487



Lane feet of Stormwater
Lines Replaced

.05



Acres of Channels Cleared
of Brush/Vegetation
“Grubbed”

37,347



Lane Feet of Roadside
Ditches Re-established

11531 FM 1960 – Off Road Ditch



Riverside Crest Lane (North Commons Area) – Roadside Ditch

2307 Elk Creek Drive – Outfall



20723 Atascocita Shores – Outfall

thank you!



HoustonPublicWorks.org |    @HouPublicWorks