

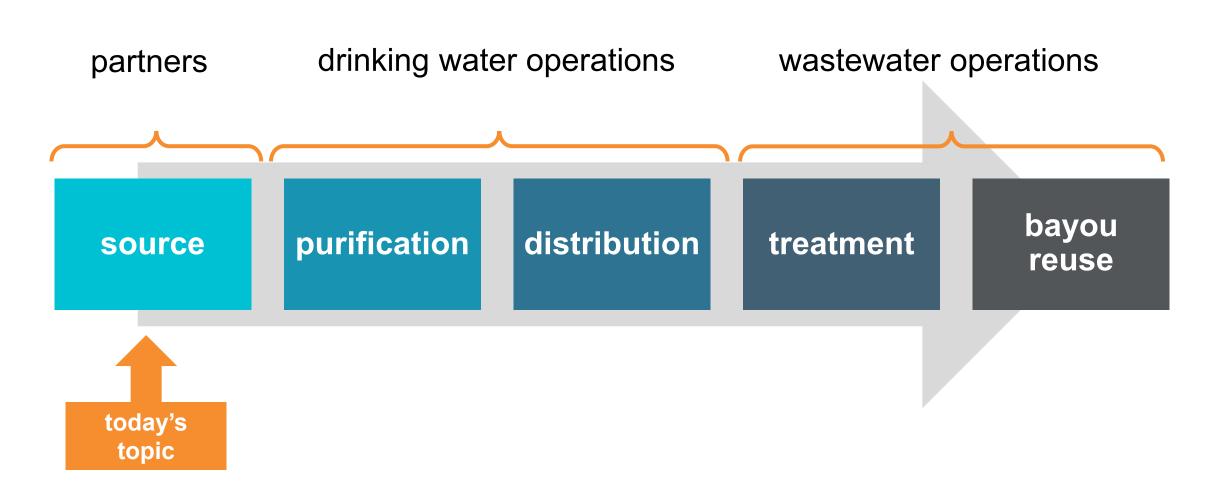
# WATER SUPPLY PARTNERSHIPS

SHARON CITINO
PLANNING DIRECTOR, HOUSTON WATER

VERONICA OSEGUEDA
WATER SUPPLY MANAGER, HOUSTON WATER



### **WATER CYCLE**





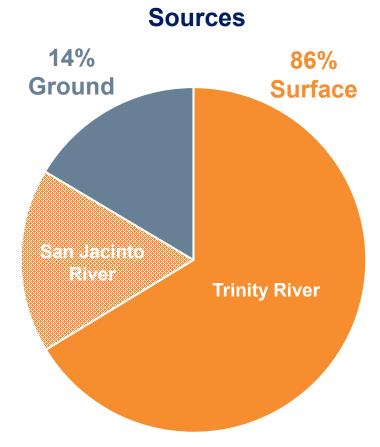
### **WATER SYSTEM**

#### **Customers**



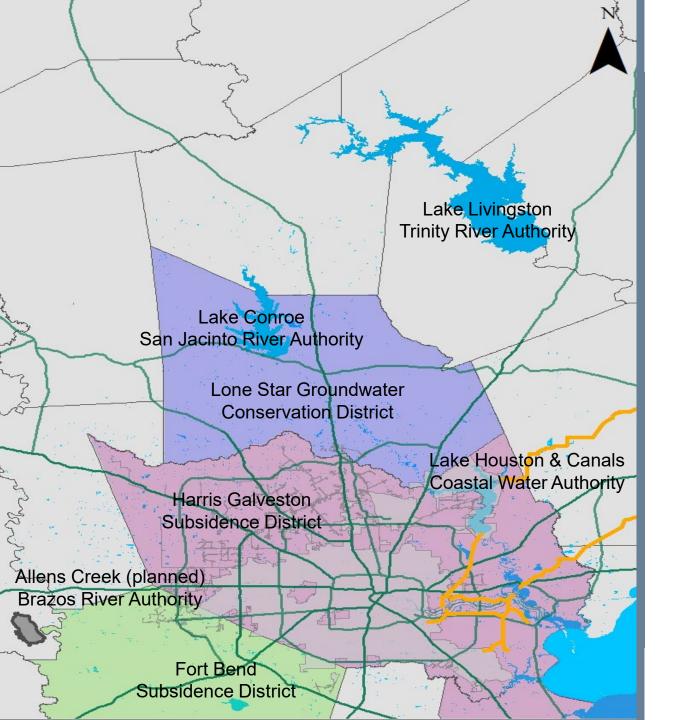
#### **Available Supply**





Trinity River & San Jacinto River wells in Harris, Fort Bend & Montgomery Counties





### **PARTNERS**

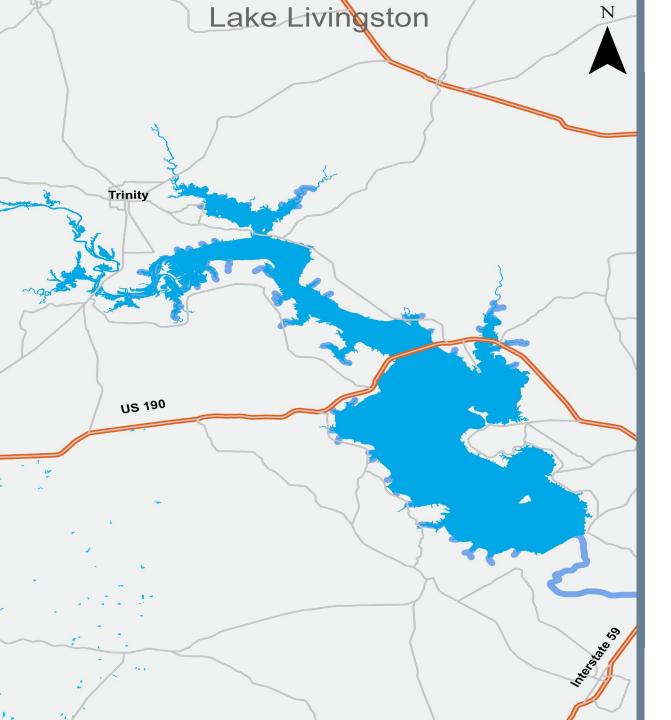
Trinity River Authority
Coastal Water Authority
San Jacinto River Authority
Brazos River Authority
Harris Galveston Subsidence
District

Lone Star Groundwater
Conservation District
Fort Bend Subsidence District



### **SURFACE WATER SUPPLY**

- 1.2 billion gallons per day
- 3 river basins
- 4 reservoirs
  - Lake Livingston
  - Lake Houston
  - Lake Conroe
  - Allens Creek (planned)

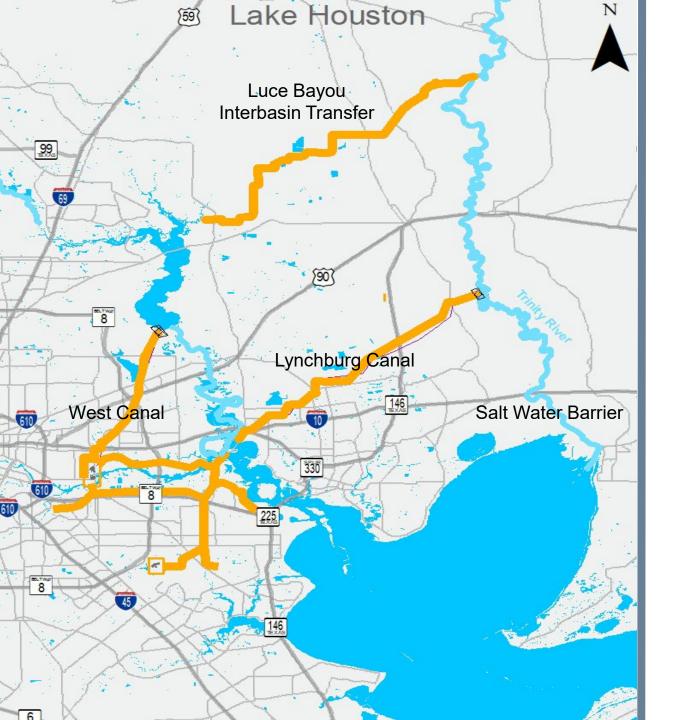


### TRINITY RIVER AUTHORITY

operates & maintains:

Lake Livingston Dam
constructed 1969
share 70% Houston
city water 806 million gallons per day

Salt Water Barrier

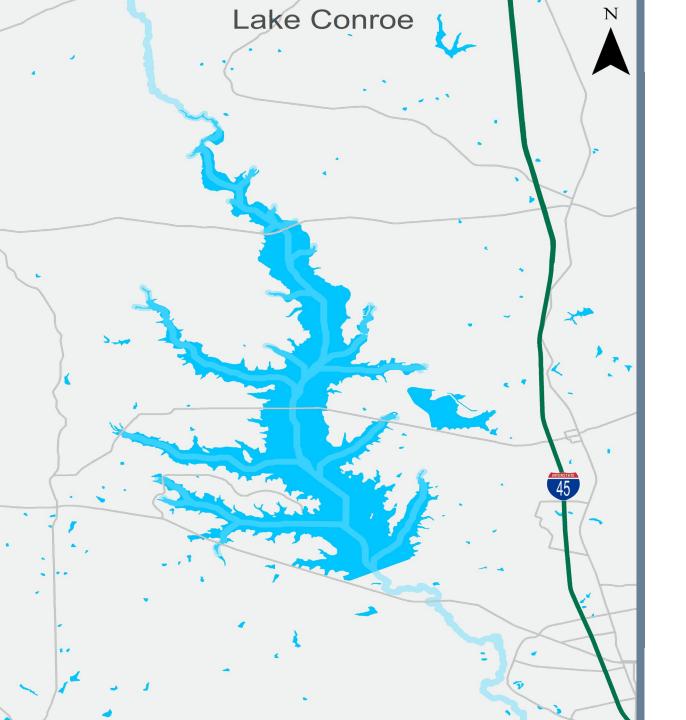


### COASTAL WATER AUTHORITY

operates & maintains:

Lake Houston Dam
constructed 1953
share 100% Houston
city water 150 million gallons per day

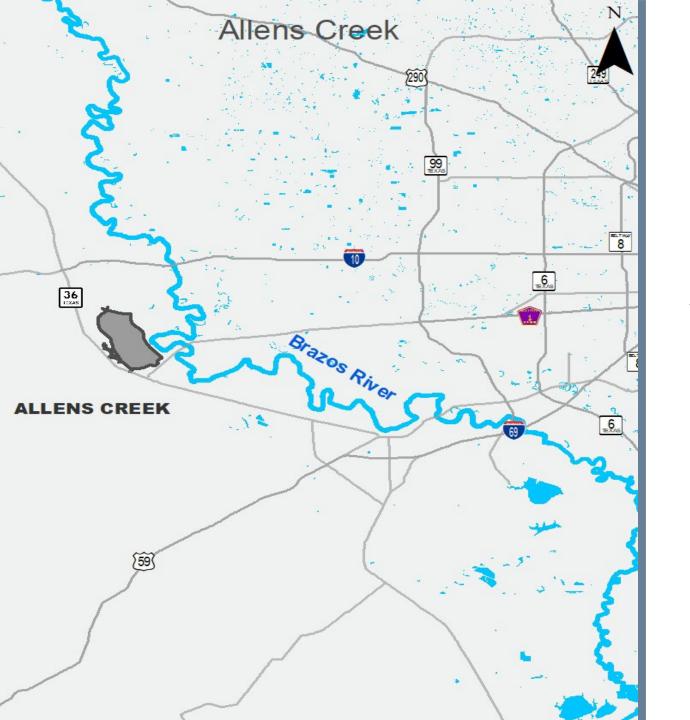
Trinity River Conveyance System Luce Bayou Interbasin Transfer Project



### SAN JACINTO RIVER AUTHORITY

operates & maintains:

Lake Conroe
constructed 1973
city water 66% Houston
capacity 59.5 million gallons per day



### **BRAZOS RIVER AUTHORITY**

Allens Creek (planned)
constructed must be started by 2025
share 70% Houston
city water 91 million gallons per day

Permitting and design work imminent

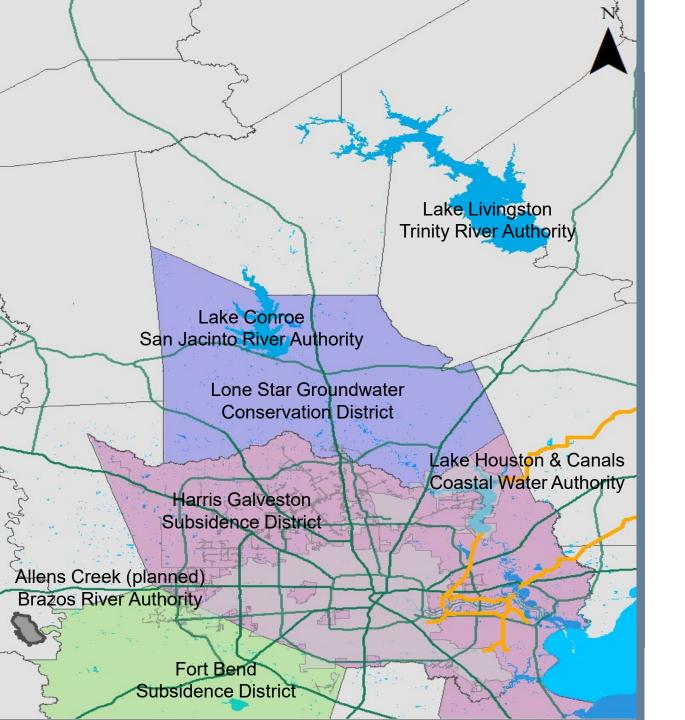
### Lone Star Groundwater **Conservation District** (3 wells) Harris Galveston Subsidence District Area 3 (110 wells). Area 2 (27 wells). Fort Bend Subsidence District Area (2 wells) (no wells)

### **GROUNDWATER SUPPLY**

PARTNER	MAX USAGE	HOUSTON USAGE
Harris Galveston Subsidence District		
Area 1	10%	0%
Area 2	20%	10%
Area 3	70%*	45.5%**
Fort Bend Subsidence District	500 M gallons	179.8 M gallons
Lone Star Groundwater Conservation District	501 M gallons	208 M gallons

<sup>\*</sup>through 2025; in 2025, reduced to 40%

<sup>\*\*</sup>includes GRP Participant wells; Houston-only wells usage is 37%



### **PARTNERS**

Trinity River Authority
Coastal Water Authority
San Jacinto River Authority
Brazos River Authority
Harris Galveston Subsidence
District

Lone Star Groundwater
Conservation District
Fort Bend Subsidence District

### **UPCOMING COUNCIL ACTIONS**

PARTNER	PURPOSE	FUNDING	TIMING
Trinity River Authority	appropriation of funds for Livingston Dam Gate Rehabilitation Project	\$8,621,528	winter
	approval of Lake Livingston 2020 operation & maintenance budget*	\$4,763,498	spring
Coastal Water Authority	approval of Lake Houston Dam Spillway Improvements Project interlocal agreement & appropriation of funds**	\$4,375,199	winter
	approval of Lake Houston Dam 2020 operation & maintenance budget*	\$5,196,900	spring
	approval of Trinity River Conveyance System 2020 operation & maintenance budget*	\$21,594,600	spring
	approval of Luce Bayou Interbasin Transfer Project 2020 operation & maintenance budget*	\$2,479,000	spring

<sup>\*</sup> appropriation through adoption of City of Houston annual budget

<sup>\*\*</sup> reimbursable through grant funds excluding City/Harris County Flood Control District local match



### **UPCOMING COUNCIL ACTIONS**

PARTNER	PURPOSE	FUNDING	TIMING
San Jacinto River Authority	approval of cost sharing & operation & maintenance agreement	N/A	summer
	approval of Lake Conroe operation & maintenance budget*	\$5,690,852	fall
Harris Galveston Subsidence District	appropriation of funds for 2020 groundwater well permit fees	\$1,032,000	winter

<sup>\*</sup> appropriation through adoption of City of Houston annual budget



## thank you!





