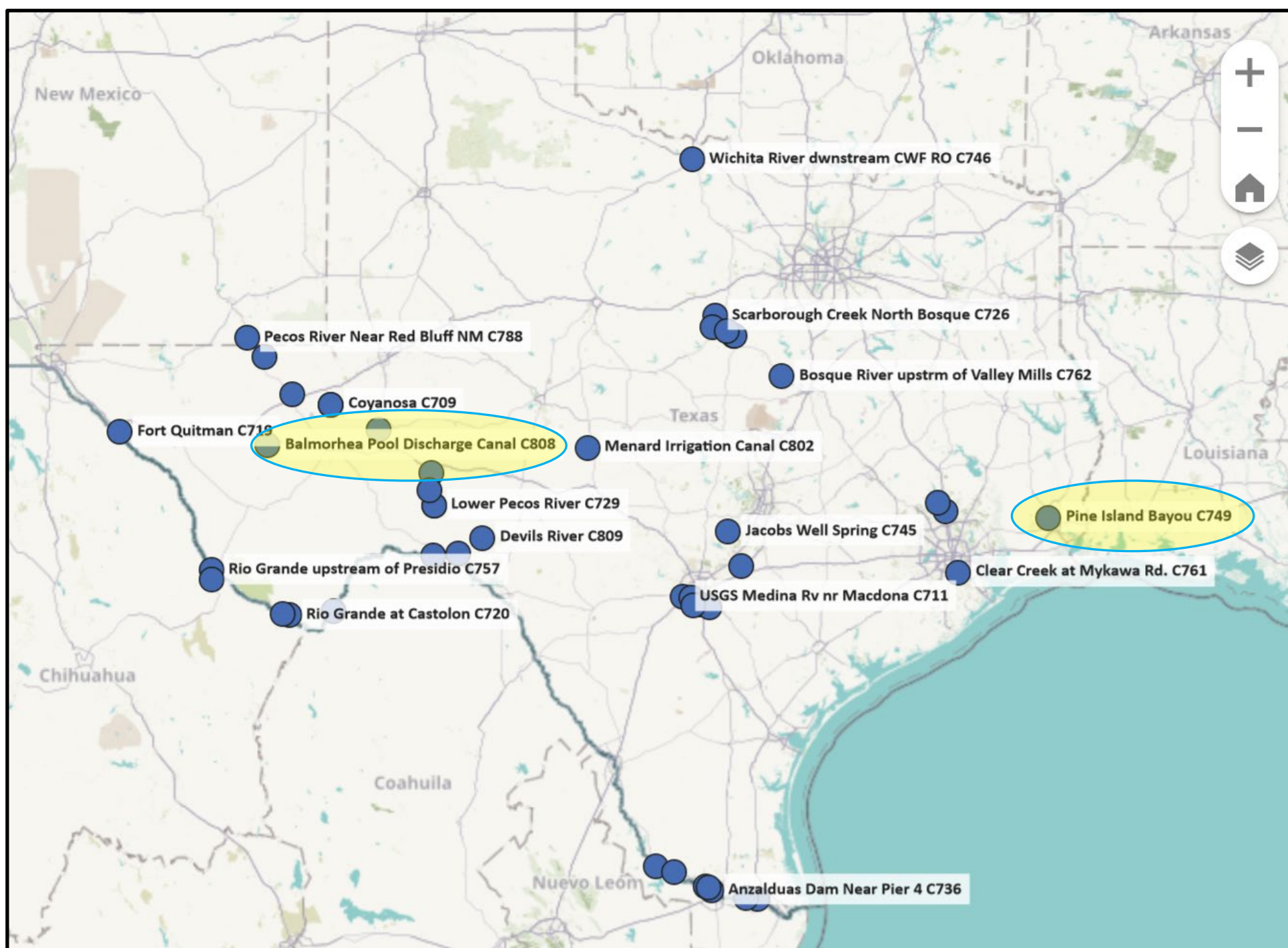
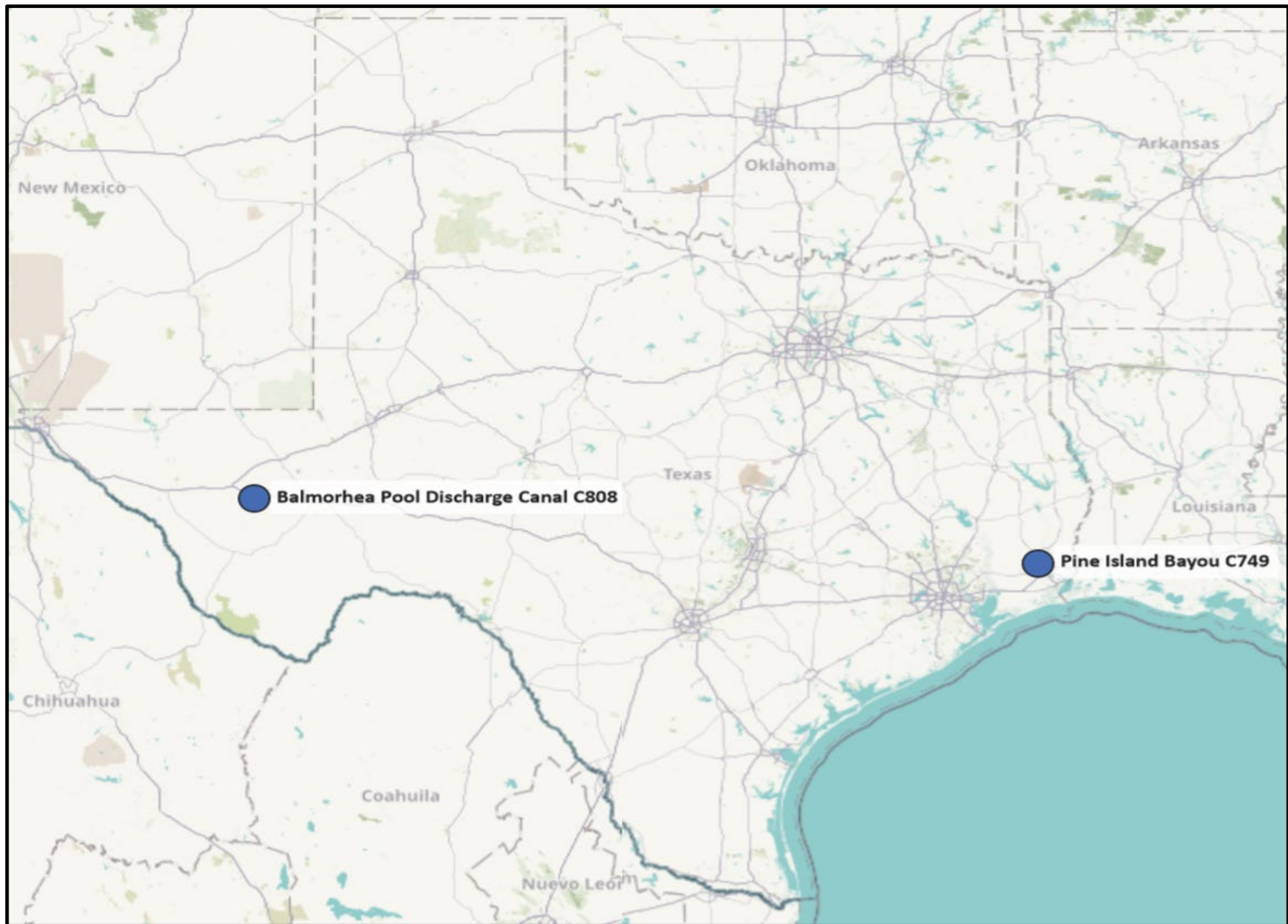


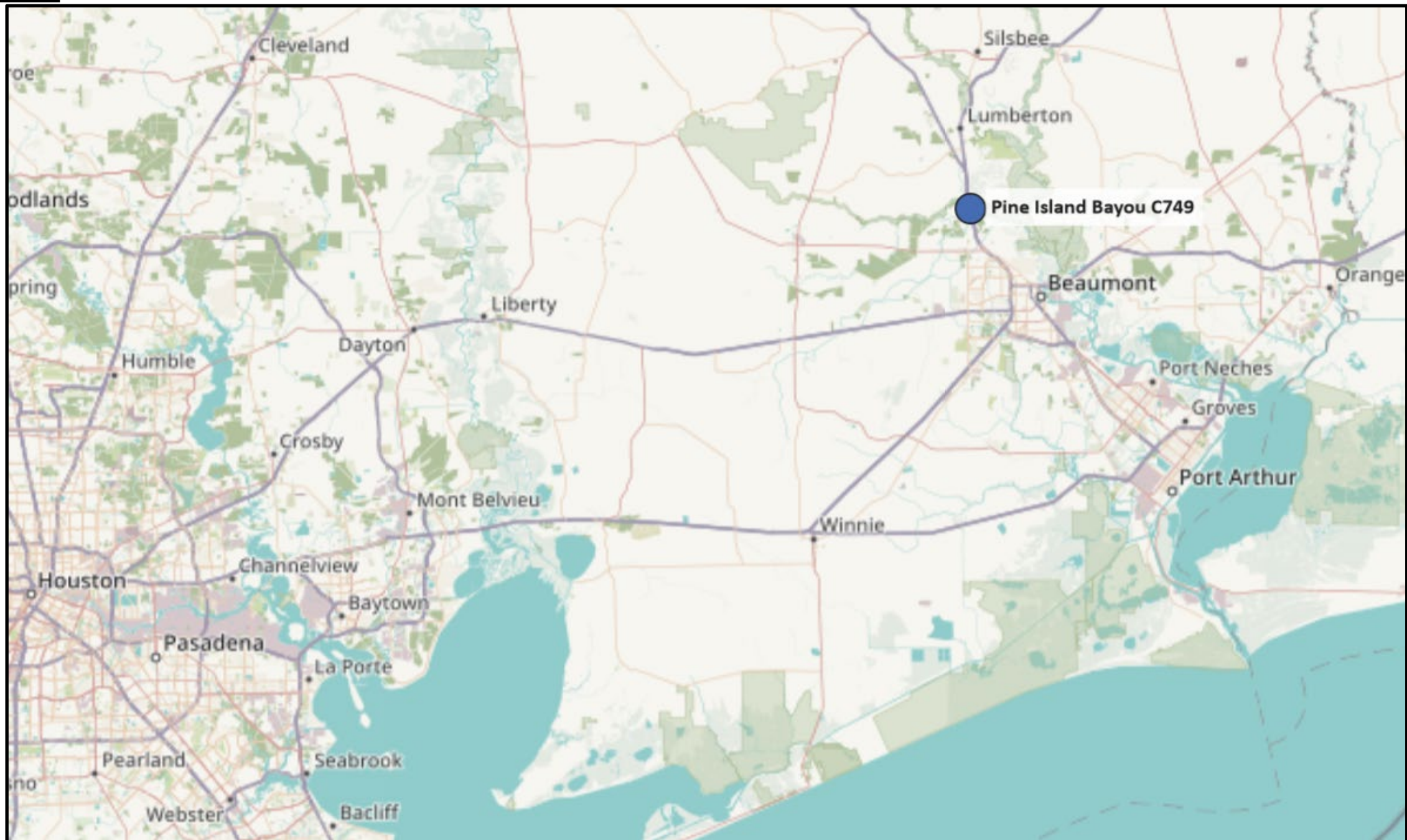
# **Texas Commission on Environmental Quality (TCEQ)**

## **CONTINUOUS WATER QUALITY MONITORING NETWORK (CWQMN)**











# Our Mission

- Provide more timely and comprehensive water quality information at priority locations than possible with grab sampling or short-term deployment.



First Established 2001



Was initially built from  
existing Air Monitoring  
Infrastructure



Near real-time continuous  
records of water quality  
(every 15 minutes)



Funded mostly under  
Clean Water Act Section  
106

# Our Partners

United States Geological Service (USGS)

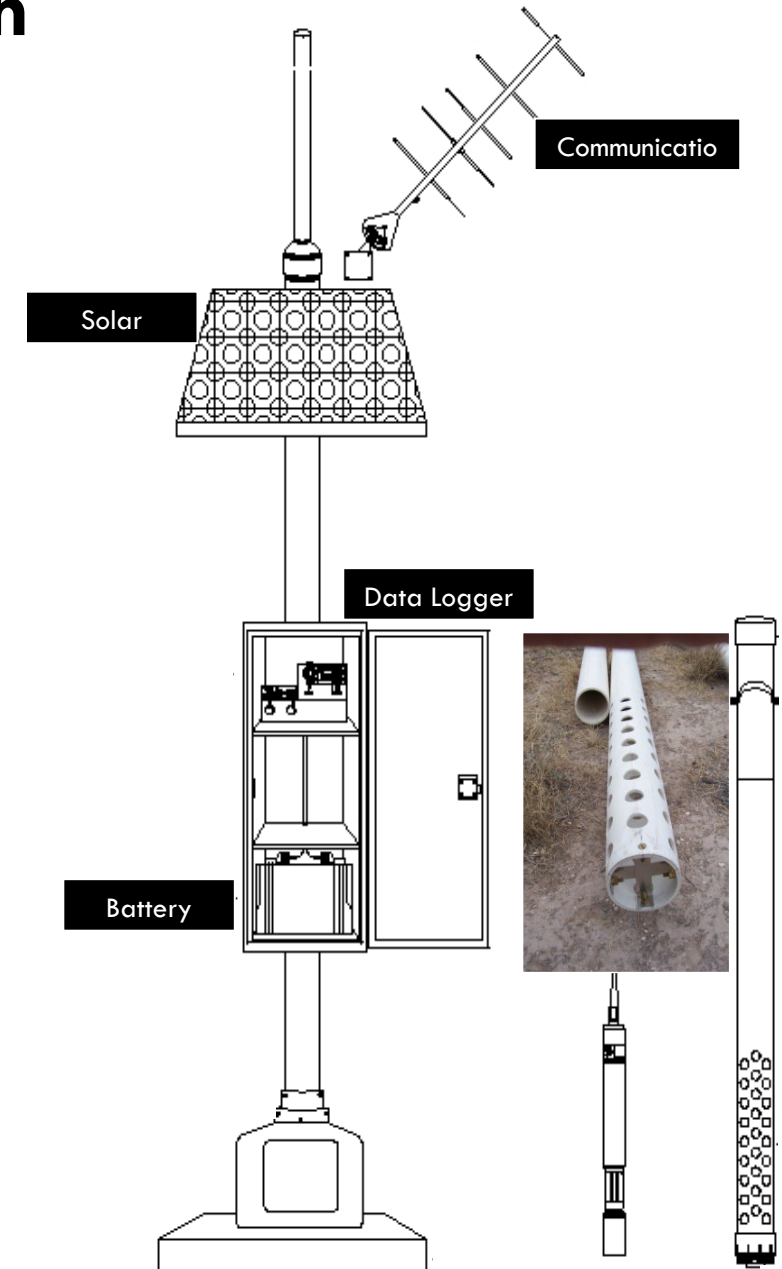
Lower Neches Valley Authority (LNVA)

Texas Parks and Wildlife Department (TPWD)

# Basic Continuous Water Quality Station

## CWQMN commonly monitors:

- Surface Water Temperature
- Surface Specific Conductance
- Total Dissolved Solids
- Dissolved Oxygen
- Surface Water pH

























# KISTERS NORTH AMERICA

- Founded in 1963 in Aachen, Germany, KISTERS is an international midsize company that specializes in the water, weather, energy, and IT sectors.

## WISKI

The Water Information System from KISTERS.

# WISKI



The image shows a login dialog box for WISKI KISTERS. The background is a blue gradient with a water splash effect on the left. The dialog box is a semi-transparent rectangle with a blue border. It contains the WISKI logo in the top left, the KISTERS logo in the top right, and a series of input fields for User, Password, Tenant, Host, and Port. There is a 'Remember login' checkbox, a 'Server login' button, and a 'Hide additional options...' link. At the bottom are 'Connect', 'Cancel', and 'Help' buttons, and the version 'WISKI 7.4.13 Release'.

**WISKI**

**KISTERS**

User:

Password:

☒ Remember login

Tenant:

Host:

Port:

[Hide additional options...](#)

WISKI 7.4.13 Release

Server login

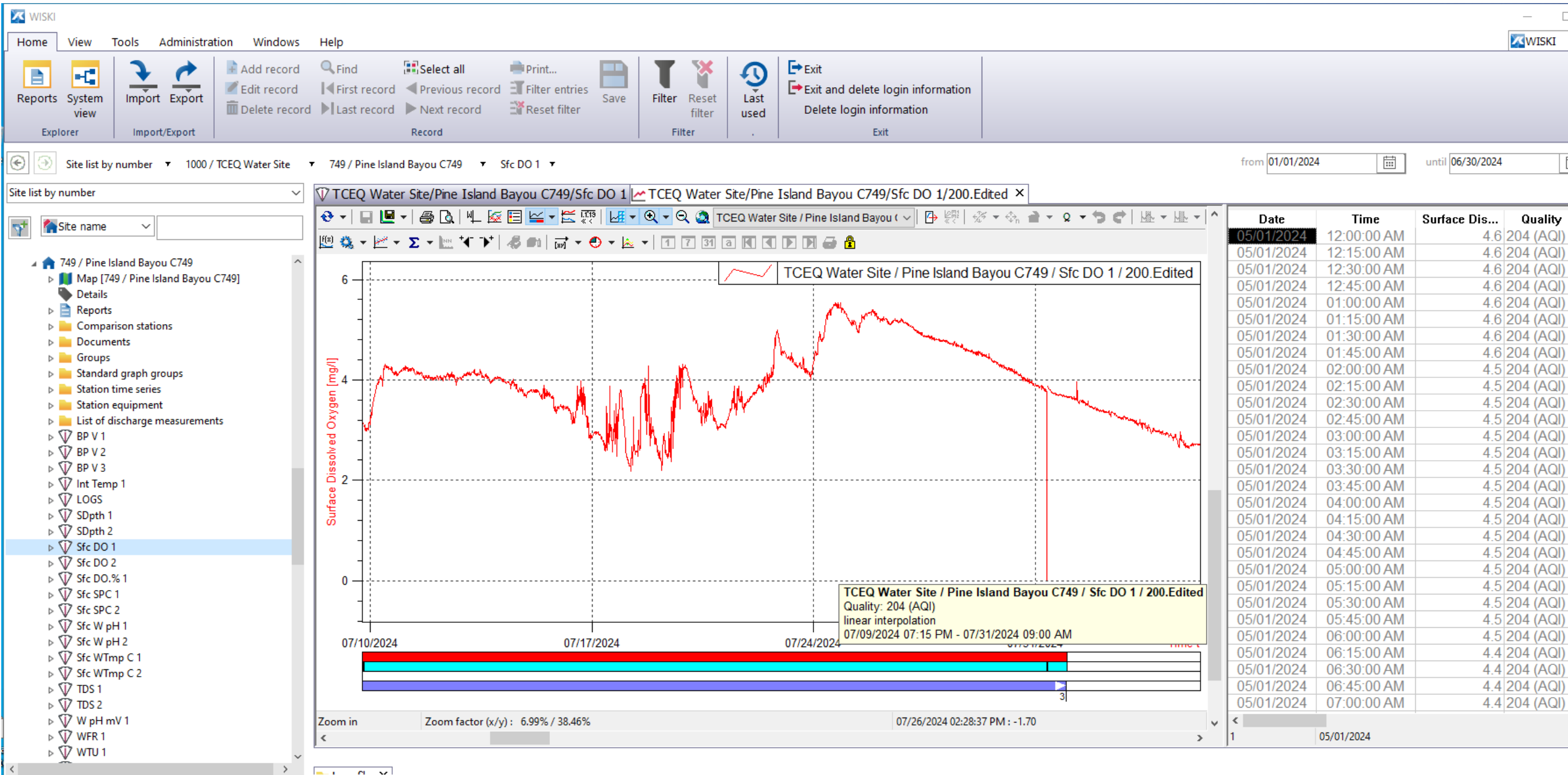






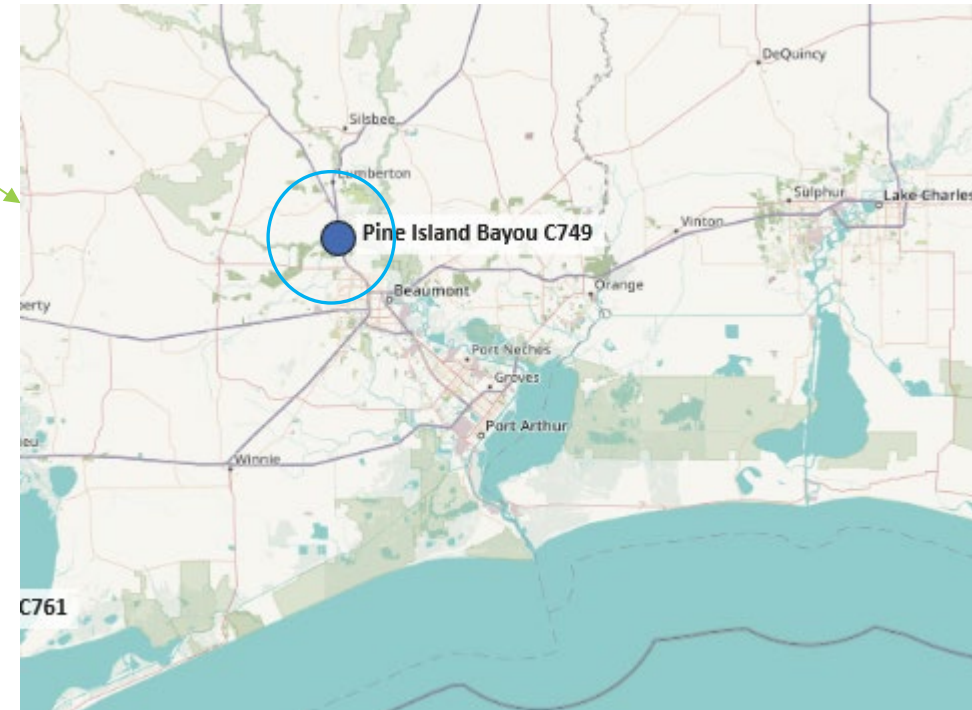
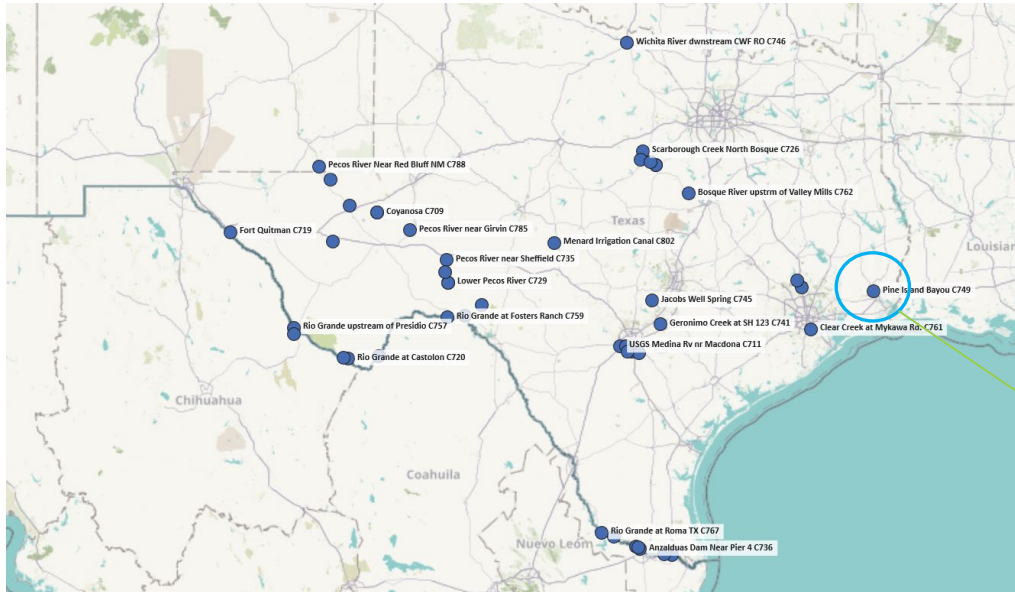







# WISKI Web Public

(<https://das.tceq.texas.gov/water/#/overview/waterdata>)



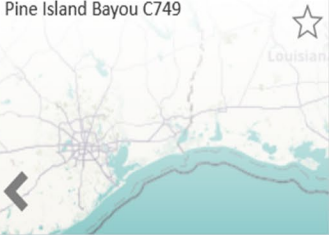


# WISKI Web Public

 Water Data

TCEQ > Water Data > Pine Island Bayou C749 > Station Information

Pine Island Bayou C749



station\_name

Pine Island Bayou C749

State

Texas

County

Jefferson

City

Beaumont

Address

End of Voth Road near Pump Station

station\_latitude

30.179200

station\_longitude

-94.188900

Elevation (m)

6.0

Maintained by

Lower Neches Valley Authority (LNVA)

Station Information

Current Measurements

Daily Summary

Monthly Summary

Yearly Summary

## Current Measurements

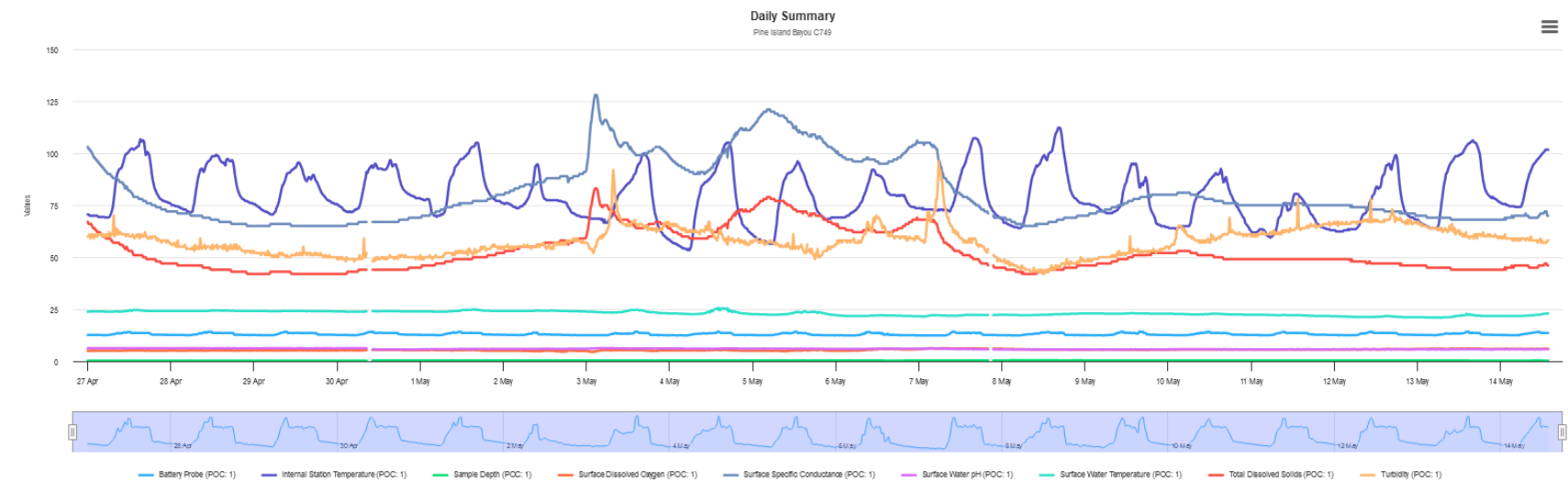
Although this is the most current data, it is not considered official until it has been certified by the technical staff. This information is updated hourly.

This web page provides the most current hourly averaged data available. Our convention for time-tagging data is the beginning of each hour. For example, values shown for the noon hour are based on measurements taken from noon to 1:00 p.m. The noon average will not be calculated until after 1:00 p.m. The noon average will then be available on our external server from 1:15 p.m. to 1:30 p.m. This results in an apparent one-hour time lag in the data. We also present our data in Local Standard Time for each measuring site. For most of Texas this is Central Standard Time. During Daylight Savings, this introduces another apparent one-hour time lag in the data.

[Show Graph](#) [New Report](#)[Show Graph](#) [New Report](#)

▼ Data Summary for Pine Island Bayou C749

Date	Time	Battery Probe POC_1	Internal Station Temperature POC_1	Sample Depth POC_1	Surface Dissolved Oxygen POC_1	Surface Specific Conductance POC_1	Surface Water PH POC_1	Surface Water Temperature POC_1
04/27/2025	00:00:00	12.67	70.5	0.240	5.0	103	6.3	23.8
04/27/2025	00:15:00	12.64	70.5	0.240	4.9	102	6.3	23.8

[Hide Graph](#) [New Report](#)

▼ Data Summary for Pine Island Bayou C749

Date	Time	Battery Probe POC_1	Internal Station Temperature POC_1	Sample Depth POC_1	Surface Dissolved Oxygen POC_1	Surface Specific Conductance POC_1	Surface Water PH POC_1	Surface Water Temperature POC_1
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04/27/2025	00:15:00	12.64	70.5	0.240	4.9	102	6.3	23.8



# POST DEPLOYMENT WORKSHEET (PDW)

- Multiprobe maintenance activities are documented in equipment dedicated logbooks or electronically in the comment section of the Post Deployment Excel Worksheets. This requirement only applies to TCEQ non-EMRS stations.
- Records must include multi-probe repair information, sensor component replacements, and the dates of these activities.

## POST DEPLOYMENT WORKSHEET (Version 4.1, 11/13/2019)

CAMS: 749

CAMS LOCATION: Pine Island Bayou

OPERATOR: LNVA		RETRIEVAL DATE: 3/25/2025		NIST TEMPERATURE CHECK		CHANGE IN WATER BODY			
DATE: 3/25/2025		DEPLOYMENT DATE: 2/26/2025		Therm. Reading: 20.34		SC:	RESULT	PASS/FAIL	CRITERIA
SERVICE START TIME: 9:30:00 AM		FIELD METER #: 18G102343		Multiprobe: 20.42			-0.1	Pass	± 5 uS
SERVICE STOP TIME: 10:45		FLOW @ DEPL. TUBE: Medium		RESULT: 0.07			-0.10	Pass	3%
MULTIPROBE #: 18G102344		DEBRIS CLOUD: Slight		PASS/FAIL: Pass		DO:	-0.10	Pass	± 0.68 mg/l
				CRITERION: ± 0.50 ° C			pH:	0.00	Pass

SPECIFIC CONDUCTANCE									
FOULING				CALIBRATION VERIFICATION		RESULTS		PASS/FAIL	CRITERION
Multiprobe/Tube Initial	Multiprobe/Tube Final	Field Multiprobe Initial	Field Multiprobe Final	Standard Value	Multiprobe Response	Fouling:	-0.03	Pass	5.00% RPE
						Drift:	0.00	Pass	
149	149	150	149.4	1000	1000	Total:	-0.03	Pass	

DISSOLVED OXYGEN									
FOULING				CALIBRATION VERIFICATION		RESULTS		PASS/FAIL	CRITERION
Multiprobe/Tube Initial	Multiprobe/Tube Final	Field Multiprobe Initial	Field Multiprobe Final	Standard Value	Multiprobe Response	Fouling:	-0.34	Pass	± 0.50 mg/l AE
						Drift:	0.05	Pass	
5.04	5.28	5.36	5.26	9.01	9.06	Total:	-0.29	Pass	

pH									
FOULING				CALIBRATION VERIFICATION		RESULTS		PASS/FAIL	CRITERION
Multiprobe/Tube Initial	Multiprobe/Tube Final	Field Multiprobe Initial	Field Multiprobe Final	Standard Value	Multiprobe Response	Fouling:	0.09	Pass	± 0.50 SU AE
						Drift: 10.00/4.00 :	0.09	Pass	
6.15	6.06	6.60	6.60	4.01	4.10	Drift: 7.00 :	0.04	Pass	
				7.00	7.04	Total: 10.00/4.00:	0.18	Pass	
						Total: 7.00:	0.13	Pass	

TURBIDITY								
FOULING				CALIBRATION VERIFICATION		RESULTS		
Multiprobe/Tube Initial	Multiprobe/Tube Final	Field Multiprobe Initial	Field Multiprobe Final	Standard Value	Multiprobe Response	Fouling:	4.02	RPE
						Drift 0:	0.04	AE
55.3	54.0	53.1	53.9	0	0.04	Drift 100:	-2.52	RPE
				100	97.48			

TEMPERATURE					
FOULING - Info only, not used for validation					
Multiprobe/Tube Initial	Multiprobe/Tube Final	Field Multiprobe Initial	Field Multiprobe Final	FOULING	-0.08
20.65	20.74	20.76	20.77		

MEASUREMENT DEPTH (Meters)			
0.376	0.376	0.372	0.384

OBSERVED FOULING (Slight/Moderate/Heavy)	
DO: Slight	Turb: Slight
pH: Slight	
SC: Slight	
T: Slight	

OPERATOR COMMENTS:	DATA VALIDATION SUMMARY
	Temperature Pass
	SC/TDS Pass
	Dissolved Oxygen Pass
	pH Pass

# **TCEQ Non-EMRS Multiprobe Data Validation Using QC Sample Results**

- If any of these fields indicate “Fail” for a given parameter(s), the corresponding data back to the last passing multiprobe exchange are invalidated using the Ambient Quality Invalidated flag (AQI).
- Multiprobe temperature checks are done at the conclusion of deployment periods. If the check fails, the  $\pm 0.5$  ° Celsius criterion, the corresponding temperature, DO, SC, and calculated TDS data are invalidated (flagged as AQI) back to the last passing multiprobe exchange.

# PDW

## TCEQ Post Deployment Worksheets

For TCEQ non-EMRS stations, station operators must enter multiprobe QC results into TCEQ's Post Deployment Excel Worksheets (PDW) and email the worksheets to the applicable data validator and QC Officer. These Excel spreadsheets document fouling, drift, and multiprobe exchanges at TCEQ non-EMRS stations.

For TCEQ non-EMRS stations after each routine station visit, station operators enter the following information into Post Deployment Worksheets (PDW):

1. CAMS Number and Location
2. Operator
3. Date
4. Service Start/Stop time
5. Multiprobe, SN/asset number, Model, pH sensor type
6. Multiprobe Retrieval Date
7. Multiprobe Deployment Data
8. Field Meter SN/asset number
9. Field Meter pH millivolt (mV) responses to standards 7.00 and 10.00 pH. PDW calculates pH mV slope.
10. Field meter conductivity cell constant after calibration
11. Flow at Deployment Tube
12. Severity of Debris cloud
13. Multiprobe Fouling and Drift Measurements
14. Measurement depth (Pine Island Bayou only)
15. Observed Sensor Fouling
16. Multiprobe NIST temperature Check

The PDW calculates results for fouling and drift and compares these results to project DQO's. After each station service event, the station operator emails the PDW to their TCEQ data validator who uses it to validate project data.

PDW workbooks for each station and calendar year are labeled using the following naming convention (PDW\_CAMSXXX\_CalendarYear). When a new calendar year starts, begin a new workbook. Tabs within the workbook contain individual PDWs and are labeled with the month, day, and year station service occurred.

# CAMS: 749 AND 808

- TCEQ Non-EMRS Multiprobe Data Validation Using QC Sample Results

Data validations for these stations are based on the following QC results:

1. Calibration Verification Sample (calibration drift) results
2. Sensor/deployment tube fouling measurement results
3. Change in water body measurement results
4. Laboratory



QUESTIONS AT END OF BREAKOUT