

# **Colorado River below Austin Turbidity Investigation**

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**Stephen Davis**  
**Lisa Benton**



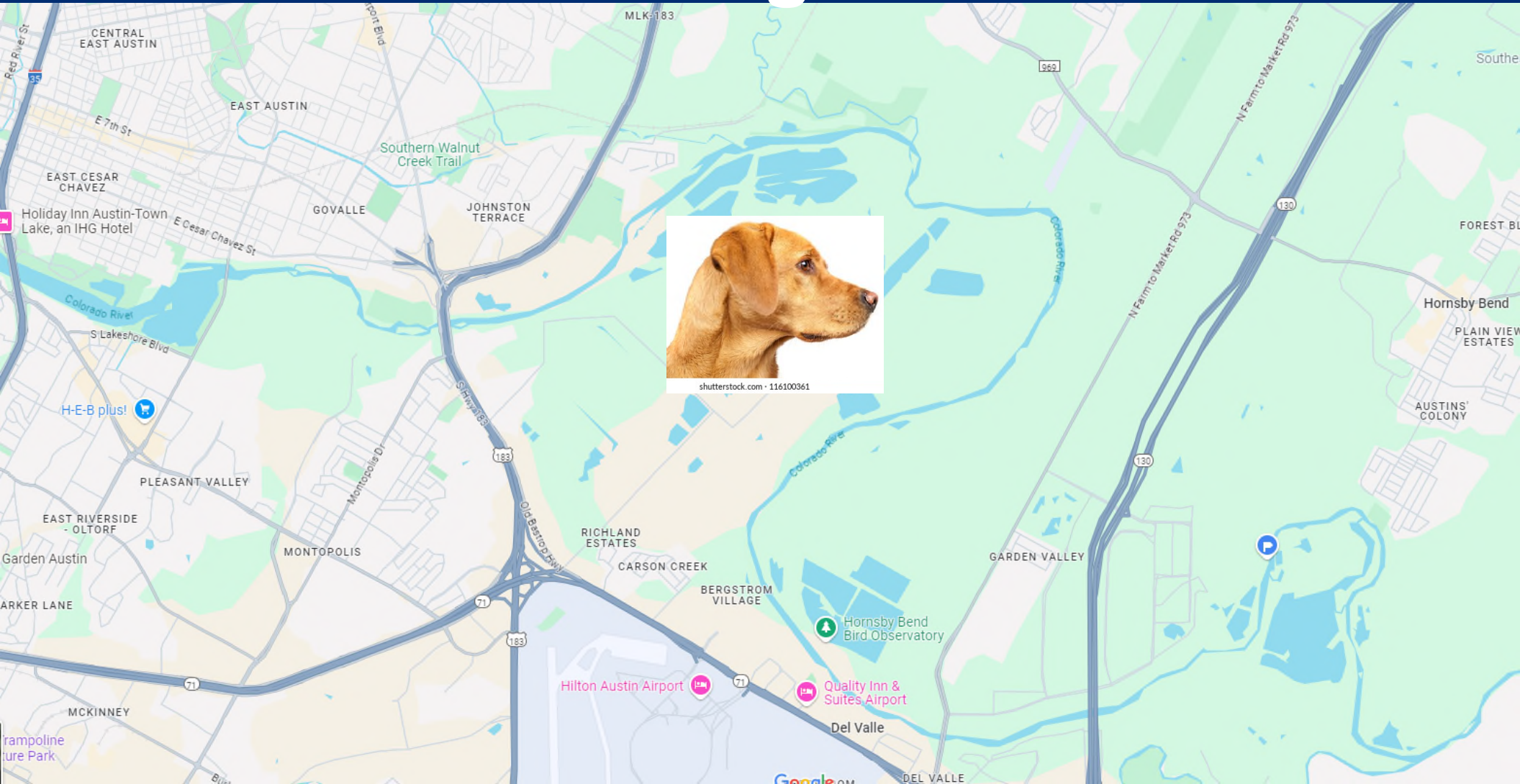
# Presentation outline

- What is the dog head reach?
- What is the issue?
- Timeline of investigation events & findings
- Next steps

# What is the dog head reach?



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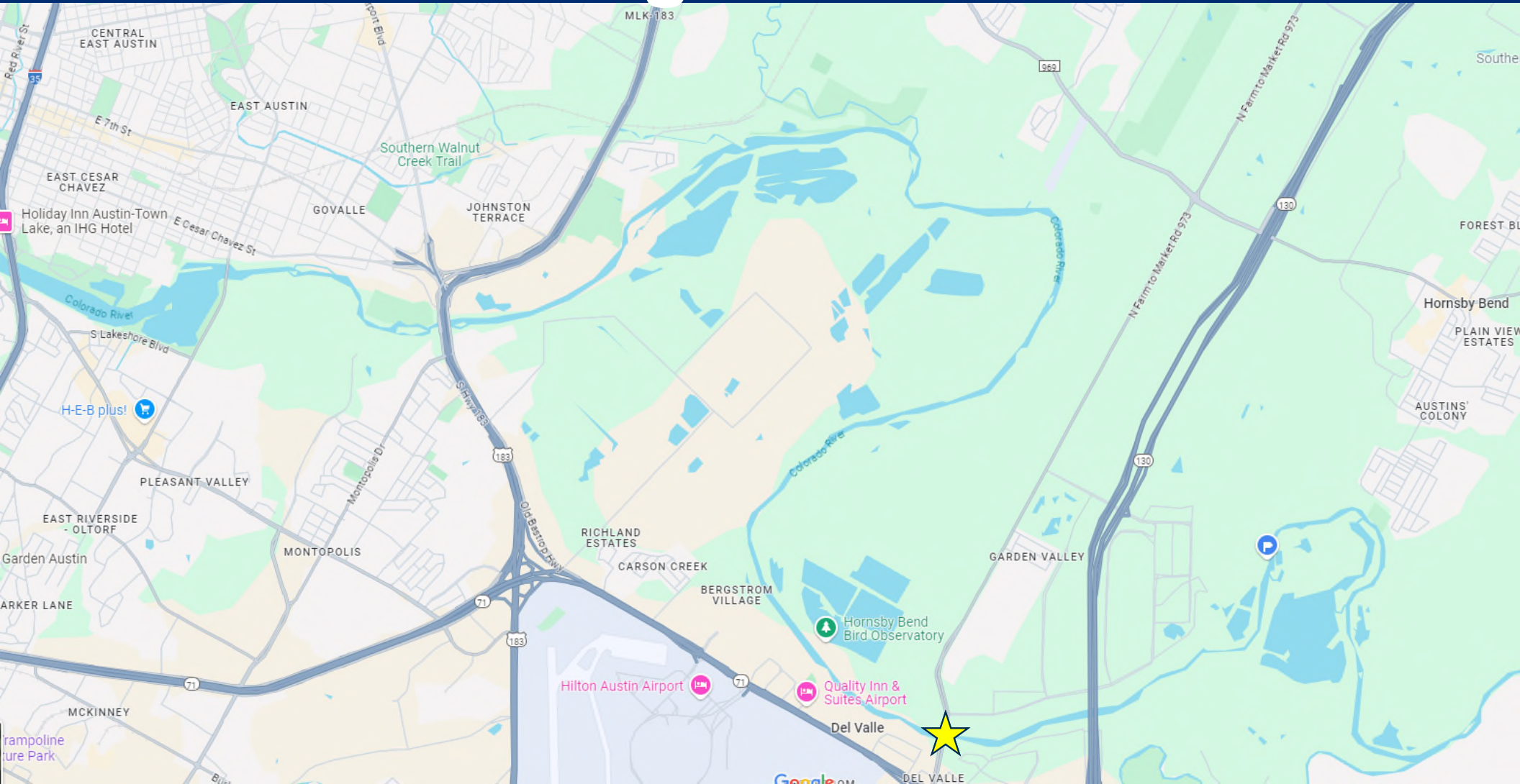


# Timeline of events

- 7/29/2023 – Initial complaint of turbidity in lower river.

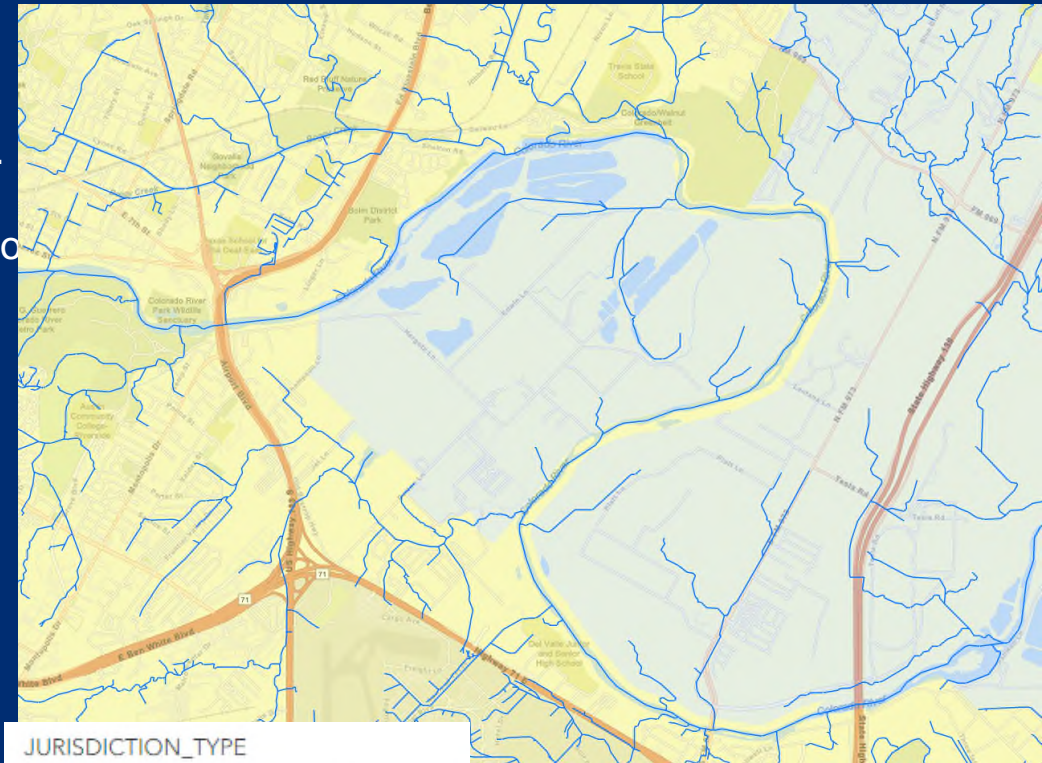


# The dog head reach



# Timeline of events

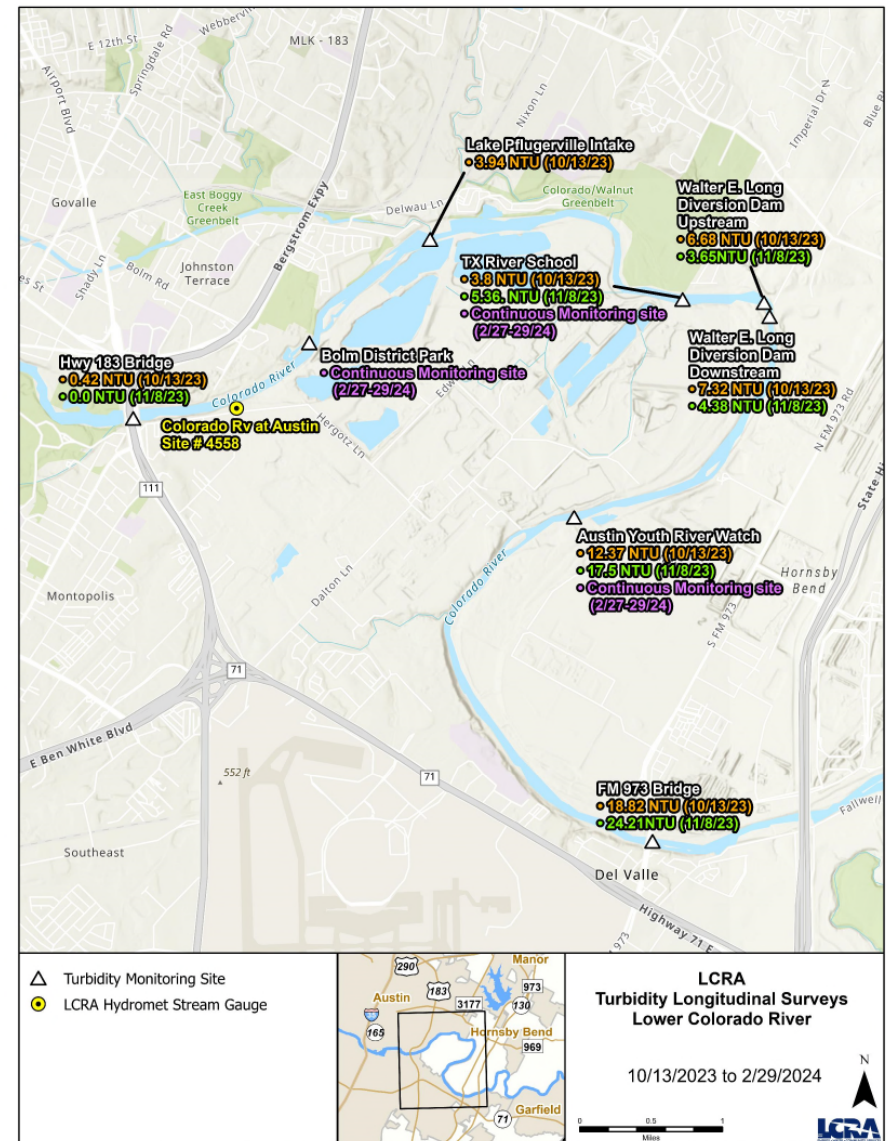
- 7/29/23 – Initial complaint of turbidity in lower river.
- 8/2/23 - COA WPD contacted and field reconnaissance conducted. No significant findings. Limited authority in area.
- 10/11/23 – LCRA aerial drone survey of dog head reach. No “smoking gun” point source discovered.



JURISDICTION_TYPE	
	2 MILE ETJ AGRICULTURAL AGREEMENT
	FULL PURPOSE
	LIMITED PURPOSE
	EXTRATERRITORIAL JURISDICTION

# Timeline of events

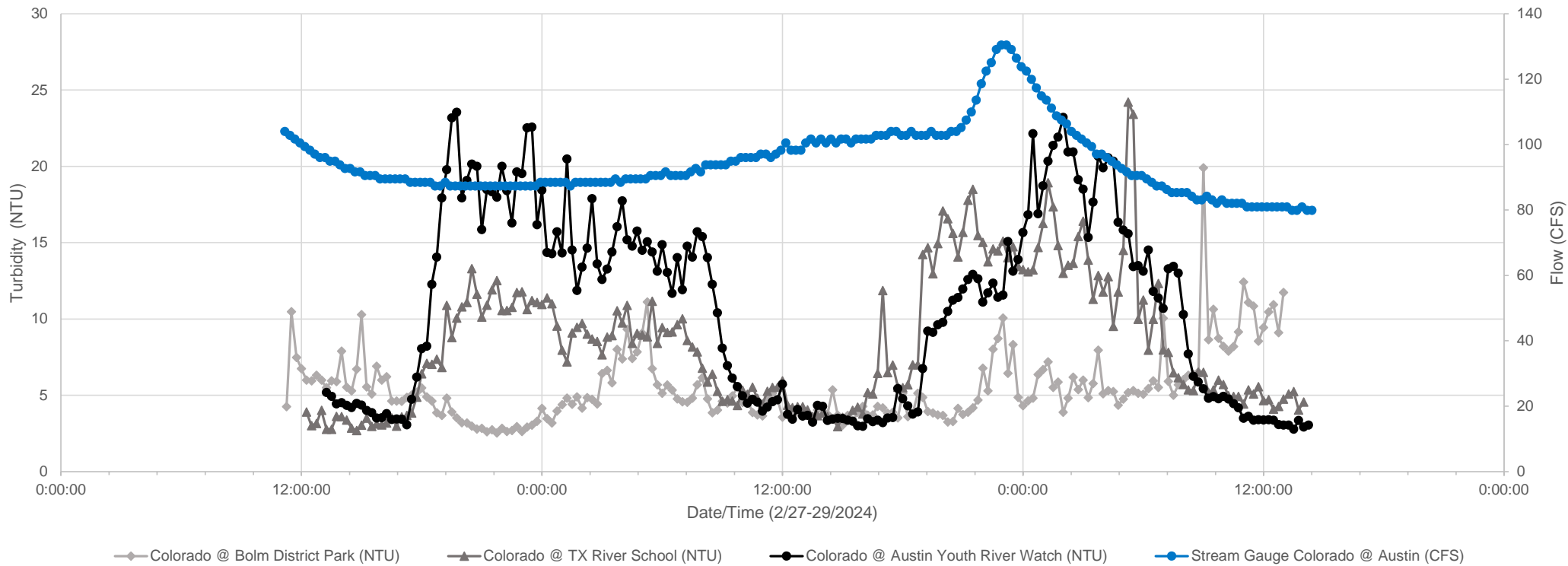
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- 10/13/23 – Longitudinal survey of lower Colorado River between Hwy 183 & FM 973. Discrete turbidity.
- 11/8/23 – Second longitudinal survey. Discrete turbidity.
- 2/27-29/24 – LCRA deploys three turbidity monitoring sensors for 48-hour period at three sites in the dog’s head reach of the lower Colorado River.



Path: \\wins.lcra.org\data\CSV\Shared\Common\Water Resource Protection\EXEMPT\GIS\SDavis\_GIS\2023\_Lower\_Colorado\_turbidity\_complaint\Turbidity\_Lower\_Colorado\_River\Turbidity\_Lower\_Colorado\_River.aprx

# Timeline of events

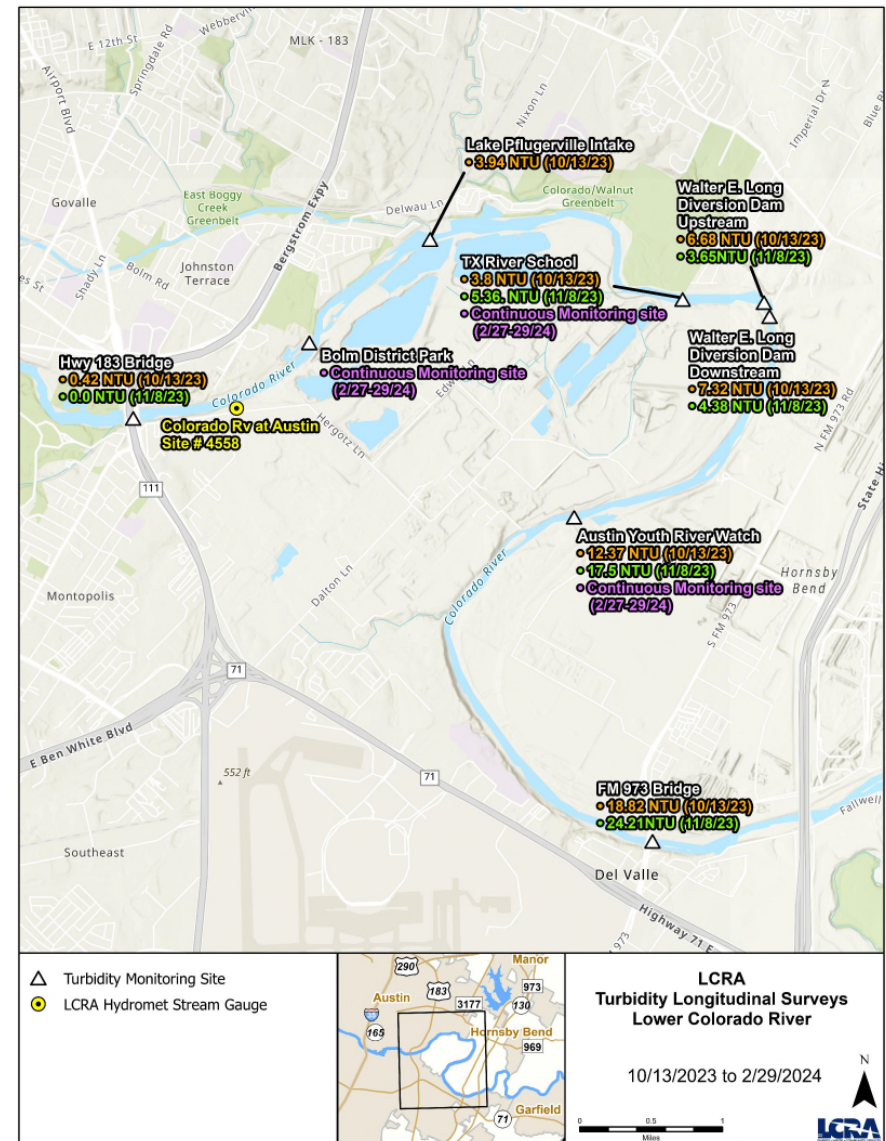
48 Hour Turbidity & Flow Measurements in the Lower Colorado River between Hwy 183 & FM 973 Crossings





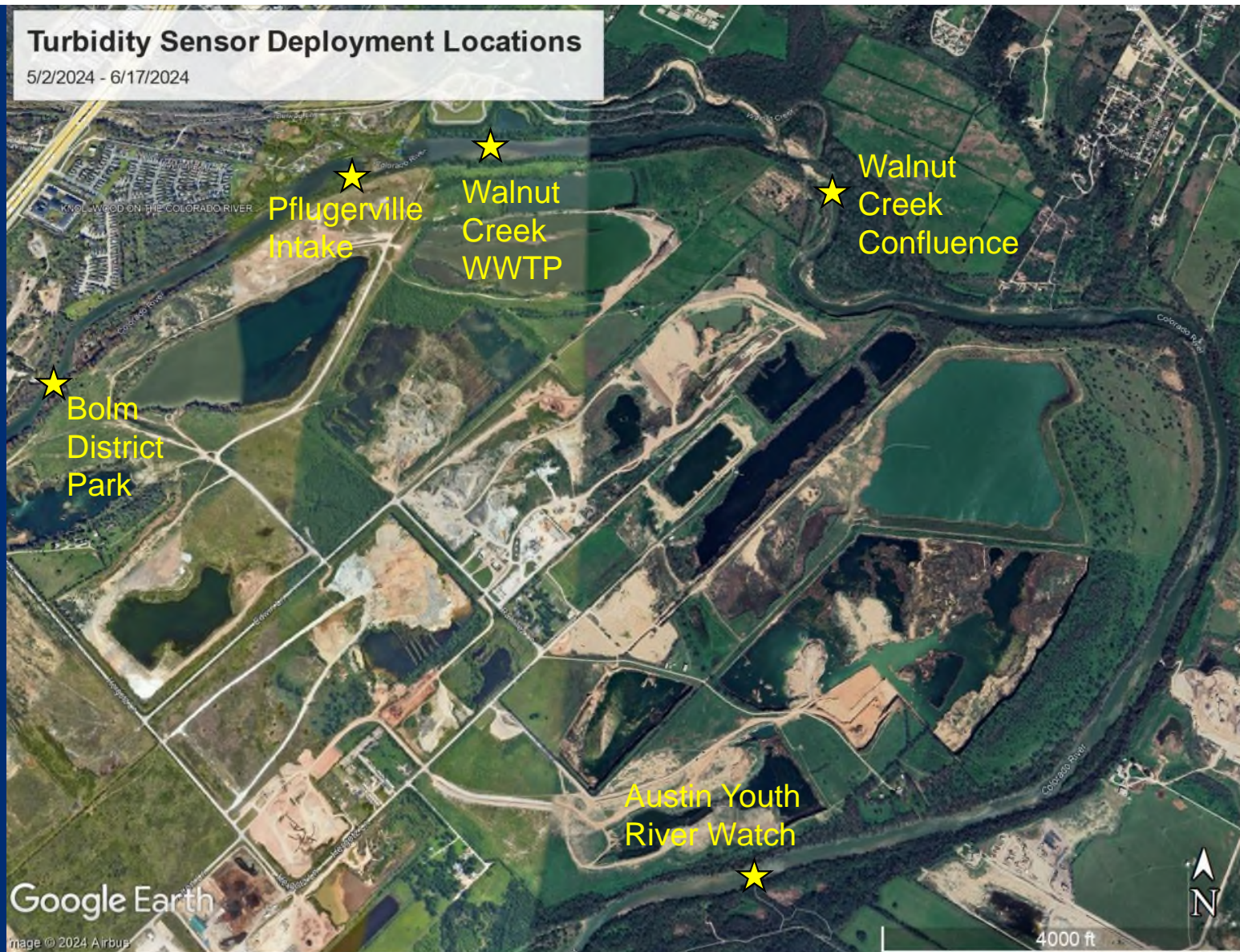
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- 4/19/24 – LCRA meets with TCEQ Region 11 Director and Water Section Manager.
- 5/2/24 to 6/17/24 – LCRA deploys turbidity monitoring sensors at five sites in the dog head reach of the Colorado River.



# Turbidity Sensor Deployment Locations

5/2/2024 - 6/17/2024



Bolm District Park

Pflugerville Intake

Walnut Creek WWTP

Walnut Creek Confluence

Austin Youth River Watch

Google Earth

Image © 2024 Airbus

4000 ft



# Turbidity sensor retrieval 6/17/24

- No data pulled from Austin Youth River Watch site



# Turbidity sensor retrieval 6/17/24



# Turbidity Sensor Deployment Locations

5/2/2024 - 6/17/2024



Google Earth

Image © 2024 Airbus

4000 ft

# Next Steps

- **More continuous turbidity sensor deployments in Colorado and Walnut Creek with routine debris maintenance**
  - (after seasonal hydro releases stop)
- **Longitudinal surveys of Walnut Creek**
- **Look at turbidity concentration further downstream**
- **Engage Travis County on topic**