



Watercourse Determinations - TCEQ's process and case studies.

An overview of TCEQ's watercourse determination process, including data sources and how they are used.

Water Rights Permitting & Availability Section

Water Availability Division

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Surface Water Availability Team

Agenda Overview

- Statutes & Rules
- Submitting a Request
- How We Make Our Determinations
- Determinations
- Case Studies
- Q&A Session

Statutes and Rules

- Texas Water Code § 11.021 – State Water
- Title 30, Texas Administrative Code:
 - § 297.1 (17) - Diffuse Surface Water
 - § 297.1 (52) - State Water
 - § 297.1 (61) - Watercourse

What is State Water?



- The water of the ordinary flow, underflow, tides of every flowing river, natural stream, lake, every bay or arm of the Gulf, the storm water, floodwater, and rainwater of every river, natural stream, canyon, ravine, depression, and watershed in the state is the property of the state.

Terms and Clarifications

- State Water

- State water does not include percolating groundwater; nor does it include diffuse surface rainfall runoff, groundwater seepage, or spring water before it reaches a watercourse.

- Watercourse

- A definite channel of a stream in which water flows within a defined bed and banks, originating from a definite source or sources.
- The water may flow continuously or intermittently, and if the latter with some degree of regularity, depending on the characteristics of the sources.

- Diffuse Surface Water

- Water on the surface of the land in places other than watercourses. Diffused water may flow vagrantly over broad areas coming to rest in natural depressions, playa lakes, bogs, or marshes.
- An essential characteristic of diffused water is that its flow is short-lived.

Watercourse

- Defined bed and banks
- Current of water
- Permanent source of supply
- May be ephemeral in nature

Diffuse Surface Water



- May create temporary "channels"
- May be concentrated within a depression
- Can be captured and used in off-channel reservoirs
- Diffuse surface water is not within TCEQ's jurisdiction

Diffuse Surface Water cont.

During Rainfall Event



1-Week Later



When is a Water Rights Permit Required?

- Texas Water Code Section 11.121
- No person may appropriate any state water or begin construction of any work designed for the storage, taking, or diversion of water without first obtaining a permit.



- Individuals, corporate entities, water supply corporations, municipalities, river authorities, etc.

Submitting a Request

- Contact the Water Rights Permitting and Availability Section
- Ask for a Project Manager on the Water Rights Permitting Team
- Phone: 512-239-4600
- Email: WRAS@tceq.Texas.gov

Information to Include

- Subject: Project Name – On/Off Channel Determination
- Latitude and Longitude of the physical location
- Photographs, engineering drawings, construction drawings, *etc.*

How We Make Our Determinations

- TCEQ Desktop Methodology
 - Plot the requested location
 - Historical data
 - Existing water rights
 - Previous determinations
 - Current and historic imagery
 - USGS topographical maps

Questions We Ask for Reservoirs

- Is there a clearly defined channel?
- Are there any existing or previous determinations near the reservoir?
- Is the reservoir bermed?
- Is a watercourse identified on historical topo maps?

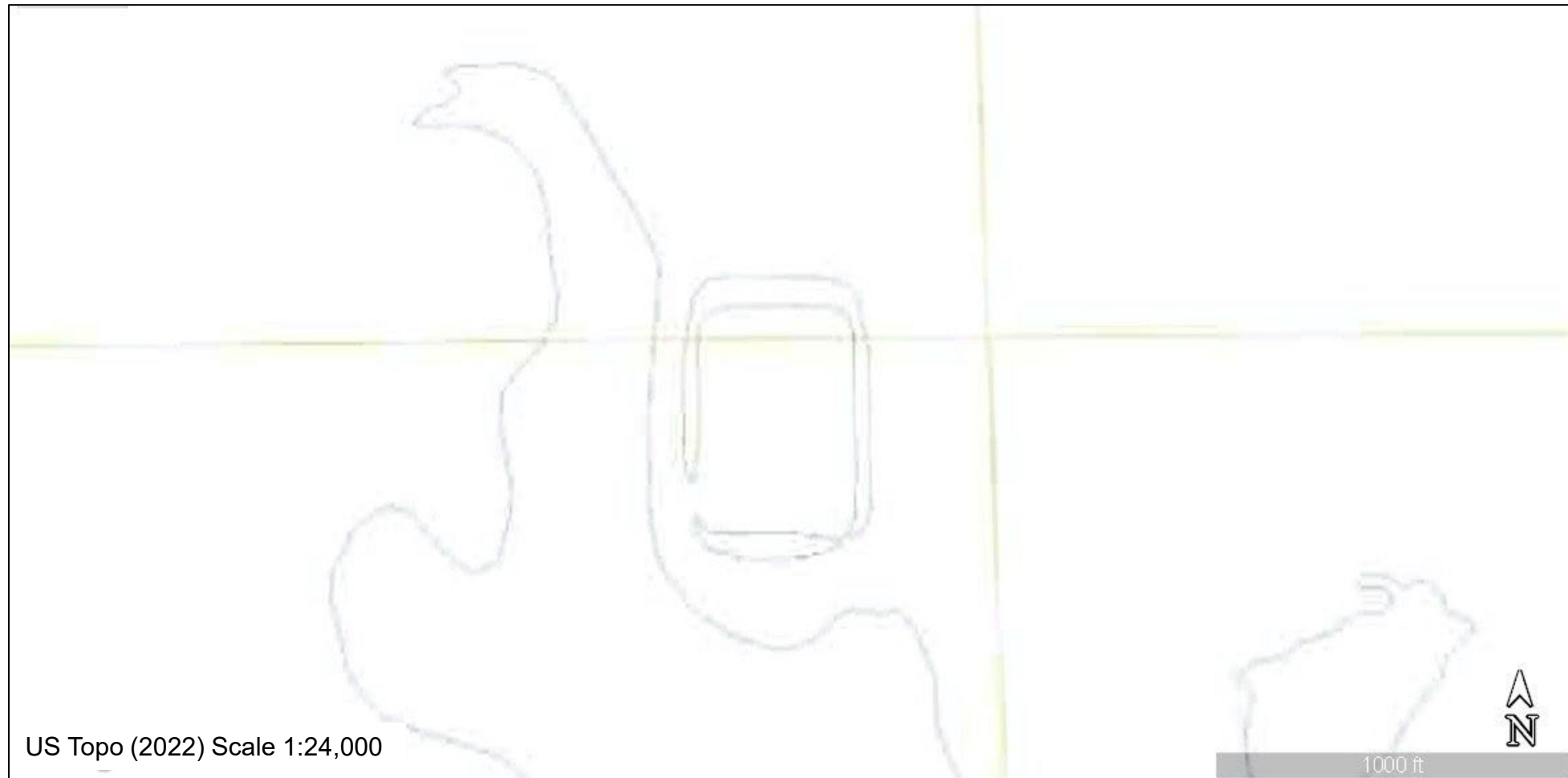
Determinations

- Three different outcomes:
 - On-channel
 - Off-channel
 - Insufficient information

Case Study: On-Channel



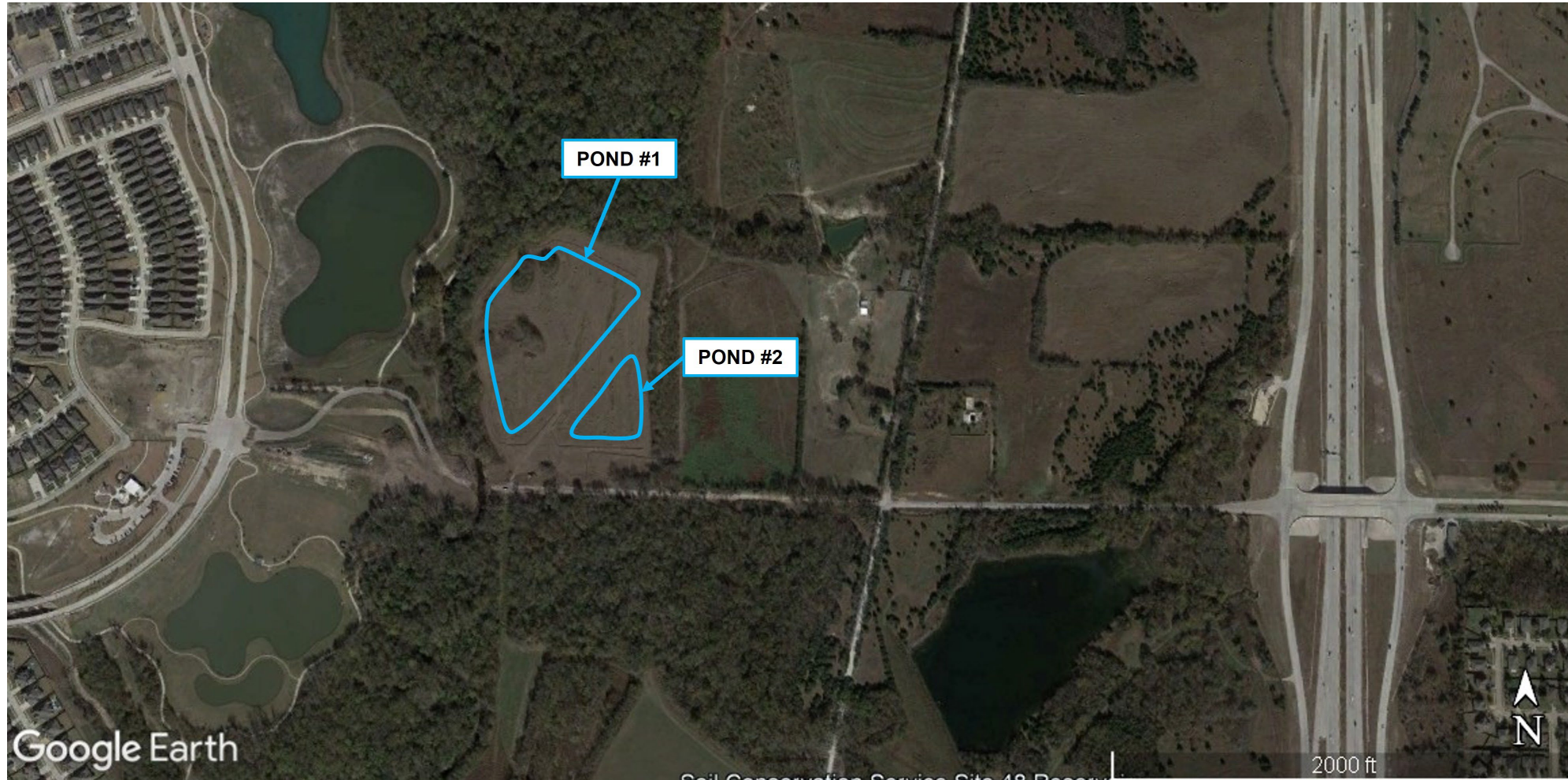
Case Study: Off-Channel



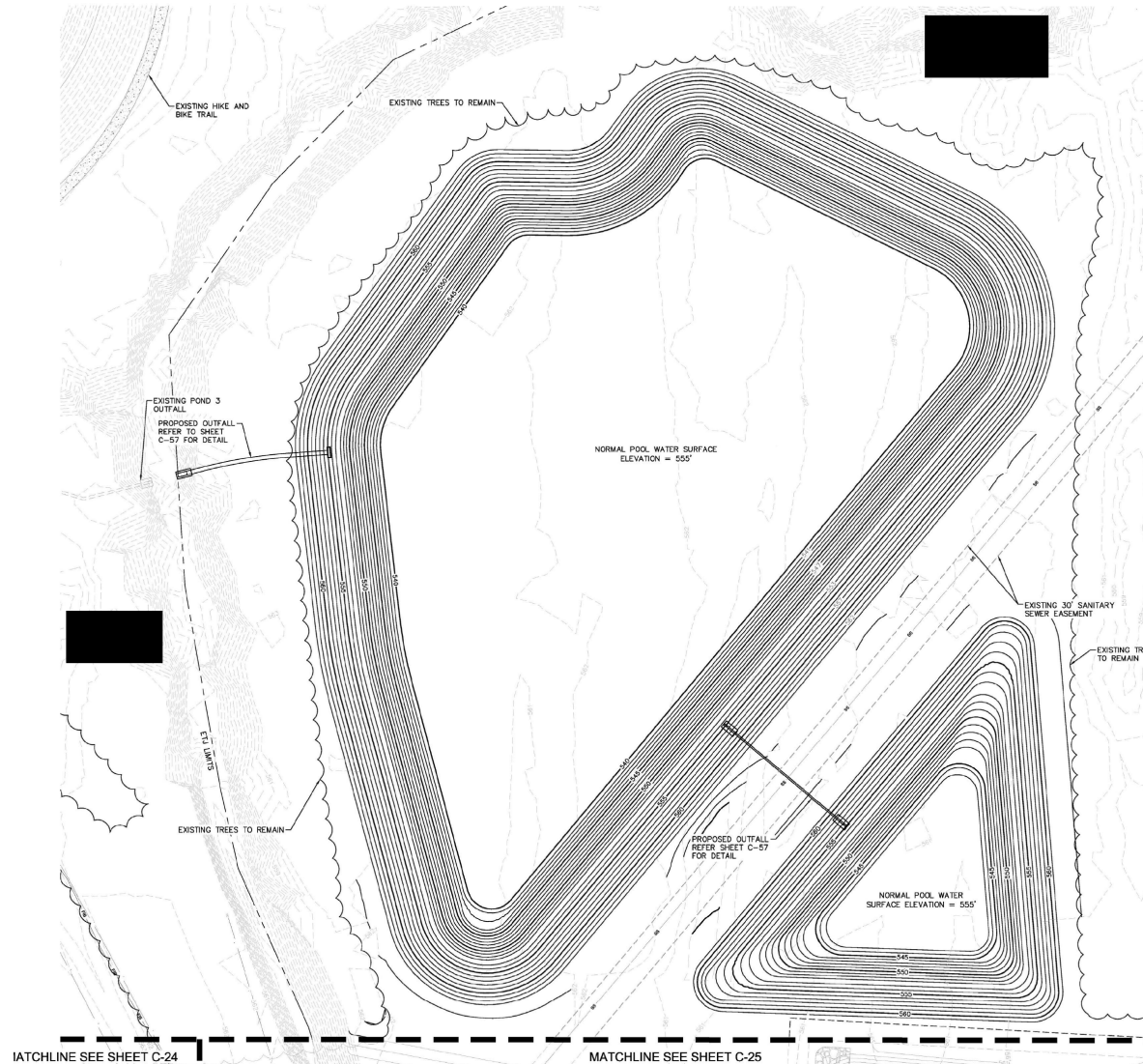
Case Study: Off-Channel cont.



Case Study: Inconclusive Evidence



Case Study: Inconclusive - Response



Reservoirs Located in the Floodplain

- Reservoirs can be in a floodplain and still be off-channel
- **BANKFULL FLOW** cannot enter the reservoir
- Only capturing floodwaters? Acceptable

Floodplain Example

Requestor confirmed that bankfull flow would pass downstream unobstructed



Re-Routing Channels

- Channel is re-routed in a way that upstream flows passes downstream without any obstruction
- Rerouting only occurs on the requestor's property. The stream must enter and exit the property at its original location.
- Reservoirs can also be completely bermed so that no inflows from the stream can enter when at or below bankfull stage
- **BANKFULL FLOW** cannot enter the reservoir

Re-Routing Channels cont.



Insufficient Information

- May submit additional information including, but not limited to, the following:
 - Pictures
 - Site Assessment
 - Engineering drawings
 - Construction drawings

Next Steps: On-Channel

- Determine whether a water right would be required for the project
- Chris Kozlowski – Water Rights Permitting Team Leader
 - Phone: 512-239-1801

Contact Information

Water Availability Division
Water Rights Permitting & Availability Section

512-239-4600

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