



Definition

A dam is:

a barrier preventing the flow of water *or* of loose solid materials (such as soil or snow)

Source: Merriam-Webster Dictionary

Photo Credit: Trevor Walsh

Why build a dam?



- Flood Control
- Public Water Supply Reservoir
- Hydropower
- Erosion Control
- Agriculture (Irrigation) & Livestock
 Water
- Recreation



What may be some concerns when it comes to dams?

- Impeded aquatic organism passage
- Holding back water from downstream users
- Impairment of navigation up and downstream
- Destruction of streambeds and release of sediment during construction
- Disruption of natural flows
- Block sediment transport
- Stagnant water can impact water quality
- Risk of dam breach



Our Goals for this Webinar

- Demystify the permitting process around <u>private</u>
 dams
 - Private dams = dams built for private benefit
 - Focused on dams on Texas waterways
- Help direct folks to the right pathways when they have a concern about a proposed or unauthorized dam

Agenda

- Framing the Conversation
- Dam Permitting Process
 - TCEQ Water Rights Division
 - TCEQ Dam Safety
 - Texas Parks and Wildlife Department
 - US Army Corps of Engineers
- Q&A (Please post in the chat as they come up)

Note: We will not answer any questions about specific dams or cases during this webinar.

EXEMPT RESERVOIRS AND WATER RIGHTS PERMITTING BY TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ): A HIGH LEVEL OVERVIEW

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OCTOBER 30, 2024

TCEQ REGULATES TAKING OR STORING "STATE WATER" UNDER CHAPTER 11 OF THE TEXAS WATER CODE (TWC)

TWC Sec. 11.021. State Water.

General concept: water in a surface watercourse is state water.

TCEQ rule further clarifies scope of "state water" (30 TAC Sec. 297.1 (52)):

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

TAC stands for Texas Administrative Code where state agency rules can be found.

GENERAL RULE: WATER RIGHT PERMIT FROM TCEQ IS REQUIRED TO STORE, TAKE, OR DIVERT STATE WATER

TWC Sec. 11.121. Permit Required.

Except as otherwise provided in specific sections of the Texas Water Code, such as 11.142 which we will discuss today, must get a permit to appropriate any state water or begin construction for the storage, taking, or diversion of state water.

"SMALL RESERVOIR" EXEMPTION FROM WATER RIGHT PERMITTING:NOT APPLICABLE FOR DAM ON NAVIGABLE STREAM OR STORING MORE THAN 200"ish" ACRE-FEET (AF)

TWC Sec. 11.142 Permit Exemptions.

Subsection (a). Without permit, may construct on your own property dam or reservoir with normal storage of not more than 200 acre-feet for domestic and livestock purposes. Commercial operation not exempt.

Cannot be on a <u>navigable</u> stream. 30 TAC Sec. 297,21 (c)

"Normal storage" defined in TCEQ rules as amount stored before uncontrolled release begins. 30 TAC Sec. 207.21 (b), (e).

"SMALL RESERVOIR" EXEMPTION FROM WATER RIGHT PERMITTING: WIGGLE ROOM ON SIZE LIMITATION— TEMPORARY STORAGE OF MORE THAN 200 AF

TWC Sec. 11.142. Permit Exemptions. Subsection(a)

Person can temporarily store more than 200 AF if the person can demonstrate has not stored more than 200 AF of water <u>on average</u> in <u>any 12-month period</u>. Applies for domestic and livestock use only.

TCEQ rules require reservoir capacity data and monthly water level records to demonstrate compliance if normal storage capacity over 200 AF. 30 TAC Sec. 297 21 (b)

WHAT QUALIFIES AS DOMESTIC USE?

TCEQ Rule 30 TAC Sec. 297.1 (definitions):

(19) **Domestic use**—Use by an individual or household for drinking, washing, or culinary purposes;

for irrigation of lawns, or of a family garden and/or orchard;

for watering of domestic animals; and

for water recreation including aquatic and wildlife enjoyment.

Generally, money-making activities not included.

WHAT QUALIFIES AS LIVESTOCK USE?

TCEQ Rule 30 TAC Sec. 297.1 (definitions):

(29) Livestock use-open-range watering of livestock, exotic livestock, game animals or fur-bearing animals

Use of land for livestock purposes is not considered a commercial operation. 30 TAC Sec. 297.21 (b)

Leasing property for hunting or trapping is acknowledged as being allowed. 30 TAC Sec. 297.21 (d)

"SMALL RESERVOIR" EXEMPTION FROM PERMITTING: FISH & WILDLIFE USE ALSO QUALIFIES (TWO VERSIONS OF THIS EXEMPTION)

Texas Water Code Sec. 11.142. Subsection(b) (added in 2001)

- dam and reservoir on the person's property
- normal storage of not more than 200 acre-feet
- for fish and wildlife purposes
- property where located is qualified open-space land, as defined by Sec. 23.51, Tax Code
- exemption does not apply to a commercial operation

"SMALL RESERVOIR" EXEMPTION FROM PERMITTING: "WILDLIFE MANAGEMENT" USE (VERSION 2)

Texas Water Code Sec. 11.142.

[second Subsection (b)] (also added in 2001)

- dam and reservoir on the person's property
- normal storage of not more than 200 acre-feet
- in an unincorporated area
- for <u>commercial</u> or <u>noncommercial</u> wildlife management, including fishing, but not including fish farming

"SMALL RESERVOIR" EXEMPTION FROM PERMITTING: "COMMERCIAL USE" DEFINED NARROWLY FOR "FISH" AND "WILDLIFE" MANAGEMENT USE

TCEQ Rule 30 TAC Sec. 297.21

(e) [applicable to "wildlife management" and "fish management" purposes under TWC Section 11.142 (b)]

Defines commercial operation as used in this subsection, and not eligible for the exemption, to mean the use of land for industrial facilities, industrial parks, aquaculture facilities, fish farming facilities, or housing developments.

EXEMPTION FROM WATER RIGHT PERMITTING: SURFACE COAL MINING (NOT LIMITED TO 200 AF)

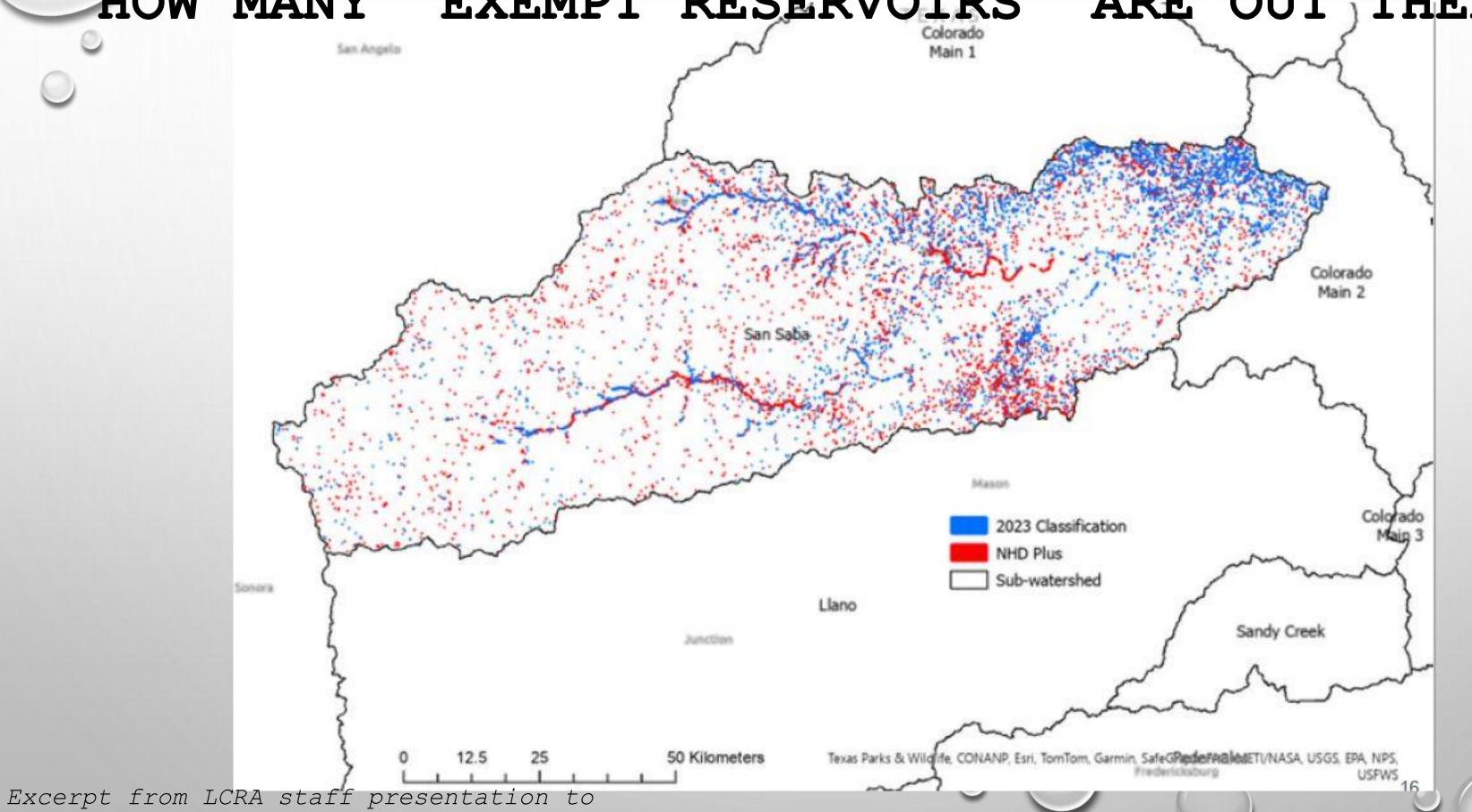
Texas Water Code Sec. 11.142 subsection(d)

Only applies for reservoir as part of permitted surface coal mining operation under Chapter 134, Natural Resources Code, and only if water used solely for:

sediment control or fire or dust suppression

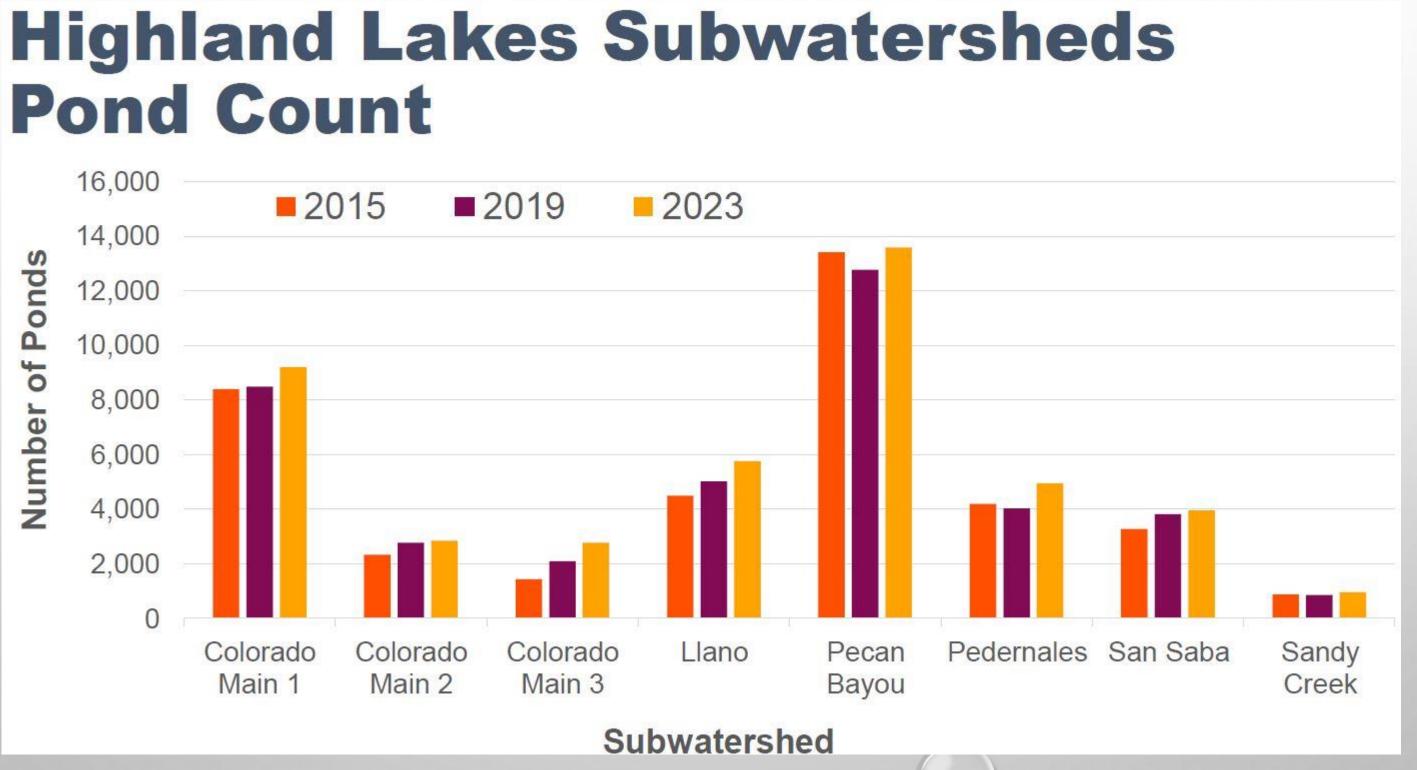
No stated size limit or ownership limitation

"SMALL RESERVOIR" EXEMPTION FROM PERMITTING HOW MANY "EXEMPT RESERVOIRS" ARE OUT THERE?



LCRA Board on June 18, 2024 (Agenda Item 4)

"SMALL RESERVOIR" EXEMPTION FROM PERMITTING HOW MANY "EXEMPT RESERVOIRS" ARE OUT THERE?



Excerpt from LCRA staff presentation to LCRA Board on June 18, 2024 (Agenda Item 4)

CONVERTING EXEMPT RESERVOIR TO NON-EXEMPT PURPOSES REQUIRES A PERMIT FROM TCEQ

TWC Section 11.143. Use of Water from Exempt Dam or Reservoir for Nonexempt Purposes

Common example might include reservoir on land that has become part of a subdivision and no longer qualifies for exemption or landowner who wants to start selling water, e.g. for fracking operation.

May have to identify an alternate source of water to keep reservoir full if unappropriated surface water not available.

KEY WATER RIGHT PERMITTING CRITERIA FOR RESERVOIR THAT IS NOT EXEMPT

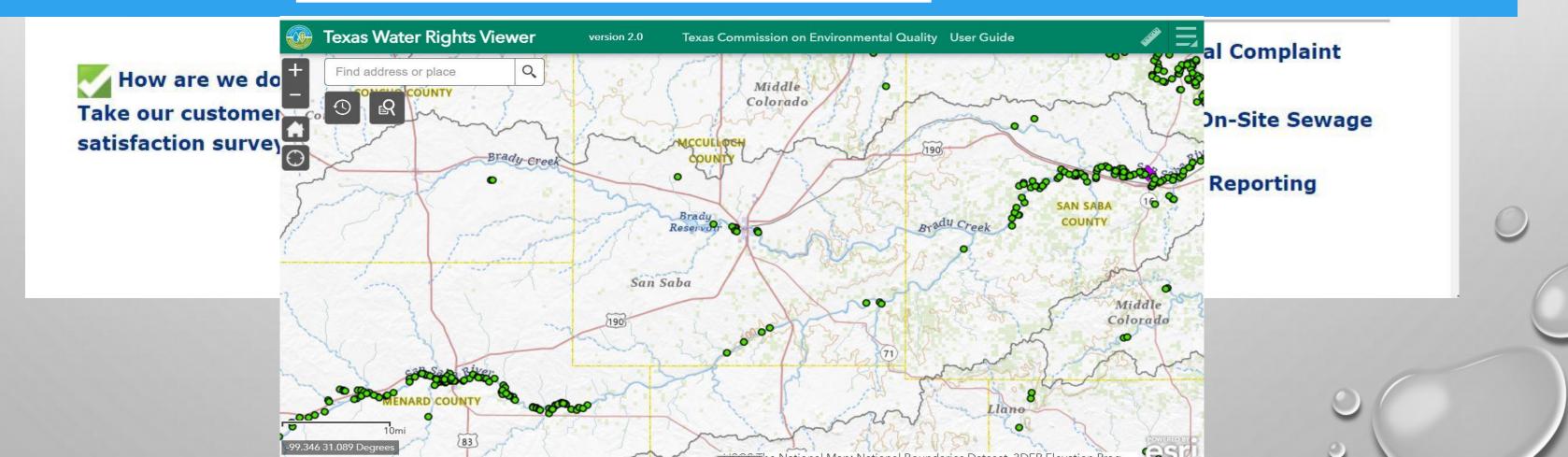
TWC Sec. 11.134. ACTION ON APPLICATION

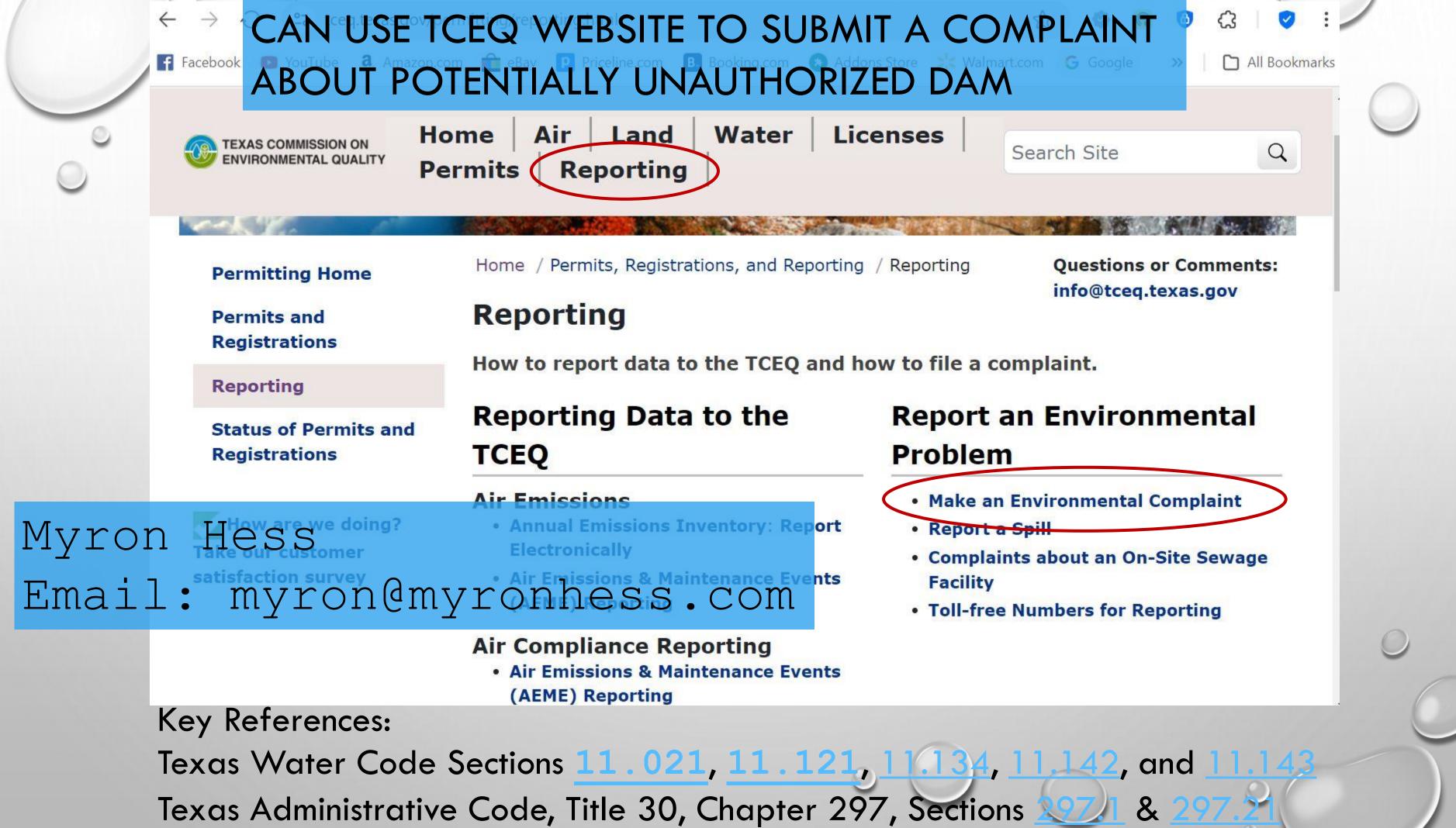
- Notice required--potential to request hearing
- Substantial application required
- Evaluation of availability of unappropriated water
- Proposed for a recognized beneficial use
- No impairment of other water rights or riparian uses
- Not detrimental to public welfare
- Environmental flow impacts adequately addressed
- · Consistency with relevant water plans
- Consideration of water conservation measures



- CLICK ON "WATER" ON HOME PAGE
- UNDER WATER CLICK ON "SURFACE WATER RIGHTS AND AVAILABILITY"

THEN CLICK ON TCEQ WATER RIGHTS VIEWER TO FIND WATER RIGHTS



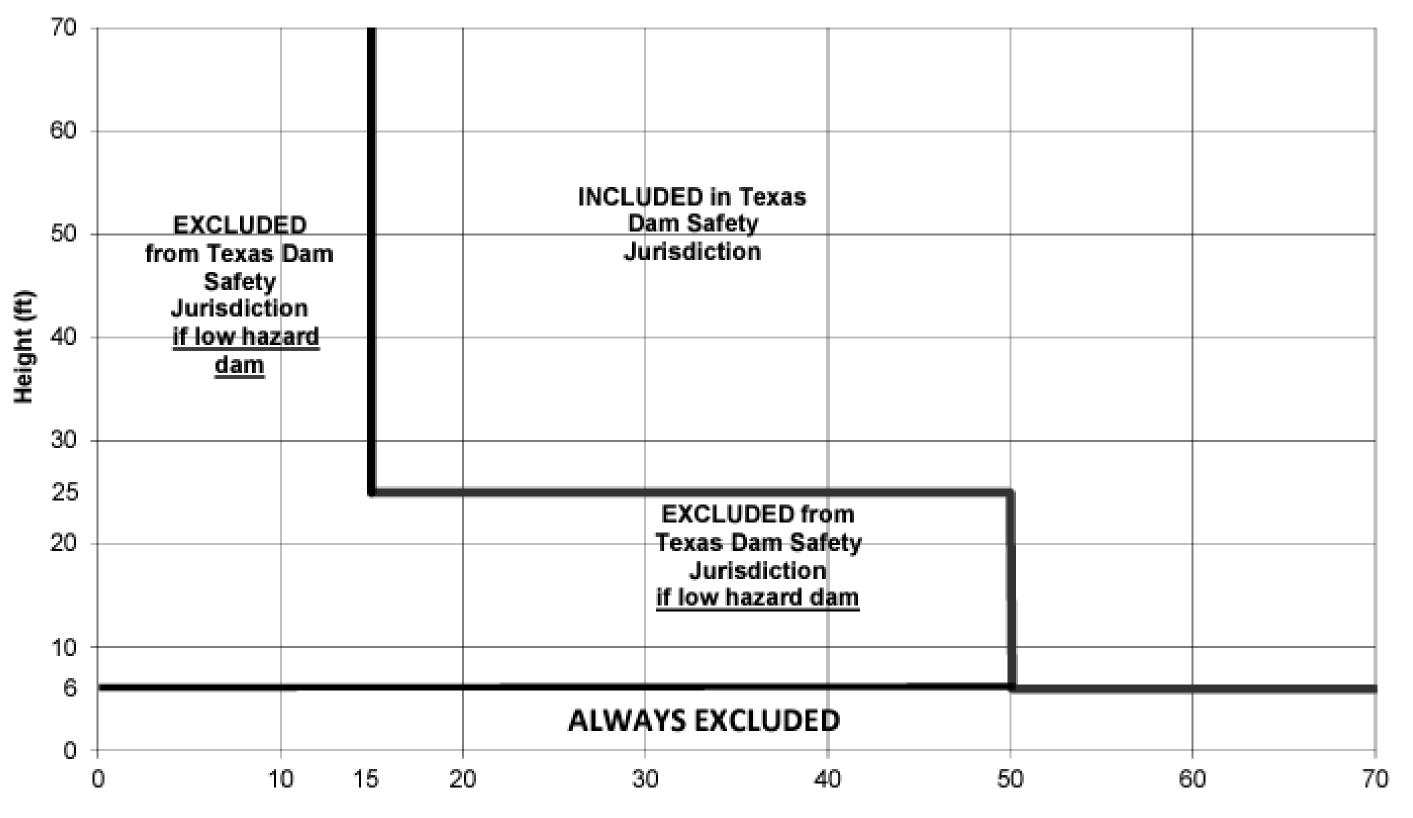




Dam Safety 101

Trina Lancaster, PE, Section Manager, Critical Infrastructure Division, OCE

Dams TCEQ regulates:





Maximum Storage Capacity (ac.ft)

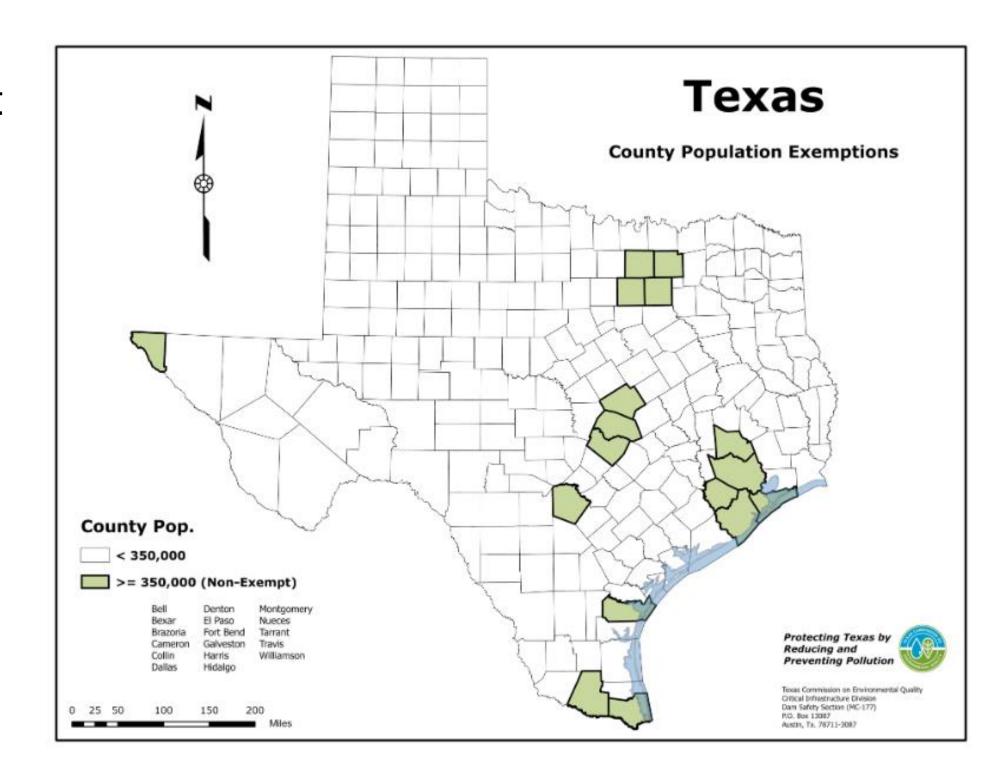
Dams not regulated:

- Dams designed/constructed/owned by federal agencies
- Embankments constructed for roads and railroads unless also designed to function as a detention dam
- Dikes/levees designed to prevent inundation by floodwater
- Off-channel impoundments authorized by TWC Chapter 26
- Above-ground water storage tanks



Exempt Dams:

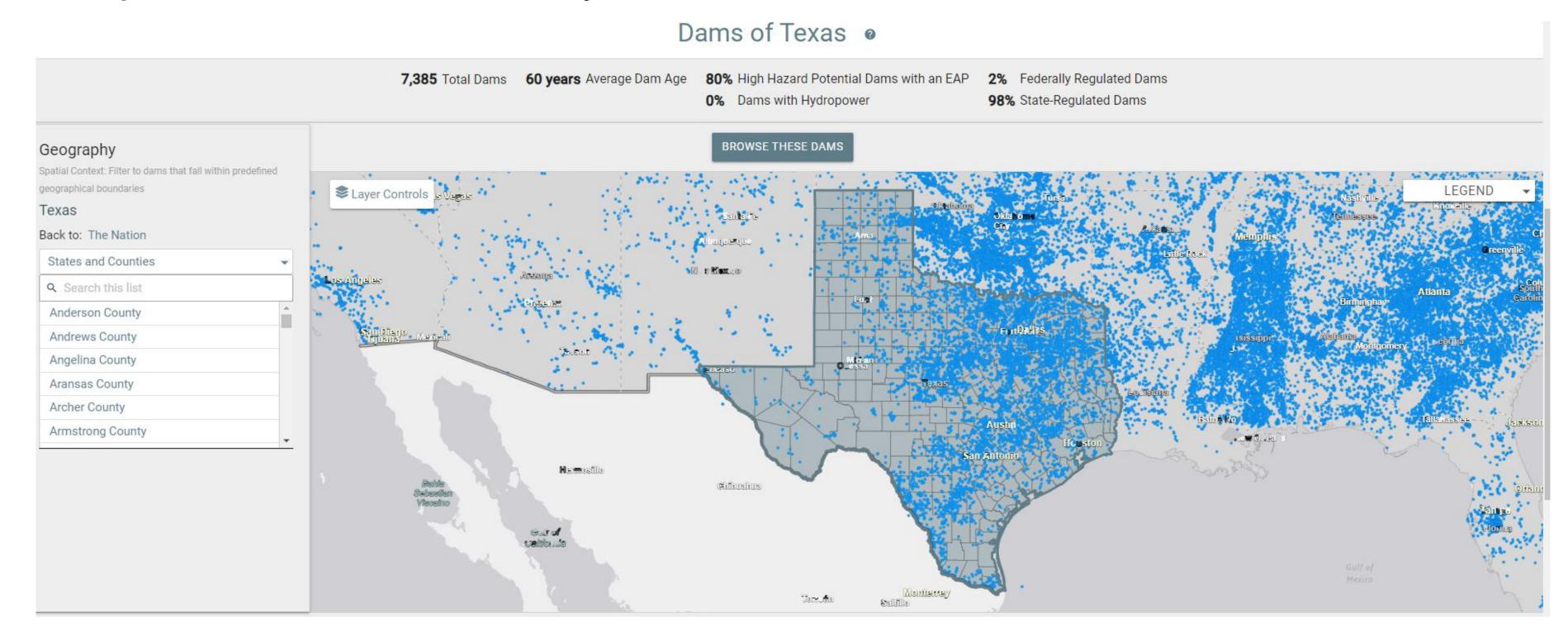
- A dam is exempt from Chapter 299 if it meets all of the following:
 - Is located on private property
 - Has a maximum capacity of less than 500 ac-ft
 - Has a hazard classification of low or significant
 - Located in a county with a population of less than 350,000
 - Not located inside the corporate limits of a municipality





National Inventory of Dams (NID):

https://nid.sec.usace.army.mil/#/



Dam Hazard Classification



- Hazard classification is a description of the potential for loss of downstream life or property in the event of a failure of the dam.
- Hazard classification is NOT a description of the condition of the structure.



Low Hazard Dams

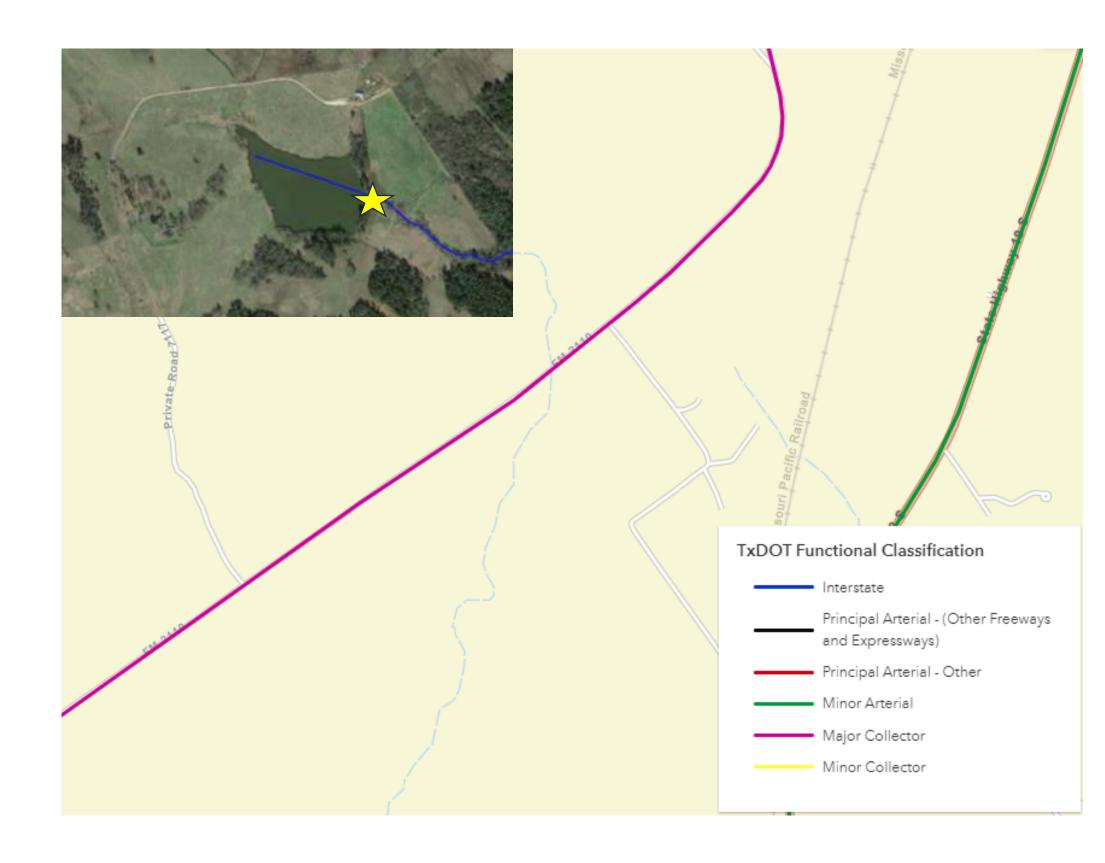
- No loss of life expected
- Minimal economic loss





Significant Hazard Dams

- Loss of life possible
 - 1 2 homes
- Appreciable economic loss
 - Interruption of utilities
 - Secondary highways
 - Minor railroads





High Hazard Dams



- Loss of life expected
 - 3+ homes
- Excessive economic loss
 - Public utilities
 - Main highways
 - Major railroads



Dam Safety & Water Rights

- Dam Safety participates in Water Rights Application Meetings
 - Determines if dam is jurisdictional
 - Adds applicable requirements to permit
 - Plan and specifications review
 - Design Requirements



Complaint Process

- Call TCEQ Region office
 - Location
 - Height, Approximate size of reservoir
- Dam Safety
 - Desktop Review
 - Field Inspection (if jurisdictional dam)
 - Limited Enforcement

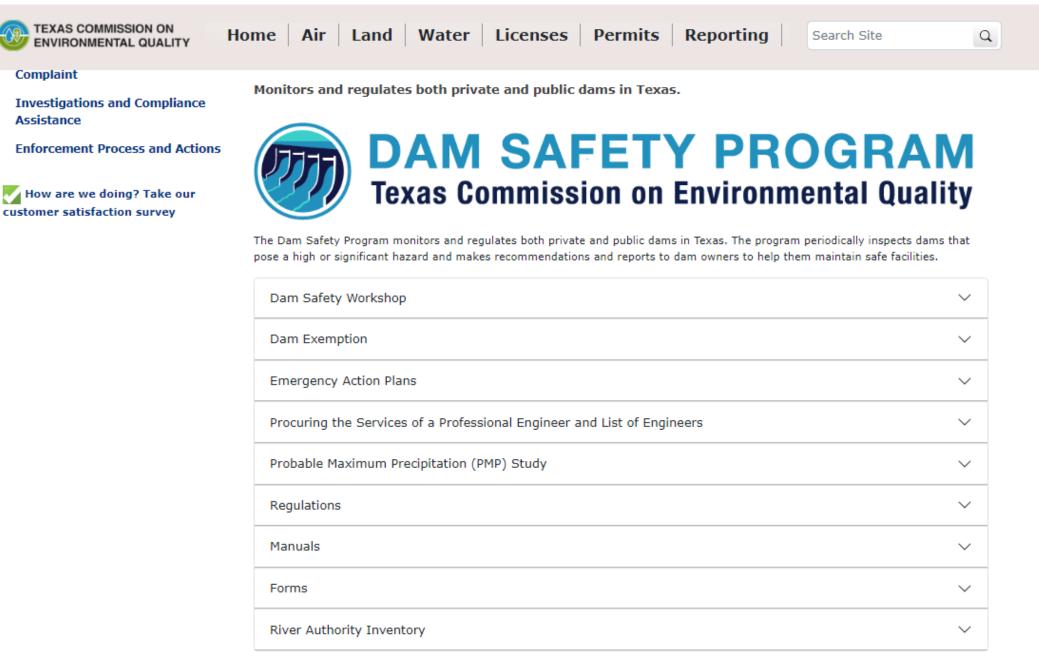


Dam Safety Resources

TCEQ Dam Safety Website

• https://www.tceq.texas.gov/compliance/investigation/damsafetyprog.h

tml







Questions?

Trina Lancaster, PE trina.lancaster@tceq.texas.gov





Sand & Gravel Permit Program

- TPWD Authority
- TPWD Jurisdiction
- Enforcement
- Permits
- Other Issues

Jurisdiction and Authority

TPWD Authority

CHAPTER 86, PARKS & WILDLIFE CODE

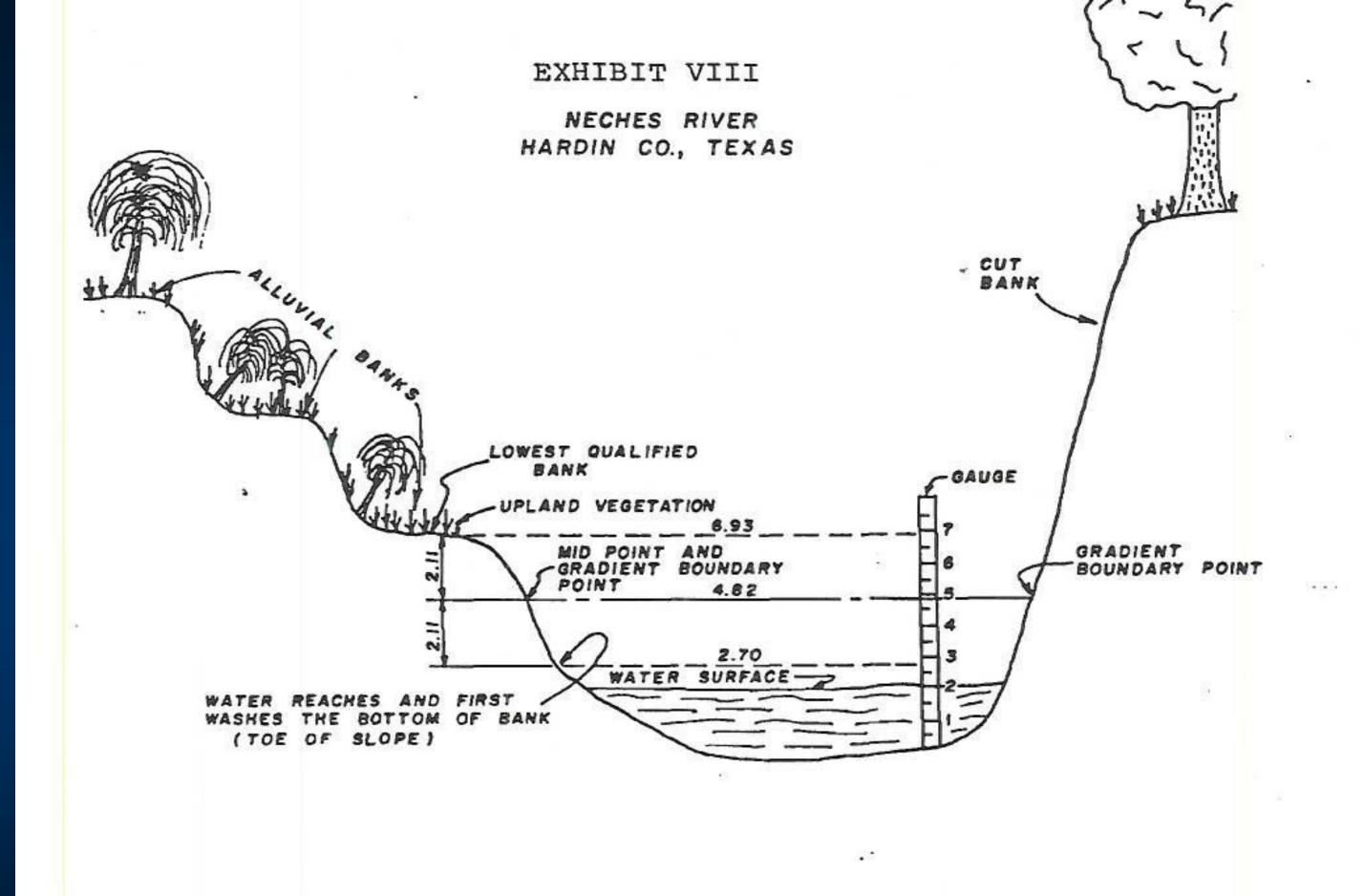
- §86.001 "The commission shall manage, control, and protect marl and sand of commercial value and all gravel, shell and mudshell located within the tidewater limits of the state,...and within freshwater areas of the state not embraced by a survey of private land...and on islands within those areas"
- §86.002 (a) No person may <u>disturb</u> or <u>take</u> marl, sand, gravel, shell or mudshell...without first having acquired from the commission a permit..."

TPWD Jurisdiction

- NAVIGABLE STREAMS Navigable in fact or by statute
 - State-owned Streambeds navigable streams with publicly-owned beds
 - "Small Bill" Streams navigable streams with privatelyowned beds
- SPANISH & MEXICAN LAND GRANTS perennial streams where the sovereign never relinquished title
- COASTAL WATERS Mean high tide to 10.35 miles offshore

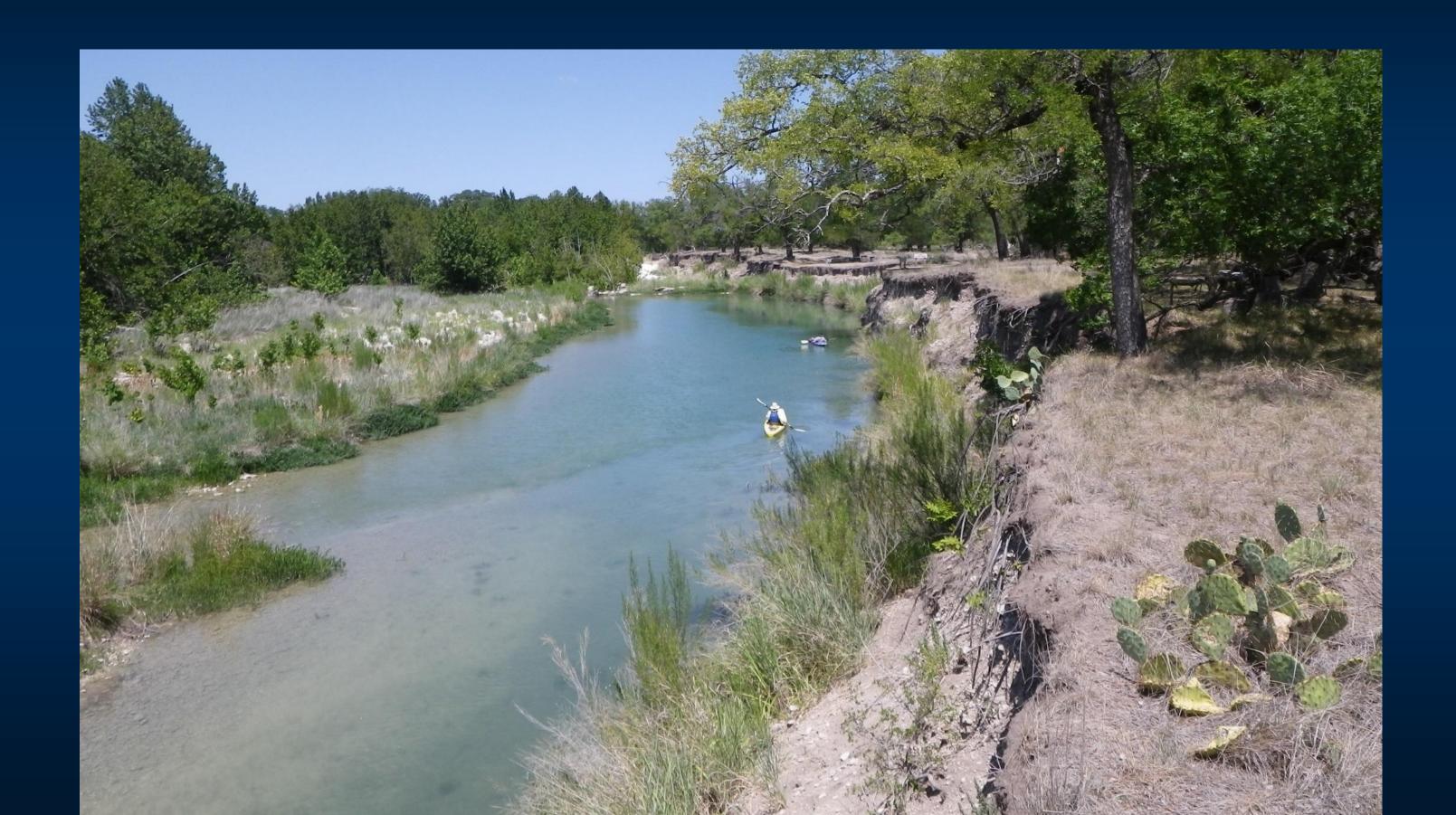
Jurisdiction – Gradient Boundary

- The line between private uplands and public riverbed
- Surveyed by experienced Licensed State Land Surveyor or Registered Professional Land Surveyor
- Gradient Boundary = half-way up the lowest qualifying earthen bank
- Helpful Tool Line of Persistent
 Upland Vegetation

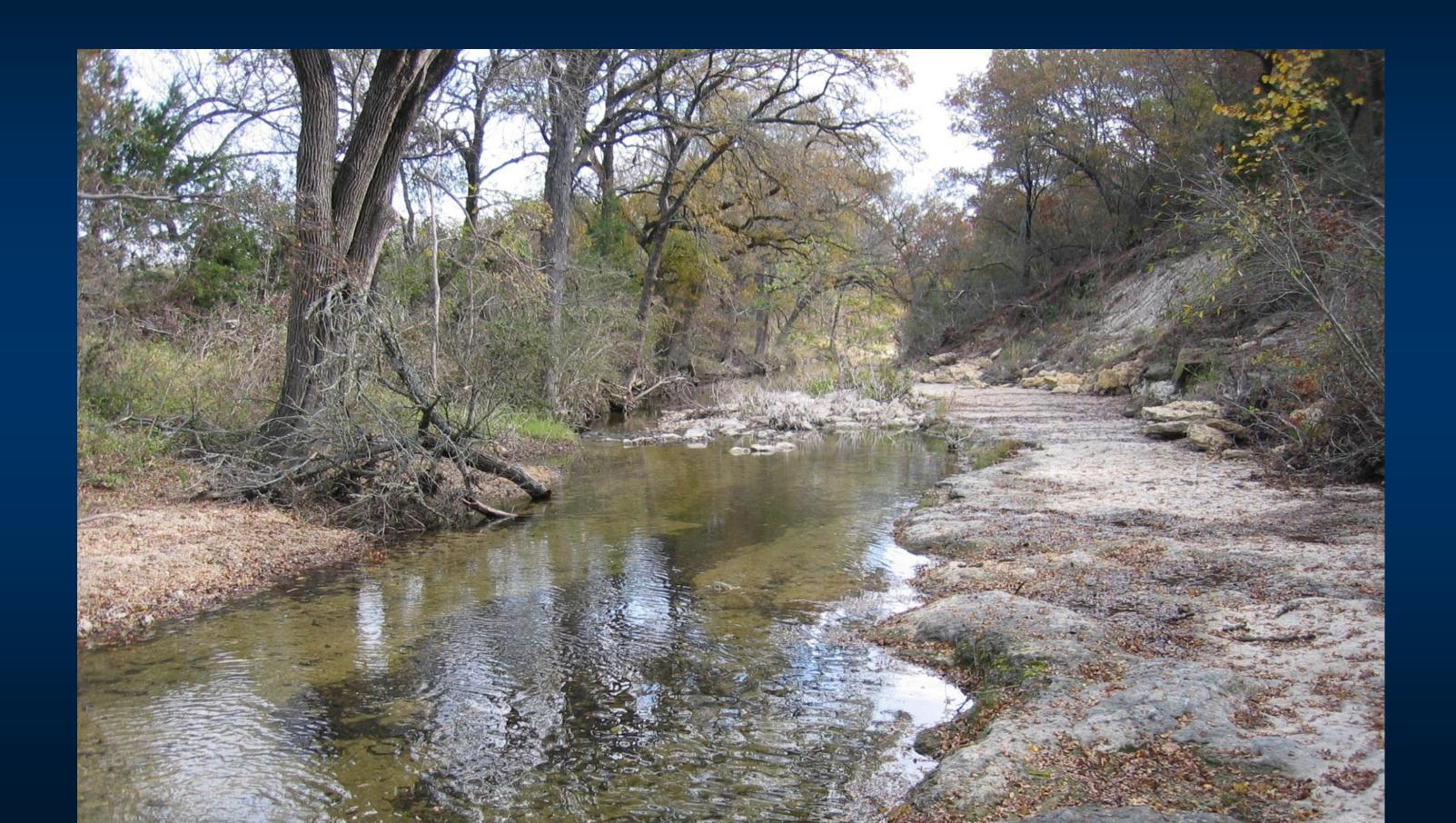




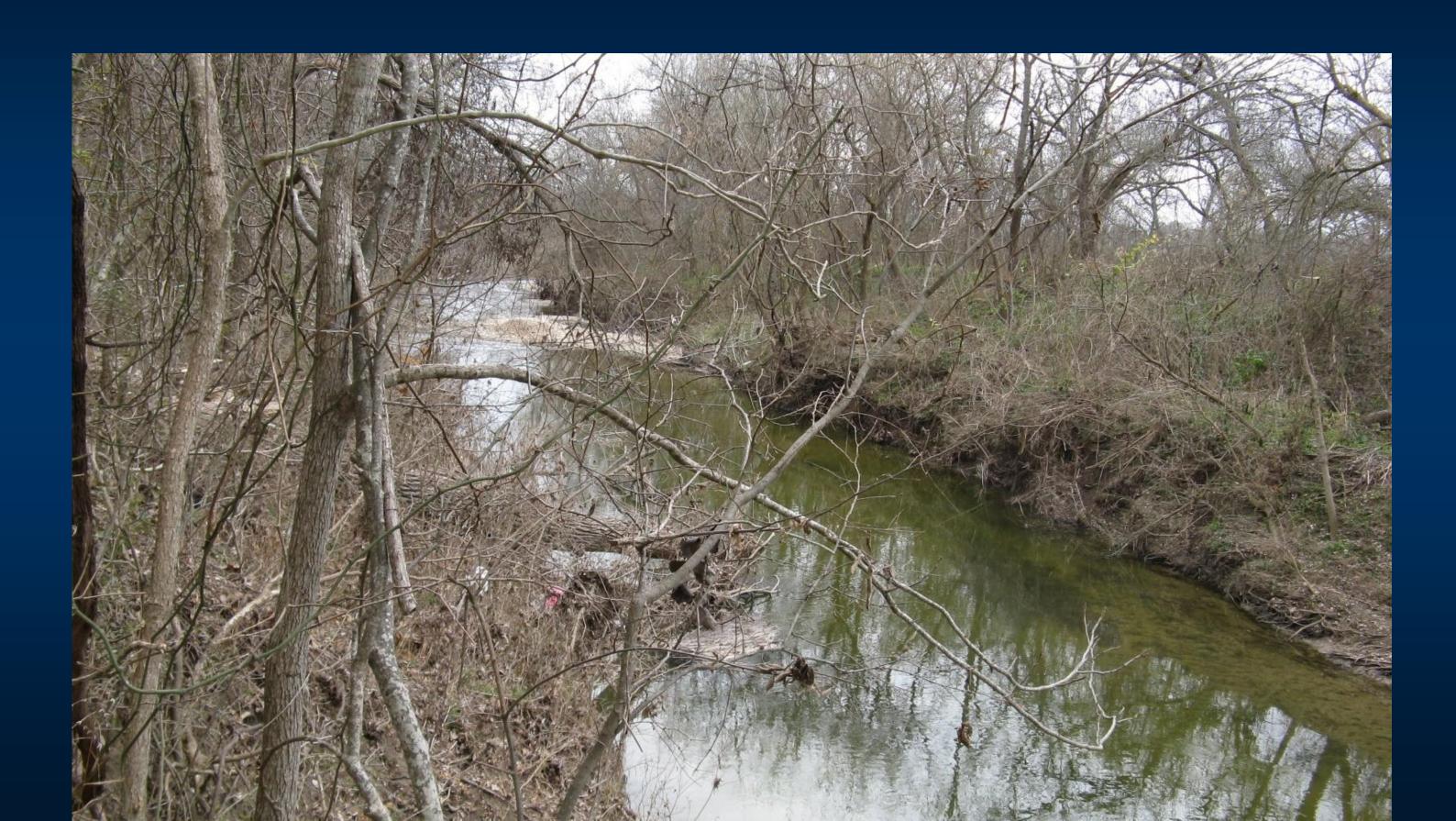
South Llano River



San Saba River



Brushy Creek



Dry Frio River



Jurisdictional Activities

CHAPTER 86, PARKS & WILDLIFE CODE

§86.002 (a) No person may <u>disturb or take</u> marl, sand, gravel, shell or mudshell...without first having acquired from the commission a permit authorizing the activity

Common Project Types

- Excavation
 - clearing behind low water crossing
- Bulkheads
- Low water crossings
- Pipelines





Common Exemptions

- Disturbance or taking that is necessary or incidental to navigation or dredging under state or federal authority
- Projects to restore or maintain the storage capacity of existing public water supplies
- Maintenance projects carried out by public utilities for non-commercial purposes
- Public road projects of the Texas Department of Transportation

Permitting Considerations

- Fish & Wildlife Habitats aquatic & riparian
- Erosion bed and banks, upstream and downstream
- Sediment budget aggrading or degrading
- Riverine Structure riffle/pool structure, bed, banks
- Water Quality turbidity, sedimentation
- Hydraulics & Hydrology
- Bank Stability
- Effects on recreation and navigation

Permitting Process

Sand and Gravel Permit

§86.004 The commission may grant a permit...if the commission finds ...the [activity] will not:

- (1) damage or injuriously affect any island, reef, bar, channel, river, creek, or bayou used for navigation, or any oysters, oyster beds, fish, or wildlife in or near the water used in the operation;
- (2) change or injuriously affect any current that would affect navigation;
- (3) significantly and injuriously change the hydrology...;
- (4) significantly increase downstream nonpoint source pollution...; and
- (5) significantly accelerate erosion upstream or downstream...

Sand and Gravel Permit

TAC §69.108 The director may consider the following:

- (1) <u>past performance</u> of the applicant with respect to its obedience and strict observance of the terms of past permits;
- (2) whether the applicant shows evidence of financial responsibility;
- (3) ability of the applicant to operate, including its <u>facilities</u> for operation;
- (4) existence of sedimentary materials in the area applied for;
- (5) whether the granting of the permit will have a material adverse effect on recreational activity...;
- (6) whether the granting of the permit will have a material adverse effect on commercial fishing or the general seafood industry...;
- (7) the effect, if any, on navigation in the general area affected by the permit.

Application Requirements

Written Application Form (provided by TPWD)

Publisher's Affidavit

Notice must be published in the daily or weekly newspaper with the greatest circulation in the county or counties affected by the issuance of the permit and in one newspaper published for the community closest to the proposed area of disturbance, if any.

Proof of Mailed Notice

 Applicants must notify by certified mail all alongshore property owners within one river mile upstream and downstream of the proposed area of disturbance

Sediment Impact Assessment;

 Must be approved by the department; must include an evaluation of sediment budget, erosion rates of the river segment to be affected, and the effect on coastal and receiving waters

Project Description

Requirements established by 31 TAC 69.105(b)(5)

Application & Review

- Once an application is deemed administratively complete, TWPD will begin a 30-day public comment period by publishing notice of the application in the Texas Register
 - All comments and requests for contested case hearings must be received within this 30-day period
- During the public comment period TPWD will hold a public comment hearing
- After the close of the public comment period, TPWD will either issue the permit, issue the permit with conditions, or deny the permit
- Contested Case Hearing
 - If a contested case hearing is requested the matter will be referred to the State Office of Administrative Hearings within 45 days after the close of the public comment period.

Unauthorized Disturbance or Taking

Enforcement

CHAPTER 86, PARKS & WILDLIFE CODE

- §86.022 (a) A person who violates Section 86.002 commits an offense that is a <u>Class B</u> Parks and Wildlife Code misdemeanor.
- §86.024 A person who violates this chapter or a rule, permit, or order of the department issued or adopted under this chapter is subject to a <u>civil penalty</u> of not less than \$100 or more than \$10,000 for each act of violation and for each day of violation, to be recovered as provided in this chapter.

Enforcement - Civil

- TPWD may issue a Notice of Violation (NOV) for unauthorized takings or disturbances
- NOVs may be resolved by creating a restoration plan approved by TPWD
 - TPWD does not issue after the fact permits
- Unresolved violations may be forwarded to the Office of the Attorney General for further enforcement
- Criminal enforcement is a separate matter and handled by the local prosecutor and game wardens

Related Issues

CHAPTER 90, PARKS & WILDLIFE CODE

§90.002 "Except as provided by Section 90.003 or 90.004, a person may not operate a motor vehicle in or on a protected freshwater area..."

§90.003 Exemptions

§90.004 Local River Access Plan

§90.008 (a) "Except as otherwise allowed by law, a person may not restrict, obstruct, interfere with, or limit public recreational use of a protected freshwater area." [defined as a navigable stream]

Contact Info

- FAQ: https://tpwd.texas.gov/faq/landwater/sand_gravel/
- Program:
 - sand.gravel@tpwd.texas.gov
- Beth Bendik:
 - **512-389-8521**
 - beth.bendik@tpwd.texas.gov
- Sue Reilly:
 - **512-389-8622**
 - sue.reilly@tpwd.texas.gov

TEXAS

PARKS &

WILDLIFE

USACE Regulatory Program: Dams and Waters of the United States

Joseph L. Shelnutt

Regulatory Technical Lead / Biologist

Regulatory Division

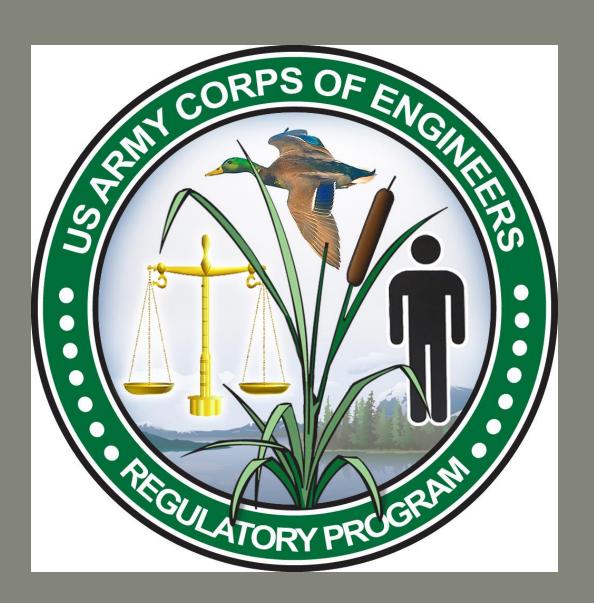
Fort Worth District





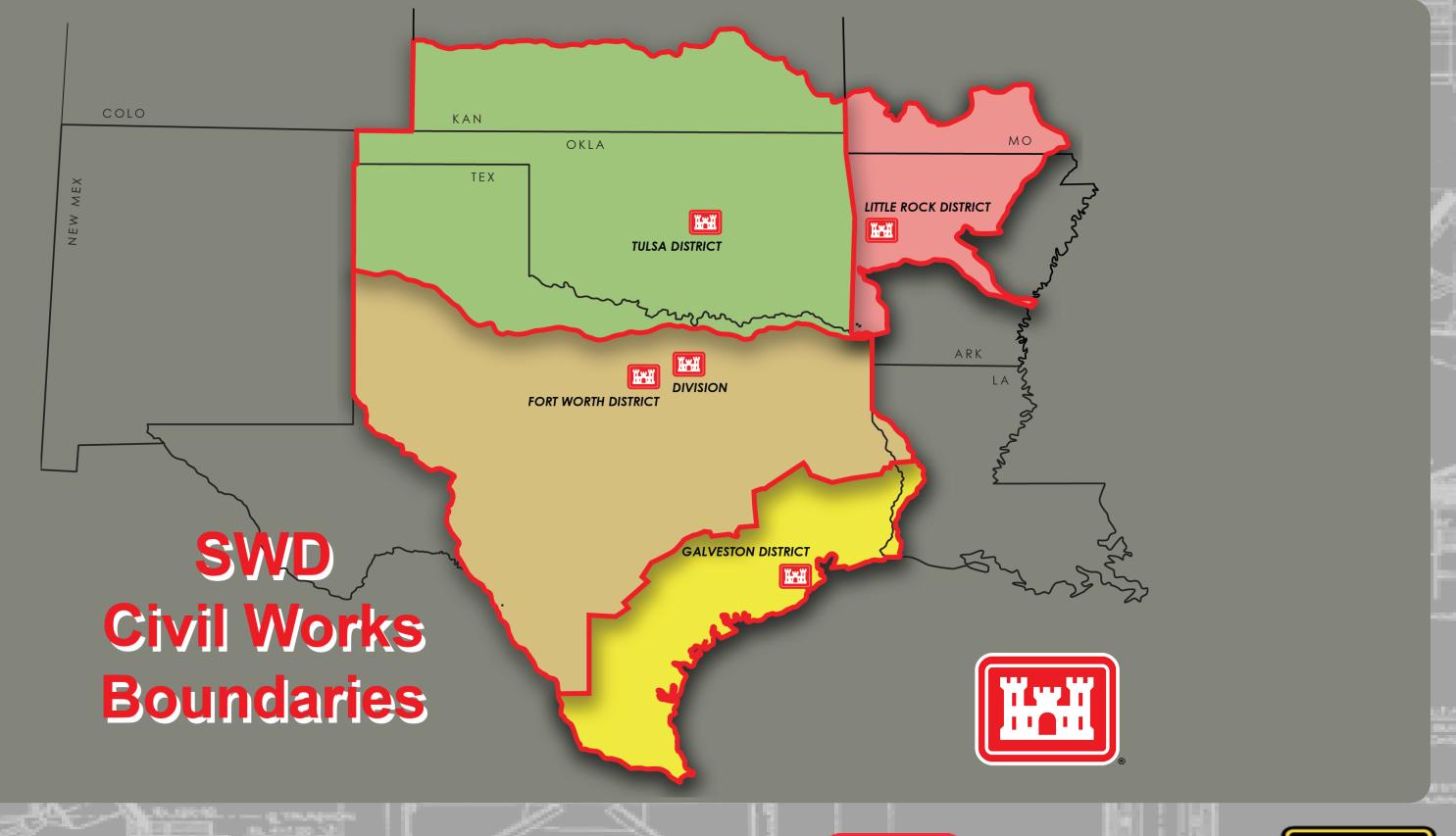


- Authorities
- Limits of Federal Jurisdiction
- Permit Types
- Exemptions
- **Violations**











US Army Corps
Of Engineers



Authorities: Section 404 - Clean Water Act

Regulates the discharge of dredged and/or fill material into waters of the United States.

Restore/maintain integrity of the Nation's Waters





Authorities: Section 10 - Rivers & Harbors Act of 1899

Waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce

Protects Navigable Capacity





Authorities: Section 103 - Ocean Dumping Act

Regulates Transport and Discharge of Dredged Material

Protects Marine Resources





Federal Jurisdiction Limits:

Waters of the United States

- Ordinary high-water mark (OHWM) Line on shore or bank established by water fluctuations
 - Shelving, Soil Changes, Destruction of Terrestrial Vegetation, Presence of Debris
- Hydrology, Soils, and Vegetation (wetlands)

WOTUS Definition: 33 CFR 328.3(a)





Ordinary High Water Mark







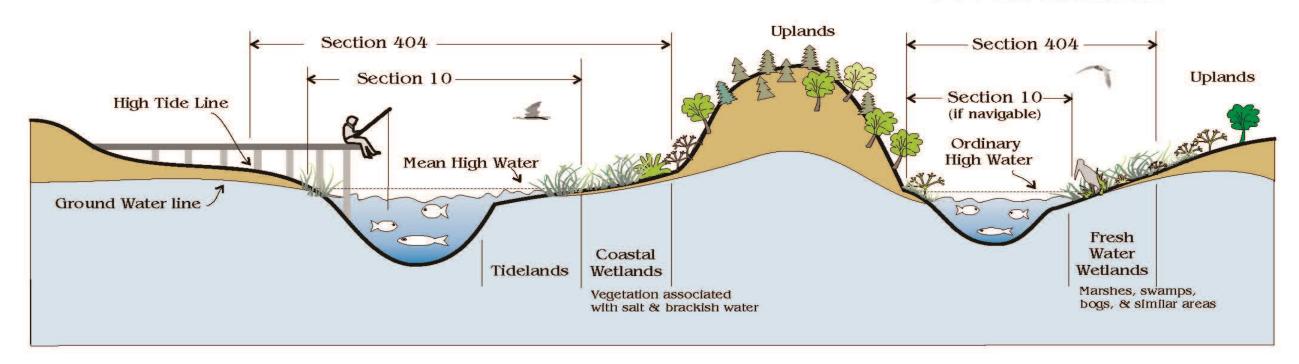




Corps of Engineers Regulatory Jurisdiction

Tidal Waters

Fresh Waters



Section 103

Ocean Discharge of Dredged Material

Ocean discharges of dredged material

Typical examples

of regulated activities

Section 404

Disposal of Dredged or Fill Material (all waters of the U.S.)

All filling activities, utility lines, outfall structures, road crossings, beach nourishment, riprap, jetties, some excavation activities, etc.

Section 10

All Structures and Work (navigable waters)

Dreding, marinas, piers, wharves, floats, intake / outtake pipes, pilings, bulkheads, ramps, fills, overhead transmission lines, etc.





Permits:

General Permits

- Nationwide Permits
- Regional General Permits

Standard Individual Permits

- Letters of Permission
- Standard Permits





Nationwide Permits (NWPs):

- NWPs (a type of general permit) are issued for a particular category of activities (e.g. NWP 13 for Bank Stabilization); they're designed to streamline authorization of projects that produce minimal impact on the nation's aquatic environment.
- Corps issues a verification letter that states proposed project meets terms and conditions of a NWP. This can include special conditions for ESA and Section 106.
- There is a NWP for "Agricultural Activities" that could apply to private dams, but only if the dam adversely impacts no more than 0.5 acres (which covers the footprint of the dam, the resource, and the open water that is created)
- Unless you meet the NWP criteria for Agricultural Activities, a new private dam is likely to need an individual permit







Standard Individual Permits:

These are for activities that cannot be authorized under a general permit)*:

- Letters of Permission (LOP)
- > Standard (SP)
- Project-specific evaluation and authorization
 - Among other things, applicants must consider: is there a less environmentally damaging, practicable alternative?
- Process involves public notice, public comment period, potential for hearings
- Public Interest Review Factors
- Alternatives Analysis/404(b)(1) Guidelines

*In many cases, a dam, adversely impacting more than 0.5 acres, will require a Standard Individual Permit





Potential Exemptions:

Section 404(f)(1)

Regarding Dams:

(c) For the purpose of construction or maintenance of farm or stock ponds or irrigation ditches, or the maintenance of drainage ditches

Note: Farm or stock ponds must be sized for the need, and cannot be used for other purposes, like recreation, to keep the exemption.





Application Proposals:

Web Link

https://www.swf.usace.army.mil/Missions/Regulatory/Permitting/

Electronic Submittal Instructions

https://rrs.usace.army.mil/rrs





Violations:

Enforcement Policies and

Procedures applicable to activities performed without required Department of the Army permits and to activities not in compliance with the terms and conditions of issued Department of the Army permits.

§ 326.1 Purpose

{Enforcement is Discretionary}





Violations:

Investigating Potential Unauthorized Activities

- Confirm whether a violation exists
 - Within Corps Jurisdiction?
 - Authorized By Nonreporting GP?
- Identify extent of the violation & parties responsible





Violations:

Confirmed UAs

Work Incomplete = Cease & Desist Order Work Complete = Notice of Violation

Prohibits any further work pending resolution of the violation





Violations: Resolution Options

- No Further Action
- Voluntary Restoration
- Initial Corrective Measures
- After-The-Fact Permitting
- > EPA Referral
- Referral to the local U.S. Attorney
 Section 404(s)(4) Class I Penalty: \$64,619/Day





Violations: Reporting Unauthorized Activity

https://rrs.usace.army.mil/rrs



https://www.swf.usace.army.mil/Missions/Regulatory/Enforcement/







Contacts:

Fort Worth District Regulatory Program

WWW.swf.usace.army.mil/Missions/Regulatory

Permits: CESWF-Permits@usace.army.mil

Enforcement: CESWF-Compliance@usace.army.mil

Regulator-Of-The-Day: 817-886-1731

Joseph L. Shelnutt: Technical Lead/Biologist

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Summary Sheet

TCEQ – Water Rights Division

Does the dam hold more than 200 ac-ft a year?

If yes, you probably need a water rights permit.

Is the dam on a *navigable* of stream?

If yes, then regardless of size, you almost certainly need a water rights permit (with some exceptions).

TCEQ – Dam Safety

Does the dam fall within Dam Safety's jurisdiction (slide 27)? And does it break any of the criteria for exemption (slide 29)?

If yes, then your engineer should submit plans to Dam Safety for review. Dam Safety division may also get involved during the water rights permitting process.

TPWD – Sand & Gravel Permit

Does construction of the private dam require disturbance of the streambed of a state "navigable" creek?

If yes, then the owner probably needs a Sand and Gravel Permit.

Note: In addition to a navigable creek, this would also apply to perennial streams in Spanish or Mexican land grants of any width.

USACE

Is the private dam being built on a "waters of the US" and does it adversely impact more than 0.5 acres?

If yes, then the owner probably needs to talk to the USACE about a permit.

Note: There are other preconstruction triggers that could require an applicant to report to USACE, not just the 0.5 acre limit.

Questions?

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