






# Dam Safety Program Updates

- Trina Lancaster, PE

1

# Program Updates

- Warren Samuelson, PE has retired
- Trina Lancaster, PE is the new Section Manager
  - 512-239-4283
  - trina.lancaster@tceq.texas.gov



2

2

## Dam Safety Program Staff



3

## TAC Chapter 299

- Applies to dams that:
  - Have a height  $\geq 25$  feet and maximum storage  $\geq 15$  acre-feet
  - Have a height  $> 6$  feet and maximum storage  $\geq 50$  acre-feet
  - Are a high or significant hazard dam (if over 6 feet tall); or
  - Are used as a pumped storage or terminal storage facility

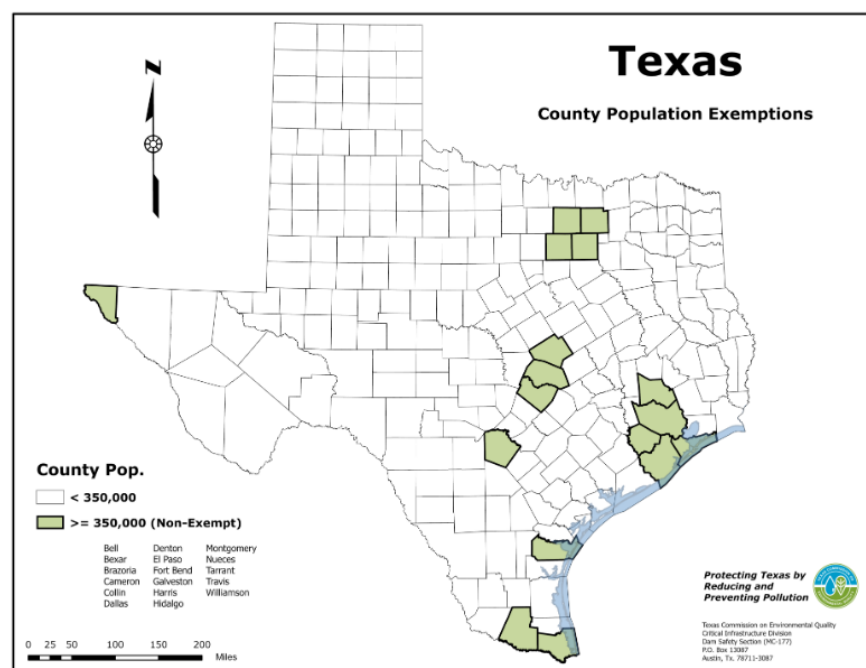
4



# 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
  - Is located in a county with a population of less than 350,000 based on the most current US Census numbers, and
  - Is not located inside the corporate limits of a municipality

7

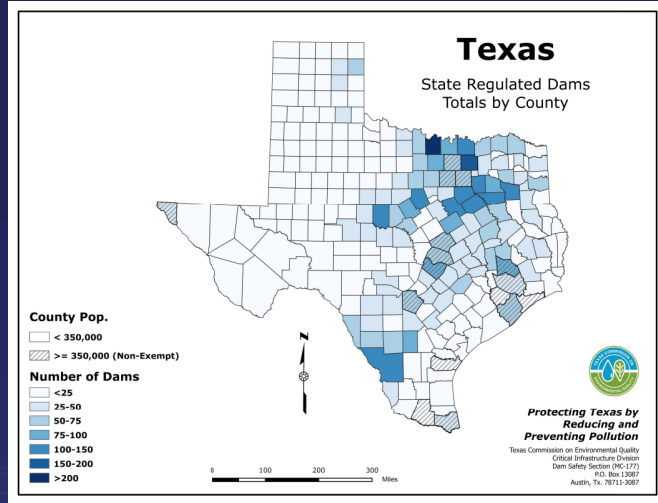


8

# Dam Inventory

State Regulated Dams = 7,360

- Non-Exempt = 4,110
  - High = 1,539
  - Significant = 301
  - Low = 2,270
- Exempt = 3,250
  - Significant = 237
  - Low = 3,013



9

# Hazard Classification Review



- 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.

10



# Hazard Classification Review

(1) Low. A dam in the low-hazard potential category has:

- (A) no loss of human life expected (no permanent habitable structures in the breach inundation area downstream of the dam); and
- (B) minimal economic loss (located primarily in rural areas where failure may damage occasional farm buildings, limited agricultural improvements, and minor highways as defined in §299.2(38) of this title (relating to Definitions)).

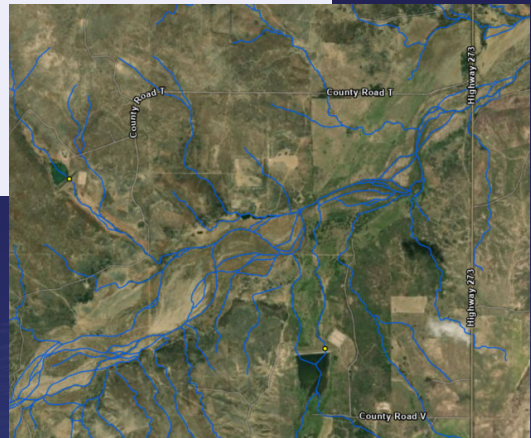


11

# Hazard Classification Review

(2) Significant. A dam in the significant-hazard potential category has:

- (A) loss of human life possible (one to six lives or one or two habitable structures in the breach inundation area downstream of the dam); or
- (B) appreciable economic loss, located primarily in rural areas where failure may cause:
  - (i) damage to isolated homes;
  - (ii) damage to secondary highways as defined in §299.2(58);
  - (iii) damage to minor railroads; or
  - (iv) interruption of service or use of public utilities, including the design purpose of the utility.



12

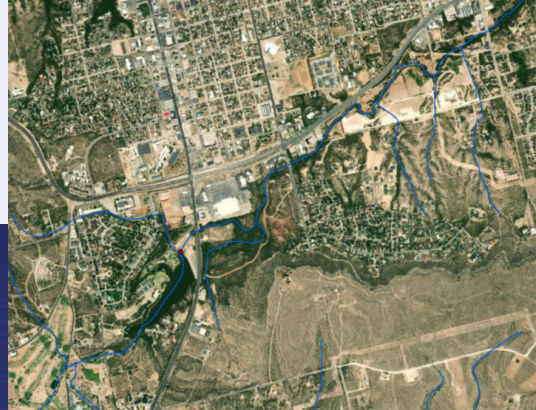
# Hazard Classification Review

(3) High. A dam in the high-hazard potential category has:

(A) loss of life expected (seven or more lives or three or more habitable structures in the breach inundation area downstream of the dam); or

(B) excessive economic loss, located primarily in or near urban areas where failure would be expected to cause extensive damage to:

- (i) public facilities;
- (ii) agricultural, industrial, or commercial facilities;
- (iii) public utilities, including the design purpose of the utility;
- (iv) main highways as defined in §299.2(33); or
- (v) railroads used as a major transportation system.



13

# Hazard Classification Review

- Hazard Classification has been confidential due to Texas Government Code §418.181

Sec. 418.181. CONFIDENTIALITY OF CERTAIN INFORMATION RELATING TO CRITICAL INFRASTRUCTURE. Those documents or portions of documents in the possession of a governmental entity are confidential if they identify the technical details of particular vulnerabilities of critical infrastructure to an act of terrorism.

Added by Acts 2003, 78th Leg., ch. 1312, Sec. 3, eff. June 21, 2003.

14

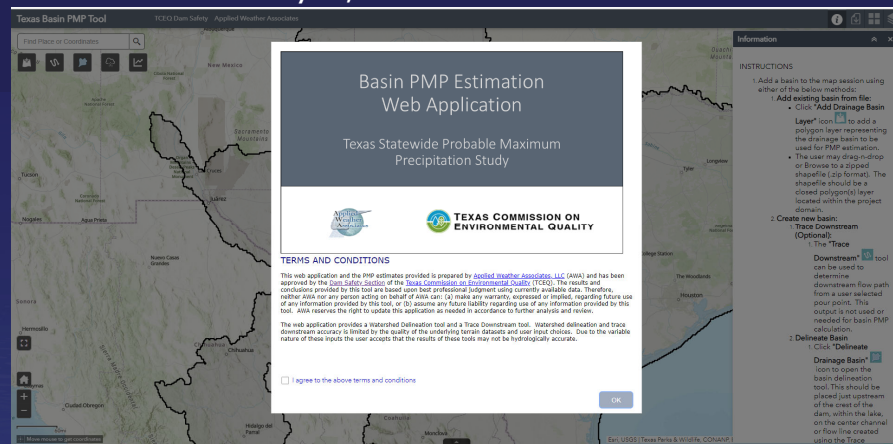
## Hazard Classification Review

- Through internal meetings and guidance from the Open Records Division of the Texas Attorney General it has been determined that the low, significant, and high hazard category designations standing alone do not reveal technical details.
- Therefore, hazard classification will no longer be confidential.
- However, EAPs, breach maps, and details on specific downstream hazards will remain confidential.

15

## Updated PMP Tool

- TCEQ has contracted with Applied Weather Associates, LLC to provide an upgraded Statewide PMP Web Application as of February 4, 2023.



**Basin PMP Estimation Web Application**  
Texas Statewide Probable Maximum Precipitation Study

**TERMS AND CONDITIONS**

This web application and the PMP estimates provided is prepared by Applied Weather Associates, LLC (AWA) and has been approved by the Regulatory Division of the Texas Commission on Environmental Quality (TCEQ). The results and calculations provided by this tool are made upon the best professional judgment using currently available data. Therefore, neither AWA nor any person acting on behalf of AWA can: (a) make any warranty, expressed or implied, regarding future use of any information provided by this tool, or (b) assume any future liability regarding use of any information provided by this tool. AWA reserves the right to update this application as needed in accordance to further analysis and review.

The web application provides a watershed Delineation tool and a Trace Downstream tool. Watershed delineation and trace downstream accuracy is limited by the quality of the underlying terrain datasets and user input choices. Due to the variable nature of these inputs the user accepts that the results of these tools may not be hydrologically accurate.

I agree to the above terms and conditions

**INSTRUCTIONS**

1. Add a basin to the map session using either of the below methods:
  - Add existing basin from file:
    - Click "Add Drainage Basin Layer" icon to add a polygon layer representing the drainage basin to be used for PMP estimation.
    - The user may drag-drop or Browse to a zipped shapefile (.zip format). The shapefile should be a closed polygonal layer located within the project domain.
2. Create new basin:
  - Trace Downstream (Optional):
    - The "Trace Downstream" tool can be used to determine downstream flow path from a user selected pour point. This output is not used or needed for basin PMP calculation.
  - Delineate Basin:
    - Click "Delineate Drainage Basin" icon to open the basin delineation tool. This should be placed just upstream of the crest of the dam, within the lake, on the center channel or flow line created using the Trace

16

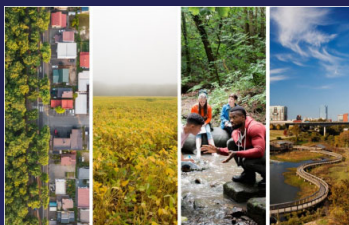


# Rehabilitation of High Hazard Potential Dams Grant

- Goal is to reduce or eliminate risk of eligible high hazard potential dams
- Funding for non-federal government entity or non-profit

17

## HHPD Grant



### Local Mitigation Planning Policy Guide

FP 206-21-0002

Released April 19, 2022, Effective April 19, 2023

OMB Collection #1660-0062




- Other Requirements - Hazard Mitigation Plan
  - Must be updated to include all dam risks:
    - Incorporation of existing plans, studies, reports, and technical information for high hazard dams
    - Addresses high hazard potential dams in the risk assessment
    - Includes mitigation goals to reduce long-term vulnerabilities from high hazard potential dams
    - Actions that address high hazard potential dams and prioritize mitigation actions to reduce vulnerabilities from high hazard potential dams

18

# HHPD Grant

- FY19 = \$574,647
- FY20 = \$987,217
- FY21 = \$1,556,603
- FY22 = \$0


Year	Texas	National
2019	\$100,000	\$1,000,000
2020	\$150,000	\$1,000,000
2021	\$200,000	\$1,300,000
2022	\$0	\$22,000,000


TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
19

19

# Dam Owner Resources

- TCEQ Dam Safety Website
  - <https://www.tceq.texas.gov/compliance/investigation/damsafety/prog.html>

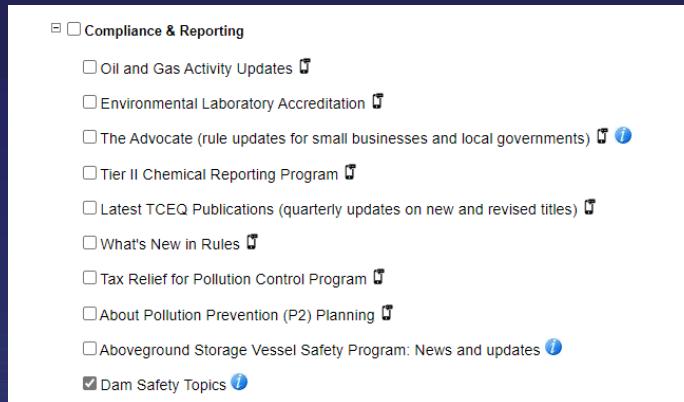

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20

20

# Dam Owner Resources

## • TCEQ Dam Safety Email Subscription

- <https://public.govdelivery.com/accounts/TXTCEQ/subscriber/new>



A screenshot of a web form for TCEQ Dam Safety Email Subscription. The form is titled "Compliance & Reporting" and contains several checkboxes for selecting email topics. The "Dam Safety Topics" checkbox is checked.

- Oil and Gas Activity Updates
- Environmental Laboratory Accreditation
- The Advocate (rule updates for small businesses and local governments)
- Tier II Chemical Reporting Program
- Latest TCEQ Publications (quarterly updates on new and revised titles)
- What's New in Rules
- Tax Relief for Pollution Control Program
- About Pollution Prevention (P2) Planning
- Aboveground Storage Vessel Safety Program: News and updates
- Dam Safety Topics

21

# Dam Owner Resources

## • Association of State Dam Safety Officials

- <https://damsafety.org/dam-owners>



A screenshot of the Association of State Dam Safety Officials (ASDSO) website. The page is titled "Resources for Dam Owners and Operators" and features a navigation menu, a breadcrumb trail, and a list of resources. A sidebar on the right lists "ADDITIONAL RESOURCES".

**Association of State Dam Safety Officials**

Join ASDSO Collaborate Portal Login

Member Center Awareness Center Resource Center Training Center About ASDSO

Home > Resource Center > Resources for Dam Owners and Operators

### Resources for Dam Owners and Operators

**ON THIS PAGE:**

- [Being a Responsible Dam Owner](#)
- [Dam Owner Academy — ASDSO's Dam Owner Education Video Series](#)
- [Find Workshops, Fact Sheets, and Guidance](#)
- [Next Steps - Meeting Knowledgeable Dam Owners and Regulators](#)
- [External Resources](#)

**ADDITIONAL RESOURCES**

- ▶ Dam Owner Academy Playlist (YouTube)
- ▶ Dam Owner Fact Sheet Booklet
- ▶ Dam Owner Workshops
- ▶ ASDSO Educational Webinars
- ▶ State Dam Safety Program Contacts and Information
- ▶ ASDSO Membership Information

22



QUESTIONS?

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