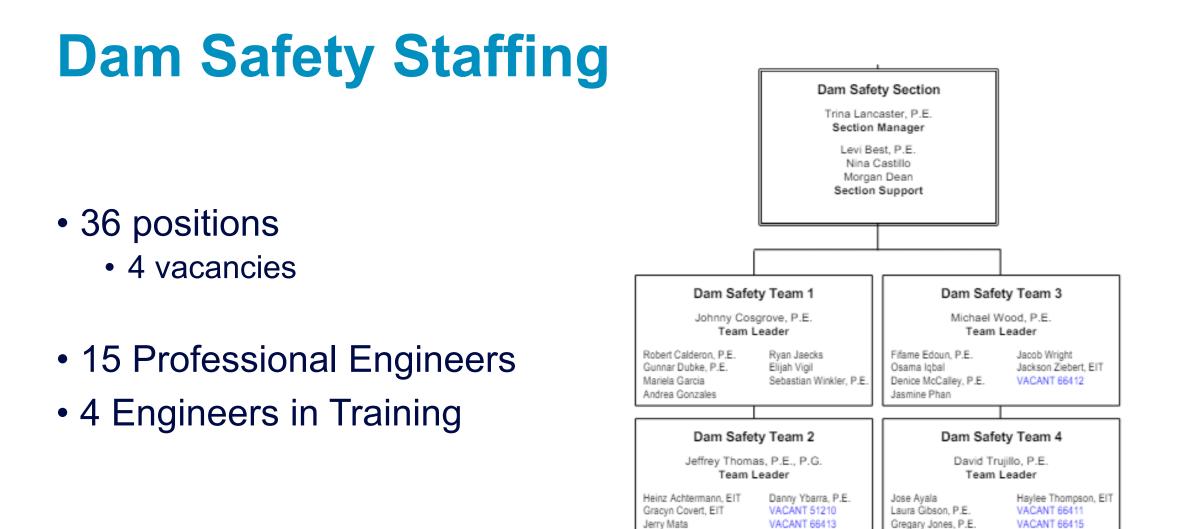


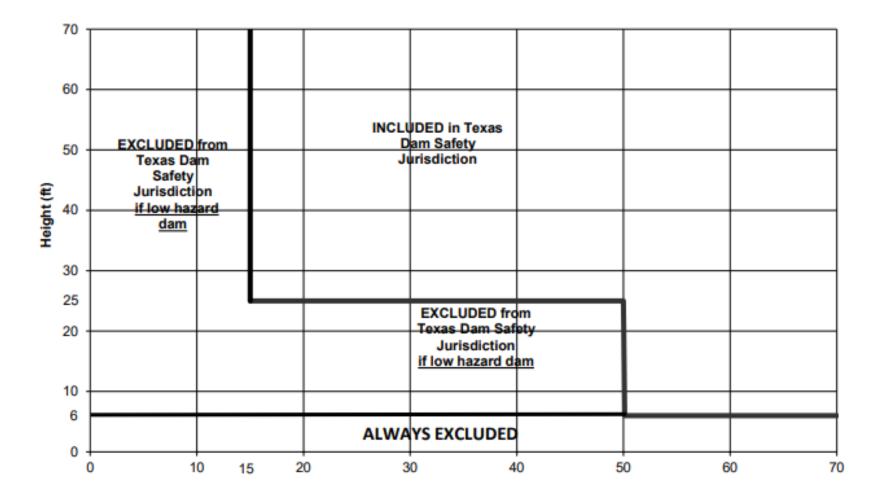
Dam Safety Program Updates Trina Lancaster, PE



Hilary Spilo, P.E.



Julian Romo

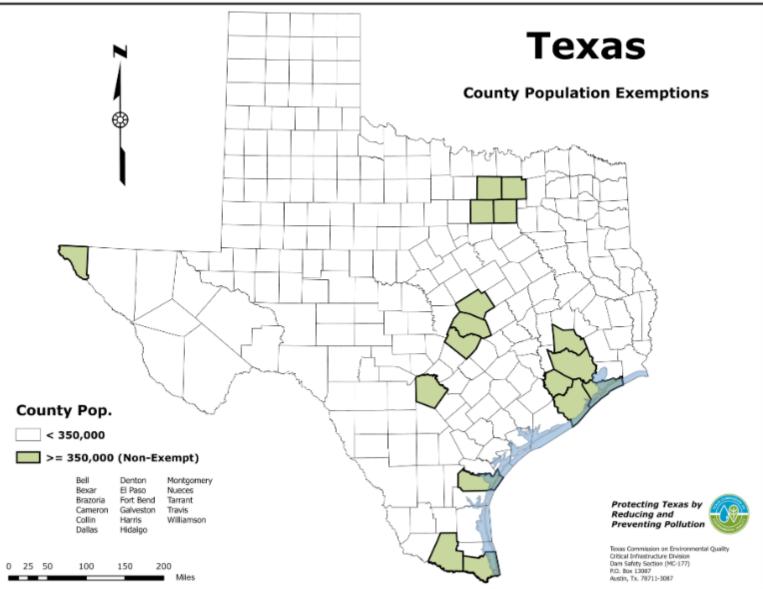


Maximum Storage Capacity (ac.ft)

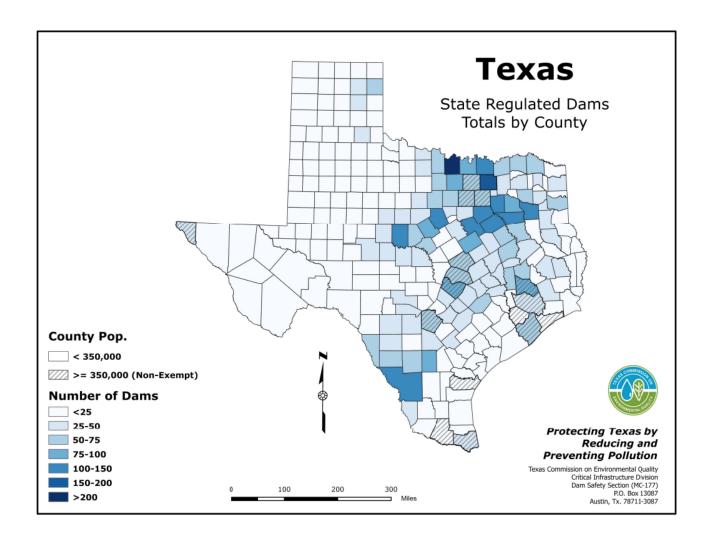


- A dam is exempt from Chapter 299 if it meets all of the following:
 - Is located on private property
 - Has a maximum capacity of less than 500 ac-ft
 - Has a hazard classification of low or significant
 - Is located in a county with a population of less than 350,000 based on the most current US Census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









State Regulated Dams = 7,371

- Non-Exempt = 4,119
 - High = 1,549
 - Significant = 306
 - Low = 2,264
- Exempt = 3,252
 - Significant = 240
 - Low = 3,012

Hazard Classification Review

- Hazard classification is a description of the potential for loss of downstream life or property in the event of a dam failure.
- 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



Funding

FLOOD INFORMATION CLEARINGHOUSE

Home About Funding Opportunities Events Contact Resources



🕒 Am I Eligible?

What Funding is Available?



Is My Project Eligible?

Submit a Request for Information Form

Funding



General Program Eligibility by Entity Type

| | | Administered by TWDB | | | Administered b | Administered by GLO | | by TCEQ | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-------------------------------------------|---------------------------------|-------------------------------------------|----------------------------------------|-------------------------------------------------|----------------------------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------|
| Entity Type (Note: This table is for general information only.The appropriateness of the program based on eligibility and funding will be determined upon further evaluation.) | Texas Water Development Fund | Clean Water State Revolving Fund | Flood Infrastructure Fund | Flood Mitigation Assistance*** * | Hazard Mitigation Grant Program**** | Pre-Disaster Mitigation Grant Program**** | Community Development Block Grants - Mitigation | Community Development Block Grants - Disaster Recovery | High Hazard Potential Dams Grant Program***** |
| City | V | √* | V | V | V | V | V | V | √ |
| Council of government | √ | v* | | √ | √ | V | V | ν | ν |
| County | √ | √ * | V | V | V | V | V | V | √ |
| Drainage district | √ | | v*** | √ | √ | V | V | | √ |
| Groundwater conservation district | √ | | | | √ | √ | V | | √ |
| Hospital district | | | | | V | √ | | | √ |
| Irrigation district | √ | | v*** | √ | √ | √ | V | | √ |
| Levee improvement district | √ | | v*** | √ | V | √ | V | | √ |
| Local government corporation | | √* | | | V | V | V | | V |



Administered

🕒 Am I Eligible? Is My Project Eligible? Funding

General Eligibility by Project Type

| | What Funding is Available? | Submit a Request for I | nformation For |
|---|----------------------------|------------------------|-------------------------|
| | Attend an Event | Other Resou | irces |
| м | Administered by TWDB | Administered by GLO | Administered by TCEQ |

| | Administered | by TDEM | | Administere | ed by TWDB | | Administe | red by GLO | TCEQ |
|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------|--------------------------------|-----------------------------------|---------------------------------|-------------------------------------------|------------------------------------|---------------------------------------------------------|-------------------------------------------------------|------------------------------------------------|
| Eligible Activities | Hazard Mitigation Grant Program | Pre- Disaster Mitigation | Flood Mitigation Assistance | Flood Infrastructure Fund | Clean Water State Revolving Fund | Texas Water Development Fund | Community Development Block Grants- Mitigation | Development Block Grants - Disaster Recovery | High Hazard Potential Dams Grant Program |
| 5 Percent Initiative Projects* | V | | | | | | | | |
| Advance assistance | √ | | | | | | | | |
| Aquifer and storage recovery** | √ | V | V | | V | | | | |
| Conservation easements/land acquisition | | | | | V | v | 1/ | v | |
| Dam repair, removal, or rehabilitation of a high hazard dam | | | | V | √** ** | V | V (not beyond original footprint) | √ (not beyond original footprint) | |
| Dam risk and consequence assessments | | | | | | | | | V |
| Feasibility studies, preliminary engineering studies, alternatives analysis, mapping, surveys, and inundation modeling | | | | | | | | | √ |
| Engineering design and specifications | | | | | | | | | √ |
| Development of floodplain management plans or operations and maintenance plans | | | | | | | | | v |

Funding



Flood Mitigation Financial Assistance Request for Information Form

Please submit only one form per project and review the Frequently Asked Questions prior to completing this form. This form is a request for information only and does not constitute an application for financial assistance. After review by the Flood Information Clearinghouse Committee (FLICC), you will be advised on potential available source(es) of financial assistance for your flood mitigation project, will be given instructions on how to apply to relevant programs, and may be contacted for clarification related to your inquiry.

| | | | | | | ۰. | |
|-------|---|---|----|-----|---|----|--|
| D. | | | ui | ir. | 2 | n | |
| 1.1.N | - | ч | 9 | | ~ | u | |

1. Name of entity(ies) seeking financial assistance for this flood mitigation project: *

| Inter your answer | |
|-------------------|--|
|-------------------|--|

2. Project name: *

Enter your answer



- Repair, replacement, reconstruction, or removal of a dam to meet applicable state dam safety standards
- Reduce or eliminate risk of eligible high hazard potential dams



- Eligible Dams
 - High Hazard
 - Has an Emergency Action Plan on file
 - Poor condition
 - Fair condition if downstream population at risk is 1,000+



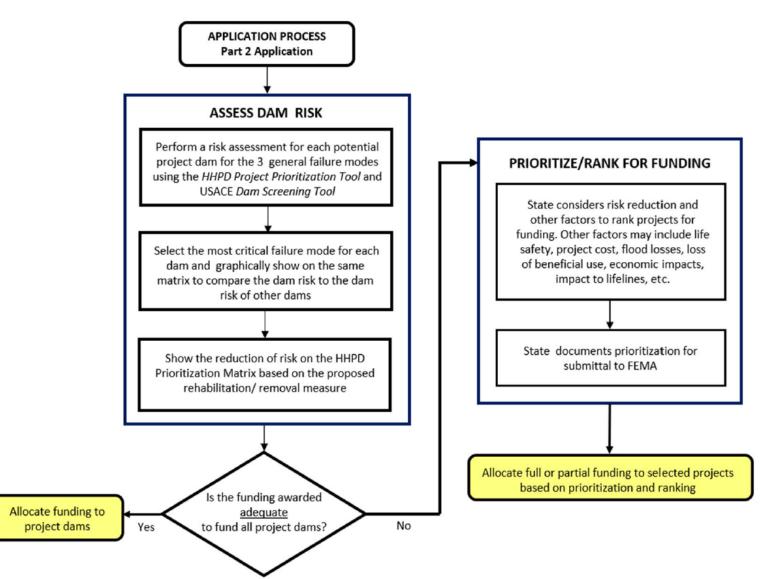
2-part application process

- Part 1
 - List of eligible dams
 - Proposed projects
 - Grant administrative plan

Part 2

- Prioritization of Dams
- Detailed work plan
- Detailed Scope of Work
- Budget narrative





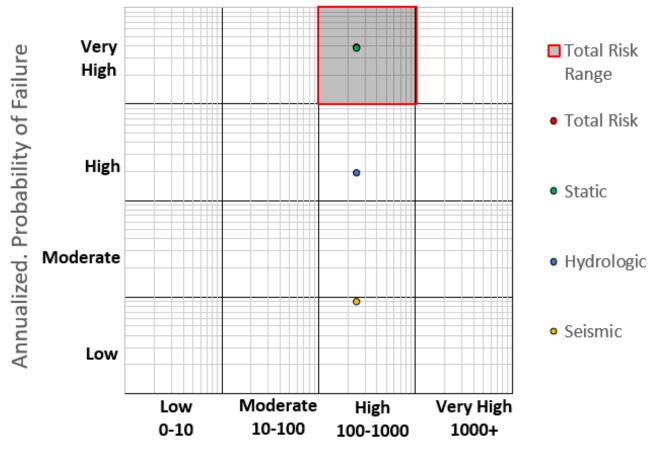


Dam Screening Tool

| PARAMETER | DAY | NIGHT | |
|-------------------------------------------|-------|--------|--|
| PAR | 252 | 15 | |
| Exposed Population | 1 | 2 | |
| % of PAR Exposed | 0.40% | 13.33% | |
| Median Life Loss | 0 | 0 | |
| Fatality Rate | 0.00% | 0.00% | |
| Mean Life Loss (Exposure Weighted) | 0. | .05 | |
| Mean Life Loss as % of PAR | 0.0 | 04% | |
| Weighted Fatality Rate (% of Exposed PAR) | 0.5 | 56% | |
| Property Damages | \$4M | | |
| # Structures Inundated | 1 | 10 | |



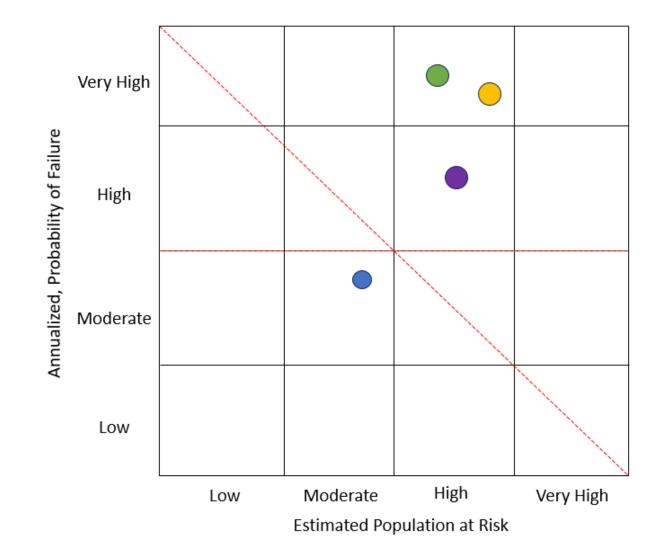
Project Prioritization
 Spreadsheet







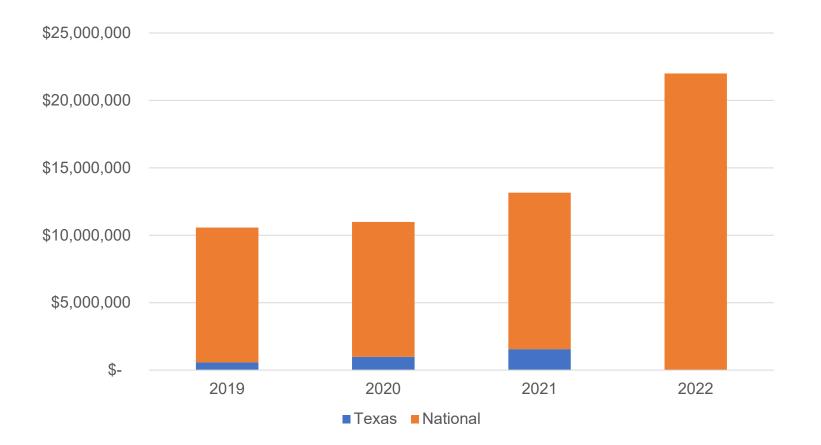
Estimated Population at Risk





21

- FY19 = \$574,647
- FY20 = \$987,217
- FY21 = \$1,556,603
- FY22 = \$0
- FY24 = pending



Local Hazard Mitigation Plan

• Must be updated to include all dam risks



Local Mitigation Planning Policy Guide

FP 206-21-0002

Released April 19, 2022, Effective April 19, 2023

OMB Collection #1660-0062



TCEQ Dam Safety Website

customer satisfaction survey

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



🛃 How are we doing? Take our

DAM SAFETY PROGRAM Texas Commission on Environmental Quality

Search Site

Q

The Dam Safety Program monitors and regulates both private and public dams in Texas. The program periodically inspects dams that pose a high or significant hazard and makes recommendations and reports to dam owners to help them maintain safe facilities.

| Dam Safety Workshop | \sim |
|-------------------------------------------------------------------------|--------|
| Dam Exemption | \sim |
| Emergency Action Plans | \sim |
| Procuring the Services of a Professional Engineer and List of Engineers | \sim |
| Probable Maximum Precipitation (PMP) Study | \sim |
| Regulations | \sim |
| Manuals | \sim |
| Forms | \sim |
| River Authority Inventory | \sim |



Sign up for Dam Safety updates



Investigations, Compliance, and Enforcement Home

Make an Environmental Complaint

Investigations and Compliance Assistance

Enforcement Process and Actions

How are we doing? Take our customer satisfaction survey

Home / Investigations, Compliance, and Enforcement / Investigations and Compliance Assistance / Dam Safety Program

Dam Safety Program

Questions or Comments: damsinfo@tceq.texas.gov

Monitors and regulates both private and public dams in Texas.



DAM SAFETY PROGRAM Texas Commission on Environmental Quality



Sign up for Dam Safety updates



Email and Text Updates

Please enter your email address or wireless number below to:

- sign up for updates
- change your subscriptions
- unsubscribe

You will only receive updates on items you choose from our list. And it's easy to change your subscriptions or unsubscribe at any time.

| Subscription Type | Email | ~ |
|-------------------|-------|---|
| E-mail Address * | | |
| Go Cancel | | |

□ □ Compliance & Reporting

- \Box Oil and Gas Activity Updates 🕻
- Environmental Laboratory Accreditation
- The Advocate (rule updates for small businesses and local governments) I 🕖
- Tier II Chemical Reporting Program

□ Latest TCEQ Publications (quarterly updates on new and revised titles) 🗓

UWhat'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 🕖



Association of State Dam Safety Officials

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



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 Knowledgable 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

Association of State Dam Safety Officials

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



Dam Owner Academy: Dams 101

Association of State Dam Safety Officials (ASDSO) + 5.1K views + 2 years ago



Dam Owner Academy: Operation & Maintenance Plans Association of State Dam Safety Officials (ASDSO) + 8.2K views + 3 years ago



Dam Owner Academy: Dam Inspections Association of State Dam Safety Officials (ASDSO) • 11K views • 3 years ago



Dam Owner Academy: Spillways & Outlet Works Association of State Dam Safety Officials (ASDSO) + 15K views + 3 years ago



Dam Owner Academy: Emergency Planning

Association of State Dam Safety Officials (ASDSO) • 2.4K views • 1 year ago



Dam Owner Academy: Extreme Rainfall Events Association of State Dam Safety Officials (ASDSO) • 2.4K views • 1 year ago



Dam Owner Academy: Hiring an Experienced and Qualified Dam Engineer

Association of State Dam Safety Officials (ASDSO) • 1.7K views • 1 year ago



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DAM SAFETY PROGRAM Texas Commission on Environmental Quality

Questions?

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