

# Dam Safety Modification Mandatory Center of Expertise

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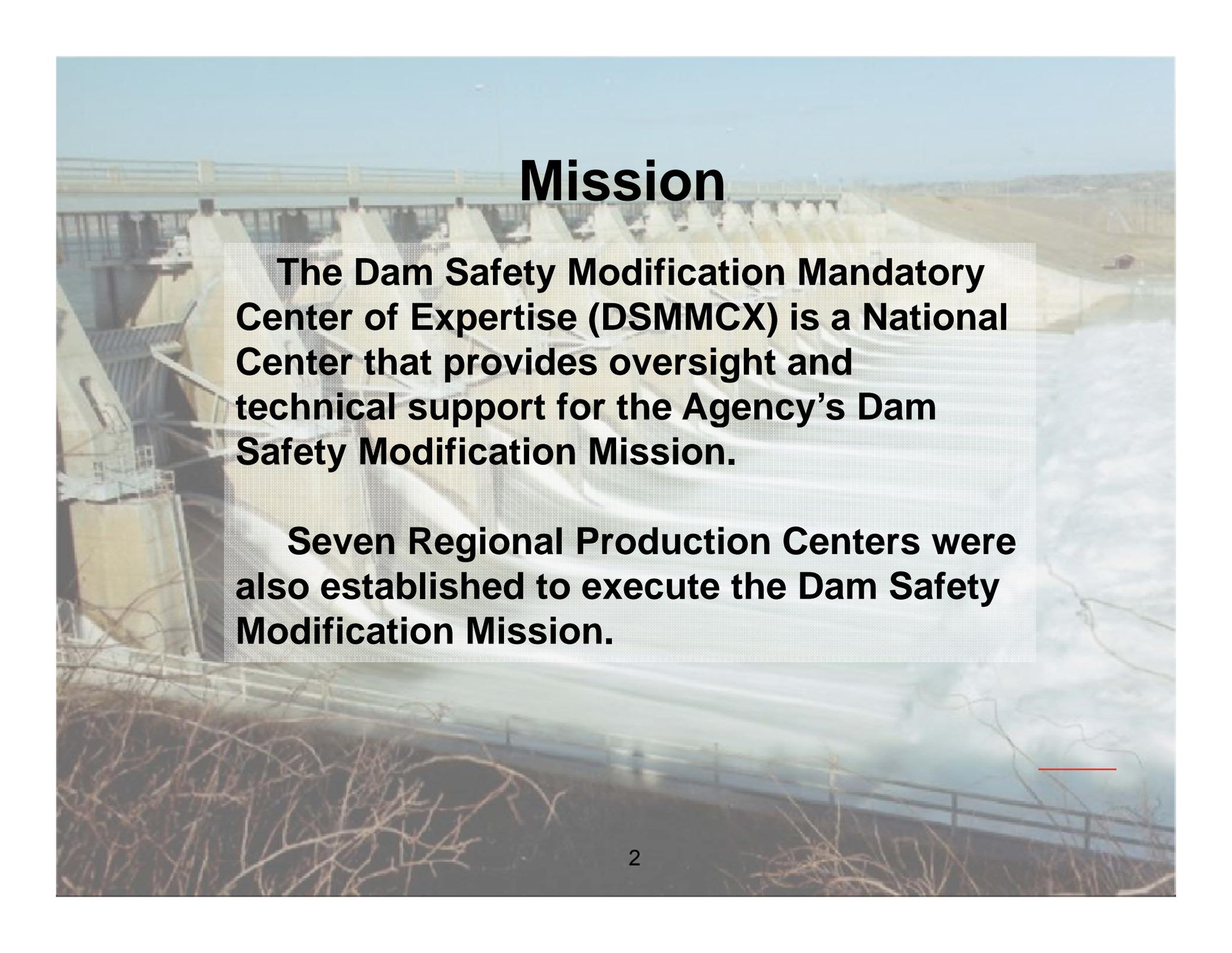
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US Army Corps of Engineers  
**BUILDING STRONG**®



A photograph of a large dam with multiple spillways. Water is cascading down the spillways, creating white foam. The dam structure is concrete and has a walkway on top. The background shows a clear blue sky and some distant hills.

# Mission

**The Dam Safety Modification Mandatory Center of Expertise (DSMMCX) is a National Center that provides oversight and technical support for the Agency's Dam Safety Modification Mission.**

**Seven Regional Production Centers were also established to execute the Dam Safety Modification Mission.**

# Dam Safety Production Centers

- ▶ Huntington, WV (Production Center and MCX)
- ▶ Tulsa, OK
- ▶ Concord, MA
- ▶ Atlanta, GA
- ▶ Vicksburg, MS
- ▶ Sacramento, CA
- ▶ Omaha, NE



# DSPC Roles

- Primary organization responsible for the preparation of engineering products and activities associated with Dam Safety Modifications:
  - ▶ Dam Safety Modification Report (decision document)
  - ▶ Design documentation
  - ▶ Plans and Specifications
  - ▶ Engineering support during construction

# DSMMCX Roles

- Ensure consistency and lessons learned across DSPCs
- Facilitate coordination of resources across DSPCs
- Provide oversight to DSPCs and perform Agency Technical Review.
- Develop and conduct Dam Safety modification related training.
- Administer National Level A-E contracts for Dam Safety Modifications.



# Corporate Goals for MCX and DSPCs

- Improve Technical Quality of Products & Services.
- Efficiently Provide Risk Reduction Across USACE Dam Inventory.
- Ensure Consistent Implementation of Engineering Methodologies & Policies.
- Enhance, Sustain & Maintain Technical Competency, Capability within USACE.



# Typical Features

- Seepage Cutoff
  - Grouting, concrete cutoff walls, deep soil mixing
- Seepage control
  - Relief wells, seepage berms/blankets, toe drains
- Concrete structure rehab
  - Anchoring, RCC, demolition/replacement, foundation drains
- Scour/erosion rehab
  - Anchoring, stilling basin, channel armoring/scour protection
- Overtopping protection
  - Gate/machinery rehab/replacement, increase capacity
- Miscellaneous
  - Instrumentation, data management



Example of abutment seepage requiring modification



# High Tension Anchor Installation



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# Spillway Erosion



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# Recent Project Contributions

Folsom Dam - California

Isabella - California

East Branch - Pennsylvania

Herbert Hoover Dike - Florida

Canton Dam - Oklahoma

Lewisville Dam - Texas

Dahla Dam - Afghanistan

Center Hill - Tennessee

Bluestone Dam - West Virginia

Dover Dam - Ohio

Bolivar Dam - Ohio

Zoar Levee - Ohio



# Questions/Comments?

