



INTERNATIONAL BOUNDARY AND WATER COMMISSION

UNITED STATES SECTION

IBWC SAFETY OF DAMS PROGRAM



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International Boundary and Water Commission
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IBWC SAFETY OF DAMS PROGRAM INTRODUCTION

WELCOME

- ▶ Lorena Soriano, Civil Engineer, O&M Division

OVERVIEW

- ▶ Safety of Dams Program
- ▶ Benefit of Dams
- ▶ IBWC Dams-DSAC Ratings & Hazard Potential Classifications
- ▶ IBWC Dams



IBWC SAFETY OF DAMS PROGRAM

- ▶ IBWC is unique – **binational** program
- ▶ National Dam Inspection Act of 1972
- ▶ IBWC conforms with the Act provisions

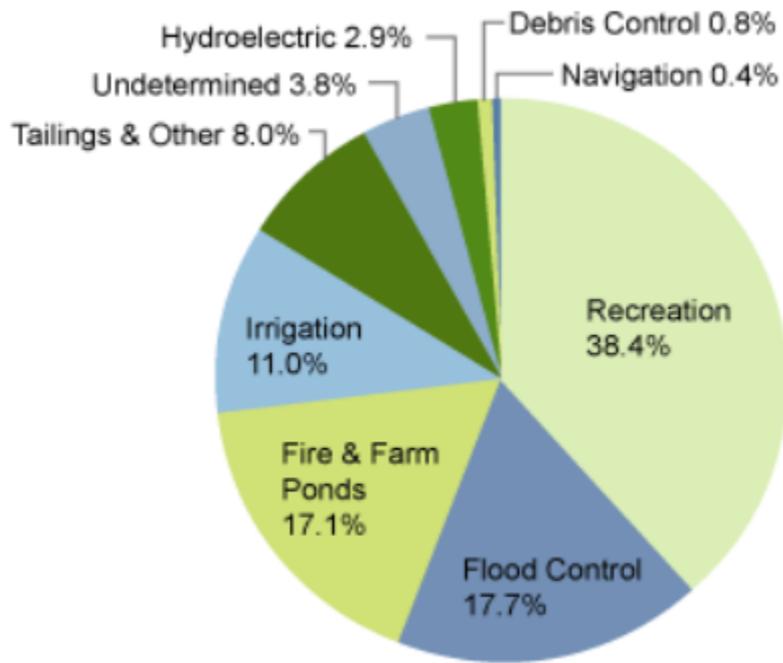


IBWC SAFETY OF DAMS PROGRAM

- ▶ IBWC follows the Federal Emergency Management Agency (**FEMA**) Federal Guidelines for Safety of Dams (2004)
- ▶ U.S. Army Corps of Engineers (**USACE**) Safety of Dams - Policy and Procedures (2011)
- ▶ IBWC contracts the **USACE** for the **Periodic Inspections** (every 5 years)



BENEFITS OF DAMS



- ▶ RECREATION
- ▶ FLOOD CONTROL
- ▶ WATER STORAGE (FIRE & FARM PONDS)
- ▶ IRRIGATION
- ▶ MINE TAILINGS
- ▶ ELECTRICAL GENERATION
- ▶ DEBRIS CONTROL
- ▶ NAVIGATION

Source: FEMA.gov



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USACE Dam Safety Action Classification

(DSAC) inspection rating for the dams:

- ▶ DSAC I – Very High Urgency
- ▶ DSAC II – High Urgency
- ▶ DSAC III – Moderate Urgency
- ▶ DSAC IV – Low Urgency
- ▶ DSAC V – Normal



USACE Hazard Potential Classification

- ▶ High – Direct Loss of Life of 1 or more
- ▶ Significant - Direct Loss of Life not expected
- ▶ Low - Direct Loss of Life not expected



IBWC Dams

- ▶ **Morelos** Diversion Dam - Algodones, Mexico
- ▶ **Five Sediment Dams** (Crow, Green Berenda, Jaralosa, Broad Canyon, & Sibley) - Hatch, New Mexico
- ▶ **International** Diversion Dam – El Paso, Texas
- ▶ **American** Diversion Dam – El Paso, Texas



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IBWC Dams

- ▶ **Amistad Dam** - Del Rio, Texas
- ▶ **Falcon Dam** - Falcon Heights, Texas
- ▶ **Anzalduas Diversion Dam** – Mission, Texas
- ▶ **Retamal Diversion Dam** – Donna, Texas



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MORELOS DAM

5 Year Inspection – November 2016



DSAC III (Moderate Urgency) - LOW HAZARD POTENTIAL



5 SEDIMENT DAMS

Annual Inspections - November 2018





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AMERICAN AND INTERNATIONAL DAMS

5 Year Inspection - December 2016



American Dam



International Dam

DSAC III (Moderate Urgency) - LOW HAZARD POTENTIAL



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AMISTAD DAM
5 Year Inspection - July 2017



DSAC II (High Urgency)-----HIGH HAZARD POTENTIAL



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FALCON DAM

5 Year Inspection - July 2017



DSAC III (Moderate Urgency)-HIGH HAZARD POTENTIAL



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ANZALDUAS DAM

5 Year Inspection – November 2017



DSAC IV (Low Urgency)-HIGH HAZARD POTENTIAL



RETAMAL DAM

5 Year Inspection – November 2017



DSAC III (Low Urgency) - SIGNIFICANT HAZARD POTENTIAL



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COMISIÓN INTERNACIONAL DE LÍMITES Y AGUAS

QUESTIONS?

