## OKLAHOMA WATER RESOURCES BOARD AM SAFETY QUARTE Volume 2, Issue 3



## NEWSLETTER OF THE OKLAHOMA DAM SAFETY PROGRAM

## In this issue:

Summer Training Wrap-Up GeoDam-BREACH for ArcGIS **ASDSO** National Conference

**OFMA Annual Conference** Low Hazard Inspection Registration Hydraulic Modeling Workshop **Upcoming Events** 



The Oklahoma Conservation Commission receives the ASDSO West Region Award of Merit. From left: Yohanes Sugeng, Charles Thompson, Charles Cobb, Michael Johnson, Larry Caldwell, Michele Lemieux, Emma Moradi, David Marble, and Chris Stoner.

### **Summer Training Wrap-Up**

The OWRB's free Emergency Action Plan (EAP) workshops in Oklahoma City and Tulsa this July had forty-seven participants, including private dam owners, homeowners associations, engineers, law enforcement officers, and emergency managers. Guest speakers from the National Weather Services (NWS), the National Resource Conservation Service (NRCS) and the OWRB emphasized the importance of an EAP, defined emergency processes and a dam owner's responsibilities, and reviewed OWRB rules and regulations.

In addition to these workshops, OWRB engineers provided on-site dam inspection and EAP training for several local governments and communities. For more information about these training opportunities, please contact Emma Moradi at (405) 530-8800 or emma.moradi@owrb.ok.gov.

### **GeoDam-BREACH for ArcGIS**

FEMA recently released the GeoDam-BREACH toolset for state and federal agencies that may help improve emergency response and reduce potential life and economic losses. GeoDam-BREACH, or Geospatial Dam Break, Rapid EAP, Consequences, and Hazards, is a suite of ArcGIS tools designed to support the development of simplified dam break studies, Risk Mapping, loss of life assessments, and EAP map panel creation. Download the free toolset and user manual here.

### **ASDSO National Conference**

In September, OWRB dam safety engineers attended the Association of State Dam Safety Officials (ASDSO) annual national conference in San Diego, CA, and participated the following technical seminars:

- · Risk in the Regulatory Environment Interest and **Impediments**
- Hydrology Issues See How They Run
- Geotechnical Analysis Related to Dam Safety
- Decade Dam Failures
- Modeling Softwares and Methods for Dam Breach Mapping
- Rehab Case Studies
- Groundbreaking Research on Material Characteristics
- Designing for and Learning from Seismic Events
- Challenges in Estimating Spillway Capacity
- Seepage Monitoring and Instrumentation
- Consequences, Vulnerability and Emergency Response

The OWRB congratulates the Oklahoma Conservation Commission (OCC) for receiving the ASDSO's West Region Award of Merit for their outstanding state and national leadership. OCC's former Executive Director, Mike Thralls, and Assistant Director, Robert Toole, were acknowledged for their efforts. in developing the agency's dam safety program. They were specifically recognized for gaining the support of Governor Mary Fallin and legislators in keeping aging watersheds safe, which resulted in one of the nation's largest and most effective dam operation and maintenance programs. The OCC was also recognized for rehabilitating 34 dams to meet current Probable Maximum Precipitation (PMP) standards. Larry Caldwell from the OCC Stillwater office accepted the award on behalf of the agency.

#### NEWSLETTER OF THE OKLAHOMA DAM SAFETY PROGRAM

# Dam Safety Engineer Speaks at OFMA Annual Conference

OWRB dam safety program manager, Yohanes Sugeng, gave an educational peresentation at the Oklahoma Floodplain Managers Association's annual conference in Tulsa. The presentation focused on the OWRB dam safety program's goals and activities for improving the safety of Oklahoma's dams and enhancing mitigation actions, including the following:

- Public awareness;
- · Emergency Action Planning;
- Reclassifying the hazard-potential of dams where downstream conditions have changed;
- Rehabilitating structurally deficient dams.

### Low Hazard Inspection Registration Open Now

The OWRB is now offering free low hazard dam inspections, including an on-site inspection, full inspection report, and a breach inundation map. Dam owners benefit from this program because state law requires them to complete a dam inspection every five years. Dam owners can also take advantage of this opportunity to learn more about the inspection and maintenance techniques in order to prolong the life of their dam and manage their liabilities as dam owners.

Visit the OWRB Dam Safety web page or contact our staff at (405) 530-8800 for more details and registration information.

### **Hydraulic Modeling Workshop**

The OWRB's Dam Safety Program will be hosting a Hydraulics Modeling Workshop in Oklahoma City on December 3, 2014. The course will cover common modeling myths, basic modeling concepts, terminology, and pre-development modeling decisions. Various types of hydraulic models, descriptions of common 1- and 2-D models, and the relative costs associated with each model type will also be introduced. Additionally, participants will be exposed to the differences in data requirements and modeling strategies between 1- and 2-D models.

The course will be led by Marc Johnson, PE, CFM, and Lee Beshoner, PE, CFM from FTN Associates, Ltd. Mr. Johnson has 35 years of experience in the development and application of 1-, 2-, and 3-dimensional hydraulic and hydrodynamic models. Mr. Beshoner has 12 years of experience in water resources engineering, including analyses with 1-D and 2-D hydraulic models and engineering design. The cost for this course is \$30 and includes breakfast and lunch for attendees who reserve their seat by Monday, December 1. For more details, please contact Emma Moradi at (405) 530-8800 or email her at <a href="mailto:emma.moradi@owrb.ok.gov">emma.moradi@owrb.ok.gov</a>. Download the registration form on our web page.

## December 3, 2014 8:00a.m. to 3:30p.m.

Oklahoma Water Resources Board 3800 North Classen Boulevard Oklahoma City, Oklahoma 73118

**\$30 fee** includes breakfast and lunch for those who reserve their seat by Monday, December 1.

This workshop is eligible for **6 Professional Development Hours**.

### **Details and registration**

are available on our <u>web page</u>, or you may contact Emma Moradi at emma.moradi@owrb.ok.gov.

### **Upcoming Events**

October 14 ASDSO Webinar: Foundation Preparation & Treatment for Dam Construction

November 12 ASDSO Webinar: Rehabilitation of Concrete Dams

December 3 OWRB Hydraulic Modeling Workshop, OWRB Office in Oklahoma City

December 9 ASDSO Webinar: <u>Earthquake Hazards & Ground Motions</u>

J.D. Strong, Executive Director Oklahoma Water Resources Board Julie Cunningham, Chief Planning & Management Division Yohanes Sugeng, P.E., Manager Dam Safety Program

The Oklahoma Dam Safety Act recognizes that properly constructed, operated, and maintained dams used to impound water and create reservoirs for public and private beneficial uses constitute vital parts of the State of Oklahoma's water resources, and authorizes the Oklahoma Water Resources Board to regulate the construction, operation, and maintenance of dams to protect lives and property.

Please e-mail comments and article ideas to <a href="mailto:public\_powrb.ok.gov">publinfo@owrb.ok.gov</a>.