

another Dam newsletter



Ohio Dam Safety Organization, Spring 2007

Ohio Dam Safety Organization

by Joe Stock, Jr., P.E., Chairman

The Ohio Dam Safety Organization (ODSO) was formed in 1995 as a division of the Water Management Association of Ohio (WMAO). ODSO is also affiliated with the national Association of State Dam Safety Officials (ASDSO). Membership in ODSO is free and open to all who are members of WMAO. It is ODSO's mission to promote dam safety in the State of Ohio by establishing a partnership between dam owners, operators, engineers and regulators. We do this by providing forums for education and discussion on dam safety related issues and providing a voice for all concerned in the formation and implementation of dam safety policy in the State of Ohio.

Levees in Ohio

by Tadd Henson

A levee is any artificial barrier (usually an earth embankment or a concrete wall) together with appurtenant works that will divert or restrain the flow of a stream or other body of water for the purpose of protecting an area from inundation by flood waters. Hurricane Katrina and the levee failures and subsequent devastation in New Orleans in 2005 has brought levee safety to the forefront of public awareness.

Although closely related to dams, levees differ in the fact that they are typically built parallel to a body of water (most often a river) in order to protect lives and properties behind it from some level of flooding. A dam built for flood protection is usually designed to decrease the flow of water downstream of the dam during a flood by storing excess water and releasing it slowly over time.

Some levees were originally built by citizens to protect their properties from flooding. They date back as much as 150 years. Others were built by various Federal, State, or local entities to protect urban areas or other high value properties. The United States Army Corps of Engineers (USACE) has designed and constructed many of Ohio's levees and is responsible for the maintenance of federally owned levees that are in the USACE system. Not all of the levees built by the USACE are federally owned, however. In some instances, levee ownership has been transferred to another local or regional authority, which then becomes responsible for documenting and maintaining the levee. In Ohio, the Department of Natural Resources, Division of Water, Dam Safety Section, is responsible for regulation of levees, which includes issuing construction permits, approving repairs, and performing periodic safety inspections.

Like dams, levees require regular maintenance to retain their designed level of protection. Levees can and do deteriorate over time if not properly maintained, and maintenance can become a serious challenge. When levees do fail, or are overtopped, they fail catastrophically – the flood damage may be more significant than if the levee was not there. No one really knows how many miles of levee there are in Ohio. Due to a lack of resources, not all non-federal levees have been identified and inventoried and until recently the total length of federal levees was not well documented either. A bill was introduced in Congress in December 2005 to create a National Levee Safety Program which would create a nationwide inventory of levees and provide funding to the states for regulation of levees. However, this bill was proposed in a previous session of Congress and had not passed by the time the session had ended. At the end of each session all proposed bills and resolutions that haven't passed are cleared from the books; so the Levee Safety bill will have to be re-introduced in the new Congress.

Dam Safety Tip: Trees & Brush

By Pete George

The establishment and control of proper vegetation is an important part of dam maintenance. Properly maintained vegetation can help prevent erosion of embankment and earth channel surfaces, and aid in the control of groundhogs and muskrats. The uncontrolled growth of vegetation can damage embankments and concrete structures and make close inspection difficult.

Trees & Brush

Trees and brush should not be permitted on embankment surfaces or in vegetated earth spillways. Extensive root systems can provide seepage paths for water. Trees that blow down or fall over can leave large holes in the embankment surface that will weaken the embankment and can lead to increased erosion. Brush obscures the surface, thus limiting visual inspection, provides a haven for burrowing animals, and retards growth of grass vegetation. Tree and brush growth adjacent to concrete walls and structures may eventually cause damage to the concrete and should be removed.

Stump Removal & Sprout Prevention

Stumps of cut trees should be removed so vegetation can be established and the surface mowed. Stumps can be removed either by pulling or with machines that grind them down. All woody material should be removed to about 6 inches below the ground surface. The cavity should be filled with well-compacted soil and grass vegetation established.

Embankment Maintenance

Embankments, areas adjacent to spillway structures, vegetated channels, and other areas associated with a dam require continual maintenance of the vegetal cover. Grass mowing, brush cutting, and removal of woody vegetation (including trees) are necessary for the proper maintenance of a dam, dike, or levee. All embankment slopes and vegetated earth spillways should be mowed at least once a year. Aesthetics, unobstructed viewing during inspections, maintenance of a non-erodible surface, and discouragement

of groundhog habitation are reasons for proper maintenance of the vegetal cover.

Methods used in the past for control of vegetation, but are now considered unacceptable, include chemical spraying, and burning. More acceptable methods include the use of weed whips or power brush-cutters and mowers. Chemical spraying to first kill small trees and brush is acceptable if precautions are taken to protect the local environment.

It is important to remember not to mow when the embankment is wet. It is also important to use proper equipment for the slope and type of vegetation to be cut. Also, always follow the manufacturer's recommended safe operation procedures.

Any other questions, comments, concerns, or fact sheet requests should be directed to the Division of Water at the following address:

Ohio Department of Natural Resources
Division of Water
Dam Safety Engineering Program
2045 Morse Rd., Bldg. B-1
Columbus, Ohio 43224
614/265-6731 (Voice) 614/447-9503 (Fax)
<http://www.dnr.state.oh.us/odnr/water/>

Dam Safety Loan Program

Reprint from ODNR's website

The Ohio Water Development Authority (OWDA) and the Ohio Department of Natural Resources (ODNR) have joined to create two loan programs to assist the state's dam owners in funding safety related repairs and improvements. Public agencies will utilize the Ohio Water Development Dam Safety Loan Program and private or corporate owners may borrow through the Ohio Water Development Link Deposit Program.

For more information, refer to <http://www.dnr.state.oh.us/water/dsafety/damloans.htm>

WMAO/ODSO Annual Fall Conference

by Dave Moore

Mark your calendars for the 36th Annual WMAO/ODSO Fall Conference! The theme of this year's conference is "Water is Trendy". It will be held November 14 & 15, 2007 at the Midwest Hotel and Conference Center (4900 Sinclair Drive, Columbus, OH 43229).

Abstracts are being sought for presentations of information addressing trends in water resources and water-resources management. You may choose to make a 20-minute Oral Presentation or participate in a Poster Session. The Conference Planning Committee will review all abstracts and inform authors of those that are accepted. Accepted abstracts will be compiled and posted on the WMAO web site.

Membership in WMAO is not a requirement for submittal of an abstract or presentation of your paper although we encourage everyone to consider joining WMAO to support the water resources profession in Ohio. All conference presenters are required to pay the conference registration fee. A discounted registration rate will apply to currently-enrolled students.

SESSION TOPICS: Presentations should focus on the following potential session topics addressing water and water-resources management (specific topics may be relevant to multiple headings):

- Dams and Dam Safety
- Programs / Programmatic
- Regulations / Regulatory
- Data and Research
- Science and Technology
- Economics
- Legal Aspects
- Infrastructure

ABSTRACT SUBMISSION: Abstracts should be limited to 300 words or fewer. Abstracts should communicate clearly and concisely the purpose, findings and implications of your investigation or

study. Abstracts will be reviewed and ranked for acceptance and placement in the program by members of the Conference Planning Committee. Papers will be selected for presentation based on their merit and relevance to the conference and session topics. Submissions that are thought provoking and address controversial water resource issues and describe new areas of application or study are especially welcomed. Authors' suggestions for topic placement will be considered, but the Conference Planning Committee will make the final decision.

Further information is available on our website:
<http://www.wmao.org/div/odso/>

2006 ODSO EVENTS

ODSO Spring Training Workshop

On May 17th, 2006, the Ohio Dam Safety Organization (ODSO) held another successful training workshop at Salt Fork Resort in Cambridge, Ohio. The topic was "Emergency Action Planning for Dams". This was our second workshop to educate the public on preparation of Emergency Action Plans (EAPs) that are required for all Class I, II and III high hazard dams in the State of Ohio. The workshop also discussed dam safety requirements as they relate to the operation and maintenance of dams. We had 66 attendees that included dam owners, regulators and consultants from Ohio, Pennsylvania and West Virginia.

WMAO Annual Fall Conference

The Ohio Dam Safety Organization (ODSO) participated in the Water Management Association Organization (WMAO)'s 35th annual fall conference held at in Columbus, Ohio on November 15 and 16, 2006. The topic was "Follow the Flow". ODSO's sessions included Dam Removal and Dam Safety. ODSO also held their annual meeting and elections during the conference.

ODSO Executive Board

by Joe Stock, Jr., P.E., Chairman

ODSO is governed by an Executive Board of representative dam owners elected at our annual Fall meeting. The Executive Board consists of one member representing each of the following seven areas of dam safety interest:

- Academia
- Conservancy Districts
- Dam Construction Contractors
- Engineering Consultants
- Industrial Dam Owners
- Municipal Dam Owners
- Private Dam Owners

The Executive Board's Officers are Joe Stock-Chairman from Buckeye Engineering representing Engineering Consultants, Jim Evans-Vice Chairman from Bowling Green State University representing Academia and Jeff Brooks-Secretary/Treasurer from the City of Columbus/Water Division representing Municipal Dam Owners.

The Advisory Committee members are Dick Lorenz (immediate past Chairman) from the City of Westerville/Water Division, Pete George from ODNR/Division of Water/Dam Safety Program and Scott Jerrome from Natural Resources Conservation Service (NRCS).

This year's Executive Board consists of one newly elected member Jim Evans from Bowling Green State University representing Academia; and two reelected members, Jeff Brooks from City of Columbus representing Municipal Dam Owners, and Tom Moe representing Private Dam Owners.

Additional Board members include Tom Moe representing Private Dam Owners, Steve Roberts from Beaver Excavating representing Dam Construction Contractors, Bret Dreger from American Electric Power representing Industrial Dam Owners, and Chad Schroeder from Miami Conservancy District representing Conservancy Districts.

ODSO Nomination Committee News

By Pat Conroy, Tim Granata, Dick Lorenz

The committee is taking nominations for the following Executive Board seats:

- 1) Industrial Dam Owners;
- 2) Dam Construction Contractors;
- 3) Conservancy Districts; and
- 4) Engineering Consultants.

Terms will start in November 2007 and will last until November 2009. We request the nominees' name, qualifications and email address be sent by August 10, 2007 to the following email address: pconroy@burnip.com.

The Committee will review the nominations and try to place two or more names on the ballot for each category. Voting will take place during the ODSO session of the Fall 2007 WMAO Conference. Absentee ballots will be attached to the fall WMAO newsletter.



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Dam Safety Awards

By Dan Hill

BEST MAINTAINED DAMS

Congratulations to the winners of last year's annual ODSO Dam Safety Awards for best maintained dam. The 2006 winners (by ownership category) as recognized at the Annual Meeting last November are:

Private: Mead Foremen's Club Pond Dam,
Countrytyme ALC

Property Owners Association: Choctaw Lake Dam,
Choctaw Lake Property Owners Association

State: Stonelick Lake Dam, ODNR Division of
Parks & Recreation

Photos of many of the winning dams can be viewed at the ODSO web site: www.wmao.org/div/odso. Click on Awards and then click on the underlined name of the dam.

Nominations for the 2007 awards are now being sought. Eligibility is primarily based on two simple requirements: (1) the dam must be at least 5 years old; and (2) it must be in compliance with all of the Department of Natural Resources' dam safety regulations.

This year's awards will be presented in conjunction with the Ohio Dam Safety Organization / Water Management Association of Ohio annual conference in mid November. To make a nomination for this year's awards, fill out the form in this newsletter and return it by September 15, 2007 to:

Daniel M. Hill, PE, Chair
ODSO Awards Committee
1433 Inglis Avenue
Columbus, OH 43212

Joe Stock, Jr., P.E.
Director of Water Resources

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please contact Joe Stock at (740) 548-8252 or jstock@insight.rr.com

Membership Application

Please complete this form and include it with your payment (made payable to WMAO) to:



The Ohio Dam Safety Organization
A Division of
Water Management Association of Ohio
601 Dempsey Road
Westerville, Ohio 43081-8978

NAME _____

ORGANIZATION _____

TITLE _____

MAILING ADDRESS _____

OFFICE PHONE _____

E-MAIL _____

MEMBERSHIP	ANNUAL DUES	BENEFITS
Individual	\$65.00	1 member
Organizational	\$180.00	3 members, additional members \$60 each
Sustaining	\$400.00	6 members, additional members \$60 each; business card advertisement space in 4 Ohio Water Table issues (Please provide complete information on each individual)
Student	\$10.00	1 member
Emeritus	\$25.00	1 member; must be 65 years of age with 5 years membership in WMAO or be approved by the executive board.

MEMBERSHIP TYPE _____

AREAS OF INTEREST (Check all that apply)

- | | | |
|---|--|---|
| <input type="checkbox"/> Agriculture | <input type="checkbox"/> Floodplain Management | <input type="checkbox"/> Research & Data Management |
| <input checked="" type="checkbox"/> Dam Safety (ODSO) | <input type="checkbox"/> Groundwater | <input type="checkbox"/> Stormwater Management |
| <input type="checkbox"/> Education | <input type="checkbox"/> Recreation & Navigation | <input type="checkbox"/> Water & Wastewater |

ODSO 2007 Best Maintained Dam Nomination Form

Categories (*check one*):

<input type="checkbox"/> Industrial	<input type="checkbox"/> Private	<input type="checkbox"/> Property Owner Association
<input type="checkbox"/> Local Public	<input type="checkbox"/> State	<input type="checkbox"/> Conservancy District

Name of Dam: _____ ODNR File No. (if known) _____

Owner: _____

Address: _____

Telephone No.: _____

Nominator (optional): _____

Address: _____

Telephone No.: _____
