

# another Dam newsletter



Ohio Dam Safety Organization, Spring 2002

## About ODSO

by Dan Hill

The Ohio Dam Safety Organization (ODSO) was organized in 1995. The mission of ODSO is to promote dam safety in Ohio by establishing a partnership between dam owners, engineers, and regulators. ODSO provides a forum for discussion of dam safety issues and a voice for all those concerned about formation and implementation of dam safety policy in the State of Ohio. The organization also provides a link to dam safety issues at the national level; ODSO is the first State Chapter affiliated with the Association of State Dam Safety Officials (ASDSO) and has a formal partnering agreement with ASDSO.

ODSO's objectives include increasing awareness of dam safety issues through workshops/seminars, publications, and our newsletter. An important part of dam safety issues is funding assistance for repair of dams. Earlier this year, ODSO wrote to Speaker of the House Larry Householder and Assistant President Pro Tempore of the Senate Jay Hottinger seeking support of state funding assistance to local sponsors responsible for the non-federal share of upgrading and rehabilitation costs at numerous small watershed dams throughout Ohio. A separate article provides more details about that upgrading/rehabilitation program; we are increasing our distribution of this newsletter to include all members of the Ohio Legislature so they are aware of this pressing need.

Membership in ODSO is open to any member of the Water Management Association of Ohio (WMAO). WMAO was organized 30 years ago to promote the comprehensive understanding, conservation, and multifaceted use of Ohio's water resources. ODSO is the Dam Safety Division of WMAO; there are no additional dues required to be a member of ODSO. Visit the WMAO website at [www.ohiowater.org/wmao](http://www.ohiowater.org/wmao) or call WMAO at 614-292-1851 to find out more about WMAO and obtain a membership application. While at the WMAO website, click on dam safety to access the ODSO site for further information about ODSO.

## WMAO Spring Conference

by Lynn Kelly

The WMAO Spring Conference will be held Wednesday June 5, 2002 at the Ramada Plaza Hotel & Conference Center in

Columbus, Ohio. The theme is WATER RESOURCES DATA: WHO, WHAT, and WHY. For further information, please contact Ted Lozier, Conference Chair, at (614) 265-6728.

## Watershed Dams Rehabilitation Update

by Art Brate

The USDA, Natural Resources Conservation Service (NRCS) is continuing to assist local watershed sponsors to rehabilitate PL-566 dams. This is part of the pilot program Ohio for which NRCS was funded.

The Rushcreek Conservancy District in Fairfield County is currently using the Uniform Relocation Act to remove two houses below structure 7C and to purchase flowage easements on the inundation area. The Chippewa Creek watershed in Medina County has one dam under construction. The sediment has been removed, and the dam will be raised and emergency spillway widened as soon as dry weather allows. Another Chippewa dam is in the planning stage. Upper Hocking Structure No. 8 in Fairfield County is out for bid to replace the concrete riser and impact basin, remove sediment, and other important upgrades.

Planning is complete on Wolf Run Lake in Noble County and Lake Snowden in Athens County. Construction contracts should be let by fall to widen the emergency spillways, etc.

The recent Farm Bill has funded NRCS to carry out dam rehabilitation for the next 5 years.

## ODSO Elections/Officers

by Dan Hill

Members elected to the Executive Board at the Annual Meeting this past November were Marshall Edens of the Rushcreek Conservancy District, representing conservancy districts; Bernie Rasmussen of American Electric Power, representing industrial dam owners; and Len Stahl of Contech Construction Products, representing contractors/suppliers. Bill Herdman has replaced George Rowe as President of the Ohio Lake Communities

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Association and now represents private dam owners on the ODSO Board. These four people join Dan Hill of Burgess & Niple, representing consultants; Lynn Kelly of the City of Columbus, representing municipal dam owners; and Mark Bowers of the University of Cincinnati, representing academia, to comprise the entire Board. Officers subsequently established by the Board are Dan Hill as Chairman, Mark Bowers as Vice Chairman, and Bernie Rasmussen as Treasurer.

## ODSO Nominations

by Mark Bowers

It is time once again to consider nominations for seats on the Executive Board of ODSO, the Ohio Dam Safety Organization. Elections will be held at the Fall WMAO Conference. You may nominate a fellow WMAO member or yourself for these seats. The following seats will be open for two-year terms:

- Academia
- Municipal Dam Owners
- Private Dam Owners

If you need further information, contact Mark Bowers, Lynn Kelly, or Bernie Rasmussen of the ODSO Nominating Committee. Names should be submitted by July 15 to a member of the ODSO Nominating Committee.

## Dam Construction Seminar

by Jeff Holchin

On April 3, 2002, WMAO and ODSO sponsored a Dam Construction Seminar at the H.C. Nutting Company office in Cincinnati with 42 enthusiastic participants, including dam owners, contractors and engineers. This day long seminar covered the geology of southwest Ohio, dam design basics, dam construction issues, testing and inspection, and ODNR regulation of dams. Seminar notes were provided, and the day ended with a field trip to the recently completed Marge Schott Lake Dam at the nearby Boy Scout Camp Friedlander. Speakers included Sarah Johnson and Jeff Holchin of H.C. Nutting Company, Dr. Mark Bowers of the University of Cincinnati, Mike Rutherford of SK Construction, and Mia Kannik of the ODNR. Seminar costs were \$10 for dam owners, \$50 for others and \$150 for sponsors. Look for this seminar coming to your neighborhood in the future!

ODSO also submitted a proposal to provide regional technical seminars for the Association of State Dam Safety Officials (ASDSO) on January 30, 2002. The seminar topics were Plans and Specifications Review and Construction Inspections for Dams and Ancillary Structures, and the team of ODSO members included engineers from Burgess and Niple, Limited;

Paul C. Rizzo Associates; Fuller, Mossbarger, Scott and May Engineers and H.C. Nutting Company. Although unsuccessful, ODSO was the only state dam safety organization to compete for the seminar presentations.

## Dam Safety Tip: Upstream Slope Protection

by Pete George

Slope protection is usually needed to protect the upstream slope of a dam against erosion due to wave action. Without proper slope protection, a serious erosion problem known as "beaching" can develop on the upstream slope. The repeated action of waves striking the embankment surface erodes fill material and displaces it farther down the slope, creating a "beach." The amount of erosion depends on the predominant wind direction, the orientation of the dam, the steepness of the slope, water level fluctuations, boating activities, and other factors. Further erosion can lead to cracking and sloughing of the slope, which can extend into the crest, reducing its width. When erosion occurs and beaching develops on the upstream slope of a dam, repairs should be made as soon as possible. However, an erosion scarp less than 1 foot high may be stable and not require repair.

The upstream face of a dam is commonly protected against wave erosion by placement of a layer of rock riprap over a layer of bedding and a filter material. Other material such as concrete facing, soil-cement, fabri-form bags, slush grouted rocks, steel sheet piling, and articulated concrete blocks can also be used. Vegetative protection combined with a berm on the upstream slope can also be effective.

Regular inspection and monitoring of the upstream slope protection is essential to detect any problems. It is important to keep written records of the location and extent of any erosion, undermining, or deterioration of the riprap, wave berm or other slope protection. Photographs provide invaluable records of changing conditions. A rapidly changing condition may indicate a very serious problem, and the Ohio Department of Natural Resources (ODNR) Dam Safety Engineering Program should be contacted immediately. All records should be kept in the operation, maintenance, and inspection manual for the dam.

Any other questions, comments concerns, or fact sheet requests, should be directed to the ODNR Division of Water at the (614) 265-6731 or visit the website at <http://dnr.state.oh.us/water>

## ODSO Brochures Available

by Susan Coyle

ODSO has assembled two public information brochures. The two topics are: 1) Guidelines for Hiring an Engineer or

Contractor for Dam Evaluation and Repair and 2) Guidelines for Farmers: Small Impoundments. If you are interested in copies of either or both of these brochures, you can access them on the web on the ODSO website at <http://www.ohiowater.org/wmao/damsafety.htm> under "Publications". These brochures are also available from your local Natural Resources Conservation Service field office or your County Soil and Water Conservation District office.

## ODSO Consultants and Contractors

by Pete George

As a service to dam owners needing assistance to make necessary remedial measures to their dams or to develop and carry out appropriate operation and maintenance activities, a list of ODSO consultant and contractor members with Ohio office locations follows. This list, including websites and email addresses for each of the consultants and contractors will soon be available on the ODSO website at <http://www.ohiowater.org/wmao/damsafety.htm>.

### BBC&M Engineering

Columbus (614) 793-2226  
Cleveland (216) 585-9995  
Cincinnati (513) 771-8471

### Bowser Morner

Dayton (937) 236-8805  
Toledo (419) 255-8200

### Burgess & Niple

Columbus (614) 459-2050  
Akron (330) 376-5778  
Cincinnati (513) 579-0042  
Painesville (440) 354-9700

### Collector Wells

Columbus (614) 888-6263

### Contech Construction Products

Dayton (513) 771-0030

### DLZ Corporation

Columbus (614) 848-4141

### EMH&T, Inc.

Columbus (614) 471-5150

### Fuller, Mossbarger, Scott and May

Cincinnati (513) 860-1070  
Columbus (614) 846-1400

### Gannett Fleming

Columbus (614) 794-9424

### GEM Consulting

Columbus (740) 927-5245

### Hartman Engineering

Delaware (740) 548-4702

### H.C. Nutting

Cincinnati (513) 321-5816  
Columbus (614) 863-3113

### Hydrosphere Engineering

Strongsville (440) 234-8966

### J&L Engineering

Medina (330) 725-8977

### ms consultants, inc.

Columbus (614) 898-7100

### Ohio Ready Mix Concrete Association

Columbus (614) 891-0210

### Paul C. Rizzo Associates

Columbus (614) 868-5011

### R.D. Zande

Columbus (800) 340-2743

### Ronald Shields, P.E.

Columbus (614) 239-7093

### Wilbur Smith Associates

Columbus (614) 888-9440

### Woolpert

Dayton (937) 461-5660  
Columbus (614) 469-1311  
Cincinnati (513) 272-8300

## Best Maintained Dam Awards

by Dan Hill

Congratulations to the winners of the fourth annual ODSO Dam Safety Awards for best maintained dam. The 2001 winners (followed by the ownership category) as recognized at the Annual Meeting last November are:

- Lake Lorelei Dam, Brown County (Property Owner Association)
- Middletown Sportsmen Club Dam (Private)
- USEC Dam X-230K, Pike County, U.S. Enrichment Corporation (Industrial)

Nominations for the 2002 awards are now being sought. Eligibility is 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 late October. To make a nomination for this year's awards, fill out the form in this newsletter and return it by July 15, 2002 to:

**Bill Herdman, Chair**  
**ODSO Awards Committee**  
**1245 Eiffel Cove**  
**Fayetteville, Ohio 45118**

# ODSO 2002 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"/> Municipal	<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.: \_\_\_\_\_

Return Service Requested

Non-Profit Org.  
U.S. Postage  
**PAID**  
Columbus, Ohio  
Permit No. 6256

Ohio Dam Safety Organization  
Water Resources Foundation of Ohio  
247 Agricultural Engineering Building  
590 Woody Hayes Drive  
Columbus, Ohio 43210-1057  
614/292-1851