

ODSO 2003 Best Maintained Dam Nomination Form

Category (check one): Industrial Private Property Owner Association
 Municipal State Conservancy District

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

Owner: _____

Address: _____

Telephone No.: _____

Nominator (optional): _____

Address: _____

Telephone No.: _____

Ohio Dam Safety Organization
 Water Resources Foundation of Ohio
<http://www.ohiowater.org/wmao/damsafety.htm>
 247 Agricultural Engineering Building
 590 Woody Hayes Drive
 Columbus, Ohio 43210-1057
 614/292-1851

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another Dam newsletter

Ohio Dam Safety Organization, Spring 2003

ODSO Elections/Officers

by Dan Hill 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. Membership in ODSO is open and free to any member of the Water Management Association of Ohio (WMAO). Visit the WMAO website at <http://www.ohiowater.org/wmao> or call (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.

Members elected to the Executive Board at the Annual Meeting this past October were Tim Granata from Ohio State University, representing academia; Dick Lorenz from the City of Westerville, representing local public dam owners; and Ed Fuhrmann from Lake Lorlei, representing private dam owners. Service awards from the ODSO Executive Board were presented at the annual meeting to Mark Bowers from the University of Cincinnati and Lynn Kelly from the City of Columbus for their many years of work on the Board. The three new Board members join Dan Hill of Burgess & Niple, representing consultants; 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 and suppliers; to comprise the entire Board. Officers subsequently established by the Board are Dan Hill as Chairman, Bernie Rasmussen as Vice Chairman, and Dick Lorenz as Secretary/Treasurer.

Proposed Legislation Increases Dam Fees

by Dick Lorenz The proposed State of Ohio operating budget for fiscal years 2004-2005 (House Bill 95) includes numerous fee increases, including Ohio Department of Natural Resources dam fees. Dam construction permit fees, which are based on a sliding percentage of the construction costs, will double. For example, the fee for the first \$100,000 of estimated construction cost will go from 2% to 4% of the cost. The budget bill also increases the minimum filing fee from \$200 to \$1,000 and the maximum from \$50,000 to \$100,000.

Annual fees for Class I dams are proposed to increase from \$30 plus \$3 per foot of dam height to \$30 plus \$10 per foot. Under current law, political subdivisions are exempt from this annual fee and most of the construction permit fees. The

proposed legislation eliminates this exemption, thus requiring a political subdivision that owns a dam for which a construction permit was required to pay an annual fee. However, the federal government will remain exempt. The bill also authorizes the Chief of the Division of Water to adopt rules that establish fee amounts that supersede the proposed fee schedules. Additional information may be found at http://www.legislature.state.oh.us/bills.cfm?ID=125_HB_95.

Dam Security

by Bernie Rasmussen Since the events of September 11, 2001, the threat of terrorist activities has become a harsh reality, increasing the need to tighten security at dams across the nation. The need is not only to protect physical assets, but access to critical technical information and computer systems. Security, which only a few short years ago was given minimal consideration, has become an important aspect of dam safety. This has created a new challenge for the dam safety professionals to gain an understanding of security and the value of performing security assessments.

Security upgrades are being done at many federal government locks and dams and hydroelectric plants across the country. The Federal Energy Regulatory Commission (FERC) is now requiring owners of hydroelectric projects to have reasonable security measures in place at all high and significant hazard dams. FERC is also requiring dam owners of high or significant hazard projects under their jurisdiction to perform a security assessment and develop a security plan. For larger projects, a vulnerability assessment is also required. As a result, dam owners have begun making security enhancements such as adding additional fencing, video cameras, motion detectors, and/or security guards at their facilities to protect the public as well as their investment.

Hazard Creep

by Dan Hill Hazard creep occurs when ODNR increases a dam's hazard classification due to increased development downstream. This can happen when just one house or a whole subdivision is built downstream of a dam where there originally was no development. In the State of Ohio, landowners typically have the right to develop their land, even in the shadow of a dam. Many dam owners are then faced with major renovations to meet ODNR's standards when the classification of their dams are increased by development downstream. Hazard creep is a phenomenon that many dam owners have experienced and about which many others should be concerned. ODSO organized a joint session with the Ohio

(Continued)

Floodplain Management Association (OFMA) on this topic at last October's WMAO conference, a panel discussion titled "Hazard Creek and Zoning Controls, or Property Rights Downstream of Dams." Participants included Gary Ziegler (City of Findlay), OFMA; Marshall Edens, Rushcreek Conservancy District; Bob Fletcher, Ohio Association of Realtors; Patti Eshman, Ohio Home Builders Association; Jim Morris, Chief, ODNR Division of Water; and Dan Hill (Burgess & Niple), ODSO. For more information about the panelists' comments, please contact ODSO.

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 in Ohio for which NRCS was funded. The Rushcreek Conservancy District in Fairfield County has purchased two houses below structure 7C and relocated the residents. They are currently purchasing flowage easements on the additional inundation area downstream of the dam to prevent future development as discussed in the "Hazard Creep" article. The Chippewa Creek watershed in Medina County has completed work on structure 3A by raising the dam, widening the auxiliary spillway, and removing sediment. They are currently bidding work on structure 8D, which includes removing sediment and minor concrete repairs. Upper Hocking structure No. 8 in Fairfield County was completed last fall. It involved removing sediment, widening the auxiliary spillway, and replacing the reinforced concrete riser and impact basin. Plans are now complete on Upper Hocking Structure R-23 for replacement of the principal spillway this summer. Construction is continuing on Lake Snowden in Athens County. This project includes raising the dam and widening the emergency spillway. Hocking College is the project sponsor and students in their construction class are performing part of the work. Wolf Run Lake in Noble County should be under construction later this summer. ODNR is the project sponsor and will be contracting to widen the auxiliary spillway and remove sediment.

Dam Safety Enforcement Program

by Pete George The Ohio Department of Natural Resources (ODNR), Division of Water has the responsibility and authority for regulating dam safety in Ohio under Section 1521.06 of the Ohio Revised Code. The Division of Water accomplishes this task primarily by inspecting existing dams, issuing permits for the construction of new dams, and working with dam owners to repair or modify deficient dams. Unfortunately, not all dams are built, operated and maintained in accordance with Ohio's dam safety laws. It sometimes becomes necessary to take enforcement action against non-

compliant dam owners to ensure that dams are properly repaired or breached for the protection of downstream lives and property.

In 2000, the Division of Water received a three-year grant from the Federal Emergency Management Agency (FEMA) to increase its enforcement capabilities. The grant was adequate to fund one dam safety engineer and a part-time Assistant Attorney General dedicated solely to the dam safety enforcement program. In 2001, significant improvements were made to the dam safety enforcement program through the efforts of a quality improvement team. To date, more than 7 projects have been successfully resolved, and at least 25 additional projects are in some stage of the enforcement process. Successful completion can include repairing a dam to bring it into compliance with all dam safety regulations, obtaining a construction permit, modifying a dam to remove it from the Division of Water's jurisdiction, or breaching a dam. If you have any questions concerning the dam safety enforcement program, or if you would like to meet with a dam safety staff person to discuss your project, please contact the Division of Water at (614) 265-6731.

ODSO Program Committee News

by Tim Granata The Program Committee wants to remind newsletter readers that the annual Water Management Association of Ohio (WMAO) Conference will be held on November 5 & 6, 2003, at the Holiday Inn East in Columbus. The program for the Dam Safety Organization has not yet been finalized, but some ideas for Conference topics are: floodplain modeling; security and terrorism; the Muskingum Program; dam removal and river restoration; and boater safety – watercraft and low head dams. If you have other suggestions for topics, please contact Tim Granata (granata.6@osu.edu) or Pete George (pete.george@dnr.state.oh.us). During the coffee breaks, posters from an ecological restoration project on the Fifth Avenue Dam (Columbus, Ohio) will be set-up in the lobby. In an effort to encourage younger members/students interested in dam safety or water resource issues, a financial discount will be provided.

ODSO Nominations

by Bernie Rasmussen The Nominating Committee is seeking nominees for open seats on the Executive Board of ODSO. The following seats will be coming up for elections at the WMAO Fall Conference:

- Industrial Dam Owners
- Conservancy Districts
- Engineering Consultants
- Dam Construction Contractors

The Board meets quarterly. If anyone is interested in serving as a Board member for the Ohio Dam Safety Organization or

would like to nominate someone please contact Bernie Rasmussen at (614) 716-2974 (bjrasmussen@aep.com) or Tim Granata at (614) 292-5040 (granata.6@osu.edu). Nominations should be submitted by July 15th.

Dam Safety Tip: Rodent Control

by Pete George Rodents such as the groundhog (woodchuck), muskrat and beaver are attracted to dams and reservoirs, and can be quite dangerous to the structural integrity and proper performance of the spillway. Groundhog and muskrat burrows weaken the embankment and can serve as pathways for seepage. Beavers may plug the spillway and raise the pool level. Rodent control is essential in preserving a well-maintained dam.

Control methods should be implemented during early spring when active burrows are easy to find, young groundhogs have not scattered, and there is less likelihood of damage to other wildlife. Groundhogs can be controlled by using fumigants or by shooting. Fumigation is the most practical method of controlling groundhogs. Groundhogs will be discouraged from inhabiting the embankment if the vegetated cover is kept mowed.

Barriers to prevent muskrat burrowing offer the most practical protection to earthen structures. A properly constructed riprap and filter layer will discourage burrowing. The filter and riprap should extend at least 3 feet below the water line. As the muskrat attempts to construct a burrow, the sand and gravel of the filter layer caves in and thus discourages den building. Heavy wire fencing laid flat against the slope and extending above and below the water line can also be effective. Eliminating or reducing aquatic vegetation along the shoreline will discourage muskrat habitation.

A simple, inexpensive method of backfilling a burrow (mud-packing) can be accomplished by placing one or two lengths of metal stove or vent pipe in a vertical position over the entrance of the den. The mud-pack mixture is then poured into the pipe until the burrow and pipe are filled with earth-water mixture. The pipe is removed and the dry earth is tamped into the entrance. The mud-pack is made by adding water to a 90 percent earth and 10 percent cement mixture until a slurry or thin cement consistency is attained. All entrances should be plugged with well-compacted earth and vegetation reestablished. Dens should be eliminated without delay because damage from just one hole can lead to failure of a dam or levee.

ODSO Amendment

by Bernie Rasmussen The ODSO Executive Board is in the process of amending the Constitution and Bi-Laws to clarify and stream-line procedures that had not

been fully addressed in the original version. The amendment is being submitted to the WMAO Board for approval. Any comments can be directed to a member of the ODSO Board.

The following are the key changes to the Constitution and Bi-Laws: 1) The treasurer and the secretary positions have been combined into one position; 2) In the event of a vacancy on the board, the Board shall appoint a temporary member to fill the vacancy until the next scheduled election; 3) Executive Board Members are no longer required to be citizens of Ohio, only active participants in dam safety in the State of Ohio; and 4) The election of the Chairman will take place at the ODSO fall meeting and the election of the Vice Chairman and Secretary/Treasurer will take place at the ODSO winter (first quarter) meeting.

Best Maintained Dam Awards

by Dan Hill Congratulations to the winners of the fifth annual ODSO Dam Safety Awards for best maintained dam. The 2002 winners (by ownership category) as recognized at the Annual Meeting last October are:

- Luczek Dam, Dr. Stephen Luczek, Cuyahoga County (Private)
- Lake Waynoka Dam, Lake Waynoka Dam Property Owners Association, Brown County (Property Owners Association)
- Germantown Dam, Miami Conservancy District, Montgomery County (Conservancy District)
- Silver Creek Metro Park Dam, Summit County Metro Parks, Summit County (Local Public)

Nominations for the 2003 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 during an ODSO session at the Water Management Association of Ohio annual conference in early November. To make a nomination for this year's awards, fill out the form in this newsletter and return it by July 18, 2003 to:

**Ed Fuhrmann, Chair
ODSO Awards Committee
538 Munster Drive
Fayetteville, Ohio 45118**