National Panel Releases Findings of Lake Delhi Dam Study

A national panel of engineers assembled to determine the cause of the Lake Delhi dam breach on July 24 released its findings yesterday, Dec. 1, in the auditorium of the Wallace State Office Building in Des Moines.

The expert panel was requested by Gov. Chet Culver and assembled under the auspices of the National Dam Safety Review Board. The report released discussed the technical factors that contributed to the breach in the dam. The panel summarized its findings and took questions from the audience.

Information gained from this study will be of use for dam safety not only in Iowa, but across the nation.

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Lake Delhi Recover and Rebuild Task Force Releases Final Report

The Lake Delhi Recover and Rebuild Task Force released its final report on Monday, Nov. 29.

On Aug. 6 Governor Chet Culver signed Executive Order Number 25, establishing the Lake Delhi Recover & Rebuild Task Force. The task force was charged with:

1) Identifying funding resources needed for recovery and rebuilding efforts;

2) Establishing principles and policies for public investment that result in improved local and regional economic development and public benefit;

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“As disastrous as the Lake Delhi dam failure was, it would be even more of a disaster if we didn’t learn from it,” said Lori McDaniel, supervisor of the DNR’s Flood Plain Management and Dam Safety section.

Findings
The panel released its completed report late Wednesday afternoon after finding that internal erosion occurring in the portion of the embankment above the top of and downstream of the concrete core wall within the earthen portion of the dam was the likely cause of the July 24 breach. The panel found that the internal, concrete core wall within the structure was overtopped by massive flooding that caused erosion within the dam and ultimate failure.

The panel also found that had one of the three spillway gates been fully operational, the dam would likely have not overtopped, but failure of the dam could have still occurred due to the internal erosion caused by water going over the internal core wall and forming erosion paths within the structure that would grow larger as water continued to flow through.

Recommendations
The scope of the Independent Panel of Engineers’ investigation was limited. Several recommendations were made to add to a better understanding of the breach at Delhi Dam:

1. Investigate the remaining sinkhole and the flow path from the sinkhole to its terminus.
2. Conduct a complete investigation of the remnant of the embankment, 1967’s berm and foundation soils including but not limited to classification of soil and critical material properties.
3. Remedial measures for the north embankment section should be developed and included in any reconstruction scenario.
4. If the owner elects to pursue a Federal Energy Regulatory Commission (FERC) license, it would be wise to delay any further investigations, demolition, reconstruction designs and analyses until coordination and procedures with FERC are established.
5. More consistent approaches should be developed for classifying dams according to hazard and achieving compliance with the associated design standards. The DNR classified Delhi Dam as moderate hazard, but Ashton Engineering classified the dam as low hazard. This has an impact on the design flood standard that is applied to dams.
6. Dam inspectors performing inspections for the DNR and consulting engineering firms performing dam safety evaluations should have strong backgrounds in dam engineering and potential failure modes analysis. There were design flaws at Delhi Dam that an experienced dam engineer would recognize likely led to additional investigations.
7. The failure of Gate 3 to fully operate during the flood appears to have been caused by the failure to complete concrete repairs behind the left gate guide. Education and enforcement mechanisms are needed to clearly identify critical dam safety issues and their impacts and to ensure these issues are resolved quickly.
8. Review/update the estimated return period for the July 2010 flood event based on historical inflows at Delhi Dam.

For additional information or to view the final Independent Panel of Engineers Report, visit www.iowalifechanging.com/lakedelhi.
Grant Updates

2011 EMPG Pass-Through Funding

HSEMD received word from DHS/FEMA that the 2011 EMPG grant guidance is not expected to be released until after Dec. 25 at the earliest. With this in mind, HSEMD encourages county emergency management coordinators interested in applying for the 2011 EMPG funding to be planning their projects based on the Guidance of last year. HSEMD continues to move forward developing IowaGrants.Gov for EMPG applications. While the application process for IowaGrants.Gov will be electronic, the application information requested should be similar to 2010. Web-based trainings on the application process in IowaGrants.Gov will be scheduled for December and January. Please contact Program Officer Tricia Boggs at tricia.boggs@iowa.gov if you have questions.

2011 Monitoring Visits

Representatives from the Homeland Security and Grants Bureau will be conducting individual site visits of approximately 20-24 preparedness grant recipients over the next year. The purpose of the visits is to fulfill federal requirements of administering preparedness grant funding and also to address any local concerns with respect to grant funding and problem solve for future projects and grant years. The initial visits will center on areas that administer a majority of projects and funding with a goal to visit remaining sub-grantees in following years. Sub-recipients selected for 2011 will be identified and contacted in order to schedule the dates for these visits in the coming weeks. Any questions with respect to this new initiative may be directed to Mike Raes at 515.725.3207 or mike.raes@iowa.gov.

Region One Training Opportunities

G-386 Mass Fatalities Incident Response

This two-day course is designed to prepare response personnel and other responsible professionals to handle a mass fatalities incident effectively by properly caring for the dead and the living – both responders and survivors. This course is one of the Advanced Professional Series (APS) Elective courses.

For more information on the APS please go to http://training.fema.gov/emiweb/APS.

This course is designed for a wide audience including all personnel who would have a role in mass fatality incident response, including: coroners, medical examiners, funeral directors, emergency management personnel, and first response agencies to include fire, law enforcement, emergency medical services, 911 dispatchers and communication center personnel. Others who will benefit include volunteer disaster agencies, hospital personnel and mental health professionals, National Guard, and transportation staff.

There are no costs associated with this class. Materials will be provided to each participant and a meal will be provided each day. There are no prerequisites to attend this course.

Certification: Participants who complete a two-day class will be issued a Certificate of Completion.

When: Jan. 12-13, 2011
9 a.m. – 5 p.m.

Where: Polk County EMA
1907 Carpenter Ave.
Des Moines, Iowa

To Register: E-mail Liz Manion at mmanion@storycounty.com or call 515.382.7229. Please provide your name, organization, address, email address and contact phone number. Deadline to register is Dec. 30.
3) Leading long-term regional and community planning efforts and identifying best practices with respect to managing the Maquoketa River watershed, reducing the likelihood of future damage by flooding and maintaining or improving water quality;

4) Identifying federal and state legal issues that need to be addressed in connection with any reconstruction of the Lake Delhi dam or its possible use for hydroelectric generation; and,

5) Ensuring transparency and accountability in the investment of public recovery and rebuilding efforts.

The Task Force met five times between Aug. 27 and Nov. 30. In addition, four committees were established to conduct further work and utilize supplementary expertise: Finance, Economic & Community Development, Environment, and Legal.

Providing a definitive answer to the question of whether or not the dam should be rebuilt was beyond the purview of the Task Force. Rather, the work of the Task Force was the identification and navigation of issues, options and conditions that will necessarily inform those who ultimately will be charged with the responsibility of answering that question.

Based upon its review, and as an interim emergency measure, the Lake Delhi Recover and Rebuild Task Force supported the Governor’s exercise of his emergency powers to dedicate public funding for the construction of temporary structures that are intended to slow the erosion of river bed channels, which has caused large amounts of sediment to flow downstream. The task force also supports the completion of an independent technical and engineering assessment that will be needed before the existing dam can be repaired or a new dam installed.

Iowa taxpayers have a right to know how and where public dollars are being spent. Fiscal transparency is crucial for the reporting and the oversight required to ensure the honest and ethical use of public funds, and for holding accountable public officials if they fail to be good stewards of those funds. Accountability and transparency reduce the likelihood of—or public concerns about the possibility of—waste, fraud or abuse by establishing publicly-open ways to review contracts and grants, thereby ensuring that they meet applicable standards, follow competition requirements and are overseen by sufficient numbers of trained acquisition and grants personnel.

In addition to private investment, a rebuilt dam at Lake Delhi will likely require a substantial infusion of public funds—whether those funds derive from local, state or federal sources, or some combination of those sources. Regardless of the source of public funding, concepts of accountability and transparency should be applied to whatever entity ultimately is responsible for constructing and operating any
ICS-300 Intermediate Incident Command System for Expanding Incidents

This Course Provides training and resources for personnel who require advanced application of ICS. It is designed to elevate the student’s understanding of the Incident Command System from a basic level up to an intermediate level. Target audience is for individuals who may assume a supervisory role in expanding incidents where some or all of the Command and General Staff positions may be activated and extend into multiple operational periods.

This course is designed for a wide audience including emergency management personnel, and first response agencies to include fire, law enforcement, emergency medical services, 911 dispatchers, communication center personnel, public health and public works.

REGION 2
Dec. 14-15, 8 a.m.-4 p.m. Charles City (Floyd County)
Dec. 16-17, 8 am.-4 p.m. Algona (Kossuth County)

REGION 6
Dec. 15-16, 8 a.m.-4 p.m. Dubuque (Dubuque County)
Dec. 21-22, 9 a.m.-5 p.m. Iowa City (Johnson County)
Jan. 8-9, 2011, 9 a.m.-5 p.m. Iowa City (Johnson County)

ICS-400 Advanced Incident Command System for Complex Incidents

This course provides advanced application of ICS for senior personnel who are expected to perform in a management capacity in an Area Command or Multi-Agency Coordination Entity. It includes an emphasis on large-scale organization development, roles and relationships of the primary staff, the planning, operational, logistical and fiscal consideration related to a large and complex incident and event management. It describes the application of Area Command and the importance of inter-agency coordination on complex incidents and events.

PRE-REQUISITES: ICS-100, ICS-200 and ICS-300 courses.

Dam Safety in Iowa

The Iowa Department of Natural Resources is responsible for the state’s dam safety program. The program involves the review and approval for the construction of new dams, maintaining an inventory of existing dams that meet minimum size criteria and the periodic inspection of certain dams. Currently there are approximately 3800 dams on the state’s dam inventory.

Dams that have the potential to create extensive damage to downstream houses or buildings, or to cause loss of life should they fail and release their impounded water are required to be regularly inspected. There are currently 321 dams that require regular inspections either on a 2 or 5 year inspection frequency.

For more information on the DNR’s dam safety program, visit the DNR website at www.iowadnr.gov/water/floodplain/damsafety.html, or contact Jon Garton at 515.281.6940 or jonathan.garton@dnr.iowa.gov.
IRC Relocates to West Des Moines

The Iowa Recovery Center in Urbandale is moving! The FEMA and HSEMD Recovery Bureau staff working on DR-1763 will be co-located with the JFO for DR-1930 in West Des Moines, effective today. All land lines for Public Assistance and Mitigation staff will be changing. HSEMD staff asks for your patience during the transition; the best way to reach staff today will be via mobile phones. Look for additional information in our next issue. Ω

Task Force Report

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dam that is re-built or constructed. At the very least, such entities should be made subject to Iowa’s open meetings and public records laws.

In the longer term, assuming that the technical and engineering assessments result in recommendations for a repaired or replaced dam structure, and that such a project can be completed at a reasonable cost, the task force supports such a project, and believes that such a project will require additional new public investment.

The task force would qualify new public investment on the following conditions:

1. Unambiguous public ownership and control of the dam to ensure participation in and eligibility for federal programs and accountable and transparent oversight

2. Satisfactory and sustainable mitigation of environmental concerns per state guidelines

3. Unfettered public access to the new Lake Delhi

View the final report and a list of task force members at www.iowalifechanging.com/lakedelhi. Ω

December is Critical Infrastructure Protection Month

President Obama has proclaimed December 2010 “Critical Infrastructure Protection Month.”

Be sure to follow updates about CIP Month by:

• Tracking new Web postings by registering for updates on www.dhs.gov/criticalinfrastructure;

• Watching for upcoming critical infrastructure blog posts on The Blog at Homeland Security (http://blog.dhs.gov); and

• Following them on Twitter @DHSJournal. Ω