NEI WPCC

Storm Response - Lessons Learned
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How New Hampshire’s Dam Safety Program Prepares for and Reacts to Floods

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Ownership
75% Private
14% Local Government
10% State
1% Federal
<1% Public Utility

There are just over 2,600 dams in NH

Population At Risk Downstream of State Owned High and Significant Hazard Dams

More than 4,000 houses

More than 130 State Road Crossings

More than 800 Town Road Crossings

Briar Pipe Dam in Concord
Failure - May 1989
Emergency Action Plans

- Required for all HIGH hazard dams and the majority of SIGNIFICANT hazard dams
- Provides specific information related to responding to impending or actual dam failures
- Must be accurate, clear and concise

Failing to plan…is planning to fail!

EAP Flow Chart

Overall Inundation area
Before the rain...

Dam Safety works with other partners to gather information related to such things as:
- Weather forecasts
- River/stream/impoundment levels
- Snowpack data and river ice conditions
- Contact information for dam owners and response partners*

*Trust me – we do this more frequently than at the last minute!

Still before the rain...

Use information gathered to develop notice and information plans
- DES press releases on a wide range of subjects
- Targeted telephone and email campaigns to dam owners and response officials
- Swift911 Emergency Notification System
- Conference calls with EMDs – sponsored by NH’s Division of Homeland Security & Emergency Management (HSEM)
Cold Brook Dam in Lempster
Failure - October 1996

During the event...

- Respond to inquiries from local responders, dam owners, property owners, SEOC staff, other agencies, etc...
- Coordinate with other agency reps. in the SEOC to provide or collect information specific to response
- Dispatch dam safety professionals to areas of flooding or developing situations to assist in response and decision making
- Relay other department-related needs and information to DES-Incident Command Center
- Participate in briefings to provide agency information and response activities to governor, agency heads and SEOC leadership

During the event...

- Report to the State Emergency Operations Center (SEOC) at HSEM
- Monitor weather and other conditions and provide information to local response officials and other agencies, either as conditions warrant or through daily conference calls. Past events have highlighted locations that are susceptible to flooding and damage. Both forecast and ongoing conditions may be used as indicators for notifying and mobilizing resources.

Conservation Pond Dam in Newmarket
Failure - April 2007
The Department of Safety’s Division of Homeland Security and Emergency Management

- Responsible for planning and training to prepare for terrorist attacks, and also for coordinating the State’s response to major disasters. This includes natural disasters such as hurricanes, floods and severe winter storms, and human-caused disasters, such as nuclear power plant accidents or chemical spills.
- Supports and manages the State Emergency Operations Center (SEOC)

STATE EMERGENCY OPERATIONS CENTER ACTIVATION LEVELS

Level One (Monitoring or Normal Operations)
- The SEOC has support staff on continuous duty to monitor daily situational awareness and assure responsiveness in anticipation or occurrence of an emergency incident or large scale event that may require staff support. The primary direction and control function at Level One includes a 24/7 warning point. This provides for a notification process that allows for further activation decisions to be made. The Operations Section of HSEM is staffed Monday – Friday from 0800 – 1600. An off-hours Duty Officer System is in place for nighttime, holiday and weekend coverage.

Level Two (Low Intensity or Unusual Event)
- The Operations and Planning Sections and the Communications Branch monitors the event, collects information and keeps appropriate staff and partners briefed. Selected personnel and ESFs may be present in the SEOC on a 24-hour or designated hours basis.
STATE EMERGENCY OPERATIONS CENTER ACTIVATION LEVELS

Level Three (High Intensity Event/Alert or Site Area Emergency)
- The situation requires, or is likely to require a high level of response from the State. The event could have the potential to or result in a significant loss of life, property damage and/or the disruption of vital public safety infrastructure. The SEOC is fully activated on a 24-hour basis and selected ESFs and Support Annex agencies are requested, as the incident warrants. There is anticipation that the incident will require multi-day activation.

LEVELS

STATE EMERGENCY OPERATIONS CENTER ACTIVATION LEVELS

Level Four (Complex, High-Intensity Event/General Emergency)
- A complex, high intensity event has or is likely to occur that will require significant State and possibly federal response. This has all the attributes of a Level Three, but is more complex either because a larger geographic area is affected, or because the potential effects are or will be greater. It is more likely to result in a Presidential Declaration. The SEOC may be activated into some of the recovery phase of the event. All ESFs and Support Annex agencies are activated.

Weather summary sheet

Event summary sheet

- Current conditions
- Potential impacts
- Information and outreach
Lessons learned

- Get organized now!
  - Develop SOPs related to such things as data sources, equipment and supplies, response vehicles, personnel staffing, etc...
  - Create “go kits” for response staff
  - Know your capabilities and those of others – who do you rely on and for what product?
  - Cross-train response staff in other areas related to agency function and response
  - Establish clear communication protocols for all potential circumstances
  - Consider developing event-based tools and products – floods, nor'easters and pandemic events call for different actions

- Measure twice and cut once!
  - Ask intelligent questions in order to assess ongoing conditions
  - Do your homework so that you are providing meaningful and appropriate response ideas
  - Follow-up to stay current on reported conditions and, as necessary, augment/modify previous advice
  - Knowledge is power – share it
  - Document everything (for after action reporting, follow-up inspections, etc..) so that event issues and impacts are addressed as required
Lessons learned

- Don’t shy away from the postmortem!
  - It’s likely that many things went poorly during the event, so meet with others both inside and outside of your agency to identify and discuss those failures
  - Get feedback from those you helped (hopefully) during the event. Was there more you could have done with not much additional effort?
  - Devote the time necessary to correcting any problems identified to prevent them from occurring again
  - Build on the successes, too

Questions?