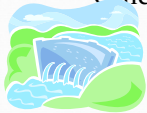


# Dam Safety & Emergency Management

Montgomery County, Maryland  
Office of Emergency Management &  
Homeland Security (OEMHS)



9 May 2012

## Agenda

- Introduction
- Dam Safety Factors
- Emergency Action Plan
- Montgomery County Dams
- Emergency Management & Dam Safety
- Dam Safety Program
- Training and Exercises
- Dam Safety Team approach
- Information Management – WebEOC & Alert Montgomery
- Final Thoughts ?

## Dam Safety Depends on 5 Factors

- Complete Investigations
- Adequate Design
- Quality Construction
- Appropriate Operations, Maintenance, & Supervision
- Adequate Alarm Mechanism and Well-Adapted Emergency Action Plans

Emergency Management should support these two factors in any dam safety program

## The Probability of Failure of a dam depends on many factors

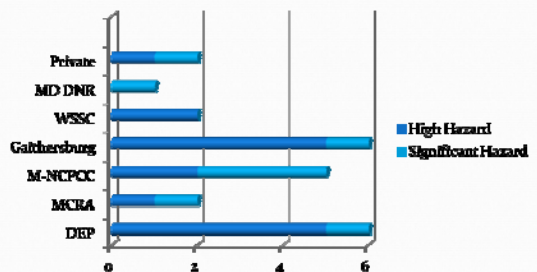
- Spillway Capacity
- Seismic Resistance
- Nature of the Foundations
- Quality of Design
- Quality of Construction
- Monitoring
- Maintenance
- Human Factors

Emergency Management support during the preparedness & mitigation phase will enhance local government response and recovery operations in the event of a dam breach /emergency.

## Maryland Emergency Action Plans

- Emergency Action Plan (EAP) purpose: *safeguard lives* and *reduce property damage* in the event that a dam should fail. The EAP contains:
  - a dam failure inundation map;
  - procedures to monitor a dam periodically and during flood warnings;
  - notify the County Emergency Operation Center of a potential dam failure; and
  - warn and evacuate the isolated residences at risk.
- These procedures are to supplement and be used in conjunction with the County's Emergency Operations Center.

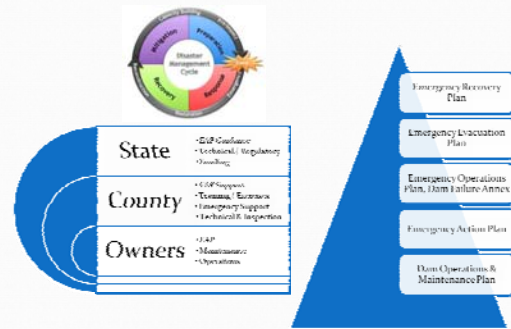
## MC Dams (High/Sig. Hazard)



# Emergency Management



# Emergency Management & Dam Safety



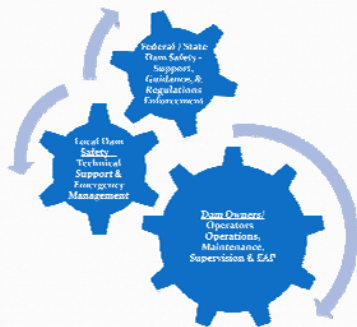
# Dam Safety Program



# Dam Safety Training & Exercises

- Prior to 2010 - EAP support yearly (No EOC sponsored training and exercise support)
- Nov. 2010 - Dam Owner Seminar
- Dec. 2010 - Dam Owner Workshop / Tabletop Exercise
- May 2011 - Hurricane Functional Exercise
- Jun 2011 - Dam Owner and EOC Drill
- Dec. 2011 - Dam Owner Workshop
- May 2012 - MD Dam Safety Conference
- Jun. 2012 - Dam Owner and EOC Drill
- Nov. 2012 - Dam Owner Workshop

# Dam Safety - It takes a whole team!



# Communications & Information Management

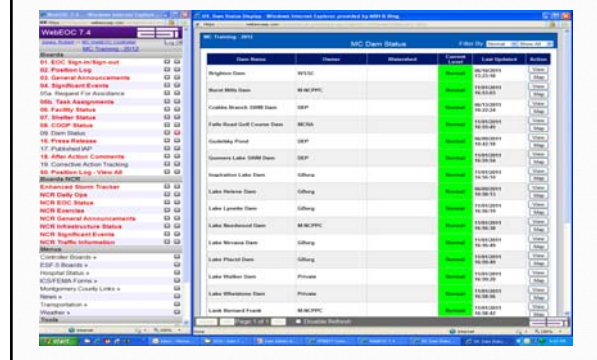
- Montgomery County uses WebEOC and Alert Montgomery to help manage our Dam safety program.



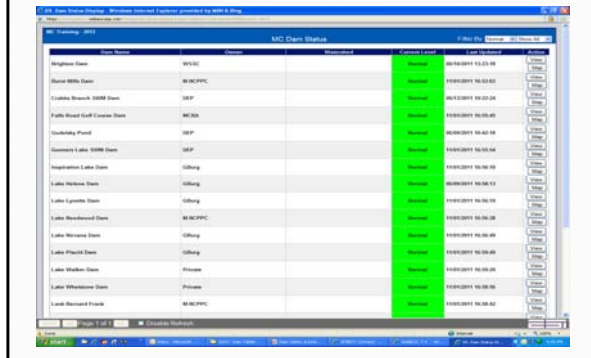
## Alert Montgomery – Dam Owners and Operations Alert Group



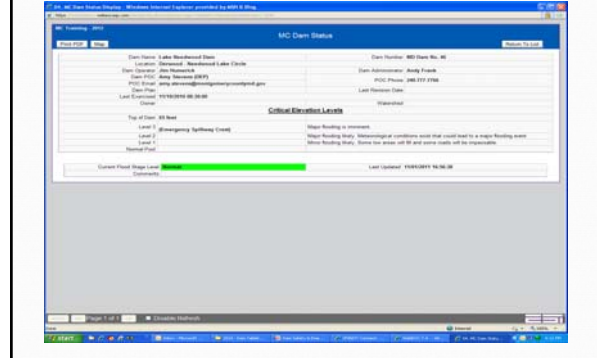
## EOC Control Panel and Dam Board



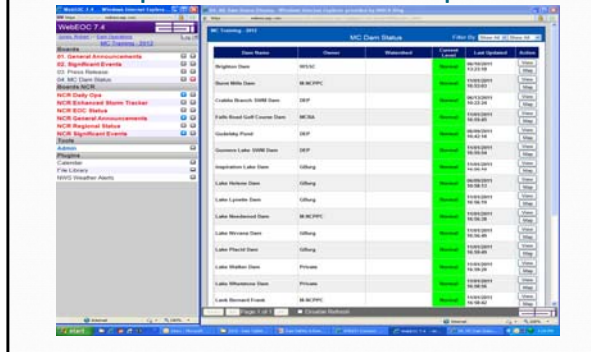
## WebEOC – Dam Status Board



## Dam Details View



## Dam Operations User Group



## Final Thoughts ?

