EMERGENCY ACTION PLAN (EAP)

For

[NAME OF DAM]

MEMA #\_\_\_\_

NID# ME\_\_\_\_

LOCATION: TOWN, COUNTY, ME

COORDINATES: LAT\_\_\_\_ LON\_\_\_\_

OWNED BY:

Date:

Expires: (two years from original or revision date)

[PHOTO OR TWO OF ACTUAL DAM IF AVAILABLE]

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# Chapter I: NOTIFICATION FLOW CHART

Message: Hello, this is \_\_\_\_\_ and this is an emergency. The \_\_\_\_\_\_ dam has failed/failing. Please activate your Alert/Notification procedures. THIS IS NOT A DRILL

# Chapter II: PURPOSE & DISTRIBUTION

## Section A: Purpose

The sudden release of water stored behind the \_\_\_\_\_\_\_\_\_\_ Dam is a potential hazard for downstream inhabitants and property. To minimize the chances for loss of life and damage to property, it is important to respond quickly to a potentially hazardous situation and to provide a coordinated effort that clearly assigns major areas of responsibility.

The first few minutes following an actual or impending failure often make the difference between disjointed and ineffective actions and a coordinated and effective response.

This plan is intended to outline a coordinated and effective emergency response. It is essential that the proper organizations and agencies be notified on a timely basis so that properly trained people can perform the functions they are qualified to do. Local responders have been involved in the development of this plan, and it is exercised periodically.

## Section B: Distribution

* 1. The Notification Flow Chart must be prominently posted at the dam site to facilitate use by observers equipped with cellular telephones or radios.
	2. The Notification Flow Chart must be prominently posted within the first downstream inhabitant, structure, or facility equipped with a telephone and (owner)
	3. This Emergency Action Plan will be distributed to each of the following persons or agencies as a minimum:
		+ DAM OWNER
		+ DAM OPERATOR
		+ 9-1-1 / COUNTY RCC
		+ FIRE AND RESCUE (incident commander)
		+ COUNTY SHERIFF
		+ STATE POLICE DISPATCH
		+ COUNTY EMA
		+ MEMA
		+ NWS
		+ LOCAL LAW ENFORCEMENT

# Chapter III: PROJECT DESCRIPTION & IMPACT

## Section A: Identification

(dam name, MEMA ID, NID number, location, body of water, year built/rebuilt, etc.)

## Section B: Impoundment

(acres, max storage, identify what used for, recreation, water supply, etc.)

## Section C: Physical Properties

(height, length, physical properties, spillway identification, gate information if applicable, etc.)

## Section D: Downstream Characteristics

(what would be affected by a sudden release of water) (below is optional form of reporting the impacted area characteristics).

## Section E: Impacted Area

See Inundation Map on page \_\_\_\_\_.

Downstream roads, bridges, houses and buildings

|  |
| --- |
| BUILDINGS |
| Type | Owner/Occupant | Telephone # | Address |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

|  |
| --- |
| INFRASTRUCTURE |
| Route | Type | Owner | Description |
|  |  |  |  |
|  |  |  |  |

#

# Chapter IV: EMERGENCY CONDITIONS

An emergency means breaches and all conditions leading to or causing a breach, overtopping and any other condition in a dam and its appurtenant structures that may be construed as unsafe or threatening to life and property. The prominent causes of dam failure emergencies include: Earthquake, Landslide - generated wave, Extreme storm, Piping, Equipment malfunction, Structural damage and/or deterioration, Foundation failure, and Sabotage.

The causes of emergencies may not all be pertinent to a given structure. The type of dam, topography, geology, design features, and age are all important considerations that need evaluation relative to the possibility and cause of failure.

At least two types of conditions where dam failures could trigger an emergency condition:

1. Normal Conditions
2. Adverse Conditions

## Section A: Normal Conditions

This type of dam failure could occur with the reservoir at normal full pond elevation and with a normal river flow prevailing. This type of failure could occur with very little warning, and for this reason, is generally considered to have the most potential for loss of human life.

## Section B Adverse Conditions

This type of dam failure occurs during a flood flow condition. Adverse Conditions refer to the flood that may be expected from the most severe combination of critical meteorological and hydrologic conditions that are reasonably possible in the drainage basin. The PMF (Probably Maximum Flood) is the upper limit for determining the inflow design flood (IDF). The IDF is the flood condition above which failure of an impounding structure has an insignificant effect on downstream flooding. A failure at the IDF is considered to show the upper limit of inundation.

# Chapter V: EAP ACTIVATION

The following are the three “Activation Levels” of an EAP for State Regulated Dams in Maine:

## EAP Activation - Level 1 (READY)

EAP agreed and functional. The EAP will always be activated to this Level 1. Owner must test communication on an ongoing basis. Any changes to the document must be made immediately. *(Use EAP Agreement Form next page)*

## EAP Activation – Level 2 (SET)

Any developing situation which threatens the integrity of the dam. Level 2 activation must place the dam under watch (surveillance). The tipping point to a Level 2 activation of the EAP should be anything, which in the opinion of the dam owner or observer, which could lead to dam failure.

Example Triggers: gate failure, blocked spillway (debris or ice), mis operation, developing defect, flood warning, continuing heavy rain, an earthquake, ground movement or developing seepage

## EAP Activation: Level 3 (GO)

This is when a dam emergency is declared, and people are evacuated. Here the dam must be failing or about to fail. The incident can be a development from Level 2, the dam breaching or overtopping.

# Chapter VI: EAP AGREEMENT FORM

By my signature, I acknowledge that I, or my representative, have reviewed this plan and concur with the tasks and responsibilities assigned herein for me and my organization.

### Dam Owner:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ***[enter organization here]*** \_\_\_\_\_\_\_\_\_\_\_\_

[enter name here. Signature above. use tab key to realign] Organization Date

### State OR County RCC:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ***[enter organization here]*** \_\_\_\_\_\_\_\_\_\_\_\_

[enter name here. Signature above. use tab key to realign] Organization Date

### Fire & Rescue:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ***[enter organization here]*** \_\_\_\_\_\_\_\_\_\_\_\_

[enter name here. Signature above use tab key to realign] Organization Date

### County Sherriff OR State Police:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ***[enter organization here]*** \_\_\_\_\_\_\_\_\_\_\_\_

[enter name here. Signature above. use tab key to realign] Organization Date

### County EMA:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ***[enter organization here]*** \_\_\_\_\_\_\_\_\_\_\_\_

[enter name here. Signature above. use tab key to realign] Organization Date

### Local EMA OR Law Enforcement:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ***[enter organization here]*** \_\_\_\_\_\_\_\_\_\_\_\_

[enter name here. Signature above. use tab key to realign] Organization Date

### Additional Agency:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ***[enter organization here]*** \_\_\_\_\_\_\_\_\_\_\_\_

[enter name here. Signature above. use tab key to realign] Organization Date

# Chapter VII: TERMINATION

Whenever the EAP has been activated, an emergency level has been declared, all EAP actions have been completed, and the emergency is over, the EAP operations must eventually be terminated and follow-up procedures completed.

## Termination Responsibilities

The town, city or county official in charge is responsible for terminating EAP operations and relaying this decision to the owner. It is then the responsibility of each person to notify the same group of contacts that he or she notified during the original event notification process to inform those people that the event has been terminated.

Prior to termination the owner should inspect the dam (in coordination with a professional engineer) to determine whether any damage has occurred that could potentially result in loss of life, injury, or property damage. If it is determined that conditions do not pose a threat to people or property, the owner’s engineer may advise the town, city or county official to terminate EAP operations as describe above.

The owner shall document the emergency event and assure all actions were taken. The owner shall provide documentation to the Maine Emergency Management Agency.

# Chapter VIII: MAINTENANCE, EAP REVIEW & REVISION

## EAP Annual Review

The owner will review and, if necessary, update the EAP at least once each year. The EAP annual review will include the following:

* 1. Calling all contacts on the notification flowchart in the EAP to verify that the phone numbers and persons in the specified positions are current, The EAP will be revised if any of the contacts have changed.
	2. Contacting the local law enforcement agency to verify the phone number and persons in the specified positions. In addition, the owner will ask if the person contacted knows where the EAP is kept and if responsibilities as described in the EAP are understood
	3. Call the locally available resources to verify that the phone numbers, addresses, and services are current.

# Chapter IX: TESTING

Once a year for significant and high hazard dams the owner shall conduct or arrange to have conducted a test of the emergency notification procedure.

The owner or designee will initiate the test by calling 9-1-1 and indicating “This is a test of the Emergency Action Plan for \_\_\_\_\_\_\_\_\_\_ Dam, in \_\_\_\_\_\_\_\_\_\_\_\_.”

Each person responsible for making calls, as indicated on the Notification Flowchart, will make contacts as indicated, stressing that this is a test of the procedures.

Report results with form on the following page.

## EAP Test Notifications Form

(Use of this form is optional; you may in turn summarize the results in a note to the Maine Emergency Management Agency Dam Safety unit).

I conducted a test of the EAP for **\_\_\_\_\_\_\_\_\_\_\_\_** dam, in \_\_\_\_\_\_\_\_\_ Maine on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Check the box that applies:

\_\_\_\_\_ All contacts were made in accordance with the most recent flowchart.

\_\_\_\_\_ Some contacts were not made, but all participants are aware of their role in the plan and have a copy of the EAP.

\_\_\_\_\_ Other

(comments) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Return to: Dam Safety Administrator/ EAP Coordinator

Maine Emergency Management Agency

 72 State House Station

 Augusta, ME 04333

 Tara.ayotte@maine.gov

# Chapter X: EVACUATION PLAN

Briefly describe your evacuation plan and include information on road blocks if applicable.

EAP to be included in the \_\_\_\_\_\_\_\_\_\_ Town Operation or Evacuation Plan

# Chapter XI: INUNDATION MAPS

[insert disclaimer here]

[Insert brief description of the inundation maps and how they were developed here]