

# **Emery Mills Dam Emergency Action Plan and Monitoring Procedures**



State Dam No. 014; High Hazard Classification

**Located in: Shapleigh, Maine**

**Owned by: City of Sanford**

**Issue Date - December 7, 2004**

**Revised Date – July 28, 2022**


**Emery Mills Dam  
No. 014  
Emergency Action Plan (EAP)**



**Reviewed and Approved by:**

  
\_\_\_\_\_  
Dam Owner (City Manager)

5/3/2018  
Date

  
\_\_\_\_\_  
Dam Operator (Director of Facilities)

5/1/2018  
Date

  
\_\_\_\_\_  
Sanford Emergency Management Director

5/1/2018  
Date

  
\_\_\_\_\_  
York County Emergency Management Director

5/1/2018  
Date

**EMERY MILLS DAM EMERGENCY ACTION PLAN  
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## 1.0 NOTIFICATION FLOWCHART AND EMERGENCY MESSAGES

### 1.1 Flowchart Description

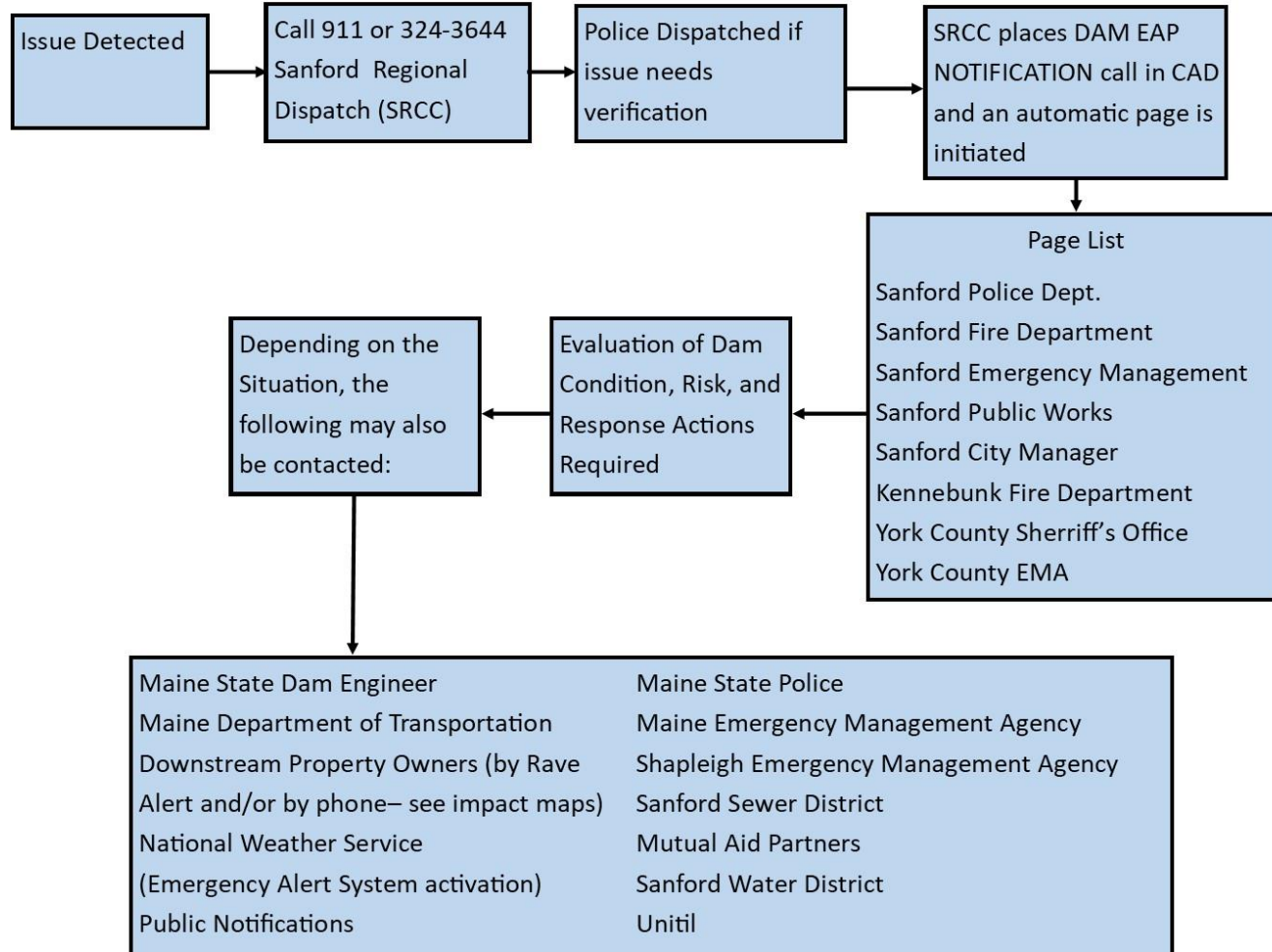
The notification flowchart describes the initial flow of information in the event of an emergency at the Emery Mills Dam. The initial notifications in the page list are automatic. Those who cannot be reached with the initial page are called by dispatchers. Additional notifications may be made at the discretion of the emergency management and response agencies.

Further direction on emergency conditions is noted in **Section 4.0**. **Section 5.0** summarizes responsibilities of individuals and agencies during emergencies.

Response activity is entered and maintained the Computer Aided Dispatch (CAD) system at Sanford Regional Communications Center.

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Dam EAP Notification Flow Chart  
(See Appendix A for contact numbers)



## **2.0 EMERGENCY ACTION PLAN PURPOSE AND DISTRIBUTION**

### **2.1 Purpose**

This Emergency Action Plan (EAP) defines responsibilities and provides procedures designed to identify unusual conditions which may endanger the Emery Mills Dam. The sudden release of water stored behind the Emery Mills Dam may present a potential hazard to downstream inhabitants and property. This plan is designed to identify the notifications to be made to appropriate public officials of possible, impending, or actual failure of the dam in time to safeguard the lives of citizens living, working, schooling, recreating, and protecting property along the Mousam River. It is important to respond quickly and in a coordinated fashion, and as such, this Plan also assigns key areas of responsibility for remedial actions to be implemented in the event of an emergency at the dam.

### **2.2 Plan Distribution and Flowchart Posting**

One copy of this EAP is distributed to each of the listed agencies. This distribution is based on guidelines from the Maine Emergency Management Agency (MEMA).

<b>Holder</b>	<b>Role</b>
City of Sanford	Dam Owner / Operator
Sanford Regional Communications Dispatch Center	Emergency Alert Notifications
Sanford Police Department	Response agency
Sanford Fire Department	Response agency
Sanford Emergency Management Director	Local Emergency Management Director
Shapleigh Fire Department	Downstream response agency
Acton Fire Department	Mutual Aid Agency
York County Sheriff's Office	County Sheriff's Office
York County Emergency Management Agency	County Emergency Management Agency
Maine Emergency Management Agency	State Emergency Management Agency
National Weather Service - Gray	Emergency Alert System Notification

\*The City of Sanford is also the owner of the next downstream dam.

The Notification Flowchart or similar notification information is maintained at the following locations:

- a. at the dam's public access area to facilitate use by observers equipped with cellular telephones or radios to call Sanford RCC 324-3644 or 911.
- b. at the City of Sanford Director of Facilities office, and
- c. at the Sanford Regional Communications Center on the CAD system

## **3.0 DAM DESCRIPTION**

### **3.1 Description**

The Emery Mills Dam is located on the Mousam River approximately two miles upstream from Sanford / Springvale and one mile downstream from Acton. The dam is located in the town of Shapleigh in York County, Maine.

The dam was built in 1886. The designer/builder of the dam is unknown. The dam consists of a rock/earth structure with a 57 foot wide concrete spillway. The dam is 210 feet long and 27 feet high. Control of outlet flow is through a gate at the base of the dam. The last significant maintenance work was done in 2019 and consisted of boring and pressure grouting, removal of upstream vegetation, and construction of an access road to the northeast end of the dam. The Dam Safety Engineer for the State of Maine conducted the most recent full inspection at this dam.

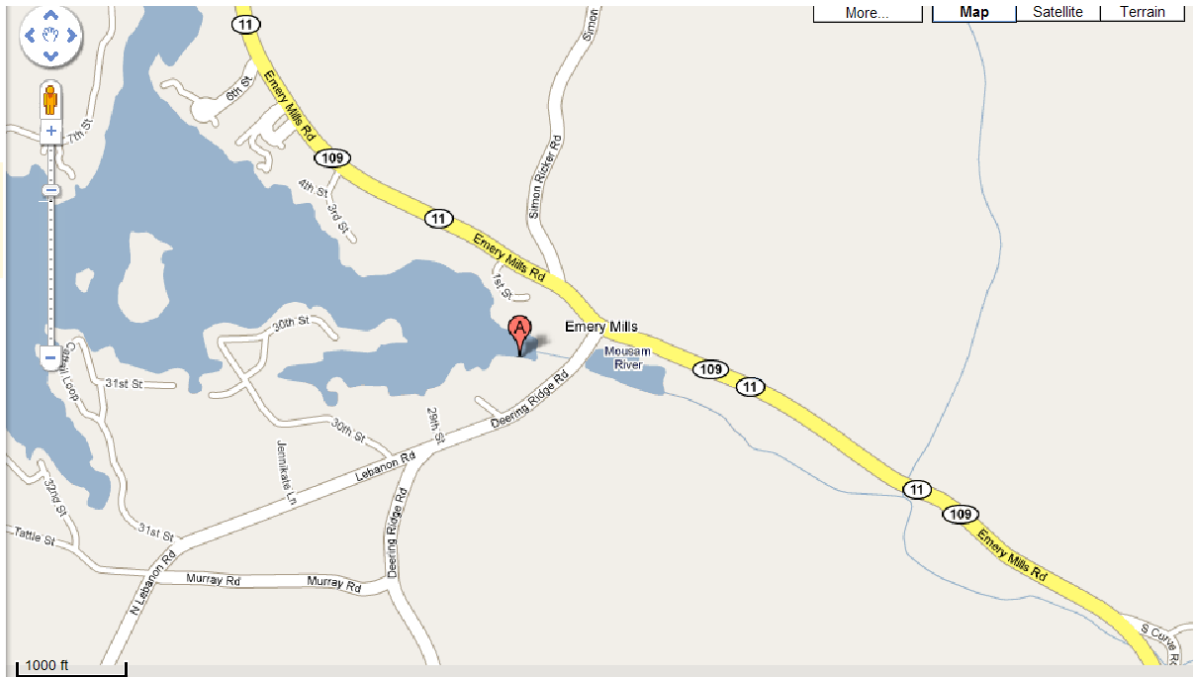
The Emery Mills impoundment has a watershed area of 5 sq miles. The watershed including Square Pond is 29 sq. miles. The watershed contributing to the dam's reservoir is characterized by hilly, wooded terrain. Soils are generally well drained in this area.

Square Pond Dam is the nearest significant dam upstream. Downstream dams (all within Sanford) are Mill Street/Alpaca Dam, River St. Dam, and Number One Pond Dam. The town of Shapleigh (limited area), and the City of Sanford and Village of Springvale would be potentially affected by failure or large releases from the Emery Mills dam. The area below the dam would see some flooding of roads and streets and have a flooding potential to Kennebunk.

### **3.2 Location of Dam**

The Emery Mills dam is accessed via Emery Mills Road (Rts 109 and 11) to Deering Ridge Road.

# Emery Mills Dam Emergency Action Plan



## **4.0 EMERGENCY CONDITIONS AND REMEDIAL ACTIONS**

### **4.1 Emergency Condition Assessment and Remedial Actions**

All decisions regarding the severity of the dam conditions and remedial actions to implement are the responsibility of the individual conducting the inspection. This individual should consult with the Sanford Director of Facilities and the Maine State Dam Engineer, as needed, for technical assistance. (See Appendix A for contact telephone numbers.) When appropriate, the dam should be operated at a reduced level until repairs can be completed. If the remedial actions are unsuccessful and the dam fails or is about to fail, downstream property owners (noted on the impact maps) will be notified.

**Table 4-1  
Emergency Situations and Recommended Specific Remedial Actions**

EVENT	ACTION
<p>Overtopping due to unusually high river flows and inability of spillway to pass water in a controlled manner.</p>	<p>This may cause erosion damage along the top/wings of the dam.</p> <ol style="list-style-type: none"> <li>a. Increase dam surveillance</li> <li>b. Lower the water level via outlet/gates in stages to avoid impacting downstream residents.</li> <li>c. Sand bag / rip rap any areas which have eroded.</li> <li>d. Check the spillway for debris or ice impeding the flow of water</li> </ol>
<p>An earthquake has been felt, or one has been reported in the vicinity.</p>	<ol style="list-style-type: none"> <li>a. Immediately conduct a general overall visual inspection of the dam. If there is no imminent danger of dam failure thoroughly inspect the following: <ul style="list-style-type: none"> <li>• the dam for cracks, settlement, or seepage</li> <li>• abutments for possible displacement</li> <li>• drains or seeps for any turbidity, cloudy or muddy water, or increased flow</li> <li>• spillway structure and gates to confirm continued safe operation</li> </ul> </li> <li>b. Contact the ME State Dam Engineer and discuss findings as necessary</li> <li>c. Monitor dam for several weeks</li> </ol>
<p>Abnormally high water levels - Flooding</p>	<ol style="list-style-type: none"> <li>a. Determine changes from the normal values</li> <li>b. Rapidly changing values could indicate concern</li> <li>c. Release water as needed.</li> <li>d. Consult as needed with the ME State Dam Engineer to discuss findings</li> </ol>

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<p>Excessive Settlement, Increasing or Excessive Seepage or Piping (cloudy or turbid seepage) or Observation of whirlpools along upstream slope of dam. Structural Failure</p>	<p>This is caused by earth material being washed away below the surface of the structure.</p> <ul style="list-style-type: none"> <li>a. Sand bag any areas which have eroded.</li> <li>b. Lower water level</li> </ul>
<p>Slides, stone dislocation on either the upstream or downstream slopes. Landslides or potential landslides into the downstream channel may impound water or impede downstream flow.</p>	<p>Slides or stone dislocation can drastically change the stability of the structure and also the flow net.</p> <ul style="list-style-type: none"> <li>a. Use gravel or riprap to stabilize the structure.</li> <li>b. Use plastic upstream and/or geotextile fabric downstream to slow the seepage.</li> <li>c. Lower the water level via outlet/gate in stages to avoid trapping downstream residents</li> <li>d. Consult as needed with the ME State Dam Engineer for remedial guidance</li> </ul>
<p>Failure of Structures, Gates, Abutment, Movement of the Spillway or Excessive Cracking of Concrete. Gate failure may result in downstream flooding.</p>	<p>This is indicative of a deficient or failing structure or its foundation.</p> <ul style="list-style-type: none"> <li>a. Monitor the rate of change.</li> <li>b. Consult as needed with the ME State Dam Engineer to discuss findings</li> <li>c. Consider initiation of notification or evacuation of low lying areas for gate failure.</li> </ul>
<p>Verbal (e.g. telephone) or written threats to the dam, or observation of trespassers/security breaches or suspicious actions by unknown individuals at the dam.</p>	<p>Notify the York County Sheriff's Office and Sanford Police Department immediately. See the Notification Flowchart for contact numbers.</p> <p>Preserve any recordings of verbal messages or written threats for law enforcement investigation.</p>

## **5.0 RESPONSIBILITIES DURING EMERGENCIES**

### **5.1 Responsibilities during the Emergency**

The following summarizes the responsibilities of Dam Owner/operator or agencies in response to an emergency at the Emery Mills Dam. Where the actions are different based on the type of emergency condition, condition specific actions are noted. Non-emergency related responsibilities for the overall dam safety and emergency program are discussed in **Section 8.0**, Emergency Preparedness.

#### **5.1.1 City of Sanford ( Dam Owner/ Operator)**

a. For Unusual Conditions

- Identify the emergency condition through inspection of the dam (if needed to confirm situation)
- Provide for increased inspection / surveillance of the dam. Obtain services of John Gallant as needed for these inspections (See Appendix A for contact numbers.)
- Implement required notifications as shown on the Notification Flowchart
- Implement emergency repairs / remedial actions at the dam (see Table 4-1)
- Request / reduce flows from upstream dams if possible
- Request / increase spillway releases (at controlled level) at downstream dams if possible
- Update the emergency status and repair progress at the dam to the Sanford Emergency Management Agency and the State Dam Engineer
- Provide technical assistance to Emergency Management Agency officials, when necessary
- Report conclusion of unusual event on-site at the dam through consultation with the ME State Dam Engineer and Sanford EMA Director

b. For Imminent or Occurring Dam Failure

- Provide for surveillance of the dam (where safe to do so) to report on status
- Initiate notifications to downstream property owners as indicated on the impact maps.
- Implement required notifications as shown on the Notification Flowchart
- Consult with the MEMA State Dam Engineer for technical assistance
- Request upstream dam owners to hold back water flow if possible
- Increase spillway releases (at controlled level) at downstream dams if possible
- Update the emergency status at the dam to the Sanford Emergency Management Agency and the State Dam Engineer
- Provide technical assistance to Emergency Management Agency officials, when necessary
- Report termination of emergency situation on-site at the dam through consultation with the ME State Dam Engineer and Sanford EMA Director

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### **5.1.2 Sanford Regional Communications Center**

- If verification of emergency situation is needed, request verification from the Sanford Police Department. They will respond and make a visual check of the Dam.
- Implement required notifications as shown on the Notification Flowchart
- Provide condition status updates using the Notification Flowchart as they are received
- Respond to calls received from the public regarding the dam emergency. Re-route calls to applicable response agencies as appropriate

### **5.1.3 Sanford Police Department**

- a. For Unusual Conditions
  - Verify status of dam if requested by the Sanford Regional Communications Center
  - Prepare for possible evacuations. Await direction on change in dam status
- b. For Imminent or Occurring Dam Failure
  - Warn the public of emergency conditions at the dam and initiate evacuations. **See the Impact Maps in Appendix B**
  - Provide security measures at the dam.
  - Control access to evacuated areas.
  - Assist in conducting rescue and recovery operations as needed.

### **5.1.4 Sanford Fire Department**

- a. For Unusual Conditions
  - Prepare for possible evacuations
  - Await direction on change in dam status
- b. For Imminent or Occurring Dam Failure
  - Assist in evacuation operations in cooperation with Sanford Emergency Management Agency and Police Department **See the Impact Maps in Appendix B**
  - Assist in conducting rescue and recovery operations as required
  - Request mutual aid for boats, initiate rescue of trapped residents as needed and request DOT assistance for road closures where required.

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### **5.1.5 Sanford Emergency Management Agency**

- Implement required notifications as shown on the Notification Flowchart
- Coordinate actions of emergency response agencies
- Serve as liaison between the City of Sanford, the York County EMA and MEMA
- Coordinate with the National Weather Service for Emergency Alert broadcasts to enhance public notification of the emergency as appropriate for situation and/or with Maine Emergency Management Agency for activation of IPAWS (Integrated Public Alert and Warning System)
- Coordinate with the media as required
- As Incident Commander, in consultation with the ME State Dam Engineer, make determination of when the emergency at the dam has ended and when flooding has subsided, termination of emergency situation in the community

### **5.1.6 Sanford Public Works Department/Maine DOT**

- a. For Unusual Conditions
  - Provide engineering support and personnel
  - Assist with providing/acquiring needed equipment (e.g. portable lighting, etc.) and materials
  - Assist in implementing the remedial activities at the dam (See Table 4-1)
  - Initiate road and bridge closures if deemed appropriate
  - Await direction on change in dam status
- b. For Imminent or Occurring Dam Failure
  - Initiate road and bridge closures if deemed appropriate

### **5.1.7 Shapleigh Fire Department**

- a. For Unusual Conditions
  - Prepare for possible evacuations
  - Await direction on change in dam status
- b. For Imminent or Occurring Dam Failure
  - Assist in evacuation operations in cooperation with Emergency Management Agency **See the Impact Maps in Appendix B**
  - Assist in conducting rescue and recovery operations as required

## Emery Mills Dam Emergency Action Plan

### **5.1.8 York County Sheriff's Office and Maine State Police**

- Assist the Sanford Police Department as needed.
- Assist with Evacuations and Traffic Control/Road Closures

### **5.1.9 Acton Fire Department**

- Provide mutual aid assistance as requested

### **5.1.10 York County Emergency Management Agency**

- a. For Unusual Conditions
  - Provide assistance to Sanford and potentially other downstream communities (when requested and beyond their capabilities) on emergency response needs
  - Prepare for possible need of public shelters
- b. For Imminent or Occurring Dam Failure
  - Provide assistance to Sanford and potentially other downstream communities (when requested and beyond their capabilities) on emergency response needs
  - Assist Sanford EMA with opening and staffing of public shelters (including Sanford Memorial Gymnasium) for evacuated individuals
  - Coordinate any specialized assistance needed
  - Notify and coordinate assistance needs with MEMA

### **5.1.11 National Weather Service**

- Activate the Emergency Alert System for Dam Failure Situations

### **5.1.12 Maine State Dam Engineer**

- Provide technical assistance to the dam Owner/Operator (Sanford Director of Facilities)
- Assist in the evaluation and resolution of potential emergency conditions

## **6.0 OPERATIONS CONTROL AND UNIQUE REQUIREMENTS**

### **6.1 Emergency Operations Center**

The Emergency Operations Center (EOC) provides a central location where City of Sanford officials and senior decision-makers will gather to provide a coordinated response. These decision makers make up the Emergency Response Team (ERT).

The Emergency Operations Center is located at the City Hall Annex next to City Hall on Main Street, Sanford.

### **6.2 Response during Periods of Darkness**

The spillway, gate structures, and any distressed areas of the dam should be illuminated if an emergency condition develops during periods of darkness. This will allow the emergency condition to be monitored and assessed, and help facilitate a response. The Sanford Public Works and Fire Departments will provide temporary emergency power and illumination during such events.

### **6.3 Response during Weekends and Holidays**

The Emergency Notification Flow Chart can be used for Weekends and Holidays. In most cases, the contact numbers are manned 24 hours. When practical, alternate telephone contact numbers have been provided. This should maximize the probability of activating the Flow Chart and engaging all of the responsible parties.

### **6.4 Response during Periods of Adverse Weather**

During periods of adverse weather, the primary access route described under **Section 3.2** should be utilized. Limited quantities of gravel and or/or crushed stone are stockpiled at the Public Works Department and would be transported to the site to allow access roads to be maintained and for making emergency repairs. Local contractors may be used to bring additional materials.

### **6.5 Availability of Use of Alternate Systems of Communications**

It is assumed that interruption of telephone service during an emergency condition could occur and that the evacuation of affected homes and businesses should be performed by the police or fire personnel informing residents by going street to street. Cellular phones may be used for communications between individuals at the dam and response agencies. Radio communication is available between the Sanford Regional Communications Center, Police and Fire Departments. As appropriate, the state's CONOPS system will be activated.

## **7.0 EMERGENCY SUPPLIES AND INFORMATION**

### **7.1 Emergency Supplies and Information**

In an emergency situation, equipment and supplies might be needed on short notice, such as sandbags, rip rap, fill materials, equipment, and laborers. The sections below list the supplies and indicate how they would be accessed.

### **7.2 Sanford Equipment and Materials**

The following is a partial list of the equipment and materials owned by the City of Sanford and available for use.

<b>Item</b>	<b>Storage Location</b>
Heavy Equipment	Public Works Garage
Gravel	Public Works Garage
Rip Rap	Public Works Garage
Dump Trucks	Public Works Garage
Sand Bags	Public Works Garage

### **7.3 Other Equipment and Materials Sources**

Appendix A contains a list of contractors and suppliers that may be contacted for acquisition of additional equipment and materials. Materials include "expendable items" such as sand bags, rip rap, gravel, soil, plastic sheets, geotextile fabric, etc. Small equipment includes items such as shovels, barrels, etc. Large equipment includes items such as backhoes, excavators, etc.

## **8.0 EMERGENCY PREPAREDNESS**

### **8.1 Responsibility Overview**

The Emery Mills Dam Emergency Action Plan coordinator is:

City of Sanford  
Director of Emergency Management  
919 Main Street  
Sanford, ME 04073

The following are the key routine and non-emergency responsibilities of the Emergency Plan (EAP) Coordinator. *Section 5.0*, outlines the responsibilities for this individual as well as others, during an actual emergency.

- Planning
  - Develop the EAP
  - Review the EAP at least every two years, including confirming all contact numbers in Appendix A
  - Update the EAP when necessary (updating may be needed based on annual drills)
  - Ensure EAP updates are distributed to all Plan holders (**Section 2.2**)
  - Ensure the Notification Flowchart is posted as required (**Section 2.2**)
- Training
  - Coordinate with listed emergency response organizations to ensure common understanding of the EAP
  - Conduct / develop public awareness "communications" to heighten awareness of the dam, its value and potential hazard to the downstream community within the potentially inundated area.
  - Coordinate with representatives of potentially affected facilities having special assistance needs where applicable
- Testing
  - Conduct "drills" (telephone call-downs using the Notification Flowchart) to confirm that the Notification Flowchart contacts are correct.
  - Conduct periodic Tabletop Exercises to test the EAP (**Section 8.3**)
  - Incorporate "lessons learned" into the EAP from actual events, drills or exercises
  - Ensure copies of drills/exercises are provided to the EMA for filing
- Inundation Mapping
  - Develop and maintain / update the impact maps, as required
  - Ensure that response agencies know how to use the maps to assist with needed evacuations in the event of a dam failure.

## Emery Mills Dam Emergency Action Plan

The Emery Mills Dam Owner/Operator is:

City of Sanford  
Director of Facilities  
919 Main Street  
Sanford, Maine 04073

The following are key routine and non-emergency responsibilities of the Dam Owner/Operator:

- Dam Maintenance
  - Ensure that the dam is regularly inspected (See Appendix C for Inspection Forms). The inspection frequency is increased as needed by unusual conditions.
  - Ensure required inspection reports are maintained.
  - Ensure that the dam is maintained to protect against deterioration and failure
  - Ensure engineering files for dam are accessible for use in emergencies.
- State Coordination
  - Serve as point of contact for the City of Sanford with the ME State Dam Engineer for dam related activities

The following summarizes the key routine and non-emergency responsibilities of the emergency response and emergency notification organizations listed on the Notification Flowchart:

- Review, and be familiar with the Emery Mills EAP, especially the assigned roles during an emergency, use of the inundation maps and Notification Flowchart
- Ensure the location of your copy of the updated EAP is known by all staff
- Ensure that evacuation needs are understood including any unique requirements, such as special needs populations (agencies having evacuation responsibilities)
- Ensure that EAP updates are inserted as soon as possible. Destroy or return (to the EAP Coordinator) any outdated EAP material.
- Participate in planning, coordination, drills and training sessions

## **8.2 TEST MESSAGE**

The following message (or similar wording) should be used when conducting the annual test of the EAP Notification Flowchart and during Tabletop Exercises. It is important to be clear that the test is not a real emergency:

"Hello, this is a Test. This is a ***Test for the Emery Mills Dam Emergency Action Plan.*** This test simulates emergency conditions at the dam site. Please confirm that you have

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received this test message with Sanford Regional Communications at 207-324-3644. Again, this is a *Test of Emery Mills Dam EAP. This is only a test.*

### **8.3 EAP Exercises**

In addition to the annual drills used to confirm the contact numbers in this EAP, the Emergency Management Director will host and facilitate a periodic exercise of the EAP.

The periodic exercise will consist of a meeting, including a Tabletop Exercise. Attendance should include all parties listed in **Section 5.0**. At the discretion of the Emergency Management Director, other organizations that may be involved with an unusual condition or emergency event at the dam are encouraged to participate.

The Tabletop Exercise will begin with the facilitator presenting a scenario of an unusual condition or dam failure emergency event at the dam. The scenario will be developed prior to the exercise. Once the scenario has been presented, the participants will discuss the responses and actions that they would take to address and resolve the scenario throughout the exercise.

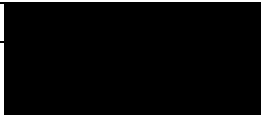


After the Tabletop Exercise, the EAP will be reviewed and potential changes to it based on "lessons learned" during the exercise will be discussed. Mutual aid agreements and other emergency procedures can be discussed. The Emergency Management Director will prepare a written summary of the periodic test and revise the EAP, as necessary.

**APPENDIX A**  
**CONTACT TELEPHONE NUMBERS**

**Table A-1  
Contact Telephone Numbers**

<b>Agency</b>	<b>Individual (Position)</b>	<b>Contact Numbers</b>
Sanford Police Department	Craig Andersen, Chief of Police Tim Strout, Deputy Chief of Police Eric Small, Deputy Chief of Police	Via Sanford Regional Communications, 207-324-3644 or 911
Sanford Fire Department	Steve Benotti, Fire Chief  Bob Arnold, Assistant Fire Chief	Via Sanford Regional Communications, 207-324-3644 or 911
Sanford Dam Operator	John Gallant	207-432-3850
Sanford Emergency Management	Alex Hammerle, EMA Director  Bill Tower, EMA Deputy Director	Office: 207-608-4170 [REDACTED] Via Sanford Regional Communications, 207-324-3644 or 911 [REDACTED]
Sanford Public Works	Matt Hill, Public Works Director  Peter Smith, Deputy PW Director	Office: 207-608-4136 [REDACTED] Office: 207-324-9135 [REDACTED]
Sanford City Manager	Steve Buck, City Manager	Office: 207-324-9172 [REDACTED]
Kennebunk Fire Department	Justin Cooper, Fire Chief	Via Sanford Regional Communications, 207-324-3644 or 911
Shapleigh Fire Department	Steve Guillemette, Fire Chief	Via Sanford Regional Communications, 207-324-3644 or 911
York County Sheriff's Office	Bill King, Sherriff	Via Sanford Regional Communications, 207-324-3644 or 911
York County EMA	Art Cleaves, Director	Via Sanford Regional Communications, 207-324-3644 or 911

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Maine State Dam Safety Inspector		800-452-8735 or 207-624-4400
Maine State Police		800-228-0857 or 207-657-3030
Maine Department of Transportation		207-624-3339
Maine Emergency Management Agency		Days: 800-452-8735 Other: 207-624-4400
National Weather Service		800-482-0913 or 207-688-3224
Sanford Sewerage District	Andre Brousseau	Via Sanford Regional Communications, 207-324-3644 or 911
Shapleigh Emergency Management	Darren Rogers, Director	
Kruger Energy (KEI Power Management) Estes Lake Dam Operator	Samuel Thibeault, Station Operator Jacob Heidi, Backup Operator  Lewis (Chuck) Loon	 Office: 207-203-3025 
Sanford Water District	Dave Parent	Office: 207-324-2312 
Unitil	Gas Emergency	Office: 866-933-3821

**Table A-2**  
**Outside Sources of Equipment and Material**

<b>Contractors</b>	<b>Contractors</b>
Guillemette Brothers 2 Hughes Street Sanford, Maine 04073 Contact person: Roger Guillemette 324-5300	Mark Hussey PO Box 325 Alfred, Maine 04002 Contact person: Mark Hussey 324-4746
Pat LaValley 686 East Shore Road Acton, Maine 04001 Contact person: Pat LaValley Cell - 432-7578	LaVigne Excavating 158 Whichers Mill Rd. Sanford, Maine 04073 Contact person: Pat LaVigne 324-0603
Levesque Excavating Rouchester Rd Sanford, Maine 04073 Contact person: Richard Levesque 490-2990	C.S. Lord and Son Gore Road Alfred, Maine 04002 Contact Person: Carroll Lord 324-9340
Nevison Excavating 1315 Foxes Ridge Road Acton, Maine 04001 Contact person: Shane Nevison 447-2900 or 432-2810 (cell)	R. Pepin & Sons PO Box 729 59 Shaw Road Sanford, ME 04073 324-6125

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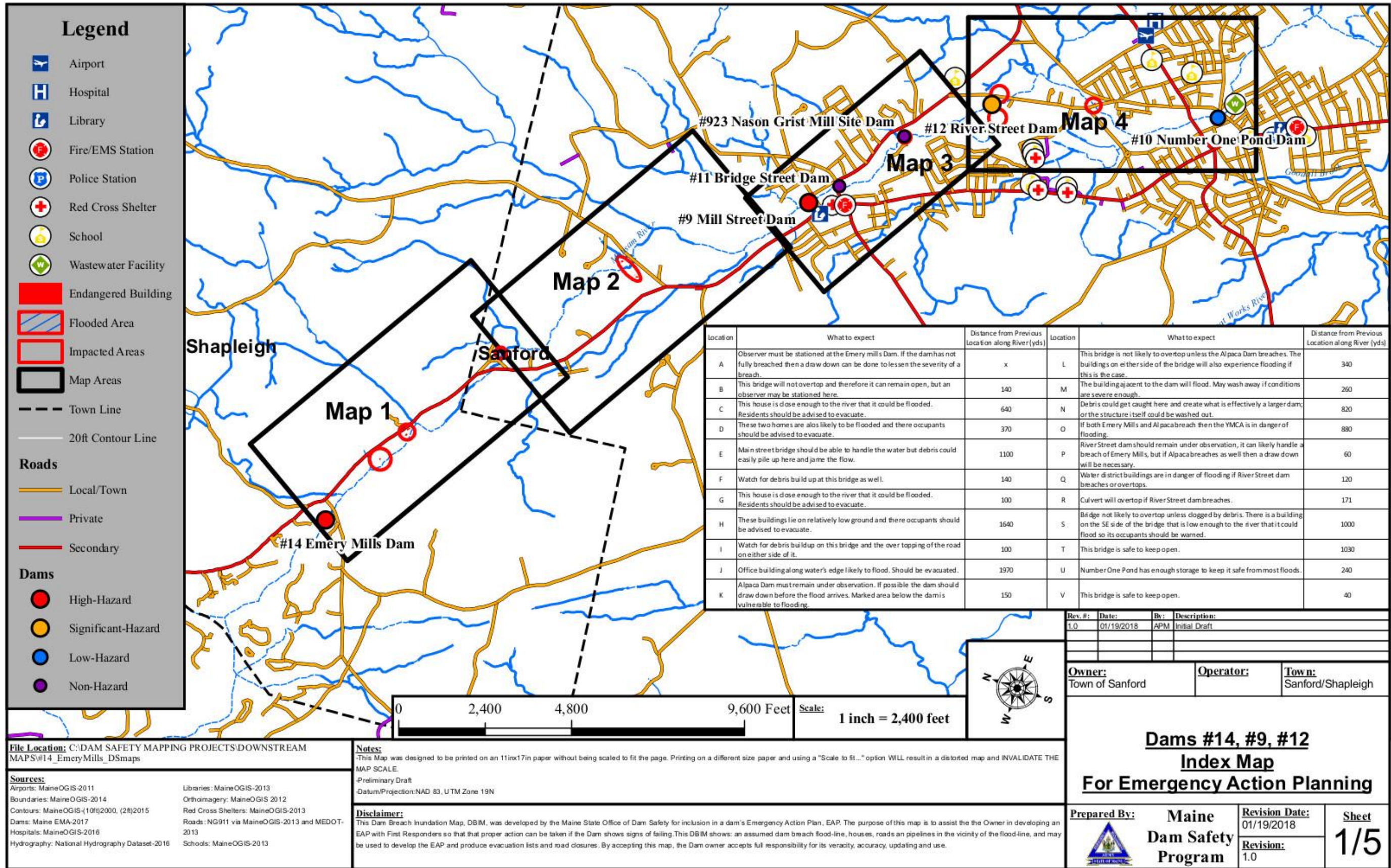
Charles Plante & Son  
50 Littlefield Road  
Springvale, Maine 04083  
Contact Person: William Plante  
324-2412

Arvid Roberts  
173 Elm Street  
Springvale, Maine 04083  
Contact person: Arvid Roberts  
324-6141

Roger Ridley  
10 Wilson Lane  
Shapleigh, Maine  
Contact person: Roger Ridley  
636-1860

Jeffrey A. Simpson Inc.  
281 Jagger Mill Road  
Sanford, Maine 04073  
Contact person: Jeff Simpson  
324-5412

**APPENDIX B**  
**IMPACT MAPS**



**File Location:** C:\DAM SAFETY MAPPING PROJECTS\DOWNSTREAM MAPS\#14\_EmeryMills\_DSmaps

**Sources:**  
 Airports: MaineOGIS-2011  
 Boundaries: MaineOGIS-2014  
 Contours: MaineOGIS-(10/1)2000, (2/8)2015  
 Dams: Maine EMA-2017  
 Hospitals: MaineOGIS-2016  
 Hydrography: National Hydrography Dataset-2016

**Libraries:** MaineOGIS-2013  
 Orthoimagery: MaineOGIS 2012  
 Red Cross Shelters: MaineOGIS-2013  
 Roads: NG911 via MaineOGIS-2013 and MEDOT-2013  
 Schools: MaineOGIS-2013

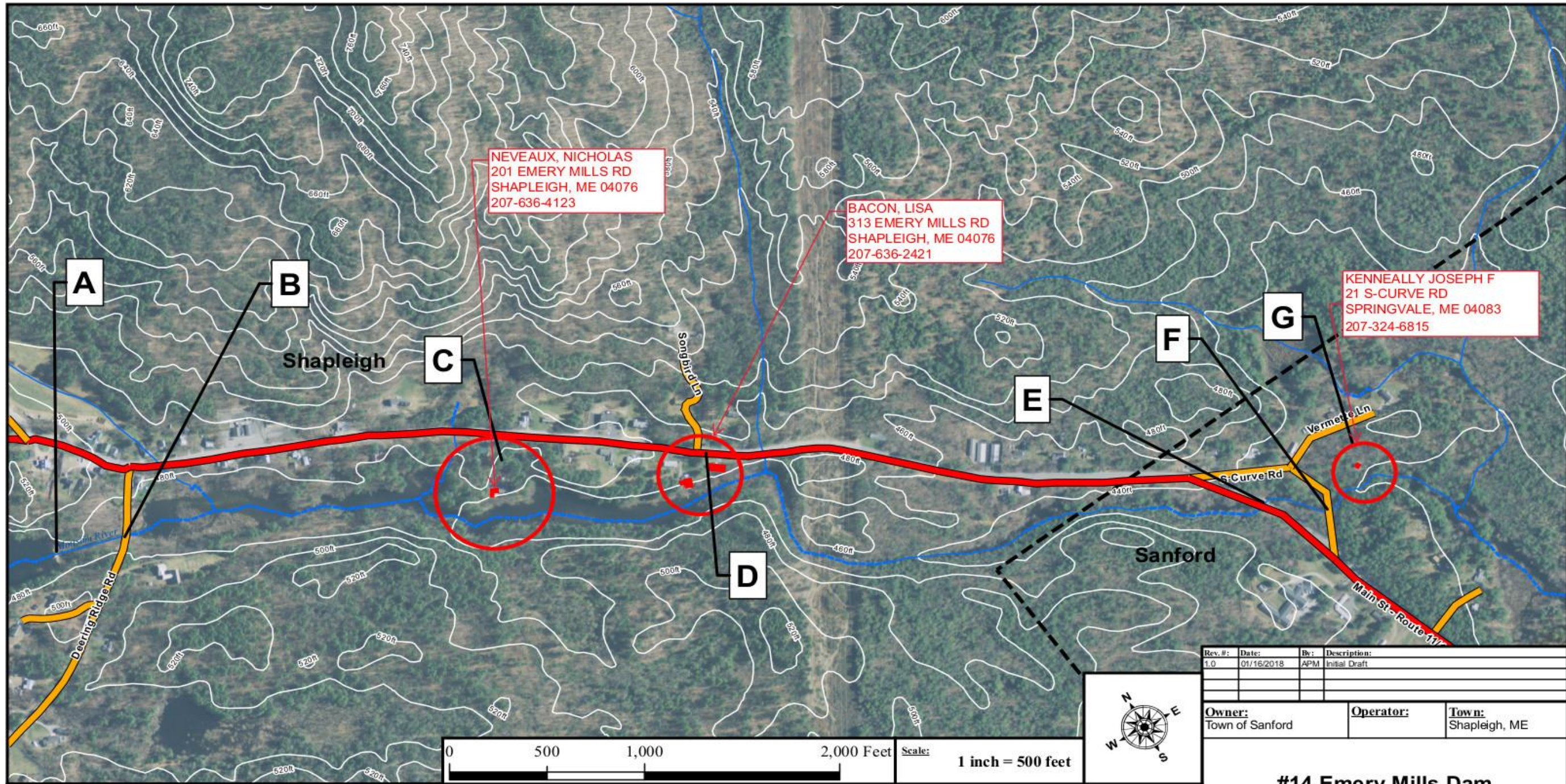
**Notes:**  
 -This Map was designed to be printed on an 11inx17in paper without being scaled to fit the page. Printing on a different size paper and using a "Scale to fit..." option WILL result in a distorted map and INVALIDATE THE MAP SCALE.  
 MAP SCALE:  
 Preliminary Draft  
 Datum/Projection: NAD 83, UTM Zone 19N

**Disclaimer:**  
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Rev. #:	Date:	By:	Description:
1.0	01/19/2018	APM	Initial Draft
<b>Owner:</b> Town of Sanford		<b>Operator:</b>	<b>Town:</b> Sanford/Shapleigh
<b>Dams #14, #9, #12 Index Map For Emergency Action Planning</b>			
<b>Prepared By:</b> Maine Dam Safety Program	<b>Revision Date:</b> 01/19/2018	<b>Sheet</b> <b>1/5</b>	
	<b>Revision:</b> 1.0		

Emery Mills Dam Emergency Action Plan

Location	What to expect	Distance from Previous Location along River (yds)	Location	What to expect	Distance from Previous Location along River (yds)
A	Observer must be stationed at the Emery mills Dam. If the dam has not fully breached then a draw down can be done to lessen the severity of a breach.	x	L	This bridge is not likely to overtop unless the Alpaca Dam breaches. The buildings on either side of the bridge will also experience flooding if this is the case.	340
B	This bridge will not overtop and therefore it can remain open, but an observer may be stationed here.	140	M	The building adjacent to the dam will flood. May wash away if conditions are severe enough.	260
C	This house is close enough to the river that it could be flooded. Residents should be advised to evacuate.	640	N	Debris could get caught here and create what is effectively a larger dam; or the structure itself could be washed out.	820
D	These two homes are also likely to be flooded and their occupants should be advised to evacuate.	370	O	If both Emery Mills and Alpaca breach then the YMCA is in danger of flooding.	880
E	Main street bridge should be able to handle the water but debris could easily pile up here and jam the flow.	1100	P	River Street dam should remain under observation, it can likely handle a breach of Emery Mills, but if Alpaca breaches as well then a draw down will be necessary.	60
F	Watch for debris build up at this bridge as well.	140	Q	Water district buildings are in danger of flooding if River Street dam breaches or overtops.	120
G	This house is close enough to the river that it could be flooded. Residents should be advised to evacuate.	100	R	Culvert will overtop if River Street dam breaches.	171
H	These buildings lie on relatively low ground and their occupants should be advised to evacuate.	1640	S	Bridge not likely to overtop unless clogged by debris. There is a building on the SE side of the bridge that is low enough to the river that it could flood so its occupants should be warned.	1000
I	Watch for debris buildup on this bridge and the over topping of the road on either side of it.	100	T	This bridge is safe to keep open.	1030
J	Office building along water's edge likely to flood. Should be evacuated.	1970	U	Number One Pond has enough storage to keep it safe from most floods.	240
K	Alpaca Dam must remain under observation. If possible the dam should draw down before the flood arrives. Marked area below the dam is vulnerable to flooding.	150	V	This bridge is safe to keep open.	40



Rev. #:	Date:	By:	Description:
1.0	01/16/2018	APM	Initial Draft

<b>Owner:</b> Town of Sanford	<b>Operator:</b>	<b>Town:</b> Shapleigh, ME
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**#14 Emery Mills Dam  
Impacted Areas Map  
For Emergency Action Planning**

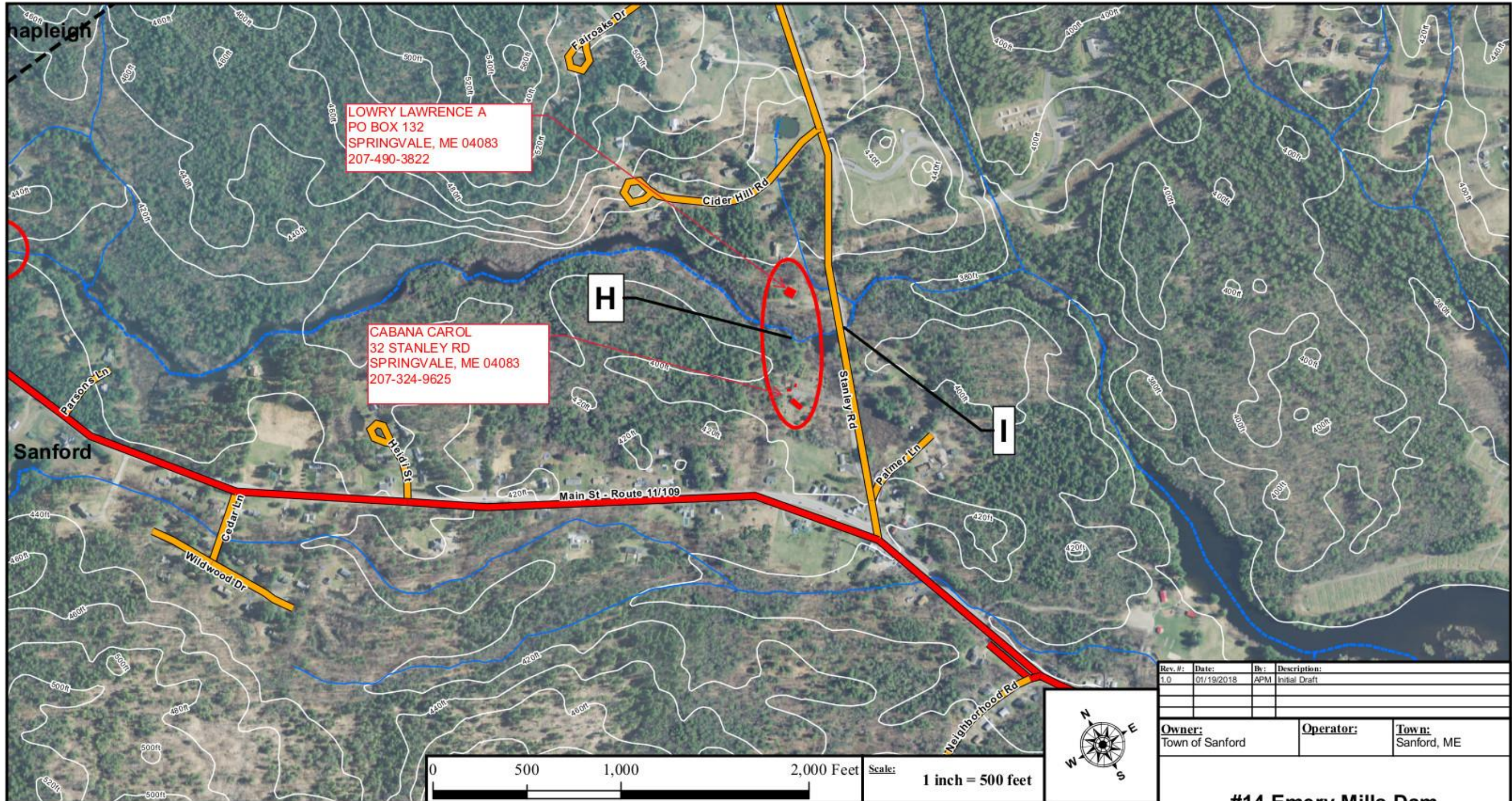
<b>Prepared By:</b>  <b>Maine Dam Safety Program</b>	<b>Revision Date:</b> 01/16/2018	<b>Sheet</b> <span style="font-size: 2em;"><b>2/5</b></span>
	<b>Revision:</b> 1.0	

**File Location:** C:\DAM SAFETY MAPPING PROJECTS\DOWNSTREAM MAPS\#14\_EmeryMills\_DSmaps

**Sources:**  
See Sheet 1

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LOWRY LAWRENCE A  
PO BOX 132  
SPRINGVALE, ME 04083  
207-490-3822

CABANA CAROL  
32 STANLEY RD  
SPRINGVALE, ME 04083  
207-324-9625

Rev. #:	Date:	By:	Description:
1.0	01/19/2018	APM	Initial Draft

<b>Owner:</b> Town of Sanford	<b>Operator:</b>	<b>Town:</b> Sanford, ME
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**File Location:** C:\DAM SAFETY MAPPING PROJECTS\DOWNSTREAM MAPS\#14\_EmeryMills\_DSmaps

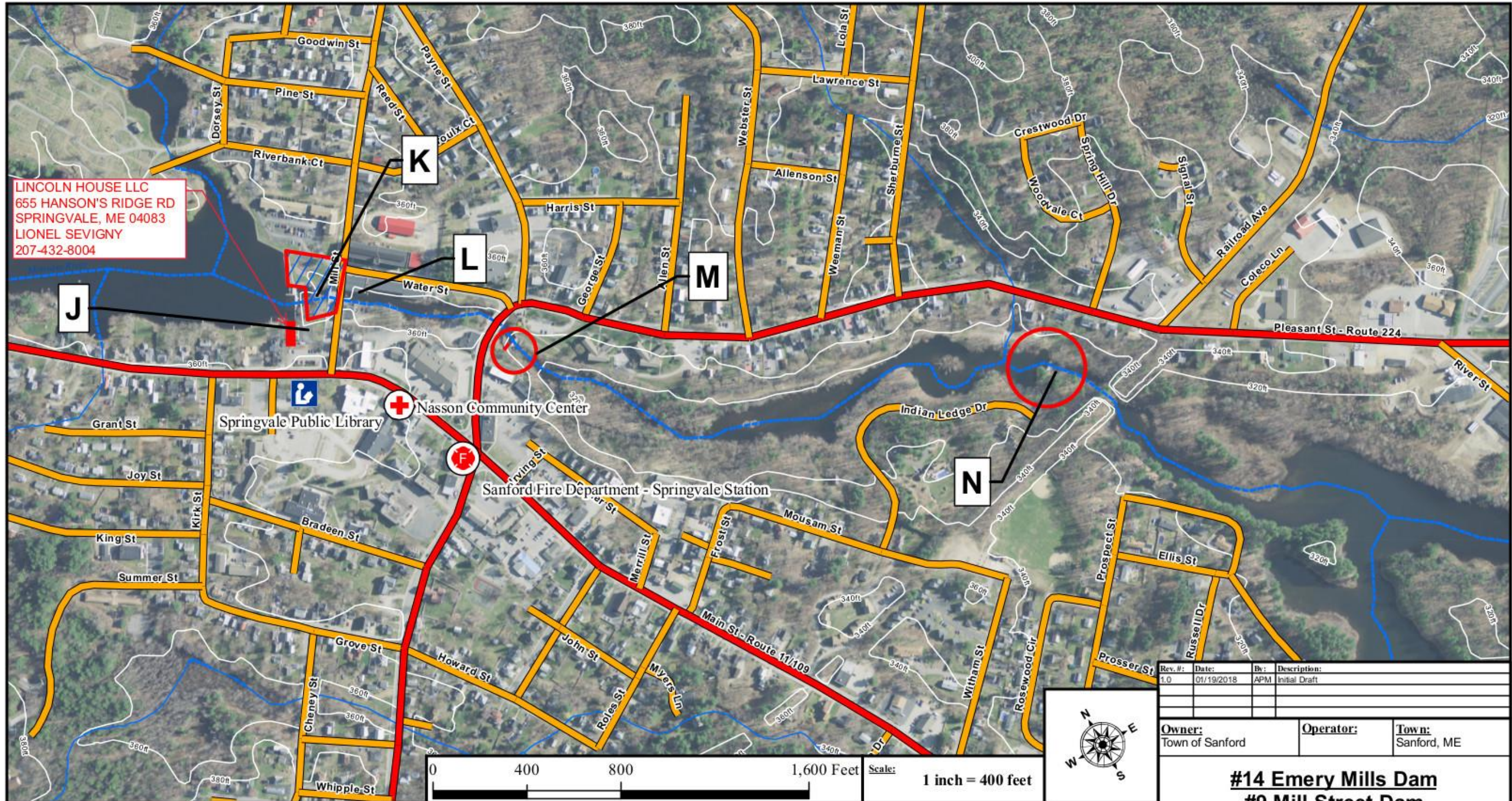
**Notes:**  
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-Preliminary Draft  
-Datum/Projection: NAD 83, UTM Zone 19N

**Sources:**  
See Sheet 1

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## #14 Emery Mills Dam Impacted Areas Map For Emergency Action Planning

 <b>Maine Dam Safety Program</b>	<b>Prepared By:</b>	<b>Revision Date:</b> 01/19/2018	<b>Sheet</b>  <b>3/5</b>
		<b>Revision:</b> 1.0	



LINCOLN HOUSE LLC  
 655 HANSON'S RIDGE RD  
 SPRINGVALE, ME 04083  
 LIONEL SEVIGNY  
 207-432-8004

Rev. #:	Date:	By:	Description:
1.0	01/19/2018	APM	Initial Draft

<b>Owner:</b> Town of Sanford	<b>Operator:</b>	<b>Town:</b> Sanford, ME
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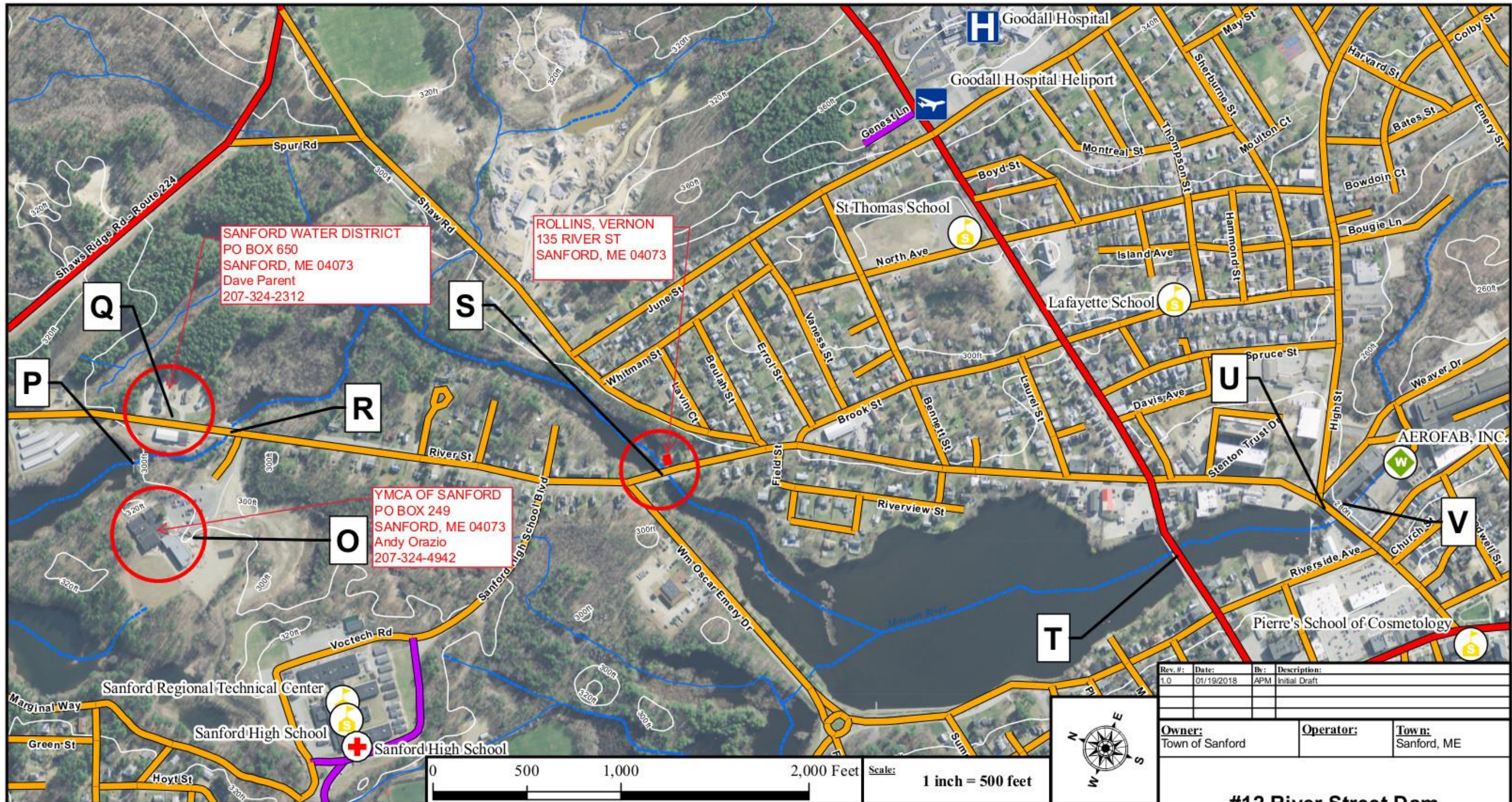
**#14 Emery Mills Dam  
 #9 Mill Street Dam  
 Impacted Areas Map  
 For Emergency Action Planning**

<b>Prepared By:</b> Maine Dam Safety Program	<b>Revision Date:</b> 01/19/2018	<b>Sheet</b> <b>4/5</b>
	<b>Revision:</b> 1.0	

**File Location:** C:\DAM SAFETY MAPPING PROJECTS\DOWNSTREAM MAPS\#14\_EmeryMills\_DSmaps

**Notes:**  
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 -Preliminary Draft  
 -Datum/Projection: NAD 83, UTM Zone 19N

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**Sources:**  
See Sheet 1

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Rev. #:	Date:	By:	Description:
1.0	01/19/2018	APM	Initial Draft

<b>Owner:</b> Town of Sanford	<b>Operator:</b>	<b>Town:</b> Sanford, ME
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Scale: 1 inch = 500 feet

### #12 River Street Dam Impact Map For Emergency Action Planning

<b>Prepared By:</b> Maine Dam Safety Program	<b>Revision Date:</b> 01/19/2018	<b>Sheet</b> <b>5/5</b>
	<b>Revision:</b> 1.0	

**APPENDIX C**

**INSPECTION FORMS**

**NAME OF DAM:** EMERY MILLS DAM  
**WEATHER / TEMP:** \_\_\_\_\_

**INSPECTOR:** \_\_\_\_\_  
**INSPECTION DATE:** \_\_\_\_\_ \_Page 1 of 3

AREA INSPECTED	EMBANKMENT / DAM			CHECK (✓) ACTION NEEDED		
	ITEM NO.	CONDITION	OBSERVATION	MONITOR	INVESTIGATE	REPAIR
UPSTREAM SLOPE	1	SLOPE PROTECTION				
	2	SLIDE, SLOUGH, SCARP				
	3	SINKHOLE, ANIMAL BURROW				
	4	EMB.-ABUT. CONTACT				
	5	EROSION				
	6	VEGETATION				
	7	STONE DISLOCATION				
	8	BOILS IN WATER				
CRACKS	9	SURFACE CRACKING				

Emery Mills Dam Emergency Action Plan

	10	SINKHOLE, ANIMAL BURROW			
	11	LOW AREA(S)			
	12	HORIZONTAL ALIGNMENT			
	13	RUTS AND / OR PUDDLES			
	14	VEGETATION			
	15				
	16				
<b>ADDITIONAL COMMENTS (REFER TO ITEM NO. IF APPLICABLE)</b>					

**NAME OF DAM: EMERY MILLS DAM**

**INSPECTOR: \_\_\_\_\_**

**INSPECTION DATE: \_\_\_\_\_ Page 2 of 3**

AREA INSPECTED	EMBANKMENT / DAM			CHECK (✓) ACTION NEEDED		
	ITEM NO.	CONDITION	OBSERVATION	MONITOR	INVESTIGATE	REPAIR
MEASUREMENTS DOWNSTREAM SLOPE	17	WET AREA(S) (NO FLOW)				
	18	SEEPAGE				
	19	SLIDE, SLOUGH, SCARP				
	20	EMB. - ABUT. CONTACT				
	21	SINKHOLE, ANIMAL BURROW				
	22	EROSION ON SLOPE				
	23	EROSION AT TOE				
	24	UNUSUAL MOVEMENT				

Emery Mills Dam Emergency Action Plan

25	VEGETATION			
26	STONE DISLOCATION			
27	WATER LEVEL MEASUREMENTS NORMAL			
28	WATER LEVEL MEASUREMENTS ABNORMAL			
29				
30				
31				
<b>ADDITIONAL COMMENTS (REFER TO ITEM NO. IF APPLICABLE)</b>				

Emery Mills Dam Emergency Action Plan

NAME OF DAM: EMERY MILLS DAM

INSPECTOR: \_\_\_\_\_

INSPECTION DATE: \_\_\_\_\_

AREA INSPECTED	SPILLWAY			CHECK (√) ACTION NEEDED		
	ITEM NO.	CONDITION	OBSERVATION	MONITOR	INVESTIGATE	REPAIR
CONCRETE STRUCTURE	32	SIDEWALKS				
	33	CHANNEL FLOOR				
	34	UNUSUAL MOVEMENT				
	35	APPROACH AREA				
	36	WEIR				
	37	DISCHARGE AREA				
	38	SLIDE, SLOUGH, SCARP				
	39	GATES OPERATIONAL				
NATURAL CHANNEL	40	EROSION				
	41	VEGETATION CONDITION				
	42	DEBRIS				
	43					
	44					
	45					
	46					
	47					
ADDITIONAL COMMENTS (REFER TO ITEM NO. IF APPLICABLE)						

**APPENDIX D**

**EMERGENCY ACTION PLAN ACKNOWLEDGEMENT /  
APPROVAL**

(Place signed copies of the signed Acknowledgement forms in this Appendix)

**ACKNOWLEDGMENT / APPROVAL FORM**

I have received and reviewed, the latest updates of the Emergency Action Plan for the Emery Mills Dam in Shapleigh Maine, (ME Dam No.014), dated\_\_\_\_\_, and agree to ensure that applicable staff at this agency will be made aware of this Plan.

Signature:\_\_\_\_\_Date:\_\_\_\_\_

Title:\_\_\_\_\_

Representing: \_\_\_\_\_  
(Name of Agency)

Please return this Acknowledgement Form to the contact listed below. This signed acknowledgement may be returned by e-mail, mail or fax.

Mr. Alex Hammerle  
City of Sanford  
Director of Emergency Management  
919 Maine Street  
Sanford, ME 04073  
ajhammerle@sanfordmaine.org  
Fax 207-324-9142

**APPENDIX E**

**EMERGENCY ACTION PLAN UPDATE TRACKING**

## RECORD OF CHANGES AND ADDITIONS

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The following lists the pages which have been updated or added.

Page Number(s)	Date of Revision	Reason for Change
<b>All</b>	<b>02/14/2014</b>	<b>Changed all references from ‘Town’ to ‘City’ of Sanford</b>
<b>2</b>	<b>2/14/2014</b>	<b>Changed all 324-1111 to 324-3644, removed Public Works pager, Changed Council Chair to Mayor and changed cell number</b>
		<b>Changed reference to Communications Dispatch Center by removing Dispatch</b>
<b>16-17</b>	<b>02/14/2014</b>	<b>Re-assigned responsibility for Planning, Training, Testing and Mapping to Emergency Management</b>
	<b>02/14/2014</b>	<b>Minor changes punctuation and spaces</b>
<b>All</b>	<b>4/30/2018</b>	<b>Completely revised and rewritten</b>
<b>Table A-1</b>	<b>6/1/2020</b>	<b>Changed contact information</b>
<b>4, Appendix A</b>	<b>6/1/2022</b>	<b>Updated maintenance info p.4, contact information Appendix A</b>
<b>Table A-1, Notification Flow Chart</b>	<b>7/28/2022</b>	<b>Updated/Added Contacts, Enlarged and added flowchart contacts</b>
<b>Appendix B</b>	<b>7/28/2022</b>	<b>Added enlarged/corrected impacts list</b>