

Emergency Action Plan  
For  
Seneca Lake Club, Inc. Dam

NJ File Number: 22-183

Owner/Operator: Seneca Lake Club  
Address: PO Box 505  
Sparta, NJ 07871-2840

Prepared by: Seneca Lake Club  
Address: PO Box 505  
Sparta NJ 07871-2840

Date: January 01, 2023

**Revision Dates:**

1<sup>st</sup> Revision: 7/26/2012  
2<sup>nd</sup> Revision: 12/13/2014  
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4<sup>th</sup> Revision: 1/2/2019  
5<sup>th</sup> Revision: 01/23/2021  
6<sup>th</sup> Revision: 01/29/2023

DAM owner/Operator is responsible for the Annual Review and Updating of the EAP

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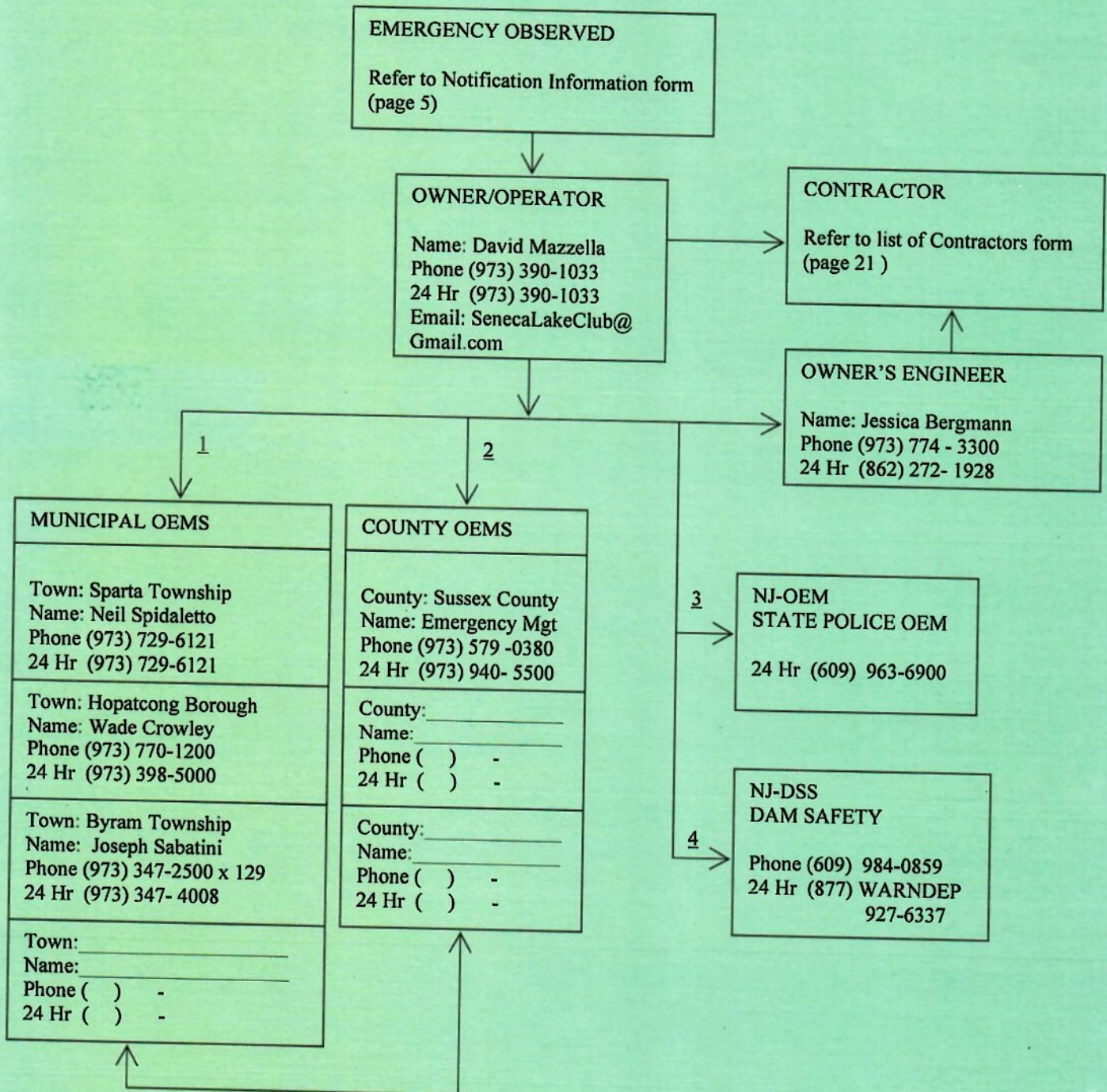
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### EMERGENCY NOTIFICATION FLOWCHART



**I. Emergency Notification**

**Emergency Notification Information**

Dam emergency information for the four emergency conditions

Name of person reporting the emergency:

Affiliation:

Phone Number:

Name & file number of dam:

Seneca Lake Club, Inc. – 22-183

Location of dam

County:

Sussex County

Municipality:

Sparta Township

Stream:

Tributary of Lubbers Run

Road(s):

Seneca Lake Road, Tomahawk Trail

Time and date of dam emergency: \_\_\_\_\_

Type of emergency: \_\_\_\_\_

Phone appropriate parties: *[refer to the Emergency Notifications Flow Chart, page 4]*

"This is     (name)    , of Seneca Lake Club, Inc.

There is a Dam (Advisory, Warning, Emergency, or Breach) condition at Seneca Lake.

Observation was at (time).

The situation is (explain the condition).

What is your anticipated time of arrival at the dam and what are my instructions?"

*[refer to Site Description, page 7, for directions to the dam]*

**Communication priority list:**

1. Municipal OEM.
2. County OEM.
3. NJ-OEM.
4. NJ-DSS.
5. Owner's Engineer.

**(This page must be printed on colored paper for ease of use)**

## **II. Statement of Purpose**

### **Purpose**

To establish procedures necessary to protect life and property in areas affected by the failure of a dam or the uncontrolled release of stored water.

### **Scope**

This Emergency Action Plan:

1. Establishes a monitoring system which can activate the Plan.
2. Identifies the officials, organizations, agencies, and their respective responsibilities for implementing the plan.
3. Identifies those areas, residences, facilities and roads which might be affected by a dam failure.

### **Authority**

1. Public Law 1942, Chapter 251, as amended.
2. N.J.S.A. 58:4-1 et seq., Safe Dam Act.
3. N.J.A.C. 7:20-1 et seq., Dam Safety Standards.

### **III. Project Description**

#### **Project Site Description**

Dam Name: Seneca Lake Club, Inc.

Hazard Classification: II

NJ File No: 22-183

NJ Federal Id: NJ00768

City/Town: Sparta

County: Sussex

Location & Access:

#### **Arriving at the Dam from the East**

**From the South:** Route 15 North to Exit Sparta, Lake Mohawk, Business District. Turn right on Blue Heron Road. Turn left onto NJ-181 South. Turn Right onto Sawmill Road. Turn Left onto Green Road. Turn Right onto Tomahawk Trail. Arrive Seneca Lake Dam.

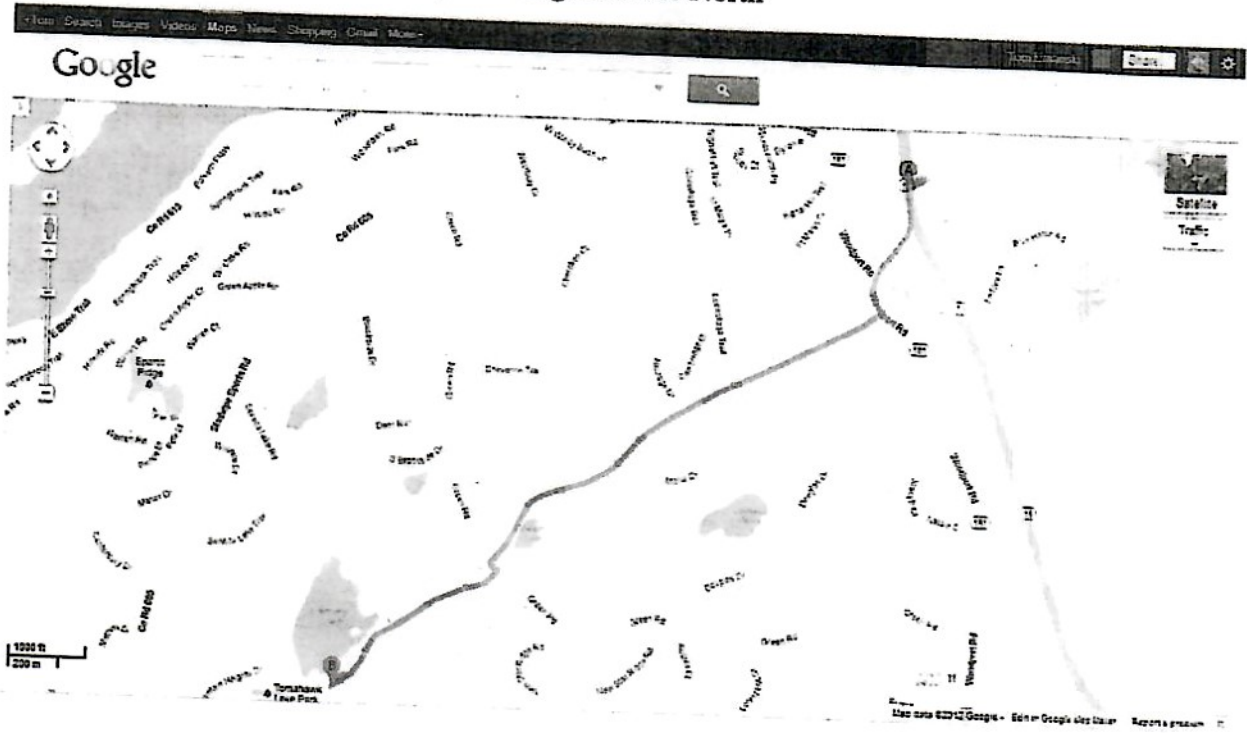
**From the North:** Route 15 South to Exit NJ-181 South, Woodport Road. Slight Lt onto NJ1-181 South/Woodport Road. Rt. onto Sawmill Road. Lt. onto Green Road. Rt. onto Tomahawk Trail. Arrive Seneca Lake Dam.

#### **Arriving at the Dam from the West**

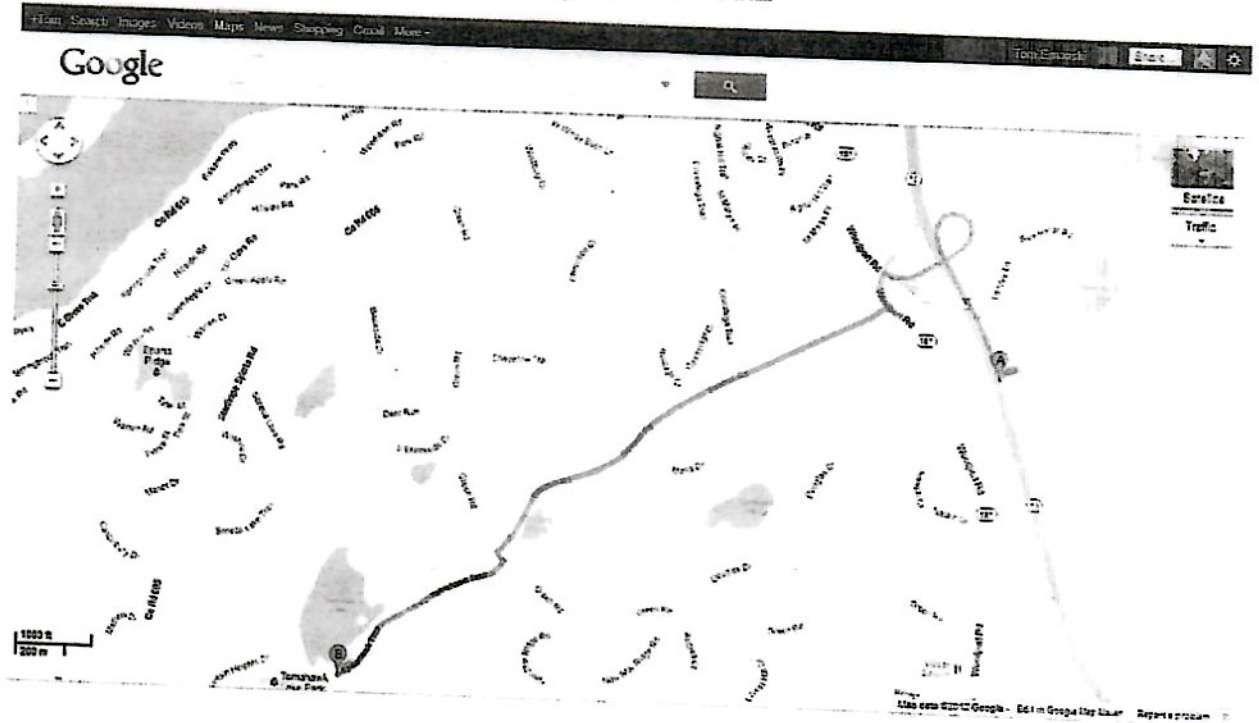
**From the South:** Northeast on County Road 605 to Tomahawk Trail. Right on Tomahawk Trail. Arrive Seneca Lake Dam.

**From the North:** Southeast on County Road 605 to Seneca Lake Road. Left on Seneca Lake Road. Arrive Seneca Lake Dam.

### Arriving at the dam from the East, traveling from the North

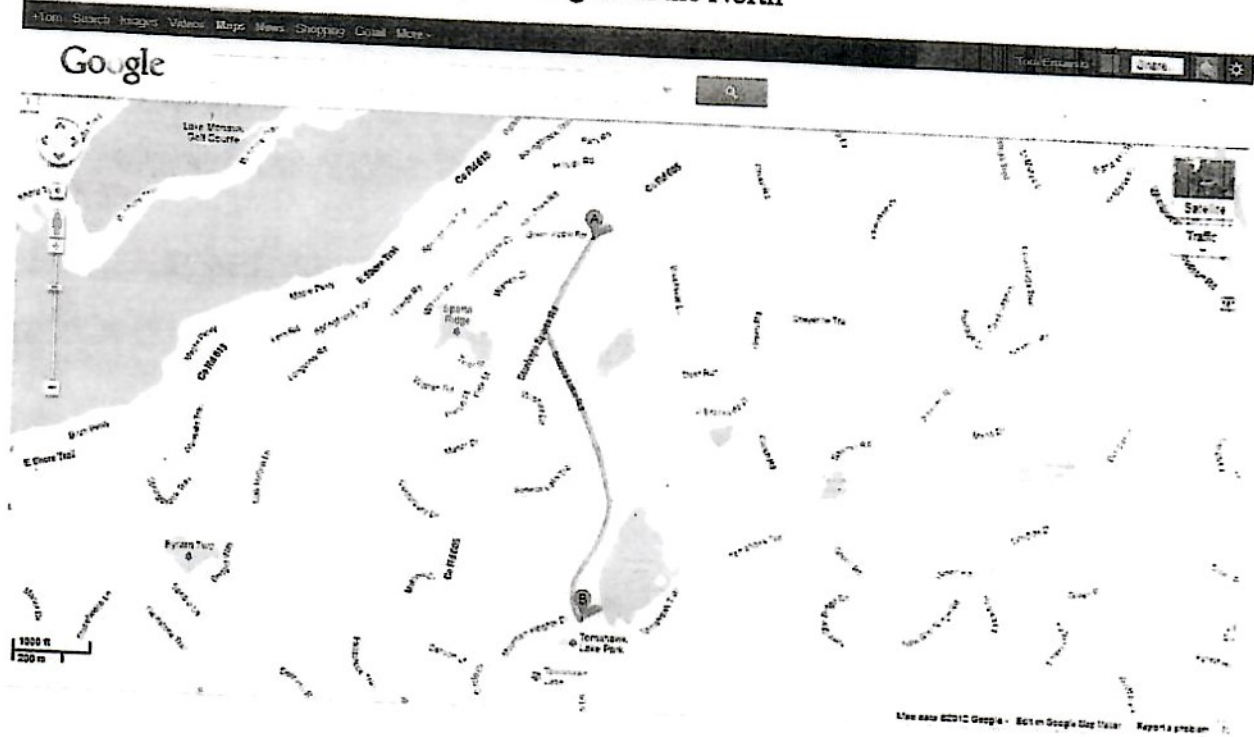


### Arriving at the dam from the East, traveling from the South

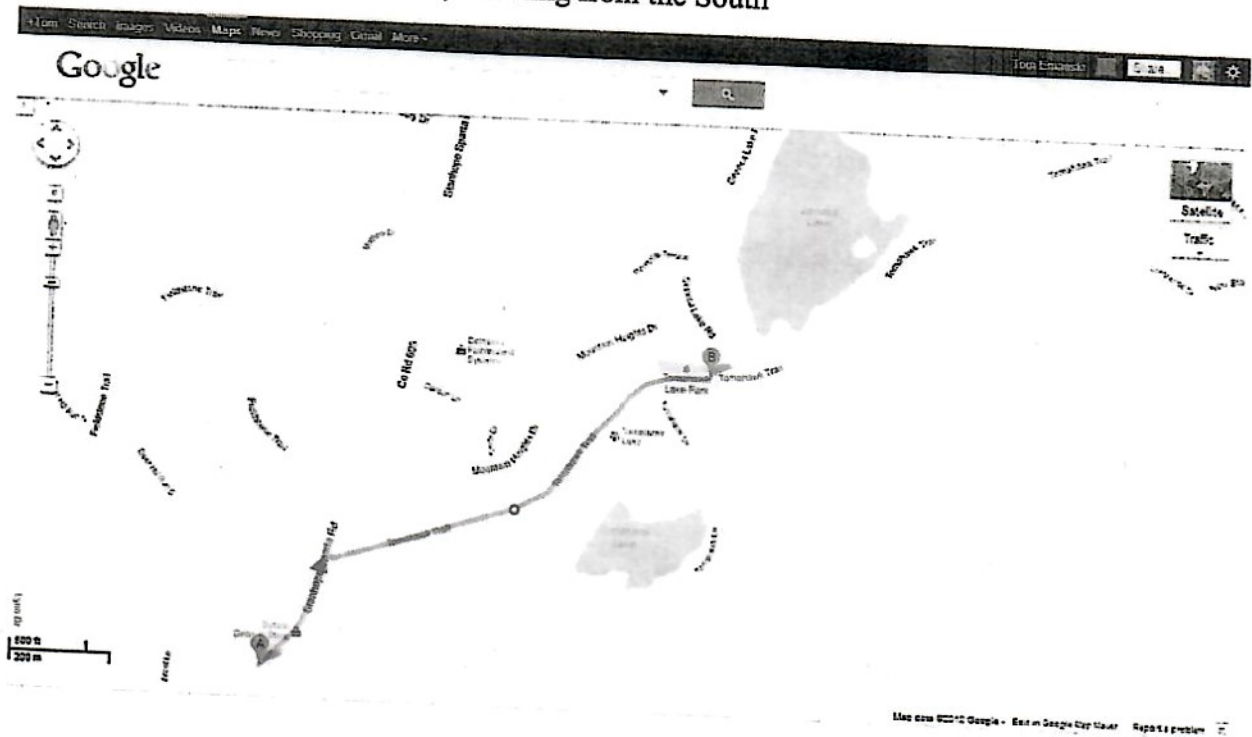




## Arriving at the dam from the West, traveling from the North



## Arriving at the dam from the East, traveling from the South



Lot No: A-9.02 B-11, 15, 18, 19, 23, 24, 26

Latitude: N 40° 55' 58"

River/Stream: Tributary of Lubbers Run

Quad Sheet: Newton East, Stanhope

Height (ft): 14

Length (ft): 360 (Dam)

Dam Type: Earth Fill

Spillway:

Dike: Semi-Circular Overflow

Outlet other than spillway: None

Purpose/Operation of Dam (attach additional sheets if necessary): Recreation

Instrumentation (if any): None

Significant upstream or downstream dams (if any): Upstream – None.

Downstream – Tomahawk Lake

Overview of Inundation Area: Intersection of Seneca Lake Road and Tomahawk Trail,  
Tomahawk Lake Water Park

Method of emergency drawdown: Low Level Outlet, 18" Square Sluice Gate

**\*PROVIDE/ATTACH PROJECT SITE DRAWINGS.**

Block No: A-16 B-16.08

Longitude: W 74° 38' 52"

Nearest City/Town: Sparta / Byram

Normal Surface (ac): 24

Normal Capacity (ac-ft): 84 @ 857.4 ft

Maximum Capacity (ac-ft): 222 @ 860.1 ft.

Spillway Capacity (cfs): 1230 @ 860.1 ft.

Drainage Area (sqr mls): 1.8

## IV. Emergency Detection, Evaluation, and Classification

### Emergency Condition Identification

Since the goal of dam emergency planning is to protect lives and property, the timely identification of emergency conditions by trained personnel becomes paramount. Procedures to identify emergency conditions have been established by NJ-OEM. Four (4) dam emergency conditions of varying severity have been identified and are described below.

#### Dam Advisory Condition

A Dam Advisory Condition is a situation where an unusual problem or situation has occurred, but a failure of the dam is not imminent. Examples of a Dam Advisory Condition are:

- Instrumentation readings reach pre-determined numerical limits:
- Any undocumented or unusual spring.
- Any sign of piping.
- Any sign of slumping.
- Any sinkhole.
- Any unusual crack.
- Any unusual wet spot or boggy area.
- Seismic activity (refer to attachment F for EAP activation criteria)
- Any obstruction in the spillway.
- Evidence of damage due to vandalism at any structure(s).
- Bomb threat.
- A civil disorder near the reservoir structure(s).
- Any aircraft accident near the reservoir structure(s).

Required responses are: *[refer to Emergency Notification Flow Chart, page 4]*

- Notify municipal OEM.
- Notify county OEM.
- Notify NJ-OEM.
- Notify NJ-DSS.
- Investigation.
- Assessment and response.

#### Dam Warning Condition

A Dam Warning Condition is any developing or occurring event or circumstance which is or may adversely affect the integrity of the dam but is considered controllable. The Dam Warning Condition has the potential of evolving into a Dam Emergency or a Dam Breach condition. Examples of a Dam Warning Condition are:

- Water level of the lake is at an unsafe level and is rising threatening to overtop the dam.
- Any developing erosion, settlement or upheaval occurring on the downstream slope or at the toe of the dam and is considered to be controllable.
- Any undocumented leakage through any dam structure considered to be controllable.

Required responses are: *[refer to Emergency Notification Flow Chart, page 4]*

- Notify municipal OEM.
- Notify county OEM.
- Notify NJ-OEM.

- Notify NJ-DSS.
- Investigation.
- Assessment and response.

### **Dam Emergency Condition**

A Dam Emergency Condition is defined as one or more of the following situations:

- Water has overtopped or will overtop any dam or dike.
- Any uncontrollable erosion, settlement or upheaval occurring on the downstream slope or at the toe of the dam.
- Any uncontrollable leakage through any dam structure.

Required responses are: *[refer to Emergency Notification Flow Chart, page 4]*

- Notify municipal OEM.
- Notify county OEM.
- Notify NJ-OEM.
- Notify NJ-DSS.
- Commence emergency actions.
- Issue public warning and begin evacuation.

### **Dam Breach Condition**

A Dam Breach Condition is defined as:

- A dislocation or failure of any structure which allows for an expanding, uncontrollable discharge of water through the spillway, dam or dikes indicating a breach is occurring.

Required responses are: *[refer to Emergency Notification Flow Chart, page 4]*

- Notify municipal OEM.
- Notify county OEM.
- Notify NJ-OEM.
- Notify NJ-DSS.
- Commence emergency actions.
- Issue public warning and begin evacuation.

## V. General Responsibilities Under the EAP

### Dam Owner/Operator Responsibilities:

During an emergency condition:

1. Identification of the emergency condition.
2. Notification of the Office of Emergency Management (OEMs) and New Jersey Department of Environmental Protection, Dam Safety Section (NJ-DSS). *[refer to the Emergency Notification Flow Chart on page 4]*

**Person responsible for the notification: DAVID MAZZELLA**

3. Implementation and direction of emergency repairs.
4. Update the emergency status to the OEMs and NJ-DSS.  
**Person responsible for the updates: DAVID MAZZELLA**
5. Provisions for security measures at the dam.
6. Provision of technical assistance to OEM officials, when necessary.
7. Reporting termination of emergency situation on-site at the dam.

In non-emergency conditions, owner/operator must also provide for:

8. Routine maintenance and operations of the dam.
9. Routine surveillance of the dam.
10. Routine inspection of the dam.
11. Annual review, updating, and distribution of the EAP.

### Owner/Operators EAP Coordinator Responsibility

Once the dam owner/operator has designated an EAP Coordinator, that person shall be responsible for EAP related activities including:

1. Inclusion and distribution of document revisions.
2. Establish training seminars.
3. Coordinate EAP exercises.
4. Contact person for any EAP related inquiries.

**EAP Coordinator Name: DON COLLIS**

**Phone Number: 973 - 459 - 8532**

### Municipal OEM Responsibilities:

1. Warn the public of emergency conditions at the dam.
2. Implement and direct required evacuations of threatened areas.
3. Establish reception centers for evacuated people.
4. Secure and control access to evacuated areas.
5. Conduct rescue and recovery operations as required.
6. Determination and declaration of termination of an emergency/disaster response activities off-site.

### County OEM Responsibilities:

1. Pass warning of emergency conditions at the dam to all affected municipalities.
2. Provide assistance to municipalities to help fulfill the emergency responsibilities.

### **NJ-OEM Responsibilities:**

1. Assumption of control and coordination (when appropriate) of all emergency actions in accordance with Public Law.
2. Provision of assistance to the affected municipalities and counties (when requested and beyond their capabilities).
3. Coordination of specialized assistance.
4. Notification of appropriate State agencies.
5. Notification of appropriate counties of any declared emergency condition.
6. Periodic testing of the emergency notification procedures.

### **NJ-DSS Responsibilities:**

1. Provide technical assistance to the dam owner/operator.
2. Assist in the evaluation and resolution of potential emergency conditions.
3. Has the authority to direct the owner/operator to take necessary safety measures.

### **Termination**

The owner/operator is responsible for evaluating a declared emergency condition. The NJ-DSS is responsible for making the decision, when appropriate, that an emergency condition no longer exists on-site at the Dam. The Office of Emergency Management representatives (OEMs) are responsible for declaring termination of an emergency condition off-site. As such, it will be the responsibility of the owner/operator to notify the OEMs of an emergency condition termination promptly.

As part of the termination phase, the County/Municipal OEM will be responsible to conduct a critique of the overall emergency response and to prepare a report documenting emergency procedures and actions. The critique process will be a discussion of the events that occurred prior to, during, and after a dam emergency. Participants review and evaluate their particular actions. The purpose of the critique is to determine what, if any, practicable improvements could be made for potential future emergencies, and conversely to identify deficiencies in procedures, manpower, materials and equipment. A report will be prepared and submitted to the NJ-OEM and NJ-DSS.

### **Recovery**

The basic goal of the recovery phase is to demobilize and return to the pre-emergency situation. The owner/operator is responsible for implementing all actions necessary to achieve this goal on-site at the dam. The Emergency Management Service (EMS) has the responsibility to effectuate recovery off-site in the affected communities.

The Owner/Operator is responsible for directing all on-site recovery activities. The basic recovery actions common to the four dam emergency conditions are:

- Secure access to emergency site,
- Restore basic facilities and services, and
- Assess damage.

An additional activity that could be part of a high level dam emergency with associated physical actions would be a disaster declaration. Official disaster declarations would be made by members of the EMS, not by the owner of the dam.

A damage assessment report will be prepared by the owner to quantify the economic damages and to evaluate the impacts to the dam structure or the lake. Damage assessment will be done in two stages. The first stage will estimate the overall impacts in a broad sense and will be prepared as soon as possible following the dam emergency. The second stage will be a detailed evaluation and formal report of all impacts. The damage assessment report will be prepared and submitted to the NJ-OEM and NJ-DSS.

**VI. Preparedness  
Emergency Notification Directory:**

**1 Dam Owner**

Seneca Lake Club

Contact Person:

David Mazzella

Address:

PO Box 505  
Sparta NJ 07871-2840  
(973) 390-1033  
(973) 390-1033  
Senecalakeclub@gmail.com

Phone No:

24 Hr. No:

Email Address:

**2. DAM Operator**

Seneca Lake Club

Contact Person:

David Mazzella

Address:

PO Box 505  
Sparta NJ 07871-2840

Phone No:

(973) 390-1033

24 Hr. No:

(973) 390-1033

Email Address:

Senecalakeclub@gmail.com

**3. EAP Development Crew**

Coordinator:

Don Collis

Phone No:

973-459-8532

**Crew:**

David Mazzella

973-390-1033

Ray Brunetti

973-828-5476

**4. Maintenance & Operations Crew**

Supervisor:

David Mazzella

Phone No:

973 390 1033

**Crew:**

Ray Brunetti

973 828-5476



## 5. Inspectors

<b>Name</b>	<b>Phone Number</b>
David Mazzella	973-729-7839
Ray Brunetti	973-828-5476
Don Collis	973 459-8532

## 6. Owner's Engineers

Name:	GZA GeoEnvironmental
Contact Person:	Jessica Bergmann
Address:	55 Lane Road Suite 407 Fairfield NJ 07004
Phone:	973-774-3300
24 Hr. No:	862-272-1928

## 7. Municipalities

<b>Municipality</b>	<b>Phone No</b>	<b>Police No</b>
Sparta Township	973-729-4493	973-729-6121
Byram Township	973-347-2500	973-347-4008
Hopatcong Borough	973-770-1200	973-398-5000

## 8 Counties

<b>County</b>	<b>Phone No</b>	<b>24 Hour #</b>
Sussex	973-579-0380	973-940-5500

## 9. State Agencies

<b>Agency</b>	<b>Phone No</b>	<b>24 Hr. No</b>
NJ-OEM	609-963-6900	609-963-6900
NJ-DSS	609-984-0859	877-WARNDEP 877-927-6337

## Emergency Operation Center (EOC)

*\*EOC should be located upstream of the dam.\**

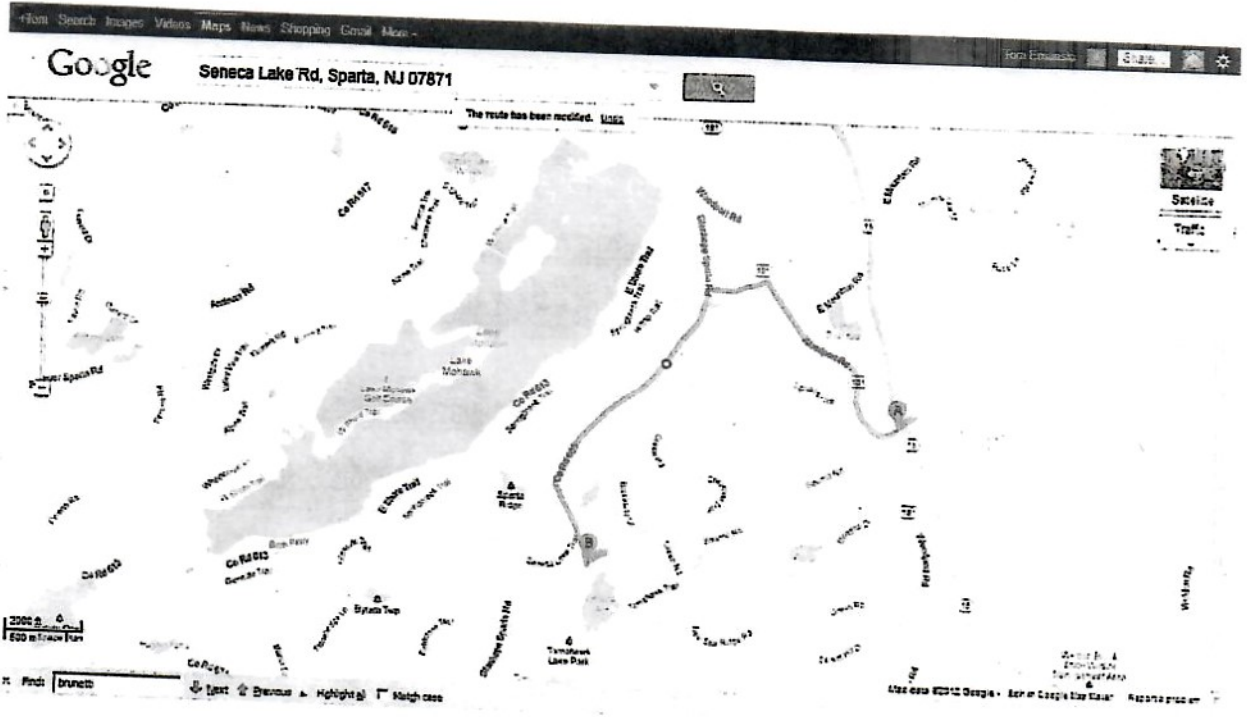
Address: 79 Seneca Lake Road  
Sparta, NJ 07871

Direction to the Emergency Operations Center from the nearest State or County highway:

**From the south:** Route 15 North to Exit Sparta, Lake Mohawk, Business District. Right on Blue Heron Road. Continue straight on NJ Route 181 North/Woodport Road. Turn Left on Pine Cone Lane. Turn Left on County Road 605. Turn Left on Seneca Lake Road. Arrive 79 Seneca Lake Road.

**From the north:** Route 15 South to Exit Sparta NJ Route 181 North/Woodport Road. Right on NJ Route 181 North/Woodport Road. Turn Left on Pine Cone Lane. Turn Left on County Road 605. Turn Left on Seneca Lake Road. Arrive 79 Seneca Lake Road.

# EOC Location Map



# Surveillance Checklist

Inspector	Date						Time	Remarks
	Response	Upstream Slope	Crest	Downstream Slope	Toe Area	Spillway Bridge & Piers		
Normal	0							
Not Inspected								
Dam Breach	1							
Uncontrollable Settlement, Heave or Erosion	2							
Controllable Leakage	3							
New Spring or Piping	3							
Slump or Heave	3							
Sinkhole	3							
Spillway Obstruction	4							
Unusual Cracking	4							
Unusual Noise or Vibration	4							
Unsubstantiated Bomb Threat	4							
Civil Disorder	4							
Aircraft Accident	4							
Other								

\* Response: 0 - No Action, Continued Inspection    1 - Dam Breach Condition    2 - Dam Emergency Condition    3 - Dam Warning Condition    4 - Dam Advisory Condition

### **List of Contractors**

After a situation is identified as an emergency and evaluated, the Chief Executive/Operator is responsible, with assistance from the Owner's Engineer and an approval from the NJ-DSS, to direct repairs to resolve the condition. The severity of the condition will dictate the resources and response time necessary.

It will be the responsibility of the owner to maintain the list of contractors that may be contacted during an emergency condition for equipments, materials, and repairs current.

For each contractor on the list, the following must be provided:

- Contractor name.
- Contact person.
- Address.
- Phone number.
- Scope of its contracted services.

1. Contractor: **Ferraro Construction Corporation**  
Contact person: **Len Ferraro** Phone No: **(973) 827-0947**  
Address: **5 Park Drive, Franklin, NJ 07416**  
Services contracted for: **Dam rehabilitation; Site Construction including concrete work, excavation, placement of fill and water lowering pumps.**
  
2. Contractor: **Ron-Jon Construction Corp.**  
Contact person: **Scott Sanclimenti** Phone No: **(973) 838-1925**  
Address: **33 Laurel Street, Butler, New Jersey 07405**  
Services contracted for: **Site Construction including concrete work, excavation, placement of fill and water lowering pumps.**
  
3. Contractor: **Adamsville Maintenance**  
Contact person: **Ernie Paley** Phone No: **(908) 874-3980**  
Address: **548 East Main Street, Bound Brook, New Jersey 08805**  
Services contracted for: **Site Construction including concrete work, excavation, placement of fill and water lowering pumps.**

**Available On-Site Materials**

<u>Material</u>	<u>Location</u>	<u>Quantity</u>
None Available On-Site		

**Available On-Site Equipment**

<u>Equipment</u>	<u>Location</u>	<u>Quantity</u>
None Available On-Site		

### Available Off-Site Materials

<u>Material</u>	<u>Company &amp; Location</u>	<u>Phone No.</u>	<u>Approximate Arrival Time to Dam (Min)</u>
Stone/Dirt	Nestor's Greenhouse	973-398-3841	10 min
Dirt/Stand/Gravel	F W Bennett & Son Inc	973-383-0854	20 min

### Available Off-Site Equipment

<u>Equipment</u>	<u>Company &amp; Location</u>	<u>Phone No.</u>	<u>Approximate Arrival Time to Dam (Min)</u>
General Purpose Hardware/Tools	The Hardware Store	973-726-7888	5 min
Large Equipment/ Tractors	Tri-State Rentals	973-383-8441	25 min

## VII. Inundation Maps

### Description of Inundated Area

Intersection of Seneca Lake Road and Tomahawk Trail

Wooded area to the south of Tomahawk Trail to include by not limited to Tomahawk Lake Water Park

### Index of Maps

List attached maps by name and number:

(To Be Submitted)

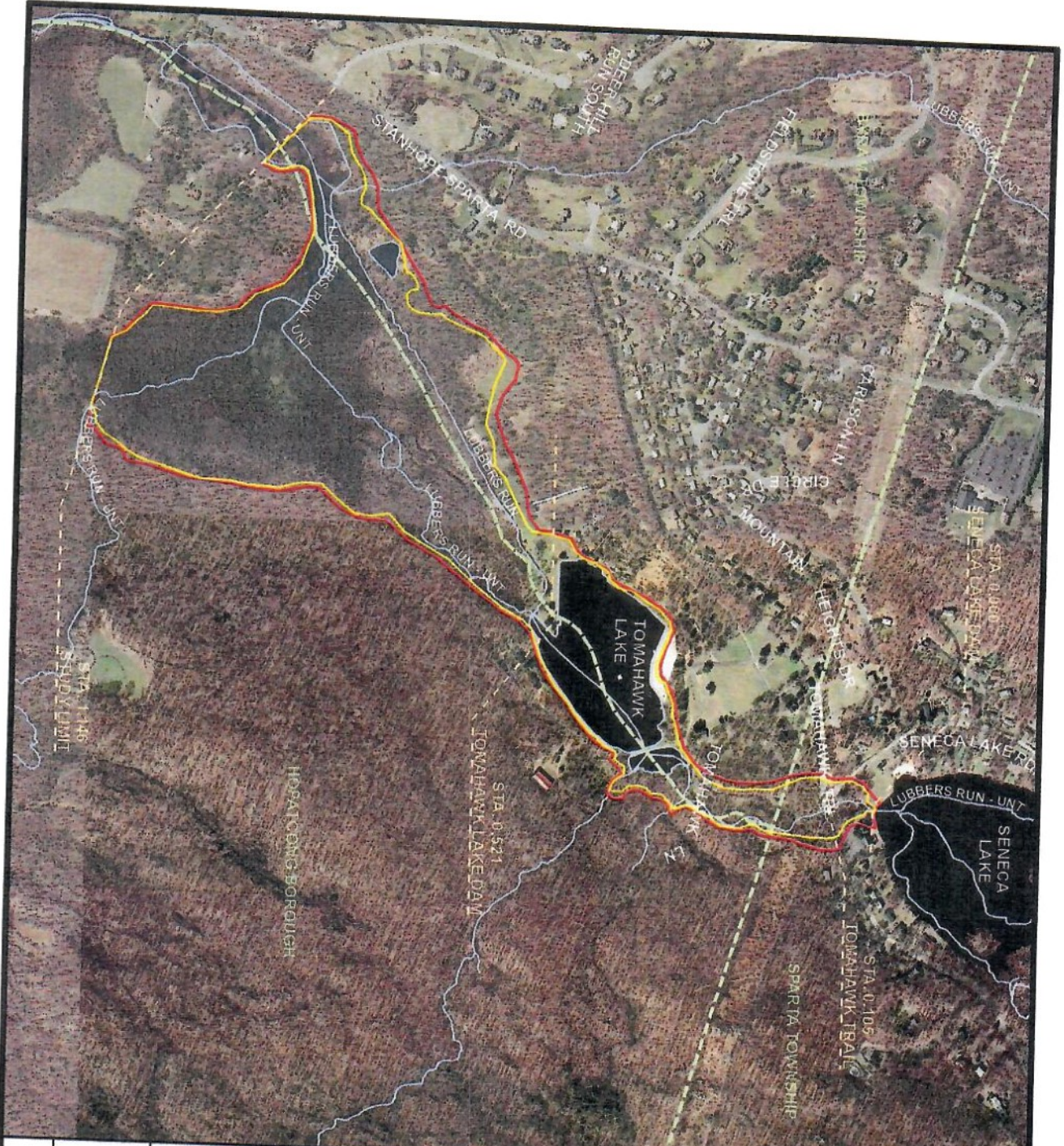
*This section will contain a detailed map of inundated areas, including dwellings if applicable, and the precise location of the dam.*

*The final inundation map to be included in the EAP should be, whenever possible, no larger than 11 inches by 17 inches, the best available map, and must be a fold out. As such, it may be necessary to reduce the mapping once the inundated areas are identified.*

Refer to:

- *Instruction for a detailed inundation map requirements.*
- *Attachment D for a sample inundation mapping, and*
- *Attachment E for guidance in performing the dam breach analysis.*





- NOTES:**
1. The limits of inundation are to be used solely for emergency planning and response.
  2. The map source is 2012 orthophotography from the NJ Image Warehouse.
  3. The inundation limits are based on the results of the dam breach analyses from the December 2001 "Conceptual Design Report for the Re-Construction of Seneca Lake Dam" and the March 12, 2002 letter response prepared by Civil Dynamics. The limits were developed using 2-foot LIDAR-based topographic contours.
  4. Portions of the inundation limits for the Sunny Day Breach and 100-Year failure events are similar and these areas may be shown as one line on the map.
  5. The inundation limits shown are approximate and based on interpolation; therefore, emergency warning and evacuation should include additional areas adjacent to the limits presented.

**LEGEND**

- Sunny Day Breach Inundation Limits
- 100-Year Failure Inundation Limits
- Municipal Boundaries
- River Stations
- NJ Streams
- NJ Lakes



**INUNDATION MAPPING  
for  
SENECA LAKE DAM**

Sparta Township  
Sussex County, New Jersey

**CIVIL DYNAMICS, inc.**

1 inch = 500 feet

April 2016

## Inundation Chart for Seneca Lake Dam

Location	Distance Downstream of Dam miles	Invert Elevation of Stream feet NGVD 29	Critical Overtopping Elevation feet NGVD 29	SUNNY DAY BREACH EVENT					100-YEAR FAILURE EVENT				
				Peak Discharge cfs	Peak Water Surface Elevation feet NGVD 29	Depth of Water at Stream Invert ft	Depth of Overtopping ft	Approximate Time of Arrival of Peak Flood Level hours/minutes	Peak Discharge cfs	Peak Water Surface Elevation feet NGVD 29	Depth of Water at Stream Invert ft	Depth of Overtopping ft	Approximate Time of Arrival of Peak Flood Level hours/minutes
Sparta Township, Sussex County, NJ	Seneca Lake Dam	N/A	861.1	2,541	857.4	N/A	-3.7	0:00	5,526	860.1	N/A	-1.0	0:00
	Tomahawk Trail	0.105	841.2	846.2	848.9	7.7	2.7	0:01	5,074	850.7	9.5	4.5	0:01
	Tomahawk Lake Dam	0.521	N/A	826.4	826.7	N/A	0.3	0:02	4,976	827.8	N/A	1.4	0:02
Byram Township and Hopatcong Borough, Sussex County, NJ	Study Link	1.146	812.7	N/A	814.3	1.6	N/A	0:20	3,530	817.1	4.4	N/A	0:16

- Notes:
- 1) The downstream Study Link is about 1.45 miles downstream of the Seneca Lake Dam.
  - 2) The Approximate Time of Arrival of the Peak Flood Level is the time elapsed from the time of the maximum discharge from the hypothetical breach of the dam.

## VIII. Appendices

### Appendix A. Plans for Training, Exercising, Updating & Posting

The EAP development coordinator of the dam is responsible for the training, exercising, and updating of the EAP.

#### Training

The EAP development coordinator of the dam is responsible for the training of all personnel involved in the implementation of the EAP. Training of personnel involved in implementation of the EAP is to ensure that they are thoroughly familiar with all elements of the plan, the availability of material and equipment, and their responsibilities and duties under the EAP.

Technically qualified personnel should be trained in problem detection and evaluation and appropriate remedial (emergency and non-emergency) measures. This training is essential for proper evaluation of developing situations at all levels of responsibility which, initially, is usually based on onsite observations. A sufficient number of personnel should be trained to ensure adequate coverage at all times.

Training courses should be held within two (2) months of the implementation of the EAP. Follow-up training sessions should be held annually. The following should be part of the training:

1. For Normal Operations:
  - Instruction on the location, purpose, and operations of the dam structure components.
  - Demonstration of normal dam conditions and operations.
  - Instruction on visual inspection procedures for the weekly/monthly inspections.
  - Hands-on training of communications equipment.
2. For Emergency Condition Identification:
  - Review of Emergency Action Plan.
  - Instruction on visually detecting an emergency warning sign.
  - Review of conditions which would indicate an emergency including proper identification of the type of emergency.
  - Instruction on interpreting the surveillance checklists to detect an emergency situation.
3. For Emergency Communications:
  - Instruction on proper use of communications equipment.
  - Instruction on appropriate individuals to contact, as well as the time to call them and the order in which calls should be made.
  - Instruction on appropriate message to convey.
4. For Emergency Response Actions:
  - Instruction on the role of each worker in response actions.
  - Instruction on dam emergency response actions to be taken for each type of emergency situation.
  - Instruction on obtaining and utilizing on and off-site emergency supplies.
  - Instruction on determining the end of a dam emergency.

- Instruction on proper communications for notifying the appropriate individuals of the emergency termination.
- Instruction on the appropriate dam emergency recovery activities.

### **Exercising**

Develop scenarios for the various emergency conditions and exercise the state of training and readiness of key personnel responsible for actions during an emergency in order to make sure that they know and understand the procedures to be followed and actions required.

Emergency response exercises should be held annually and should simulate an emergency situation in which the worker is tested on emergency condition notification, emergency communications, and emergency response skills. The exercise, whenever possible, should include participation by both the dam owner and the affected state and local emergency management officials. The exercises should be evaluated both orally and in writing and the EAP should be revised to correct any deficiencies noted.

### **Updating**

The EAP should be updated promptly after each change in involved personnel or their telephone numbers or after the completion of a scheduled exercise review which revealed required changes. A review of the adequacy of the EAP should be conducted at intervals not to exceed one year. If no revision is necessary, a statement that the review was made and no revision to the EAP was necessary should be provided to each recipient of the original EAP.

### **Posting of the Notification Flowchart**

An up-to-date copy of the Notification Flowchart should be posted in prominent locations at the dam site and local emergency operations center (essential for unattended dams).

The flowchart should be posted at each phone and radio transmitter at the dam, powerhouse (if applicable), and at all other desirable locations. The locations of the posted flowcharts should be indicated below.

List of Location of Notification Flowchart at the Dam Site:

1. Seneca Lake Club, Inc – Beach Storage Shed
2. 128 Seneca Lake Road Sparta, NJ 07871
3. 79 Seneca Lake Road Sparta, NJ 07871

## Appendix B. Definitions

### Definitions

The words and terms listed below, as used in this plan, shall have the following meanings, unless the context clearly indicates otherwise.

- Dam** - Any artificial dike, levee or other barrier, together with appurtenant works, which is constructed for the purpose of impounding water on a permanent or temporary basis, that raises the water level five (5) feet or more above the usual, mean, low water height when measured from the downstream toe-of-dam to the emergency spillway crest or in the absence of an emergency spillway, the top-of-dam.
- Drawdown** - Lowering of lake/reservoir level through the use of flood gates, low level outlets, etc.
- Emergency** - A condition in which a significant hazard to life or property is occurring.
- Emergency Action Plan (EAP)** - Established procedures necessary to minimize threat to life and damage to property in the event of a dam failure related release.
- Emergency Condition** - Any of the four conditions identified in the *Emergency Condition Identification* section.
- Emergency Management Service (EMS)** - All Offices of Emergency Management (State, County or Local) which would be involved in an emergency response.
- Emergency Operation Center (EOC)** - The command post from which emergency operations are coordinated. Must contain a telephone/communication line or be close to one.
- Failure** - An incident resulting in the uncontrolled release of water from an operating dam.
- File Number** - New Jersey State identification number for the dam.
- Hazard Classification** - Classification of potential hazard a dam failure would cause downstream of the dam.
- Class I (High Hazard Potential)** - Those dams the failure of which may cause the probable loss of life or extensive property damage.
- Class II (Significant Hazard Potential)** - Those dams the failure of which may cause significant damage to property and project operation, but loss of human life is not envisioned.
- Inundation** - The area that would be directly affected by flood waters resulting from a catastrophic dam failure.
- Large Dam** - A dam which raises the water of any stream more than 70 feet above its usual mean low-water height or which impound more than 10,000 acre-feet of water.
- NJ-DSS** - New Jersey Department of Environmental Protection, Dam Safety Section.

- NJ File No.** - New Jersey State identification number for the dam.
- NJ-OEM** - New Jersey State Police, Office of Emergency Management.
- Outlet** - An opening through which water can be freely discharged from a lake/reservoir for a particular purpose.
- Owner/Operator** - Person/entity who owns, controls, operates, maintains, manages the dam.
- Piping** - The progressive development of internal erosion by seepage, appearing downstream as a hole or seam discharging water that contains soil particles.
- Sinkhole** - Any unusual subsidence.
- Slumping** - The movement of a mass of earth and/or down a slope. In embankments and abutments, this involves the separation of a portion of the slope from the surrounding material.
- Spillway** - A waterway/structure designed to convey excess water from a reservoir/lake without endangering the safety of the dam.
- Spillway Design Flood** - The flood associated with the spillway design storm upon which the hydraulic capacity of the spillway structure is designed.

**Appendix C. Approval & Distribution of the EAP**

**Approval and Distribution**

Once the EAP has been developed, the owner/operator shall submit the completed EAP with inundation mapping and dam breach analyses to the NJ-DSS for review and approval. Once the NJ-DSS approves the EAP, the EAP must be distributed by the owner to all individuals who will be involved during an emergency. Any revisions to the EAP should be furnished to all individuals to whom the original EAP was distributed.

Each party receiving an EAP must sign and return a receipt to the distributor (owner/operator) of the EAP. The signed receipt should help to assure that all parties are aware of and understand the EAP and agree to their assigned roles should an emergency occur.

A standard distribution letter and receipt is included for reference.

**Document Distribution:**

The document holder and location of each copy of the up to date EAP should be included in this section of the EAP.

<u>Controlled Document Holder</u>	<u>Document Number</u>
NJ-OEM (State Police OEM)	1
NJ-DSS (DEP Dam Safety Section)	2
<hr/>	
GZA GeoEnvironmental	3
Sussex County	4
Sparta Township	5
Byram Township	6
Hopatcong Borough	7



#### **Attachment D. Post-Earthquake Inspection and EAP Activation Guidelines**

The Bureau of Dam Safety and Flood Control (Bureau) recommends that the dam owner/operator perform a site inspection following any earthquake felt at the dam site regardless of hazard classification or earthquake magnitude. However, a post-earthquake inspection of Class I (high hazard) and Class II (significant hazard) dams must be performed by a New Jersey licensed Professional Engineer (NJ PE) hired by the dam owner/operator if the following criteria are met.

- **Earthquake magnitude of 5.0 or greater occurring with an epicenter located within a 20 miles radius of the dam.**
- **Earthquake magnitude of 4.0 or greater occurring with an epicenter located within a 10 mile radius of the dam.**

Following a seismic event as described above, an inspection of the dam should be performed by the owner/operator immediately. An inspection must be performed by a NJ PE as soon as possible, but no later than 24 hours after the event. The above criteria are minimum requirements only and individual site conditions and earthquake characteristics must also be considered when determining if a post-earthquake inspection is necessary. For example, a dam that may be more vulnerable to instability during an earthquake (i.e. liquefiable materials within the embankment or foundation) may require a post-earthquake inspection by a NJ PE even if the above criteria are not met.

The Bureau must be immediately notified of any unusual or emergent conditions identified by the dam owner/operator or engineer during a post-earthquake inspection. Regardless of inspection findings, a letter summarizing the results of the inspection must be submitted to the Bureau within 7 days following the inspection.

#### EAP Activation:

**Activation of the EAP and issuance of a dam advisory condition is required following seismic activity meeting the above criteria.** The dam owner/operator is responsible for contacting the Bureau (and other agencies on the EAP flow chart) to inform them of the status of the potential emergency condition and either terminating or modifying the condition to match the current status of the situation.

Please note that the US Geological Survey (USGS) Earthquake Hazards Program provides automated notification to subscribers following an earthquake within the region via e-mail or text messaging. To subscribe to this service, please visit the USGS at <https://sslearthquake.usgs.gov/ens>.