



A legacy of **experience**. A reputation for **excellence**.

TABLE OF CONTENTS

1.0	Notification Flowchart	1-1
2.0	Statement of Purpose	2-1
3.0	Project Description	3-1
3.1	Newfields Development Dam Characteristics.....	3-1
4.0	Emergency Detection, Evaluation, and Classification	4-1
4.1	Detection.....	4-1
4.2	Evaluation.....	4-1
4.3	Classification	4-4
5.0	General Responsibilities.....	5-1
5.1	Dam Owner.....	5-1
5.2	Notification.....	5-1
5.3	Evacuation	5-2
5.4	Termination, Security, and follow-up.....	5-2
5.5	EAP Coordinator	5-2
6.0	Preparedness	6-1
6.1	Surveillance	6-1
6.2	Response During Periods of Darkness.....	6-1
6.3	Access to Site	6-1
6.4	Response During Weekends and Holidays.....	6-1
6.5	Response During Adverse Weather	6-1
6.6	Alternate Means of Communication.....	6-1
6.7	Emergency Supplies and Resources.....	6-2

APPENDIX A:	Investigation and Analysis of Dam Break Floods
APPENDIX B:	Plans for Training, Exercising, Updating, and Posting the EAP
APPENDIX C:	Site-Specific Concerns
APPENDIX D:	Approval of the EAP

EXHIBITS

Exhibit 1:	Sketch of Dam
Exhibit 2:	Original Design Plan
Exhibit 3:	Dam Inventory Sheet



A legacy of **experience**. A reputation for **excellence**.

PREFACE

SUMMARY OF EMERGENCY ACTION PLAN PROCESS

There are four steps that must be followed anytime an incident or emergency event is detected at The Newfields Development Dam. The steps are:

- Step 1: Event Detection and Level Determination
- Step 2: Notification and Communication
- Step 3: Expected Actions
- Step 4: Termination and Follow-up

Incidents and emergency events are defined in Section 4 of the EAP. Specific actions required for each step will depend on the severity of the situation as defined during Step 1. A summary of each step is provided below.

Step 1 - Event Detection and Level Determination

During the initial step, an incident or emergency event is detected at the dam and classified by the Dam Owner into one of the following event levels:

- Monitor: Incident, slowly developing
- Watch: Emergency Event, rapidly developing
- Warning: Emergency Event, imminent dam failure or flash flooding

Information to help the Dam Owner determine which of the above event levels is applicable is provided in Section 4 of this EAP. In addition, the Dam Owner can consult with the Engineer.

Step 2 - Notification and Communication

After the event level has been determined, notifications are made in accordance with the appropriate notification flow chart provided in Section 1 of this EAP.

Step 3 - Expected Actions

After the initial notifications are made, the Dam Owner should confer with the Public Works staff and the Engineer to develop and execute appropriate preventative actions. During this step of the EAP, there is a continuous process of taking actions, assessing the status of the situation, and keeping others informed through communication channels established during the initial notifications. The EAP may go through multiple event levels during Steps 2 and 3 as the situation either improves or worsens.

Step 4 - Termination and Follow-up

Once the event has ended or been resolved, termination and follow-up procedures should be followed as outlined in Section 5.4 of this IEAP.



A legacy of **experience**. A reputation for **excellence**.

SECTION 1:




Notification Flowcharts



A legacy of **experience**. A reputation for **excellence**.

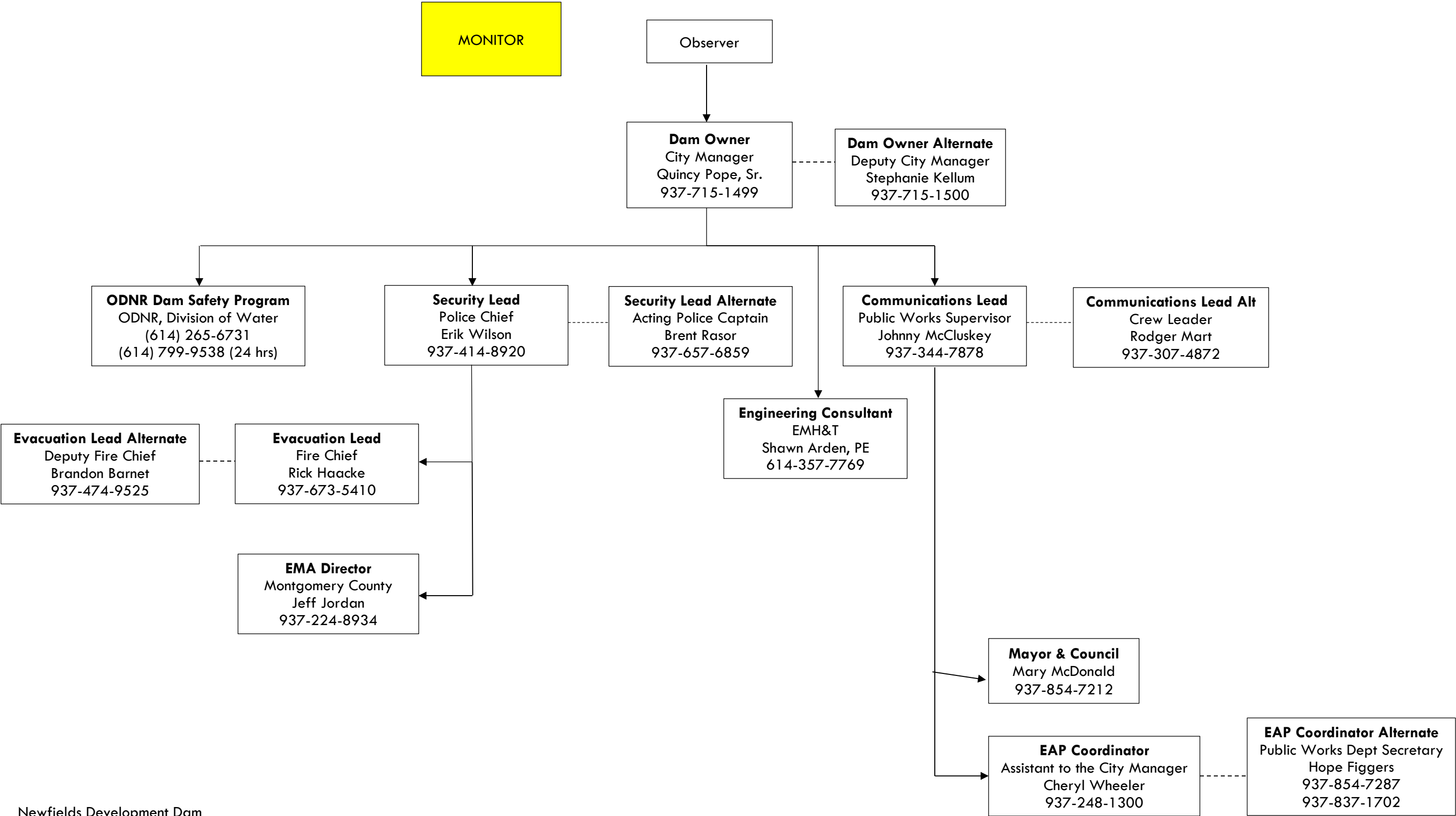
1.0 NOTIFICATION FLOWCHART

This Emergency Action Plan (EAP) was prepared for use by the City of Trotwood and partner agencies to guide actions during an emergency situation at the Newfields Development Dam. Emergency conditions are classified as shown in the following table.

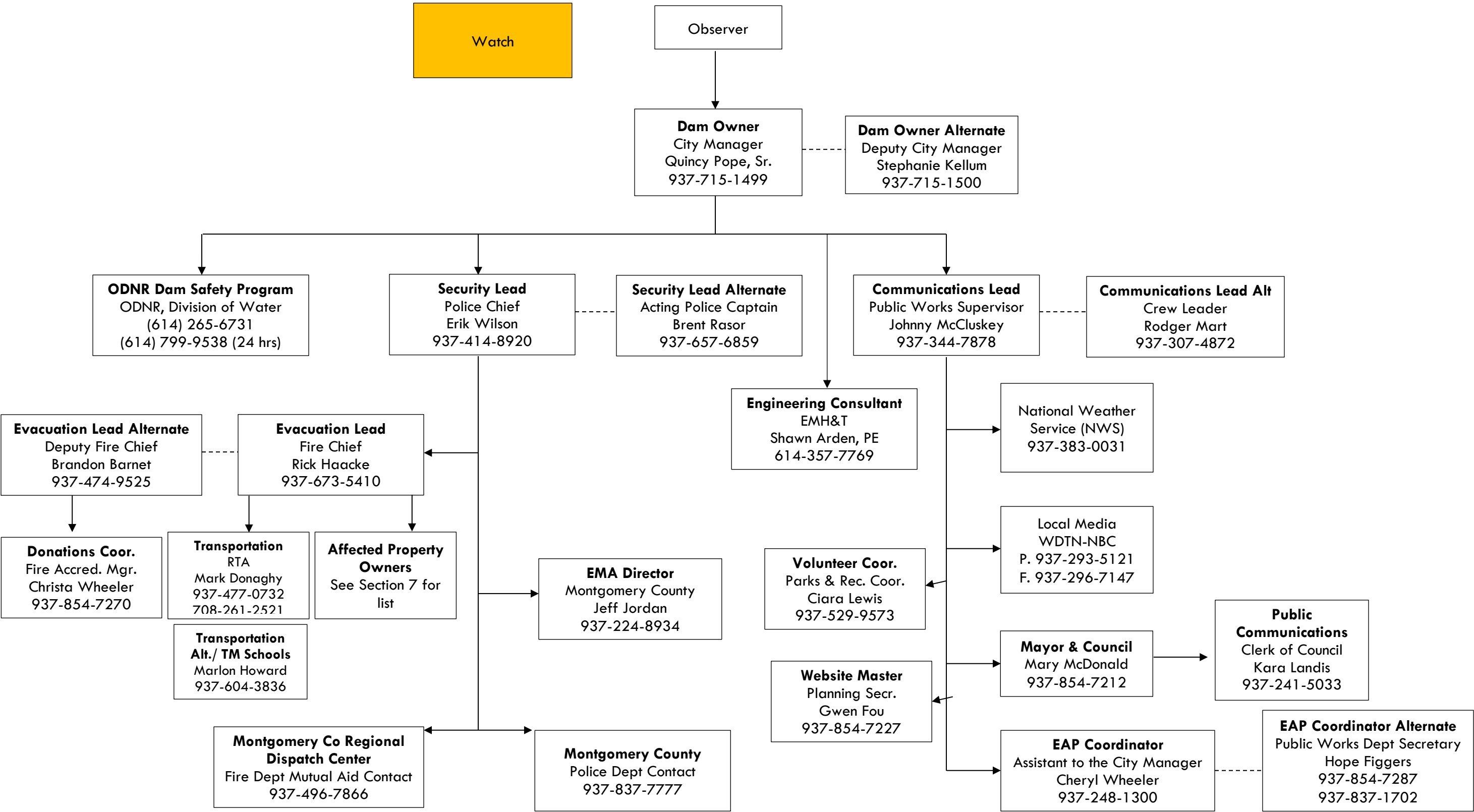
	Monitor	A hazardous condition exists, requiring investigation and corrective action; potential for failure is being assessed; corrective measures are underway
	Watch	Potential dam failure situation is developing.
	Warning	Dam failure is occurring or is imminent.

City staff shall utilize the Notification Flowcharts provided in this section to inform the appropriate personnel and entities of the condition at the dam site. In addition, prescribed messages are provided in this section for use by City staff.

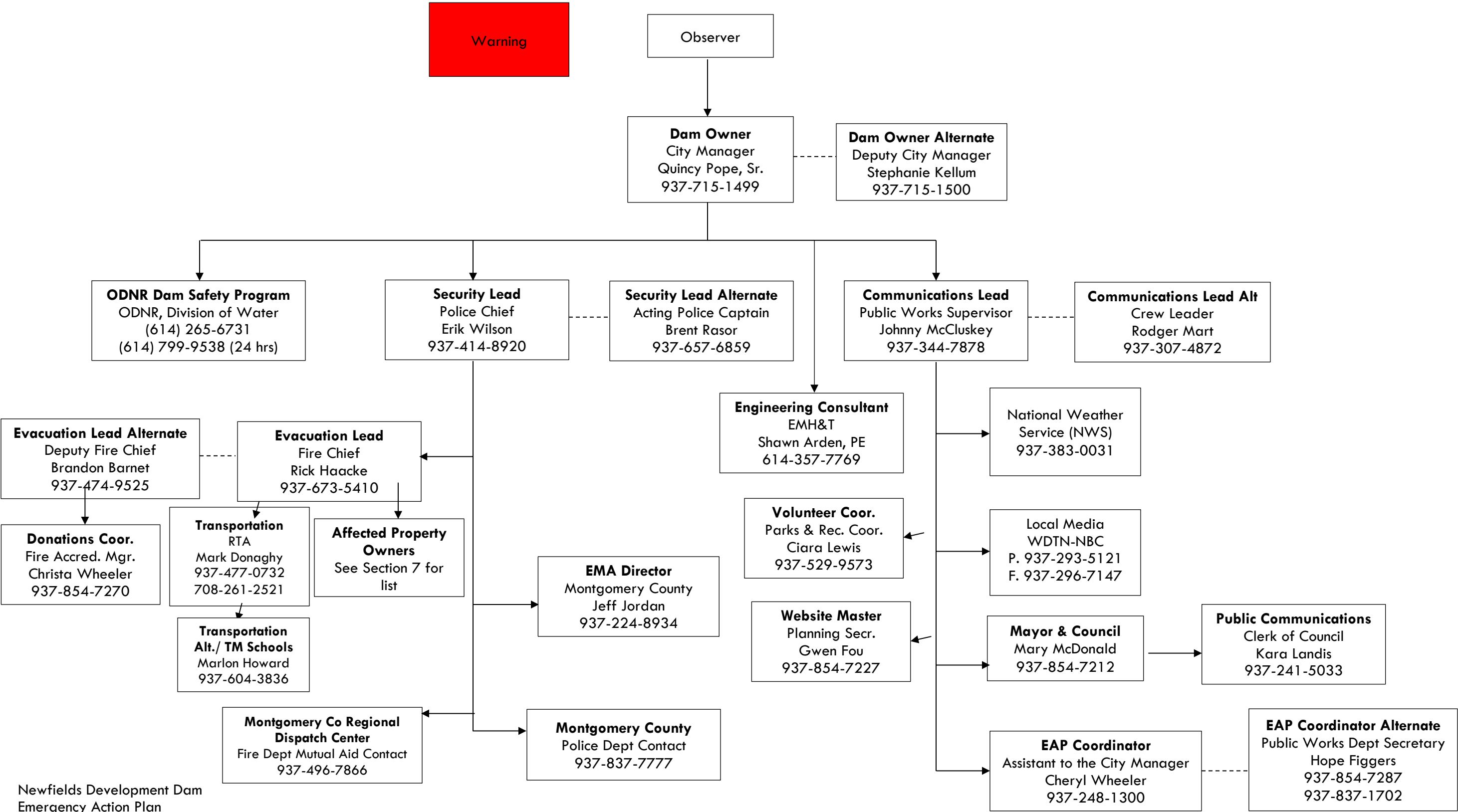
NOTIFICATION FLOWCHART
Emergency Condition: Monitor



NOTIFICATION FLOWCHART
Emergency Condition: Watch



NOTIFICATION FLOWCHART
Emergency Condition: Warning





A legacy of **experience**. A reputation for **excellence**.

1.1 Prescribed Messages

Emergency Condition: Monitor

- This is the City of Trotwood Emergency Action Plan Communications Lead. I am making this call in accordance with the Newfields Development Dam EAP.
- An incident has been detected at Newfields Development Dam.
- The EAP has been activated, currently at a Monitor condition.
- If a problem occurs, flooding between the dam and North Branch Wolf Creek is possible.
- The situation is being monitored to determine if any evacuation warnings are necessary.
- We will keep you apprised of the situation via Media Outlets for updates: Hyper-Reach, Website and Facebook

Emergency Condition: Watch

- This is the City of Trotwood Emergency Action Plan Communications Lead. I am making this call in accordance with the Newfields Development Dam EAP.
- An incident has been detected at Newfields Development Dam.
- The EAP has been activated, currently at a Watch condition.
- Flooding between the dam and North Branch Wolf Creek is possible.
- Prepare to evacuate the area including the following streets: Sherry Drive, Hillpoint Street, Elmore Street, Westland Drive, Belmore Trace, Tuscola Drive, Elysian Court, Shadows Glade Drive, and Arundel Road.
- We will keep you apprised of the situation via Media Outlets for updates: Hyper-Reach, Website and Facebook

Emergency Condition: Warning

- This is the City of Trotwood Emergency Action Plan Communications Lead. I am making this call in accordance with the Newfields Development Dam EAP.
- Failure of the Newfields Development Dam is imminent.
- The EAP has been activated, currently at the highest Warning condition.
- Flooding between the dam and North Branch Wolf Creek will occur.
- Immediately evacuate the area including the following streets: Sherry Drive, Hillpoint Street, Elmore Street, Westland Drive, Belmore Trace, Tuscola Drive, Elysian Court, Shadows Glade Drive, and Arundel Road.
- We will keep you apprised of the situation via Media Outlets for updates: Hyper-Reach, Website and Facebook



A legacy of **experience**. A reputation for **excellence**.

Announcement for Possible Dam Failure Problem (Watch Condition)

THE CITY OF TROTWOOD ANNOUNCED AT (time) TODAY THAT AN EMERGENCY CONDITION EXISTED AROUND THE NEWFIELDS DEVELOPMENT DAM DUE TO (general description of the problem). THE DAM IS LOCATED NEAR SYCAMORE WOODS DRIVE IN THE CITY OF TROTWOOD, OHIO.

LOCAL EMERGENCY MANAGEMENT PERSONNEL ARE CURRENTLY WORKING TO RESOLVE THE SITUATION.

CURRENTLY, THERE IS NOT IMMEDIATE DAMGER OF THE DAM FAILING. HOWEVER, AS A PRECAUTIONARY MEASURE, RESIDENTS LOCATED DOWNSTREAM OF THE DAM SHOULD PREPARE TO EVACUATE. THIS AREA INCLUDES THE FOLLOWING STREETS:

- SHERRY DRIVE
- HILLPOINT STREET
- ELMORE STREET
- WESTLAND DRIVE
- BELMORE TRACE
- TUSCOLA DRIVE
- ELYSIAN COURT
- SHADOWS GLADE DRIVE
- ARUNDEL ROAD.

ADDITIONAL INFORMATION WILL BE RELEASED AS PROMPTLY AS POSSIBLE.

Announcement for Possible Dam Failure Imminent or In Progress (Warning Condition)

THE CITY OF TROTWOOD ANNOUNCED AT (time) TODAY THAT AN EMERGENCY CONDITION EXISTED AROUND THE NEWFIELDS DEVELOPMENT DAM DUE TO (general description of the problem). THE DAM IS LOCATED NEAR SYCAMORE WOODS DRIVE IN THE CITY OF TROTWOOD, OHIO.

LOCAL EMERGENCY MANAGEMENT PERSONNEL ARE CURRENTLY WORKING TO RESOLVE THE SITUATION.

ATTEMPTS TO SAVE THE DAM ARE UNDERWAY, BUT THEIR SUCCESS CANNOT BE DETERMINED YET. **RESIDENTS LOCATED DOWNSTREAM OF THE DAM SHOULD EVACUATE TO HIGH GROUND IMMEDIATELY.** THIS AREA INCLUDES THE FOLLOWING STREETS:

- SHERRY DRIVE
- HILLPOINT STREET
- ELMORE STREET
- WESTLAND DRIVE
- BELMORE TRACE
- TUSCOLA DRIVE
- ELYSIAN COURT
- SHADOWS GLADE DRIVE
- ARUNDEL ROAD.

IF THE DAM FAILS, WATER WILL TAKE LESS THAN 30 MINUTES TO INNUNDATE THE AREA BETWEEN THE DAM AND NORTH BRANCH WOLF CREEK.

ADDITIONAL INFORMATION WILL BE RELEASED AS PROMPTLY AS POSSIBLE.



A legacy of **experience**. A reputation for **excellence**.

SECTION 2:

Statement of Purpose






A legacy of **experience**. A reputation for **excellence**.

2.0 STATEMENT OF PURPOSE

The purpose of this Emergency Action Plan (EAP) is to safeguard lives and to reduce property damage downstream of the Newfields Development Dam. This plan addresses the responsibilities of City Officials and Emergency Management Personnel for response to the possibility of failure or imminent/current failure of the embankment of the Newfields Development Dam. Additionally, since the Newfields Development Dam is unmanned, it provides a notification procedure in the event of an unconfirmed report at the site. These conditions are known by the following levels:

Table 2-1 - Notification Levels

	Monitor	A hazardous condition exists, requiring investigation and corrective action; potential for failure is being assessed; corrective measures are underway
	Watch	Potential dam failure situation is developing.
	Warning	Dam failure is occurring or is imminent.

The City of Trotwood has developed this EAP for the Newfields Development Dam as required by the Ohio Department of Natural Resources (ODNR) in accordance with the Ohio Administrative Code, Rule 1501:21-21-04 and 1501:21-15-07. The EAP is part of a larger program that includes ongoing inspections and maintenance of the embankment.

This EAP establishes procedures to notify City of Trotwood staff, public officials and agencies so that necessary precautions can be taken in the case of an actual or possible dam embankment failure. It also provides for communication within City staff, and for mitigation of conditions that might threaten the safety of the dam embankment. An inundation map is included within this EAP that identifies potential areas that could be flooded in the unlikely event of a dam embankment failure.



A legacy of **experience**. A reputation for **excellence**.

SECTION 3:

Project Description



A legacy of **experience**. A reputation for **excellence**.

3.0 PROJECT DESCRIPTION

The City of Trotwood owns the Newfields Development Lake Dam, which is situated in Montgomery County, Ohio on a tributary to North Branch Wolf Creek and just south of Sycamore Woods Boulevard. ODNR has assigned the Newfields Development Dam a Class I Hazard Rating based on the potential for loss of life and property damage downstream of the dam in the event of a dam failure. A Location Map for the dam is provided as Figure 1 on the following page. No significant dams are located upstream or downstream of the Newfields Development Dam that would be affected by an emergency condition at this site.

Newfields Development Lake Dam, constructed in 1973, is an earthen embankment dam and is approximately 6 acres in size at its normal pool elevation of 873.3 feet. The principal spillway structure is comprised of a 6-ft diameter concrete riser pipe (0.5' thick) with grated top connected to a 30" diameter reinforced concrete outlet pipe. An open channel emergency spillway is located at each abutment of the dam. The upstream and downstream slope of the dam embankment is approximately 4H:1V and 2H:1V, respectively. The embankment's length spans approximately 800 feet, its height is 14.6 feet, and the top width is 20 feet, according to field measurements performed by EMH&T in 2017. The elevation of the principal spillway crest and earthen dam crest (top of dam) are approximately 873.3 feet and 879 feet, respectively, again based on 2017 EMH&T field survey. The northeast emergency spillway consists of a 30' wide ditch at 0.4% slope with a crest elevation of approximately 875.00. The southwest emergency spillway consists of a 44' wide open channel weir with a crest elevation of approximately 875.80. Refer to the Exhibits included with this EAP for a sketch of dam (Exhibit 1) and the ODNR Dam Inventory Sheet (Exhibit 3).

3.1 Newfields Development Dam Characteristics

Table 3-1: Newfields Development Dam Pertinent Data

Top of Dam Elevation	879
Emergency Spillway Elevation	875 & 875.8
Emergency Spillway Width	30 feet & 44 feet
Principal Spillway Elevation	873.3
Upstream Slope	4:1 (H:V)
Downstream Slope	2:1 (H:V)
Length	800 feet
Drainage Area	0.35 SM



Figure 1: Project Vicinity Map



A legacy of **experience**. A reputation for **excellence**.

SECTION 4:

Emergency Detection, Evaluation, and Classification



4.0 EMERGENCY DETECTION, EVALUATION, AND CLASSIFICATION

4.1 Detection

In order to determine whether an emergency condition exists, the entire dam must be inspected or monitored on a regular basis as outlined in the dam's Operation, Maintenance, and Inspection Manual. When inspecting the dam, pay particular attention to known past problem areas and other areas of current concern as listed below, then use the "Alert Level" table to determine the severity of problems identified from the dam inspection and the "Classification of Conditions" table to determine the appropriate actions to take.

- Inspect the principal spillway riser and lake drain for obstructions.
- Inspect the emergency spillway channels for obstructions and erosion.
- Monitor the earthen dam embankment for cracks, earth slides/slips, seepage, and sinkholes.

After significant rainfall, dams are more likely to develop problems such as slides, spillway obstructions, seepage, or structural problems. If more than 2 inches of rain occurs within 24 hours or the pool level rises more than one foot, monitor the dam daily until the pool level begins to decrease. Inspect the dam as described above. Record rainfall amount and pool elevation.

4.2 Evaluation

Examples of Emergency Situations

The following are examples of conditions that usually constitute an emergency situation that may occur at a dam. Adverse or unusual conditions that can cause the failure of a dam are typically related to aging or design and construction oversights. Extreme weather events that exceed the original designed conditions can cause significant flow through the emergency spillways or overtopping of the embankment. However, accidental or intentional damage to the dam may also result in emergency conditions. The conditions have been grouped to identify the most likely emergency-level condition. The groupings are provided as guidance only. Not all emergency conditions may be listed, and the dam operator is urged to use conservative judgment in determining whether a specific condition should be defined as an emergency situation at the dam.

Emergency Spillway Flows

- **Watch Alert Level—Potential dam failure situation; rapidly developing:**
 1. Significant erosion or headcutting of the spillway is occurring, but the rate does not appear to threaten an imminent breach of the spillway crest that would result in an uncontrolled release of the reservoir.
 2. Flow through the earthen emergency spillway is or is expected to cause flooding that could threaten people, homes, and/or roads downstream from the dam.
- **Warning Alert Level—Urgent; dam failure appears imminent or is in progress:**
 1. Significant erosion or headcutting of the spillway is occurring at a rapid rate, and a breach of the control section appears imminent.
 2. Flow through the earthen emergency spillway is causing flooding that is threatening people, homes, and/or roads downstream from the dam.



A legacy of **experience**. A reputation for **excellence**.

Embankment Overtopping

- **Watch Alert Level—Potential dam failure situation; rapidly developing:**
 1. The reservoir level is within 2 feet from the top of the dam and significant runoff continued to enter the lake from upstream areas.
- **Warning Alert Level—Urgent; dam failure appears imminent or is in progress:**
 1. The reservoir level has exceeded the top of the dam, and flow is occurring over the embankment.

Seepage and Sinkholes

- **Watch Alert Level—Potential dam failure situation; rapidly developing:**
 1. Cloudy seepage or soil deposits are observed at seepage exit points or from internal drain outlet pipes.
 2. New or increased areas of wet or muddy soils are present on the downstream slope, abutment, and/or foundation of the dam, and there is an easily detectable and unusual increase in volume of downstream seepage.
 3. Significant new or enlarging sinkhole(s) near the dam or settlement of the dam is observed.
 4. Reservoir level is falling without apparent cause.
- **Warning Alert Level—Urgent; dam failure appears imminent or is in progress:**
 1. Rapidly increasing cloudy seepage or soil deposits at seepage exit points to the extent that failure appears imminent or is in progress.
 2. Rapid increase in volume of downstream seepage to the extent that failure appears imminent or is in progress.
 3. Water flowing out of holes in the downstream slope, abutment, and/or foundation of the dam to the extent that failure appears imminent or is in progress.
 4. Whirlpools or other evidence exists indicating that the reservoir is draining rapidly through the dam or foundation.
 5. Rapidly enlarging sinkhole(s) are forming on the dam or abutments to the extent that failure appears imminent or is in progress.
 6. Rapidly increasing flow through crack(s) eroding materials to the extent that failure appears imminent or is in progress.

Embankment Movement and Cracking

- **Watch Alert Level —Potential dam failure situation; rapidly developing:**
 1. Settlement of the crest, slopes, abutments and/or foundation of the dam that may eventually result in breaching of the dam.
 2. Significant increase in length, width, or offset of cracks in the crest, slopes, abutments, and/or foundation of the dam that may eventually result in breaching of the dam.
- **Warning Alert Level—Urgent; dam failure appears imminent or is in progress:**
 1. Sudden or rapidly proceeding slides, settlement, or cracking of the embankment crest, slopes, abutments, and/or foundation, and breaching of the dam appears imminent or is in progress.



A legacy of **experience**. A reputation for **excellence**.

Alert Level Table		
Event	Situation	Alert Level*
Earthen Emergency Spillway Flow	Reservoir water surface elevation at spillway crest or spillway is flowing with no active erosion	Monitor
	Spillway flowing with active gully erosion	Watch
	Spillway flow that could result in flooding of people downstream	Watch
	Spillway flowing with an advancing headcut that is threatening the control section	Warning
	Spillway flow that is flooding people downstream	Warning
Embankment Overtopping	No overtopping flow but water level in lake within 2 feet of embankment crest with significant runoff entering the lake.	Watch
	Major overtopping flow eroding the embankment slope	Warning
Seepage	New seepage areas in or near the dam with clear flow	Monitor
	New seepage areas with cloudy discharge or increasing flow rate	Watch
	Heavy seepage with active erosion. Muddy flow and/or sand boils.	Warning
Sinkholes	Observation of new sinkhole in reservoir area or on embankment.	Watch
	Rapidly enlarging sinkhole on the embankment with visible flow or whirlpool in the lake.	Warning
Embankment Cracking	New cracks in the embankment greater than 1/4-inch wide without seepage	Monitor
	Cracks in the embankment with seepage	Watch
Embankment Movement	Visual movement/slippage of the embankment slope	Monitor
Earthquake	Measurable earthquake felt or reported on or within 50 miles of the dam	Monitor
	Earthquake resulting in visible damage to the dam or appurtenances	Watch
	Earthquake resulting in uncontrolled release of water from the dam	Warning
Security Threat	Verified bomb threat that, if carried out, could result in damage to the dam	Watch
	Detonated bomb that has resulted in damage to the dam or appurtenances	Warning
Sabotage	Damage to dam or appurtenances with no impacts to the functioning of the dam	Monitor
	Damage to dam or appurtenances that has resulted in seepage flow	Watch
	Damage to dam or appurtenances that has resulted in uncontrolled water release	Warning



A legacy of **experience**. A reputation for **excellence**.

4.3 Classification

Classification of Conditions Table		
Alert Level	Description	Action
Monitor	Unusual event, slowly developing, not an immediate threat to the dam.	<p>Dam owner representative must inspect the dam.</p> <p>Document the incident and report findings to your engineer and the ODNR Dam Safety Program.</p> <p>Obtain instructions regarding the next course of action from your engineer and/or ODNR.</p>
Watch	Unsafe situation that may lead to failure of the dam but not an immediate threat.	<p>Begin notifications according to <u>Section I: Notification Flowchart</u> in this EAP.</p> <p>Begin constant surveillance of the dam.</p>
Warning	Urgent situation. Failure is occurring or about to occur. Or, areas downstream are flooding due to spillway flow. Evacuation of downstream area necessary.	<p>Begin notifications according to <u>Section I: Notification Flowchart</u> in this EAP.</p> <p>Begin constant surveillance of the dam.</p>



A legacy of **experience**. A reputation for **excellence**.

SECTION 5:

General Responsibilities



A legacy of **experience**. A reputation for **excellence**.

5.0 GENERAL RESPONSIBILITIES

5.1 Dam Owner

The City of Trotwood owns the Newfields Development Dam and is responsible for routine inspections of the dam, as well as responding to emergency conditions at the site. For implementation of the EAP, the City Manager will serve as Dam Owner and is responsible for declaring or terminating any level of emergency condition described in the EAP. The City Manager shall also:

- Manage the emergency condition
- Maintain overall decision making authority
- Evaluate and set emergency condition level
- Assign specific tasks to individuals
- Direct the Communications Lead to perform notification activities in accordance with the Flowcharts included in Section 1 of the EAP

5.2 Notification

The City Manager, or designated alternate, shall assess the condition of the embankment or deficiency and take immediate action. If warranted by the site conditions and Emergency Condition Level, the City may issue timely notifications in accordance with the Notification Flowchart and prescribed messages included in Section 1 of this EAP.

The City Manager shall notify:

- ODNR Dam Safety Program
- Security Lead
- Communications Lead
- Engineer

The Communications Lead shall notify:

- National Weather Service
- Local Media
- Mayor, Council and potentially impacted citizens via Hyper Reach
- Public Communications and Website Master
- City EAP Coordinator
- Volunteer Coordinator

The Security Lead shall notify:

- Evacuation Lead
- Montgomery County
- Montgomery County Regional Dispatch



A legacy of **experience**. A reputation for **excellence**.

The Evacuation Lead shall notify:

- Affected Property Owners
- Transportation /RTA
- Donations Coordinator

5.3 Evacuation

The Communications Lead will notify citizens of potential hazards using the Hyper Reach notification system. Evacuation Lead provides in person notice to property occupants within the predicted flood inundation area. Refer to the Inundation Map and list of affected properties included in Section 7 of this EAP.

The Security Lead shall assist the evacuation effort to ensure the public is able to exit the inundation area in a safe manner. The Security Lead shall also prevent re-entry into the inundation area by the public until the emergency condition at the dam has ended.

5.4 Termination, Security, and follow-up

The City of Trotwood must monitor the emergency situation at the dam and keep ODNR informed of developing conditions. The Dam Owner shall not terminate the EAP under the emergency until the condition at the dam has ended. The Dam Owner shall notify public officials and residents of the termination of the emergency condition using the “Monitor” Notification Flowchart included in Section 1.

The Security Lead shall provide a police presence at the dam site to protect the public and emergency personnel. Additional security measures may be required depending on the specific nature of the emergency condition. The Security Lead shall assist the evacuation effort to ensure the public is able to exit the inundation area in a safe manner. The Security Lead shall also prevent re-entry into the inundation area by the public until the emergency condition at the dam has ended.

The EAP Coordinator shall arrange for a post-event meeting of the participating personnel to review the actions performed, lessons learned, and necessary revisions for the EAP. This meeting should occur within 30 days of termination of the emergency condition.

5.5 EAP Coordinator

The Assistant to the City Manager will serve as the Emergency Action Plan (EAP) Coordinator for the Newfields Development Dam. The following are the responsibilities of the EAP coordinator:

- Maintains all copies of the EAP document are consistent and up-to-date
 - Coordination with City of Trotwood Human Resources is required to collect and re-issue EAP documents during personnel changes.
- Submits updated EAP's to the ODNR and Montgomery County Office of Emergency Management
- Schedules, leads, and logs annual training exercise of the EAP
- Serve as the EAP contact for emergencies and non-emergencies



A legacy of **experience**. A reputation for **excellence**.



A legacy of **experience**. A reputation for **excellence**.

SECTION 6:

Preparedness



A legacy of **experience**. A reputation for **excellence**.

6.0 PREPAREDNESS

6.1 Surveillance

The Newfields Development Dam is an unmanned facility. Remote surveillance equipment is not available at this facility. The City Public Works staff will visually inspect the dam during periodic (bi-weekly) site visits.

6.2 Response During Periods of Darkness

The Newfields Development Dam site does not contain permanent lighting infrastructure. The City shall use emergency vehicles to illuminate the site during emergency conditions.

6.3 Access to Site

The Newfields Development Dam can be accessed most directly from Wolf Creek Pike, then north on Snyder Road, then east on Sycamore Woods Boulevard, then southeast on Lake Center Drive. In an emergency the dam can also be accessed from Arundel Road via a bike path, if the emergency spillway has not activated.

6.4 Response During Weekends and Holidays

During weekends and holidays, the notification flowcharts included in Section 1 shall be followed. All contact phone numbers are 24-hour access. Local emergency agencies operate 24 hours a day, 7 days a week.

6.5 Response During Adverse Weather

Access routes to the dam site may be restricted during extreme rainfall events due to roadway ponding.

According to the FEMA Flood Insurance Study for Montgomery County, Ohio, dated January 6, 2005:

- The following roadway bridges over Wolf Creek are elevated above the 500 year flood profile and should not be overtopped by heavy streamflow: Olive Road, Wolf Creek Pike, Main Street, and Snyder Road.
- The following roadway bridges over North Branch Wolf Creek are elevated above the 500 year flood profile and should not be overtopped by heavy streamflow: Main Street, Broadway Ave / Union Road, and Sycamore Woods Boulevard.

6.6 Alternate Means of Communication

The City will use cell phones and emergency radios for communication.



A legacy of **experience**. A reputation for **excellence**.

6.7 Emergency Supplies and Resources

Public Works Stockpiles (Rock & 304)

- Broadway (across from N. Broadway Park)
- 778 Main Street, Trotwood, OH 45426

Public Works Equipment

- 2400 Olive Road, Trotwood, OH 45426

Local Quarries (No emergency access)

- Martin Marietta
9843 Dayton-Greenville Pk (SR49)
Brookville, OH 45309
Phone: 937-884-5814
Dispatch: 800-331-4242
- Tipp Stone
8172 Meeker Road
Dayton, OH 45414
Phone: 937-890-4051

Contractors (No emergency on-call contract)

- Outdoor Enterprise
8515 Lefevre Road
Casstown, OH 45312
Phone: 937-857-9400
- Coates Construction
800 Summit Ave
Niles, OH 44446
Phone: 330-652-0190

County Engineer

- Montgomery County Engineers Office
5625 Little Richmond Road
Dayton, OH 45426
Phone: 937-837-2528



A legacy of **experience**. A reputation for **excellence**.

SECTION 7:

Inundation Maps and Affected Property List



A legacy of **experience**. A reputation for **excellence**.

APPENDIX A:

Investigation and Analyses of Dam Break Floods



A legacy of **experience**. A reputation for **excellence**.

APPENDIX B:

Plans for Training, Exercising, Updating, and Posting the EAP



A legacy of **experience**. A reputation for **excellence**.

Plans for Training, Exercising, Updating, and Posting the EAP

The EAP Coordinator is responsible for the activities listed in this Appendix.

Training and Exercising

- The City shall hold an annual training and table-top exercise to walk through implementation of the EAP for a hypothetical emergency event at the Newfields Development Dam. The EAP Coordinator shall ensure a sign-in sheet for attendees and minutes covering the items discussed in the exercise are collected and maintained.
- The EAP Coordinator and Public Works Supervisor shall hold a training session annually with Public Works personnel regarding problem detection and evaluation at the dam. Areas of discussion include:
 - Abnormal water levels in the lake
 - Erosion on the embankment or emergency spillways
 - Debris obstructing the principal spillway riser or discharge pipe
 - Debris blocking the emergency spillways.
 - Woody vegetation growth on the embankment
 - Heavy or turbid discharge from the embankment toe drain outlets.
- The EAP Coordinator will ensure that the Departments included in the Notification Flowchart have reviewed the EAP with their personnel.

Updating

The EAP Coordinator shall update the EAP document following the annual training exercise, following an emergency event, and as otherwise deemed necessary by the City Manager or ODNR.

The EAP Coordinator shall distribute updated copies of the EAP to all of the City personnel listed on the Notification Flowcharts in Section 1 of the EAP, as well as the ODNR Dam Safety Program. The EAP Coordinator shall maintain a log of EAP material distribution and signatures acknowledging receipt of the EAP.

Outdated copies of the EAP document shall be discarded.

Posting

The EAP Coordinator shall file the updated EAP document digitally at a location readily accessible to City personnel.



A legacy of **experience**. A reputation for **excellence**.

APPENDIX C:

Site-Specific Concerns



A legacy of **experience**. A reputation for **excellence**.

Site Specific Concerns

The Newfields Development Dam discharges stormwater runoff in a passive manner without the use of moving components. The following items should be inspected with emphasis to ensure the facility is in the best condition to function during an extreme rainfall event.

- Inspect the principal spillway riser and lake drain for obstructions.
- Inspect the emergency spillway channels for obstructions and erosion.
- Monitor the earthen dam embankment for cracks, earth slides/slips, seepage, and sinkholes.
- Monitor discharge from the embankment toe drains for increased and/or turbid discharge.



A legacy of **experience**. A reputation for **excellence**.

APPENDIX D:

Approval of the EAP



A legacy of **experience**. A reputation for **excellence**.

Volunteer Coordinator

Name

Date

Website Master

Name

Date

Donation Coordinator

Name

Date



A legacy of **experience**. A reputation for **excellence**.

Approval Signature Sheet

The parties below acknowledge approval of the EAP and acceptance of responsibilities herein.

Dam Owner	_____	_____
	Name	Date
Alternate Dam Owner	_____	_____
	Name	Date
Communications Lead	_____	_____
	Name	Date
Alt Communications Lead	_____	_____
	Name	Date
Public Communications	_____	_____
	Name	Date
Evacuation Lead	_____	_____
	Name	Date
Alternate Evacuation Lead	_____	_____
	Name	Date
Security Lead	_____	_____
	Name	Date
Alternate Security Lead	_____	_____
	Name	Date
EAP Coordinator	_____	_____
	Name	Date
Alternate EAP Coordinator	_____	_____
	Name	Date



A legacy of **experience**. A reputation for **excellence**.

EXHIBITS