

Pennsylvania Department of Environmental Protection

Rachel Carson State Office Building

P.O. Box 8554

Harrisburg, PA 17105-8554

June 20, 2006

Bureau of Waterways Engineering

717-772-5956

Craig Bubbs, Executive Director
The Municipal Authority of the Borough of Lewistown
70 Chestnut Street
Lewistown, PA 17044

RECEIVED JUN 23 2006

Re: DEP File No. D44-062

Dear Mr. Bubbs:

The Emergency Action Plan (EAP) for the Laurel Creek Dam, dated May 2, 2006, was submitted to this office with the Authority's engineer's May 25, 2006, cover letter. A review by the Department and the Pennsylvania Emergency Management Agency finds the EAP to be complete. The plan is approved for distribution and implementation.

Enclosed is an executed copy of the PEMA and DEP's "Promulgation and Concurrence" signature page for the Authority's use. Copies of the approved "Promulgation and Concurrence" signature pages must be attached to the EAP distributed by the Authority. The original signature copy of these pages will be maintained in the Department files. Every emergency response agency identified as having a responsibility in Sections 4.B. through 4.I. in the EAP should receive a copy of the EAP. We have distributed an approved copy of this EAP to the Department's Southcentral Regional Office in Harrisburg, PA, to the Central Area Office of the Pennsylvania Emergency Management Agency, and the Mifflin County Emergency Management Agency. **We request that the Authority provide this office, within 60 days of the date of this letter, with a statement certifying that it has distributed the EAP to the appropriate emergency response agencies.**

Legislative amendments to the Dam Safety and Encroachments Act imposed additional requirements upon the owners and operators of dams located in the Commonwealth. The Act of May 16, 1985, P.L. 32, No. 1985-15, amended Section 13 of the Dam Safety and Encroachments Act (32 P.S. 693.13) to add the following new subsection (b):

"(b) In addition to the duties of subsection (a), the owner of any high hazard dam which has been classified as such by the Department of Environmental Protection shall post notices in public places in any area which might be affected by the failure of the dam."

The Act defines "high hazard dam" as "any dam so located to endanger populated areas downstream by its failure." This EAP was developed because the consequences of the downstream flooding from the sudden failure of Laurel Creek Dam could result in the loss of life, appreciable damage to public or private property, or public inconvenience as defined by the Act. Therefore, under



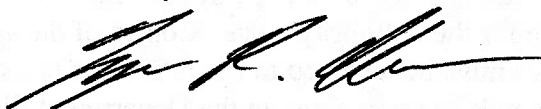
the terms of the Act, the Authority is required to comply with the requirements for posting notices in potentially impacted downstream areas.

The NOTICE form included in the EAP should be used in posting public notices. In order to comply with the notice requirement, such notices must be posted in the public places listed on page 9 of the approved EAP. **Also, we request that the Authority provide this office, within 60 days of the date of this letter, with a statement certifying that it has complied with this requirement and provide us a list of the public posting places.**

Thank you for your cooperation in the development of this EAP. Hopefully, the Authority will not have to implement it. The Authority's proper operation and maintenance of Laurel Run Dam in accordance with this Department's Regulations and our guidance will minimize future problems. However, should severe weather conditions occur or if a sudden problem develops at the dam, the lives of those inhabitants downstream will depend on the Authority's prompt implementation of this EAP.

If you have any questions regarding this letter, or at any time need assistance with this dam, contact me at the telephone number above.

Sincerely,




Tyson R. Clouser
Monitoring and Compliance Section
Division of Dam Safety

Enclosure: "Promulgation and Concurrence" signature pages

cc: Martin L. Zahuranec, P.E. (w/ concurrence signature page enclosed)
Director, Bureau of Plans, PEMA
Central Area Office, PEMA (w/ concurrence signature page enclosed)
Mifflin County EMA (w/ EAP enclosed)

PEMA AND DEP APPROVALS

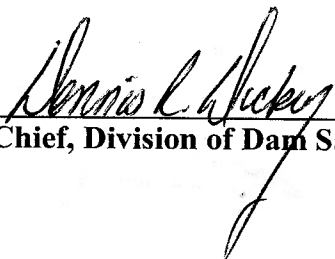
The Pennsylvania Emergency Management Agency, hereby finds the Emergency Action Plan contains key elements for an effective warning and evacuation plan.



Director, PEMA Central Area Office

Date 6/13/2006

The Department of Environmental Protection, Bureau of Waterways Engineering, Division of Dam Safety, hereby approves the Emergency Action Plan for LAUREL CREEK DAM (D44-062).



Chief, Division of Dam Safety

Date 6/19/06

EMERGENCY ACTION PLAN

SURVEILLANCE, WARNING AND EVACUATION PROCEDURES

**LAUREL CREEK DAM
DEP NUMBER D44-062**

LOCATED IN MIFFLIN COUNTY, ARMAGH TOWNSHIP

LATITUDE 40° 43' 48"

LONGITUDE 77° 37' 44"

OPERATED BY: The Municipal Authority of the Borough of Lewistown
Craig Bubb, Executive Director
70 CHESTNUT STREET
LEWISTOWN, PA 17044
TELEPHONE: WORK: (717) 248-0165
HOME: (717) 248-0797
24 HOUR:

OWNED BY: The Municipal Authority of the Borough of Lewistown
ADDRESS: 70 CHESTNUT STREET
LEWISTOWN, PA 17044
TELEPHONE: WORK: (717) 248-0165
HOME: (717) 248-0797

**DATE: SEPTEMBER 2002
REVISED: MAY 2, 2006**

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PROMULGATION AND CONCURRENCE

We, the undersigned, on date indicated, have reviewed the requested support activity in the Emergency Action Plan for the Laurel Creek Dam. Our support action will be executed in accordance with existing Standing Operation Procedures.



The Municipal Authority of the Borough of
Lewistown, DAM OWNER AND OPERATOR
CRAIG BUBB, EXECUTIVE DIRECTOR

5/8/06

DATE




E.M. CORD, MIFFLIN COUNTY EMA
PHILIP C. LUCAS, JR., DIRECTOR

17 May 2006

DATE

PEMA AND DEP APPROVALS

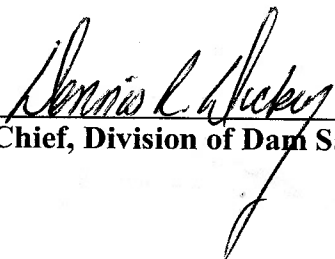
The Pennsylvania Emergency Management Agency, hereby finds the Emergency Action Plan contains key elements for an effective warning and evacuation plan.



Director, PEMA Central Area Office

Date 6/13/2006

The Department of Environmental Protection, Bureau of Waterways Engineering, Division of Dam Safety, hereby approves the Emergency Action Plan for LAUREL CREEK DAM (D44-062).



Chief, Division of Dam Safety

Date 6/19/06

I. PURPOSE AND SCOPE

- A. To safeguard the lives as well as to reduce property damage of the citizens living within the dam's potential downstream flood or inundation area.
- B. To provide for effective dam surveillance, prompt notification to local emergency management agencies, citizen warning and evacuation response, when required.
- C. To identify emergency actions to be taken by the dam owner/operator, public officials, emergency personnel, and to outline response actions in the event of a potential or imminent failure of the dam.

II. SITUATION

- A. The dam is a 135 foot high, 600 foot long, rolled rock filled, hydraulic sluiced dam, maintaining a normal pool of 3,050 acre-feet of water with a maximum pool capacity of 4,080 acre-feet.
- B. The dam is located Laurel Creek, 2 miles northwest of the Village of Milroy, along Route 322. Refer to Location Map at ***Attachment C***.
- C. The inundation area resulting from a sudden dam failure is bordered along Laurel Run, Honey Creek, and Kishacoquillas Creek beginning at the Laurel Creek Dam and terminating at the confluence of Kishacoquillas Creek with the Juniata River. See Inundation Map at ***Attachment A***.
- D. Within the inundation area are approximately 800 buildings with 2,200 residents. This includes approximately 80 privately owned businesses. Refer to the Inundation Map at ***Attachment A***.
- E. Critical infrastructure located within the inundation area are as follows:
 - 1. Government Offices
 - a. Derry Township
 - 2. Emergency Services
 - a. Brooklyn Fire Company
 - 3. Schools
 - a. Armargh Elementary
 - 4. Utilities and Bussinesses
 - a. Standard Steel
 - b. Granville Sewer Authority
 - c. Suburban Propane
 - 5. Emergency Transportation
 - a. J&D's Bus Garage
 - b. Fisher's Bus Garage

III. CONCEPT OF OPERATIONS

A. SURVEILLANCE - (DAM OWNER OR OPERATOR)

1. Normal Conditions

- a. The Executive Director of the Municipal Authority of the Borough of Lewistown or his designated representative will conduct an on-site visual inspection of the dam, the dam's spillway(s), control systems, and the toe area below the dam at a minimum of once every three months. Any abnormal or questionable conditions will be immediately brought to the attention of the owner's engineer and the Division of Dam Safety of DEP.

2. Unusual Event Conditions

- a. Possible failure of this dam is most likely to occur during severe thunderstorms, heavy rains with local flood warnings, tropical storms and hurricanes, or heavy rains with frozen ground and/or snow cover.
- b. The Executive Director of the Municipal Authority of the Borough of Lewistown or his designated representative will commence 24-hour continuous around-the-clock surveillance of conditions at the dam site when:
 - (1) The water level in the impoundment area has reached the threshold level of 12 feet below the top of the dam (2 feet of flow in the emergency spillway), or
 - (2) The National Weather Service issues a flash flood watch or warning and conditions warrant, or
 - (3) Any condition(s) listed in paragraph III.C.1. is observed during routine dam maintenance or an inspection, or
 - (4) Following the occurrence of an earthquake in the general region of the dam.

B. TERMINATION OF SURVEILLANCE

- 1. The Executive Director of the Municipal Authority of the Borough of Lewistown or his designated representative may terminate 24 -hour surveillance of dam site conditions when:
 - a. The National Weather Service ends a flash flood watch or warning, and

- b. Heavy rains have ended and the water level in the lake has dropped 12 feet below the top of the dam and is receding.
- c. After personal inspection by a knowledgeable professional engineer of the dam site, following an earthquake, overtopping of the dam, or an evacuation of the inundation area as a result of this EAP, or other serious problems resulting in a notification of a dam site emergency.

C. WARNING NOTIFICATION

- 1. The Executive Director of the Municipal Authority of the Borough of Lewistown or his designated representative is responsible for determining the dam's threat potential. The following conditions constitute a dam emergency and require notification to the Mifflin County Communications Center 911 and the Department of Environmental Protection's Southcentral Regional Office.
 - a. The water level in the impoundment area has reached the threshold level of 10 feet below the top the dam.
 - b. The depth of flow in the emergency spillway has reached the depth of 4 feet(12 feet below top of concrete wall at lower bridge).
 - c. Imminent failure of this dam might be indicated by observance of one or more of the following conditions at the dam site.
 - (1) The reservoir level is at or near the top of the dam and water is flowing, or about to flow, over the top of the dam.
 - (2) The overflow pipe or spillway is damaged, or clogged with debris or ice, which is resulting in a rapid rise in the lake or pond level.
 - (3) The spillway is experiencing heavy flows which are causing severe erosion to the spillway or the dam embankment.
 - (4) Any structural movement or failure of the concrete spillway or the spillway abutment walls.
 - (5) Any sloughing or sliding of the embankment upstream or downstream slope. Also, earth slides in the spillway channel, either upstream or downstream the dam's crest, which could impede the flow in the spillway.
 - (6) Subsidence, sinkholes or cracks found in any part of the dam's embankment or abutting slopes.

- (7) Any new discharge of water is observed through the dam's embankment or abutting slopes, adjacent to any conduit outlets, or under the dam, which appears as a boil along the downstream toe. Should such a discharge occur and the water is cloudy or muddy in color, then a very serious problem exists.
2. Warning notification will be relayed from the Mifflin County Communications Center 911 to all emergency responders and designated government officials and agencies.
3. Emergency management officials will accomplish the needed actions, which are explained in this EAP, in accordance with their existing recommended operating guidelines and existing municipal or county emergency operation plans.

D. EVACUATION

Evacuation or pre-evacuation warning of the public may commence upon notification by the Executive Director of the Municipal Authority of the Borough of Lewistown or his designated representative of a potential or imminent failure of the dam. Emergency responders will initiate action in accordance with plan outline and any existing internal organizational recommended operating guidelines, and existing municipal or county operation plans

IV. RESPONSIBILITIES AND DUTIES - EMERGENCY RESPONSE

A. DAM OWNER (SURVEILLANCE- DAM SITE EMERGENCY)

1. The Executive Director of the Municipal Authority of the Borough of Lewistown or his designated representative will provide for 24-hour on site dam surveillance and monitoring.
2. When the situation meets the criteria under the warning notification guidelines, presented in Section III.C.1, indicating a failure of the dam is possible or a significant threat condition is developing, the Executive Director of the Municipal Authority of the Borough of Lewistown or his designated representative will initiate warning communication to the Mifflin County Communications Center 911 and the Department of Environmental Protection's Southcentral Regional Office.

B. MIFFLIN COUNTY COMMUNICATIONS CENTER 911

1. The Mifflin County Communications Center will notify (Telephone numbers and points of contact are listed in Attachment D):

- a. Mifflin County 911/EMA
- b. Milroy Fire & EMS Company
- c. Reedsville Fire Company
- d. Yeagertown Fire Company

- e. Burnham Fire Company
- f. Newtown Fire Company
- g. Highland Park Fire Company
- h. Medic 29
- i. City Fire & Rescue Company
- j. FAME Emergency Medical Services
- k. United Fire Company
- l. Brooklyn Fire Company
- m. Junction Fire Company
- n. Armagh Township Police Department
- o. Mifflin County Regional Police Department
- p. Granville Township Police Department
- q. Pennsylvania State Police – Lewistown Barracks

C. MIFFLIN COUNTY EMA

- 1. The Mifflin County EMA will contact the following personnel and agencies (See Attachment D):
 - a. Armagh Township EMA
 - b. Brown Township EMA
 - c. Derry Township EMA

- d. Burnham Borough EMA
 - e. Lewistown Borough EMA
 - f. Granville Township EMA
 - g. Media - Advisory and/or Warning (Activate EAS). Refer to Attachment E
 - h. Mifflin County EOC staff, as necessary
 - i. American Red Cross Mifflin-Juniata Chapter (when mass care or family assistance is required). Coordinate sheltering per ESF 6 of County EOP.
 - j. Mifflin County elected officials
 - k. Pennsylvania Emergency Management Agency
 - l. Mifflin County School District (school bus routes)
 - m. Lewistown Hospital
- 2. The Mifflin County EMA will ascertain and report to PEMA any unmet needs requirements.
 - 3. The Mifflin County EMA will initiate Damage Assessment and Recovery procedures as the situation requires.
 - 4. The Mifflin County EMA will contact the following downstream County EMAs (see attachment D):
 - a. Juniata County
 - b. Perry County
 - c. Cumberland County
 - d. Dauphin County

D. LOCAL MUNICIPAL EMAs

- 1. ARMAGH TOWNSHIP EMA
 BROWN TOWNSHIP EMA
 DERRY TOWNSHIP EMA
 BURNHAM BOROUGH EMA
 LEWISTOWN BOROUGH EMA
 GRANVILLE TOWNSHIP EMA

- a. Notify municipal elected officials.
- b. Advise municipal services (water, sewer, etc.).
- c. Keep the County EMA apprised of the situation.
- d. Coordinate the evacuation (where appropriate).
- e. Perform initial damage assessment.

E. FIRE DEPARTMENTS

- 1. MILROY FIRE COMPANY
REEDSVILLE FIRE COMPANY
YEAGERTOWN FIRE COMPANY
BURNHAM FIRE COMPANY
NEWTON FIRE COMPANY
HIGHLAND PARK FIRE COMPANY
CITY FIRE & RESQUE COMPANY
UNITED FIRE COMPANY
BROOKLYN FIRE COMPANY
JUNCTION FIRE COMPANY

- a. Provide citizen notification and route alerting to advise residents living within their jurisdiction. (See Inundation Map - Attachment A)
- b. Assist in evacuation.
- c. Assist police and EMS, as requested.
- d. Provide communications support if feasible and requested.

F. POLICE SERVICES

- 1. ARMAGH TOWNSHIP POLICE DEPARTMENT
PENNSYLVANIA STATE POLICE – LEWISTOWN BARRACKS
MIFFLIN COUNTY REGIONAL POLICE DEPARTMENT
GRANVILLE TOWNSHIP POLICE DEPARTMENT

- a. Dispatch radio vehicle to dam site in order to provide alternate communications system – Armagh Township Police Department.

- b. Assist evacuation traffic flow and establish traffic control points (TCP) at pre-designated locations (See Inundation Map – Attachment A and Traffic Control Points – Attachment B).
- c. Prevent unauthorized entry into emergency areas.
- d. Provide assistance with route alerting, if requested.

G. EMERGENCY MEDICAL SERVICES (EMS)

1. THOSE ADMINISTERED BY FAME EMS, MEDIC 29 AND MILROY EMS

- a. Provide evacuation transportation assistance and coordinate with designated fire services agencies for transportation of persons with disabilities and any special needs.
- b. Assist fire and police departments as requested.
- c. Provide EMS support to any mass care center as requested.

H. AMERICAN RED CROSS

1. MIFFLIN-JUNIATA CHAPTER (If requested by Mifflin County EMA)

- a. Alert person(s) responsible to set-up and operate reception center at the Hartman Center, Indian Valley Middle School, Brown Elementary School, Indian Valley High School, Highland Park Elementary School, and Lewistown Area High School.
- b. Support operations of the reception center and activate mass care center staff.
- c. Maintain operations of reception center/mass care center as requested by EMA officials until final disposition of evacuees is completed.

I. PENNSYLVANIA DEPARTMENT OF TRANSPORTATION (PennDOT)

- 1. Provide services, signs, barricades and guidance on roads and bridges affecting the evacuation and recovery.

V. ADMINISTRATION AND LOGISTICS

A. Notices (see Attachment F) will be posted at the following public places:

- 1. Armagh Township Building

2. Brown Township Building
3. Derry Township Building
4. Lewistown Borough Building
5. Burnham Borough Office
6. Granville Township Office.
7. Mifflin County Regional Police Department
8. Pennsylvania State Police, Lewistown Barracks
9. Lewistown Borough Tax Office
10. Mifflin County Tax Office
11. Mifflin County Courthouse
12. Mifflin County Library
13. Municipal Authority of the Borough of Lewistown Office.

B. The Notice (see Attachment F) must state that copies of the Emergency Action Plan for this dam are available for inspection at the following locations (include physical address):

1. Mifflin County Emergency Services, 20 North Wayne Street, Lewistown, PA, 17044.
2. Armagh Township Building, 103 College Avenue, Milroy, PA 17063.
3. Brown Township Building, 7748 State Route 655, Reedsville, PA 17084.
4. Burnham Borough Building, 1 Avenue, Burnham, PA.
5. Derry Township Building, Mill Street, Yeagertown, PA 17099.
6. Granville Township Building, 100 Helen Street, Lewistown, PA 17044.
7. Lewistown Borough Building, 2 East 3rd Street, Lewistown, PA 17044.
8. Municipal Authority of the Borough of Lewistown, Dam Owner, 70 Chestnut Street, Lewistown, PA 17044

- C. New Notices will be sent to those agencies in paragraph "A" above whenever Plan is revised.

VI. AUTHORITY AND REFERENCES

A. AUTHORITY

1. The Dam Safety and Encroachments Act (32 P.S. sections 693.1-693.27), May 16, 1985.
2. The Pennsylvania Code - Title 25, Chapter 105 Dam Safety and Waterways Management, Section 105.63 and 105.134.
3. Emergency Management Services Code, 35 Pa C.S. Section 7101 et seq., as amended.

B. REFERENCES

1. Guidelines for Developing an Emergency Action Plan for Hazard Category 1 & 2 Dams. Prepared by the Department of Environmental Protection, Water Management, Bureau of Waterways Engineering, Division of Dam Safety, and the Pennsylvania Emergency Management Agency, July 2005.
2. Inspection, Maintenance and Operation of Dams in Pennsylvania. Prepared by the Department of Environmental Protection, Water Management, Bureau of Waterways Engineering, Division of Dam Safety, August 2004.
2. Mifflin County Emergency Operations Plan.

VII. DEFINITIONS

- A. **ABUTMENT** - The part of the valley's hillside against which the dam abuts. Right and left abutments are those on respective sides of the dam as an observer looks downstream.
- B. **AFFECTED COUNTIES/MUNICIPALITIES** – Those jurisdictions within Pennsylvania or adjoining states that, according to the inundation map, may experience flooding as a result of a failure of the dam.
- C. **BOIL** - A disturbance in the surface layer of soil caused by water escaping under pressure from behind a water-retaining structure such as a dam or a levee. The boil may be accompanied by deposition of soil particles (usually sand or silt) in the form of a ring (miniature volcano) around the area where the water escapes.

- D. **BREACH** - An opening or a breakthrough of a dam sometimes caused by rapid erosion of a section of earth embankment by water.
- E. **CONDUIT** - A pipe used to convey water through or around or under a dam.
- F. **CONTROL TOWER** - A structure in the dam or reservoir used to control withdraw of water from the reservoir thru pipes or culverts.
- G. **CREST OF DAM** - The crown of an overflow section of the dam. In the United States, the term "crest of dam" is often used when "top of dam" is intended. To avoid confusion, the terms **crest of spillway** and **top of dam** should be used for referring to the overflow section and dam proper, respectively.
- H. **CULVERT** - (a) A drain or waterway structure built transversely under a road, railway, or embankment. A culvert usually comprises a pipe or a covered channel of box section. (b) A gallery or waterway constructed through any type of dam, which is normally dry but is used occasionally for discharging water; hence the terms scour culvert, drawoff culvert and spillway culvert.
- I. **DAM** - A barrier built across a watercourse for impounding or diverting the flow of water.
- J. **DAM FAILURE** - The uncontrolled release of a dam's impounded water. It is recognized that there are degrees of failure. Any malfunction or abnormality, outside the design assumptions and parameters, which adversely affect a dam's primary function of impounding water is properly considered a failure. Minor malfunctions or abnormalities can result in a sudden failure of a dam.
- K. **EARTH DAM (EARTHFILL DAM)** - An embankment dam in which more than 50% of the total volume is formed of compacted fine-grained earth.
- L. **EMBANKMENT** - Fill material, usually earth or rock, placed with sloping sides.
- M. **EMERGENCY** - A condition of serious nature which develops unexpectedly and endangers the structural integrity of a dam or endangers downstream property and human life. An emergency requires immediate action.
- N. **EMERGENCY ACTION PLAN (EAP)** - A formal plan of procedures designed to minimize consequences to life and property in the event of an emergency at a dam.
- O. **FACE** - With reference to a structure, the external surface that limits the structure, e.g., the face or a wall or dam.
- P. **FAILURE** - An incident resulting in the uncontrolled release of water from an operating dam. See "Dam Failure".
- Q. **FOUNDATION OF DAM** - The natural material on which the dam structure is placed.

- R. **GROIN** - That area along the contact (or intersection) of the face of a dam with the abutment.
- S. **HAZARD** - A situation which creates the potential for adverse consequences such as loss of life, property damage, and adverse social and environmental impacts. Impacts may be for a defined area downstream of a dam from floodwaters released through spillways and outlet works of the dam or waters released by partial or complete failure of the dam. They may also be for an area upstream of the dam from effects of backwater flooding or effects of landslides around the reservoir perimeter.
- T. **INUNDATION AREA** - The downstream area that would be flooded or other wise affected by the failure of a dam or large flows. This area can be subject to a fast moving flood wave, 20 to 50 MPH is common, with a height of 1 foot to tens of feet
- U. **INUNDATION MAP** - A map delineating the area that would probably be flooded in the event of a dam failure. This map must be prepared by a registered professional engineer.
- V. **NOTIFICATION** - To promptly inform appropriate individuals or emergency agency about an emergency condition so they can initiate appropriate actions.
- W. **NORMAL WATER LEVEL (NORMAL WATER POOL)** - For reservoir with a fixed overflow spillway crest, it is the lowest level of that crest.
- X. **OPERATOR** - The person or position in a company or organization, who is responsible for a dam's operation and surveillance.
- Y. **OUTLET** - A constructed opening through which water can be safely discharged for a particular purpose from a reservoir.
- Z. **OWNER** - Any person, authority or agency that manages a dam or reservoir.
- AA. **SEEPAGE** - The movement of water that might occur through the dam, its foundation or its abutments. Small amounts of clear water seepage is normal. Increase in the amount of water flow or change in color is a concern for a dam's safety.
- BB. **SLIDE** - 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 materials.
- CC. **SPECIAL NEEDS FACILITY** – A building or establishment relating to people who have specific needs, such as children or those associated with a disability.
- DD. **SPILLWAY** - A structure over or through which flows are discharged. If the flow is controlled by gates, it is considered a controlled spillway; if the elevation of the spillway crest is the only control, it is considered an uncontrolled spillway.

- EE. **SPILLWAY CHANNEL** - A channel conveying water from the spillway crest to the river downstream.
- FF. **TOE OF DAM** - The junction of the downstream face of a dam with the ground surface.
Also referred to as downstream toe. For an embankment dam, the junction of the upstream face with ground surface is called the upstream toe.
- GG. **TOP OF DAM** - The elevation of the uppermost surface of a dam, usually a road or walkway, excluding any parapet wall, railings, etc.
- HH. **TRAFFIC CONTROL POINT (TCP)** – Manned posts established at critical road junctions for the purpose of controlling or limiting traffic. TCPs are used to control evacuation movement and also limit entry into the inundation area when an emergency situation requires it.

VIII. EXERCISE AND TRAINING

The dam owner will advise and cooperate with the Mifflin County EMA of any exercises scheduled, and coordinate with the Mifflin County EMA to exercise all or portions of this EAP as part of the county's all-hazard exercise program schedule.

IX. PLAN MAINTENANCE AND DISTRIBUTION

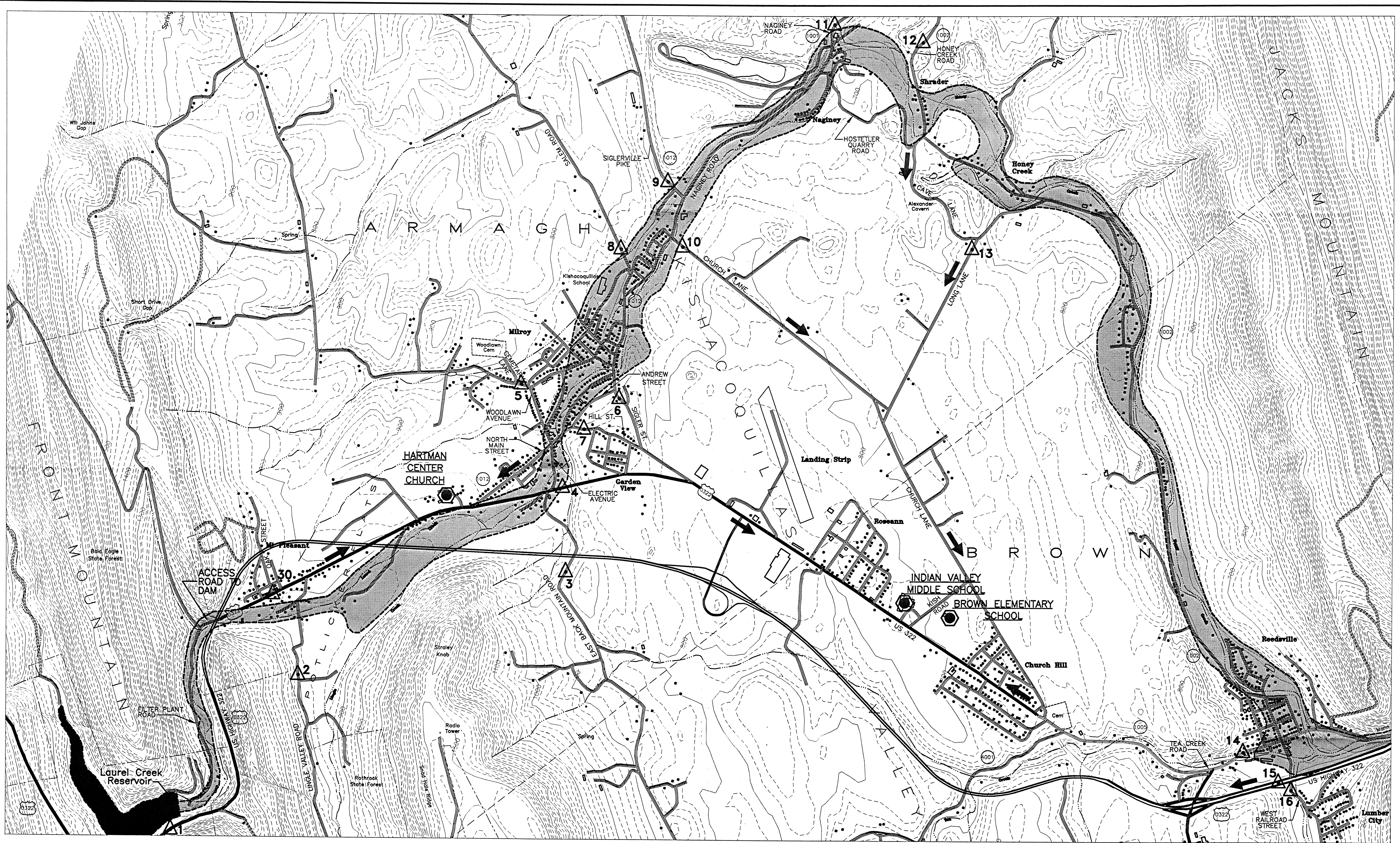
- A. This Plan will be reviewed every five years by the owner or the owner's engineer. During the five year review:
 - 1. The owner's engineer will field review the flood (inundation) area for any increase in downstream development and revise the Inundation Map, if needed.
 - 2. The owner's engineer will review and revise surveillance conditions as needed.
 - 3. The owner will coordinate with Mifflin County EMA if population increase or development within the inundation area could affect the emergency response requirements. If so, a new or revised plan should be developed.
 - 4. The owner will obtain concurrence from the affected county EMA offices.
 - 5. The owner will submit revised plan to DEP for approval.
- B. A copy of the approved EAP will be distributed to those emergency response agencies listed in Section 4 and a letter certifying distribution of the approved EAP will be sent to the DEP, Division of Dam Safety.

ATTACHMENTS:

ATTACHMENT A - DOWNSTREAM FLOOD AREA (INUNDATION) MAP
ATTACHMENT B - TRAFFIC CONTROL POINTS
ATTACHMENT C - LOCATION MAP
ATTACHMENT D - TELEPHONE ROSTER
ATTACHMENT E - MEDIA ANNOUNCEMENT
ATTACHMENT F - NOTICE

ATTACHMENT A

INUNDATION MAP



LEGEND

- EXISTING INTERMEDIATE CONTOUR
- EXISTING INDEX CONTOUR w/ ELEV.
- EXISTING STREAM / BODY OF WATER
- BOROUGH / TOWNSHIP POLITICAL BOUNDARY
- U.S. ROUTE SYMBOL AND NUMBER
- STATE ROUTE SYMBOL AND NUMBER
- POTENTIAL INUNDATION AREA
- RECEPTION / MASS CARE CENTER
- TRAFFIC CONTROL POINT
- EVACUATION ROUTE

SHEET LOCATION

GRAPHIC SCALE
(IN FEET)

CHECK GRAPHIC SCALE BEFORE USING

| NO. | DATE | REVISIONS |
|-----|----------|--|
| 1 | 12/22/97 | REVISED PER REVIEW COMMENTS |
| 2 | 6/15/99 | REVISED PER REVIEW COMMENTS (ADDED STREET NAMES) |
| 3 | 12/1/00 | REVISED PER REVIEW COMMENTS (ADDED NEW HIGHWAY) |
| | | |
| | | |
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APPROVED

INUNDATION MAP
Municipal Authority
of the
Borough of Lewistown
LAUREL CREEK DAM
DEP Number 44-062
EMERGENCY ACTION PLAN
Armagh, Brown and Derry Townships, Burnham and
Lewistown Boroughs, Mifflin County, Pennsylvania

ISSUED: 09/24/02
FILE: 72029A-1.DWG

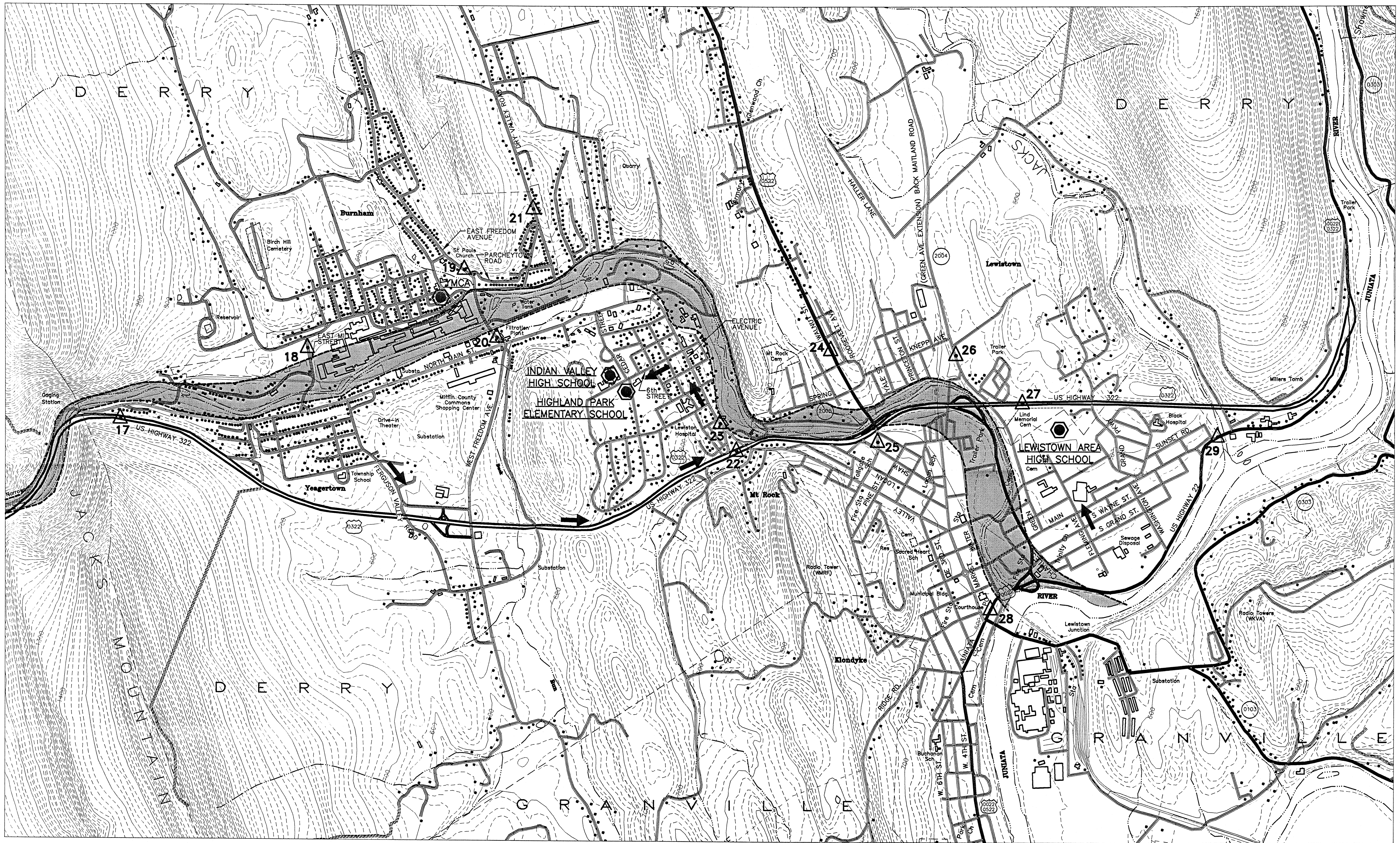
JOB: 72029
DRAWN BY: JDM

SCALE: 1" = 1000'
CHECKED BY: DCS

GD&F
GWIN DOBSON & FOREMAN INC.
Consulting Engineers
3121 Fairway Drive
Suite B
Allentown, PA 18602

SHEET NO:
A-1

G:\72029\72029a-1.dwg



LEGEND

- EXISTING INTERMEDIATE CONTOUR
- EXISTING INDEX CONTOUR w/ ELEV.
- EXISTING STREAM / BODY OF WATER
- BOROUGH / TOWNSHIP POLITICAL BOUNDARY
- U.S. ROUTE SYMBOL AND NUMBER
- STATE ROUTE SYMBOL AND NUMBER
- POTENTIAL INUNDATION AREA
- RECEPTION / MASS CARE CENTER
- TRAFFIC CONTROL POINT
- EVACUATION ROUTE

SHEET LOCATION

GRAPHIC SCALE
(IN FEET)

1000 0 500 1000 2000 4000

CHECK GRAPHIC SCALE BEFORE USING

| REVISIONS | | | |
|-----------|----------|--|--|
| NO. | DATE | DESCRIPTION | |
| 1 | 12/22/97 | REVISED PER REVIEW COMMENTS | |
| 2 | 6/15/99 | REVISED PER REVIEW COMMENTS (ADDED STREET NAMES) | |
| 3 | 12/1/00 | REVISED PER REVIEW COMMENTS (ADDED NEW HIGHWAY) | |
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INUNDATION MAP

Municipal Authority
of the
Borough of Lewistown

LAUREL CREEK DAM
DEP Number 44-062
EMERGENCY ACTION PLAN

Armagh, Brown and Derry Townships, Burnham and
Lewistown Boroughs, Mifflin County, Pennsylvania

| | | |
|--------------------|---------------|-------------------|
| ISSUED: 09/24/02 | JOB: 72029 | SCALE: 1" = 1000' |
| FILE: 72029A-2.DWG | DRAWN BY: JDM | CHECKED BY: DCS |

GD&F

GWIN
DOBSON &
FOREMAN
INC.
Consulting Engineers

3121 Fairway Drive
Suite B
Altoona, PA 16602

SHEET NO:

A-2

ATTACHMENT B

Traffic Control Points

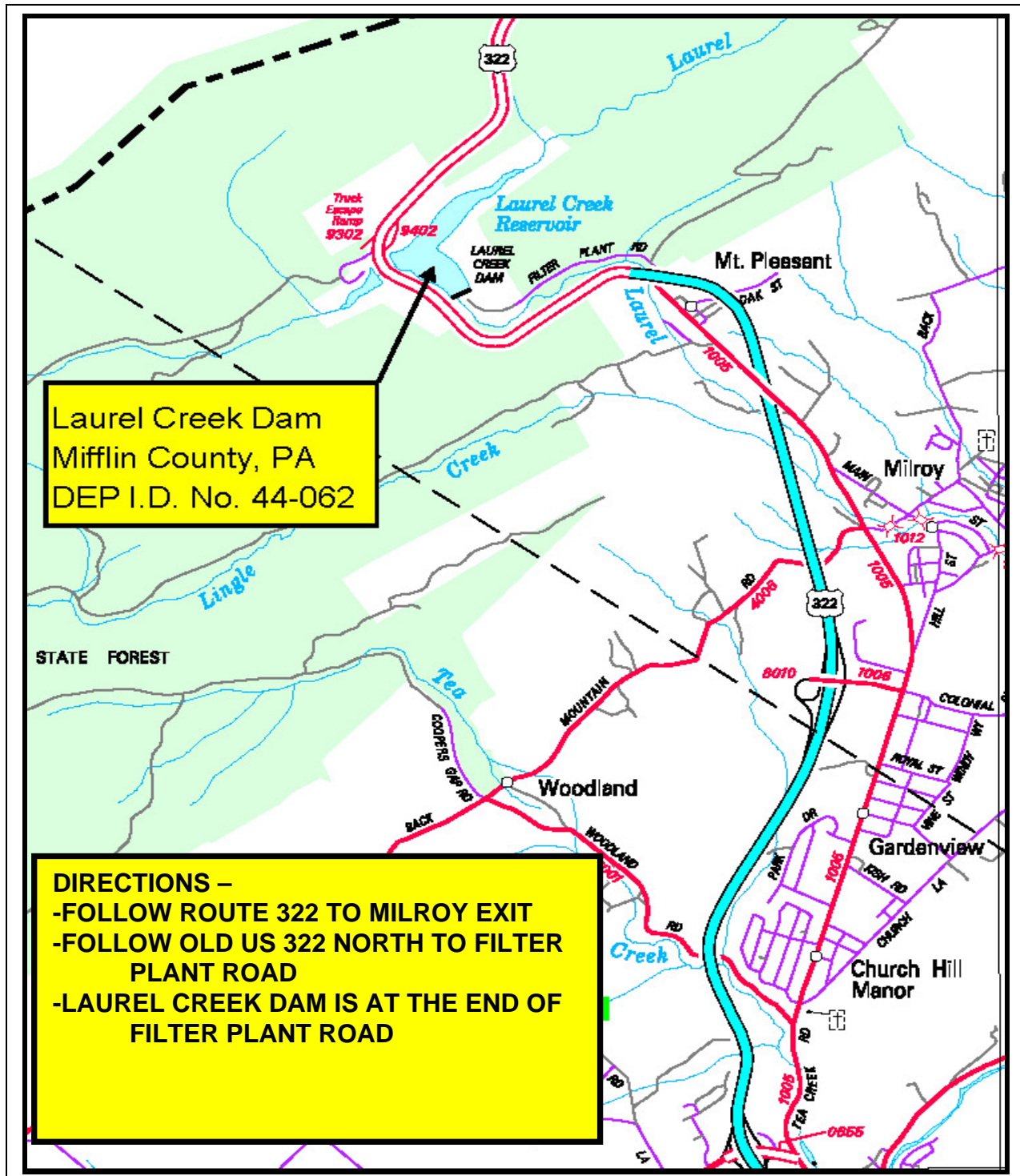
| | | |
|--------|---|---------------------------------|
| TCP 1 | US Highway 322, east bound lane, 3.5 miles west of the Milroy Exit | PA Department of Transportation |
| TCP 2 | Lingle Valley Road, ½ mile south of the intersection of Lingle Valley Road and Old US Route 322 | Aramagh Township |
| TCP 3 | East Back Mountain Road, ½ mile south of the intersection of East Back Mountain Road and Old US Route 322 | Aramagh Township |
| TCP 4 | Old US Route 322, ¼ mile east of the intersection of Old US Route 322 and Electric Avenue | PA Department of Transportation |
| TCP 5 | Electric Avenue, ¼ mile north of the intersection of Electric Avenue and North Main Street | Aramagh Township |
| TCP 6 | Sigler Street, ¼ mile north of the intersection of Sigler Street and North Main Street | Aramagh Township |
| TCP 7 | North Main Street, ½ mile west of the intersection of North Main Street and Old US Route 322 | Aramagh Township |
| TCP 8 | Salem Road, ¼ mile north of the intersection of Salem Road and Naginey Road | Aramagh Township |
| TCP 9 | Siglerville Pike, ¼ mile north of the intersection of Siglerville Pike and Naginey Road | Aramagh Township |
| TCP 10 | Church Lane, ¼ mile south of the intersection of Church Lane and Naginey Road | Aramagh Township |
| TCP 11 | Naginey Road, ¼ mile north of the intersection of Naginey Road and Hostetler Quarry Road | Aramagh Township |
| TCP 12 | Honey Creek Road, ½ mile north of the intersection of Honey Creek Road and Hostetler Quarry Road | Aramagh Township |
| TCP 13 | Long Lane, immediately south of the intersection of Long Lane and Cave Lane | Aramagh Township |
| TCP 14 | Tea Creek Road, ¼ mile west of the intersection of Tea Creek Road and Railroad Street | Brown Township |
| TCP 15 | US Highway 322, east bound lane, ½ mile east of the Reedsville/Bellville US 655. | PA Department of Transportation |
| TCP 16 | Railroad Street, ¼ mile south of the intersection of Railroad Street and Tea Creek Road | Brown Township |
| TCP 17 | US Highway 322, west bound lane, 1 ½ miles west of the Burnham/Yeagertown Exit | PA Department of Transportation |
| TCP 18 | East Mill Street, immediately south of the intersection of East Mill Street and Edwardtown Road | Burnham Borough |
| TCP 19 | East Freedom Avenue, immediately north of the intersection of East Freedom Avenue and Parcheytown Road | Burnham Borough |

| | | |
|--------|---|---------------------------------|
| TCP 20 | East Freedom Avenue, immediately north of the intersection of East Freedom Avenue and North Main Street | Burnham Borough |
| TCP 21 | Dry Valley Road, immediately east of the intersection of Dry Valley Road and 4 th Street | Derry Township |
| TCP 22 | US Highway 322, east bound lane, immediately south of Electric Avenue exit | PA Department of Transportation |
| TCP 23 | Electric Avenue, immediately north of the intersection of Electric Avenue and Mill Road | Derry Township |
| TCP 24 | Walnut Street, ¼ mile north of intersection of Walnut Street and Spring Street | PA Department of Transportation |
| TCP 25 | Walnut Street, immediately south of intersection of Walnut Street and Pennebaker Avenue | PA Department of Transportation |
| TCP 26 | Green Avenue Extension, immediately south of intersection of Green Avenue Extension and Country Farm Lane | PA Department of Transportation |
| TCP 27 | US Highway 322, west bound lane, ¼ mile east of the Route 522 west exit | PA Department of Transportation |
| TCP 28 | US Highway 522, immediately east of intersection of US Highway 522 and Route 103 | PA Department of Transportation |
| TCP 29 | US Highway 22, immediately west of intersection of US Highway 22 and South Main Street | PA Department of Transportation |
| TCP 30 | Oak Street, ¼ mile north of intersection of Oak Street and Old US Route 322 | PA Department of Transportation |

ATTACHMENT C

Location Map

LOCATION MAP



ATTACHMENT D

TELEPHONE ROSTER

| | EMERGENCY | NON- EMERGENCY |
|--|----------------------|---------------------|
| DAM OWNER: THE MUNICIPAL AUTHORITY OF THE BOROUGH OF LEWISTOWN | N/A | 717-248-0165 |
| DAM OPERATOR: THE MUNICIPAL AUTHORITY OF THE BOROUGH OF LEWISTOWN | 717- 248-1779 | 717-667-3918 |
| MIFFLIN COUNTY COMMUNICATIONS CENTER | 911 | N/A |
| DEP SOUTHCENTRAL REGIONAL OFFICE | 877-333-1904 | 717-705-4700 |
| DEP DIVISION OF DAM SAFETY | 717-787-4343 | 717-787-8568 |
| PENNSYLVANIA EMERGENCY MANAGEMENT AGENCY | 800-424-7362 | 717-651-2001 |

ATTACHMENT E

Media Announcement

ATTACHMENT E
MEDIA ANNOUNCEMENT

WARNING MESSAGE:

The Mifflin County Emergency Management Agency advises that due to conditions at the Laurel Creek Dam in Armagh Township, the public should avoid the area downstream of the dam along Laurel Creek, Honey Creek and Kishacoquillas Creek. Stay tuned for further information.

REPEAT PERIODICALLY

EVACUATION MESSAGE:

The Mifflin County Emergency Management Agency is advising all residents living downstream of the Laurel Creek Dam in Armagh Township to evacuate the area immediately. Evacuate the area Milroy, Woodland, Naginey, Shrader, Locke Mills, Honey Creek, Reedsville, Yeagertown, Burnham, Electric Avenue, and Lewistown along Kishacoquillas Creek. If you require shelter during this emergency you should report to the mass care centers at Hartman Center, Indian Valley Middle School, Brown Elementary School, Indian Valley High School, Highland Park Elementary School, or Lewistown Area High School.

REPEAT PERIODICALLY

INCIDENT RESOLVED , SAFE TO RETURN:

The Mifflin County Emergency Management Agency is advising residents of the area downstream of the Laurel Creek Dam in Armagh Township that the problem at the dam has been resolved and that residents may return to their homes.

REPEAT PERIODICALLY

NOTE: The above messages should be modified as necessary to fit the situation.

ATTACHMENT F

Notice

NOTICE

Laurel Creek DAM HAS BEEN CLASSIFIED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AS A HIGH HAZARD DAM; THIS IS, A DAM SO LOCATED AS TO ENDANGER POPULATED AREAS DOWNSTREAM BY ITS FAILURE.

**AN EMERGENCY ACTION PLAN HAS BEEN DEVELOPED FOR
LAUREL CREEK DAM**

A COPY OF THIS PLAN, INCLUDING AN INUNDATION MAP NOTING AREAS IN ARMAGH TOWNSHIP, BURNHAM BOROUGH, BROWN TOWNSHIP, DERRY TOWNSHIP, AND LEWISTOWN BOROUGH SUBJECT TO FLOODING IN THE EVENT OF FAILURE, IS AVAILABLE FOR PUBLIC INSPECTION AT THE FOLLOWING LOCATIONS:

**Municipal Authority of the
Borough of Lewistown
70 Chestnut Street
Lewistown, PA 17044**

**Derry Township Building
Mill Street
Yeagertown, PA 17099**

**Mifflin County Emergency Services
20 North Wayne Street
Lewistown, PA 17044**

**Lewistown Borough Building
2 East 3rd Street
Lewistown, PA 17044**

**Armagh Township Building
103 College Avenue
Milroy, PA 17063**

**Burnham Borough
1st Avenue
Burnham, PA 17009**

**Brown Township Building
7748 State Route 655
Reedsville, PA 17084**

**Granville Township Building
100 Helen Street
Lewistown, PA 17044**