Kanawha Putnam Emergency Management Plan Hazard Identification Annex	
Weather Emergencies **Revised December 2025; Reviewed Biennially**	**B01**

Risk	**Vulnerability**
Moderate to High	Moderate

I. Introduction

Weather phenomenon is the cause of most natural disaster declarations in the metropolitan area. This annex will estimate the risk associated with any weather event and identify plan elements that should be brought to bear to prevent, prepare for, respond, and recover from weather emergency events.

II. Flash Flooding

A. Situation

1. So-called Flash Flooding occurs when a large volume of rain falls over the same geographic area in a relatively short amount of time. The ensuing run-off from higher to lower elevations can overfill streams and flood roadways and homes.

2. Risk to the metropolitan area is moderate, with higher risk present in certain areas (see Flood Mitigation Plans).

3. Flash flooding has historically been sufficient to cause damage in the metropolitan area:

   a. Disaster declaration by the Governor and/or the President of the United States.

   b. Evacuation and permanent damage to residences.

c. Damage to places of business interrupting the ability of a firm to conduct its work.

d. Damage to roadways sufficient to render them impassable.

e. Utility infrastructure outages from flood damage.

f. Eventual river flooding.

B. Prevention

1. Prevention details are in the Kanawha County Flood Mitigation Plan and the Putnam County Flood Mitigation Plan

C. Preparation

1. The National Weather Service initiates warning procedures for weather events when the potential exists for such an event to create an emergency or disaster.

2. Elements of Functional Annex A01 – Public Warning can expedite and enhance early warning measures.

3. Many fire departments maintain the necessary assets and trained personnel to conduct swift water rescue of endangered citizens.

4. The Emergency Management Director will consult the appropriate Flood Mitigation Plan or mapping of flood prone areas to identify critical infrastructure and potential HAZMAT that might be susceptible to compromise due to flooding.

D. Response

1. If flooding extends beyond the “nuisance” level, threatening life and property, or 911 calls for service due to flooding threaten to overwhelm the 911 Center, the Emergency Operations Center may be activated to coordinate response and recovery efforts.

2. Mutual aid agreements between fire departments allow boat rescue crews to respond to assist other jurisdictions with boat rescue operations.

3. The Emergency Operations Center shall document damage reports, including those received from the National Weather Service.

E. Primary Functional Plans – include, but are not limited to:

1. A01 – Public Warning
2. A03 – Communication
3. A04 – Evacuation
4. A07 – Mass Care
5. A08 – Health and Medical
6. A12 – Special Needs Population
7. A15 – Resource Management
8. A21 – Search and Rescue
9. A24 – Recovery

F. Support Functional Plans – include, but are not limited to:

1. A14 – Law Enforcement/Security

G. Recovery

1. A24 – Recovery
2. A25 – Mitigation

III. River Flooding

A. Situation

1. Four rivers are located within the metropolitan area: the Kanawha, Elk, Coal and Poca Rivers.

2. The area includes one major river, the Kanawha, utilized for commercial navigation.

3. Risk on the Kanawha and Elk Rivers is low due to flood control dams upstream.

4. Risk on the Poca and Coal Rivers is low due to limited vulnerabilities.

5. A dam failure affecting either the Kanawha or Elk Rivers would create a significant disaster in Kanawha and Putnam County.

6. For more information, refer to Flood Mitigation Plans

B. Prevention

1. Refer to Flood Mitigation Plan

C. Preparation

1. River flooding can be anticipated following significant flash flooding. Effect may be isolated.

2. The National Weather Service initiates warning procedures for weather events when the potential exists for such an event to create an emergency or disaster.

3. Elements of Functional Annex A01 – Public Warning can expedite and complement early warning measures.

4. Many fire departments maintain the necessary assets and trained personnel to conduct swift water rescue of stranded citizens.

5. Evacuation of residents from areas prone to river flooding before flooding will reduce risk.

6. The Emergency Management Director will consult the appropriate Flood Mitigation Plan and river flood plain mapping to identify critical infrastructure and potential HAZMAT that might be susceptible to compromise due to flooding and coordinate any protective action.

7. For additional information, refer to the Kanawha or Putnam Flood Mitigation Plan

D. Response

1. If flooding extends beyond the “nuisance” level, threatening life and property, or 911 calls for service due to flooding threaten to overwhelm the 911 Center, the Emergency Operations Center may be activated to coordinate response and recovery efforts.

2. Mutual aid agreements between fire departments allow boat rescue crews to respond to assist other jurisdictions with boat water rescue operations.

3. Initial response efforts should concentrate on protection of life, then protection of critical infrastructure.

4. The Emergency Operations Center will document damage to flooding, collected from the public, response personnel and the National Weather Service.

E. Primary Functional Plans – includes, but not limited to,

1. A01 – Public Warning

2. A03 – Communication

3. A04 – Evacuation

4. A07 – Mass Care

5. A12 – Special Needs Population

6. A15 – Resource Management

7. A21 – Search and Rescue

F. Support Functional Plans – includes, but not limited to,

1. A08 – Health & Medical/Psych Care

2. A14 – Law Enforcement/Security

G. Recovery

1. A24 – Recovery

2. A25 – Mitigation

IV. Winter Storm

A. Situation

1. Winter storms can result in heavy snowfall and/or ice accumulation causing travel difficulties and utility infrastructure failure.

2. The risk for a winter storm that causes a state-of-emergency declaration is moderate.

3. Winter storms generally cause temporary problems lasting a few days.

4. Large accumulations of wet snow can cause roofs and buildings to collapse.

5. Flooding can be a secondary event caused by melting snow.

B. Prevention

1. WVDOH and city governments maintain equipment and supplies sufficient to clear blocked and icy roads.

2. Utility companies generally maintain infrastructure rights of way, reducing risk of damage.

C. Preparation

1. The National Weather Service initiates warning procedures for weather events when the potential exists for such an event to create an emergency or disaster.

2. Elements of Functional Annex A01 – Public Warning can expedite and enhance early warning measures.

3. Winter storms are usually predicted days in advance by the National Weather Service, providing an opportunity to conduct public warning.

4. Agencies tasked with clearing roadways and maintaining utilities will staff-up in the face of a significant storm.

5. The Emergency Management Director will ensure that communications facility generators are fueled and in working order.

6. The Emergency Management Director will consider billeting arrangements for EOC staff.

D. Response

1. Response may be delayed due to roadway blockages or icing.

2. Sheltering of the public may become necessary due to power failures.

E. Recovery

1. Necessary recovery efforts will be minimal unless complicated by flooding.

2. See A24 – Recovery

V. Tornado/Windstorm

A. Situation

1. Tornados and microburst windstorms can strike any part of the metropolitan area.

2. Tornados and microburst windstorms can cause damage to trees, structures, utility infrastructure and public safety communications facilities.

3. According to the National Weather Service, microburst windstorms, or so-called straight-line winds, can cause damage to the same extent as a tornado.

4. These events pose a significant life safety threat to the public.

5. Damage from these events will be limited to the path of the storm and not likely to affect the entire metropolitan area.

6. The abundance of manufactured housing utilized in the metropolitan area poses vulnerability.

7. Tornadoes and windstorms can occur in any month, but most frequently during the spring and early summer months.

8. The National Weather Service possesses the technology to observe potential, in-progress tornadic storms using Doppler radar.

9. Tornadoes and microburst storms can occur with little or no warning.

10. These storms move quickly, passing a given point within minutes.

B. Prevention

1. Since these storms cannot be prevented, public education creates awareness that dangerous storms can, and do, occur.

2. The National Weather Service conducts public awareness campaigns and weather spotter classes to educate the public.

3. Identification of critical infrastructure can provoke measures to protect those assets from damage.

C. Preparation

1. The National Weather Service initiates warning procedures for weather events when the potential exists for such an event to create an emergency or disaster.

2. Elements of Functional Annex A01 – Public Warning can expedite and enhance early warning measures.

3. Since these storms occur quickly and with little, or no, warning, utilization of all available public warning assets should be carefully considered by the Emergency Management Director.

4. Public safety response personnel will be kept informed as to the status of dangerous storms and will take measures to protect themselves when such measures become necessary.

D. Response

1. The Emergency Management Director should anticipate that the 911 Center will be overwhelmed with radio traffic and calls from the public as the storm passes.

2. Response personnel will, as necessary, take steps to protect themselves from the storm.

3. Debris removal assets will be needed immediately following the storm to clear blocked roadways.

4. The EOC will document all damage to its jurisdiction, including that information received by the National Weather Service.

E. Recovery

1. See A 24 – Recovery.