

Kanawha Putnam Emergency Management Plan Hazard Identification Annex	
<h1 style="margin: 0;">Dam / Impoundment Failure</h1> <p style="margin: 0;"><b>Revised September 2022; Reviewed Biennially</b></p>	<h1 style="margin: 0;">B18</h1>
<b>Risk</b>  High	<b>Vulnerability</b>  High

## I. Introduction

The metropolitan area contains five types of dam structures:

- A. Coal Refuse
- B. Flood Control
- C. Chemical Plant Impoundments
- D. Navigation Locks and Dam
- E. Raw Water Storage Dams (Flood control/recreation)

All dam sites pose a threat to life and property. This annex describes the hazards associated with dam structures and stipulates functional sections of the Plan that should or could apply to an emergency incident involving a dam.

## II. Situation and Assumptions

- A. Dams fall under a vigorous permit process administered by the WV Department of Environmental Protection.
- B. Major flood control dams are maintained by the US Army Corps of Engineers.
- C. West Virginia has had one coal refuse dam failure which resulted in several deaths.

Also, throughout the United States we have experienced other types of dam failures.

- D. Litigating a dam failure is the responsibility of the dam owner.
- E. Public Warning is the key to high survival rate, affording citizens the opportunity to self protect to higher ground or follow evacuation instructions.
- F. The worst-case scenario for a dam failure would be a catastrophic failure due to overtopping, earthquake or explosion.
- G. According to open-source reporting, terrorist have shown interest in targeting dam sites in order to cause failures.

### **III. Functional Annex Components**

A. Primary Functional Annexes – include, but are not limited to:

- 1. A01 – Public Warning
- 2. A02 – Emergency Public Information
- 3. A03 – Communications
- 4. A04 – Evacuation
- 5. A07 – Mass Care
- 6. A09 – Fire/Rescue
- 7. A14 – Law Enforcement/Security

B. Support Functional Annexes – include, but are not limited to:

- 1. A05 – Mass Evacuee Transportation
- 2. A06 – Traffic Diversion
- 3. A08 – Health and Medical
- 4. A12 – Special Needs Population

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5. A15 – Resource Management
6. A16 – Chemical/HAZMAT Response
7. A19 – Crisis Relocation
8. A21 – Search and Rescue
9. A23 – Volunteer Response
10. A24 – Recovery
11. A27 – Catastrophic Event