

Overall Findings on Flood Fatalities in West Virginia:

1. County-Based Fatalities:

- Logan County leads with 123 fatalities.
- Kanawha County follows with 91 fatalities.
- McDowell – 44 fatalities
- Jefferson – 42 Fatalities
- Ohio – 21 fatalities

2. FEMA Flood Zone Breakdown:

- **Zone A:** 211 fatalities 43.2%
- **Zone AE:** 174 fatalities 35.7%
- **Zone AE (Floodway):** 59 fatalities 12.1%
- **Unmapped:** 20 fatalities 4.1%

**** An unmapped zone refers to an area where a fatality occurred but is not currently designated within a FEMA flood zone****

- **The remaining fatalities were located in Advisory A, Levee Protected, or shaded X**

3. Mitigation and Flood Control:

- A significant number of fatalities occurred in areas where no mitigation structures were implemented post-flood event.
- The main mitigated structure is a stream gauge, where 99 fatalities occurred from streams that currently have a stream gauge.
- Only 12 fatalities are located on streams with a structure built post-flood event for flooding purposes.

4. 11 fatalities in Kanawha County occurred in areas that are now protected by levees, indicating that mitigation measures were implemented after the flood. However, at the time of the event, no levee was in place.

5. Main Cause of Death:

- **Drowning** is the leading cause of death by far.
- **Landslides** were the cause of 7 deaths
- **Pre-Existing Medical Conditions** were the cause of 4 deaths.
- **Utilities** were the cause of 4 deaths (Utilities include gas explosion, carbon monoxide poisoning, electricity)

6. Victim Demographics:

- **Age:** Middle-aged adults and children are the most frequent age groups, tied for the highest number of fatalities.
- **Gender:** The gender distribution is nearly equal, with females at 49.6% and males at 50.4%.

7. **Most Deadly Disaster:**

- The **Buffalo Creek Disaster** remains the deadliest, claiming 123 lives.

8. **Total Fatalities:**

- **488 fatalities** are cataloged across **12 major flood disasters**.

9. **Stream-Related Fatalities:**

- **98 fatalities** occurred on streams that now have a stream gauge.
- **12 fatalities** were located near streams with mitigation structures.

10. **Streams with Most Fatalities:**

Streams responsible for mass fatalities:

1. Buffalo Creek (123 fatalities)
2. Cabin Creek (42 fatalities)
3. Caldwell Run (10 fatalities)
4. Dry Fork (13 fatalities)
5. Elk Two-Mile Creek (10 fatalities)
6. Elkhorn Creek (27 fatalities)
7. Magazine Branch (9 fatalities)
8. Middle Island Creek (19 fatalities)
9. North Fork South Branch Potomac River (15 fatalities)
10. Paint Creek (17 fatalities)
11. Seng Creek (21 fatalities)
12. South Branch Potomac River (12 fatalities)

11. **Mass Casualties:**

- **73% of known fatalities** were part of **mass casualty events** (more than 3 deaths per event), totaling **62 separate mass casualty events**.
- A mass casualty event was defined as a group of individuals known to be together at the time of the disaster, either within the same structure or sharing the same last name in the same event and location, based on the assumption that they were together at the structure level.
- The largest mass casualty event resulted in **13 fatalities**.

12. Property Damage:

Year	Property Damages
1870	91,000,000
1889	16,670,000
1888	14,550,000
1901	2,000,000
1916	108,696,000
1932	43,103,000
1943	17,808,000
1950	98,000,000
1961	31,746,000
1972	568,181,000
1985	1,540,000,000
2016	1,100,000,000

13. Date

- 4 in July – All Summer Thunderstorms
- 4 in June – All Summer Thunderstorms
- 2 In August – All Summer Thunderstorms
- Tropical storm in September and November

