

### *Plan Update Notes*

Since no structures would experience damage due to drought, this updated plan, like the previous plan, does not identify existing or future buildings at risk of loss due to drought.

### *Exposure of Existing Buildings to Damages Due to Drought*

No existing buildings are exposed to damage due to drought.

### *Exposure of Future Buildings to Damages Due to Drought*

No future buildings will be exposed to damage due to drought.

## **Estimating Potential Loss**

### *Plan Update Notes*

There is no change in this updated plan in the estimate of loss due to drought.

### *Methodology*

Estimated potential dollar loss due to drought is based on damages provided in SHELDUS, which are zero.

### *Estimated Potential Dollar Losses*

The estimate potential dollar loss annually in Union County due to structural damage due to drought is \$0.00.

## **Summary of Risk Assessment Findings**

The purpose of completing a rigorous assessment of risk is to inform decision-making about the mitigation actions that are most appropriate for the County. Table 29 shows that Union County can expect the greatest losses from flooding. Annualized anticipated losses due to flooding are more than twice the losses anticipated due to tornado or high wind. Annualized anticipated losses due to tornado or high wind are more than 17 times the anticipated losses due to heavy snow or ice. Thus, the majority of actions proposed in this mitigation plan address potential damage due to flooding.

**Table 29: Risk Assessment Findings**

| Hazard               | Vulnerable Locations       | Annual Probability of Occurrence in Union County | Estimated Annual Dollar Loss (in 2008 dollars) |
|----------------------|----------------------------|--|--|
| Flood                | Special Flood Hazard Areas | 33%  | \$1,305,932.35                                 |
| Heavy Snow or Ice    | Entire County              | 100%   | \$35,396.60                                    |
| Tornado or High Wind | Entire County              | 100%   | \$616,907.72                                   |
| Wildfire             | Wooded Areas               | <1%  | \$0.00   |
| Earthquake           | Entire County              | <1%  | \$0.00   |
| Land Subsidence      | Localized                  | <1%  | \$0.00   |
| Landslide            | Steep Slopes               | <1%  | \$0.00   |
| Drought              | Entire County              | 25%  | \$0.00   |

The risk assessment also identified two boroughs where particular hazards are not expected to occur. These boroughs will not be implementing some of the proposed actions designed to mitigate the effects of these hazards. These are:

- Hartleton Borough, which is not at risk of damage due to flooding or wildfire
- Lewisburg Borough, which is not at risk of damage due to wildfire or landslide

The conclusion of the risk assessment is that the greatest damages attributable to a single hazard occurring in Union County can be expected to be caused by flooding. Since flooding is expected to occur once every 3 years, and since the other two damaging hazards, heavy snow or ice and tornado or high wind, are expected to occur every year, an understanding of potential costs to the County are evaluated on a 3-year basis. That is, over the course of 3 years, the County can expect to experience a total of \$3,262,845.31 in damages. Of these damages incurred over a 3-year period, only 3.25 percent would be due to heavy snow or ice, 56.72 percent would be due to tornado or high wind, and 40.02 percent would be due to flooding. Thus, the hazards that will receive immediate attention and the greatest number of County resources will be tornado or high wind and flooding. Fewer resources will be directed toward reducing potential damages due to heavy snow or ice, and almost no resources will be used to mitigate the negative effects of the other hazards identified.