Assess Vulnerability and Risk | Guiding Questions for Narrative Assessments

WHO

This exercise is for the practitioner to complete in the Assess Vulnerability and Risk step.

WHAT

After determining which, if any, assessments are going to be narrative, this document provides guiding questions for developing the narrative.

SUPPORTING RESOURCES

- Refer to 3.1 Determine Assessment Type - Worksheet for a list of assessments that were determined would be narrative.

INSTRUCTIONS

- ☐ The guiding questions that can be used to develop this narrative are listed below.
- ☐ Review the example provided and develop the narrative assessment(s) by doing any additional research into the hazard and community and recording answers to the questions provided.

Guiding Questions

- Define the hazard. What is it and where does it occur? Whom does it affect? What are the climate and non-climate stressors associated with the hazard?
- Is there spatial data available, what does it show about the hazard and the community? Any contextual information that can be provided? Provide any maps or other visuals as needed or available.
- Based on research done for the community, what are some key findings? How can these be interpreted in terms of vulnerability to the community? Provide any maps or other visuals as needed or available.
- Consider root causes of social vulnerability. Because the spatial assessments will likely focus on property-based community assets, narrative assessments may turn the focus back to how hazards affect people in the community. Often, there is incomplete spatial data and not at a scale that can be used for a spatial assessment. By uncovering and addressing contributing causes of disproportionate climate risk, options can be developed that address full community resilience.

Example

Define the hazard. What is it and where does it occur? Whom does it affect? What are the climate and non-climate stressors associated with the hazard?
Wildfire is a natural disturbance that provides benefits to ecosystems and natural systems but can become a threat when it negatively impacts communities and the assets we value. This assessment will examine the threat of wildfire in the Wildland Urban Interface. The Wildland Urban Interface includes areas where homes and assets are adjacent to vegetation and fuels for wildfire. The assessment of vulnerability and risk to wildfire may help prioritize areas where fire response may be more challenging. The risk of wildfire is also greatest in years of drought. Climate stressors for wildfire include temperature variability and drought. Lightning is also known as a source of wildfire ignitions in more remote areas. Non-climate stressors include growth, hydrologic alterations, and homes in the Wildland Urban Interface.
If there is spatial data available, what does it show about the hazard and the community? Any contextual information that can be provided? Provide any maps or other visuals as needed or available.
Data from the SILVIS Lab was used to assess potential for exposure to direct impacts from wildfire. This includes the Wildland Urban Interface Mapping products (for intermix and interface). These maps illustrate where the Wildland Urban Interface is located and provide an understanding of the areas where homes and developments intermingle with or are in close proximity to wildland vegetation and fuels for wildfire. The peak wildfire season in the state is typically January through mid-June, burning over 100,000 acres of land annually. Within the county in the past 20 years, there have been 10 wildfires over 10,000 acres in size. Lightning is considered to be one of the main causes of large wildfires on managed lands. Wildfire has a large impact on homes located in the Wildland Urban Interface and many homes in the community are not located within the Wildland Urban Interface. Additionally, smoke from wildfires can impact air quality, which in turn impacts human health.
Based on research done for the hazard in the community, what are some key findings? How can these be interpreted in terms of vulnerability to the community? Provide any maps or other visuals as needed or available.
Wildfire has an important role on the natural landscape in the county and is very actively managed, resulting in the area having the most acres burned within the region. The direct wildfire risk to people and assets in the community is relatively low due to limited Wildland Urban Interface (compared to some neighboring communities). Wildfire response capacity is also something that seems to be adequate throughout the community, based on response drive time from fire stations throughout the region. However, ingress/ egress could be an issue for development to the west of the study area, which should be taken into consideration.

Since wildfire is a greater threat in neighboring communities and there is a great deal of active management, wildfire smoke may be a larger issue in the community, especially for sensitive populations. Of general concern is PM2.5, which is the main pollutant generated in wildfire smoke, and can travel across the region. Over the past 20 years, the Air Quality Index (AQI, based on U.S EPA/ federal standards) has been “orange,” or unhealthy for sensitive groups or the general population, for at least nine days. Socially vulnerable populations and those sensitive to poor air quality are the most potentially impacted.