



Chapter 4 Risk Assessment

Requirement §201.6(c)(2): [The plan shall include] A risk assessment that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards.

As defined by the Federal Emergency Management Agency (FEMA), risk is a combination of hazard, vulnerability, and exposure. “It is the impact that a hazard would have on people, services, facilities, and structures in a community and refers to the likelihood of a hazard event resulting in an adverse condition that causes injury or damage.”

The risk assessment process identifies and profiles relevant hazards and assesses the exposure of lives, property, and infrastructure to these hazards. The process allows for a better understanding of a jurisdiction’s potential risk to natural hazards and provides a framework for developing and prioritizing mitigation actions to reduce risk from future hazard events.

This risk assessment followed the methodology described in the FEMA publication Understanding Your Risks—Identifying Hazards and Estimating Losses (FEMA 386-2, 2002), which breaks the assessment down to a four-step process:

1. Identify Hazards;
2. Profile Hazard Events;
3. Inventory Assets; and
4. Estimate Losses.

Data collected through this process has been incorporated into the following sections of this chapter:

- **Section 4.1: Hazard Identification: Natural Hazards** identifies the natural hazards that threaten the Planning Area and describes why some hazards have been omitted from further consideration.
- **Section 4.2: Hazard Profiles** discusses the threat to the Planning Area and describes previous occurrences of hazard events and the likelihood of future occurrences.
- **Section 4.3: Vulnerability Assessment** assesses the Planning Areas’ exposure to natural hazards; considering assets at risk, critical facilities, future development trends, and, where possible, estimates potential hazard losses.
- **Section 4.4: Capability Assessment** inventories existing mitigation activities and policies, regulations, plans, and projects that pertain to mitigation and can affect net vulnerability.

This risk assessment covers the entire geographical extent of the Sacramento County Planning Area, which includes the unincorporated County, all incorporated communities and other participating jurisdictions. Throughout this chapter, information is presented for the Sacramento Planning Area as a whole and specific to unincorporated Sacramento County. Since this plan is a multi-jurisdictional plan, an assessment of how the hazards and risks vary from jurisdiction to jurisdiction is included. While these differences are noted in this chapter, they are expanded upon in the annexes of the participating jurisdictions. If no additional