Lightning

Lightning is a discharge of electrical energy that results from the buildup of positive and negative charges in a thunderstorm, which creates a "bolt" when the buildup of charges becomes strong enough. On average, 55 people are killed and hundreds are injured each year by lightning strikes in the United States. Lightning can strike communications equipment (e.g., radio or cell towers, antennae, satellite dishes, etc.) and hamper communication and emergency response. Lightning strikes can also cause significant damage to buildings, critical facilities, and infrastructure, largely by igniting a fire. Lightning can also ignite a wildfire.

Structure and Infrastructure Projects

L-1 Protect Critical Facilities and Equipment

Protect critical facilities and infrastructure from lighting damage with the following measures:

- Installing lightning protection devices and methods, such as lightning rods and grounding, on communications infrastructure and other critical facilities.
- Installing and maintaining surge protection on critical electronic equipment.

Education and Awareness Programs

L-2 Conduct Lightning Awareness Programs

Use outreach programs to promote awareness of lightning dangers. This could include ideas such as:

- Developing a lightning brochure for distribution by recreation equipment retailers or outfitters in mountainous areas.
- Mailing safety brochures with monthly water bills.
- Posting warning signage at local parks.
- Teaching school children about the dangers of lightning and how to take safety precautions.

Other lightning-related mitigation actions may also apply to other hazards. See the section entitled "Multiple Hazards" for other possible ideas.