Gina de la Chesnaye Global Health Disaster Preparedness and Response Gershon Spring 2023 February 21, 2023

Module 2: Assignment 2.2 Brief - Mitigation Strategies

Since March 27, 1980 Mount Saint Helens had been evidencing an eruption with a series of small volcanic explosions and pyroclastic flows. It finally erupted on May 18 killing 57 people and destroying railways, bridges and highways as well as private homes and crops due to the ensuing mudslides and swollen rivers. A depth of 150' of ash was recorded within the surrounding valley. Hundreds of square miles of land became unusable. The Federal Emergency Management Agency, created only one year earlier, declared it a disaster three days later. By all accounts, they were ill prepared.

Short term structural disaster management responses included clearing debris, dredging riverbanks, building debris dams and sediment basins. However considering that Mount Saint Helens is one of 5 active volcanoes in the Cascade Region and that volcanic ash is a major hazard - it can cause lung damage and when mixed with water create sulphuric acid which can burn skin, damage crops, and corrode machinery - a multi agency disaster management plan was created which included the Washington Military Department's Emergency Management Division, the Forest Service, the Oregon State Emergency Management Division (EMD) and emergency management officials from local tribes and surrounding counties. Each organization is tasked with different responsibilities i.e, the Forest Service will handle road closures and the EMD will coordinate emergency air responses. At the county level recommendations are now made for all households to include dust masks and goggles in their emergency kits. This coordination between agencies did not exist 43 years ago. The creation of this in itself is both a structural and non-structural mitigation strategy. Additionally, funds were allocated to invest in monitoring equipment (structural) for volcanic behavior and warning signs.²

References

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