

NATURAL HAZARD RATING PROCESS

Using a scoring matrix available in the 20/20 Mitigation Software provided to Skagit County by the Washington State Military Department, Emergency Management Division, each Indian Tribe and jurisdiction participating in the **Skagit County Natural Hazards Mitigation Plan** calculated a risk analysis for the following natural hazards:

Avalanche	Landslide/Erosion
Drought	Severe Storm
Earthquake	Storm Surge/Tsunami
Flooding	Wildfire
High Winds	Volcanic Activity

To begin the risk analysis process, each jurisdiction completed the 20/20 scoring matrix using a subjective evaluation based on historical events by assigning numerical values for each natural hazard based upon the following risk categories:

- The area(s) impacted by the hazard (ranked 0 – 4)
- Probability of persons injured or killed (ranked 0 – 3)
- Probability of property damaged or destroyed (ranked 0 – 3)
- Probability of environmental damage (ranked 0 – 3)
- Probability of Economic disruption (ranked 0 – 3)

In addition, a Probability or Frequency of Occurrence value was assigned to each natural hazard (ranked 1–5) based upon the known frequency of incidents resulting from each natural hazard.

For each natural hazard, the numerical values for each risk category were totaled (with a maximum possible score of 16) and this number was then multiplied by the Probability or Frequency of Occurrence value to determine the risk rating for each natural hazard.

Using this formula, the maximum numerical risk value that could be assigned to each hazard is 80. Based on this scoring matrix, the maximum numerical risk value that could be assigned to calculate the combined risk rating for all natural hazards considered is 800.

The completed 20/20 scoring matrix and risk rating for each participating Indian Tribe and jurisdiction can be found in their individual portion of SECTION IV of this plan.

Based upon the risk analysis calculated by each participating Indian Tribe and jurisdiction, the NATURAL HAZARD RATING TABLE shown on the following page was compiled by Skagit County Department of Emergency Management staff.

The NATURAL HAZARD RATING TABLE provides a useful tool to compare the extent to which each natural hazard affects each community involved in the **Skagit Natural Hazards Mitigation Plan**.