**Activity #2: Oregon’s Volcanoes: Mt. Hood Volcanic Hazard Map Activity**

**Lesson Summary**

Students learn how to read topographic hazards maps and explore how Mt. Hood volcanic hazards will affect the surrounding region.

**Materials**

* Download geologic hazard map from SMILE blog: <http://blogs.oregonstate.edu/smile/?cat=1324>
* Red & blue pens

**Next Generation Science Standards: Performance Expectations and Crosscutting Concepts**

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| **Performance Expectations** | **Crosscutting Concepts** |
| **4-ESS2-2.** Analyze and interpret data from maps to describe patterns of Earth’s features.  **MS-ESS2-1.** Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.  **MS-ESS2-2.** Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.  **HS-ESS2-2.** Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth systems. | https://lh3.googleusercontent.com/4cU4k9oOHC5M5NsUvPwbmUJbTSbhDFAotZ6eYS6H25aAuKGAuOT_WZIJAfJf6censryuYzjmU5QHwTXKzROniPML_i8S5ZYoRINbg1Y1F647rv9EQiccnOTCbygtxVv_ |

**Introduction:**

Mount Hood volcano, Oregon’s highest peak, has erupted episodically for about 500,000 years and hosted two major eruptive periods during the past 1,500 years. During both recent eruptive periods, growing lava domes high on the southwest flank collapsed repeatedly to form pyroclastic flows and lahars that were distributed primarily to the south and west along the Sandy River and its tributaries. Today we will explore the hazards that a volcanic eruption at Mt. Hood would present to the neighboring communities using a recently created volcanic hazards map.

**Procedure:**

Divide students into groups to make observations from the map using the worksheet. Ask students the prompt questions below.