**Background Research Outline**

**Topic: *Study Site***

**Subtopic:** *Location*

 *Ensign peak is located…*

Sources

**Subtopic:** *Land Use Patterns*

 *The study site is used for…*

Sources

**Subtopic:** *Ecosystem Services*

 *The study site’s ecosystem services include…*

Sources

**Topic: *Fire***

**Subtopic:** *Site Specific Event Details*

 *The Ensign Peak brush fire occurred…*

Sources

**Subtopic:** *General Fire Causes & Effects*

 *Brush fires are caused by…*

 *As a result of brush fires,…*

Sources

**Subtopic:** *Relevance*

 *Understanding the impacts of wildfire on an ecosystem is important because…*

Sources

**Topic: *Soil Chemistry (N, P, K, and pH)***

**Subtopic:** *Description of specific soil chemistry factors*

 *Nitrogen is a soil nutrient that…*

 *Potassium is a soil nutrient that…*

 *Phosphorous is a soil nutrient that…*

 *pH is a measurement of…*

Sources

**Subtopic:** *Description of how specific soil nutrients are cycled through an ecosystem*

 *Nitrogen is cycled through an ecosystem by…*

 *Potassium is cycled through an ecosystem by…*

 *Phosphorous is cycled through an ecosystem by…*

Sources

**Subtopic:** *Role of soil nutrients in plants*

 *Nitrogen is important for plants because…*

 *The optimum nitrogen soil value is…*

 *Potassium is important for plants because…*

 *The optimum potassium soil value is…*

 *Phosphorous is important for plants because…*

 *The optimum phosphorous soil value is…*

Sources

**Subtopic:** *Method of Measurement*

 *Soil nutrients (N, P, K) are determined by…*

 *Soil pH is determined by …*

Sources

**Subtopic:** *Relevance*

 *It is important to understand soil chemistry because….*

Sources

**Subtopic:** *Other Research*

 *Prior research has found that fire effects ecosystems by….*

Sources