**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