Applicable High School Essential Content Standards and Expectations (HSCE)

Below is a list of content standards and expectations applicable to the program “Land, Life and People: Making the Connections.”

Grade Levels 9-12:

Earth Science
- **Standard E3: The Solid Earth**
  - **E3.p1**: Landforms and Soils *(prerequisite)*
    - E3.p1B Explain how physical and chemical weathering leads to erosion and the formation of soils and sediments. *(prerequisite)*

- **Standard E4: The Fluid Earth**
  - **E4.p1**: Water Cycle *(prerequisite)*
    - E4.p1B Analyze the flow of water between the elements of a watershed, including surface features (lakes, streams, rivers, wetlands) and groundwater. *(prerequisite)*
    - E4.p1C Describe the river and stream types, features, and process including cycles of flooding, erosion, and deposition as they occur naturally and as they are impacted by land use decisions. *(prerequisite)*
    - E4.p1D Explain the types, process, and beneficial functions of wetlands.
  - **E4.1**: Hydrogeology
    - E4.1C Explain how water quality in both groundwater and surface systems is impacted by land use decisions.

Biological Science
- **Standard B1: Inquiry, Reflection, and Social Implication**
  - **B1.1**: Scientific Inquiry
    - B1.1A Generate new questions that can be investigated in the laboratory or field.
    - B1.1E Describe a reason for a given conclusion using evidence from an investigation.
  - **B1.2**: Scientific Reflection and Social Implication
    - B1.2f Critique solutions to problems, given criteria and scientific constraints.
    - B1.2g Identify scientific tradeoffs in design decisions and choose among alternative solutions.
    - B1.2k Analyze how science and society interact from a historical, political, economic, or social perspective.

- **Standard B3: Interdependence of Living Systems and the Environment**
  - **L3.p4**: Human Impact on Ecosystems *(prerequisite)*
    - L3.p4A Recognize that, and describe how, human beings are part of Earth’s ecosystems. Note that human activities can deliberately or inadvertently alter the equilibrium in ecosystems. *(prerequisite).*