



**Grades 6–8**

**3.4.6-8.I Environmental Literacy and Sustainability: Sustainability and Stewardship**

**Students who demonstrate understanding can** *construct an explanation that describes regional environmental conditions and their implications on environmental justice and social equity.*

**Clarifying Statement:** Examples include both current and historical conditions due to systemic inequalities, including but not limited to human health impacted by Superfund sites, air quality, urban heat islands, acid mine drainage, access to green space, biodiversity, and water quality. Explanations could be constructed using primary and secondary sources, both print and digital.

**Assessment Boundary:** N/A

Science and Engineering Practices (SEP)	Disciplinary Core Ideas (DCI)	Crosscutting Concepts (CCC)
<p><b>Obtaining, Evaluating, and Communicating Information</b></p> <p>Obtaining, evaluating, and communicating information in 6–8 builds on K–5 and progresses to evaluating the merit and validity of ideas and methods.</p> <ul style="list-style-type: none"> <li>Gather, read, and synthesize information from multiple appropriate sources and assess the credibility, accuracy, and possible bias of each publication and methods used, and describe how they are supported or not supported by evidence.</li> </ul>	<p><b>LS4.D: Biodiversity and Humans</b></p> <ul style="list-style-type: none"> <li>Changes in biodiversity can influence humans' resources, such as food, energy, and medicines, as well as ecosystem services that humans rely on—for example, water purification and recycling.</li> </ul>	<p><b>Cause and Effect</b></p> <ul style="list-style-type: none"> <li>Cause and effect relationships may be used to predict phenomena in natural or designed systems.</li> </ul>

**Pennsylvania Context:** Examples of Pennsylvania context include but are not limited to Pennsylvania Environmental Justice Area designations or Environmental Health Indicators.

**PA Career Ready Skills:** Explain how expressive communication strategies can affect others.

**Connections to Other Standards Content and Practices**

Standard Source	Possible Connections to Other Standard(s) or Practice(s)
<b>Agriculture (AFNR)</b>	CS.04.01.02.c: Evaluate sustainability policies and plans and prepare summary of potential improvements for AFNR businesses or organizations.
<b>Science, Environmental Literacy and Sustainability (NAAEE)</b>	5-8 Strand 2.3.A. Human-environment interactions: Learners describe human-caused changes that affect the immediate environment as well as other places, other people, and future times.
<b>PA Core Standards: ELA</b>	CC.3.6.6-8.H: Draw evidence from informational texts to support analysis reflection, and research.



Standard Source	Possible Connections to Other Standard(s) or Practice(s)
<b>PA Core Standards and Practices: Math</b>	MP.2: Reason abstractly and quantitatively. CC.2.4.8.B.1: Analyze and/or interpret bivariate data displayed in multiple representations. CC.2.4.8.B.2: Understand that patterns of association can be seen in bivariate data utilizing frequencies.
<b>PA Standards: Social Studies</b>	7.4.6.B: Describe and explain the effects of people on the physical systems within regions.
<b>Educational Technology (ISTE)</b>	1.3. Knowledge Constructor: Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others.
<b>Technology and Engineering (ITEEA)</b>	STEL-3G: Explain how knowledge gained from other content areas affects the development of technological products and systems.