Climate Change & Community Resilience

Program Overview

In *Climate Change & Community Resilience*, high school students (grades 9-12) will investigate the guiding question, “How can I help develop community resilience in the face of climate change?” The core lessons in this program will empower students to engage in conversations and activities about climate change, the local impacts of climate change, and how developing community resilience will help reduce these impacts through labs, case studies and reflective journaling. In *Climate Change & Community Resilience: Green Urban Infrastructure Practicum*, students will engage with green infrastructure professionals and visit restoration sites to learn about local green infrastructure impacts and urban ecosystem benefits. Students will gain practical tools for assessing personal and community needs through asset mapping and through discussions about green space and gentrification. In *Climate Change & Community Resilience: Plastic Planet*, students will learn about the negative impacts of where plastics come from, how plastics are formed and how they impact our local ecosystems. At the conclusion of the program, students transform their knowledge into meaningful action to help mitigate climate change impacts.

Program Outline

Students will participate in a set of core lessons that are the same in all program versions, plus a set of additional lessons that are specific to a theme (*Green Urban Infrastructure Practicum* or *Plastic Planet*).

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<tr>
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<th><em>Climate Change &amp; Community Resilience: Green Urban Infrastructure Practicum</em></th>
<th><em>Climate Change &amp; Community Resilience: Plastic Planet</em></th>
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<tbody>
<tr>
<td>Core Lessons</td>
<td>● Why is the Climate Changing?</td>
<td>● Where Does Plastic Come From?</td>
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<td>● Intersectionality of Climate Change</td>
<td>● Recycling and Disposals</td>
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<td>● Introduction to Ecosystem and Climate Resilience</td>
<td>● Plastics in Our Ecosystem</td>
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<td>● Climate Resilience Toolkit</td>
<td>● Systemic Problems, Systemic Solutions</td>
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<td>Additional Lessons</td>
<td>● Urban Ecosystems</td>
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<td>● Stormwater Management</td>
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<td>● Urban Forestry and Urban Heat Island</td>
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<td>● Asset Mapping and Community Needs</td>
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<td>● Green Space and Gentrification</td>
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<td>Action Project</td>
<td>Action projects may include gathering and presenting community science data to answer a research question, starting a home garden, art, or advocating for legislation to reduce and prevent climate change.</td>
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The Watershed Project’s mission is to inspire Bay Area communities to understand, appreciate, and protect our local watersheds.

If you have any questions about this program, please contact us at: education@thewatershedproject.org

Climate Change & Community Resilience

Program Goals
1. Students will make evidence-based claims about the causes and local impacts of climate change.
2. Students will understand the connections between personal resilience, ecosystem resilience, and community resilience through reflection and research.
3. Students will participate in outdoor activities that strengthen their connection to nature.

Standards Connections

*Climate Change & Community Resilience* supports learning and engagement in the following high school Next Generation Science Disciplinary Core Ideas:
- ESS2 - Earth’s Systems
- ESS3 - Earth and Human Activity
- ETS1 - Engineering Design
- LS2.A: Interdependent Relationships in Ecosystems
- LS2.C: Ecosystem Dynamics, Functioning, and Resilience
- ESS2.C: The Roles of Water in Earth’s Surface Processes
- ESS2.D: Weather and Climate
- ESS3.A: Natural Resources
- ESS3.D: Global Climate Change

This program also incorporates concepts from the following high school Common Core English Learning Language and History/Social Studies Standards:
- Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
- Draw evidence from literary or informational texts to support analysis, reflection, and research.
- Interpret information presented in diverse media and formats (e.g. visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.
- Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.
- Analyze the structure of the relationship among concepts in a text, including relationships among key terms (e.g. force, friction, reaction force, energy).

The program also incorporates concepts from the following high school Common Core Health Standards:
- Identify global environmental issues.
- Describe the impact of air and water pollution on health.
- Identify ways to reduce pollution and harmful health effects (e.g., by using alternative methods of transportation).
- Analyze how environmental conditions affect personal and community health.
- Apply a decision-making process to a community or environmental health issue.

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