

# PROJECT OVERVIEW

**Inspired by the film:** In this selected clip from *A Climate for Change*, we are introduced to scientists working in Kaneohe Bay who are working on coral development and restoration to combat recent coral bleaching events and the effects of warming sea water on coral. We learn about what causes bleaching, what it takes to regenerate and restore coral and the hopes that scientists have for the future of Hawaii's coral reefs.

<b>ESSENTIAL QUESTION for the PROJECT:</b>	What is the true impact that coral has on our environment?	
<b>PROJECT OVERVIEW:</b>	In this project, students learn about the impact that coral reefs have on different systems and create their own systems thinking map.	<b>KEY VOCABULARY:</b> Systems Thinking Nodes Coral Algae/Limu Zooxanthellae Coral Bleaching Polyp Land-Based Pollution Chemical Fertilizers Overfishing Construction Run-Off Sediments Turbidity Carbon Dioxide Climate Change Population Urbanization Invasive Species
<b>SELECTED KEY SKILLS:</b>  <i>Teachers can modify the selected key skills based on scope and need.</i>	<ul style="list-style-type: none"> <li>● Critical Thinking</li> <li>● Inquiry Based Discussions</li> <li>● Systems Thinking</li> <li>● Cause and Effect</li> </ul>	
<b>SELECTED KEY CONTENT &amp; PERFORMANCE:</b>  <i>Teachers can modify the selected key content based on scope and need. All projects are designed to be interdisciplinary and to address multiple content performance standards.</i>	<ul style="list-style-type: none"> <li>● <b>NGSS MS-LS2-1 Ecosystems Interactions, Energy, and Dynamics</b> Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.</li> <li>● <b>NGSS MS - LS2 -2 Ecosystems Interactions, Energy and Dynamics</b> Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems</li> <li>● <b>CCSS.ELA-LITERACY.W.8.7 Research to Build and Present Knowledge</b> Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.</li> </ul>	