



# Graphing the Drought



<u>Performance Expectations</u>	<u>Connections Between EP&amp;Cs, CCCs, and SEPS</u>	<u>Clarifications for DCIs</u>	Relevant EEI Units
<p><b>MS-ESS2-4</b> Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.</p> <p><b>MS-ESS3-2</b> Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.</p>	<p style="text-align: center;"><b>Targeted Environmental Principles &amp; Concept(s)</b></p> <p><b>Principle III: Natural Systems Change in Ways that People Benefit from and can Influence</b></p> <p>Natural systems proceed through cycles that humans depend upon, benefit from, and can alter.</p> <p>Concept A. Natural systems proceed through cycles and processes that are required for their functioning.</p> <p>Concept B. Human practices depend upon and benefit from the cycles and processes that operate within natural systems.</p> <p>Concept C. Human practices can alter the cycles and processes that operate within natural systems.</p> <p style="text-align: center;"><b>Targeted Crosscutting Concept(s)</b></p> <p>Scale Energy &amp; Matter</p>	<p style="text-align: center;"><b>Targeted Disciplinary Core Idea(s)</b></p> <p><b>MS-ESS2-1 Earth Materials &amp; Systems</b> All Earth processes are the result of energy flowing and matter cycling within and among the planet's systems. This energy is derived from the sun and Earth's hot interior. The energy that flows and matter that cycles produce chemical and physical changes in Earth's materials and living organisms.</p> <p><b>MS-ESS2-4 The Roles of Water in Earth's Surface Processes</b> Water continually cycles among land, ocean, and atmosphere via transpiration, evaporation, condensation and crystallization, and precipitation, as well as downhill flows on land. (MS-ESS2-4)</p> <p><b>MS-ESS2-6 Weather &amp; Climate</b> Weather and climate are influenced by interactions involving sunlight, the ocean, the atmosphere, ice, landforms, and living things. These interactions vary with latitude, altitude, and local and regional geography, all of which can affect oceanic and atmospheric flow patterns.; Because these patterns are so complex, weather can only be predicted probabilistically. (MS-ESS2-5); The ocean exerts a major influence on weather and climate by absorbing energy from the sun, releasing it over time, and globally redistributing it through ocean currents.</p> <p><b>MS-ESS3-1 Natural Resources</b> Humans depend on Earth's land, ocean, atmosphere, and biosphere for many different resources. Minerals, fresh water, and</p>	<p>K: A Day in My Life; The World Around Me</p> <p>3: Living Things in Changing Environments; The Geography of Where We Live</p> <p>5: Earth's Water; Changing States: Water, Natural Systems, and Human Communities; Precipitation, People, and the Natural World; Our Water: Sources and Uses</p> <p>6: The Dynamic Nature of Rivers</p> <p>8: Struggles with Water</p>

One Cool Earth (OCE) supports the integration of Next Generation Science Standards (NGSS) three dimensional learning and the Environmental Principles & Concepts (EP&Cs) in their lesson planning. In recognition of A Blueprint for Environmental Literacy and the California State Board of Education, OCE uses the *CA Science Framework*.

	<p style="text-align: center;"><b>Targeted Science and Engineering Practice(s)</b></p> <p>Using Mathematics &amp; Computational Thinking</p> <p>Analyzing &amp; Interpreting Data</p>	<p>biosphere resources are limited, and many are not renewable or replaceable over human lifetimes. These resources are distributed unevenly around the planet as a result of past geologic processes.</p> <p><b>MS-ESS3-2 Natural Hazards</b> Mapping the history of natural hazards in a region, combined with an understanding of related geologic forces can help forecast the locations and likelihoods of future events.</p>	
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