

Climate Change in San Diego's Local Environment: Online Resources

November 2, 2016



Science and climate change

Science and climate change, www.climate.gov

Science and climate change, <https://www.epa.gov/climatechange/>

Facts and other "vital signs" of the planet, <http://climate.nasa.gov/>

"Climate Kids" activities for weather and climate, plants and animals, <http://climatekids.nasa.gov/>

Glossary for Climate change, wildlife and wildlands, [http://downloads.globalchange.gov/toolkit/Glossary Entire wout Citations 6 9 09.pdf](http://downloads.globalchange.gov/toolkit/Glossary%20Entire%20with%20Citations%206%209%2009.pdf)

Frequently-asked questions about climate change, [http://downloads.globalchange.gov/toolkit/Climate Basics 8pager 508 v4.pdf](http://downloads.globalchange.gov/toolkit/Climate%20Basics%208pager%20508%20v4.pdf)

Communicating about climate change

Creating messages about climate change, [http://oceanservice.noaa.gov/education/discoverclimate/NOAA Activity%20Communicate.pdf](http://oceanservice.noaa.gov/education/discoverclimate/NOAA_Activity%20Communicate.pdf)

The value of explanatory chains in reframing climate change, http://www.frameworksinstitute.org/assets/files/occ_values.pdf

Climate literacy: The essential principles of climate sciences. Sun is the primary energy. Climate is complex. Life affects climate—and climate affects life. Climate is variable. Scientists study climate. Humans affect climate. Climate change has consequences. 17-page report. <https://www.climate.gov/teaching/essential-principles-climate-literacy/essential-principles-climate-literacy> (also Spanish)

Regional impacts of climate change

San Diego, 2050 is Calling, How will we answer? <http://www.sandiego.edu/2050/>

Climate change impacts in the southwest U.S.,
<https://www3.epa.gov/climatechange/impacts/southwest.html>

Teaching about climate change in the southwest,
<https://www.climate.gov/teaching/southwest-region>

Regional climate change organizations

Climate Science Alliance-South Coast (130 organizations, educators, businesses, and agencies), <http://www.climatesciencealliance.org/>

Climate Kids San Diego (activities focused on visual and performing arts, and outdoor experiences), <http://www.climatekids.org/san-diego>

Climate Action Campaign (advocacy), <https://www.climateactioncampaign.org/>

Climate Education Partners (university groups), <http://www.sandiego.edu/climate/>

San Diego Regional Climate Collaborative (agencies)
<http://sdclimatecollaborative.org/>

The San Diego Foundation, climate program,
<https://www.sdfoundation.org/programs/programs-and-funds/climate/>

Curriculum and lessons

Climate Change in San Diego's Local Environment, Middle school lessons aligned with Next Generation Science Standards, http://sdchildrenandnature.org/wp/wp-content/uploads/2015/12/ClimateChg_LessonsGr6-8.pdf .

Wildlife and Wildlands Educators' Toolkit for middle school students,
<http://www.globalchange.gov/browse/educators/wildlife-wildlands-toolkit>. Separate documents for impacts of climate change on birds and fish.

Two-week middle school lesson plan about climate change, "Facing the Future, Climate Change: Connections and Solutions, Grades 6-8," 128 p., .pdf download at <https://www.facingthefuture.org/collections/all>

Global Climate Change curriculum for middle school, 18 units,
<https://pangea.stanford.edu/programs/outreach/climatechange/curriculum/middle-school>

Links to NGSS components, <https://www.climate.gov/teaching/national-climate-assessment-and-next-generation-science-standards>

Climate Change Education website, <http://www.climatechangeeducation.org/>

Mobile apps about climate change, <http://climate.nasa.gov/earth-apps/>

Citizen Science and climate change,
<http://www.birds.cornell.edu/citscitoolkit/climatechange>

How we know what we know about our changing climate: Scientists and kids explore global warming (book), L. Cherry and G. Braasch, 2008, 66 p. Excerpts

from Teachers' guide at http://youngvoicesonclimatechange.com/pdf/Any-Citizen-Science_curriculum.pdf

Urban heat island effect of climate change

Lessons about urban heat island,

http://www.windows2universe.org/teacher_resources/teach_heat.html

Resources on Heat Island Effects, <http://www.epa.gov/heatisd/index.htm>

Wildlife and climate change

Video about wildlife and climate change, 13 minutes,

<http://www.globalchange.gov/browse/educators/wildlife-wildlands-toolkit/video>

Effects on birds, mammals, amphibians, and reptiles,

<http://www.fs.usda.gov/ccrc/topics/wildlife>

Wildlife in a warming world, National Wildlife Federation, 48 p.,

http://www.nwf.org/pdf/Reports/NWF_Wildlife-Warming-World_Report_web.pdf

EPA website with impacts on ecosystems, including seasons, ranges, food webs, pathogens and pests, and extinction,

<https://www3.epa.gov/climatechange/impacts/ecosystems.html>

Local plants and animals

Illustrated guides and checklists of San Diego's mammals, reptiles and amphibians, and arthropods (insects), <http://www.sdnhm.org/science/field-guide/>

Plants native to San Diego, <http://www.cnpssd.org/plantlistlinked.html>

Plants and their growing conditions, http://plants.usda.gov/about_plants.html .

Birds and their habitats, <http://allaboutbirds.org/guide/search/>

Please send suggestions and additions to this resource list to afege@sdchildrenandnature.org