

Specific Topic Resources

Florida Envirothon - Current Environmental Issue 2023 Adapting to a Changing Climate

Adapting to a Changing Climate

- [2023 Current Issue Study Resources \(Part A\)](#) from Envirothon.org
- [SlideShow overview](#)

This Google SlideShow was created by Joyce Tuten for the Florida Envirothon 2023

Climate Change 101

- <https://vimeo.com/346889477>
General overview presentation by Joyce Tuten in 2019
(NOTE: some of the presentation data might be slightly out of date)

Carbon Cycle

- NOAA
<https://www.noaa.gov/education/resource-collections/climate/carbon-cycle>
- MooMoo Math
<https://www.youtube.com/watch?v=KNLUzqW8luA>
- Crash Course
https://www.youtube.com/watch?v=aLuSi_6OI8M
- The Economist
<https://www.youtube.com/watch?v=yhlq9txl7yM>
- NASA eClips
<https://www.youtube.com/watch?v=hgFpvDNfXOk>
- Quizlet
<https://quizlet.com/546782441/biogeochemical-cycles-carbon-cycle-diagram/>

Global Warming & Greenhouse Gases

- Carbon Dioxide increase
<https://www.noaa.gov/news-release/carbon-dioxide-now-more-than-50-higher-than-pre-industrial-levels>
- The Keeling Curve
<https://education.nationalgeographic.org/resource/keeling-curve>
- Greenhouse Gases
<https://www.eia.gov/energyexplained/energy-and-the-environment/greenhouse-gases.php>

Fossil Fuels

- <https://www.youtube.com/watch?v=YTnE0OQPTEo>
- <https://www.youtube.com/watch?v=xd1alir07q4>
- <https://www.youtube.com/watch?v=smfTfd80UbQ>

Carbon Footprint

- <https://sustainable.ufl.edu/2021/01/14/action-of-the-month-reduce-your-carbon-footprint/>

Ocean Acidification

<https://www.youtube.com/watch?v=fgBozLCGUHY>

Photosynthesis

https://www.youtube.com/watch?v=8B_64G2SI_8

https://www.youtube.com/watch?v=rXzN89I4_Yk

<https://ssec.si.edu/stemvisions-blog/what-photosynthesis>

Sea Level Rise

- <https://oceanservice.noaa.gov/hazards/sealevelrise/>
- <https://www.youtube.com/watch?v=WadD54Ywvz4>
- Salt Water Intrusion
- Water Table
<https://education.nationalgeographic.org/resource/water-table>

Florida geology

- <https://education.nationalgeographic.org/resource/bedrock>
- <https://floridadep.gov/fgs/geologic-topics/content/floridas-geologic-history-and-formations#:~:text=Florida%20has%20unique%20origins.,feet%20of%20limestone%20beneath%20it!>

Saltwater Intrusion

- <https://www.usgs.gov/mission-areas/water-resources/science/saltwater-intrusion#:~:text=If%20too%20much%20freshwater%20is,contaminate%20the%20water%20supply%2C%20too.>
- (this is a CA district, but the graphics are good!)
<https://www.youtube.com/watch?v=8zxZUSVjg10&t=20s>

Nature Based Solutions

https://www.youtube.com/watch?v=C_MCp-lu2Fw

Website Resources

Florida Climate Institute

- <https://floridaclimateinstitute.org/>
 - Environmental Minute
<https://floridaclimateinstitute.org/resources/environmental-minute>
 - FAQs
<https://floridaclimateinstitute.org/resources/faqs>
 - Key Messages (published book available on Amazon)
“Florida’s Climate Changes, Variations, & Impacts: Summary and Key Messages”
<https://floridaclimateinstitute.org/images/newsletter/2019-May/FloridaClimate-Summary-KeyMessages.pdf>
 - Chapters 12, 13, 14, 17, 18, 19, 20

Florida Department of Environmental Protection

- The Effects of Climate Change on Florida's Ocean & Coastal Resources
https://floridadep.gov/sites/default/files/The%20Effects%20of%20Climate%20Change%20on%20Florida%27s%20Ocean%20and%20Coastal%20Resources_0.pdf

FSU - Florida Climate Center

- <https://climatecenter.fsu.edu/>

Florida Fish & Wildlife Conservation Commission

- <https://climateadaptationexplorer.org/>

UF IFAS

- Changing Climate Patterns and Agriculture in Florida
- <https://hos.ifas.ufl.edu/media/hosifasufledu/stone-fruit/documents/field-day-presentations-2021/Changing-Climate-Patterns-and-Agriculture-in-Florida---Dr.-Clyde-Fraisse.pdf>

NASA

- Responding to Climate Change
<https://climate.nasa.gov/solutions/adaptation-mitigation/>

NOAA

- <https://www.climate.gov/>

EPA

- What Climate Change Means for Florida
<https://www.epa.gov/sites/default/files/2016-08/documents/climate-change-fl.pdf>

US Global Change Research Program

- Global Climate Change Impacts in the US Southeast
<https://nca2009.globalchange.gov/southeast/index.html>

United Nations - IPCC (Intergovernmental Panel on Climate Change)

- <https://www.ipcc.ch/>

NPR - a kid's guide to Climate Change (printable comic strip for teachers)

https://www.npr.org/2023/01/17/1144849154/climate-change-kids-guide?utm_medium=email&utm_source=GovDelivery

Everglades National Park and Climate Change

<https://www.nps.gov/ever/learn/nature/climatechange.htm>

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For Florida Envirothon 2023 - Current Environmental Issue - Adapting to a Changing Climate