

Researching Topic #10 -- Unequal Impacts, in the U.S., by states and regions

[last revised 3/9/2021]

This prompt offers two kinds of help:

- A brief overview of the kinds of questions you might wish to explore as you study how climate change is likely to affect the food supply;
- A suggested strategy for how to search the literature as you prepare to write your paper.

OVERVIEW – CLIMATE IMPACTS IN YOUR STATE OR REGION OF THE U.S.

The United States is a big country. The geography and the weather vary greatly over the continental U.S. There are great deserts and swamps, plains and mountainous regions, places that are generally hotter and others that are generally colder. Even areas referred to as “coastal” can differ greatly. The Northern Pacific coast of Washington State is not like the Pacific coast of Southern California, and neither are like the Gulf Coast.

So, although one can certainly estimate and predict what impacts climate change will have for the nation as a whole, and such estimates can tell us a lot, about national-level economic or political impacts, for example, it is also true that climate change will have significantly different impacts in different regions of the nation.

Your research assignment is to find literature that is more “fine grained” than the literature that considers impacts only on a national scale. What are the predicted impacts in *your* region of the U.S.? If you can find studies even more fine grained, studies at the level of individual States, what are the predicted impacts for *your* State?

SUGGESTED STRATEGY FOR SEARCHING THE LITERATURE

I recommend the following sequence for searching the literature:

- 1 Start with a search of the most recent **reports from top scientific bodies and government agencies**;
- 2 Search **academic articles** using Google Scholar (scholar.google.com);
- 3 Do a **more general search** using Google or another search engine;
- 4 Search the **best newspapers** and **reputable climate websites**.
(NOTE that I do not suggest using Wikipedia.)

1 Search the most recent **reports from top scientific bodies and government agencies**

(NOTE: There are many excellent reports one can consult. You will find a lot of repetition, so you do not need to consult every source. Here I start with a handful of the most recent reports, followed by a more complete list.)

These publications should, in most cases, supply you with all you need:

IPCC's most recent full set of reports:

<https://www.ipcc.ch/report/ar5/>

EPA: https://19january2017snapshot.epa.gov/climate-impacts/climate-impacts-society_.html

U.S. Global Change Research Program:

<https://science2017.globalchange.gov/> (the science)

<https://nca2018.globalchange.gov/> (the impacts)

American Meteorological Society:

www.ametsoc.net/sotc2017/StateoftheClimate2017_lowres.pdf

A more complete list of best scientific and governmental sources:

International

Intergovernmental Panel on Climate Change
United Nations Environmental Programme (UNEP)
World Meteorological Organization

Agencies of the U.S. federal government

Environmental Protection Agency (EPA)
National Oceanographic and Atmospheric Administration (NOAA)
National Aeronautics and Space Administration (NASA)
U.S. Global Change Research Program

Scientific bodies – U.S.

National Academic of Sciences
Climate Change at the National Academies (climatechange@nas.edu)
National Science Foundation

Other professional bodies – American Meteorological Society

2 Search **academic articles** using Google Scholar (scholar.google.com)

(NOTE: Narrow and focus your search by using several phrases in quotes – such as “climate change”. For example, if you are searching for how climate change will increase the frequency of extreme weather events, don’t just enter “climate change,” search, instead for” “climate change” AND “extreme weather events”)

Search terms to use (you may certainly choose others):

“climate change” AND x, where x can be:

The name of your State

The name of your region of the U.S.

(NOTE: For some citations you find on Google Scholar, you can directly download the PDF. For other citations, you may be able to find and download PDFs if your University library offers on line access to academic journals.)

3 Do a **more general search** using Google or another search engine

Use the same search terms to do a general search on Google or another search engine.

This will bring up information more recent than you find on scholar.google.com (it takes several years for research to be published in academic journals).

4 Search the **best newspapers** and **reputable climate websites**

New York Times, Washington Post, The Guardian

On line sources

Climate Central

GRIST

Society of Environmental Journalists

The Daily Climate

Climate Nexus

InsideClimate News

DeSmogBlog

Skepticalscience.com

Yale 350

(NOTE about on line sources: You will run into a lot of denialist disinformation on the internet, on websites, on blogs, on youtube. FYI, skepticalscience.com has a comprehensive list of denialist talking points (and refutations of those talking points).

See, for example: <https://www.skepticalscience.com/argument.php>)

Finally, here are some good citations to help you get started:

Various chapters on climate impacts in the U.S. found in the recent report from the U.S. Global Change Research Program (<https://science2017.globalchange.gov/>) offer information at the level of *regions*, albeit pretty large ones.

Go to <https://www.globalchange.gov/explore> and then scroll down.

<https://nca2018.globalchange.gov/chapter/21/>

For assessment of risk in individual states:

<http://statesatrisk.org/>

https://grist.org/article/we-broke-down-what-climate-change-will-do-region-by-region/?utm_medium=email&utm_source=newsletter&utm_campaign=daily

For California:

Report from 2012:

www.energy.ca.gov/2012publications/CEC-500-2012-007/CEC-500-2012-007.pdf

Report from 2018: “California’s Changing Climate 2018,” California’s Fourth Climate Assessment,

<http://www.climateassessment.ca.gov/>

<http://www.climateassessment.ca.gov/regions/>

www.climateassessment.ca.gov/state/docs/20180827-SummaryBrochure.pdf

Mapping different vulnerabilities by county and community

<https://www.americancommunities.org/mapping-climate-risks-by-county-and-community/>