CLIMATE LITIGATION: THE FUTURE IS NOW.

THE CHALLENGE OF CLIMATE CHANGE.

Post wildfire near Mora, New Mexico (June 2022.

We Have Difficult Choices to Make.

Our Choices Will Impact Others.

There Will be Winners and Losers.

YouTube. Capital One Bank – No Overdraft fees.

[Capital One (Banking) TV Spot, 'Barkley' - iSpot.tv]

What Climate Change?

Lateral, Mesilla Valley June 2022

Southern Mesilla Valley March 2022

For the Western States, climate change is water.

The Southwestern U.S. has been experiencing a severe megadrought since 2000.

National Oceanic and Atmospheric Administration (NOAA)

Lake Mead 7/1/2022

The main driver of climate change is the greenhouse effect.

After being released, major greenhouse gases stay in the atmosphere for tens to hundreds of years.

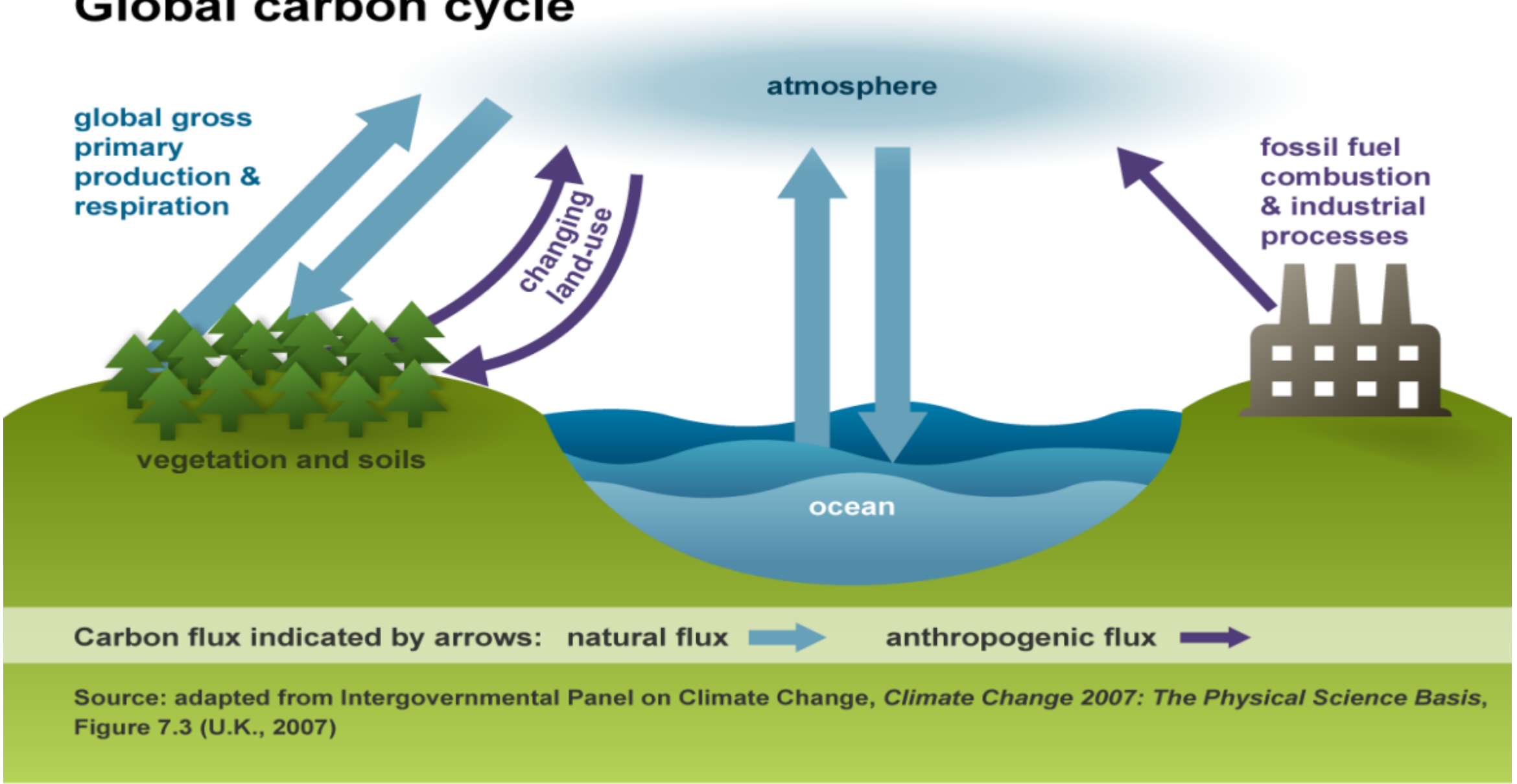
- carbon dioxide (CO_2)
- methane
- nitrous oxide
- fluorinated gases

Greenhouse gases occur naturally and are part of our atmosphere's makeup.

The natural greenhouse effect keeps the planet at a friendly 15 °C (59 °F) on average. But in the last century, humans have been interfering with the planet's energy balance, mainly through the burning of fossil fuels that add carbon dioxide to the air.

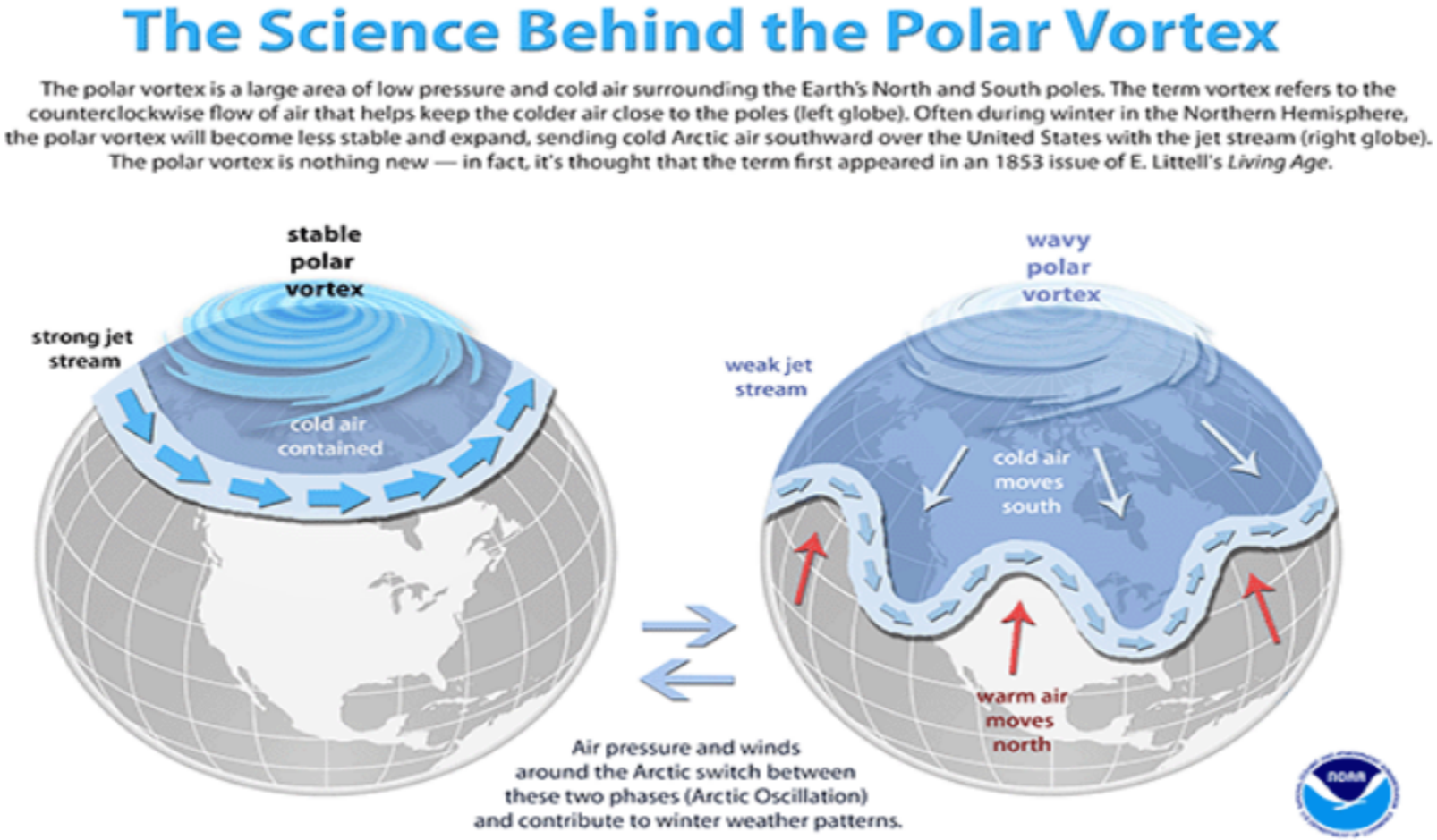
NASA Climate Change; FAQs (https://climate.nasa.gov/faq)

Global carbon cycle



Source: adapted from Intergovernmental Panel on Climate Change, *Climate Change 2007: The Physical Science Basis*, Figure 7.3 (U.K., 2007)

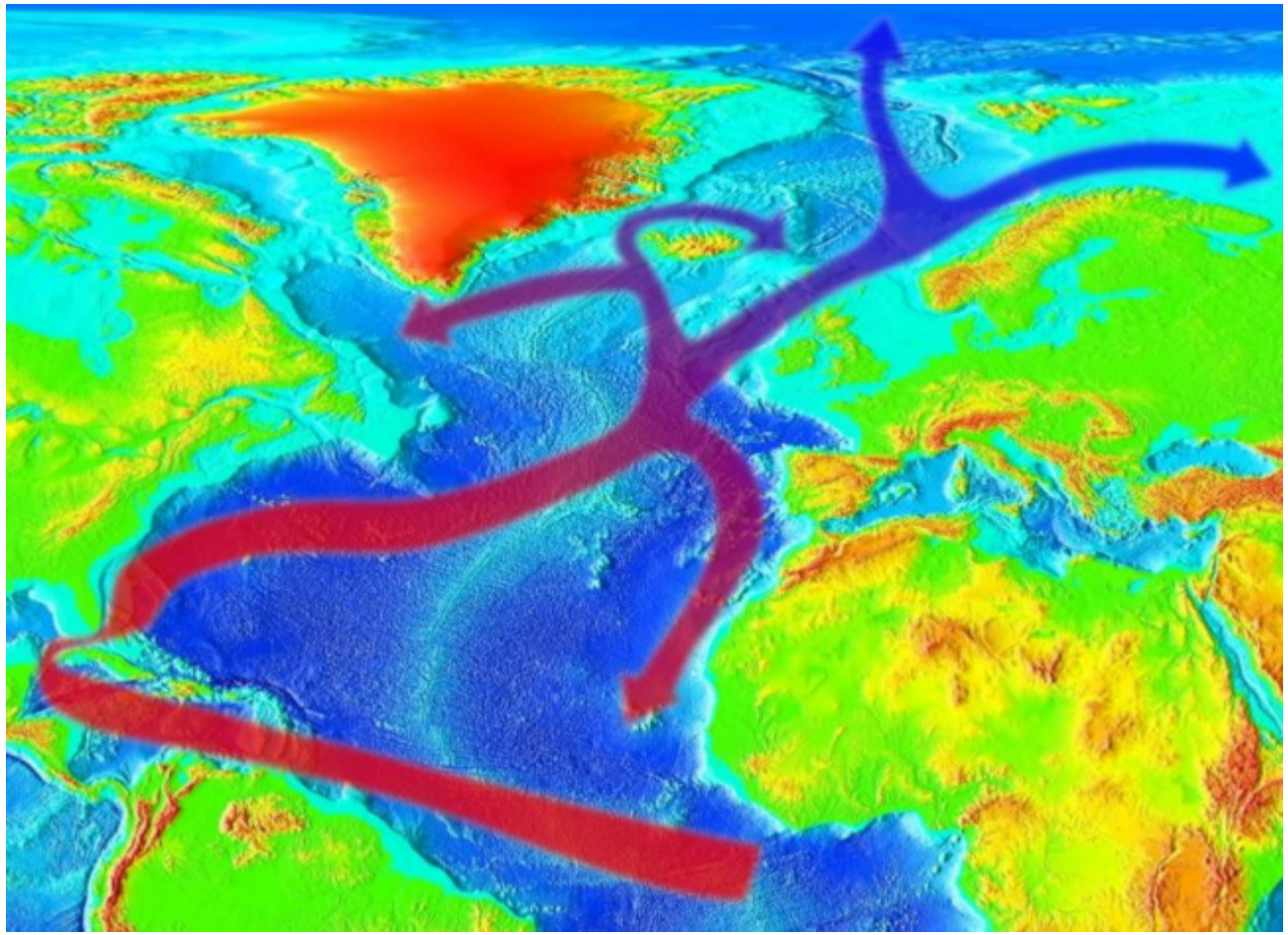
The North Atlantic jet stream may migrate northward in the coming decades if strong global warming continues.



GULF STREAM INSTABILITY

Research has found a substantial loss of stability over the last century of the Atlantic meridional currents. The currents are already at their slowest point in at least 1,600 years, and may be nearing a shutdown.

Nature Geoscience (Caesar et al, 25 February 2021).



GLOBAL WARMING WILL AFFECT THE INTENSITY AND FREQUENCY OF CLIMATIC EVENTS.

As surface temperatures rise, more liquid water evaporates from the land and ocean. Evaporation adds moisture to the air. How much water vapor the air can hold is based on its temperature.

A Force of Nature: Hurricanes in a Changing Climate (NASA: Global Climate Change 6/1/22)

LET’S GO BACK TO NEW MEXICO.

We Have an 80-20/20-80 Challenge/Opportunity in New Mexico.

Irrigated agriculture uses about 80% of the water in the state. (2018)

2018 Water Plan Office of the State Engineer, page 24, Part II.

Irrigated agriculture contributes 20% to the State's economy.

Flood irrigation applied to a pecan orchard, Mesilla Valley (July 2022)

The rest of the water use:

8.7 percent of total water use is for municipal and related purposes.

12.3 percent is other uses: manufacturing, mining, commercial purposes.

N.M. Const., Art. XVI, Sec. 3:

"The unappropriated water of every natural stream, perennial or torrential, within the state of New Mexico, is hereby declared to belong to the public and to be subject to appropriation for beneficial use, in accordance with the laws of the state. Priority of appropriation shall give the better right."

The New Mexico Water Code (Sec. 72-1-1, et seq.)

"All natural waters flowing in streams and watercourses, … within the limits of the state of New Mexico, belong to the public and are subject to appropriation for beneficial use." (72-1-1)

"The state engineer shall, upon the written application of a majority of the water rights owners of any district in this state, appoint a water master … who … shall be removed upon a petition of a majority of the water rights owners of the district." (72-3-2)

"Water Allowance - Improved irrigation methods or changes in agriculture practices resulting in conservation of water shall not diminish beneficial use or otherwise affect an owner's water rights or quantity of appurtenant acreage." (72-5-18)

Bounds v. State ex rel. D'Antonio, 2013-NMSC-037, aff'g 2011-NMCA-011, 149 N.M. 484, 252 P.3d 708.

"Section 72-12-1.1 NMSA 1978 does not violate the doctrine of prior appropriation set forth in the New Mexico constitution and is facially constitutional."

State ex rel. State Eng'r v. Lewis, 2007-NMCA-008, 141 N.M. 1, 150 P.3d 375.

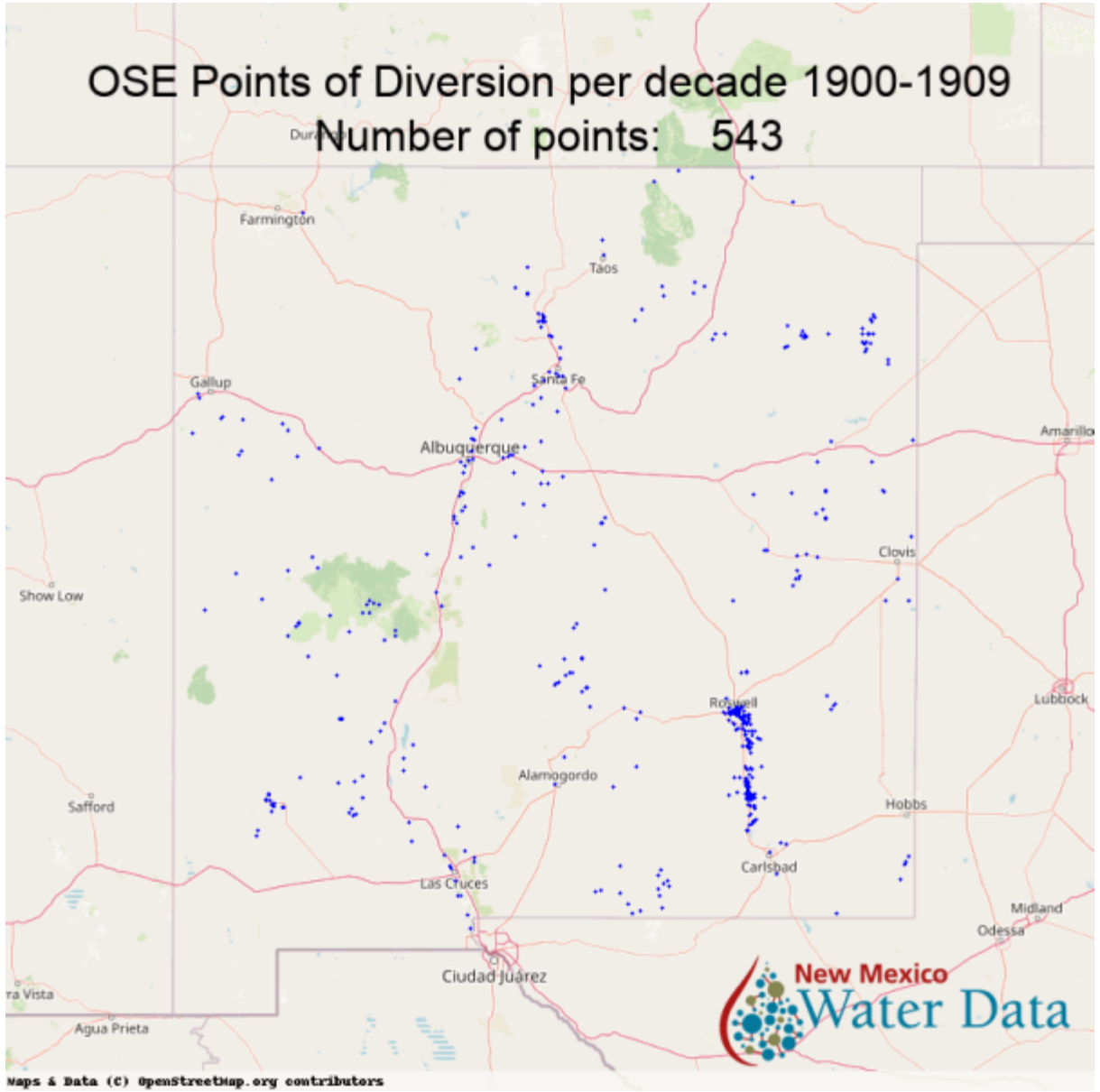
"The doctrine of prior appropriation does not require that resolution of existing and projected future water shortage issues be attempted exclusively through the procedure of a priority call when senior water rights are supplied their adjudicated water entitlement by other reasonable and acceptable management methods."

Let’s take a look around the State:

Deep Well Extractions

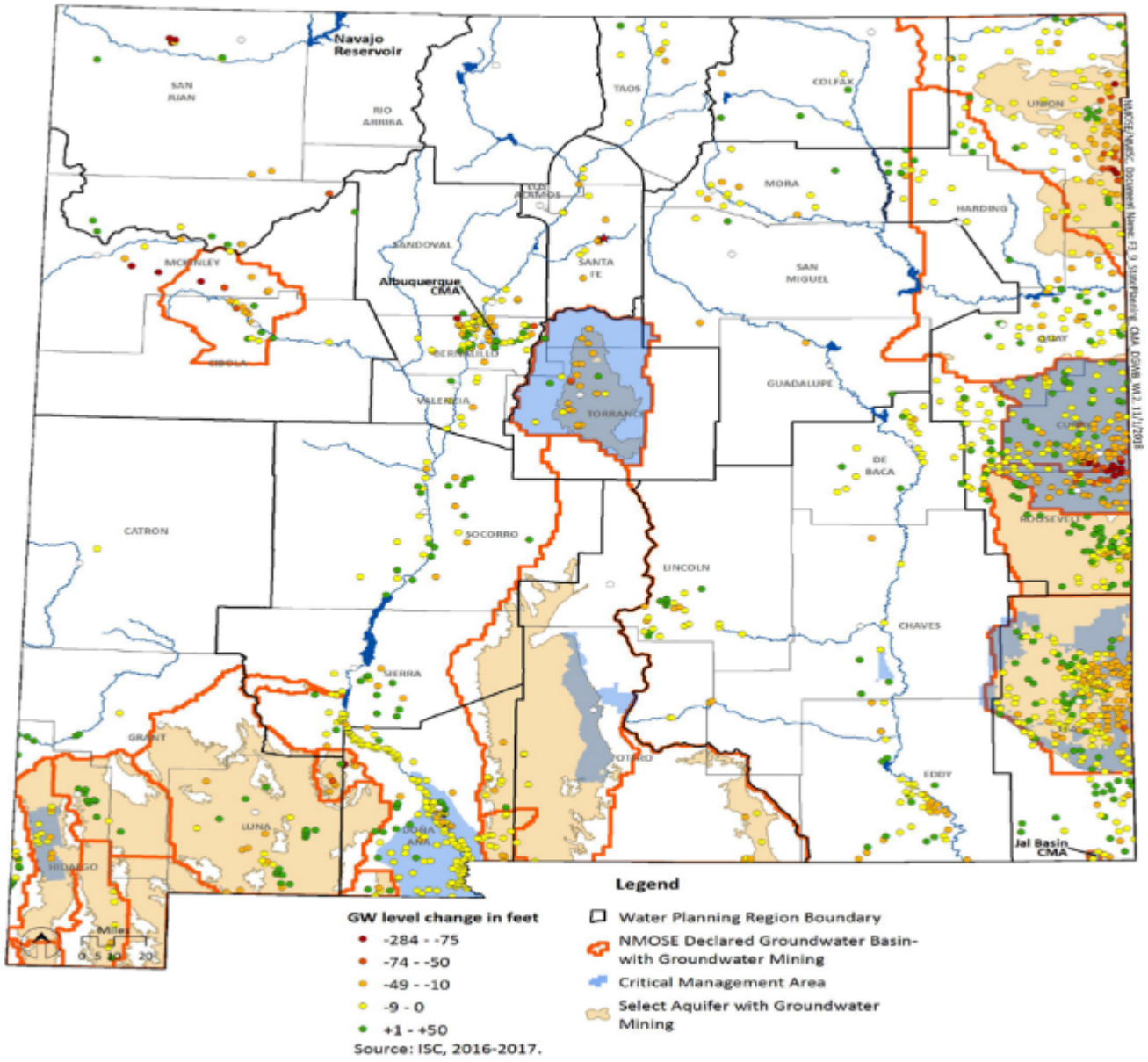
1909 - 543 deep wells

2022 - 174,758 deep wells



2018 Water Plan
Office of the State Engineer, page 33, Part I

"The most glaring water supply shortfall is occurring in eastern New Mexico where some communities have less than five years of water supply remaining."



JUDICIAL – LEGAL ADAPTATION TO CLIMATE SCIENCE

Adaptation to changes in climate will require various adaptations: social, financial, technological, scientific, agricultural, medical, legal and many other forms. (Most forms require funding and/or legislative action). Legal adaptations occur through:

1. Findings of civil or criminal liability which often spurs socially adaptive behavior (DWIs);
2. Legal decisions often add to the body of scientific information (Ford Pinto, Roundup);
3. Exposure to liability or risk spurs legislative action (Medical Mal, Guardianship, Whistleblower Acts)

TYPES OF CLIMATE SCIENCE LITIGATION

A. Negligence-duty of care.

- Exercise of reasonable care, not industry standards.
- Foreseeability of risk, failure to assess
  -infrastructure and facilities
  -human health
  -natural resources (like water)
  -endangered species
- Mitigation issues

B. Nuisance

- Private or Public
  -failure to abate a foreseeable risk

C. Constitutional and Public Tort Claims

a. Statutory obligation to regulate
b. Policy or administrative decision to act, or not act
c. Failure to disclose or assess
d. Consumer protection claims

D. **Public Trust Doctrine**

a. Usually relates to bodies of water

E. **Insurance and Insurance Claims**

a. Coverage issues (flood exemption, Act of God, etc)

b. First Party Claims

- inadequate coverage provided
- underwriting omissions

c. Reduced coverage limits or market withdrawal

F. **Water law claims**

- Appropriation rights

Bounds v. OSE

OSE v. Lewis

- Conservation and CS issues

G. Social Justice

a. Claims seeking equitable relief for the poor/unrepresented.

b. Justice for the undeveloped.

H. Federal Jurisdiction Implications

a. Equitable apportionment of water.

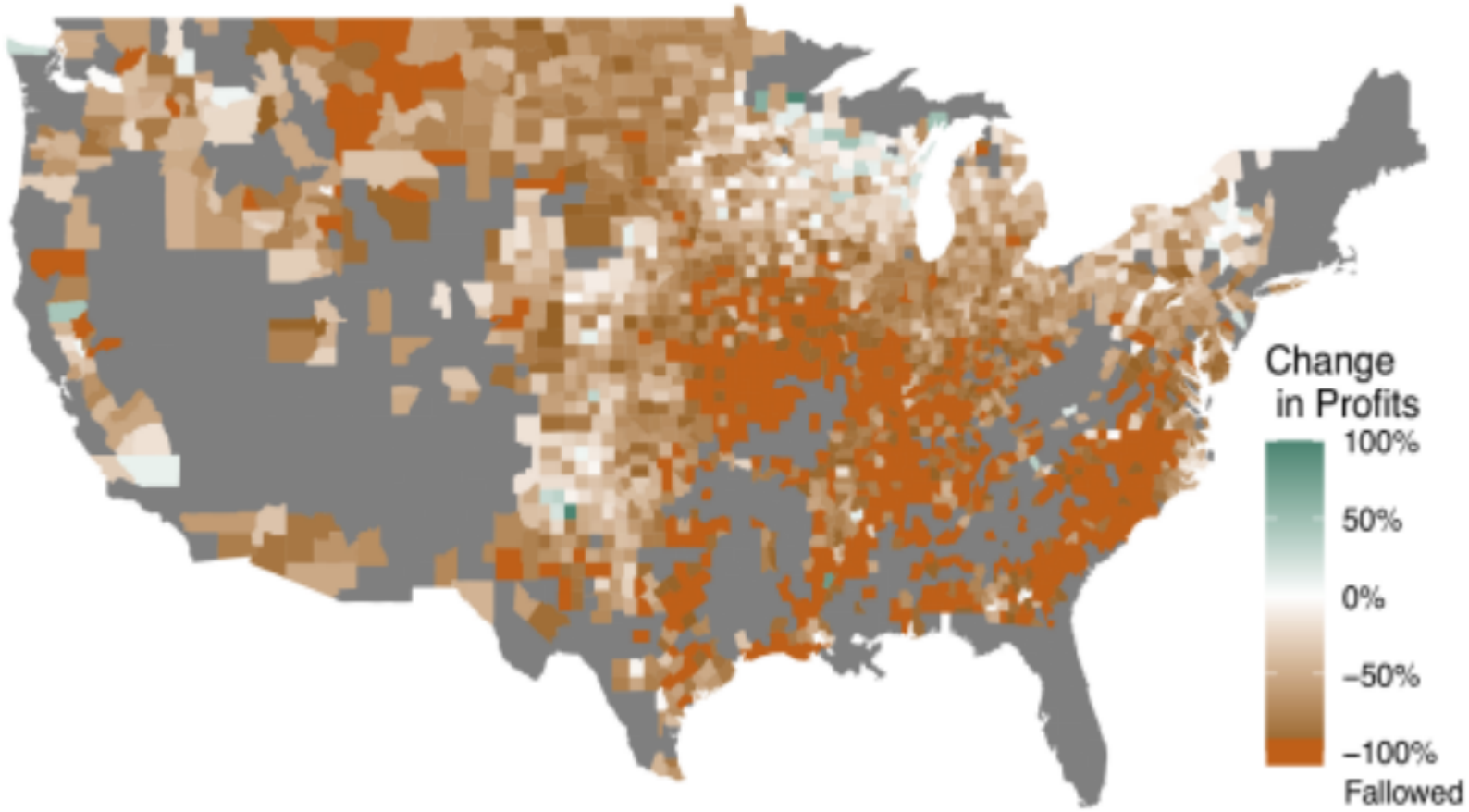
b. Regulatory deference to states.

c. Preemption issues.

d. State ex rel. State Eng'r v. United States, 2018-NMCA-053, 425 P.3d 723

The Killing Temperature – Sustained Heatwaves.

By 2060, America's breadbasket will shift to Canada.



Camino a Santiago de Compostela

WE HAVE HOPE.