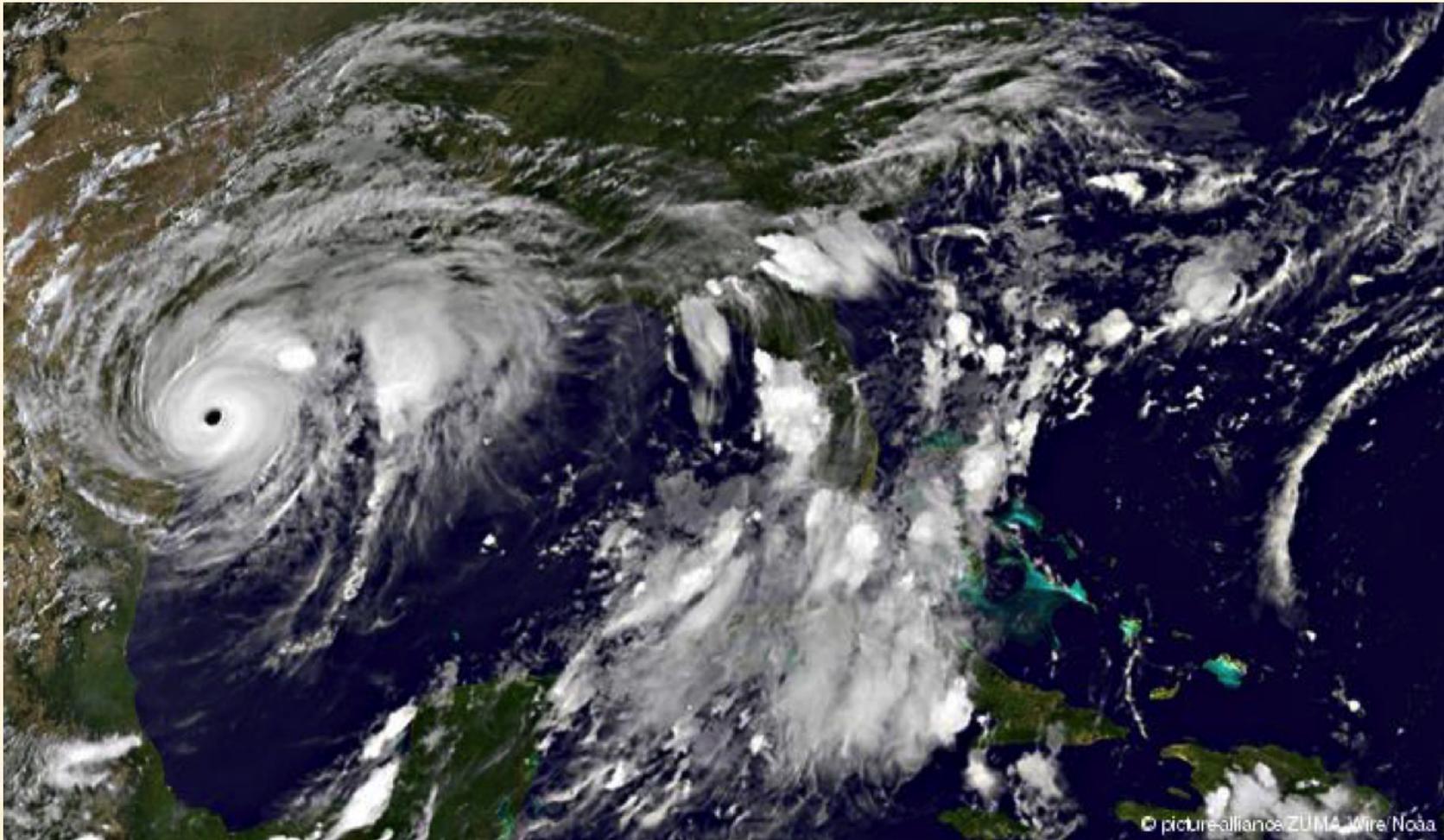


Hurricanes Harvey and Florence



© picture-alliance/ZUMA Wire/Noaa

Hurricane Harvey – Rainfall Totals

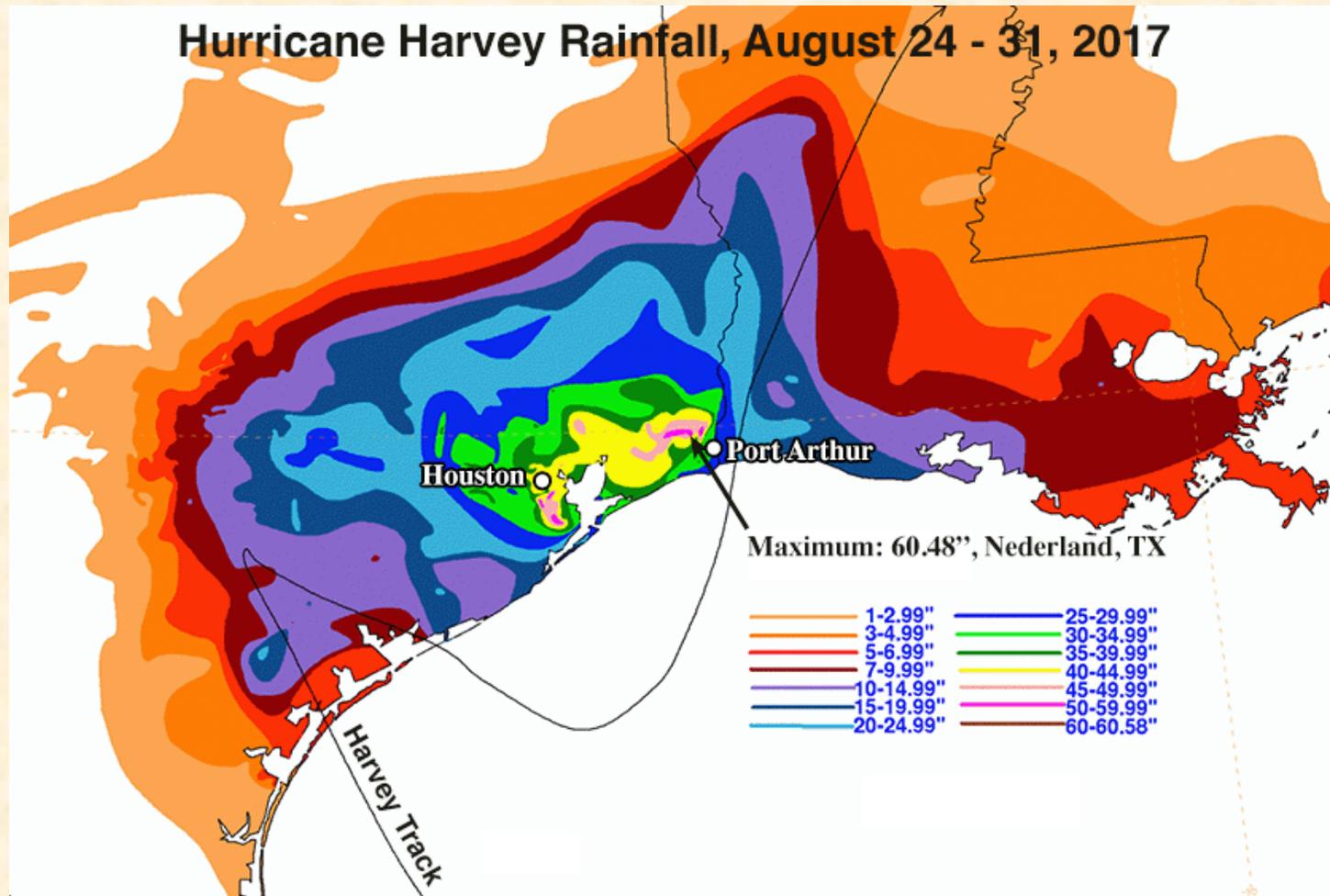


Image Credit: NOAA / Weather Underground

Hurricane Florence Rainfall Totals

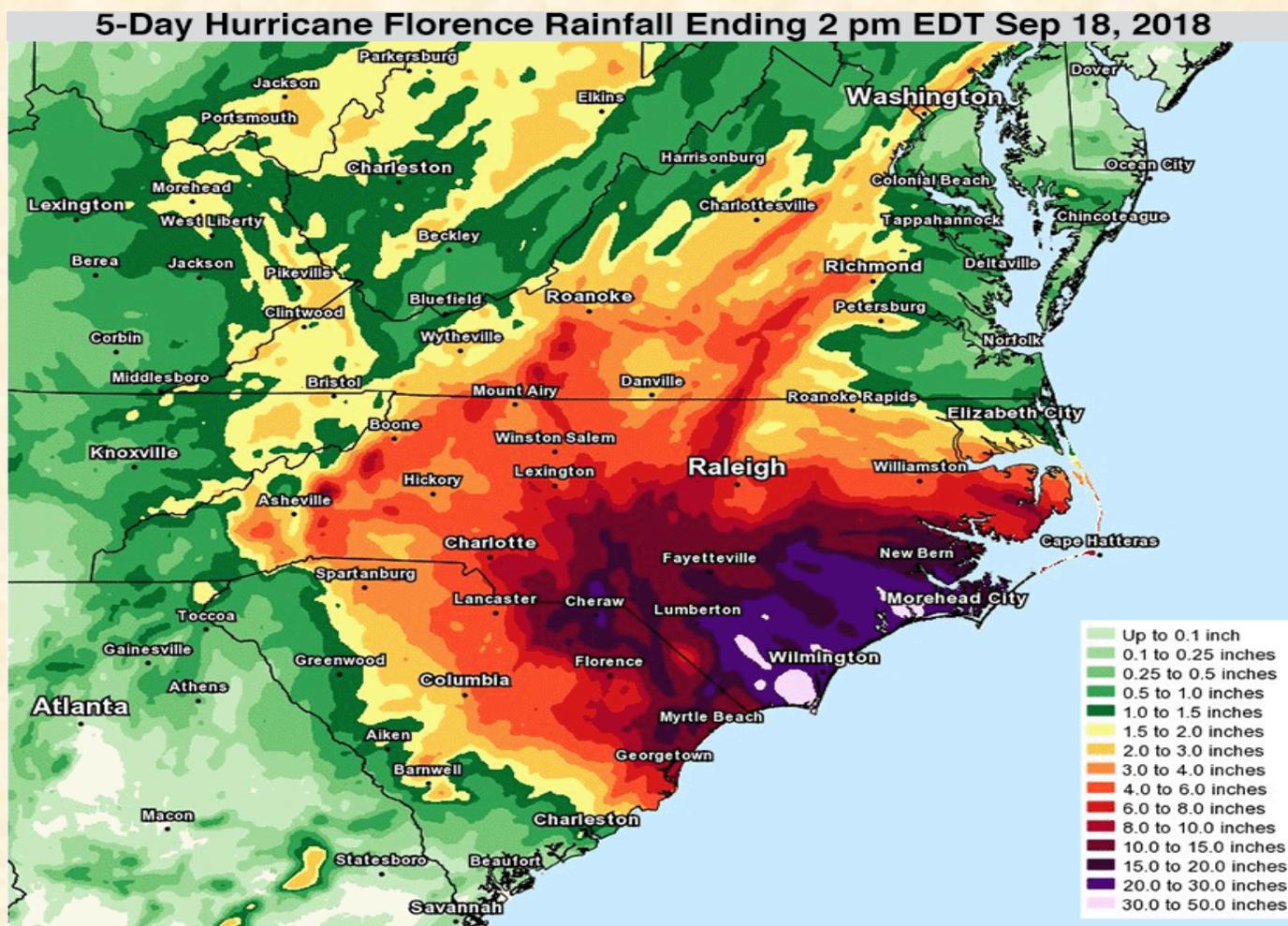


Image Credit: National Weather Service / Weather Underground

Climate Change Risk Potential

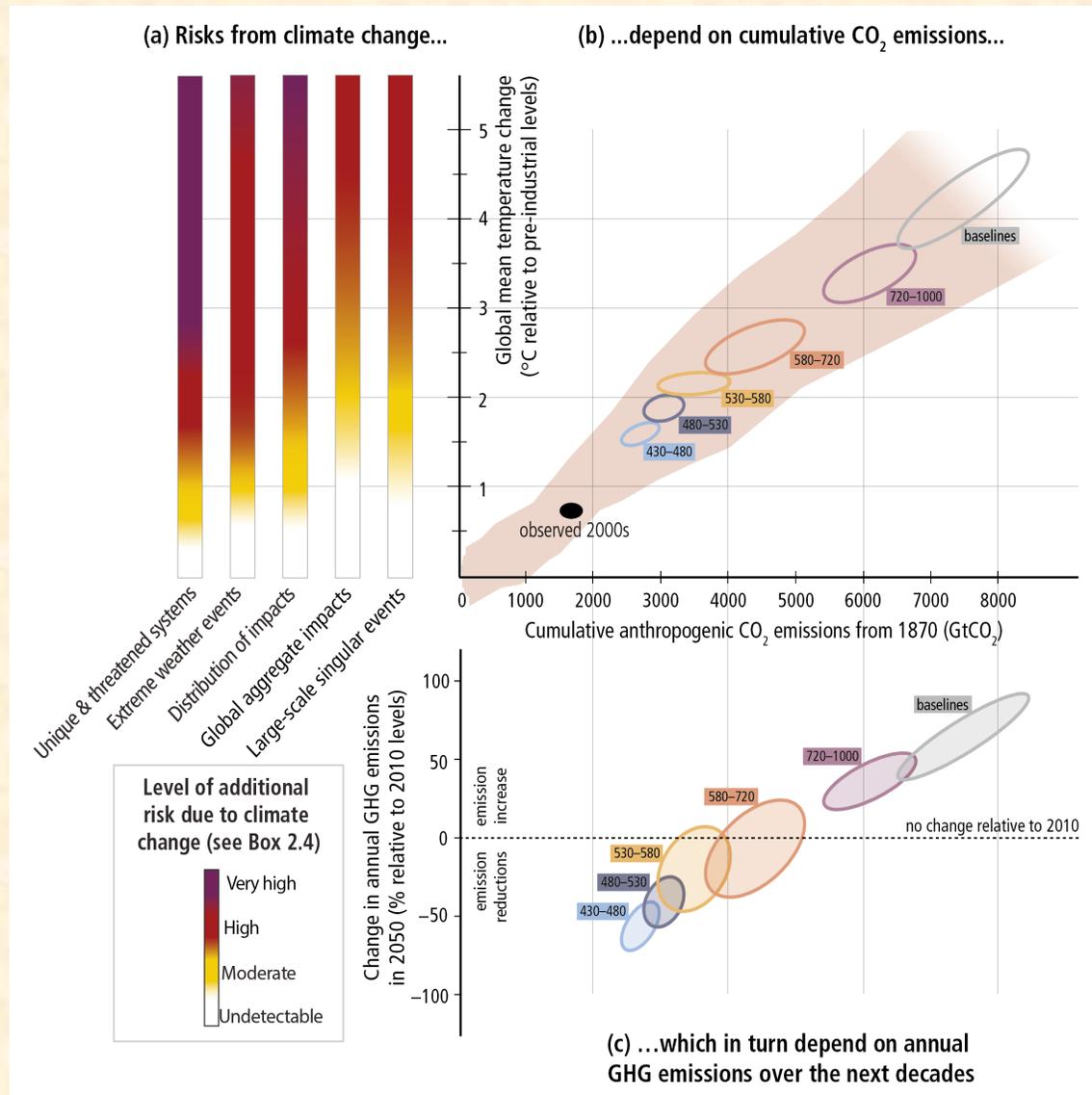


Fig. 3.1 – Ch. 3 – Observed Changes and Their Causes: *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]IPCC, Geneva, Switzerland,

Some Considerations

- What is a “100-year Event”?
- How do you Calculate the Loss for an Event?

US Billion-Dollar Weather/Climate Disasters - 2019

U.S. 2019 Billion-Dollar Weather and Climate Disasters



This map denotes the approximate location for each of the 14 separate billion-dollar weather and climate disasters that impacted the United States during 2019.

NOAA National Centers for Environmental Information (NCEI) U.S. Billion -Dollar Weather and Climate Disasters (2020). <https://ncdc.noaa.gov/billions/>

US Billion-Dollar Events – 1980-2019

DISASTER TYPE	NUMBER OF EVENTS	CPI-ADJUSTED LOSSES (BILLIONS OF DOLLARS)	AVERAGE EVENT COST (BILLIONS OF DOLLARS)
TROPICAL CYCLONE	44	\$945.9	\$21.5
DROUGHT	26	\$249.7	\$9.6
SEVERE STORMS	113	\$247.8	\$2.2
FLOODING	32	\$146.5	\$4.6
WILDFIRES	17	\$84.9	\$5.0
WINTER STORMS	17	\$49.3	\$2.9
FREEZES	9	\$30.5	\$3.4
ALL DISASTERS	258	\$1,754.6	\$6.8

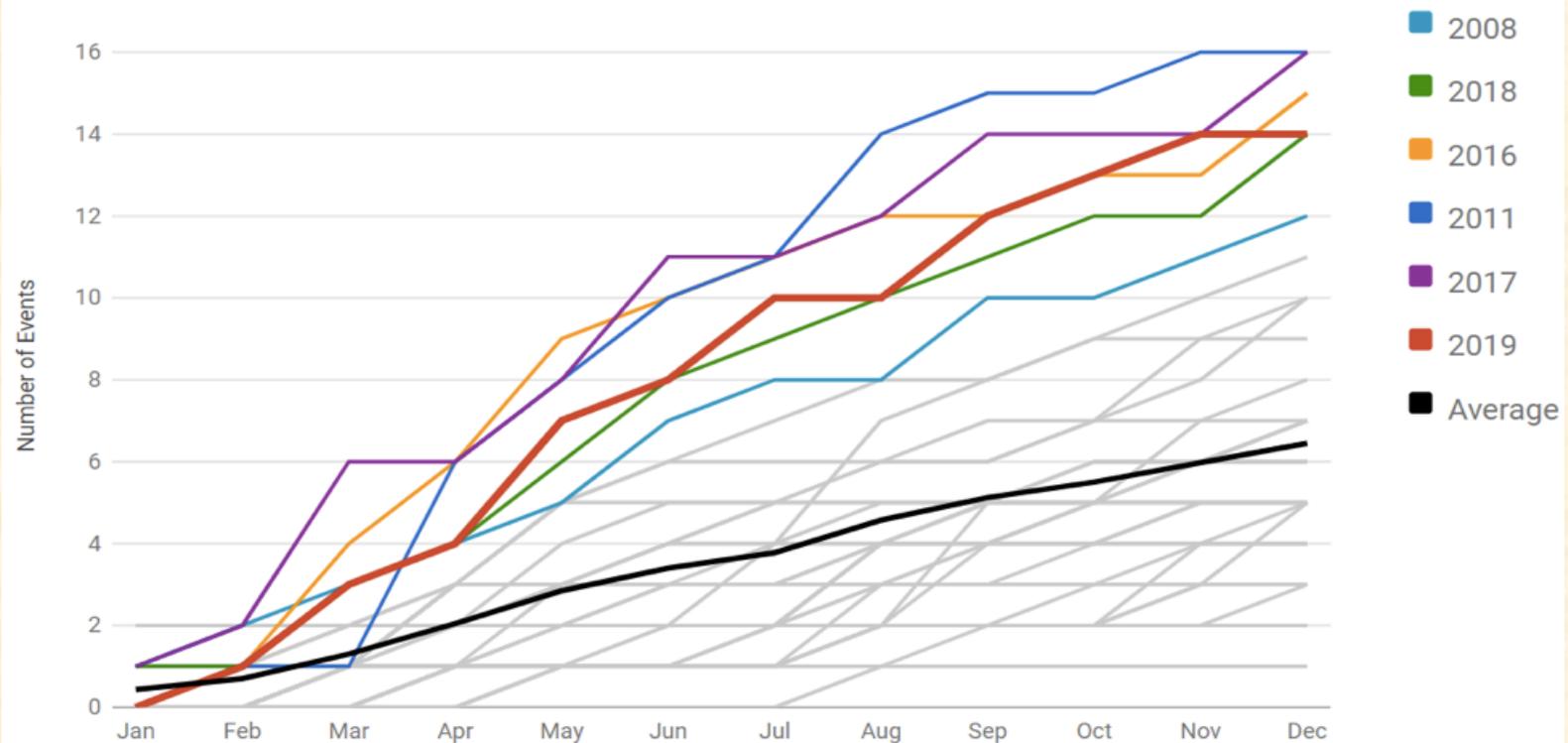
NOAA National Centers for Environmental Information (NCEI) U.S. Billion-Dollar Weather and Climate Disasters (2020). <https://www.ncdc.noaa.gov/billions/>

US Billion Dollar Weather Disasters – 1980-2019

Are They Becoming More Frequent?

1980-2019 Year-to-Date United States Billion-Dollar Disaster Event Frequency (CPI-Adjusted)

Event statistics are added according to the date on which they ended.



NOAA National Centers for Environmental Information (NCEI) U.S. Billion-Dollar Weather and Climate Disasters (2020). <https://www.ncdc.noaa.gov/billions/>

Climate Change Litigation

Climate Change Litigation: Two Types of U.S. Suits

➤ Government Suits Against Energy Producers

- First and Second Generation Suits
- More relevant for Insurance Industry

➤ Suits by Young People Against the Government

- *Juliana et al., v. The United States of America, et al.*, 6:15-cv-01517 (Dist. OR. 2015)
- Dismissed January 2020.

Climate Change Litigation – Snapshot*

- Climate Change Lawsuits filed in at least 28 Countries;
- At least 1328 Suits Filed as of 2019; 1023 filed in US;
- Purpose to Change Corporate Behavior, Seek Compensation; Influence Government Policy.
- Suits Brought by Citizens, Government Entities, Corporations, and NGOs

* Setzer J. and Byrnes R. (2019) *Global Trends in Climate Change Litigation: 2019*,

Direct Climate Change Litigation

First generation suits:

➤ *Am. Elec. Power Co., Inc. v. Connecticut*, 564 U.S. 410 (2011); (“AEP”)

and

➤ *Native Village of Kivalina v. ExxonMobile Corp.*, 696 F.3d 849 (9th Cir. 2012) (“Kivalina”)

Kivalina and Am. Elec. Power

- Remedy sought against multiple energy companies for public nuisance based on defendants' CO₂ **emissions**;
- The defendants successfully moved to dismiss the lawsuit on two separate grounds;
 1. Standing – Lack of ability to demonstrate “substantial likelihood” that Defendants’ conduct caused injury.
 2. Lack of Subject Matter Jurisdiction – Non-Justiciable Political Question – required input from legislature.
- Preemption was the Key: - Courts held that Clean Air Act preempted federal common law in regards to CO₂ emissions (*AEP*) and damages caused by global warming (*Kivalina*)

“Second Generation” Climate Change Litigation - Government Suits

16 and Counting

- California - Cities of San Francisco, Oakland, Richmond, Imperial Beach, and Santa Cruz, and the counties of San Francisco, San Mateo, Marin, and Santa Cruz;
- New York City;
- Colorado – Boulder, Boulder County, and San Miguel County;
- Washington State – King County (Seattle);
- Rhode Island and City of Baltimore – latest filings.

“Second Generation” Climate Change Litigation - Government Suits

- Filed in State Courts – generally based on State Law claims rather than on Federal claims;
- Allegations based on Defendants’ knowledge;
- Alleging Public and Private Nuisance, Trespass, and some Products-Liability claims – Failure to Warn;
- Based on Defendants’ Production, not Emissions;
- Sought Reimbursement for Costs Expended to Respond to Climate Change Damages.

“Second Generation” Climate Change Litigation - Government Suits

How did Defendant's Respond?

- Brushed aside attempt to reframe debate as one of Production rather than Emissions; Same thing.

Argued:

- Congress has displaced common law claims;
- Combustion, not extraction = emissions;
- **(Key Science Point)** Impossible to link releases to injury;
- **(Key Legal Point)** Claims violate Separation of Powers – Court would invade legislative and executive (foreign affairs) spheres of influence

Government Suits - Where Are We Now?

- **Oakland** and **San Francisco** suits, removed to federal court; motion to remand denied; dismissed on June 25, 2018; (preemption, extraterritoriality);
- **New York** suit dismissed on July 19, 2018;
- **Other California** suits remanded to state court after removal; actions stayed pending appeals to 9th Circuit;
- **Colorado** and **King County** suits still alive; motions to dismiss filed by Defendants based on *Kivalina* and *AEP* reasoning;
- **Baltimore** and **Rhode Island** suits remanded to state court, both still active.

Attribution Science – How Do We Know?

- Extreme Event Attribution (“EEA”)

Generally:

- Would a Specific Event have Occurred in the Absence of Anthropogenic Climate Change?

Specifically in Legal/Insurance Context:

- For Example, How do you prove that an Energy Company’s Actions in Location A Caused the Claimed Injury in Location B, in the Context of Anthropogenic Climate Change.

Is There A Duty To Defend Climate Change Suits??

Potential Defenses??

- Known Loss?
- Pollution Exclusions – Greenhouse Gasses as Pollutants?
- Expected or Intended Injury?
- Accident? Occurrence?
- Products-Completed Operations Hazard Exclusion?

Duty to Defend – What Happened??

- *AES Corp. v. Steadfast Insurance Co.* – First and ONLY(!) Duty to Defend Climate Change Suit



Questions?

