

Climate & Energy Planning Workshop

Upper Midwest Planners Conference

Lismore Hotel & Convention

Wilson Hall - Main level

October 2, 2019

2 to 4 p.m.

Sponsor thank you



Welcome to Eau Claire!

“THE POSTINDUSTRIAL TOWN IS REINVENTING ITSELF AS AN OUTDOORSY CULTURAL MECCA, COMPLETE WITH NEW BOUTIQUE HOTELS, LOCAVORE RESTAURANTS AND AN \$80 MILLION ARTS COMPLEX AT THE MEETING POINT OF TWO SCENIC RIVERS.”

— *TIME Magazine*

TIME **HM**

FOOD & WINE

THRILLIST

ci
THE CAP TIMES

Minnesota
Monthly

Madison
magazine

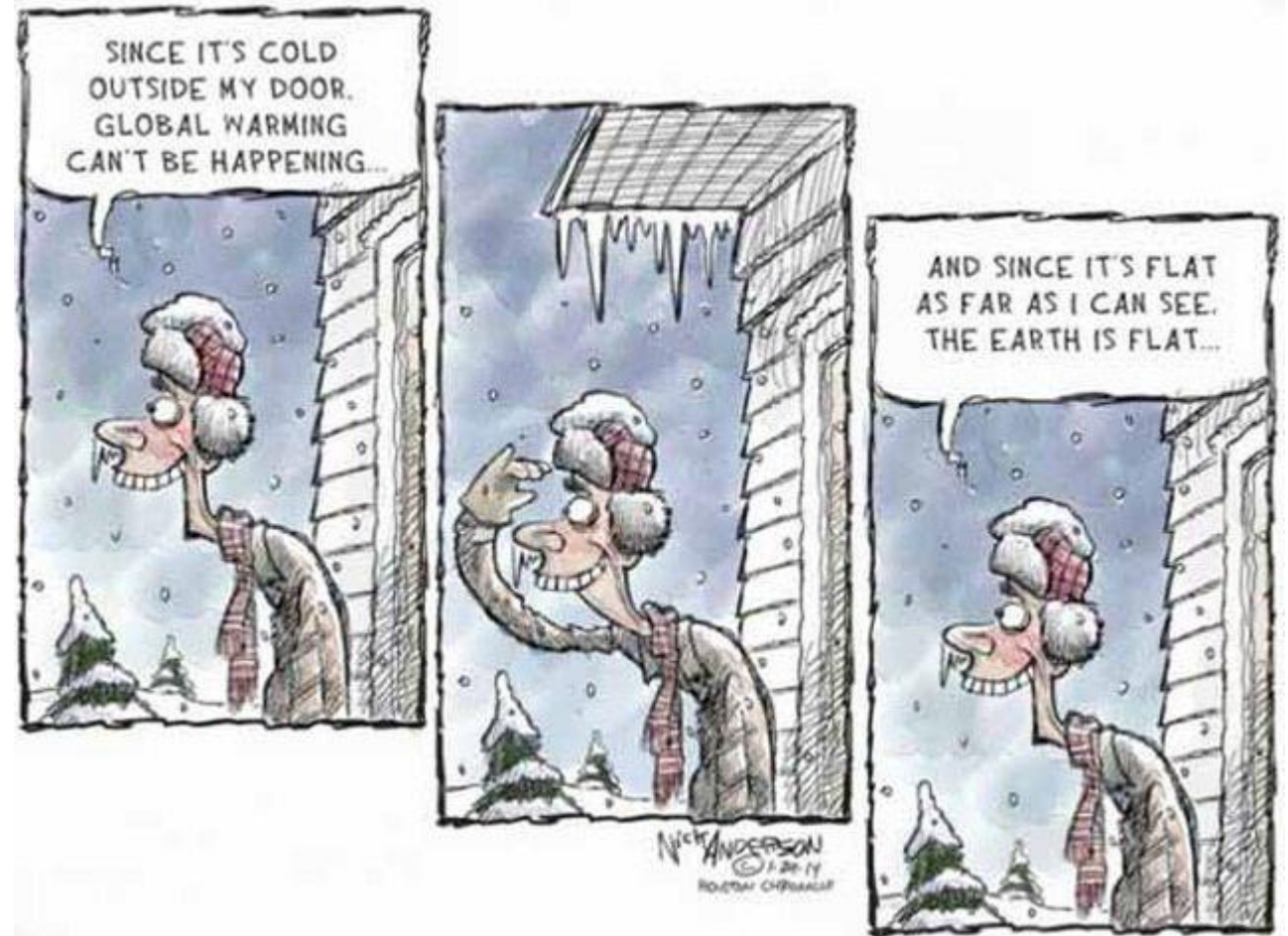
journal
sentinel
HOME OF THE QUAL TRIP DIARY

Facilitators

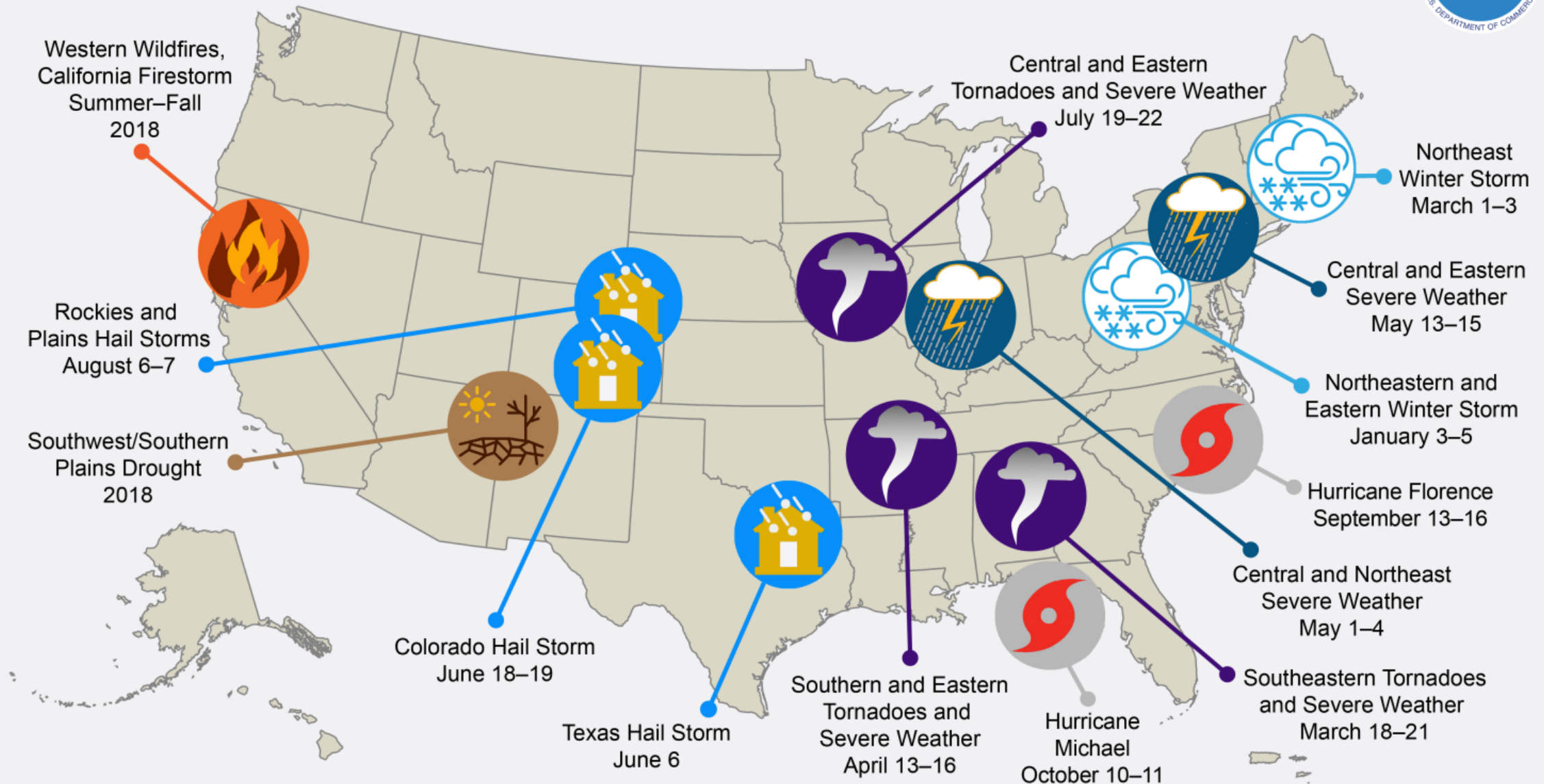
- Abby Finis, Senior Energy planner, Great Lakes Institute, Minneapolis
- Marisa Bayer – Community Energy Program Manager, Center for Energy & Environment (MN)
- Tami Gunderzik – Senior Product Manager, Xcel Energy
- Ned Noel, Associate Planner, AICP, City of Eau Claire

Participant Introductions

- And what do you want to get out of this workshop?



U.S. 2018 Billion-Dollar Weather and Climate Disasters

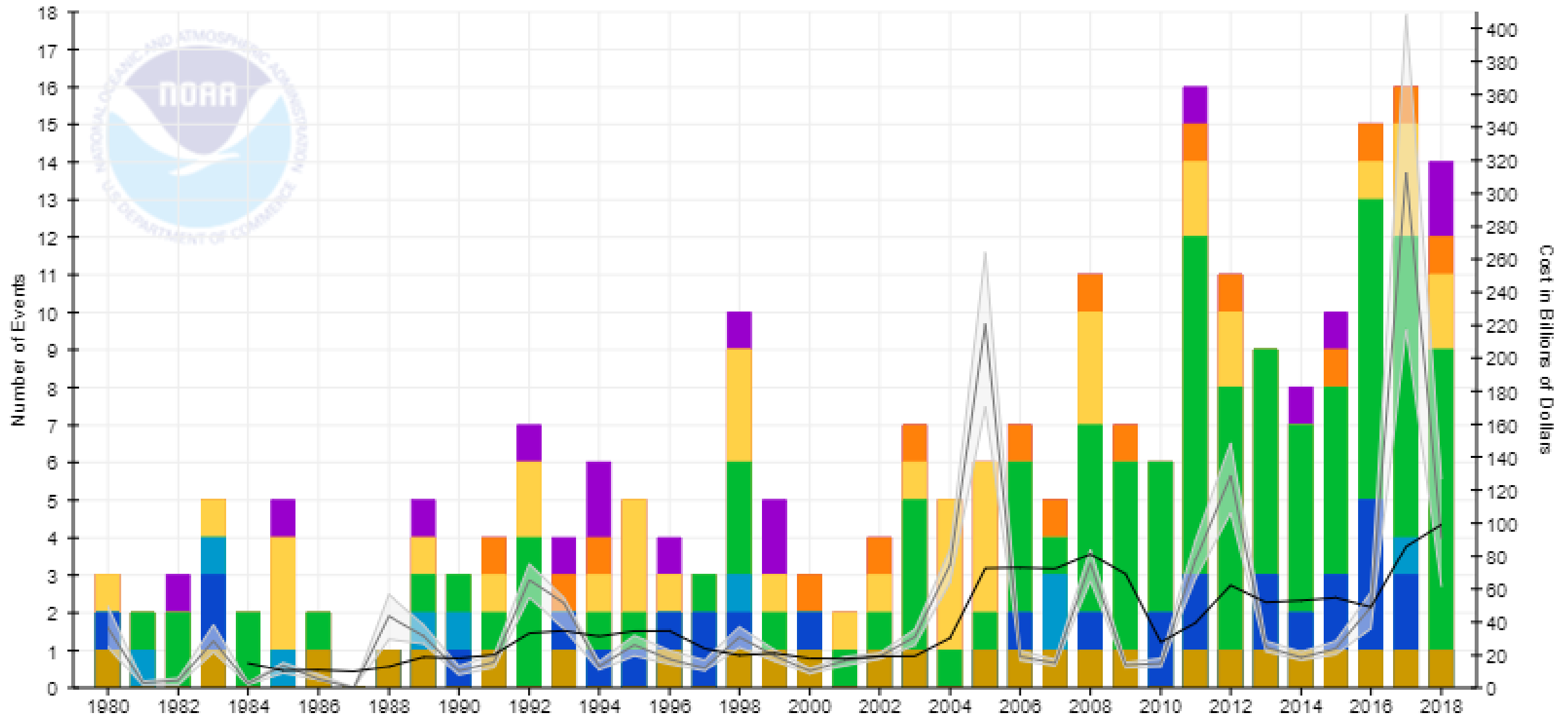


*This map denotes the approximate location for each of the **14 separate billion-dollar weather and climate disasters** that impacted the United States **during 2018**.*

Billion-Dollar Disaster Event Types by Year (CPI-Adjusted)



<https://www.ncdc.noaa.gov/billions/>



What climates today are most similar to the projected future climate of my location?



Climate analog: 2046-2065,
mid emission scenario (A1B)



Climate analog: 2081-2100,
mid emission scenario (A1B)

<http://www.wicci.wisc.edu/climate-map.php>



$\Delta T = 3.6^\circ\text{F}$
over 60 yrs

$\Delta T = 2.7^\circ\text{F}$
over 30 yrs

Tornado that hit western Wisconsin classified as EF3

Homes were damaged and trees downed in Wheaton and Elk Mound.

By Tim Harlow Star Tribune | SEPTEMBER 25, 2019 — 11:03PM



DAN REILAND — ASSOCIATED PRESS



**POLICY GUIDE ON PLANNING &
CLIMATE CHANGE**

Adopted April 27, 2008

Updated April 11, 2011

American Planning Association

Policy Guide on Planning and Climate Change

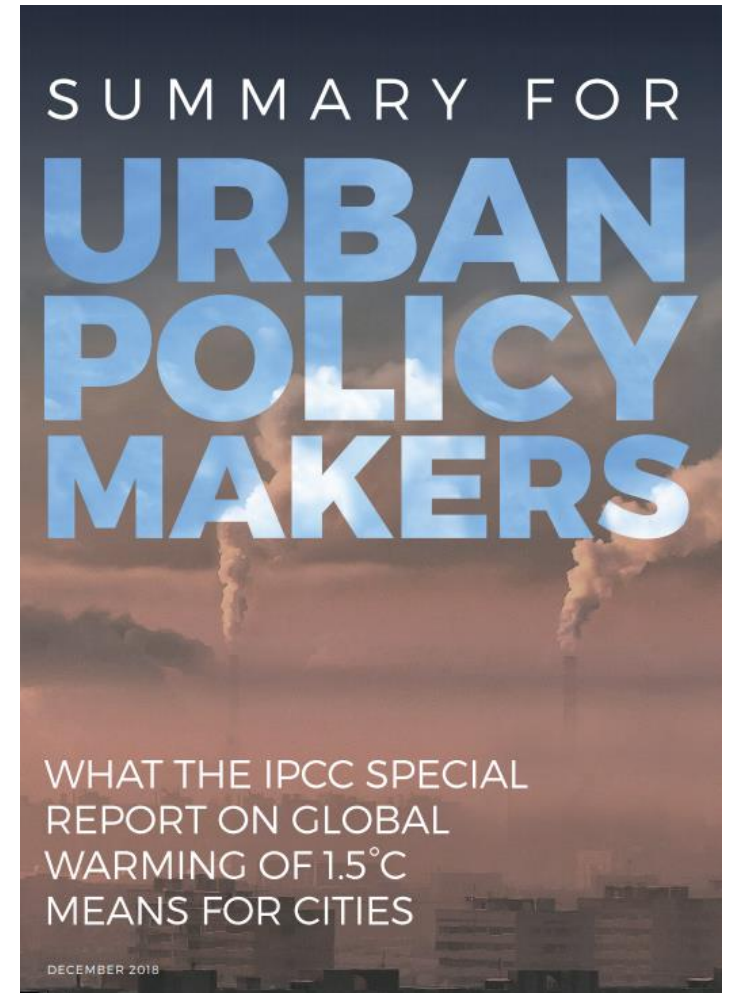
1.0 INTRODUCTION

Today, planners have the **opportunity and obligation** to address the challenge of global climate change. The planning profession and the process of planning are **uniquely suited** to help communities rise to this historic challenge. This Climate Change Policy Guide recommends a policy framework to assist communities in dealing with climate change and its implications. Success will **require new policies and a bold new approach** to planning, including the recognition that there will be enormous challenges to our political and economic institutions to address the myriad impacts of climate change.

Planners must also understand that there is a “**no regrets**” approach to much climate change work. Reducing GHG emissions also reduces pollution; further, if these emissions reductions are achieved through **green building development** and **reductions in vehicle-miles-traveled**, there are **economically measurable savings in energy expenses** and **traveler convenience**. A more **compact urban form** has the potential to reduce both GHG emissions and infrastructure costs. A public safety program that enhances climate resiliency can also **protect property and persons from existing threats**. Building a bridge with greater clearance above a coastal estuary accounts for both future sea-level rise and current storm surge potential and may have environmental benefits as well. If these sorts of actions are undertaken to address potential climate change impacts or to reduce its effects, they will have **collateral benefits** regardless of the future state of the climate.

APA's Planning Framework

1. Based on best available data
2. Locally made
3. Adaptation as important as mitigation
4. Ongoing civic engagement



Things to think about from APA's Policy

- Finding 16: Few communities regulate and evaluate development in a way that accounts for or reduces GHG emissions. Planning, regulations and development reviews should directly address climate factors. New or revised standards, regulations, practices and technologies are needed to reduce GHG and prepare communities to adapt to the effects of climate change.
- Energy Policy 9: Integration of Renewable Energy into Codes
 - Revise building codes and architectural design guidelines to allow for, encourage, or require integration of passive solar design, green roofs, active solar and other renewable energy sources.
- Land Use Policy 10: Zoning and Development Standards Reform
 - New zoning and development standards should incorporate climate change impacts and implications in required environmental reviews and decision-making.

APA has you covered



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Hazards Planning Center



Research Priorities

The Hazards Planning Center focuses its efforts into projects and policies that prioritize hazard mitigation, post-disaster recovery, and climate change adaptation.

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Climate Change Resources

APA provides its members with information and resources to do their jobs effectively and advocate for best planning practices in the communities where they work. The environmental and economic impacts of climate change on communities are a continuing focus of APA's research efforts. In fact, climate change was rated the top priority by APA members who responded to the Research Agenda Task Force Survey.

In January 2017, the [Kresge Foundation](#) recognized APA as one of nine urban-focused professional membership organizations for its efforts to educate members on climate change issues.

The following climate change resources are available from APA. See the [Disaster Recovery Resources](#) page for additional hazard mitigation information.

Policy Guides and Frameworks

APA's policy guides represent the collective thinking of our members on positions of both principle and practice. They represent APA's official position on issues central to building communities of lasting value.

[Climate Change](#)

[Energy](#)

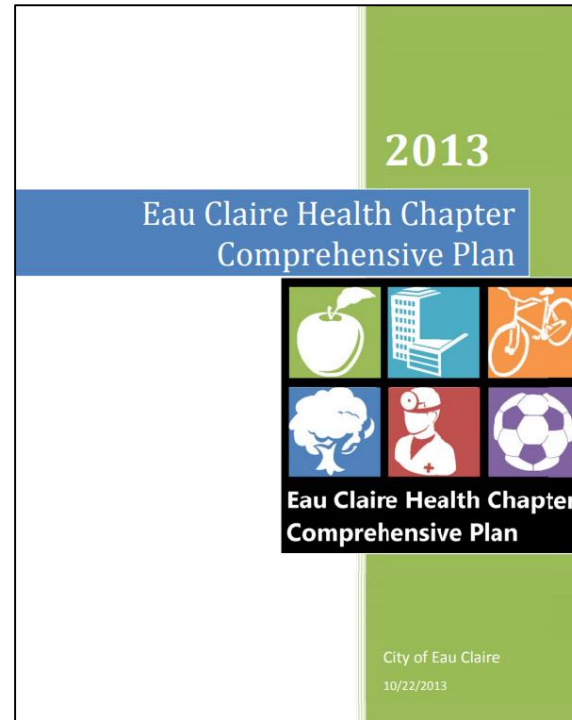
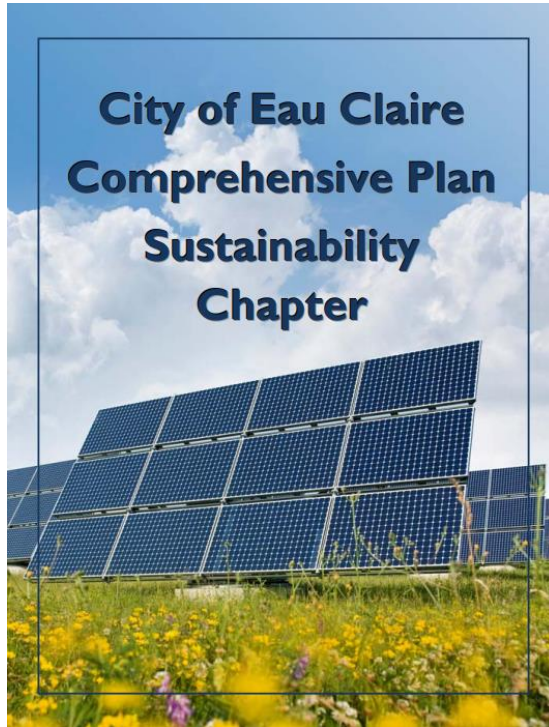
[Hazard Mitigation](#)

[Sustainability Policy Framework](#)

[View the entire library of APA Policy Guides](#)

Research Initiatives

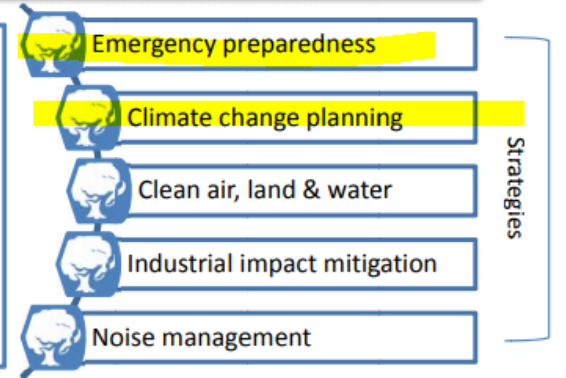
Eau Claire's brief story



Objective: The City will strive to minimize or prevent harmful exposure to environmental situations within its ability to manage.

Desired Health Outcomes:

- Decrease hazardous exposure to extreme weather events
- Decrease air, water, land, material pollutant and nuisance exposure
- Increase disease prevention
- Decrease health disparities amongst populations

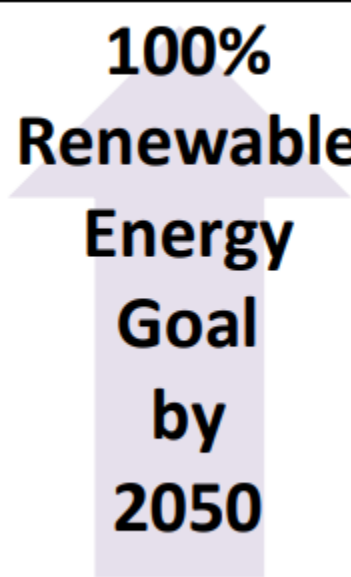


Policy goals drive planning

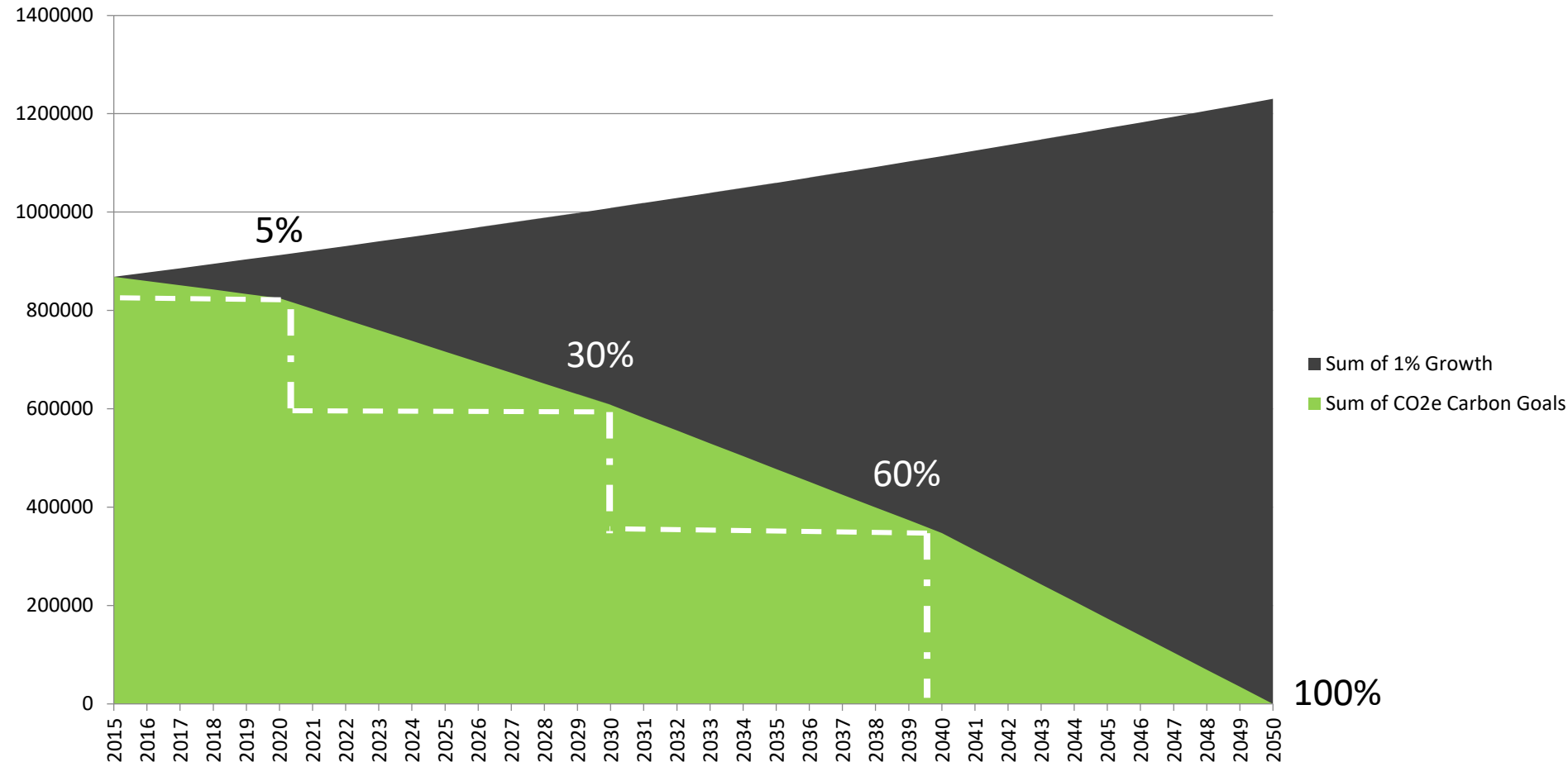
PARIS OBJECTIVE 1: Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above pre-industrial levels

PARIS OBJECTIVE 2: Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production.

Policy goals drive planning

City & Community 100% Carbon Neutral Goal by 2050	
4% annually over 2041 – 2050 (40% drop)	 100% Renewable Energy Goal by 2050
3% annually over 2031 – 2040 (30% drop)	
2.5% annually over 2021 – 2030 (25% drop)	
1% annually over 2015 – 2020 (5% drop)	
Community/City Emission Baseline 2015	

Carbon Drop Down Goals



Carbon Neutral 2050

- City of Eau Claire
- Eau Claire County
- U of WI – Eau Claire
- Xcel Energy

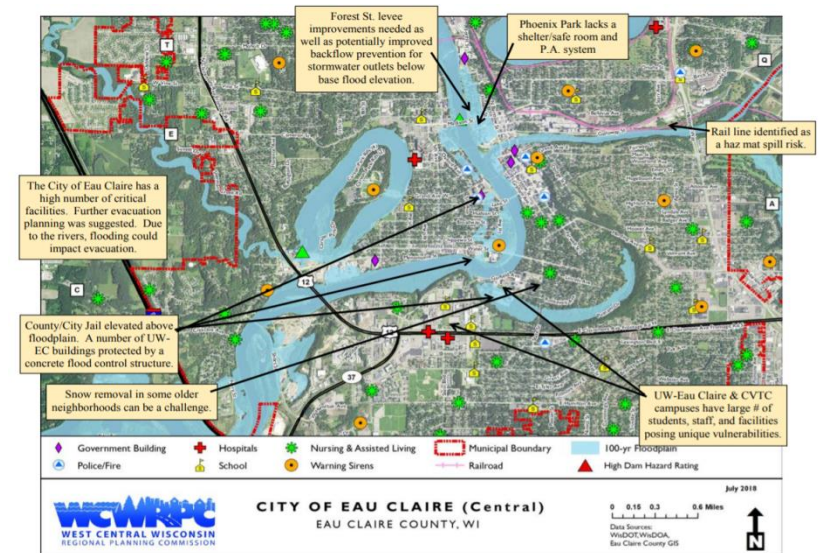


Risk Management

- County & City Multi-Hazard Mitigation Plan 2018-2023
- Required by FEMA & Wisconsin Emergency Management every 5 years
- Inventory of critical facilities and services
- Risk and vulnerability assessment
- Climate change impacts addressed
- Flood emergency plan, including notifications and response
- Past example: removing vulnerable floodplain properties
- Future example: shoring up levees

Table 9. Eau Claire County Hazard Risk & Vulnerabilities Survey Results (2017)

Hazard	Risk	Vulnerability	Avg	HVA relative threat	in 2013 Plan?	section of 2013 plan
Natural Hazards						
Riverine or Overbank Flooding	3.9	2.9	3.4	34%	x	flooding
Overland or Stormwater Flooding	2.8	2.7	2.7	48%	x	flooding
Heavy Snow Storm and Blizzards	3.2	2.5	2.9	45%	x	winter storms & extreme cold
Ice Storms and Sleet	3.2	3.0	3.1	68%	x	winter storms & extreme cold
Winter Kill of Crops	1.8	1.7	1.7	--	x	winter storms & extreme cold
Extreme Cold	2.7	2.4	2.5	53%	x	winter storms & extreme cold
Forest or Wild Fire	2.7	2.8	2.7	35%	x	wildfire
Tornadoes	2.3	3.8	3.1	48%	x	tornadoes
High Winds	2.8	3.4	3.1	--	x	thunderstorms & high winds
Thunderstorms, Lightning, Hail, etc.	2.8	2.0	2.4	35%	x	thunderstorms
Extreme Heat	2.1	1.9	2.0	38%	x	extreme heat
Drought	2.2	2.7	2.5	31%	x	drought; county plan only



Renewable Energy Action Plan

The REAP community planning project seeks to address how Eau Claire will meet its 100% renewable energy and carbon neutrality goals by 2050.

Background



Workshops



Workshop #1 [Agenda](#), [Notes](#) & [Slides](#)

Workshop #2 [Agenda](#), [Notes](#), [Slides](#), [Strategy Summaries](#)

Workshop #3 [Agenda](#), [Notes](#), [Slides](#)

Workshop #4 [Agenda](#)

Future meeting agendas and notes will be posted here.

Data



Average Energy Costs (2018)

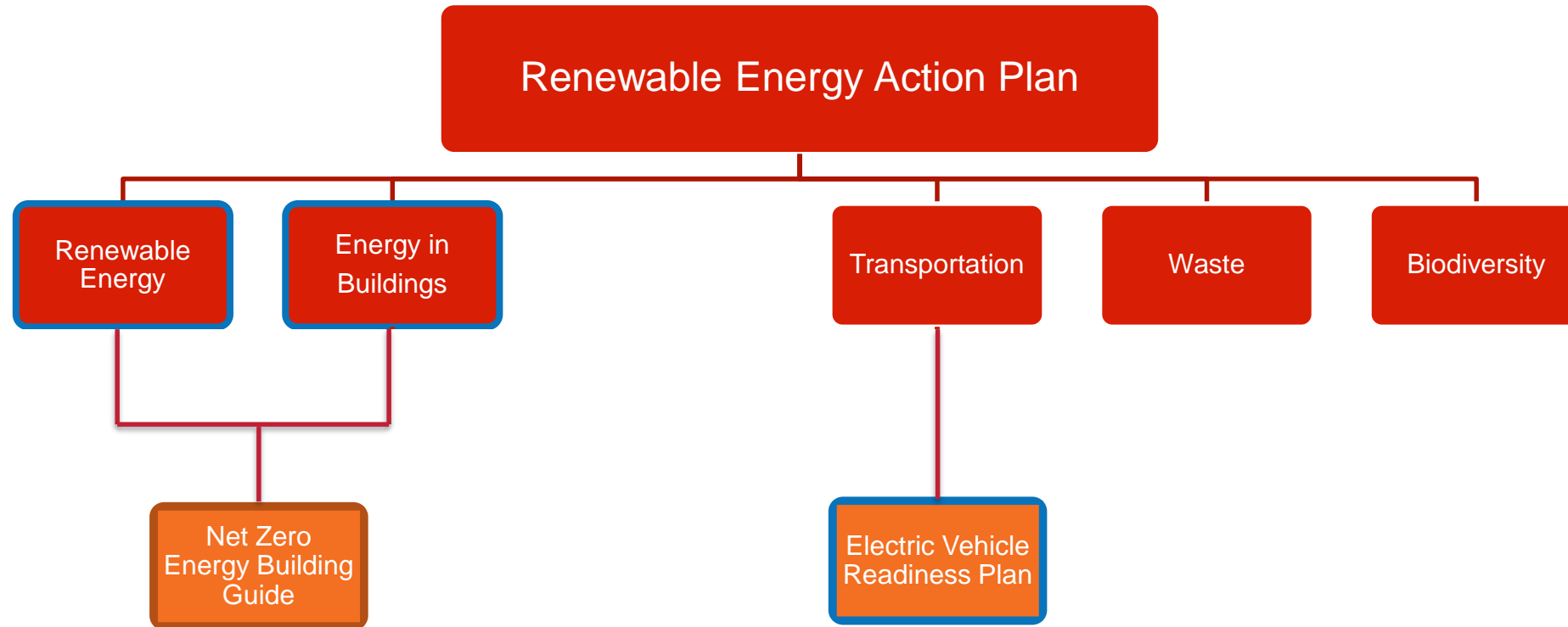



Sector	Average Costs Per Premise
Residential	\$1,376
Commercial and Industrial	\$17,484
Municipal	\$10,719

Total spent on energy: \$108 Million

<https://www.eauclairewi.gov/government/our-divisions/renewable-energy-action-plan>

Plan Structure & Focus Areas



 = Supported by Partners in Energy

