

# Why We need Climate Policy in Local Comprehensive Plans.

Change is Inevitable, but PNW Heat Dome X 2 is Not

A Presentation to the League of Women Voters TPC  
by Climate Pierce County

May 2022

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# Agenda

1. Climate Consequences in Pierce County
2. Expected Climate Trends
3. Vision 2050 & Countywide Planning Policies
4. Climate Policy and Comp Plans
5. Why collaboration is important
6. Conclusion

# Climate Change Consequences in Pierce County

# Flooding



TNT  
February 7, 2020



# Puyallup Flood 2009



# January 2021 King Tide at Purdy

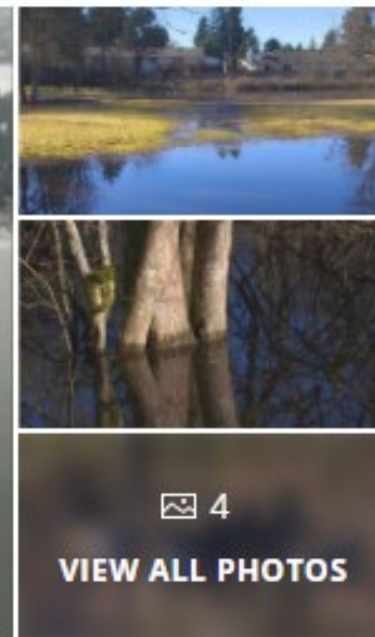




# New FEMA maps show hundreds of Pierce Co. residents may now need flood insurance

by Michelle Esteban | Monday, February 13th 2017

AA



*New FEMA flood-mapping has determined that 800 properties that weren't considered "high risk" for flooding before, now fall under that category, which means they may now need flood insurance. (Photo: KOMO News)*



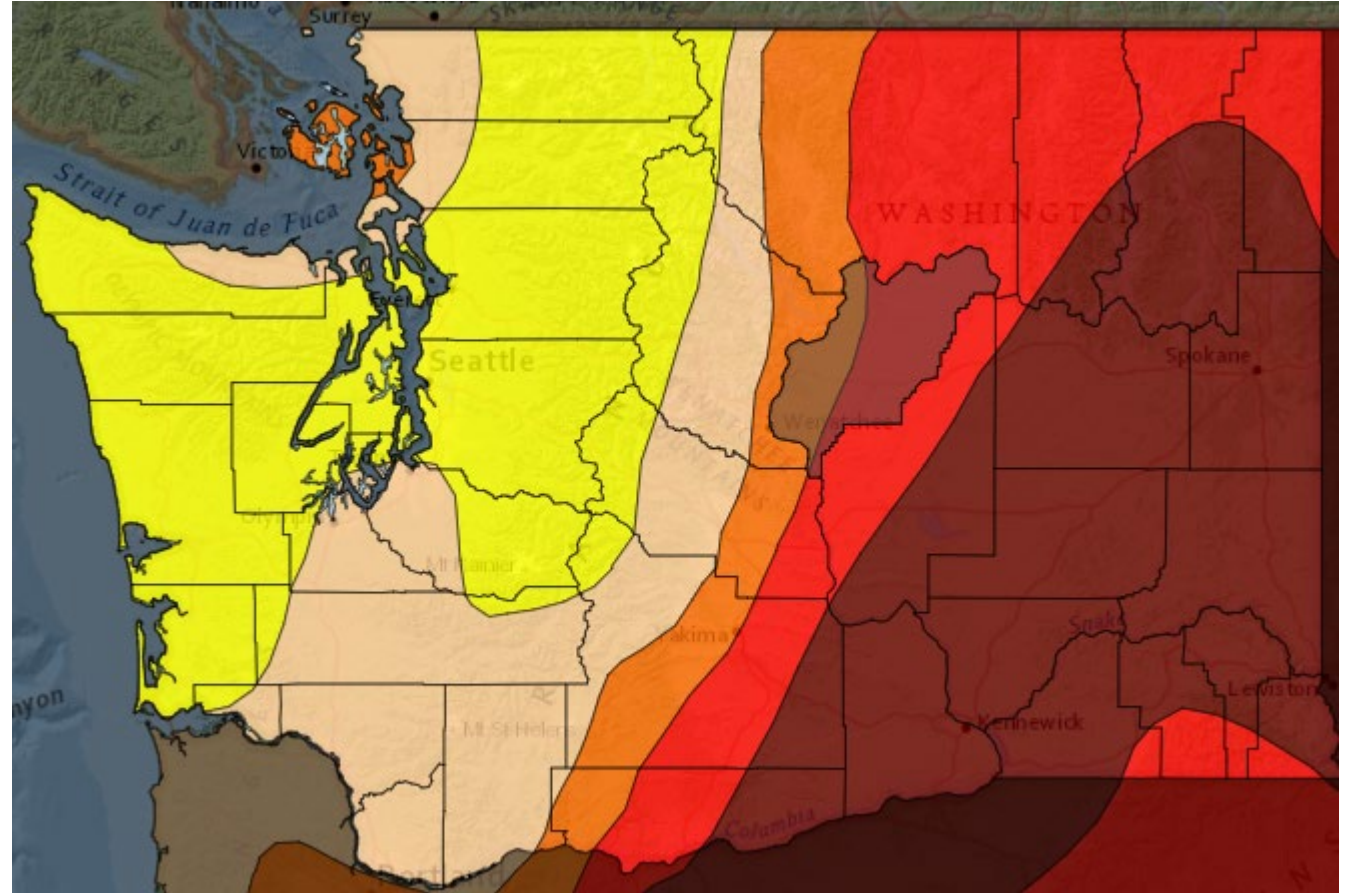
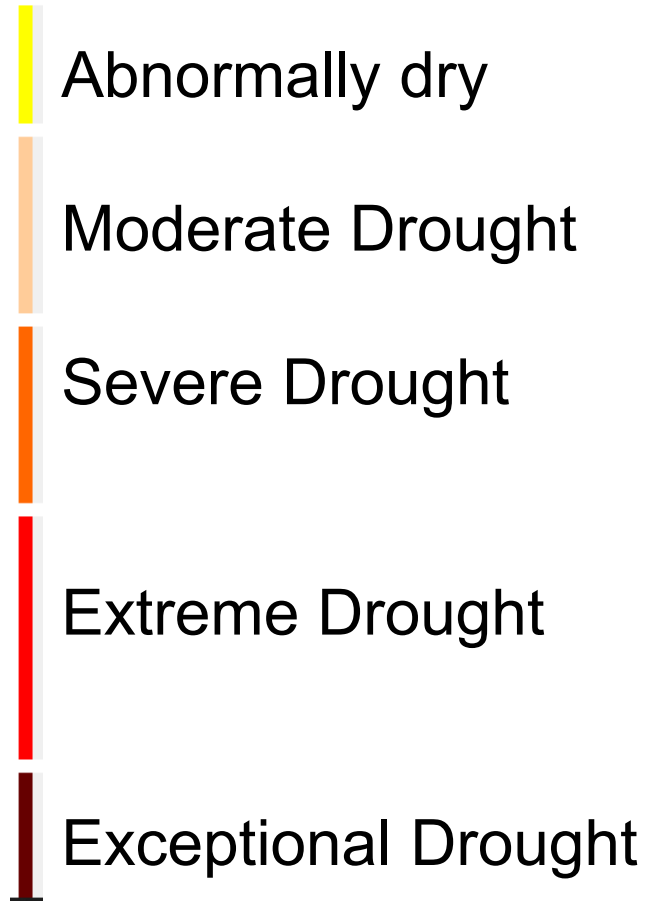
PARKLAND, Wash. - Some people in Pierce county might want to call their insurance agent because they may now need flood insurance.

# From the WA State Enhanced Hazard Mitigation Plan

Storms in late 2021 and early 2022 led to multiple flooding disasters that included several cascading impacts, such as stream channel migration, mudslides, and erosion. These events reiterated that flooding is one of the most prevalent natural hazards in Washington and deserves our attention. In 2022, we'll be prioritizing flood risk reduction in our **grant rounds** and in our update to the SEHMP.



# U.S. Drought Monitor Conditions for Washington, September 2021



# Wildfires

Graham fire, 8 houses destroyed,  
KOMO news, September 8, 2020



Bonney Lake fire, 4 homes  
destroyed, 100s to evacuate, TNT,  
September 9, 2020

# Smokestorms : 2017, 2018, 2020

Tacoma Pierce County  
Health Department





# Heat Dome: 2021

## Gig Harbor cooling center to open over weekend for people escaping the heat



Mellena O'Brien, four, plays in the Yesler Terrace Spray Park during a heat wave hitting the Pacific



National Weather Service   
@NWS



A historic heat wave will continue to grip the Western U.S. While everyone is at risk from the dangers of extreme heat, but these groups are more vulnerable than most. Ensure that your loved ones and neighbors are safe from the heat and remain [#WeatherReady](#).

**Heat Impacts: Vulnerable Populations**

				
<b>PREGNANT</b>	<b>NEWBORNS</b>	<b>CHILDREN</b>	<b>ELDERLY</b>	<b>CHRONIC ILLNESS</b>
Extreme heat events have been associated with adverse birth outcomes such as low birth weight, preterm birth, infant mortality, and congenital cataracts.	Newborns are extra sensitive to heat because their ability to regulate body temperature is limited.	Young children and infants are particularly vulnerable to heat, as their bodies are less able to adapt to heat than adults. Those under four are especially vulnerable.	Older adults, especially those who have preexisting diseases, take certain medications, live alone or have limited mobility are at higher risk for heat illness.	People with chronic medical conditions are more likely to have a serious health problem during a heat wave.

Source:  
The Impacts of Climate Change on Human Health in the United States,  
A Scientific Assessment (U.S. Global Changes Research Program)

weather.gov 

6:35 AM · Jun 27, 2021





# Landslides



Crosscut: Fairfax Forest Reserve Rd.  
in Pierce County,  
February 2020



# Algae Blooms

Look familiar?  
Can't swim, and  
can't fish.

TPCHD



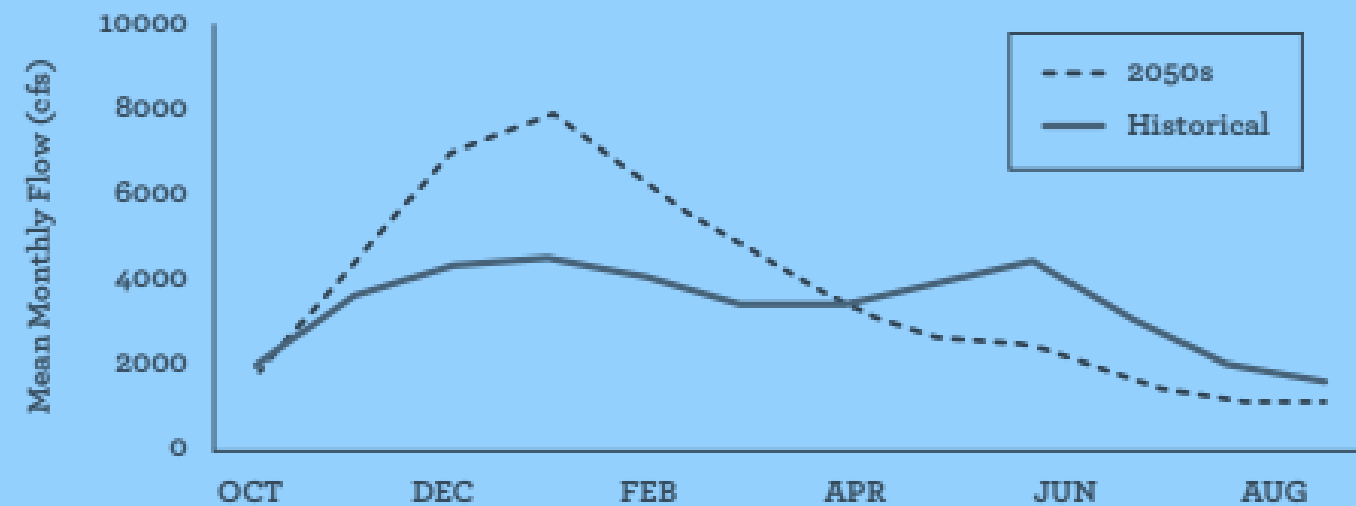


# Expected Climate Trends

# UW Climate Impacts Group, 2018

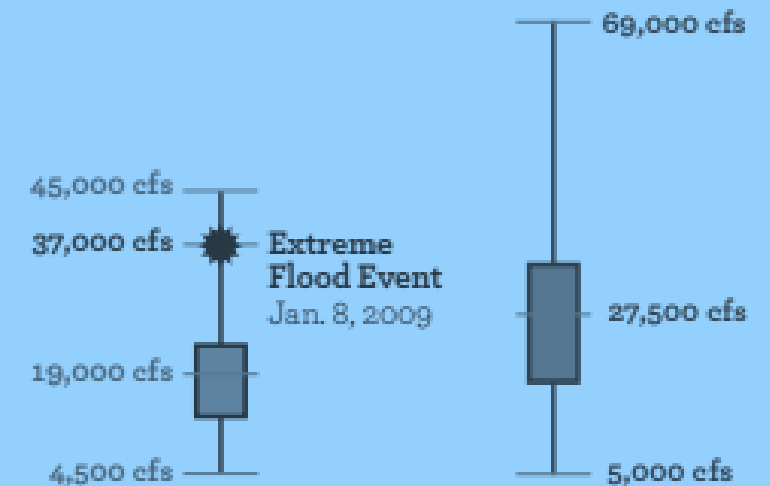
## PUYALLUP RIVER AT PUYALLUP

### MONTHLY FLOWS



Peak flows of the Puyallup River shift from the historical peak in June to a peak in January by mid-century.

### PEAK ANNUAL FLOWS



Mean peak flows and minimum/maximum ranges observed (1950-2017) and projected for future (2050s).

# WSDOT 2011: Our summer temperatures

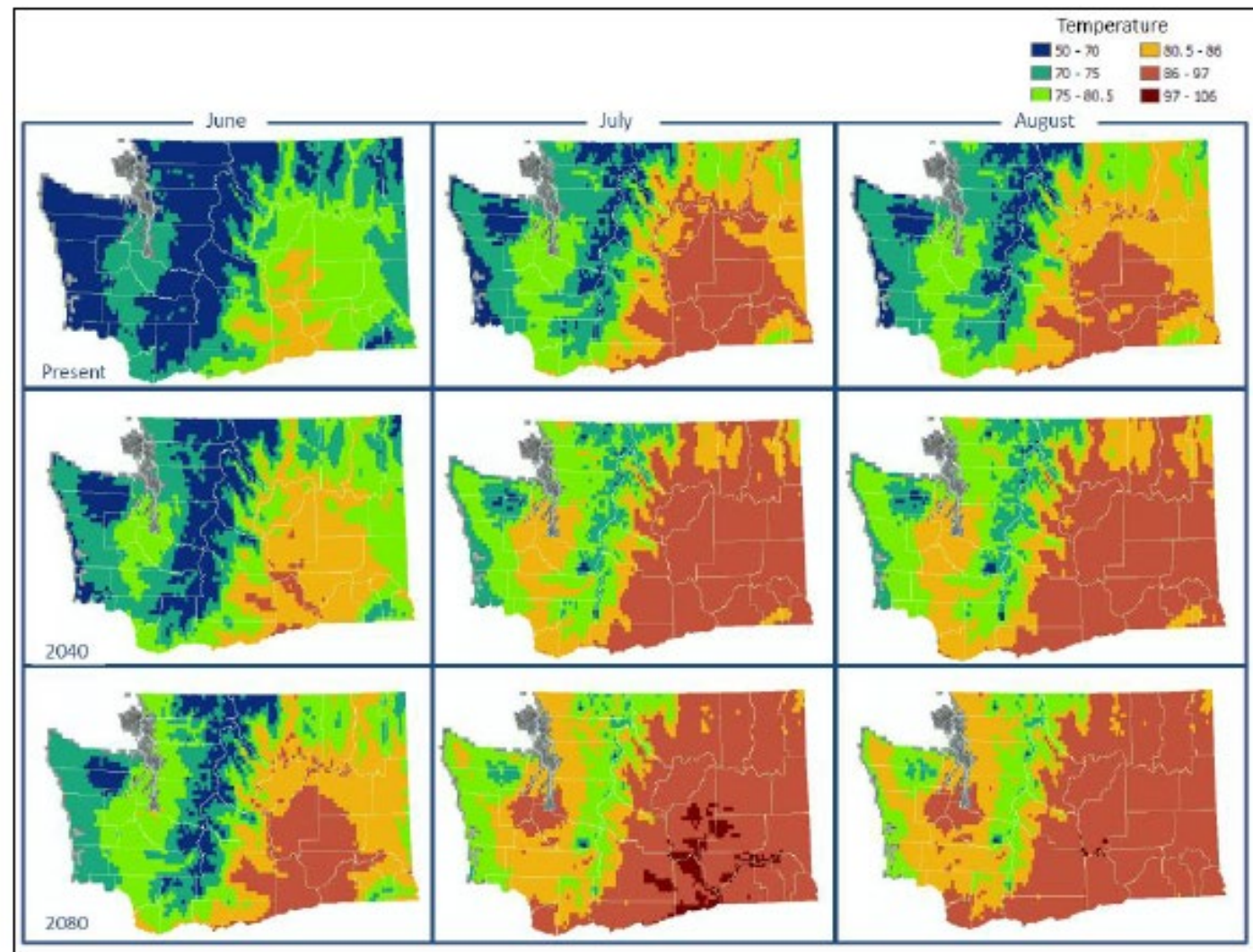
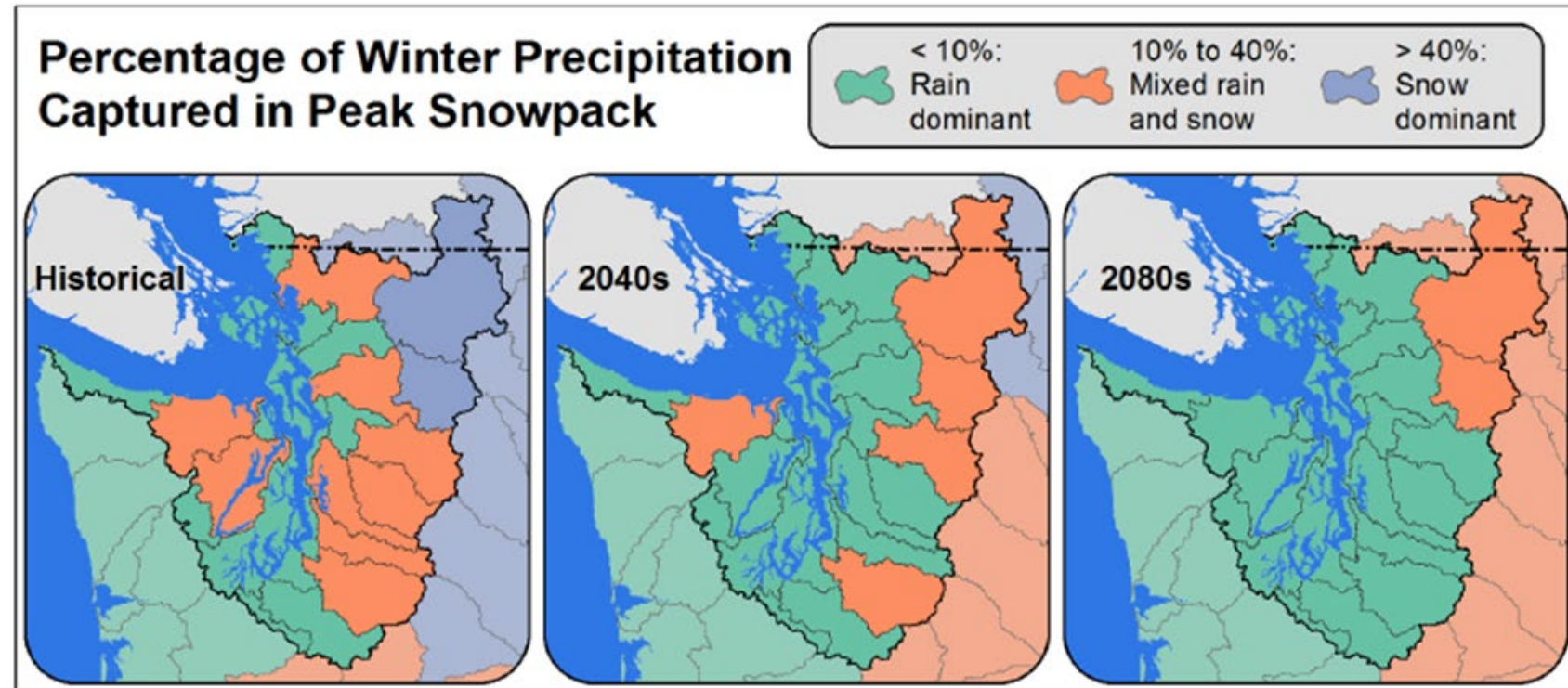


Exhibit 2-2 Change in Temperature – Present to 2080



# UW Climate Impacts Group, 2015

We will become rain dominant instead of mixed rain and snow.



# A Preview of Future Impacts from 2015

**2015** 

Temperature: ~2.7°C (4.8°F) warmer than pre-industrial  
Snowpack: ~70% below normal (1970-1999 average)

## FISHERIES

Low summer streamflow & warm waters  
resulted in fishery closures

  
**>250,000**

Columbia  
River sockeye  
salmon died

## RECREATION

Low snowpack led to reductions in  
winter & summer recreation

  
**42%**

shorter ski  
season at  
Stevens Pass

## WILDFIRE

The most severe wildfire season in  
Washington's recorded history

  
**>1,000,000**

acres  
burned

  
**>\$253  
million**

fire  
supression

## AGRICULTURE

Warm temperatures & reduced water  
availability stressed WA agriculture

  
**17**

major crops  
with reduced  
yields

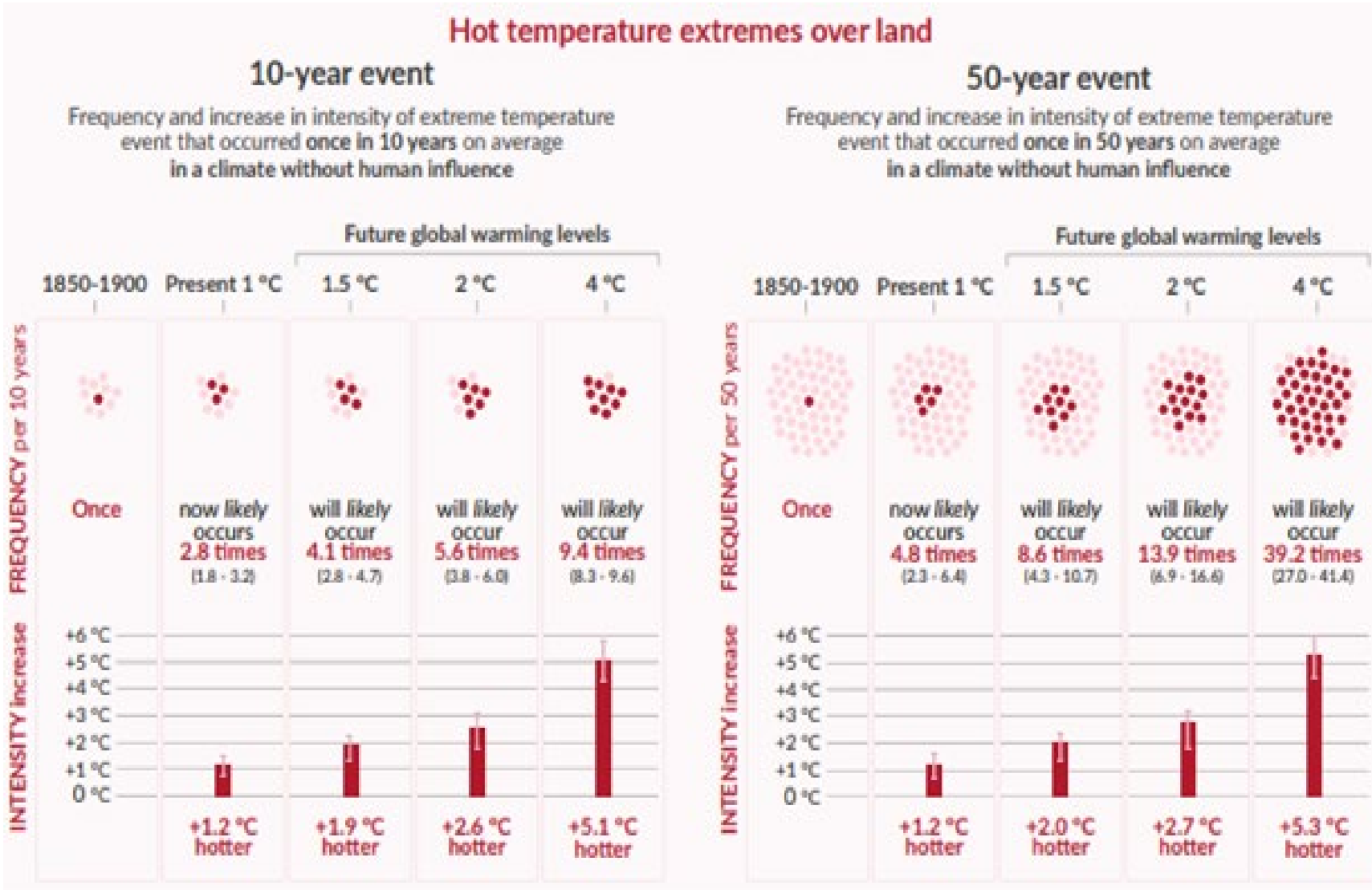
  
**\$633-733  
million**

economic  
losses

*From UW Climate Impacts Group*

# UN International Panel on Climate Change, 2021

Projected changes in extremes are larger in frequency and intensity with every additional increment of global warming.



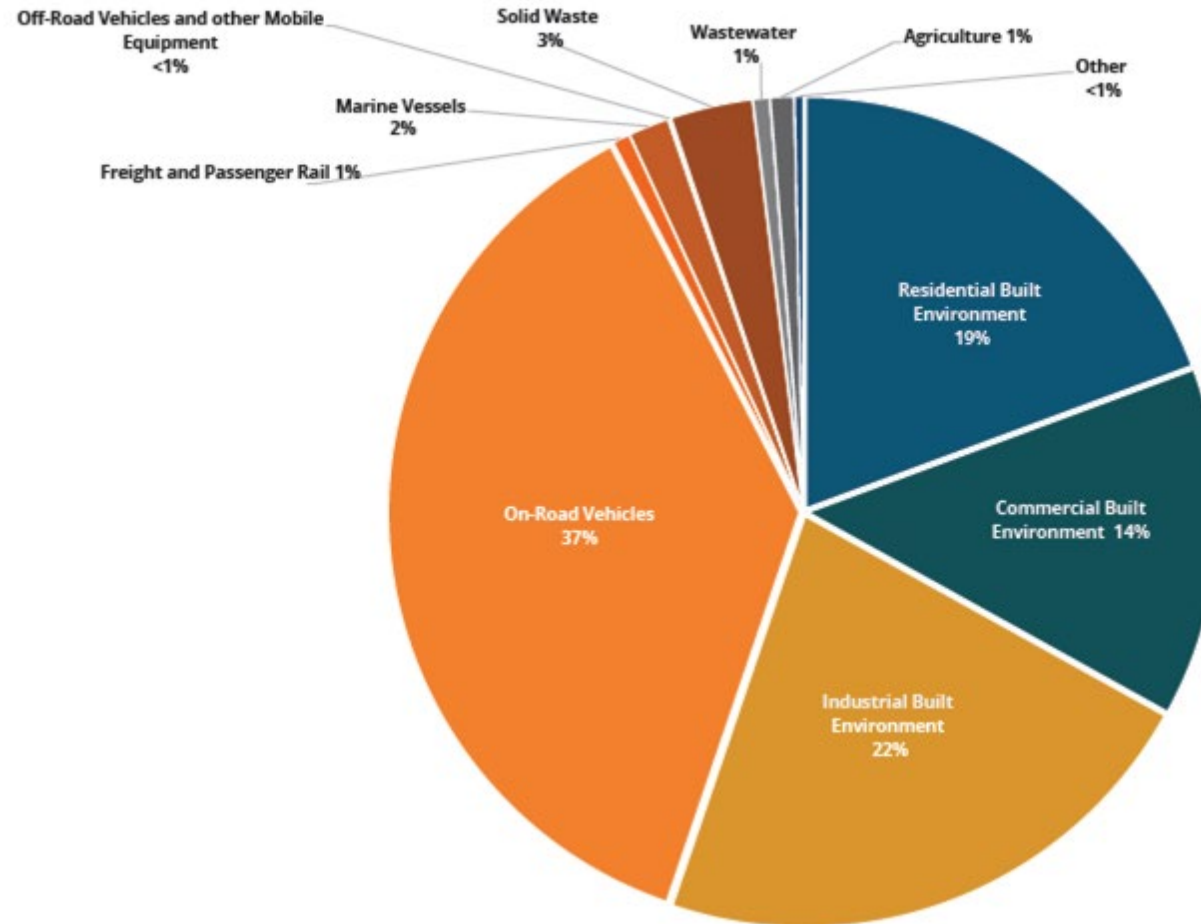


# GHG Emission Inventory PSCAA 2015

By 2044, Vision 2050 projects Pierce County Population will increase by 264,785 people, bringing us to over 1.2 million people.

GHG emissions in  
2015:  
8.2 million Mg CO<sub>2</sub>e

Sources of GHG Emissions in Pierce County 2015



# Current Climate Planning in Pierce County

- Northwest Seaport Alliance Clean Air Strategy:
  - Carbon Neutral by 2050
- City of Tacoma Climate Action Plan:
  - Carbon Zero by 2050
- Pierce County Sustainability and GHG Reduction Plan:
  - 45% Reduction by 2030
- Puyallup Tribe: Emergency Climate Resolution and 2016 Climate Impact Study
- Pierce County Rural Climate Dialogues Climate Action Plan
- Puyallup White River LIO Ecosystem Recovery Plan

# From Vision 2050 Puget Sound Regional Council

## CC-Action-3 – Reducing GHG emissions

Policies and Actions to Address Climate Change: Cities and counties will incorporate emissions reduction policies and actions that contribute meaningfully toward regional greenhouse gas emission goals, along with equitable climate resiliency measures, in their comprehensive planning. Strategies include land uses that reduce vehicle miles traveled and promote transit, biking, and walking consistent with the Regional Growth Strategy, developing and implementing climate friendly building codes, investments in multimodal transportation choices, and steps to encourage a transition to cleaner transportation and energy systems.

# From Vision 2050

## CC-Action-4 Climate Resilience and Climate Mitigation

Resilience: Cities and counties will update land use plans for climate adaptation and resilience. Critical areas will be updated based on **climate impacts from sea level rise, flooding, wildfire hazards, urban heat, and other hazards**. The **comprehensive plans** will identify mitigation measures addressing these hazards including multimodal emergency and evacuation routes and **prioritizing mitigation of climate impacts on highly impacted communities and vulnerable populations**.



# PC Countywide Planning Policies (CPP) – PC Council vote May 17<sup>th</sup>.

Vision 2050 sets the Multicounty Planning Policies.

- The Pierce County CPPs are intended to be consistent with the MPPs and are one of the primary mechanisms for VISION 2050 to be implemented at the local level.
- Jurisdictions are required by VISION 2050 to individually update their local Comprehensive Plans and other long range planning documents for consistency with VISION 2050.
- The local comprehensive plans of the county and the cities and towns are expected, and required by GMA, to be consistent with the CPPs.

# Climate is New to CPPs. These are abbreviated.

- ENV 40 Address impacts from climate change, sea level rise, and climate resiliency, as applicable to each jurisdiction's unique circumstances.
- ENV 41 Plan to meet State mandates on climate change and the reduction of greenhouse gases, and support achievement of regional greenhouse gas emission reduction goals.
- ENV 42 ...shall work to identify, address and mitigate the adverse impacts of climate change on people's health, particularly that of populations at a greater risk of climate change impacts.
- ENV 43 Encourage, incentivize, and require where appropriate, the development community to reduce impacts of proposed projects on climate change by undertakings such actions as:...

# Climate CPPs cont'd

- ENV 44 Work to protect and restore the carbon sequestration potential of environmentally sensitive lands, natural resources, and open space through actions such as:...
- ENV 45 Support energy management technologies as well as zero emission and renewable energy sources.
- ENV 46 Include climate change mitigation strategies in local transportation planning through actions such as:...

Find the Full CPPS here:

<https://online.co.pierce.wa.us/cfapps/council/model/otDocDownload.cfm>

# Climate Policy in Comprehensive Plans

- Towns and cities may not have the where with all to do a separate Sustainability Plan.
- Comprehensive Plan updates are required by December 2024 and the CPPs state the comp plans need to address climate.
- Share your Climate Goals with leaders and get the Comprehensive Plan for your town to include them.



# Climate Planning and Collaboration

ENV 40 again: Jurisdictions, individually or through **cooperation with coalitions**, state, and/or regional agencies,...

- Maximizing resources through collaboration is smart.
- Small towns don't have the resources to go it alone in funds or personnel. Help your towns prioritize actions and help build collaborations with other towns that could benefit.
- Combining efforts on one large project gives greater benefits and reduces overall costs.
- Bulk purchasing for several towns and cities reduces costs
- Grant applications with several partner towns carry more weight.

# So even though HB 1099 didn't pass

- Pierce County cities and towns are expected to add climate into their comprehensive plans.
- We as residents need to press to get actionable policies in place, not just vague intentions.
- We need to support, this is hard work for small towns and cities both funding wise and people wise.

# Our Task: Monitor and Ask during this comp plan update time period

Together we can:

- Take care of our beautiful area and its resources
- Reduce emissions
- Motivate a robust clean transit system for all of Pierce County
- Conserve energy in buildings and electrify.



# THANK YOU!

We can all help.

Climate Pierce County  
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