

# COMPREHENSIVE PLAN INTERFACE WITH CLIMATE CHANGE

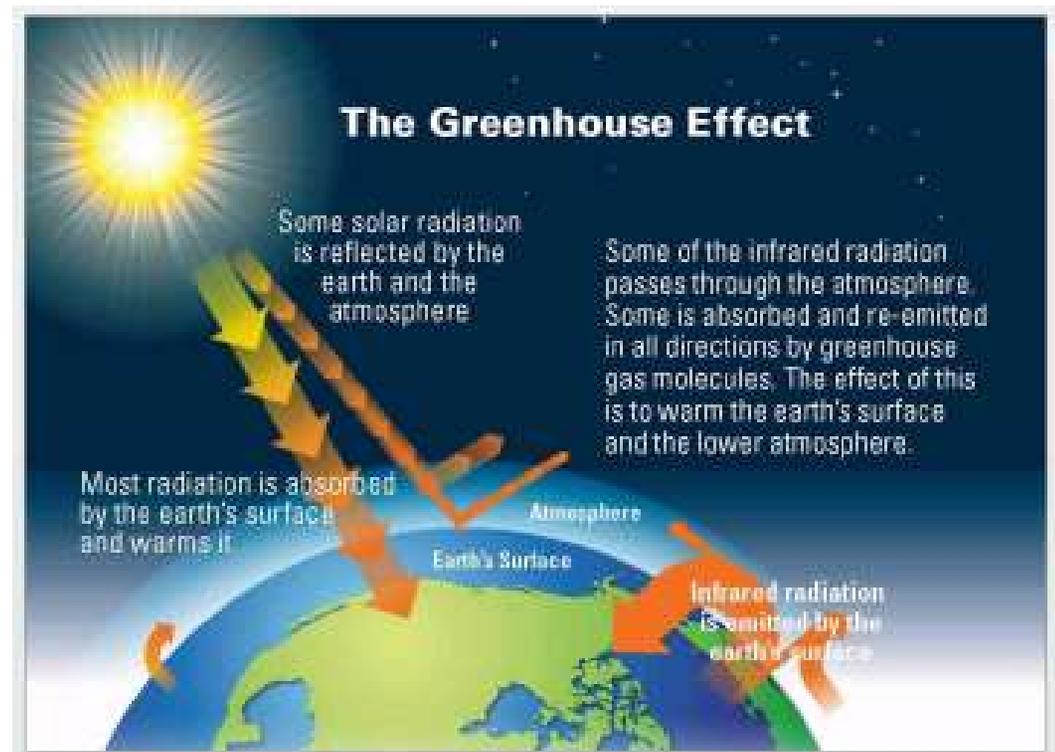
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Charter Review Committee Climate and Environment subcommittee

March 17, 2021

# Climate Change

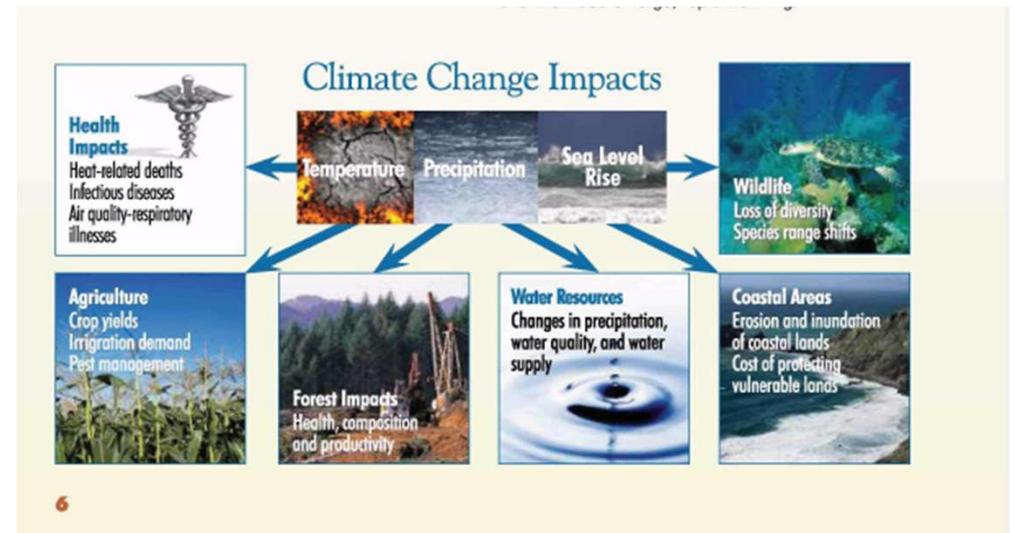
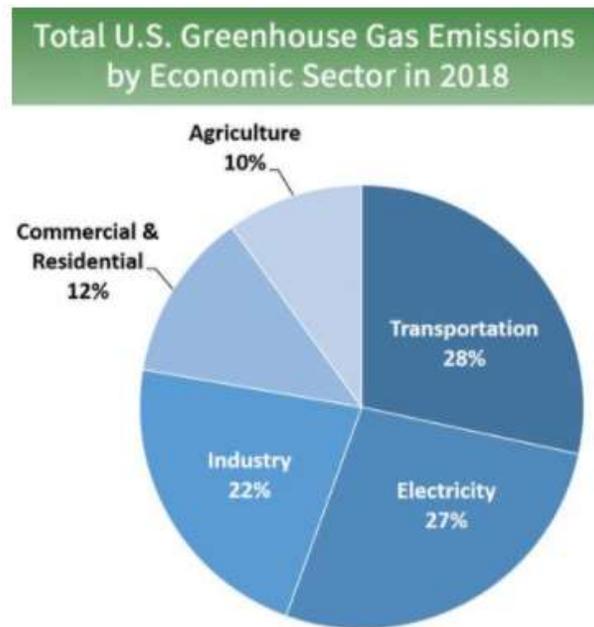
- Warming of the earth caused by human activities that generate greenhouse gases – primarily burning of fossil fuels
- Greenhouse gases trap heat and make the planet warmer
- Warming of planet disrupts established climate patterns



# Climate Change Considerations

Activities that contribute to climate change

Impacts of climate change on communities



# Contributory Activities – State Level\*

- Transportation – Passenger cars, buses and airplane travel result in ~45%
- Electricity – Heating and lighting of buildings – 15%
- Commercial, residential, industrial heating – Heating and cooking ~24%

\*Source: Washington State Greenhouse Gas Emissions inventor:  
1990 - 2018  
<https://apps.ecology.wa.gov/publications/documents/2002020.pdf>

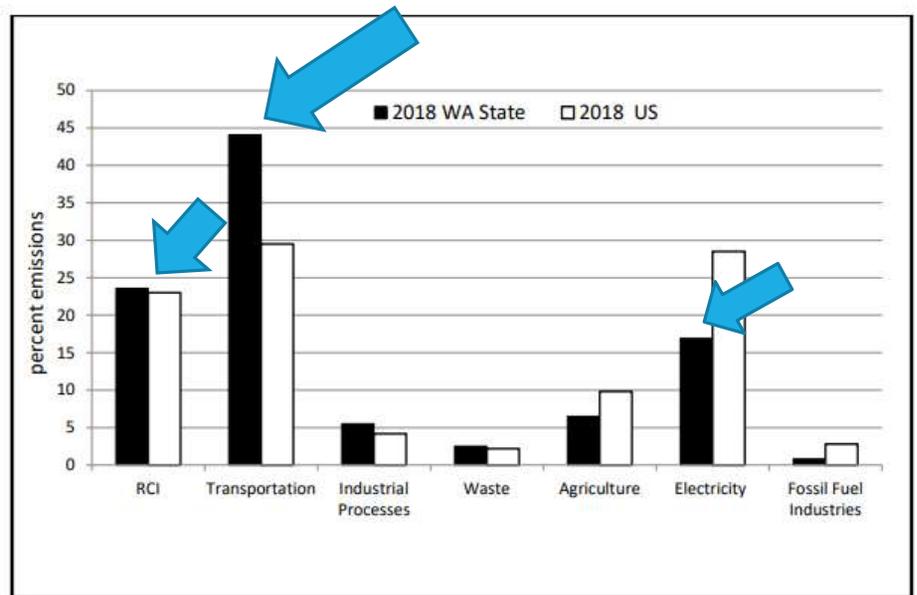


Figure 4: Percent comparison of Greenhouse Gas Emissions by Sector - 2018, Washington and U.S.<sup>12</sup>

# Climate Change Impacts – Pacific Northwest

- Temperature and Precipitation - Wetter winters, drier summers, less snow pack, earlier spring melt
  - Impacts sources of drinking water, hydrology, timing of stream flows, fish habitat
  - Shifts in forest composition
  - Increases in wildfire
- Sea Level Rise – increases in coastal erosion, landslides and flooding, saltwater intrusion
- Ocean acidification – impacts to species and habitats, shellfish

# Comprehensive Plan & Climate Change – Vision Statement

**CLIMATE CHANGE** Our community sets an example with its response to climate change. We prepare to address the negative effects in advance before they become crises. Our community encourages voluntary efforts and enacts incentives and regulations if necessary to reduce our carbon footprint

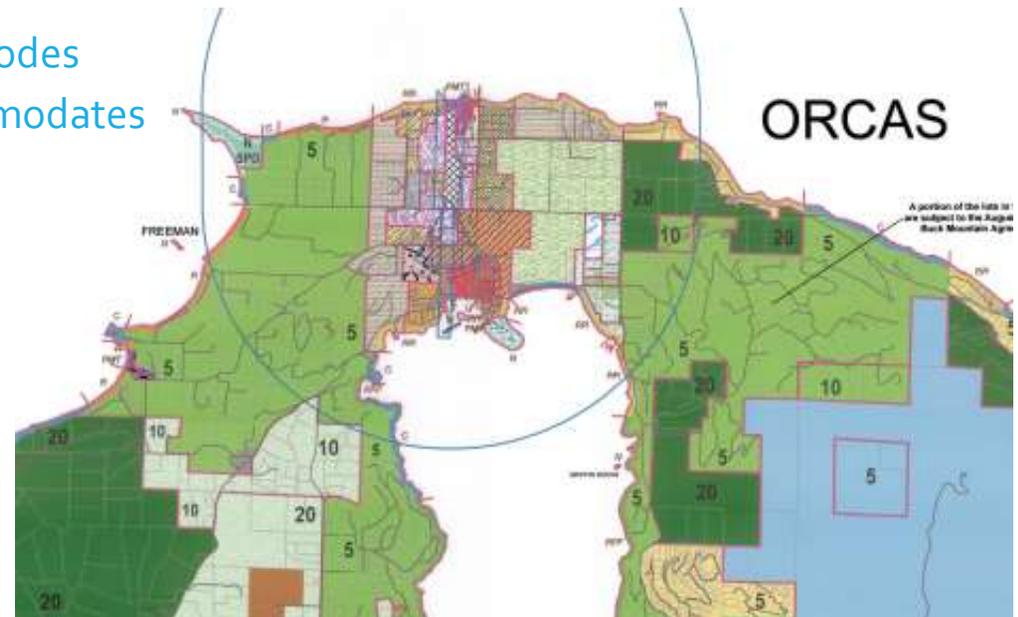
The Comprehensive Plan guides future development and includes policies and maps

Climate change goals and policies proposed throughout Comprehensive Plan during this update: Housing; Land Use; Transportation; Economic Development; Capital Facilities & Utilities; Parks, Trails, Natural Areas and Non-Motorized Plan

# Comprehensive Plan & Climate Change – Proposed Policies for Reducing Sources of GHG

- Transportation – Reduce vehicle miles traveled
  - Concentrating development in urban growth areas
  - Promote alternative modes of transportation – bicycles, pedestrians, equestrians, electric cars
  - Support electrification of all transportation modes
  - Develop a transportation system that accommodates bicyclists, pedestrians and equestrians.

**The most effective reduction strategy is already in place: Concentration of growth into Urban Growth Areas reduces reliance on vehicles**



# Comprehensive Plan & Climate Change – Proposed Policies for Reducing Sources of GHG

- Electricity – Increase Energy Efficiency
  - Reduce energy use for heating and cooling by promoting energy efficiency in buildings – Washington Energy Code
  - Support development of non-fossil fuel sources of energy - Provide opportunities within land use designations for the development and use of renewable energy resources



# Comprehensive Plan & Climate Change – Proposed Policies for Mitigating Impacts

- Temperature and Precipitation
  - Study and understand climate impacts at local level (social, economic and environmental)
  - Land use patterns should limit human impacts on ecosystems and habitats
  - Promote forest stewardship activities that result in carbon sequestration and reduce wildfire risks
  - Value ecosystem services that mitigate the effects of climate change
- Sea Level Rise
  - Evaluate transportation system vulnerabilities to climate change
  - New roads are sited appropriately and protected from sea level rise, flooding and erosion
  - Land use patterns focus new development in areas less prone to impacts such as flooding and erosion

## More Information:

- Planning Commission is currently working on the Comprehensive Plan and climate change policies.
- Where to send comments and ideas: [compplancomments@sanjuanco.com](mailto:compplancomments@sanjuanco.com)
- Draft documents are posted here: <https://www.sanjuanco.com/1753/Comp-Plan-Update-Current-Drafts>
- Most recent climate change staff reports:
  - <https://www.sanjuanco.com/DocumentCenter/View/22342/March-4-2021-Staff-Memo--Land-Use-and-Rural-Draft-Climate-Change-Policies>
  - <https://www.sanjuanco.com/DocumentCenter/View/21876/February-5-2021-Climate-Change-Staff-Report-for-Planning-Commission-21921>