

Climate Trends and Projections for Oregon's Fourth Congressional District:

Bulleted Points

Hogan Sherrow



Trends & Projections

TEMPERATURE:

- Temperature increased about 2°F during the 20th century
- Potential to increase another 5°F to 8°F during this century compared to the 1981-2010 average
- Temperatures will rise more during summer months than during winter months.

PRECIPITATION:

- Overall annual precipitation is not predicted to change drastically
- Precipitation is expected to be heavier in the winter and reduced in the summer though with heavier downpours and major winter storms that cause flooding and damage instead of steady rainfall that replenishes soils and waterways.
- Strong winds, associated with coastal winter storms will disrupt fishing and forestry livelihoods, while causing greater erosion and damage.

SNOWPACK:

- Snowpack accumulation is projected to continue declining, to as low as 10% of historic levels by late century.
- Combined with earlier snowmelt, this will reduce summer and fall stream flow and place interior regions of CD4 in danger of drought.

WILDFIRE:

- Wildfire season, already 2.5 months longer than in the 1970s, is expected to become longer and more severe.
- Wildfire may consume two to six times greater area than historically burned by mid-century especially critical in the Southwest area of CD4 where summers are particularly dry and along the coast, where the coast range can provide ample fuel for wildfires.

Economic Impact

AGRICULTURE AND MANUFACTURING:

- Timber and Wood Processing:
 - Climatic shifts will likely compromise the viability of important forest and timber species in the district which are still important parts of CD4's economy.
- Fruits, Vegetables, and Nursery Stock:
- Limited irrigation water, increase in plant pests and disease, and growing competition from weeds will reduce production.
 - Wineries, food processors and cannabis growers will also be negatively affected.

TOURISM, RECREATION & FISHERIES:

- Recreation:
 - Outdoor tourism brings in millions to the annual CD4 economy.
 - Extreme temperatures, wildfire, and drought will negatively impact summer tourism.
- Fishing:
 - Extreme temperatures, wildfire, and drought will impact summer tourism, making this coastal destination less desirable.
 - Coastal fisheries are threatened by warming waters and acidification which threaten coastal fisheries while warming waters and reduced stream flow threaten cold water sport fish populations, a critical issue along the major rivers and their tributaries, and where they meet the Pacific Ocean.

HUMAN HEALTH:

- Increased drought, wildfire, heat, and infectious disease threaten those with underlying respiratory conditions.
- All residents face potential dehydration, water contamination, heat-related illness, and occupational and recreational hazards.
- Low-income and rural households are common in CD4 and there is a large elderly population.
 - Coastal residents of CD4 will face fewer extreme temperatures than residents further inland
 - Residents of interior regions of CD4 face extreme heat during future summers

FUTURE TRAJECTORY:

- The current emissions trajectory must be halted and reversed, if we wish to maintain a global temperature increase below 2°C (3.6°F), as International Agreements dictate.

SOLUTIONS:

- Naming the solution is simple: We must halt our extraction, exploitation, and reliance on fossil fuels, reduce our greenhouse gas emissions immediately, and promote carbon sequestration. Achieving the solution is much more challenging. Drastically reducing emissions of warming gases is critical to reaching global temperature goals. We must switch to sustainable, emission-free sources of energy, such as geothermal, wind, and solar.
- Congressional District 4 has one of the best offshore wind production locations in the United States, and a project to harness this potential that will need to be completed if we are to meet our greenhouse gas emissions goals.

For more information on these Bullets, see the full summary at: <http://socan.info/oregon-legislatedistrict-summaries/>

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