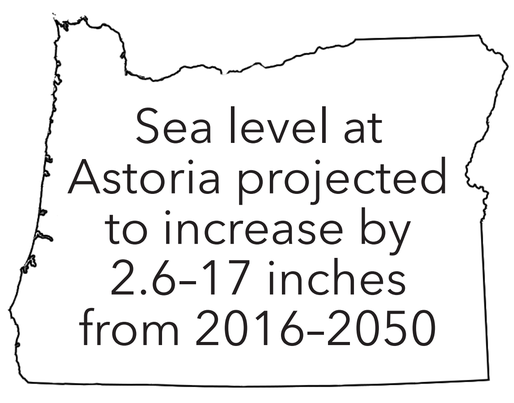
Region 1

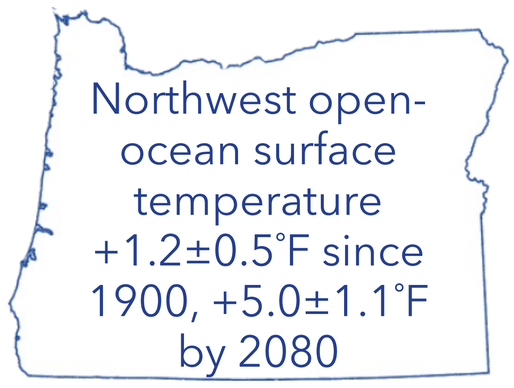
POTENTIAL EFFECTS OF CLIMATE CHANGE ON OREGON'S COAST

SEA LEVEL RISE



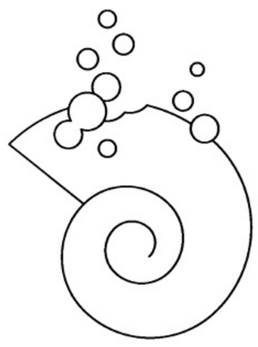
- Salt water intrusion
- Coastal flooding and erosion
- Less-efficient port operations
- Loss of cultural resources
- Changes in estuarine food web

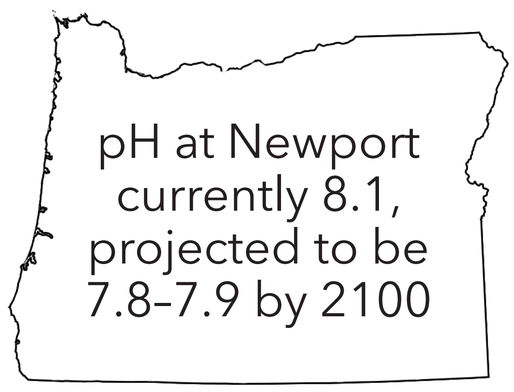
WARMING OCEAN WATER



- Altered marine food webs
- Reduced growth and survival of some marine species
- Lower estuarine water quality
- Increased probability of dead zones

OCEAN ACIDIFICATION



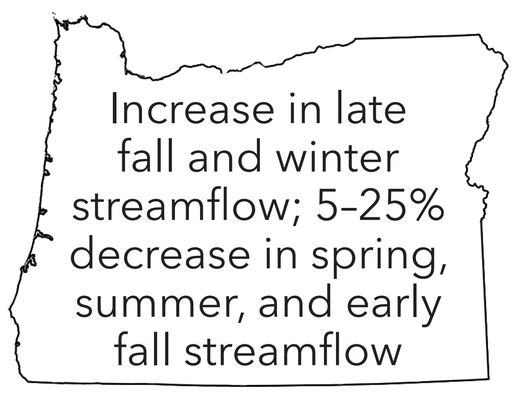


- Negative effects on reproduction of some shellfish (oysters, crabs, pink shrimp)
- Declines of some populations of cold water fishes (salmon, halibut)

WILDFIRES

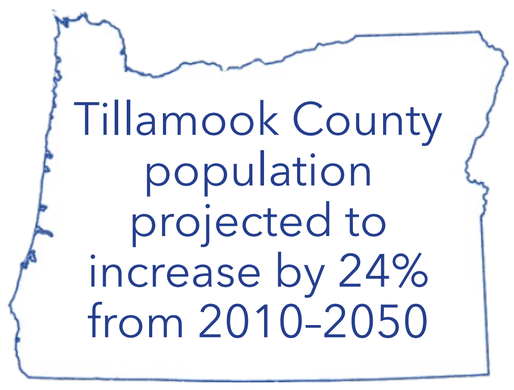
- More days with smoke
- Higher concentrations of fine particulate matter
- Higher risk of landslides
- Increased sedimentation

WATER SECURITY



- Greater number of harmful algal blooms
- Higher fecal coliform loads
- Salt water intrusion
- Winter flooding and erosion in estuaries

POPULATION GROWTH



- Pressure on existing resources and services
- Increase in volume of freshwater withdrawals
- Increased risk of fire ignitions

Projected changes in climate variables are from similar global climate models and reflect continued emissions of relatively high levels of greenhouse gases (RCP 8.5). Projected changes in natural hazards are derived from multiple sources that extended projections to different dates.

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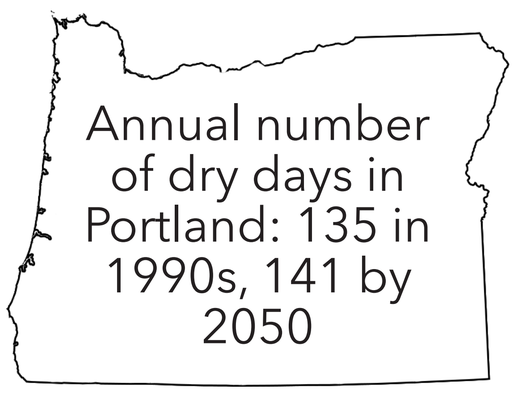
Region 2

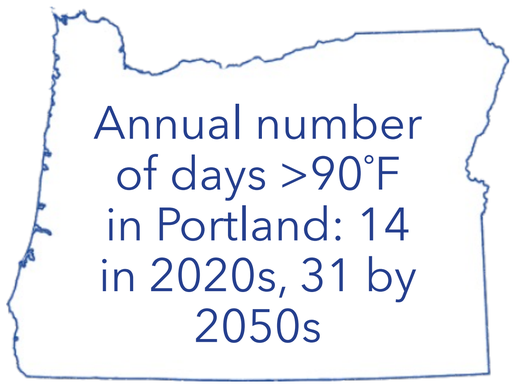
POTENTIAL EFFECTS OF CLIMATE CHANGE IN THE MID TO NORTHERN WILLAMETTE VALLEY

DROUGHT



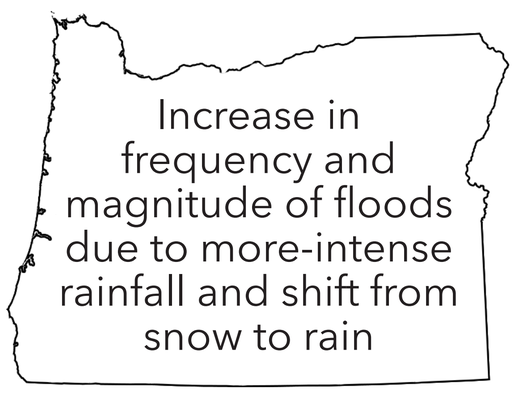
- Reduction in quality and quantity of water for domestic and agricultural use
- Dry vegetation increases wildfire risk
- Water stress in ecosystems

HEAT WAVES



- Adverse effects on health of urban residents, outdoor workers
- Negative effects on some crops, dairy cows
- Higher seedling mortality
- Plants become heat-scorched

EXTREME PRECIPITATION

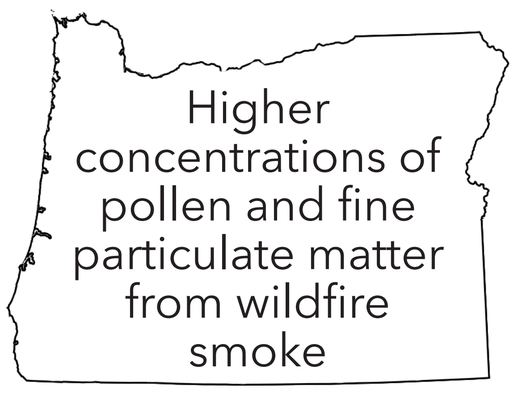


- Higher risk of landslides, mudslides
- Disruption of transportation infrastructure, such as roads, bridges, and railroads
- Flooded airport runways

WILDFIRES

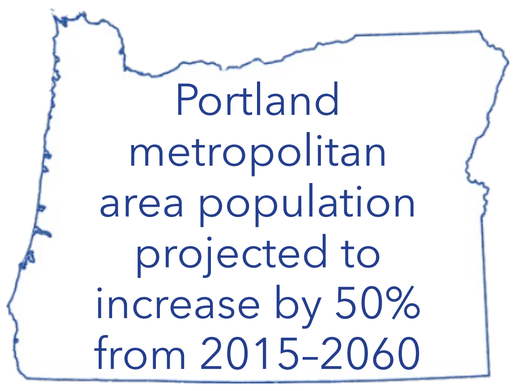
- More ignitions at the wildland-urban interface
- Adverse public health effects
- Lower wine quality
- Damaged homes, infrastructure

AIR QUALITY

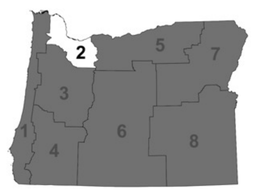


- Adverse public health effects
- Lower solar radiation constrains crop growth, generation of solar power
- Economic losses from tainted wines, reduction in tourism

POPULATION GROWTH



- Larger unhoused population
- Increasing food needs
- Increasing demand for water
- Strain on healthcare system



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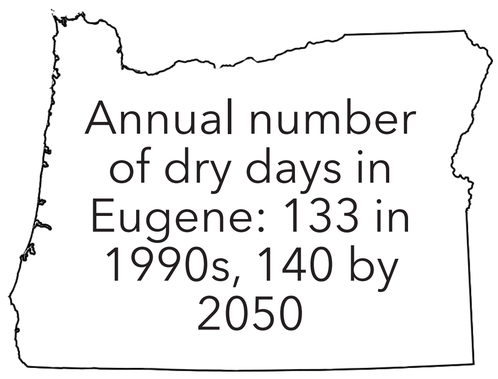
Region 3

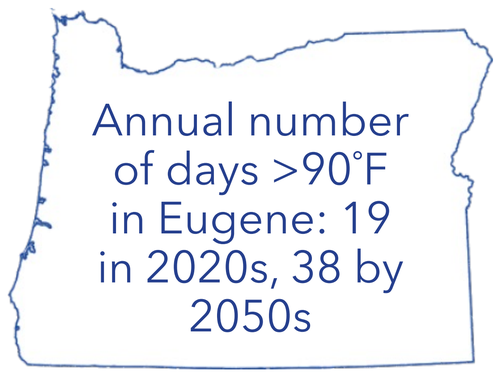
POTENTIAL EFFECTS OF CLIMATE CHANGE IN THE MID TO SOUTH WILLAMETTE VALLEY

DROUGHT



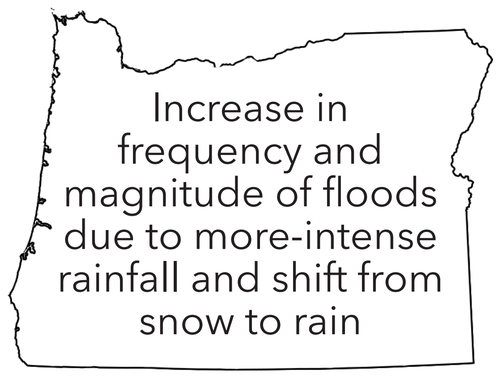
- Reduction in quality and quantity of water for domestic and agricultural use
- Dry vegetation increases wildfire risk
- Water stress in ecosystems

HEAT WAVES



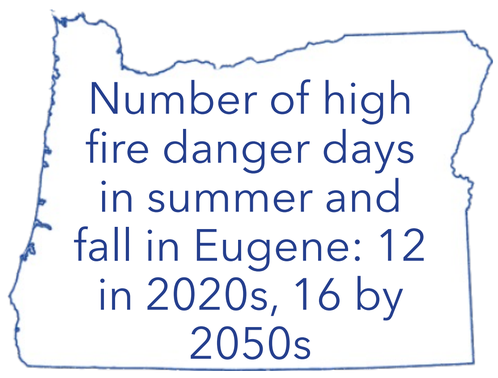
- Adverse effects on health of urban residents, outdoor workers
- Negative effects on some crops, dairy cows
- Higher seedling mortality
- Plants become heat-scorched

EXTREME PRECIPITATION



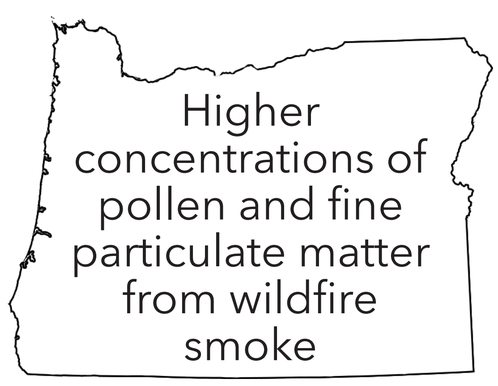
- Higher risk of landslides, mudslides
- Disruption of transportation infrastructure, such as roads, bridges, and railroads
- Flooded airport runways

WILDFIRES



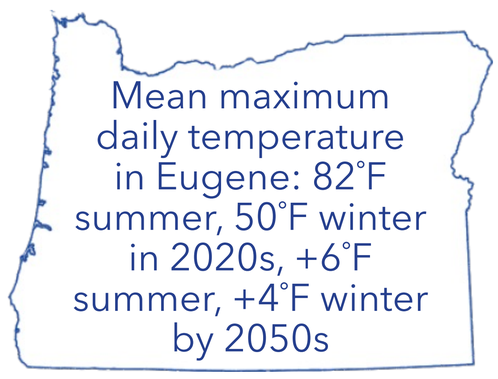
- More ignitions at the wildland-urban interface
- Lower wine quality
- Damaged homes, infrastructure
- Displacement of residents

AIR QUALITY

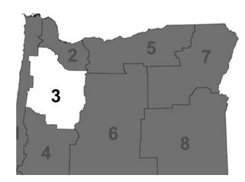


- Adverse public health effects
- Lower solar radiation constrains crop growth, generation of solar power
- Economic losses from tainted wines

MEAN TEMPERATURE



- Warmer nights
- Longer fire seasons
- Unmet chilling requirements
- Expansion of some pests, diseases, invasive species



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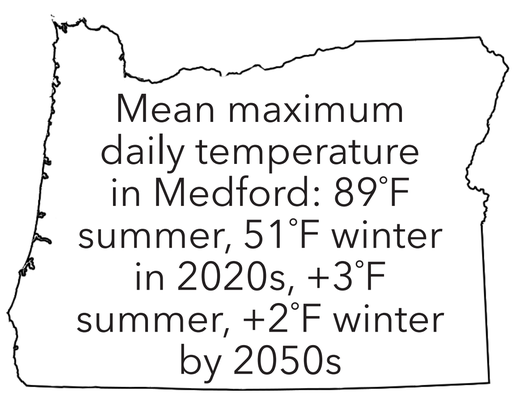
Region 4

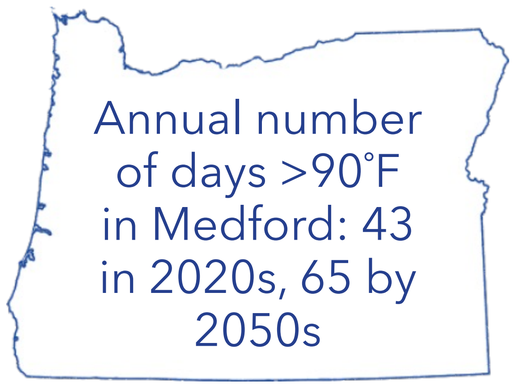
POTENTIAL EFFECTS OF CLIMATE CHANGE ON SOUTHWESTERN OREGON

MEAN TEMPERATURE



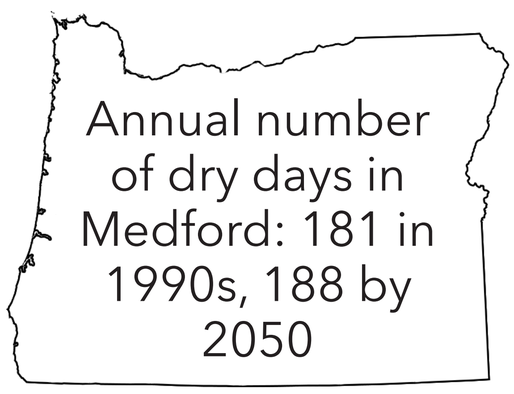
- Warmer nights
- Longer fire seasons
- Unmet chilling requirements
- Expansion of some pests, diseases, invasive species

HEAT WAVES



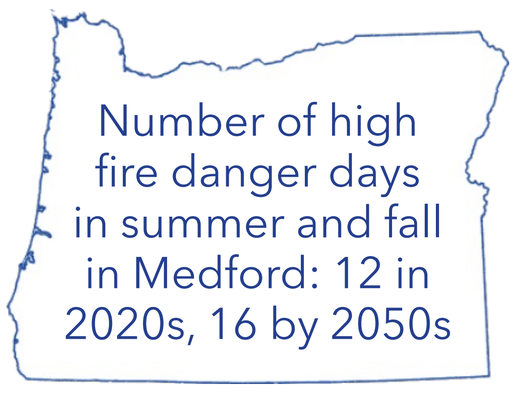
- Adverse effects on health of urban residents, outdoor workers
- Negative effects on some crops, dairy cows
- Higher seedling mortality
- Plants become heat-scorched

DROUGHT



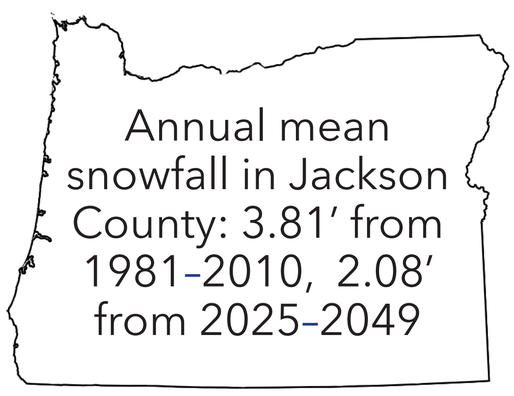
- Reduction in quantity and quality of water for domestic and agricultural use
- Drier natural vegetation increases wildfire risk
- Loss of topsoil

WILDFIRES



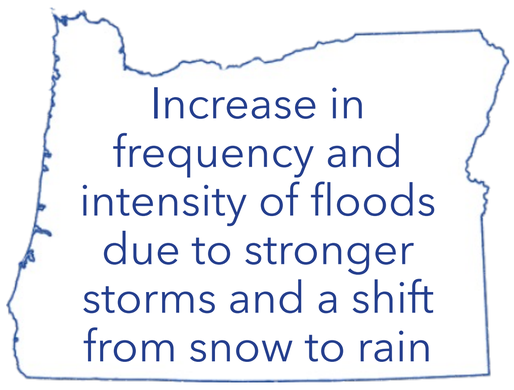
- More ignitions at the wildland-urban interface
- Adverse public health effects of wildfire smoke
- Lower wine quality and associated economic losses
- Damaged homes, infrastructure

WARMER WINTERS



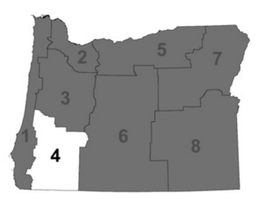
- Earlier springs
- Earlier peak streamflow
- Longer wildfire season
- Expansion of some pests, diseases, invasive species
- Unmet chilling requirements

EXTREME PRECIPITATION



- Higher risk of landslides, mudslides, and hillside and streambank erosion
- Disruption of transportation infrastructure, such as roads, railroads, and airport runways

Projected changes in climate variables are from similar global climate models and reflect continued emissions of relatively high levels of greenhouse gases (RCP 8.5). Projected changes in natural hazards are derived from multiple sources that extended projections to different dates.



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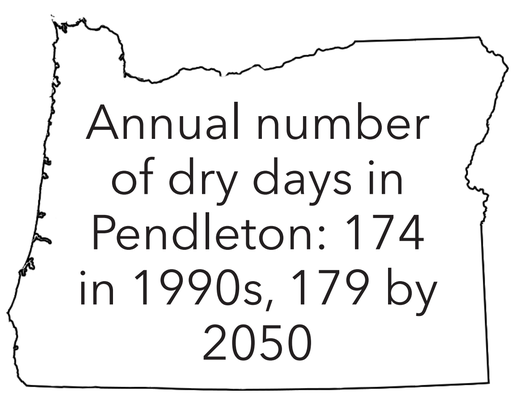
Region 5

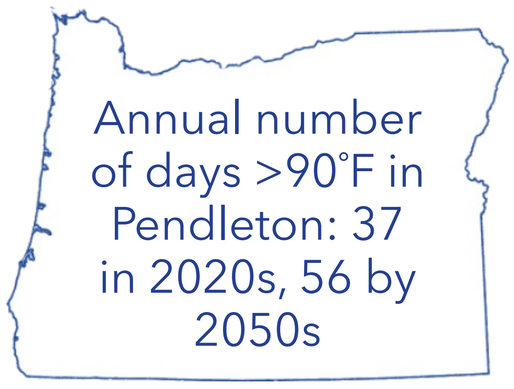
POTENTIAL EFFECTS OF CLIMATE CHANGE ON THE MID-COLUMBIA REGION

DROUGHT



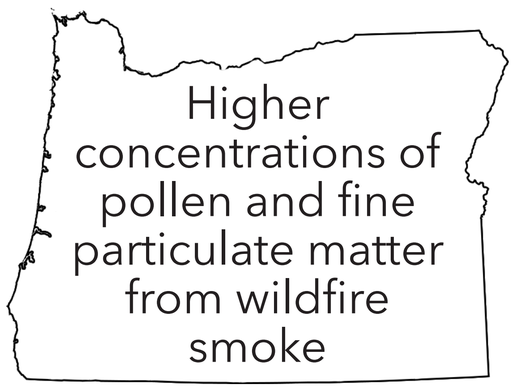
- Reduction in quantity and quality of water for domestic and agricultural use
- Drier natural vegetation increases wildfire risk
- Loss of topsoil

HEAT WAVES



- Adverse effects on health of urban residents, outdoor workers
- Negative effects on some crops, dairy cows
- Higher seedling mortality
- Plants become heat-scorched

AIR QUALITY

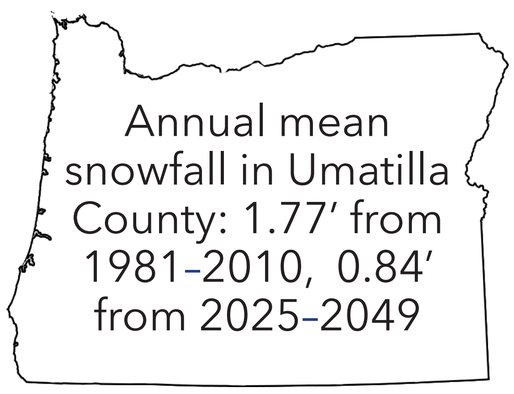


- Adverse public health effects
- Lower solar radiation constrains crop growth, generation of solar power
- Economic losses from tainted wines, reduction in tourism

WILDFIRES

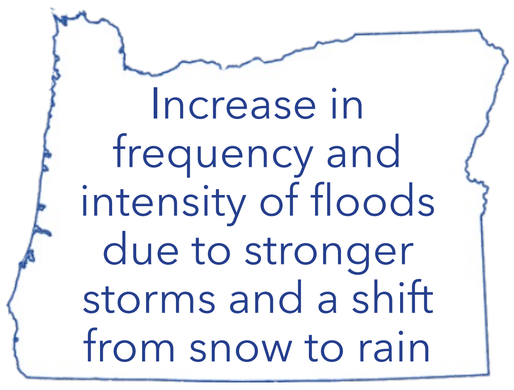
- More ignitions at the wildland-urban interface
- Adverse public health effects of wildfire smoke
- Lower wine quality
- Damaged homes, infrastructure

WARMER WINTERS



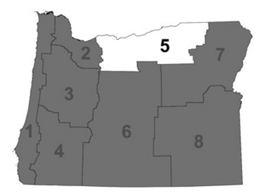
- Earlier springs
- Earlier peak streamflow
- Unmet chilling requirements
- Longer wildfire season
- Expansion of some pests, diseases, invasive species

EXTREME PRECIPITATION



- Higher risk of landslides, mudslides, and hillside erosion
- Disruption of transportation infrastructure, such as roads, bridges, and railroads
- Flooded airport runways

Projected changes in climate variables are from similar global climate models and reflect continued emissions of relatively high levels of greenhouse gases (RCP 8.5). Projected changes in natural hazards are derived from multiple sources that extended projections to different dates.



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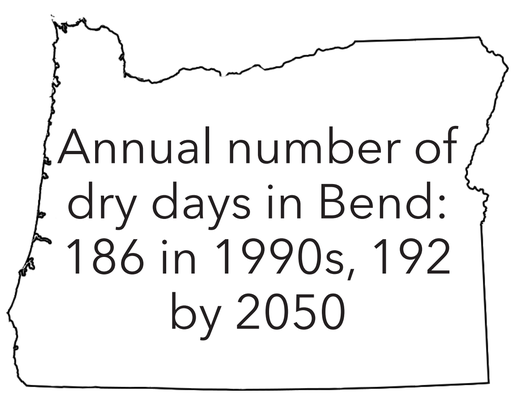
Region 6

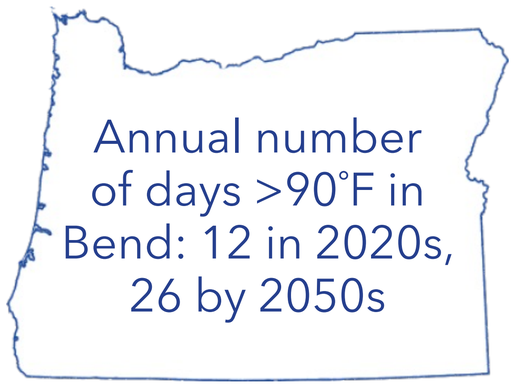
POTENTIAL EFFECTS OF CLIMATE CHANGE ON CENTRAL OREGON

DROUGHT



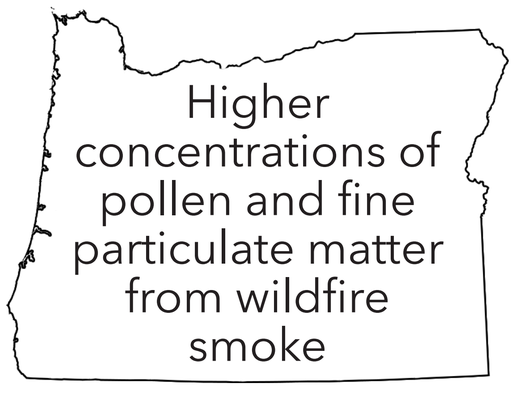
- Reduction in quantity and quality of water for domestic and agricultural use
- Drier natural vegetation increases wildfire risk
- Loss or lower abundance of some plant species

HEAT WAVES



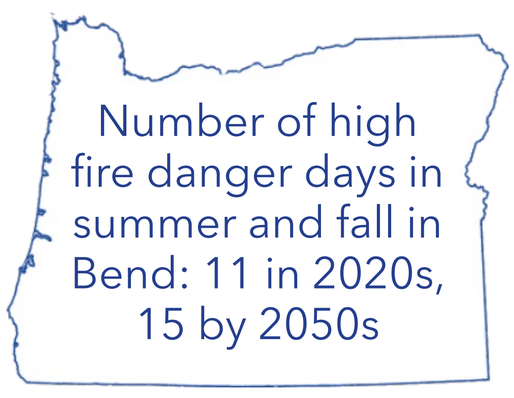
- Adverse effects on health of urban residents, outdoor workers
- Negative effects on some crops, dairy cows
- Higher seedling mortality
- Plants become heat-scorched

AIR QUALITY



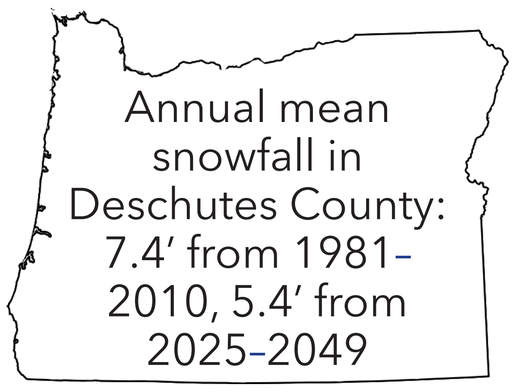
- Adverse public health effects
- Lower solar radiation constrains crop growth, generation of solar power

WILDFIRES



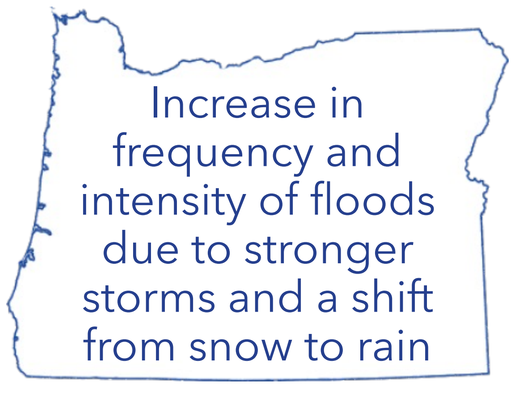
- More ignitions at the wildland-urban interface
- Adverse public health effects of wildfire smoke
- Loss of timber, livestock forage
- Damaged homes, infrastructure

WARMER WINTERS



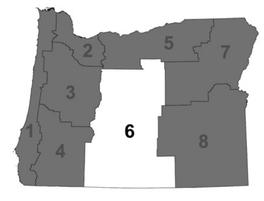
- Earlier springs
- Earlier peak streamflow
- Longer wildfire season
- Expansion of some pests, diseases, invasive species

EXTREME PRECIPITATION



- Higher risk of landslides, mudslides
- Disruption of transportation infrastructure, such as roads, bridges, and railroads
- Increased risk of erosion

Projected changes in climate variables are from similar global climate models and reflect continued emissions of relatively high levels of greenhouse gases (RCP 8.5). Projected changes in natural hazards are derived from multiple sources that extended projections to different dates.



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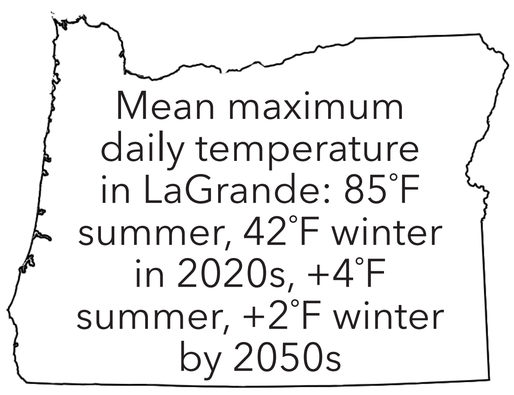
Region 7

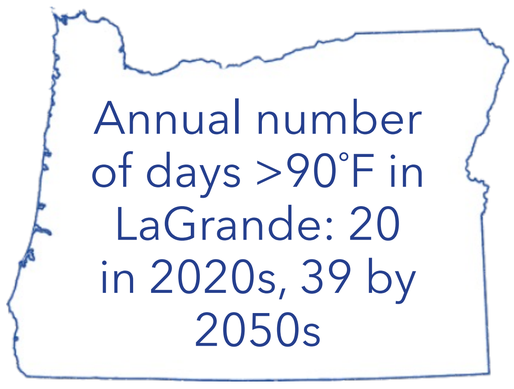
POTENTIAL EFFECTS OF CLIMATE CHANGE ON NORTHEASTERN OREGON

MEAN TEMPERATURE



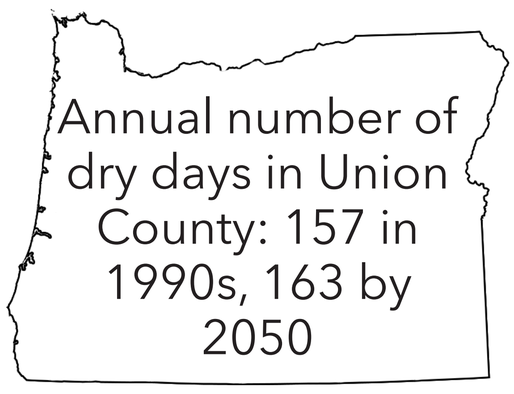
- Warmer nights
- Longer fire seasons
- Unmet chilling requirements
- Expansion of some pests, diseases, invasive species

HEAT WAVES



- Adverse effects on health of urban residents, outdoor workers
- Negative effects on some crops, dairy cows
- Higher seedling mortality
- Plants become heat-scorched

DROUGHT

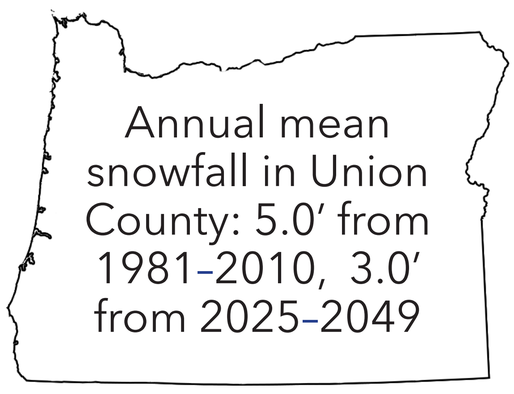


- Reduction in quantity and quality of water for domestic and agricultural use
- Drier natural vegetation increases wildfire risk
- Mortality of crop plants, trees

WILDFIRES

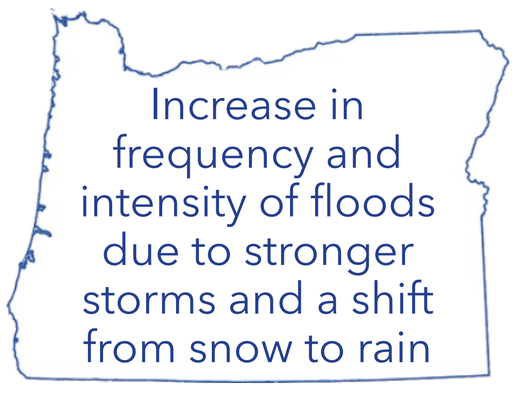
- Adverse public health effects of wildfire smoke
- Damaged homes, infrastructure
- Lower solar radiation constrains generation of solar power

WARMER WINTERS

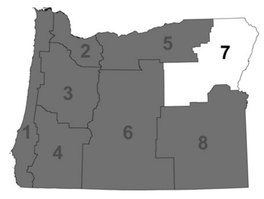


- Earlier springs
- Earlier peak streamflow
- Longer wildfire season
- Expansion of some pests, diseases, invasive species

EXTREME PRECIPITATION



- Higher risk of landslides, mudslides, and hillside and streambank erosion
- Disruption of transportation infrastructure
- Risk of dam failure



Projected changes in climate variables are from similar global climate models and reflect continued emissions of relatively high levels of greenhouse gases (RCP 8.5). Projected changes in natural hazards are derived from multiple sources that extended projections to different dates.

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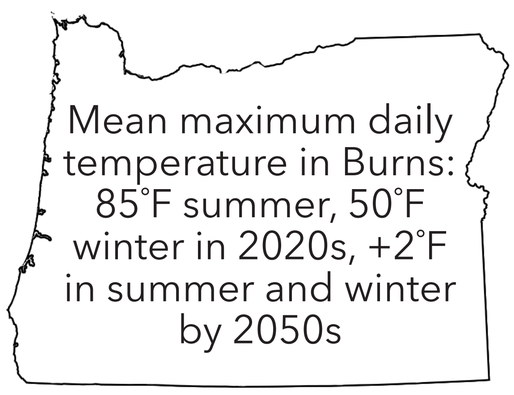
Region 8

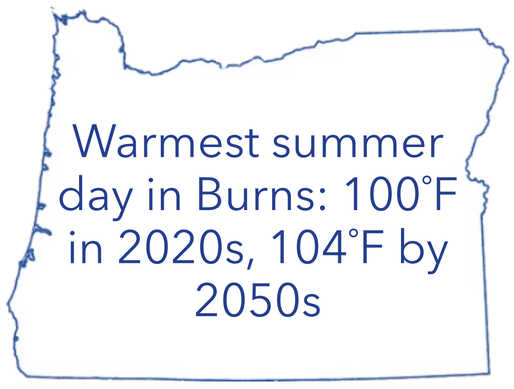
POTENTIAL EFFECTS OF CLIMATE CHANGE ON SOUTHEASTERN OREGON

MEAN TEMPERATURE



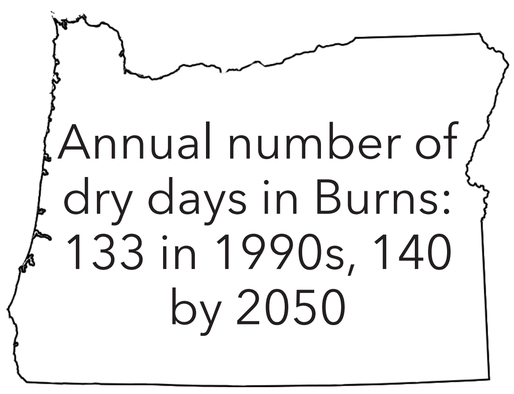
- Warmer nights
- Longer fire seasons
- Unmet chilling requirements
- Expansion of some pests, diseases, invasive species

HEAT WAVES



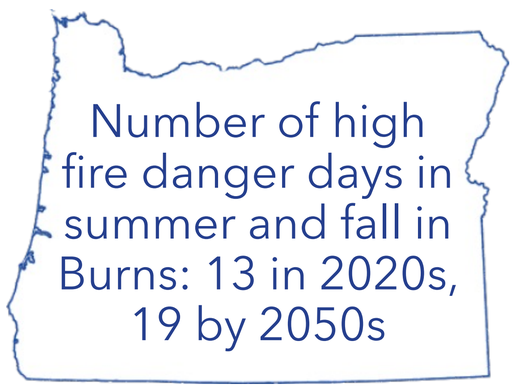
- Adverse effects on health of urban residents, outdoor workers
- Negative effects on some crops, dairy cows
- Higher seedling mortality
- Plants become heat-scorched

DROUGHT



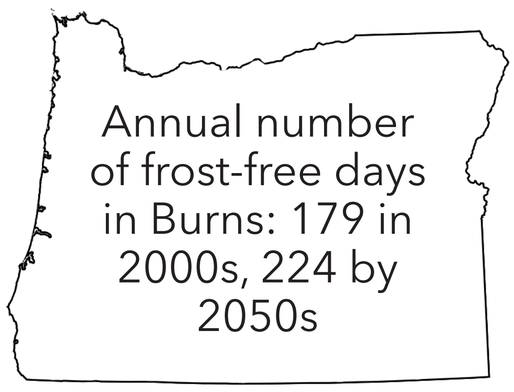
- Reduction in quantity and quality of water for domestic and agricultural use
- Drier natural vegetation increases wildfire risk
- Loss or lower abundance of some plant species

WILDFIRES



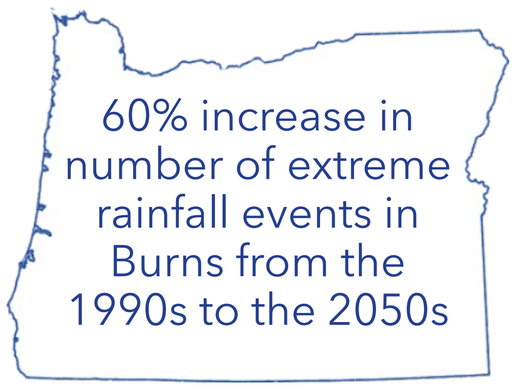
- Adverse public health effects of wildfire smoke
- Damaged homes, infrastructure
- Loss of crops, timber, housing
- Lower solar radiation affects generation of solar power

WARMER WINTERS



- More rain, less snow
- Earlier peak spring streamflow
- Higher probability of late frost
- Intensified summer drought
- Longer wildfire season

EXTREME PRECIPITATION



- Increased risk of flash floods
- Disruption of transportation infrastructure, such as roads, bridges, and railroads
- Increased soil erosion

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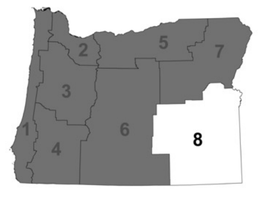

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