



CLIMATE CHANGE AND PUBLIC HEALTH IN OREGON

WORKSHOP ON CLIMATE AND HEALTH IN THE NORTHWEST

FEBRUARY 23- 24, 2012

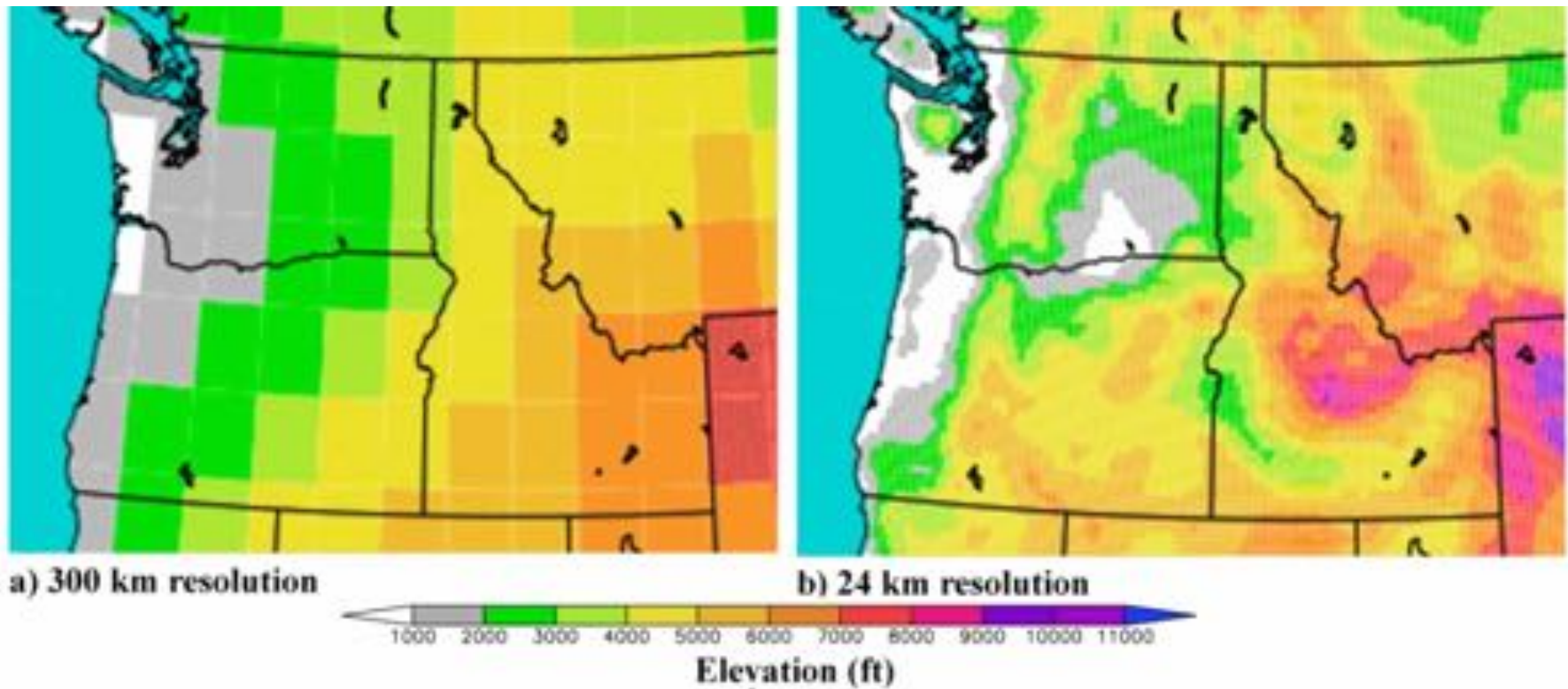
GAIL R SHIBLEY, J.D. – ADMINISTRATOR, ENVIRONMENTAL PUBLIC HEALTH



Questions

- What are the climate/health impacts and concerns in Oregon, both current and potential?
- What is Oregon's perspective on health impacts of climate change?
- Are there any assessment or adaptation efforts or plans for Oregon?
- What decisions is Oregon facing relating to climate and health, and what needs to be done?

Local Projections for Change

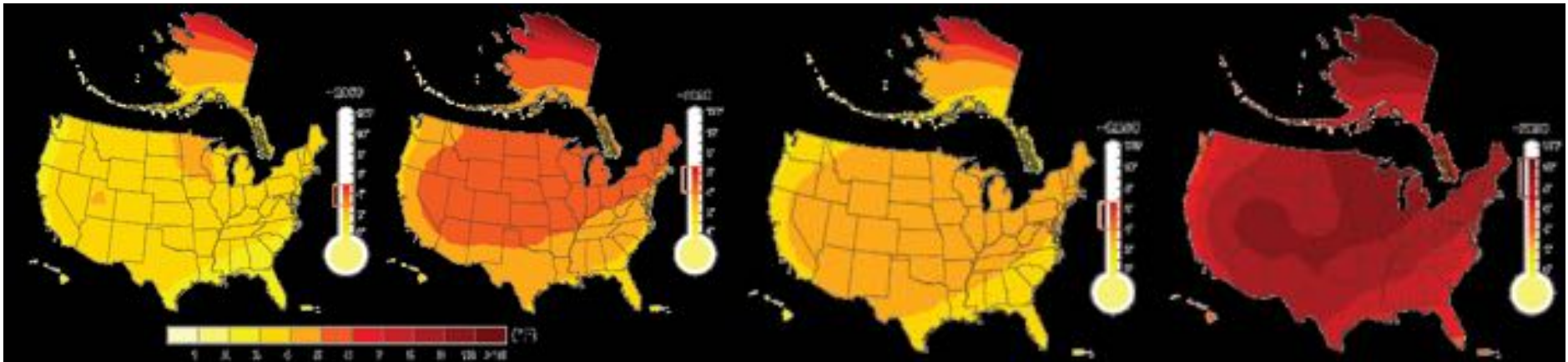


Down-scaled climate modeling provided by OCCRI

Health Implications for Oregon

Lower Emissions Scenario91
Projected Temperature Change (°F)
from 1961-1979 Baseline

Higher Emissions Scenario 91
Projected Temperature Change (°F)
from 1961-1979 Baseline



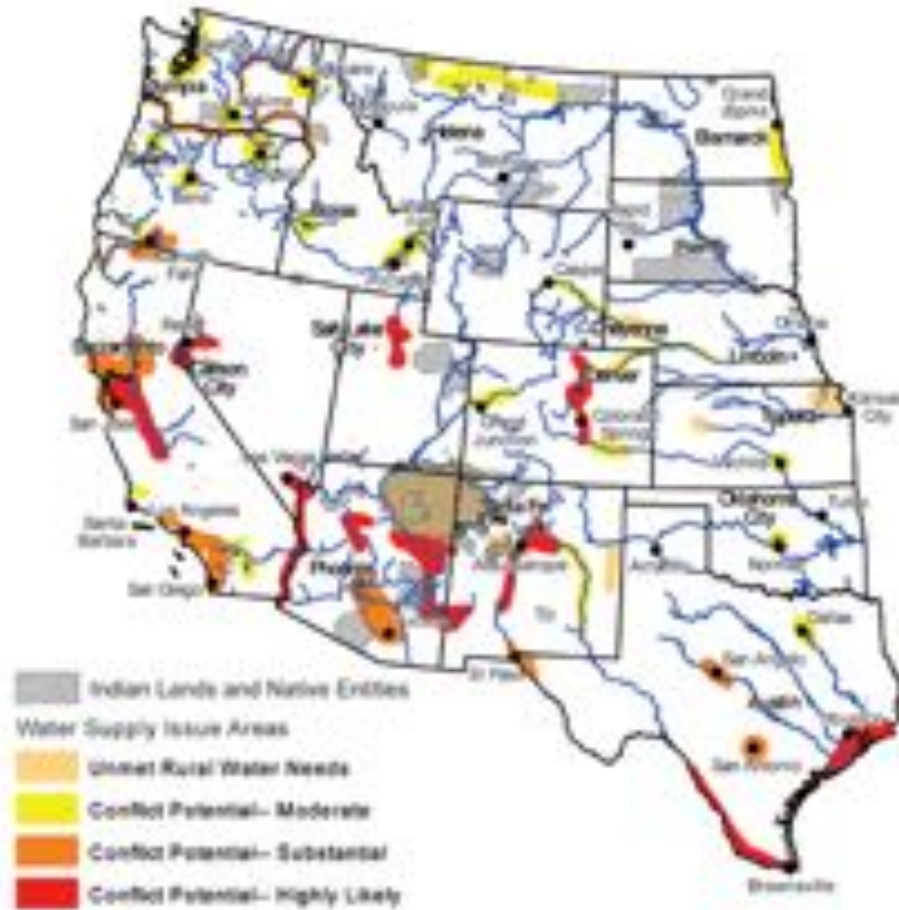
Mid-Century (2040-2059 average)

End-of-Century (2080-2099 average)

Mid-Century (2040-2059 average)

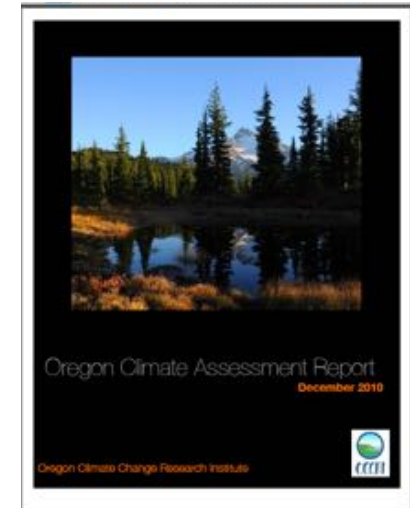
End-of-Century (2080-2099 average)

Health Implications for Oregon



Brief history of Oregon PH engagement on climate change

- 2007
 - ▣ Global Warming Commission
 - ▣ OCCRI
- 2008
 - ▣ **Final Report to the Governor**
- 2009
 - ▣ Report to Legislature
- 2010
 - ▣ **Oregon Climate Assessment**
 - ▣ **Oregon Adaptation Framework**
- 2011
 - ▣ Report to Legislature
 - ▣ CDC investment



8. INCORPORATE THE PUBLIC HEALTH IMPLICATIONS OF CLIMATE CHANGE

The impacts and implications of climate change on public health have been noticeably lacking in local, state, and federal policy on climate change to date. Given the potential magnitude of these issues, the prior inattention to this important area should be remedied in future policy.

- Integrate the public health impacts of climate change into the policy, planning, and preparation for climate change done by the Global Warming Commission, the state, and the research sector.
- Recognize and incorporate the benefits to public health of many climate change mitigation, preparation, and adaptation activities.
- Watch for unintended public health consequences of climate change mitigation, adaptation, and preparation activities.

Oregon Climate Adaptation Framework priority actions related to public health

The Oregon Climate Change Adaptation Framework

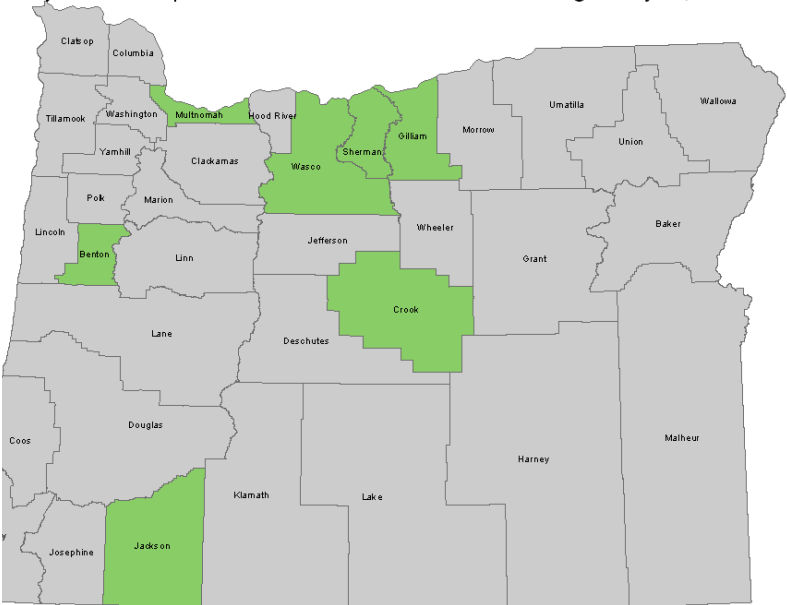
December 2010



Climate Risks and Short-Term Priority Actions	
<i>Very likely to occur</i>	
1.	Increase in average annual air temperatures and likelihood of extreme heat events
	Enhance and sustain public health system capacity to prepare for and respond to heat waves and smoke emergencies, and improve delivery of information on heat events and cooling centers, especially for isolated and vulnerable populations.
2.	Changes in hydrology and water supply; reduced snowpack and water availability in some basins; changes in water quality and timing of water availability
	Maintain the capacity to provide assistance to landowners to restore wetlands, uplands and riparian zones to increase the capacity for natural water storage.
	Improve real-time forecasting of water delivery and basin yields to improve management of stored water.
	Improve capacity to provide technical assistance and incentives to increase storage capacity and to improve conservation, reuse, and water use efficiency among all consumptive water uses.
<i>Likely to occur</i>	
3.	Increase in wildfire frequency and intensity

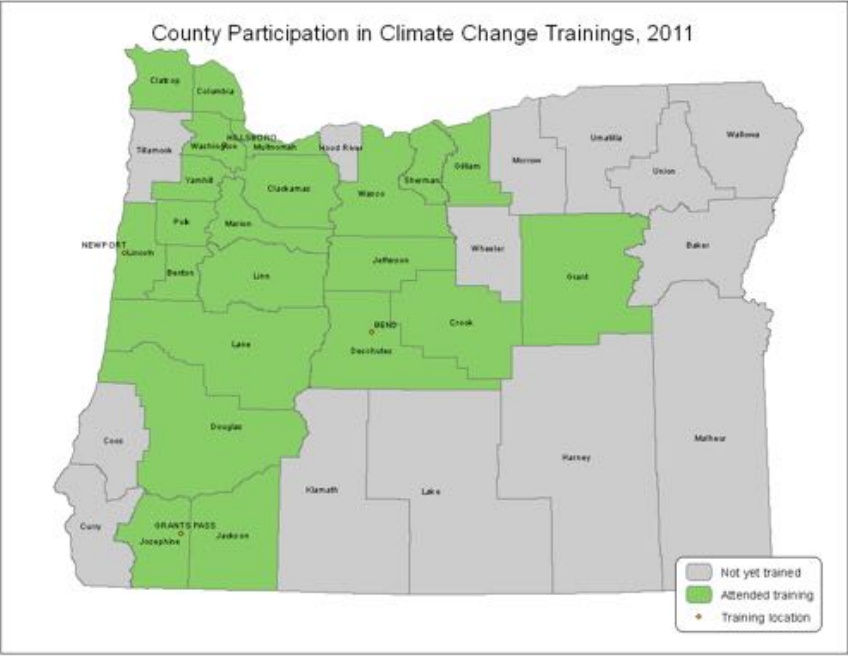
County Partners

County Health Departments* Funded for Climate Change Project, 2011



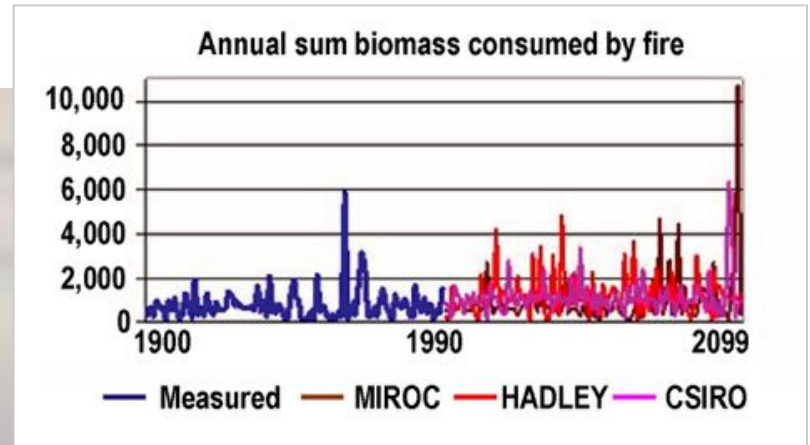
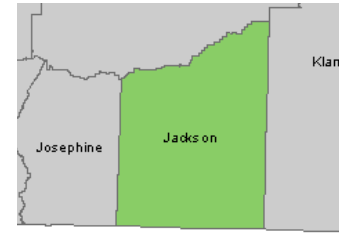
*Wasco, Sherman and Gilliam counties have one health department, the North Central Health District.

County Participation in Climate Change Trainings, 2011



- Not yet trained
- Attended training
- Training location

Jackson County



Benton County



Oregon winter storm: Mother and child die; 17 rivers at or near flood stage; more rain on the way

Published: Thursday, January 19, 2012, 6:16 PM Updated: Thursday, January 19, 2012, 9:29 PM

By Helen Jung, The Oregonian



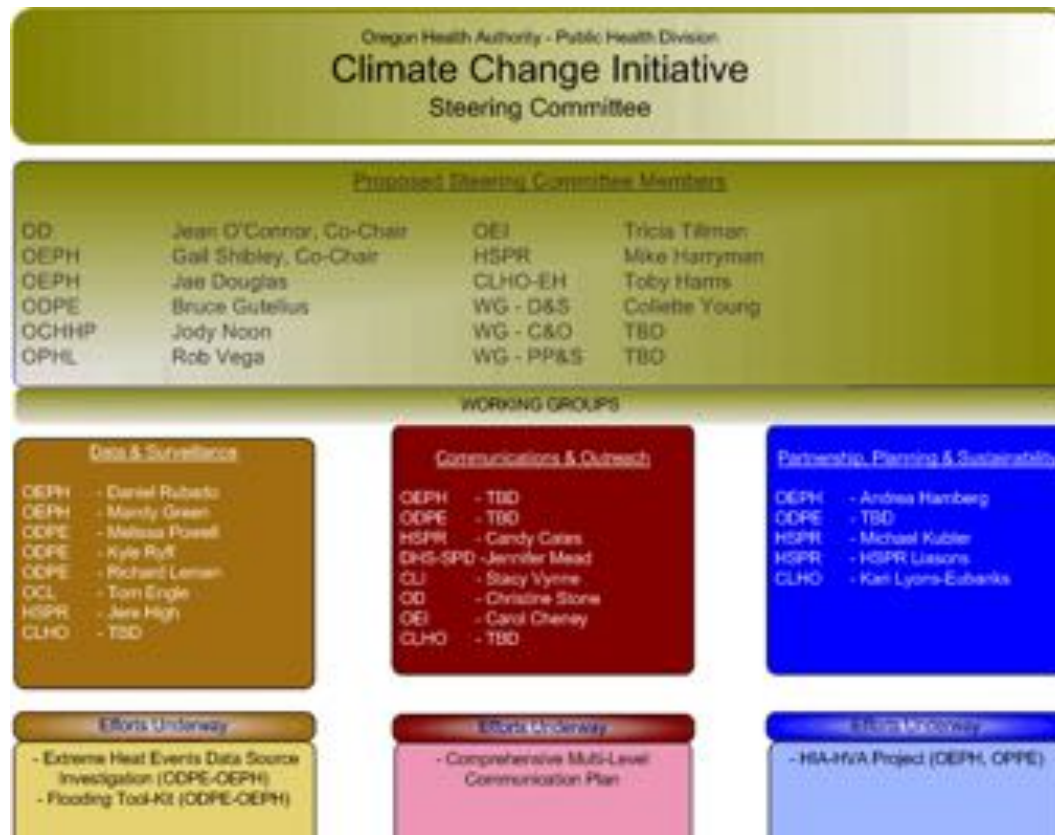
PHILOMATH, OREGON - JANUARY 19 2012 - Charlotte Risland, 44, wades through the water in front of her house at the Friendly Y in Philomath. The Marys River hasn't flooded up this far in over 20 years but it did this morning. Risland put on hip waders and went back to the house to get the most valuable stuff first. Roger Spinney, 45, drove his truck back so Risland could load more into the back. Benjamin Brink/The Oregonian

A tempest that heaped rain on top of melting snow lashed much of western Oregon on Thursday. It triggered floods and landslides, before forcing evacuations in one of the state's worst winter storms of the past century.

- » Gov. John Kitzhaber declared a state of emergency for four counties.
- » Hundreds of residents in Scio, Turner and Mapleton were urged to abandon their homes as rising rivers and creeks swamped city streets and flooded front lawns.
- » A young mother and her 20-month-old baby died when their car was swept into an overflowing creek in Albany.
- » Flooding hit the Salem-to-Eugene area the hardest, with 17 rivers across the region at or near flood stage. At Philomath in Benton County, the Marys River reached a record. The rainfall has been dramatic in some regions with 15.5 inches falling in 48 hours in the tiny Lane County town of Swiss Home. Along state highways, the rain wreaked its havoc.

Oregon
Health
Authority

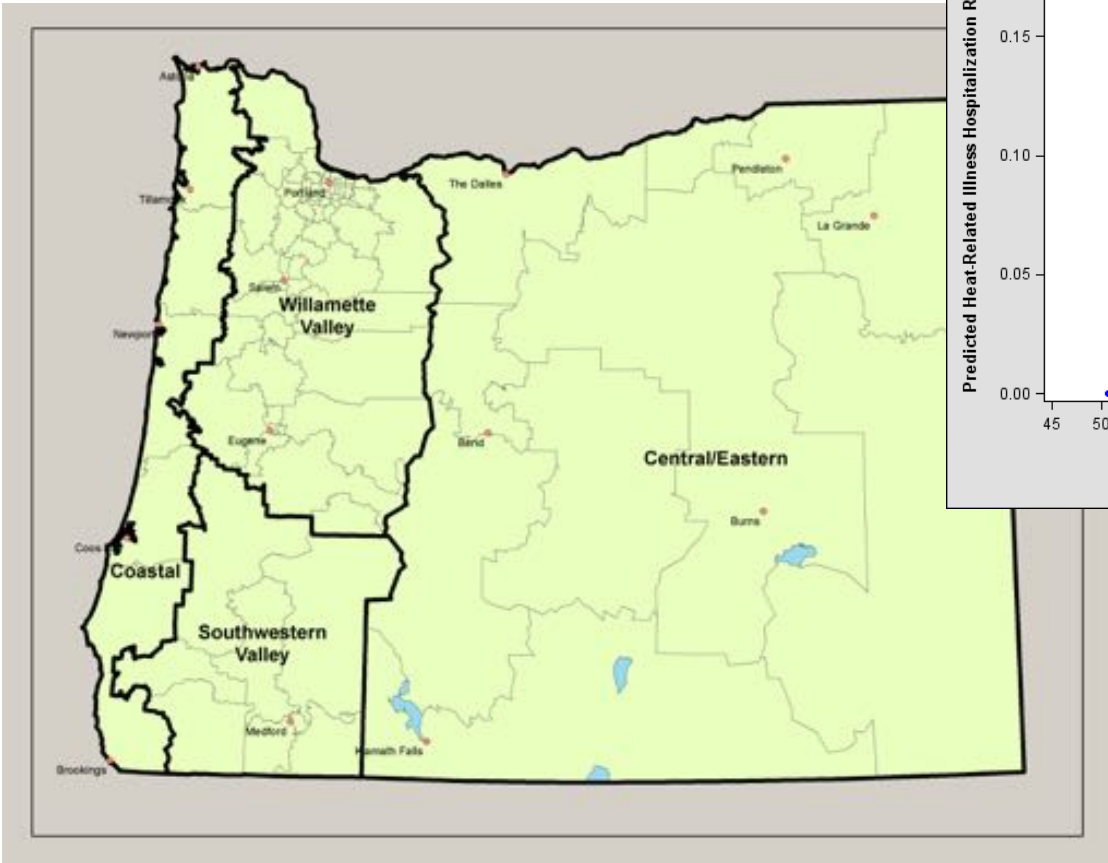
Building state public health capacity



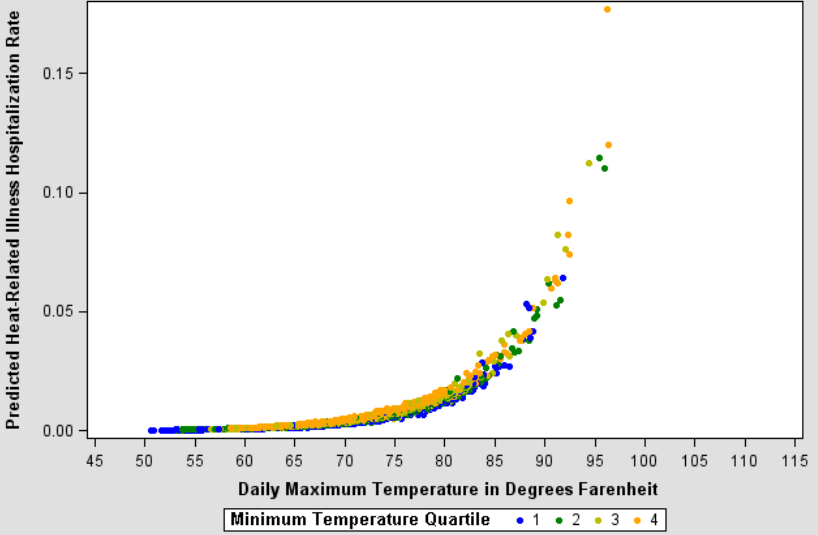
Building state public health capacity

- Oregon Public Health Division-wide climate change steering committee
 - ▣ Mission: Ensure climate change planning, communication & response remains top priority within Public Health Division
 - ▣ Receive recommendations and data from working groups
- Three working groups
 - ▣ Data and surveillance
 - ▣ Communication and outreach
 - ▣ Partnership, planning, and sustainability

Extreme Heat Analysis



Predicted Heat Hospitalization Rate Vs. Maximum Temperature by Quartile of Minimum Temperature - Coastal Zone



Future work



- ↓ Determine state and local-level impacts and priorities
- ↓ State-level Investigations of priority health impacts and adaptation strategies
- ↓ Policy-level work from OHA's Climate Change Steering Committee
 - ▣ Increase monitoring, detection and controls for zoonotic vectors.
 - ▣ Increase surveillance and monitoring for climate-sensitive infectious diseases to humans
 - ▣ Increase outreach and community education about disease and invasive species prevention measures.
 - ▣ New and better means to detect and combat diseases and invasive species.



Thank you!

Questions?

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www.healthoregon.org/climatechange

