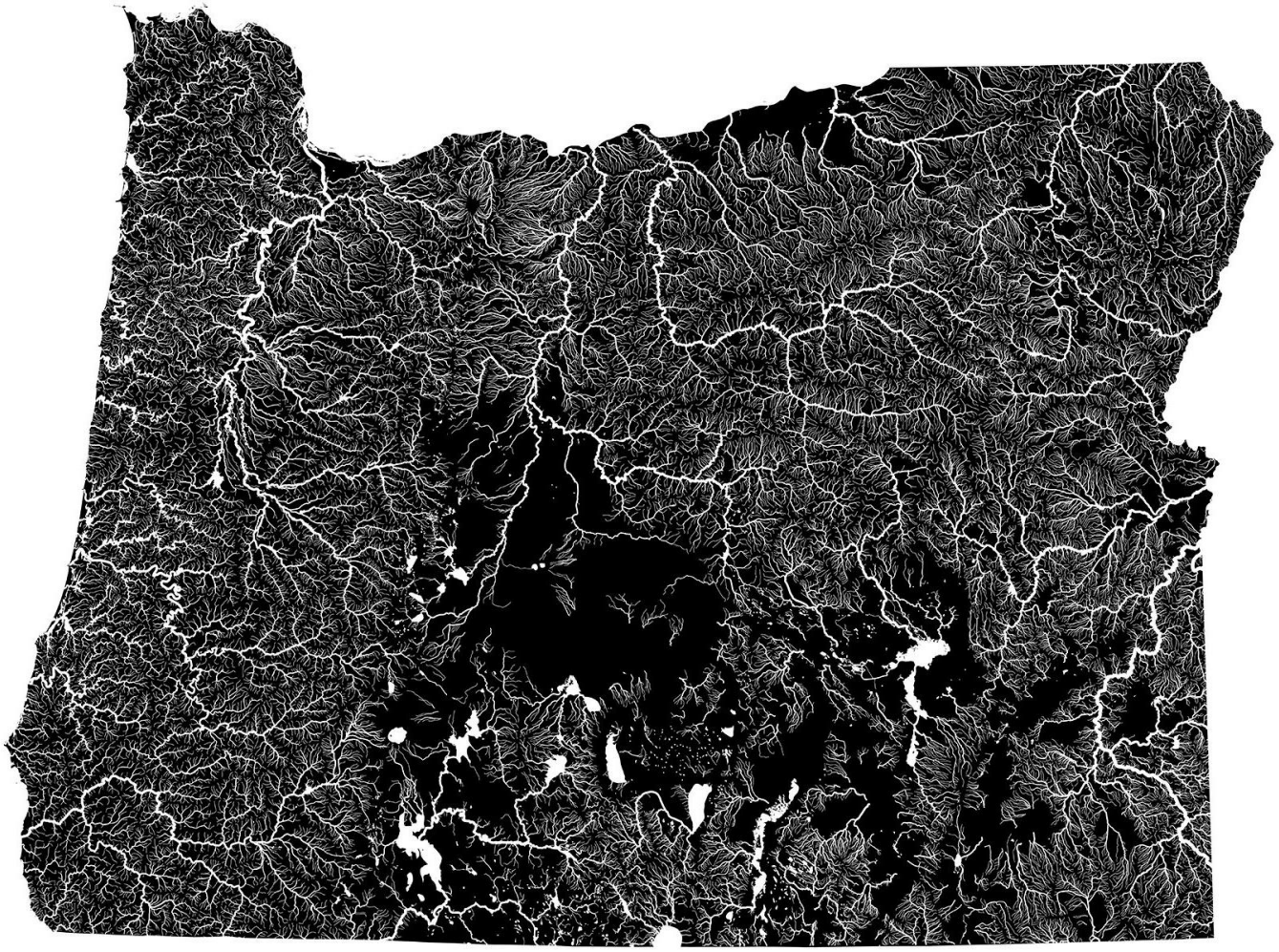
Martin Doyle
Professor, Nicholas School of Environment
Director for Water Policy, Nicholas Institute for Environmental Policy Solutions
Duke University

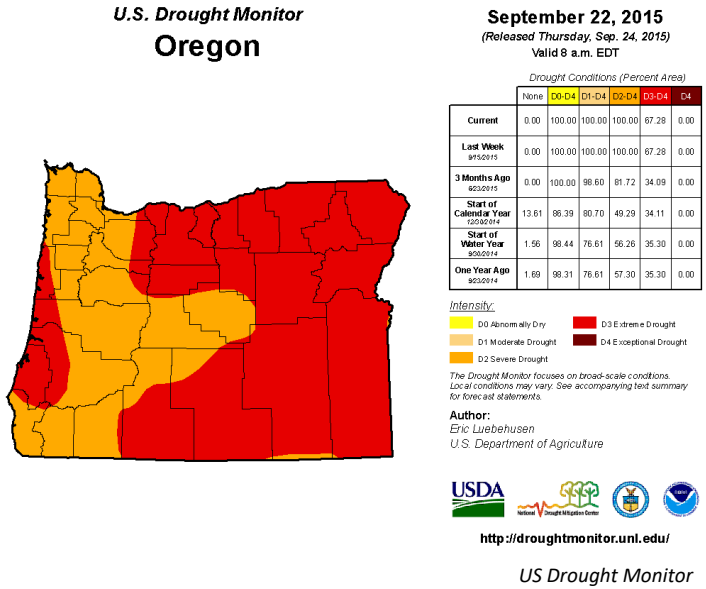


Oregon Business Council Has Sustained Program of Water Work

Water is basis for our economy, our communities, natural systems, and our lives

Bobby Cochran, Willamette Partnership, Oregon Business Summit

Oregon has suffered relentless water related crises in recent years



US Drought Monitor

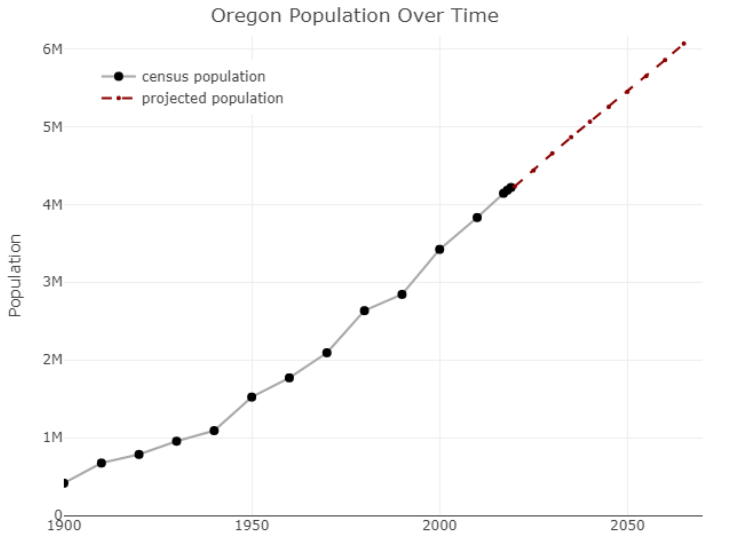
Hermiston Herald

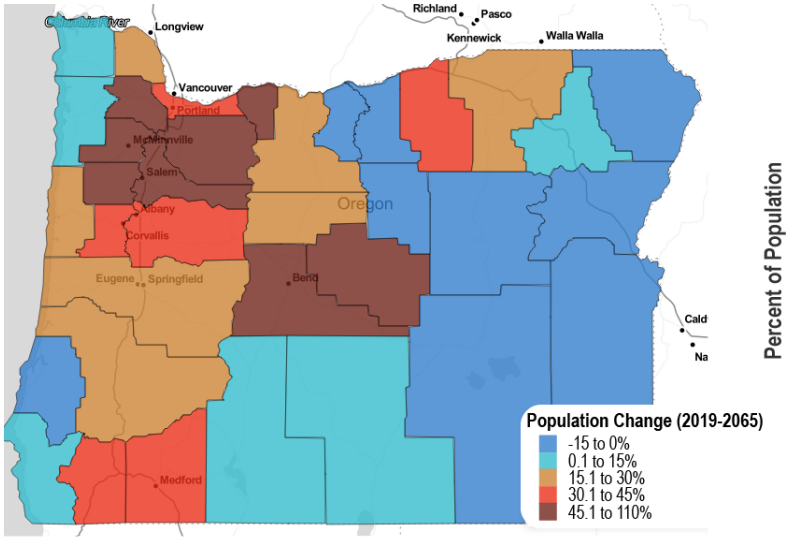
US Geological Survey

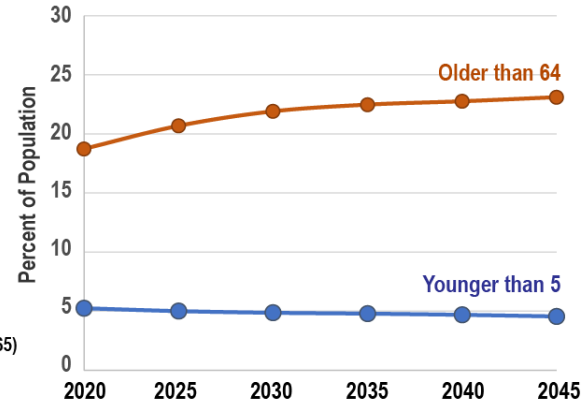
Univ of Denver Law Review

Three Perspectives on Oregon's Long-Term Water

1. Demography – population will increase, but some communities will shrink







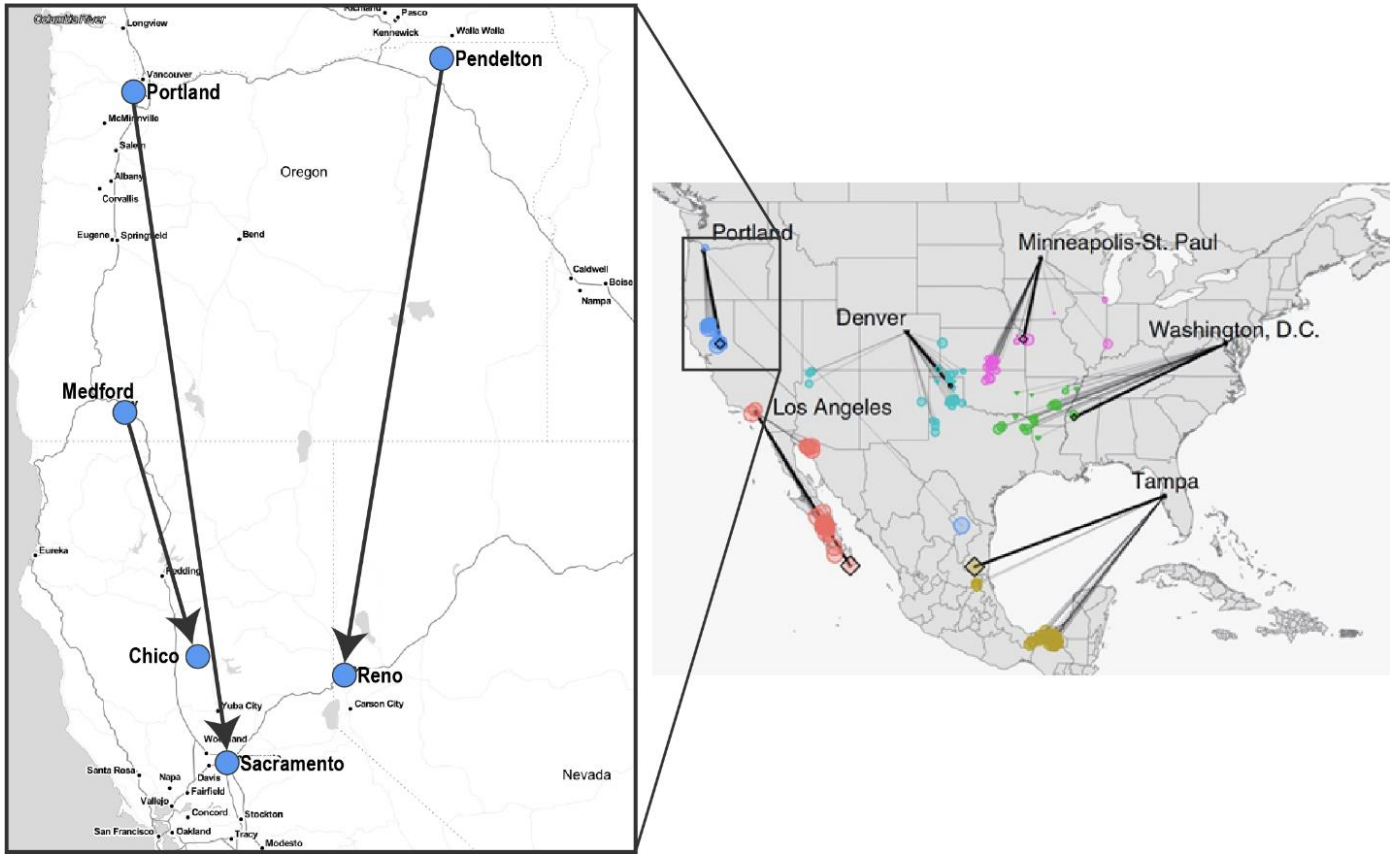
Portland State University, Population Research Center

Three Perspectives on Oregon's Long-Term Water

2. Climate – Portland in 40 years will feel like Sacramento does today

Medford will feel like Chico, CA

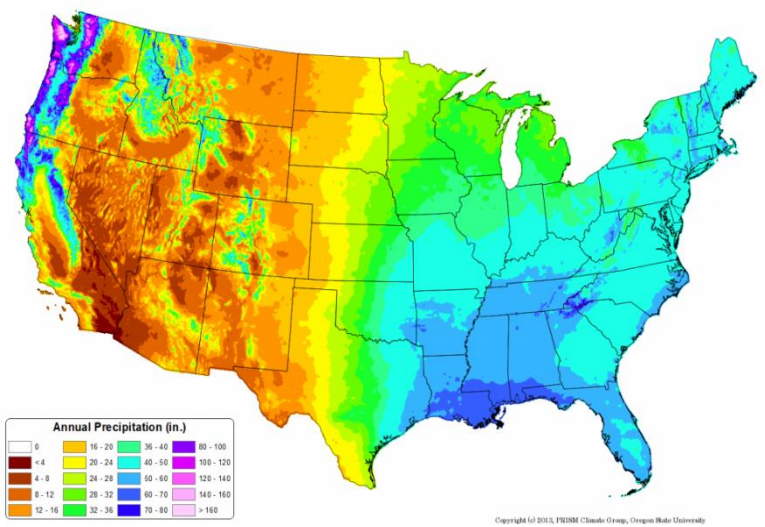
Pendleton will feel like Reno, NV

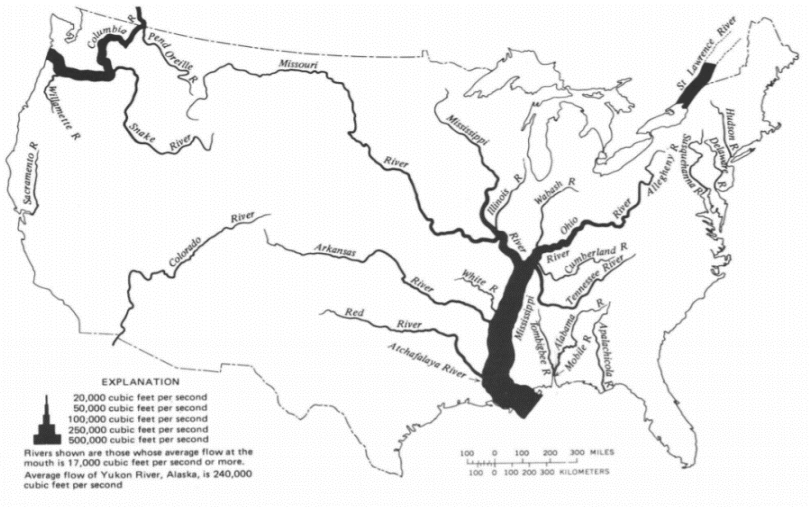


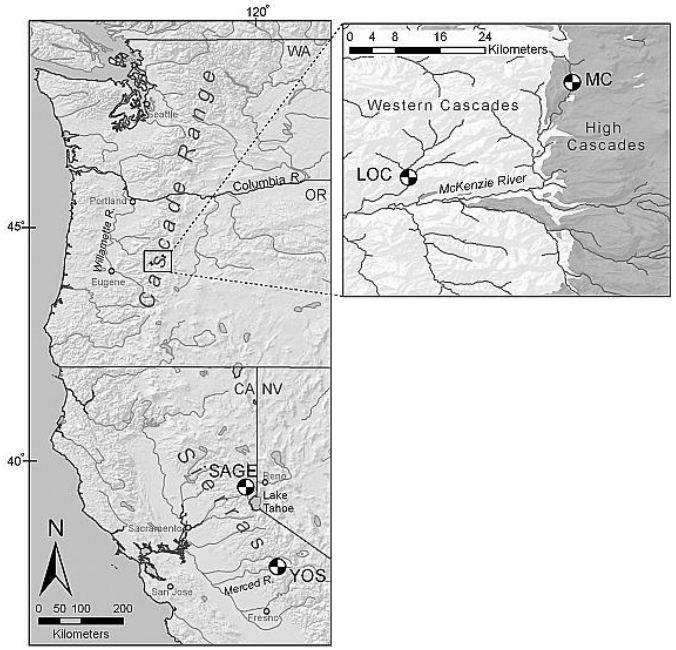
University of Maryland,

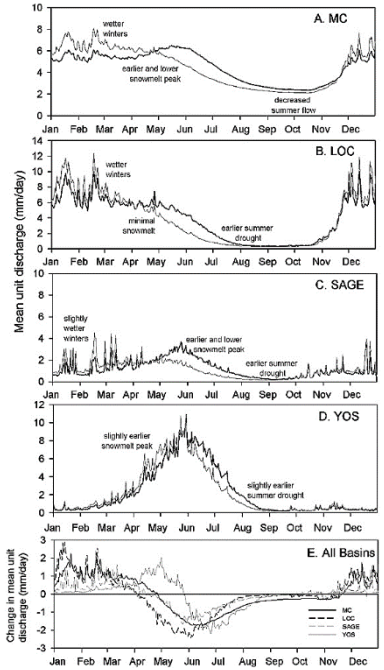
https://fitzlab.shinyapps.io/cityapp/

Three Perspectives on Oregon's Long-Term Water
3. Hydrology – Oregon has a comparative hydrologic advantage









Tague and Grant, Water Resources Research, 2008

Ten Trends for the Next Ten Years – in Oregon and the US generally

1. Rain not snow
2. Growing demand for over-allocated waters
3. Aging infrastructure
4. Affordability and equity
5. Federalism and long-term shrinking budgets
6. Groundwater and natural infrastructure
7. Smart water and open water data
8. Novel compliance approaches
9. Impact investing
10. Growing cost of capital

Over-arching Conclusions

1. Oregon's biggest challenge is water management – not scarcity
2. Unclear, and doubtful, that Oregon's water management system is up to the impending challenges

Four Pillars for Transforming Oregon's Water Management

1. Regional water approaches to increase opportunities for innovation and responsibility that address local/regional challenges
2. Greater transparency through increased use of shared, integrated water data
3. Careful, intentional reform of water permitting processes
4. Inclusion of wider range of voices in water management