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## **Testimony supporting SB427**

Chair Golden and members if the Senate Committee on Natural Resources and Wildfire:

Southern Oregon Climate Action Now is a grassroots climate organization of some 2,000 Southern Oregonians. We are concerned about the climate crisis and seek federal, state and local action to address it. We are rural and coastal Southern Oregonians who live on the frontlines of the warming, reducing snowpack, heatwaves, drought, rising sea level and the increasing wildfire risk that these trends conspire to impose on us. Because of our concern, we pay close attention to efforts nationally, statewide, and locally that impact our collective efforts to address the climate crisis. In addition to our interest in mitigating climate change, we also week to adapt where possible and advisable. As our logo above indicates, the focus of SOCAN is to promote action through science.

I write today in support of SB427. Krugger (2024) reported that freshwater supplies across the globe dwindled substantially in 2015 with the loss of "290 cubic miles (1,200 cubic km)" of freshwater, a volume equal to 250% of Lake Erie. Rodell et al. (2024) reported vast freshwater loss between 2014-2016 with its implications for sea level. In a recent, though undated, commentary (UN undated) the summary starts with the declaration that "Climate change is primarily a water crisis." This is explained later with the statement that "Climate policymakers must put water at the heart of action plans. Sustainable water management helps society adapt to climate change by building resilience, protecting health and saving lives. It also mitigates climate change itself by protecting ecosystems and reducing carbon emissions from water and sanitation transportation and treatment."

In a discussion of water availability, the World Wildlife Fund pointed out: "Many of the water systems that keep ecosystems thriving and feed a growing human population have become stressed. Rivers, lakes and aquifers are drying up or becoming too polluted to use. More than half the world's wetlands have disappeared. Agriculture consumes more water than any other source and wastes much of that through inefficiencies. Climate change is altering patterns of weather and water around the world, causing shortages and droughts in some areas and floods in others."

The 7th Oregon Climate Assessment Report (Fleishmann 2025) indicted that between 1990 and 2023, 18 years had below average precipitation while 21 of those years were warmer than normal. As a result, Oregon's freshwater supply has been dwindling. In terms of projections, the report suggests "Drought risk likely will increase over the twenty-first century on the western slopes of the Cascade Range and the southern Coast Range, decrease in the Deschutes and John Day basins in north-central Oregon, and change little elsewhere. Drought risk during summer is likely to increase statewide." Meanwhile, the USGS Climate Change Viewer suggests that Oregon summers will tend to be drier as we pass through the century while winters will be slightly wetter (USGS 2025 accessed Feb 24, 2025; citation Alder and Hostettler 2013).

Clearly, our future is likely one in which freshwater supplies will be in shortening supply. These trends will have a profound impact on aquatic natural systems as well as human populations relying on our dwindling water supplies. For these reasons it makes eminently good sense to marshal the ability of those wishing to divert streamflow to do so if such diversion would result in "diminishment of streamflow;" and that an applicant seeking such diversion should ascertain whether the diversion would "result in the diminishment of streamflow." (OLIS 2025).

As a result of the precipitation pattern and trends, it makes perfectly good sense that Oregon should adjust ORS 537.211 to reflect the need to protect streamflow as recommended in SB427. Southern Oregon Climate Action Now therefore endorses this proposal.

Respectfully Submitted

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## Sources Cited

Alder, J. R. and S. W. Hostetler, 2013. USGS National Climate Change Viewer. US Geological Survey <a href="https://doi.org/10.5066/F7W9575T">https://doi.org/10.5066/F7W9575T</a>

Further description and tutorial for the NCCV may be found in our <u>documentation</u>

Fleishman, E., editor. 2025. Seventh Oregon climate assessment. 14. Oregon Climate Change Research Institute: Oregon State University, Corvallis, Oregon; Technical Report, 314p. https://doi.org/10.5399/osu/1181

Krugger J (2024) The World's Freshwater Resources Drop to Troubling Low. Time <a href="https://time.com/7177603/global-freshwater-resources-drop-to-troubling-low/">https://time.com/7177603/global-freshwater-resources-drop-to-troubling-low/</a>

Rodell M, Barnoud A, Robertson F, Allan R, Bellas-Manley A, Bosilovich M, Chambers D, Landerer F, Loomis B, Nerem R, O'Neill M, Wiese D, Seneviratne S. 2024 Water Storage and Its Relationship with Sea Level Change. Springer Nature, Surveys in Geophysics.

https://link.springer.com/article/10.1007/s10712-024-09860-

w?cjdata=MXxOfDB8WXww&utm medium=affiliate&utm source=commission junction&utm campaign=CONR BOOKS ECOM GL PBOK ALWYS DEEPLINK&utm content=textlink&utm ter m=PID100085446&CJEVENT=a0e16073f31011ef80bc002b0a1eba24

UN undated. Water and Climate Change. United Nations: UN Water. <a href="https://www.unwater.org/water-facts/water-and-climate-change">https://www.unwater.org/water-facts/water-and-climate-change</a>

WWF undated Threats: Water scarcity. World Wildlife Fund <a href="https://www.worldwildlife.org/threats/water-scarcity">https://www.worldwildlife.org/threats/water-scarcity</a>