

# FEATURE

## Idaho's Economic Climate Change Assessment

Megan L. Foster and Alan S. Kolok

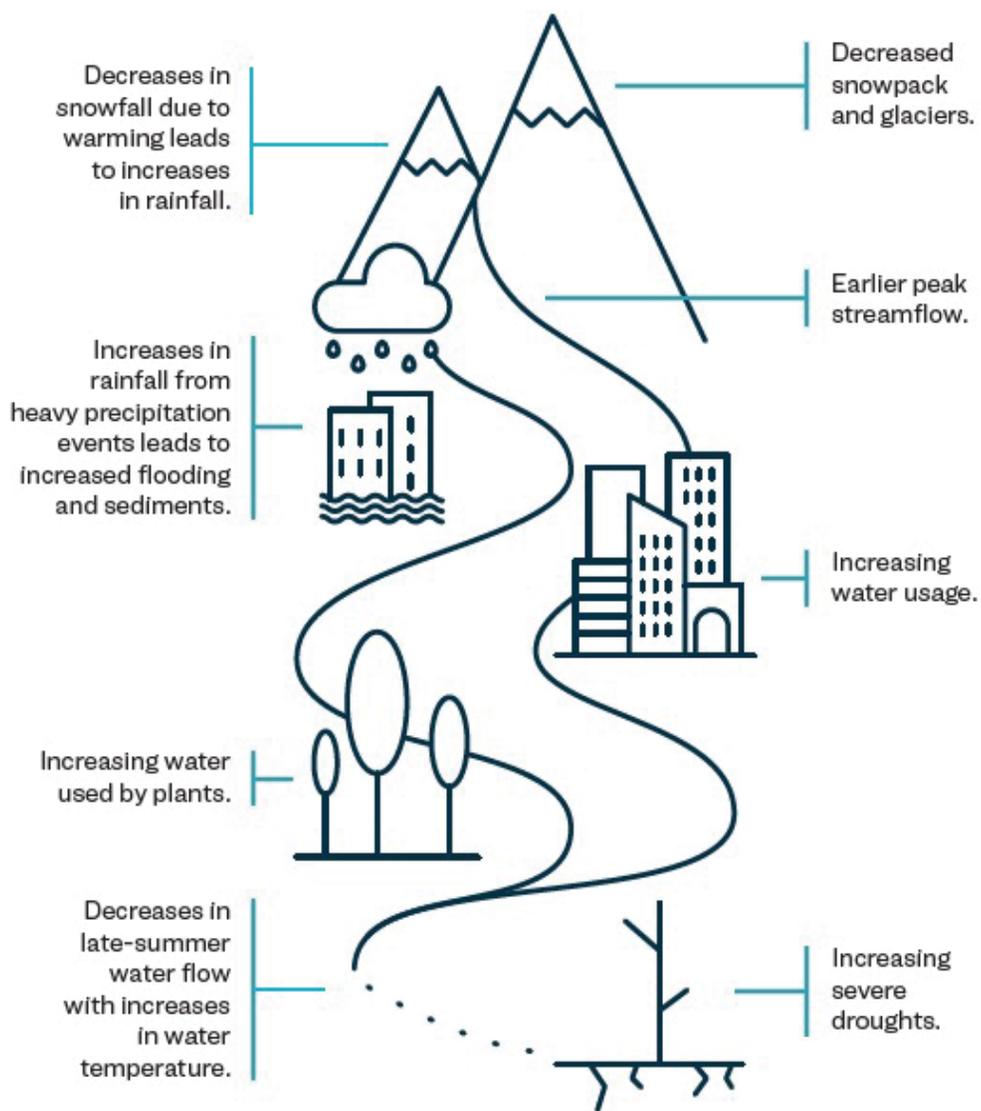
IN JULY 2022, CLIMATE scientists were shocked to find that air temperatures in the United Kingdom soared above 40°C for the first time in recorded history. Despite what these and similar events may foretell, discussing climate change remains challenging in many parts of the United States. Like many states within the intermountain region of the United States, Idaho is facing premature snowmelt and annual hydrographs that are substantially different from historical patterns. With changes in climate, the region's snowmelt starts earlier in the spring than in previous years. Furthermore, the peak flow from the annual snowmelt is attenuated and stretched out over time.

These changes are consequential for water availability and water storage in Idaho. Earlier snowmelt and attenuated flow means less water is readily available for use in mid- to late summer—the exact time that agricultural needs for water peak in the region. The Idaho Water Resources Research Institute and the University of Idaho McClure Center for Public Policy Research framed these issues in terms of economic impact to reach a broad spectrum of stakeholders.

### An Economic Perspective

With that intention in mind, the University of Idaho's McClure Center spent over two years convening and leading the [Idaho Climate-Economy Impacts](#)

### CLIMATE IMPACTS ON WATER



Changes in climate mean earlier snowmelt and more frequent and intense droughts, which pose challenges for Idaho's economy. Source: Idaho Climate-Economy Impacts Assessment.

[Assessment](#). The assessment is a nonpartisan, science-based resource to help Idaho business leaders, policy makers, and residents plan for a productive, prosperous, and resilient Idaho economy. The impetus for the assessment emerged from a two-day summit in late

2017 that brought together over 500 participants across Idaho. These included community members, scientists, and local, state, federal, and tribal governments, as well as representatives from the nonprofit, business, and industry sectors. This summit, “Safeguarding Idaho’s Economy in a Changing Climate,” was the first statewide conversation on climate change. Framing this conversation from an economic perspective was essential to reach a diverse audience, as Idaho’s economy depends heavily on natural resources.

Small farms, large agribusiness, hydropower, forest products, and recreation and tourism all require abundant water and healthy land, which are at risk from impacts associated with climate change. While Idahoans wanted to know about economic risks and opportunities, Idaho-specific data were limited. Summit participants identified key areas of future work—the first of which was an economic impacts analysis.

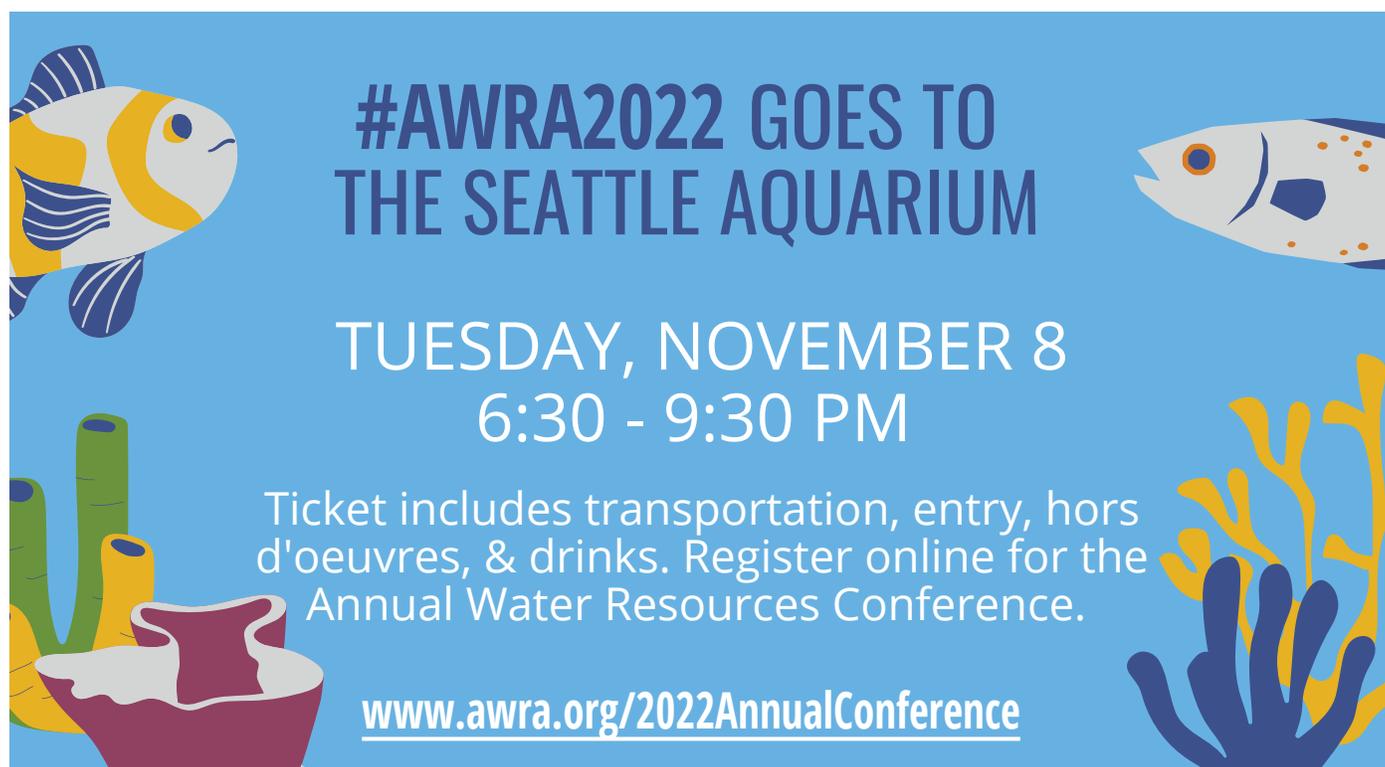
By focusing on the economic nature of this work, the McClure Center convened the assessment with the support and involvement of many organizations. An executive committee of leaders from Idaho business, nonprofit, and higher education institutions oversaw the [Idaho Climate-Economy Impacts Assessment](#). The assessment was also supported by advisory board of leaders from across business, industry, nonprofits, and communities. By including representatives from local, state, federal, and tribal governments, the McClure

Center ensured that the assessment benefited from diverse perspectives and was broadly relevant, engaging, and actionable. In addition, scientists and engineers from Idaho universities, colleges, businesses, nonprofits, and tribal and other governments collaborated in the research effort. Subject matter experts provided technical feedback on all sections of the assessment in a manner consistent with an academic peer review process. The assessment was funded by business, nonprofit, and government investments, as well as in-kind contributions from Idaho universities and other organizations.

#### **Deep Outlook, Wide Audience**

The assessment includes an economic analysis of the agriculture, energy, health, infrastructure, land (forest and range), and recreation and tourism sectors. Analyses connect the latest science on Idaho’s changing climate with economic risks and opportunities for innovation and economic development. The assessment also features data on climate, water, and wildfire smoke; a summary of economic opportunities; and a list of resources and references. The assessment’s findings are widely accessible: all materials—[technical documents](#), as well as one-page [non-technical summaries](#)—can be found online.

Upon completion of the assessment in December 2021, the McClure Center issued a press release to share the findings. In addition, it provided communication



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resources to advisory board members to support their local outreach efforts. Through a variety of invited speaking engagements and media interviews, the assessment has reached broad audiences from advocacy groups to public decision-makers. The assessment has been lauded for providing a shared language, as well

as a basis for conversations and planning around climate-related economic impacts expected in Idaho. The impacts of climate change on water resources do not respect political boundaries. It is, therefore, beneficial to develop a shared understanding and common vocabulary for assessing anticipated changes, impacts, and risks. Doing so can serve as a basis for conversation among broader water stakeholders in the Intermountain West.

This approach can be used well beyond Idaho and the Intermountain West. To that end, the McClure Center has made presentations on the construction of an assessment to broader audiences at the national level. Assessing climate impacts can benefit from

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thoughtful planning and broad engagement. The McClure Center's efforts—developing a nonpartisan assessment with support from an advisory board built around common interest in the economic health of the state—provides a template for other states and regions to address impacts from climate change in ways

that meet the needs of impacted communities. ■

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