Academy of Sciences

Science in the Service of Washington State

We live in a time of extraordinary opportunities and challenges – many of which involve science or technology with impacts to jobs, health, the environment and other aspects of the quality of life in the state of Washington. The Washington State Academy of Sciences (WSAS) is a unique state resource for the government, organizations and citizens as they confront these challenges and seize opportunities to improve their lives.

WSAS serves by

- Identifying and recruiting as Members the state's most distinguished scientific and technical experts
- Conducting relevant time-sensitive unbiased studies that inform state and local planners and decision makers
- Organizing in-depth discussions about important issues confronting Washington State
- Identifying emerging trends and needs that will have significant impact on our citizens' future.

About WSAS

The Washington State Legislature authorized WSAS in 2005 as a private, nonprofit 501 (c)(3) organization whose work is nonpartisan, independent and funded from both private and public sources.

WSAS Members are nominated and recognized by their peers as outstanding leaders in their respective scientific and technical fields and are committed to serving the citizens of Washington. Its 265+ members' expertise cuts across the physical sciences and mathematics, engineering and technology, biological sciences, health sciences, and behavioral and social sciences. Many are also members of the National Academies of Sciences, Engineering or Medicine, and a significant proportion of them have served extensively on National Academies' study committees.

WSAS engages Members' expertise in specific scientific and technical reviews and analyses using a committee structure modeled after the one used by the National Academies. Great care is taken to appoint committees and working groups of specialists to conduct high-quality studies; subject draft reports to rigorous, independent science and technical peer review; and secure WSAS Board of Directors approval before the release of reports to ensure that they are free from bias and conflict of interest.

WSAS addresses a range of challenging public issues – environmental quality; food security, sustainability of natural resources, and climate change; jobs, infrastructure and economic development; and quality of life, health, education and workforce development. Its reports do not contain policy recommendations; rather, they contain the best available scientific and technical analyses to inform public discussion and decision making.

How WSAS Serves Washington State

WSAS provides authoritative, independent scientific and technical advice to inform policy development and decision making in Washington State. It responds to requests from the Governor, the State Legislature, and other state entities or private organizations.

WSAS conducts its work for the State primarily by convening study committees and issuing objective reports that are funded by the government and non-governmental organizations.

In addition, WSAS develops and sustains a culture of scientific and technical excellence in Washington State through annual scientific symposia, public and K-12 education programs, and support for students in science and engineering.

Topical Working Groups

In 2016 the WSAS established three Topical Working Groups (TWGs) aligned with the state's key scientific and technological policy interests. TWGs are designed to engage members in critical policy issues facing the state, organize and conduct projects addressing these issues, and help coordinate efforts to connect with other state and local organizations. The initial TWGs are:

- Environmental Quality, Sustainability and Climate Change
- Jobs, Infrastructure and Economic Environment
- Quality of Life, Health, Education and Workforce Preparedness

Selected Examples of WSAS impacts on Washington state

Washington State continually faces vexing issues that are controversial, fraught with uncertainty, and politically contentious. Those entrusted to develop policies and make decisions to address these issues benefit greatly from the rigorous and objective scientific and technical analyses that WSAS provides in the public interest. Examples include:

COMMISSIONED REPORTS, REVIEWS AND REQUESTED ADVICE

Evaluation with Recommendations by the Washington State Academy of Sciences of Interim Report: 2015 Drought and Agriculture. December 2016.

This evaluation responded to a request from the Washington State Department of Agriculture to review the science supporting the methodologies and interpretation of the results of its study of the 2015 drought on Washington agriculture.

Opportunities for Addressing Laminated Root Rot Caused by Phellinus Sulphurascens in Washington's Forests. December 2013.

This report responded to a request from the Washington State Department of Natural Resources to identify approaches and opportunities ripe for research on understanding and managing of root diseases of Douglas fir.

White paper on Washington State Initiative 522 (I-522): Labeling of Foods Containing Genetically Modified Ingredients. November 2013.

Six legislators requested WSAS to provide an independent white paper addressing the science underlying the use of products from genetically modified plants and/or animals in food and the impacts of required labeling of foods containing ingredients from genetically modified plants and/or animals.

Sound Indicators: A Review for the Puget Sound Partnership. August 2012.

The State Legislature asked WSAS to assess the progress of the Puget Sound Partnership's (PSP) 2020 Action Agenda to protect and restore Puget Sound.

WSAS ANNUAL SYMPOSIA PROCEEDINGS

Proceedings of the Ninth Annual Symposium, Columbia River Treaty, Issues for the 21st Century, 2016.

Proceedings of the Eighth Annual Symposium, Accelerating Science's Impact: Translating Discoveries into Solutions, 2015.

Proceedings of the Seventh Annual Symposium, Health Disparities in Washington State: Narrowing the Gap, 2014.

Proceedings of the Sixth Annual Symposium, Energy: Environmentally Acceptable Choices for Washington State, 2013.

Proceedings of the Fifth Annual Symposium, Water, Washington and the World, Ensuring Economically and Environmentally Sustainable Water Resources, 2012.

Proceedings of the Fourth Annual Symposium, Rising Above the Gathering Storm: STEM Education in Washington State, 2011.

For more information, or to inquire about a potential study topic for WSAS or about scientific or technical issues of interest to you, please see <u>washacad.org</u>, contact us at <u>wsas.programs@washacad.org</u>.