

WASHINGTON STATE  
**Academy of Sciences**

Science in the Service of Washington State

# 2022 Annual Report



For activities July 2021 - June 2022  
Prepared in December 2022 for Governor Jay Inslee

# New Member Highlights



Information about New Members elected in 2022 can be found [here](#).

## From the President



It is my pleasure to report on the work and progress of the Washington State Academy of Sciences in FY 2022 (July 2021 – June 2022). We achieved success in several key areas:

- We completed two important projects that will inform policymakers on policy issues related to the use of natural resources – on Net Ecological Gain, and the Skagit Water Supply.
- We organized two workshops – one for stakeholders and one for scientists – on research that can inform the management of pinnipeds, given concerns about their predation on salmonids.
- We worked with community members in the TriCities, the northwestern part of the state and in Spokane to develop three community dialogues to discuss critical issues that have emerged due to COVID-19.
- We held an annual symposium on COVID-19: Science and Society, which focused on the health and scientific, community, and economic impacts of the pandemic as of the early fall of 2021.
- We welcomed 25 new elected members into the Academy.
- Our Board of Directors set ambitious new strategic priorities to guide our work for the next several years. Each priority strengthens the Academy and increases our capacity provide more members to engage in the Academy's work, and thus provide utility to the state.

Finally, in FY 2022 the Governor and Legislature increased in our core funding. We are grateful for this momentous affirmation of the service we provide to Washington State, and look forward to engaging in many more important issues in the years to come.

A handwritten signature in black ink that reads "John Roll". The signature is written in a cursive, flowing style.

**John Roll**

WSAS President,  
September 2022 – September 2024

## Who We Are

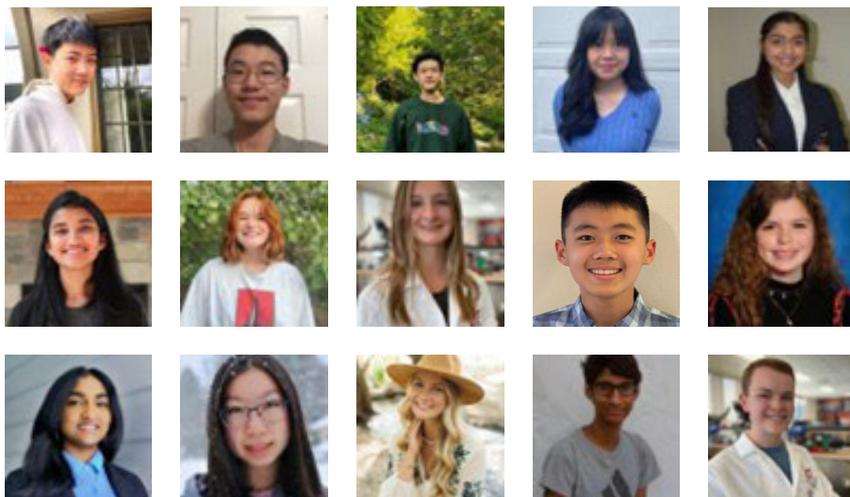
The Washington State Academy of Sciences (WSAS) is a non-profit organization of more than 360 elected members who are nationally recognized for their scientific and technical expertise.

## Our Mission

WSAS provides expert scientific and engineering assessments to inform public policy making and works to increase the impact of research in Washington State.

## Educational Programming

Each year, WSAS selects the Washington state delegates for the American Junior Academy of Sciences (AJAS). This year, WSAS provided funding for 15 exemplary high school students to attend the Virtual AJAS Conference. You can read more about the AJAS program and the past and present Washington state delegates here.



A list of WSAS's standing and ad hoc committees can be found on our [website](#).

**14TH ANNUAL SYMPOSIUM PROCEEDINGS PUBLISHED**  
WSAS's [annual symposium](#) explored COVID-19: Science and Society.

# Completed Projects

## COVID-19 COMMUNITY DIALOGUES SERIES

### May 2021 – December 2021

National Science Foundation

WSAS organized a virtual dialogue series to respond directly to decisions being navigated in local communities in response to the COVID-19 pandemic. The dialogues, planned and co- designed with community members, were held in the Tri-Cities area, Coastal Washington, and Spokane. The series was founded through a partnership with the Pacific Northwest National Laboratory and was carried out under the guidance of the WSAS COVID-19 Steering Committee with a grant from the National Science Foundation.

### Covid-19 Steering Committee

**Ronald Thom**, Chair (PNNL Emeritus)

**Philip A. Bernstein** (Microsoft)

**Ann Bostrom** (UW)

**Richard Catalano, Jr.** (UW)

**Dianne Chong** (Boeing, Retired)

**Howard Frumkin** (UW Emeritus)

**Lai-yung “Ruby” Leung** (PNNL)

**Clifford F. Mass** (UW)

**Ron Mittelhammer** (WSU)

**Guy Hughes Palmer** (WSU)

## SKAGIT RIVER BASIN WATER SUPPLY

### January 2020 – June 2022

WA Department of Ecology

As requested by the Joint Legislative Task Force on Water Supply, WSAS directed independent third-party reviews of the estuary portion of a 1999 technical report that informed the Skagit Instream Flow Rule, and of a supply and demand analysis of the Skagit Basin prepared by WSU’s Water Research Center and UW’s Climate Impacts Group. The Committee also prepared a *Proposed Scope for a Comprehensive Hydrologic Study of the Skagit Estuary*.

### Committee

**Michael Goodchild**, chair (UCSB Emeritus)

Rebecca Flitcroft (USDA Forest Service)

Eric Grossman (USGS)

Se-Yeun Lee (Seattle University)

John Rybczyk (WWU)

Mark Wigmosta (PNNL)

## Active Projects

### PINNIPED PREDATION ON SALMONIDS

**Timeline: July 2021 – December 2022**

Sponsoring Agency: Washington Department of Fish and Wildlife (WDFW)

WSAS is conducted a scientific and technical review of the science of pinniped on salmonids, with an emphasis on Washington's portion of the Salish Sea and Washington's outer coast. This project involved review of the existing science and data around pinniped predation culminating in a report describing the science of pinniped predation, including

assessment of scientific and technical aspects of potential management actions. The WSAS committee engaged with salmon co-managers, stakeholders, and scientists beyond the committee.

The WSAS Committee's Final Report, **Pinniped Predation on Salmonids in the Washington Portions of the Salish Sea and Outer Coast**, is available [here](#).

### NET ECOLOGICAL GAIN

**Timeline: August 2021 – September 2022**

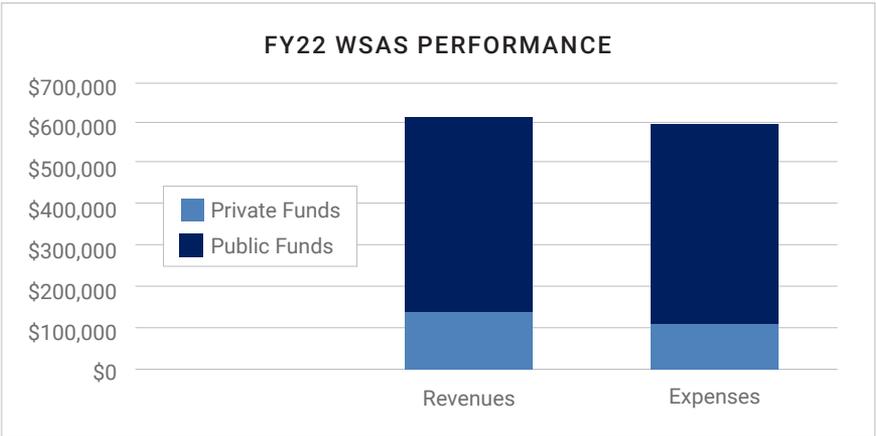
Sponsoring Agency: Washington Department of Fish and Wildlife (WDFW)

WSAS advised WDFW and the state legislature's ongoing conversations on a net ecological gain standard for state land use, development, and environmental laws to achieve a goal of better statewide performance on ecological health and endangered species recovery, including the recovery of salmon in order to fulfill treaty obligations and de-list threatened or endangered species.

The committee produced a report that outlines a definition, goals, objectives, and performance metrics for a net ecological gain standard; assessed the sufficiency of standards; and made recommendations about monitoring and indicators for no net loss and ecological gain. The committee's report is available at this [link](#).

# Finances FY 2022

	REVENUES	EXPENSES
Private Funds	\$139,563	\$111,479
Public Funds	\$474,754	\$466,516
<b>Total</b>	<b>\$614,317</b>	<b>\$577,995</b>



\*Program revenue funds include contracts and grants from the Department of Ecology, the Washington Department of Fish and Wildlife, the Governor’s Salmon Recovery Office, and the National Science Foundation.

**— THANK YOU TO OUR PROGRAM FUNDING PARTNERS —**



WSAS is a 501(c)3 non-profit organization.  
 More information is available upon request. EIN: 68-0668369.

## THANK YOU WSAS DONORS!

**Donations** allow WSAS to explore topics that are not supported by core funding and expand the activities of WSAS's committees, Board, and Topical Working Groups.

### **Up to \$249**

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Steve Henikoff  
Joel Kaufman  
Ljiljana Pasa-Tolic  
Noel Schulz  
Ronald Thom  
Judith Wasserheit

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David Lomet  
Marc Mangel  
Kristi Morgansen  
R.G. Hamish Robertson  
Michael Smerdon

### **\$500 - \$999**

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Cathryn Booth-LaForce  
Dianne Chong  
Samson Jenekhe  
Roger Myers  
Buddy Ratner  
James Winton

### **\$1,000 - \$4,999**

Anjan Bose  
Ann Bostrom  
Allison Campbell  
Mary Ann Chapman\*  
Earll Murman  
Tueng Shen  
Dennis Tilley\*

## OFFICERS 2021-2022

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Aerojet Rocketdyne (RETIRED)

**Don Baer**, SECRETARY  
Pacific Northwest National Laboratory  
(EMERITUS)

**Allison Campbell**, TREASURER  
Pacific Northwest National Laboratory  
(RETIRED)

**John Roll**, PRESIDENT-ELECT  
Washington State University

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