



The Center for Urban Waters

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James Parvey, Chief Sustainability Officer

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...brings together environmental scientists, analysts, engineers and policymakers who are developing creative and sustainable solutions to restore and protect Puget Sound.

The founding partners...are committed to providing a collaborative environment where the best-available science forms the basis for policy development and implementation.

The Center for Urban Waters is the result of years of work by community leaders who dreamed of a world-class research center on Commencement Bay dedicated to finding solutions for urban bay communities.

Urban Waters Advisory Board



Jim Waldo, Chair	Gordon, Thomas, Honeywell
Bruce Martin	WestRock Company
Catherine Rudolph	Strategic Advisor for Economic Development, Pierce County
Chad Wright	CEO, Marine View Ventures, Puyallup Tribe of Indians
Conor McCarthy	Council Member, Tacoma City Council
Connie Bacon	Commissioner (retired), Port of Tacoma
Dan Cheney	Pacific Shellfish Institute
Derek Sandison	Director, Department of Agriculture, State of Washington
Jim Parvey	Chief Sustainability Officer, City of Tacoma
Kate Snider	Principal, Floyd-Snider
Kurt Beckett	Northwest Seaport Alliance
John McCarthy	Commissioner, Port of Tacoma
Linda McCrea	Interim Director, Tacoma Public Utilities

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Key Elements of the Center for Urban Waters



Our Foundation: a thriving research center that is nationally-recognized for innovative solutions to urban water issues.

Virtuous cycle



- Attracting talent
- Competing for funding
- Peer-reviewed publications
- Urban Waters scientists have high impact
- Solutions translated to actions

Key Elements of the Center for Urban Waters

Serving as a boundary organization between science and policy



PUGET SOUND INSTITUTE

 UNIVERSITY of WASHINGTON

- Synthesis and integration of research results into policy-ready guidance
- Effective communication to targeted audiences
- Science-smart, policy neutral

Key Elements of the Center for Urban Waters

Education and workforce development



- Supporting STEM education at UW Tacoma
- Providing authentic research experiences for South Sound students
- Engaging middle and high school students in environmental research

Urban Waters Summer Internship Program

Goals:

- Provide research experience for students
- Provide authentic work experience
- Establish networks
- Allow research staff to explore new ideas



Student Training



Growth of STEM Degree Programs at UW Tacoma

- 1990: B.S. in Environmental Science
- 1999: B.S. in Computer Science and Systems
- 2003: MS in Computer Science and Systems
- 2005: BA in Computer Science and Systems
- 2006: B.S. in Computer Engineering and Systems
- 2009: B.S. in Information Technology
- 2013: Master of Cybersecurity & Leadership
- 2015: B.S. in Mathematics
- 2016: B.S. in Biomedical Sciences
- 2017: B.S. in Electrical Engineering
- 2020: B.S. in Mechanical Engineering (proposed)
- 2021: B.S. in **Civil and Environmental Engineering** (proposed)

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iGEM 2017

International Genetically Engineered Machine Competition

This year the RAIN student team took a bronze medal at the International Genetically Engineered Machine competition in Boston... matching teams at Stanford, Harvard, and Pasteur Paris. This is one example of the many fruits the Readiness Acceleration & Innovation Network has to bear.

iGEM

iGEM 2017

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EPA Environmental Workforce Development and Job Training Programs



- Tacoma's Local Employment and Apprenticeship (LEAP) was recently awarded its third consecutive "Green Jobs." grant.
- Training to prepare enrollees for jobs. in the environmental field
- Participants complete 200 hours of instruction at Clover Park Technical School
- Latest cohort 61 enrolled, 57 graduated and 43 employed in green jobs.
- Partners: Goodwill and Clover Park Technical College



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Innovation Partnership Zone



- The Urban Clean Water Technology IPZ will accelerate development of a research-based cluster by leveraging partnerships in the Thea Foss Waterway zone, related educational and business assets in the region.
- The IPZ is an area of about 121 gross acres with natural and human-made boundaries.

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Major Accomplishments Since IPZ Designation



- Wellspring Conference Series
- IPZ Capital Budget Grant (\$3.6M)
- UW Tacoma Clean Water Innovation Laboratory
- Advanced analytical instrumentation
- Innovative treatment media
- WSU Puyallup Aquatic Toxicology Laboratory
- Washington Department of Ecology's Technology Assessment Protocol-Ecology (TAPE) program facilitation
- Ed Kolodziej, PhD, Professor of Environmental Science

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Making Connections

- EPA's Water Cluster Nation
- Wellspring Symposia
- Green Infrastructure Challenge
- Foreign Delegations



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