EPA United States Environmental Protection Agency

EPA's Office of Research and Development invites you to a free webinar

Water Research Webinar Series

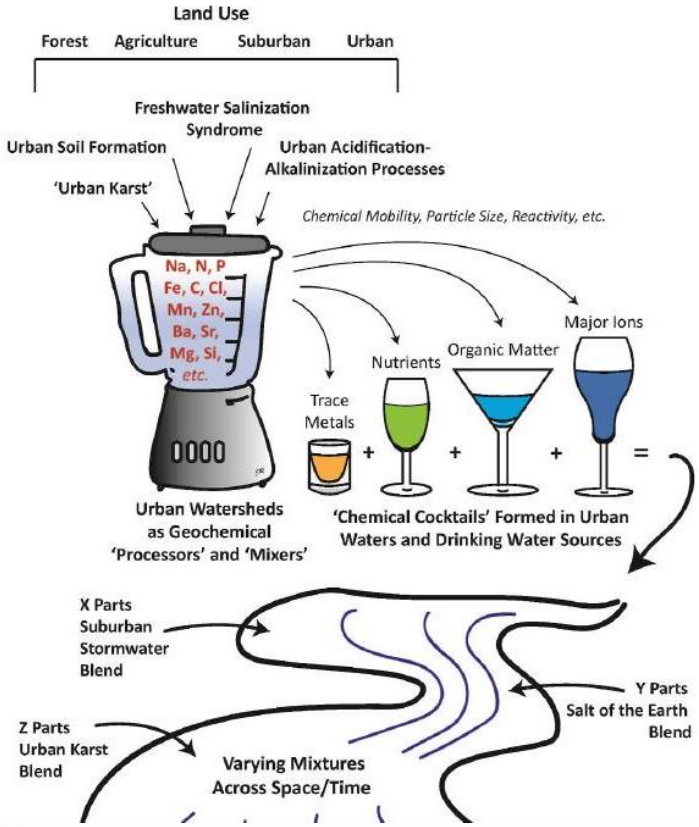
Road Salts and Freshwater Salinization Syndrome: An Emerging Water Quality Threat

A certificate of attendance will be offered for this webinar

Wednesday, June 30 from 2:00 to 3:00 pm ET

Optional Q&A from 3:00 to 3:15

Registration: attendee.gotowebinar.com/register/1729091301702473997



Streams throughout the U.S. and world-wide have increased in salinity due to multiple processes, including road salt and human-accelerated weathering of impervious surfaces, reductions in acid rain, and other anthropogenic legacies. This freshwater salinization, in turn, mobilizes chemical cocktails via ion exchange and other biogeochemical processes.

This webinar will examine fate and transport of salts and chemical cocktails, describe the litany of environmental impacts, and discuss the use of real-time sensor data to characterize trends of nutrients and metals using long-term data from urban streams in the Chesapeake Bay watershed. Finally, presenters will discuss approaches to managing this growing environmental and health problem.

See back page to meet the presenters

Webinar series schedule and recordings: epa.gov/water-research/water-research-webinar-series

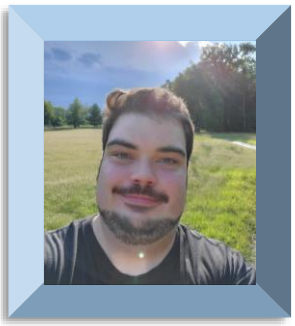
Learn more about water research: epa.gov/water-research

Get feature articles about our science: epa.gov/sciencematters/

Presenters

Paul Mayer, Ph.D.
Paul is a Research Ecologist and Special Assistant to the Director at Pacific Ecological Systems Division in EPA's Office of Research and Development (ORD) Center for Public Health and Environmental Assessment (CPHEA). Paul's research interests are in stream restoration, riparian ecosystems, and ground water with a focus on how green infrastructure and stormwater management can improve water quality. Paul received a B.S. from North Dakota State University, M.S. from University of Missouri, and Ph.D. from University of Minnesota-Twin Cities.

Tammy Newcomer-Johnson, Ph.D.
Tammy is an ecologist in EPA ORD Center for Environmental Measurement and Modeling (CEMM). Her is current research is focused on watershed restoration and ecosystem services in the Great Lakes Areas of Concern. She is the technical lead on EPA tools like the EcoService Models Library and the National Ecosystem Services Classification System (NESCS Plus). Tammy holds a Ph.D. from University of Maryland.



Joe Galella
Joe is a doctoral candidate at the University of Maryland College Park where he studies how road salt application mobilizes metals, cations and nutrients under Dr. Sujay Kaushal. Joe recently concluded an ORISE fellowship in EPA's Center for Public Health and Environmental Assessment (CPHEA). His article "Sensors track mobilization of 'chemical cocktails' in streams impacted by road salts in the Chesapeake Bay watershed" was recently published in Environmental Research Letters. Joe holds a M.S. from Shippensburg University.

Sujay Kaushal, Ph.D.
Sujay is a Professor in the Department of Geology and Earth System Science Interdisciplinary Center at the University of Maryland, College Park. His areas of expertise are Biogeochemistry, Environmental Geochemistry, and Hydrology with focuses on long-term chemistry of inland waters, impacts of land use and climate change on water quality, and managing and restoring freshwater ecosystems. He holds a B.A. in Biology (Ecology and Systematics) from Cornell University and a Ph.D. in Biology (Biogeochemistry) from the University of Colorado, Boulder.