

AGWA – AGWT 2021 WEBINAR



Webinar Presenters - Professional Background
February 9 & 10, 2021



Ellen Hanak, PhD, Vice President and Director, Water Policy Center, Public Policy Institute of California, San Francisco, CA



Ellen Hanak is vice president and director of the PPIC Water Policy Center and a senior fellow at the Public Policy Institute of California, where she holds the Ellen Hanak Chair in Water Policy. Under her leadership, the center has become a critical source of information and guidance for natural resource management in California. She has authored dozens of reports, articles, and books on water policy, including *Managing California's Water*. Her research is frequently profiled in the national media, and she participates in briefings, conferences, and interviews throughout the nation and around the world. Her other areas of expertise include climate change and infrastructure finance. Previously, she served as research director at PPIC. Before joining PPIC, she held positions with the French agricultural research system, the President's Council of Economic Advisers, and the World Bank. She holds a PhD in economics from the University of Maryland.

Debra Perrone, PhD, Assistant Professor, UC Santa Barbara Environmental Studies Program, Santa Barbara, CA.



Prior to joining the faculty at the University of California, Debra was a postdoctoral research scholar at Stanford University with a dual appointment in the Department of Civil and Environmental Engineering and the Woods Institute for the Environment. She received her PhD in Environmental Engineering at Vanderbilt University in 2014 and was awarded first honors as the Graduate School's Founder's Medalist. Debra has been awarded fellowships from the Environmental Protection Agency and National Science Foundation for her work studying the growing water scarcity challenges and tradeoffs facing society. Deb integrates research methods from engineering, physical science, and law to inform water sustainability and policy; she uses a wide-spectrum of outlets to disseminate her research, including peer-reviewed journals, policy briefs, and interactive-online dashboards. Debra is a co-author of a textbook for undergraduate students that focuses on the challenges and opportunities surrounding our global water resources by providing a foundation in water science and policy.

Andy Clay, Advisor at EY (Ernst & Young), Johannesburg, South Africa



Andy has more than 40 years of experience in the minerals industry, from field geology, research, and mineral resource management to commercial due diligence and evaluation of a wide range of local and international mineral and oil and gas assets. He has more than 30 years of experience working with commercial banks and financial institutions on transactions in the minerals industry and has been involved in the preparation of numerous codes and rules for compliance and reporting in the public domain. He has M.Sc. (Geol), and M.Sc. (Min Eng) from the University of the Witwatersrand in South Africa. Having successfully operated his own advisory business for 30 years this was acquired by Deloitte in 2012 in order to roll out technical advisory consulting services within an accountancy business framework. He has served as an Expert Witness on numerous occasions and still has a keen interest in valuations and regulatory reporting hence his involvement in the water sector over the past 10 years. He is a long-standing member of numerous professional bodies.

Matt Payne, Principal, WestWater Research, LLC, Phoenix, AZ



Matt Payne leads the WestWater Research Southwest office in Phoenix. His areas of expertise are water resource economics, water asset valuation, water supply planning and implementation, and mergers and acquisitions. He assists groundwater sustainability agencies with developing flexible water allocation and trading systems that assist with SGMA compliance. His groundwater banking experience includes advising the Antelope Valley-East Kern Water Agency on its High Desert Water Bank program, a \$130M partnership with the Metropolitan Water District of Southern California. Matt holds an M.B.A. from the W.P. Carey School of Business at Arizona State University. He also earned a B.A. Degree in Economics from Colorado College, where he focused on environmental and natural resource economics, and conducted research in the water resources field. He specializes in estimating the value of water using econometric techniques. Matt has published extensively in peer-reviewed and industry journals and has developed the first-ever price index for water rights in the American West.

Timothy Foster, PhD, Senior Lecturer, Department of Mechanical, Aerospace and Civil Engineering, University of Manchester, UK



Dr Tim Foster joined the University of Manchester as a Lecturer in Water-Food Security in August 2016. Prior to this, he was a Postdoctoral Research Fellow at the Robert B. Daugherty Water for Food Global Institute at the University of Nebraska in the United States. Tim holds Ph.D. and M.Sc. degrees in Hydrology from Imperial College London, along with B.Sc. in Physical Geography from University College London.

Tim's research develops and integrates state-of-the-art biophysical models, earth observation techniques, and economic analysis to explore the complex dynamics of water-food-energy systems and guide decision-making about water resources management. Tim is also the lead developer of AquaCrop-OS (<http://www.aquacropos.com>), a free, open-source software tool for assessing the impacts of water scarcity and climate change on crop production worldwide. Tim's work is inherently interdisciplinary, and includes collaborations with hydrologists, economists, and agronomists from academia, government, and policy organizations.

Rosemary Knight, PhD, Director, GEM Center, Department of Geophysics, Stanford University, Stanford, CA



Rosemary is working with her research group to find innovative ways of using geophysical methods to understand the hydrologic processes occurring in the top kilometer of Earth. In 1985, she coined a term to describe this work, “hydrogeophysics” - a sub-discipline that has grown dramatically over the past 30 years. A current focus of her group is the integration of geophysical imaging with remote sensing data for the evaluation and management of groundwater resources; this research is being done in partnerships with groundwater managers in the western U.S. Using laboratory and field experiments, and computer modeling, we are developing new methods for acquiring, processing, and interpreting geophysical data; and discovering new links between our geophysical images, and hydrologic properties and processes. Rosemary has a Ph.D from Stanford University in, Geophysics (1985) and an M.S from Queen's University, Kingston, Ontario Canada in Geological Sciences.

John Jansen, PhD, PG, PGp, Senior Geophysicist & Hydrogeologist, Collier Consulting, West Bend, WI



John has a B.S. in Geology and a M.S. and Ph.D. in Geological Sciences with an emphasis in hydrogeology and geophysics, all from the University of Wisconsin-Milwaukee. He is a Senior Geophysicist and Hydrogeologist for Collier Consulting. John works on a wide variety of ground water projects around the country specializing in high capacity wells and groundwater resource management. He received the NGWA Keith A Anderson Award in 2012 for service to NGWA and the groundwater industry and was the NGWA McElhiney Distinguished Lecturer in Water Well Technology in 2013. John was an invited lecturer on managed aquifer recharge and groundwater geophysics for the Geoscience University of China in Beijing in June of 2018.

Jeremy White, PhD, Principal Hydrogeologist, Intera Inc., Boulder, CO



Dr. Jeremy White is internationally recognized as an expert in inversion of natural-system models, with an emphasis on statistical uncertainty quantification and high-dimensional parameters spaces. Dr. White also has extensive expertise in numerical simulation of hydrogeologic, hydrologic and hydraulics systems, including surface water and groundwater interactions, mass transport and density-dependent flow. At INTERA, his focus includes the continued development of open-source codes: PEST++ and pyEMU and other uncertainty analysis/optimization tools. He has a BS in Computer Science from West Texas A&M, and MS and PhD in Geology from the University of South Florida.

David Barnes, Senior Modeler, Geoscience Support Services Inc., Claremont, CA



David has more than a decade of professional experience working in the water resources, water supply and mining sectors. His experience includes numerical modeling of surface and groundwater systems, design and construction of water supply and injection wells for fresh, brackish and seawater RO facilities. He has a Bachelor of Science in Hydrology and Water Resources from the University of Arizona and a Master of Engineering in Civil and Environmental Engineering from MIT.

Austin Ewell, Executive Director, Water Blueprint for the San Joaquin Valley, Fresno, CA



Austin B. Ewell III joined the Department of the Interior as Deputy Assistant Secretary for Water and Science in October 2017. In this role, he assisted the Assistant Secretary for Water and Science, who is “responsible for overseeing the U.S. Geological Survey (USGS) and the U.S. Bureau of Reclamation (USBR).” Austin Ewell is an attorney who has “specialized in land use, water supply and regulatory matters” who has worked “as a regulatory consultant on a variety of projects, including water rights, development entitlements, [and] natural resource mitigation.” Before joining the Department of the Interior, Ewell worked at The Ewell Group of Companies, a real estate firm founded by his father, Ben Ewell, “a prominent Fresno water lawyer.” Austin Ewell was President of the Clarksfield Company, Inc., Point Millerton Ranch, LLC, Lake Millerton Marinas, LLC, and was the Owner and Real Estate Broker of Record for Zenobia Realty Company. Ewell is currently a manager of Ewell Consulting Group LLC, a Fresno-based organization that engages in “land, water and environmental consulting.” Ewell, “a native of California,” has a B.A. from University of Southern California and a J.D. from Loyola Law School in Los Angeles.

Annalisa Kihara, PE, Supervising Water Resource Control Engineer, Division of Water Quality, DWR, Sacramento, CA



Ms. Kihara is Chief of the Unit implementing the Strategy to Optimize Resource Management of Stormwater, or STORMS in the Surface Water Branch. Ms. Kihara has been with the State Water Resources Control Board for 12 years and prior to that Annalisa was a Project Engineer with Delta Environmental. Ms. Kihara holds a B.S. degree in Civil Engineering from the University of California Davis, and is a CA registered Professional Engineer.

David Kaminski, Senior Vice President, QED Environmental Systems Inc., Pleasant Hill, CA



Since joining QED in 1984, David Kaminski has been involved in the development of new products for groundwater monitoring and landfill applications. In 2009, he became an instructor with the Princeton Groundwater Pollution Hydrology Course. Over the past 25 years, he has designed and installed ground-water pumping and sampling systems for sites throughout the United States, Canada, Europe, Australia and South America. Mr. Kaminski has developed new devices and methods for ground-water sampling and groundwater remediation applications and has been awarded four US patents. Mr. Kaminski has presented hundreds of seminars, short courses and field courses on ground-water sampling for leading industry professional organizations, universities and regulatory agencies worldwide. He is a member of the standards organization ASTM International and was Chairman of ASTM's Ground Water Sample Collection committee 1990 – 2008, during which time he co-authored several standards on monitoring well purging methods and sampling device selection.

Marvin Glotfelty, RG, Co-Founder/Principal Hydrogeologist, Clear Creek Associates, Scottsdale, AZ



Marvin Glotfelty, P.G. is a Principal Hydrogeologist with Clear Creek Associates in Scottsdale, Arizona. He is a Registered Professional Geologist (AZ, CA), and also a Licensed Water Well Driller (AZ) with over 36 years of experience in the design, installation, rehabilitation, or decommissioning of about 1,000 water wells in the southwestern United States. Mr. Glotfelty is a seasoned lecturer and author on topics relating to the mutually-dependent hydrogeologic sciences and well drilling trades. He was the National Ground Water Association's *Distinguished McElhiney Lecturer* in 2012, and he has given over 100 presentations to municipalities, professional organizations (both hydrologists and well drillers), Native American tribes, Universities, governmental and military agencies, and private industries. Mr. Glotfelty has also authored over 20 publications, including *The Art of Water Wells* (NGWA Press, 2019), and *Glossary of Driller's Terms* (NGWA Press, 2004). He received his BS and MS degrees in Geology from Northern Arizona University.

Matthew D. Hacker, Senior Resource Specialist, Metropolitan Water District, Los Angeles, CA



Matthew Hacker has more than 25 years of experience in water resources planning and local resource development, including recycled water, groundwater, and stormwater. Matthew has a Bachelor of Science Degree in Geology from the University of Notre Dame and a Master of Science Degree in Geology from the University of California, Los Angeles. He is currently a Senior Resource Specialist at the Metropolitan Water District of Southern California working on innovative project solutions, including Metropolitan's groundbreaking Regional Recycled Water Program.

Alvar Escriva-Bou, PhD, Research Fellow, Public Policy Institute of California, San Francisco, CA



Alvar Escriva-Bou is a research fellow at the PPIC Water Policy Center. His research explores integrated water, energy, and environmental resources management, including systems approaches, simulation and optimization of economic-engineering models, and climate change analysis. Previously, he worked as a civil engineer, managing and developing large infrastructure projects for local and regional governments and consulting firms in Spain. He holds a PhD and MS in water and environmental engineering and a BS in civil engineering from the Polytechnic University of Valencia in Spain, as well as an MS in Agricultural and Resource Economics from the University of California, Davis.

Shivaji Deshmukh, PE, General Manager, Inland Empire Utilities Agency, Chino Hills, CA



Shivaji Deshmukh is a licensed engineer who serves as the General Manager of the Inland Empire Utilities Agency with over 20 years of experience in the water industry. IEUA serves approximately 875,000 people in western San Bernardino County. Before IEUA, he served as the Assistant General Manager at the West Basin Municipal Water District for 9 years. Prior to that, he served Orange County Water District, focused on the implementation, design, and construction of the Groundwater Replenishment System, a 100 million gallon per day potable reuse project. He holds a Bachelor and Master of Science in Civil and Environmental Engineering from the University of California, Los Angeles.

Peter Kavounas, PE, General Manager, Chino Basin Watermaster, Rancho Cucamonga, CA



As the General Manager, Mr. Kavounas oversees all aspects of the organization, meeting obligations to the Judgment and other Court Orders, implementation of the Optimum Basin Management Program and compliance with all regulatory requirements, and business practices. He has over 25 years of experience and has worked for the Los Angeles Department of Water and Power as the Eastern Sierra Environmental Issues Manager, and for the City of Glendale's Water and Power Department as the Assistant General Manager-Water Services. Mr. Kavounas was elected to the Castaic Lake Water Agency Board of Directors in 1998 and served for fifteen years holding various positions including the office of Board President.

Mr. Kavounas has a Bachelor of Science degree in Civil Engineering from the University of Minnesota, a Master of Engineering-Structural from UC Berkeley, and a Master of Science-Water Resources from USC. He is also a graduate of Leadership Southern California Class XII, and is a licensed Professional Engineer in the State of California.

Gus Tolley, PhD, Hydrogeologist, Daniel B Stephens and Associates Inc., Grass Valley, CA



Gus Tolley has a MS in Hydrology from New Mexico Tech and PhD in Hydrology from University of California-Davis. His dissertation title was "Assessment of Groundwater-Surface-Water Interactions in an Irrigated Agricultural Basin with Groundwater Dependent Ecosystem Using an Integrated Hydrologic Model". Dr. Tolley specializes in groundwater hydrology, groundwater resources, engineering hydrology and contaminant transport in groundwater. His background with numerical modeling and surface water-groundwater interactions is particularly relevant to issues related to water planning and development, mining, solid waste, and litigation. Dr. Tolley's project experience includes providing construction and hydrogeologic support for water supply development projects, groundwater intrusion management, and litigation support related to contaminated soil and groundwater. He has experience with the development, sensitivity analysis, calibration, and uncertainty analysis of integrated hydrologic models, and was one of the lead developers of the Scott Valley Integrated Hydrologic Model (SVIHM), which is currently being used to formulate the Groundwater Sustainability Plan (GSP) for the basin.

Sustainability Plan (GSP) for the basin.



Laura Foglia, PhD, Adjunct Associate Professor, University of California, Davis, CA and Consultant Senior Engineer, Larry Walker Associates, Davis, CA



Laura holds a MS in Physics from University of Milan, Italy, and a PhD in Environmental Engineering from ETH Zurich, Switzerland. Her research focuses on understanding integrated groundwater/surface water systems at local and macro-scale. Her emphasis is on model calibration and uncertainty analysis applied to different watersheds and different water management problems, from ecohydrological problems to optimization of conjunctive use of surface water/groundwater. She has been a research assistant at the Technical University of Darmstadt, Germany, where she taught groundwater and vadose zone modelling courses, and short courses for other universities. At University of California, Davis, she developed a new class on "Inverse Problems" for students in the Civil and Environmental Engineering and Land, Air and Water Resources Departments.

Peter Colohan, Executive Director, Internet of Water, Nicholas Institute for Environmental Policy Solutions, Duke University, Durham, NC



Prior to his appointment at the Nicholas Institute, Peter had nearly a decade of Federal service with the National Oceanic and Atmospheric Administration (NOAA). At NOAA, Peter was a key advocate for the development of the National Water Model and the creation of the NOAA Water Initiative. He also served as a Federal Coordinating Lead Author for the Water Chapter of the Fourth National Climate Assessment, published in November 2018. Peter was a participant in the 2017 Aspen Dialogue Series on Water Data, co-led by the Nicholas Institute, which led to the creation of the Internet of Water.

From 2012-2014, Peter served as the Assistant Director for Environmental Information within the White House Office of Science and Technology Policy under President Barack Obama, on assignment from NOAA, where he worked closely with all Federal agencies responsible for climate, water and environmental science and technology. Prior to his federal service, Peter advised NOAA as a consultant on the development of the Group on Earth Observations (GEO), an intergovernmental body dedicated to the global exchange

of environmental data and information. He served as that body's Executive Officer from 2003 to 2005. Peter has a MA in International Affairs from American University.

Stacy Timmons, Associate Director, Hydrogeology Programs New Mexico Bureau of Geology & Mineral Resources, New Mexico Tech, Socorro, NM



Stacy Timmons manages the Aquifer Mapping Program at the NM Bureau of Geology and Mineral Resources at New Mexico Tech. Working with the Aquifer Mapping Program, she has been involved with several large-scale, long-term hydrogeologic studies focused on geologic influences on recharge, and groundwater movement and occurrence. She has worked in diverse locations over New Mexico, including the San Agustin Plains, Magdalena, northeastern Tularosa Basin, Truth or Consequences hot springs district, La Cienega wetlands, and southern Sacramento Mountains. She has managed the Aquifer Mapping Program since 2013. This program aims to combine geologic, hydrologic, geochemical, and geophysical data to develop regional conceptual models to describe groundwater flow within aquifers in New Mexico. This work serves the state of New Mexico by providing publicly available reports and data that can be applied to decision-making and water resource planning. Stacy has BS and MS degrees in geology from the University

of Cincinnati and Oregon State University and has worked in hydrogeology for the Bureau of Geology since 2004. Prior to working at the Bureau of Geology, Stacy worked in environmental, groundwater, and surface water consulting in New Mexico. In 2019 Stacy was appointed as a member of the New Mexico Interstate Stream Commission and the Water Quality Control Commission.

ASSOCIATION OF GROUND WATER AGENCIES



AGWA, was formed in 1994 by a group of Southern California groundwater basin management agencies to provide a unified voice to coordinate efforts and exchange information to enhance the effective management of groundwater resources. AGWA's purpose is to create a forum for the discussion of groundwater issues for entities responsible for management of groundwater basin resources.

AGWA's primary objectives are to promote:

- ◆ More effective means of enhancing management of groundwater basins
- ◆ The reliability of existing groundwater supplies
- ◆ The increase of basin yields and the protection and enhancement of groundwater quality

AMERICAN GROUND WATER TRUST



The AGWT was formed in 1986 as a non-profit education organization with the mission of promoting interest and awareness in groundwater issues. The AGWT's conference and workshop programs and educational materials:

- ◆ Communicate the environmental and economic value of groundwater
- ◆ Showcase ground water science and technology solutions
- ◆ Increase citizen, community and decision-maker awareness
- ◆ Facilitate stakeholder participation in water resource decisions
- ◆ Promote efficient and effective groundwater management