


Stanford



Newsha Ajami

Senior Research Engineer

Stanford Woods Institute for the Environment

 Curriculum Vitae available Online

Bio

BIO

Dr. Ajami specializes in sustainable water resource management, water policy, innovation, and financing, and the water-energy-food nexus. Her research throughout the years has been interdisciplinary and impact driven, focusing on the improvement of the science-policy-stakeholder interface by incorporating social and economic measures and effective communication.

She is a gubernatorial appointee to the Bay Area Regional Water Quality Control Board. Before joining Stanford, she worked as a senior research associate at the Pacific Institute, and served as a Science and Technology fellow at the California State Senate's Natural Resources and Water Committee where she worked on various water and energy related legislation. She has published many highly cited peer-reviewed articles, coauthored two books, and contributed opinion pieces to the New York Times and the Sacramento Bee. She was the recipient of the 2005 National Science Foundation award for AMS Science and Policy Colloquium and ICSC-World Laboratory Hydrologic Science and Water Resources Fellowship from 2000 to 2003. Dr. Ajami received her Ph.D. in civil and environmental engineering from the UC, Irvine, an M.S. in hydrology and water resources from the University of Arizona.

ACADEMIC APPOINTMENTS

- Sr Research Engineer, Stanford Woods Institute for the Environment
- Academic Research Staff, Stanford Woods Institute for the Environment
- Senior Research Associate, Water in the West

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Science Advisory Committee Member, Delta Science Program (2018 - present)
- Advisory Board Member, Sustainable Silicon Valley (2016 - present)
- Board Member, San Francisco Bay Regional Water Quality Control Board (Gubernatorial Appointment) (2013 - present)

Teaching

COURSES

2019-20

- Senior Practicum: PUBLPOL 200B (Win)

2018-19

- Senior Practicum: PUBLPOL 200C (Spr)

2017-18

- Senior Practicum: PUBLPOL 200C (Spr)

2016-17

- Senior Practicum: PUBLPOL 200C (Spr)

Publications

PUBLICATIONS

- **Shifting landscapes: decoupled urban irrigation and greenness patterns during severe drought** *ENVIRONMENTAL RESEARCH LETTERS*
Quesnel, K. J., Ajami, N., Marx, A.
2019; 14 (6)
- **Goal-based water trading expands and diversifies supplies for enhanced resilience** *NATURE SUSTAINABILITY*
Gonzales, P., Ajami, N. K.
2019; 2 (2): 138–47
- **Large Landscape Urban Irrigation: A Data-Driven Approach to Evaluate Conservation Behavior** *WATER RESOURCES RESEARCH*
Quesnel, K. J., Ajami, N. K.
2019; 55 (1): 771–86
- **A case-study based framework for assessing the multi-sector performance of green infrastructure.** *Journal of environmental management*
Gordon, B. L., Quesnel, K. J., Abs, R., Ajami, N. K.
2018; 223: 371–84
- **Advancing Water Innovation through Public Benefit Funds: Examining California’s Electricity Public Goods Charge** *Journal American Water Works Association*
Quesnel, K. J., Ajami, N. K.
2018; 110 (2)
- **Recent innovations and trends in in-conduit hydropower technologies and their applications in water distribution systems** *Recent innovations and trends in in-conduit hydropower technologies and their applications in water distribution systems*
Sari, M., Badruzzaman, M., Cherchi, C., Swindle, M., Ajami, N. K., Jacangelo, J. G.
2018; 228: 416-428
- **Balancing marine ecosystem impact and freshwater consumption with water-use fees in California’s power markets: An evaluation of possibilities and trade-offs** *Balancing marine ecosystem impact and freshwater consumption with water-use fees in California’s power markets: An evaluation of possibilities and trade-offs*
Bolorinos, J., Yu, Y., Ajami, N. K., Rajagopal, R.
2018; 226 (C): 644-654
- **Evaluating Environmental Governance along Cross-Border Electricity Supply Chains with Policy-Informed Life Cycle Assessment: The California-Mexico Energy Exchange.** *Environmental science & technology*
Bolorinos, J., Ajami, N. K., Muñoz Meléndez, G., Jackson, R. B.
2018
- **A novel search algorithm for quantifying news media coverage as a measure of environmental issue salience** *Environmental Modelling & Software*
Roby, N. A., Gonzales, P., Quesnel, K. J., Ajami, N. K.
2018; 101: 249-255
- **An integrative regional resilience framework for the changing urban water paradigm** *SUSTAINABLE CITIES AND SOCIETY*
Gonzales, P., Ajami, N. K.
2017; 30: 128-138
- **A Framework for Building Efficient Environmental Permitting Processes** *SUSTAINABILITY*
Ulibarri, N., Cain, B. E., Ajami, N. K.
2017; 9 (2)
- **The changing water cycle: impacts of an evolving supply and demand landscape on urban water reliability in the Bay Area** *Wiley Interdisciplinary Reviews: Water*
Gonzales, P., Ajami, N.
2017; 4 (6): e1240

- **Social and Structural Patterns of Drought-Related Water Conservation and Rebound** *Water Resources Research*
Gonzales, P., Ajami, N.
2017; 53
- **Accelerating the Integration of Distributed Water Solutions: A Conceptual Financing Model from the Electricity Sector** *Environmental Management*
Quesnel, K. J., Ajami, N. K., Wyss, N.
2017; 60 (5): 867–881
- **Coordinating water conservation efforts through tradable credits: A proof of concept for drought response in the San Francisco Bay area** *Water Resources Research*
Gonzales, P., Ajami, N., Sun, Y.
2017; 53 (9): 7662–7677
- **Changes in water consumption linked to heavy news media coverage of extreme climatic events** *Science Advances*
Quesnel, K. J., Ajami, N. K.
2017; 3 (10): e1700784
- **Monthly water balance modeling: Probabilistic, possibilistic and hybrid methods for model combination and ensemble simulation** *JOURNAL OF HYDROLOGY*
Nasseri, M., Zahraie, B., Ajami, N. K., Solomatine, D. P.
2014; 511: 675-691
- **Complexity in microbial metabolic processes in soil nitrogen modeling: a case for model averaging** *STOCHASTIC ENVIRONMENTAL RESEARCH AND RISK ASSESSMENT*
Ajami, N. K., Gu, C.
2010; 24 (6): 831-844
- **Addressing snow model uncertainty for hydrologic prediction** *ADVANCES IN WATER RESOURCES*
Franz, K. J., Butcher, P., Ajami, N. K.
2010; 33 (8): 820-832
- **Reply to Comment by B. Renard et al. on "An integrated hydrologic Bayesian multimodel combination framework: Confronting input, parameter, and model structural uncertainty in hydrologic prediction"** *WATER RESOURCES RESEARCH*
Ajami, N. K., Duan, Q., Sorooshian, S.
2009; 45
- **Sustainable water resource management under hydrological uncertainty** *WATER RESOURCES RESEARCH*
Ajami, N. K., Hornberger, G. M., Sunding, D. L.
2008; 44 (11)
- **Multi-model ensemble hydrologic prediction using Bayesian model averaging** *ADVANCES IN WATER RESOURCES*
Duan, Q., Ajami, N. K., Gao, X., Sorooshian, S.
2007; 30 (5): 1371-1386
- **An integrated hydrologic Bayesian multimodel combination framework: Confronting input, parameter, and model structural uncertainty in hydrologic prediction** *WATER RESOURCES RESEARCH*
Ajami, N. K., Duan, Q., Sorooshian, S.
2007; 43 (1)
- **Multi-Model Combination Techniques for Hydrological Forecasting: Application to Distributed Model Intercomparison Project Results** *Journal of Hydrometeorology*
Ajami, N. K., Duan, Q., Gao, X., Sorooshian, S.
2006; 7 (4): 755–768
- **Calibration Of A Semi Distributed Hydrologic Model For Streamflow Estimation Along A River System** *Journal of Hydrology*
Ajami, N. K., Gupta, H., Wagner, T., Sorooshian, S.
2004; 298 (1-4): 112-135