

# Stanford

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## Stefanie Helmrich

Postdoctoral Scholar, Earth System Science

### Bio

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#### BIO

Stefanie is a postdoctoral scholar at the Doerr School of Sustainability at Stanford University. Her postdoctoral research focuses on developing tools to optimize application and monitoring of nature-based climate solutions. During her Ph.D. she worked on reactive transport models and watershed models to investigate inorganic contaminant cycling. She holds a Ph.D. in Environmental Systems from U.C. Merced and a M.Sc. in Water Management from Technical University of Dresden.

#### HONORS AND AWARDS

- Delta Science Fellow, Delta Stewardship Council (2018-2020)

#### PROFESSIONAL EDUCATION

- Master of Science, Technische Universitat Dresden (2014)
- Bachelor of Science, Technische Universitat Dresden (2011)
- Doctor of Philosophy, University of California Merced (2022)
- Ph.D., U.C. Merced , Environmental Systems (2022)
- M.Sc., TU Dresden , Water Management (2014)

#### STANFORD ADVISORS

- Kate Maher, Postdoctoral Faculty Sponsor

### Publications

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#### PUBLICATIONS

- **Operationalizing Real-Time Monitoring Data in Simulation Models Using the Public Domain HEC-DSSVue Software Platform** *JOURNAL OF WATER RESOURCES PLANNING AND MANAGEMENT*  
Tran, V., Helmrich, S., Quinn, N. T., O'Day, P. A.  
2023; 149 (9)
- **Critical review of mercury methylation and methylmercury demethylation rate constants in aquatic sediments for biogeochemical modeling** *CRITICAL REVIEWS IN ENVIRONMENTAL SCIENCE AND TECHNOLOGY*  
Helmrich, S., Vlassopoulos, D., Alpers, C. N., O'Day, P. A.  
2022; 52 (24): 4353-4378