

Thomas Meixner

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Department of Hydrology and Water Resources
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A. Professional Preparation:

University of Maryland, College Park, MD	History of Science and Technology	B.A.	1992
University of Maryland, College Park, MD	Soil and Water Conservation	B.S.	1992
University of Arizona, Tucson, AZ	Hydrology and Water Resources	Ph.D.	1999

B. Appointments:

2012-Present	Professor, Dept. of Hydrology and Water Resources, University of Arizona
2005-2012	Assoc. Prof., Dept. of Hydrology and Water Resources, University of Arizona
1999-2004	Asst. Prof. Dept. of Env. Sciences, UC Riverside

C. Publications:

Five publications most closely related to this proposal:

Dwivedi, R., Meixner, T., McIntosh, J. C., Ferré, P. T., Eastoe, C. J., Niu, G. Y., Minor, R. L., Barron-Gafford, G. A., & Chorover, J. (2019). Hydrologic functioning of the deep critical zone and contributions to streamflow in a high-elevation catchment: Testing of multiple conceptual models. *Hydrological Processes*.

Driscoll, J., Meixner, T., Molotch, N., Ferre, T., Williams, M., & Sickman, J. (2018). Event-Response Ellipses: A Method to Quantify and Compare the Role of Dynamic Storage at the Catchment Scale in Snowmelt-Dominated Systems. *Water*, 10(12), 1824.

McIntosh, J. C., Schaumberg, C., Perdrial, J., Harpold, A., Vázquez-Ortega, A., Rasmussen, C., Vinson, D., Zapata-Rios, X., Brooks, P. D., Meixner, T., Derry, L., Chorover, J., & Pelletier, J. (2017). Geochemical evolution of the Critical Zone across variable time scales informs concentration-discharge relationships: Jemez River Basin Critical Zone Observatory. *Water Resources Research*, 53(5), 4169-4196.

Meixner, T., Manning, A. H., Stonestrom, D. A., Allen, D. M., Ajami, H., Blasch, K. W., ... & Flint, A. L. (2016). Implications of projected climate change for groundwater recharge in the western United States. *Journal of Hydrology*, 534, 124-138.

Niraula, R., Meixner, T., Dominguez, F., Bhattarai, N., Rodell, M., Ajami, H., Gochis, D., & Castro, C. (2017). How might recharge change under projected climate change in the western U.S.?. *Geophysical Research Letters*, 44. <https://doi.org/10.1002/2017GL075421>

Five other significant publications:

Guido, Z., McIntosh, J. C., Papuga, S. A., & Meixner, T. (2016). Seasonal glacial meltwater contributions to surface water in the Bolivian Andes: A case study using environmental tracers. *Journal of Hydrology: Regional Studies*, 8, 260-273.

Niraula, R., Meixner, T., Ajami, H., Rodell, M., Gochis, D., & Castro, C. L. (2017). Comparing potential recharge estimates from three Land Surface Models across the western US. *Journal of Hydrology*, 545, 410-423.

Niraula, R., Meixner, T., & Norman, L. M. (2015). Determining the importance of model calibration for forecasting absolute/relative changes in streamflow from LULC and climate changes. *Journal of Hydrology*, 522, 439-451.

O'reilly, C. M., Gougis, R. D., Klug, J. L., Carey, C. C., Richardson, D. C., Bader, N. E., Soule, D. C., Castendyk, D., Meixner, T., Stomberg, J., Weathers, K. C., & Hunter, W. (2017). Using Large Data Sets for Open-Ended Inquiry in Undergraduate Science Classrooms. *BioScience*, 67(12), 1052-1061.

Biederman, J. A., T. Meixner, A. A. Harpold, D. E. Reed, E. D. Gutmann, J. A. Gaun, and P. D. Brooks (2016), Riparian zones attenuate nitrogen loss following bark beetle-induced lodgepole pine mortality, *J. Geophys. Res. Biogeosci.*, 121, 933–948,

D. Synergistic Activities:

1. Mentor to two Native American students in Center for Integrated Access Networks REU program 2014 and 2015.
2. Member of Critical Zone Observatory Information Management Committee (CZO-IMC).
3. Participated in two NAGT teaching module workshops with two learning modules rated as excellent.
4. Public Talks - at Biosphere 2 to Upper San Pedro Partnership. and Tucson Water CWAC on “Climate 5. Change and Sources of Water to Rivers in Arizona”.
5. In charge of curriculum as Associate Head, Department of Hydrology and Water Resources.