

# John Malito

## Professional Summary

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Business address: The University of Texas at Austin  
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## Professional Preparation

### Professional Appointments

Research Scientist Associate III, UT Austin Bureau of Economic Geology (June 2022-Present)

- o Developed machine learning approach (in python) to analyze water quality/quantity and assessed spatiotemporal variability in various environmental resource datasets
- o Implemented new ensemble streamflow forecasts into multi-reservoir hydrologic model to assist development of Forecast Informed Reservoir Operations project in central Texas
- o Conducted report for TCEQ on potential nitrate contamination in Texas aquifers groundwater using GIS spatial analysis tools and analysis of statewide dataset of well measurement
- o Assessment of Nitrate in Groundwater and Public Water Supply Systems in Texas
- o Conducted report for TCEQ on potential mobilization of contaminants during high-flow events and possible implications on managed aquifer recharge structures in Texas
- o Stormwater Quality in Non-Karst Regions of Texas and Local Case Studies of Enhanced Recharge Structures
- o Developed proposals, published research results in academic journals, and presented findings in conferences

Environmental/GIS Specialist, CBD Civil Engineering & Surveying (July 2018-July 2019)

- o Conducted environmental assessments, mapping, and documentation for CBD projects within federal, state, and municipal environmental guidelines
- o Used GIS data analysis tools to construct and maintain environmental data layers to support engineering operations.
- o Developed a geospatial model in ArcGIS to automate the workflows in which GIS layers were compiled, clipped to a project site, and converted into AutoCAD Civil3D.
- o Manipulated LiDAR point clouds produce digital elevation models in order to create maps, delineate streams, create topographic contours, calculate acreage of drainage basins, etc. using this elevation data.

## Publications

### Peer Reviewed Journal Articles

Malito, J., Eidam, E., and Nienhuis, J., 2022, Increasing wave energy moves Arctic continental shelves toward a new future: *Journal of Geophysical Research: Oceans*, v. 127, no. e2021JC018374, 22 p., <http://doi.org/10.1029/2021JC018374>.

Scanlon, B. R., Fakhreddine, S., Reedy, R. C., Yang, Q., and Malito, J. G., 2022, Drivers of spatiotemporal variability in drinking water quality in the United States: *Environmental Science & Technology*, v. 56, no. 18, p. 12965-12974, <http://doi.org/10.1021/acs.est.1c08697>.

### Published Abstracts

Scanlon, B. R., Rateb, A., Reedy, R. C., and Malito, J., 2022, Assessing the Impacts of

Agrohydrology on Water Resources in the High Plains Aquifer (abs.): AGU Fall Meeting Abstract  
H15Q-0992, Invited.