



POSTER SESSION & SOCIAL

THURSDAY | SEPT. 8 | 5:30-7:30 PM | GRAND REEF

STUDENT POSTERS

- 1. Wetland Accretion Rate Model of Ecosystem Resilience (WARMER) and Its Application to Coastal Transportation Infrastructure Along Alabama State Route 180. (071)** John Anderson, Auburn University
- 2. Investigating the Differences in Severity and Frequency of Multi-year Streamflow Deficits Using Instrumental and Reconstructed Data: A Case Study of the Wasatch Mountain Basins. (122)** Danyal Aziz, The University of Alabama
- 3. Using Analytical Hierarchy Process to Quantify Survey Data for GIS Modeling. (078)** Aaron Blackwell, The University of Alabama
- 4. Quantitative Microbial Risk Assessment to determine the level and source of fecal pollution, nutrients and water quality for various land uses and characterization in NW Florida aquatic systems. (062)** Ronell Bridgemohan, Watershed Management Laboratory, UF WFREC
- 5. Performance of a Hybrid Sand Filter for Onsite Wastewater Treatment Applications in the Alabama Black Belt. (124)** Rachel Chai, University of South Alabama
- 6. Life Cycle Analysis of Water Distribution Systems in the Context of Physicochemical Pipe Degradation. (014)** Jonathan Clayton, The University of Alabama
- 7. Develop Tidal/Non-Tidal Forested Wetlands Using Imagery Classification. (155)** Eian Davis, Auburn University
- 8. Investigating the Effectiveness of Best Management Practices in Reducing the Agricultural Water Footprint in Alabama. (171)** Betelhem Demeke, The University of Alabama
- 9. Examining the extent and functional value of headwater wetlands in relation to land use in coastal Alabama. (158)** Kurtis Fisher, Auburn University
- 10. Detecting global declines of stoneflies at a local scale: measuring changes in stonefly diversity in the Cahaba River of central Alabama. (135)** Gabriella Gentry, Jacksonville State University
- 11. Improved Stormwater Management through Zeolite Amended Bioretention Media. (091)** Shelton Griffith, Auburn University
- 12. Stream temperature prediction using a machine learning approach in the Mobile River Basin, AL. (090)** Henrique Haas, Auburn University
- 13. Flue Gas Desulfurization (FGD) Gypsum can Effectively Remove Phosphorous (P) from Water. (010)** Ansley Hamid, Auburn University
- 14. Citizen-Science approach to testing private well water quality. (118)** Sharaf Anika Hoque, Auburn University
- 15. Effect of cover crop and tillage practices on soil pore characteristics. (051)** Preetika Kaur, Auburn University
- 16. Into the deep: How far into the water column can a drone actually measure? (069)** Kelly Kaye, Auburn University
- 17. Assessment of a modified evaporation method used for evaluating unsaturated soil properties. (121)** Mahlet Kebede, The University of Alabama
- 18. Engineering Cost-Effective Biochars for Efficient Removal of PFAS in Water. (023)** Samuel Krebsbach, Auburn University
- 19. Impacts of Tropical Cyclone on Streamflow and Suspended Sediment Dynamics in Large Global Rivers. (031)** Sera May, The University of Alabama
- 20. Geochemical modeling of the speciation and mobilization of arsenic and molybdenum in coal combustion residual sites of Alabama, USA. (143)** Shifat Monami, Auburn University
- 21. Evaluation of LSTM Networks for Forecasting Multi-season Streamflow in a Mountain Catchment. (107)** Savalan Neisary, The University of Alabama

- 22. Assessing the benefits of different GIPs for improvement of stormwater runoff quality from a parking lot. (112)**
Gianluca Nicolaico, Auburn University
- 23. Comparison of a rectangular grid and hybrid curvilinear grid EFDC hydrodynamic models in Biscayne Bay. (109)**
Nathaniel Nwogwu, Auburn University
- 24. Ensuring safe drinking water quality in Northern Haiti: Financial sustainability of drinking water laboratory related to Operating Costs, User Demand, and Economic Conditions. (037)** Lonege Ogisma, Auburn University
- 25. Evaluation of wood-chip bioditch reactors as a nutrient reduction conservation strategy. (101)** Geoffrey Payne, Arkansas State University
- 26. Spatial and temporal changes of flash flood occurring precipitation events (FOPE) in the Southeastern United States. (058)** Mohammad Siddiqur Rahman, The University of Alabama
- 27. The Development of a MODFLOW Groundwater Model to investigate groundwater/surface water interaction in the Mobile Bay Watershed. (153)** John Richins, USGS Lower Mississippi-Gulf Water Science Center
- 28. Examining the effect of salinity on dolphin mortality by Lagrangian particle tracking in a hydrodynamic model. (066)**
Mehrhad Shahidzadehasadi, Auburn University
- 29. Runoff sediments and nutrient losses from soybean crop. (142)** Arpita Sharma, Auburn University
- 30. Rainfall Intensity-duration-frequency curves over Southeastern, US under climate scenarios using Artificial Neural Networks. (011)** Bijoychandra Takhellambam, Auburn University
- 31. Evaluating the Synergistic Effects of MIEX Resin and Coagulation on the Removal of Disinfection Byproduct Precursors in a Pilot-Scale Water Treatment Plant. (044)** Melanie Vines, The University of Alabama
- 32. Hydrologic Controls on Organic Matter Partitioning in Headwater Streams Across Alabama. (149)** Michelle Wolford, The University of Alabama
- 33. Water Availability in HUC06 Basins Under the Changing Climate Using Budyko Framework. (036)** Fitsume Wolkeba, The University of Alabama
- 34. Watershed Network Dry Down Effects on Dissolved Gas Concentrations (N₂, Ar, O₂) in a Prairie Stream. (089)** Kaci Zarek, The University of Alabama

WATER PROFESSIONAL POSTERS

- 35. Phosphorus solubility in traditional versus gypsum treated poultry litter and its environmental implications. (145)**
Debolina Chakraborty, Auburn University
- 36. Los Angeles Aqueduct: Geovisualization of Key Infrastructure and Design Phases I, II, and III. (034)** Philip Chaney, Auburn University
- 37. The Impact of Irrigation on Crop Productivity in U.S. Agriculture. (156)** Valentina Hartarska, Auburn University
- 38. Alabama Center Pivot Irrigated Acreage Survey: 2006-2021. (047)** Krel Haynes, University of Alabama in Huntsville
- 39. Stochastic Analysis of Profitability of Irrigated Corn Production in Alabama. (152)** Denis Nadolnyak and Valentina Hartarska, Auburn University
- 40. Monitoring sediment and nutrient losses from paired watersheds in agriculture fields in runoff water in Alabama farms. (146)** Anh Nguyen, Auburn University
- 41. Stream Connectivity: Geomorphic and Anthropogenic Influence on Longitudinal Fragmentation in Alabama. (008)**
Daniel West, Geological Survey of Alabama

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