

CURRICULUM VITAE

Name Kevin E. Vought

Education Master of Science, Civil Engineering – The Ohio State University, Columbus, OH
 Master of Science, Nuclear Engineering – The Ohio State University, Columbus, OH
 Bachelor of Science, Physics and Math – SUNY Oswego, Oswego, NY

Certification Professional Engineer – FL – 68547
 Professional Engineer – OH – 69911

Employment Record

Year	Firm	Position and Responsibilities
2009-present	DHI Water and Environment, Inc.	Water Resources Engineer, Groundwater/Surface Water Modeler
2007-2009	CDM	Environmental Engineer, Stormwater Modeler
2005-2007	BBL/ARCADIS	Senior Project Engineer II, Groundwater/Atmospheric Dispersion Modeler
2003-2005	Coastal Engineering Consultants, Inc.	Managing Engineer, Coastal Hydraulic Modeler
1998-2003	SAIC	Hydrogeologist, Groundwater Modeler

Selected Experience Record

Year	Project	Position and Activities
2009 – present	Broward County Integrated Water Resource Management Master Plan/Broward County, Florida	Project Manager, Hydraulic and Hydrologic modeler responsible for evaluating alternative water use scenarios to maximize the County’s water resources for the next 20 years and beyond. The project includes modeling of the unconfined and confined aquifers to evaluate the effects of new production wells and the potential for saltwater intrusion. Mr. Vought is the technical lead for modeling of groundwater flow and saltwater transport in the confined aquifer using MODFLOW coupled with SEAWAT. Has analyzed and processed many datasets including kriging TDS concentration data in the aquifers, statistically analyzing precipitation and water elevation data, and processing and sorting thousands of rows of pumping data for wells in the aquifers over time.
2008	JEA Southside Generation Station Site Assessment/Jacksonville, Florida	Hydrologic modeler responsible for the development of a groundwater flow model of the site and immediate area using MODFLOW. Analyzed numerous boring logs to distinguish layers of fill, an old swamp, and the regional sediments. Included managing the data from these logs. Also analyzed USGS publications to help further identify and classify regional sediments.

2008	Tampa Bay Water Booster Pump Station/Tampa, Florida	Task Manager, Hydraulic modeler responsible for analysis of undeveloped site details and generation of plans for the development of a 10 to 11 acre site. Once the plans were developed, a Stormwater model was built using ICPR, to ensure compliance with SWFWMD and Hillsborough County regulations for stormwater discharges.
2007-2008	Tampa Bay Water Surface Water Treatment Plant Expansion/Tampa, Florida	Task Manager, Hydraulic modeler responsible for modifying a previously developed stormwater model (ICPR) for the facility. Approximately one quarter of the facility's Stormwater drainage features required updating due to the proposed construction of a new sludge drying area and expansion of the facility.
2007	Hillsborough Waste to Energy Facility Expansion/Tampa, Florida	Task Manager, Hydraulic modeler responsible for modifying a previously developed stormwater model (ICPR) to account for new control structures that had been proposed for use at the facility.
2006	North Miami Manufactured Gas Plant/North Miami Beach, Florida	Hydrologic modeler responsible for developing a flow model of the site and surrounding area using MODFLOW and contaminant transport models for acenaphthene, naphthalene, and benzene using MT3DMS. The Site contained NAPL phase contaminants, although transport and degradation of this phase was not numerically included in any simulations. Mr. Vought processed and kriged the contaminant data for inclusion in the modeling.
2006	CKD Disposal Evaluation/Alpina Michigan	Task manager responsible for modeling groundwater flow through and from an abandoned quarry filled with Cement Kiln Dust (CKD). The CKD was elevating the pH of a nearby pond. In addition to the abandoned quarry that was used for the CKD disposal, two active quarries near the disposal site were incorporated into the model. Predictive scenarios were run to simulate the effect on the groundwater system as these quarries increased in size and were subsequently abandoned. Transient simulations were also run to account for seasonal fluctuations in the production rate of the dewatering wells for the active quarries. Several particle tracking runs were simulated using MODPATH to demonstrate the predicted effectiveness of several different alternatives proposed to help contain groundwater runoff from the CKD pile.
2005-2006	Lockheed Martin Tallevast Site Assessment/Tallevast, Florida	Hydrologic modeler responsible for developing 3-dimensional visualizations of geologic zones at the site and developing MODFLOW and MT3D models for the site. This work included analyzing soil descriptions in over 100 boring logs and compiling and analyzing data from numerous other sources. Mr. Vought maintained the databases with the boring information. He also kriged the layer surfaces for the geologic model, and kriged the contaminant distributions for the transport simulations.
2005	DuPont, Pompton Lakes Works/Pompton Lakes, New Jersey	Hydrologic modeler responsible for the development of a flow model (MODFLOW) to aid in estimating pumping rates required for dewatering as part of a sediment removal project. The sediments contained multiple contaminants, primarily mercury.

2005	Confidential Client, Soil Remediation Project/Milford, New Hampshire	Hydrologic modeler responsible for the development of a flow model (MODFLOW) to aid in estimating pumping rates required for dewatering as part of a soil removal project. He analyzed numerous options for containment barriers, including multiple types of barriers and distributions of the flow barriers.
2003-2005	Louisiana Department of Natural Resources-Bay Joe Wise Headland Restoration/Empire, Louisiana	Hydraulic modeler responsible for the development of a coastal hydraulic model (using ADCIRC) predicting changes in tidally driven water elevations and currents through the back-bays in and around Bay Joe Wise resulting from beach and marsh restoration in the area. Also developed a sediment transport model (using SBEACH) and a wave propagation model (STWAVE) to further evaluate design options. Evaluated the optimal design slope for the beach and construction berms based on geotechnical data measured in laboratory testing. Mr. Vought maintained databases with current speed and water height data for the ADCIRC modeling.
2002-2003	USDOE-Portsmouth Gaseous Diffusion Plant/Portsmouth, Ohio	Hydrologic modeler used UTCHEM to develop a model to predict the movement and degradation of a TCE plume. TCE and its daughters, DCE and vinyl chloride were tracked with the model. This plume included NAPL phase TCE which was simulated by the model to move and dissolve into aqueous phase TCE. Biodegradation of both TCE and DCE was accounted for. Mr. Vought kriged distributions of TCE, DCE, and VC for inclusion in the modeling.
2001	Franklin Steel/Columbus, Ohio	Hydrologic modeler responsible for assessing the potential movement of numerous organic and inorganic contaminants at the client's facility using AT123D. Mr. Vought analyzed large sets of contaminant data to determine the locations, extents, and mean concentrations for inclusion in the model.
1999-2003	Bethlehem Steel Corporation/Bethlehem, Pennsylvania	Hydrologic modeler responsible for assessing the geology of a highly weathered carbonate aquifer with seven thrust faults separating granitic gneiss from the carbonate formations. Calibrated a MODFLOW model in part by using extraction and drawdown data from several onsite wells from 1917 to 2000. Successfully predicted the locations of naphthalene and benzene plumes using the calibrated model and particle tracking in MODPATH. Mr. Vought analyzed and processed large spreadsheets of geologic, pumping, and contaminant data. He also processed very large datasets using programs he wrote in FORTRAN to help analyze results from the MODPATH particle tracking simulations.
1998-2002	USACE, Former Brush Beryllium Facility/Lucky, Ohio	Hydrologic modeler generated a geological model of the site, and used that as a framework for a MODFLOW model. Once calibrated, the MODFLOW model was used in conjunction with MT3D to run predictive scenarios for the movement of beryllium, lead, uranium, and thorium. Mr. Vought analyzed and processed large spreadsheets of geologic and contaminant data. He also gridded the contaminant data and the geologic surface data with an algorithm similar to kriging for inclusion in the flow model.