## ALAN E. KEHEW

<u>Title</u>: Professor, Department of Geosciences, Director, Michigan Geological Survey, Western Michigan University.

Date and Place of Birth: Sept. 17, 1947, Pittsburgh, Pa.

Education: B.S., Bucknell University; Geology, 1969

M.S., Montana State University; Earth Science (Geology Option); 1971

Ph.D., University of Idaho; Geology, 1977

#### **Professional Experience:**

Summer, 1969: Field Assistant, Bucknell University; field mapping in Norway

1969-1971: Research Assistant, Montana State University

1970-1974: Active duty, U.S. Navy

1972: Instructor, University of Maryland, Atlantic Division; Taught Physical Geology at U.S. Naval Air Station, Keflavik, Iceland while on active duty, U.S. Navy

1975-1977: Graduate Assistant, University of Idaho

1977-1980: Geologist II, III, North Dakota Geological Survey

Activities and Responsibilities: (1) evaluation of geologic suitability of sanitary landfill sites in North Dakota, (2) detailed hydrogeological study of a sanitary landfill site, (3) principal investigator of the EPA Surface Impoundment Assessment for North Dakota, (4) geological and environmental geologic mapping of the Minot, North Dakota area, (5) earth resistivity investigation of reclaimed surface lignite mine spoils, (6) hydrogeologic study of oil and gas well drilling disposal sites, (7) hydrogeological study of six municipal waste stabilization lagoons, and (8) investigation of erosional and depositional processes of glacial-lake spillways. Additional responsibilities included advisement of State Health Department concerning sanitary landfill permit applications and other waste disposal problems.

Summer, 1983: Graduate Research Professor, University of North Dakota

1980-1984: Assistant Professor of Geology, University of North Dakota

1984-1986: Associate Professor of Geology, University of North Dakota and Geologist, North Dakota Geological Survey; tenure granted, 1986

Courses Taught: General Geology for Engineers, Groundwater Geology, Engineering Geology, Geological Interpretation of Air Photos, Advanced Hydrogeology (Graduate), Hydrogeochemistry (Graduate), Advanced Geomorphology: Fluvial (Graduate). Additional responsibilities include: Coordinator of the Geological Engineering Program, Graduate Committees (Chairperson - 1 Ph.D. committee, 10 M.S. committees). Instructional development grant, 1984, \$500.

1986-Present: Associate Professor to Professor of Geology, Western Michigan University; Tenure granted, 1990; Interim Chair, 1995; Chair, 1997-2003.

Courses taught: Hydrogeochemistry, Geomorphology, Contaminant Hydrogeology, Glacial Geology, Field Hydrogeology (summer field camp), Hydrogeology, Environmental Geology, Introduction to Soils. Graduate committees (Chairperson - 8 PhD committees (completed, 29 M.S. committees (completed).

## **Research Grants Awarded:**

1. Principal investigator - North Dakota Water Resources Research Institute Project A072-NDAK, "Effect of Seepage From Unlined Municipal Waste Stabilization Lagoons on Chemical Quality of Groundwater in Shallow Aquifers", 9-1-80 to 9-30-82. Total funding, \$33,900.

2. Co-Principal Investigator - USBM Contract No. J0275010 (Addition), "Geologic and Geochemical Controls on the Chemical Evolution of Subsurface Water in Surface Coal Mine Spoils", 10-1-79 to 3-31-83

3. Co-Principal Investigator - ND Water Resources Research Institute, "Characterization of Detrimental Effects of Salts and Other Chemical Constituents Carried in Surface and Subsurface Waters From Brine and Drilling Fluid Disposal Pits Buried During Oil Development",9-1-83 to 9-30-85. Total funding, \$190,000

4. Principal Investigator - 4 grants from University of North Dakota Faculty Research Committee. Total funding, \$2180.

5. Principal Investigator - WMU Faculty and Creative Activities Support Fund, "Chemical Evolution of Groundwater in Kalamazoo County, Michigan", 1/87-4/88, \$4200

6. Co-Principal Investigator, Institute of Water Research, Michigan State University, "Hydrogeological and Hydrogeochemical Characterization and Implication for Consumptive Groundwater Use of a Large Glacial-drift Aquifer in Southwest Michigan: 4/88 - 3/90, \$ 22,500 (federal)

7. Co-Principal Investigator, Institute of Water Research, Michigan State University, "Determinants of Ground-Water Quality in a Multi-Layer Glacial Drift Aquifer System: Implications for Wellhead Protection for Small Community Water Supply Systems in Agricultural Settings: April 1, 1992-March 31, 1994, \$47,000 (Federal)

8. Co-Principal Investigator, City of Grand Rapids, "Optimization of Pb (Lead) Corrosion Control Treatments for the City of Grand Rapids", 1992-1993, \$74,823

9. Principal Investigator, Institute of Water Research, Michigan State University, "Determinants of Ground-Water Quality in a Multi-Layer Glacial Drift Aquifer System: Role of Wetlands in Nitrogen Speciation", April 1, 1994-March 31, 1995, \$17,000 (Federal)

10. Principal Investigator, U.S. Geological Survey, "Geologic Mapping of St. Joseph County, Michigan", April 1, 1995-March 31, 1996, \$15,000 (Federal)

11. Co-Principal Investigator, U.S. Army Research Office, "Slope Stability Analysis and Ground-Water Hydrology in Heterogeneous Glacial Material: Elements for Prediction of Bluff Erosion, July 1, 1996-June 30, 1999, \$197, 048

12. Principal Investigator, U.S. Geological Survey, Geologic Mapping of St. Joseph County, Michigan, Yr 2'', June 1-1996-May 31, 1997, \$51, 826.

13. Principal Investigator, U.S. Geological Survey, "Geological Mapping of Oliver Lake Quadrangle, La Grange County, Indiana, Western Part", May 15, 1996-May 14, 1997, \$9998.

14. Principal Investigator, U.S. Geological Survey, Geological Mapping of ST. Joseph County, Michigan, Yr 3'', June 1, 1997-May 31, 1998; \$45,386

15. Principal Investigator, U.S. Geological Survey, Geological Mapping of the East Leroy and Union City 7.5 Minute Quadrangles, Calhoun County, Michigan@, May 1, 1997-April 30, 1998, \$6,000.

16. Principal Investigator, U.S. Geological Survey, Geologic Mapping of Van Buren County, Year I, 4/1/98-3/30/99, \$20,997

17. Principal Investigator, U.S. Geological Survey, Geologic Mapping of the Gobles East 7.5 Minute Quadrangle, Van Buren County, Michigan, 4/1/98-3/31/99, \$6,000.

18. Principal Investigator, U.S. Geological Survey, Geologic Mapping of Van Buren County, Yr 2'', 5/4/99-4/30/00, \$40,575

19. Principal Investigator, U.S. Geological Survey, Origin of the Kalamazoo River Valley and Relationship to the Dynamics of the Lake Michigan and Saginaw Lobes of the Laurentide Ice Sheet: An EDMAP Project, 4/1/99- 3/31/00, \$4998.

20. Principal Investigator, U.S. Geological Survey, Geologic Mapping of Van Buren County, Year 3, 4/1/00-3/30/01\$42,507.

21. Principal Investigator, U.S. Geological Survey, Origin of the Kalamazoo River Valley and Relationship to the Dynamics of the Lake Michigan and Saginaw Lobes of the Laurentide Ice Sheet: An EDMAP Project, 4/1/00- 3/31/01, \$5250.

22. Co-Principal Investigator, US Army Corps of Engineers, Monitoring the effects of groundwater on the stability of slopes experiencing minimal toe erosion, 6/21/00-9/30/00; \$20,000

23. Principal Investigator, U.S. Geological Survey, Geologic Mapping of Van Buren County, Year 4, 4/1/01-3/30/02 \$46,183.

24. Co-Principal Investigator, U.S. Army Corps of Engineers, "Monitoring of Allegan County Bluff Dewatering Project", 9/10/01- 6/01/02, \$110,000

25. Principal Investigator, U.S. Geological Survey, "Three Dimensional Mapping of the Kalamazoo and Kalamazoo Southwest quadrangles, Michigan: Origin and timing of incision of the Kalamazoo Valley relative to the Lake Michiagn Lobe" 4/01/01-3/31/02, \$7,500.

26. Principal Investigator, U.S. Geological Survey, "Geologic Mapping of Allegan County, Yr. 1", 7/1/02-6/30/03, \$41, 125.

27. Principal Investigator, U.S. Department of State, Bureau of Educational and Cultural Affairs "Establishment of an Environmental Hydrogeology Coalition including Western Michigan University, Suez Canal University and South Valley University" \$221, 772.

28. Co-Principal Investigator, US Army Corps of Engineers, "Lake Michigan Bluff Dewatering Project" 10/1/02-12/31/02, \$125,000.

29. Co-Principal Investigator, US Army Corps of Engineers, "Lake Michigan Bluff Dewatering Project" 1/1/03- 12/31/03- \$161,000.

30. Principal Investigator, U.S. Geological Survey, "Geologic Mapping of Allegan County, Yr. 2", 8/1/03-7/31/04, \$30,171.

**31.** Principal Investigator, Michigan Dept. of Environmental Quality, "Pharmaceuticals, Personal Care Products, and Polybrominated Diphenyl Ethers in the Environment" 9/03-8/05. (PhD project for Lisa Anderson) \$43,000

32. Principal Investigator, Michigan Dept. of Environmental Quality, "Geologic Mapping of Allegan County, Yr 3, 8/1/04-7/31/05; \$25,423.

33. Co-Principal Investigator, US Army Corps of Engineers, "Lake Michigan Bluff De-watering Project. "Monitoring of Allegan County Bluff Dewatering Project" 6/2/04-1/31/05. \$188,576.

34. Principal Investigator, Three dimensional mapping of the Dowling, 7.5 minute quadrangle, southwest Michigan: eskers, tunnel channels, and implications for the hydrologic regime of the Saginaw Lobe. \$10,993. U.S. Geological Survey.

35. Co-Principal Investigator. Stabilization of shoreline bluffs by removal of groundwater. \$80,000: 6/01/06-12/1/06; Co-PI, Ron Chase, P.I. U.S Army Corps of Engineers.

**36.** Principal Investigator, Causes of seasonal fluctuations of BTEX concentrations in monitor wells at UST sites. Kalamazoo Community Foundation; \$4038.

37. Co-Principal Investigator, Stabilization of shoreline bluffs by removal of groundwater. 25,000: 8/01/07-12/31/07 ; Co-PI, Ron Chase, P.I. U.S Army Corps of Engineers.

38. Principal investigator, US Geological Survey: Surficial geologic mapping Augusta 7.5 minute quadrangle Calhoun and Kalamazoo Counties, MI, \$39,952, awarded

39. Principal Investigator, US Geological Survey: Surficial geologic mapping Calhoun County Michigan, Marsahll and NW Albion quadrangles, \$61, 994, awarded

40. Principal Investigator, US Geological Survey: Surficial geologic mapping, Climax and NE Albion quadrangles, Calhoun, Kalamazoo, and Jackson Counties, Michigan, \$58, 829, awarded

41. Principal Investigator, US Geological Survey: Surficial geologic mapping Calhoun County Michigan, East Leroy, Lyons Lake and Ellis Corners 7.5 minute quadrangles. \$77637, awarded.

42. Surficial Geologic Mapping Calhoun County, Michigan, Southwest Albion, Southeast Albion 7.5 Minute Quads, and production of Barry County Composite Map. U.S. Geological Survey. \$70483.

42. Principal investigator, US Geological Survey: Surficial geologic mapping Calhoun County, Michigan, Olivet 7.5 minute quad. Nov. 2014, \$46,447 awarded. 9/1//14-10/15/15

43. Principal Investigator, US Geological Survey: Surficial Geologic Mapping, Tekonsha, Burlington, Union City 7.5 min. quadrangles; March, 2015, \$41,420 awarded. 5/1/14-12/31/15

44. Principal Investigator, U.S. Geological Survey, EDMAP, Surficial Geologic Mapping of the Indian Town and Wood Island SE 7.5 Minute Quadrangles, Pictured Rocks National Lakeshore, Michigan, Nov. 2015, \$14,594 Awarded. 5/1/15-4/30/16

#### **Research Interests:**

Surficial geologic processes and deposits.

Effects of waste disposal on groundwater quality.

Chemical evolution of groundwater.

Geologic mapping applied to land-use planning and groundwater protection

Glacial and Quaternary geology of the northern Great Plains and Great Lakes Regions.

Erosional and depositional effects associated with Pleistocene glacial-lake outburst floods.

Glacial geology of southwestern Michigan

### **Professional Societies:**

**American Geophysical Union** 

Geological Society of America (President, North Central Section, 1993-1994; General Chair of North Central Section, 1994 Annual Meeting)

Association of Ground Water Scientists and Engineers

**American Quaternary Association** 

American Institute of Hydrology; Certified Professional Hydrogeologist

#### Awards and Honors

Outstanding Geologist, 2007. Michigan Section, American Institute of Professional Geologists

Fellow, Geological Society of America, Elected 2008.

# **Publications:**

#### **BOOKS, BOOK CHAPTERS, BOOK REVIEWS**

- 1. Kehew, A.E., 1983, <u>Book Review</u>, "Geologic Hazards, Resources, and Environmental Planning", by G.B. Griggs and J.A. Gilchrist:Journal of Geologic Education, v. 31, p. 398-399
- 2. Kehew, A.E., 1987, <u>Book Review</u>, "Engineering Geology", by F.C. Beavis: Journal of Geologic Education, v. 35, p. 106
- 3. Kehew, A.E., 1988, General Geology for Engineers: Prentice-Hall Inc., 440 p.
- 4. Kehew, A.E., 1988, Instructors Manual With Tests: General Geology for Engineers: Prentice-Hall Inc.
- 5. Kehew, A.E. and Lord, M.L., 1987, Glacial-lake outbursts along the mid-continent margins of the Laurentide Ice Sheet, <u>in</u>, *Catastrophic Flooding*, L. Mayer and D. Nash, eds., Boston, Allen & Unwin, p. 95-120
- 6. Kehew, A.E., 1995, Geology for Engineers and Environmental Scientists, 2nd Edition: Prentice-Hall, Inc., 574 p.
- 7. Kehew, A.E., 2001, Applied Chemical Hydrogeology. Prentice-Hall, Inc., 368p.
- 8. Chase, R.B., Kehew, A.E., and Montgomery, W.W. 2001. Determination of Slope Dispacement Mechanism and Causes: An Approach using new geometric modeling techniques and climate data: *in*, Harmon, R.S., and Doe, W.W., III, eds., *Landscape Erosion and Evolution Modeling*, Kluwer Academic, New York, p. 57-87.
- 9. Kehew, A.E. 2006. Geology for Engineers and Environmental Scientists, 3rd Edition: Prentice-Hall, Inc.

#### JOURNAL ARTICLES AND OTHER REFEREED PAPERS

- 1. Bluemle, J.P.,Kehew, A.E., Brostuen, E.A., and Harris, K.L., 1978, Alfalfa and the occurrence of fissures on the North Dakota prairies: *Prairie Naturalist*, v. 10, no. 2, p. 53-59.
- 2. Kehew, A.E., 1979, Drainage history of the Lewiston Basin: Northwest Science, v. 53, no. 4, p. 242-250.
- 3. Kehew, A.E., 1982, Catastrophic flood hypothesis for the origin of the Souris Spillway, Saskatchewan and North Dakota: *Geological Society of America Bulletin*, v. 93, no. 10, p. 1051-1058.
- 4. Kehew, A.E. and Clayton, Lee, 1983, Late Wisconsinan floods and development of the Souris-Pembina spillway system, <u>in</u>, Teller, J.T. and Clayton, Lee, eds., *Glacial Lake Agassiz*: Geological Association of Canada Special Paper 26, p. 187-210.
- 5. Kehew, A.E., Schwindt, F.J., and Brown, D.J., 1984, Hydrogeochemical interaction between a municipal waste stabilization lagoon and a shallow aquifer: *Ground Water*, v. 22, p. 746-754.
- 6. Kehew, A.E. and Lord, M.L., 1986, Origin and large-scale erosional features of glacial-lake spillways in the northern Great Plains: *Geological Society of America Bulletin*, v. 97, no. 2, p. 162-177.

- 7. Kehew, A. E. and Boettger, W.M., 1986, Depositional environments of buried-valley aquifers in North Dakota: Ground Water, v.24, no. 6, p. 728-735
- Lord, M.L. and Kehew, A.E., 1987, Sedimentology and paleohydrology of glacial-lake outburst deposits in southeastern Saskatchewan and northwestern North Dakota: *Geological Society of America Bulletin*, v. 99, p. 663-673
- 9. Murphy, E.C., Kehew, A.E., Beal, W.A., and Groenewold, G.H., 1988, Leachate generated by an oil-and-gas brine pond in North Dakota: *Ground Water*, v. 26, no. 1, p. 31-38
- 10. Kehew, A.E. and Lord, M.L., 1989, Glacial Lake Spillways of the Central Interior Plains, Canada U.S.: *The Canadian Geographer*, v. 33, no 3, p. 274-277
- 11. Bulger, P.R., Kehew, A.E., and Nelson, R.A., 1989, Dissimilatory nitrate reduction in a waste-water contaminated aquifer: *Ground Water*, v. 27, no. 5, p. 664-671
- 12. Kehew, A.E. and Passero, R.N., 1990, pH and redox buffering mechanisms in a glacial drift aquifer contaminated by landfill leachate: *Ground Water*, v. 28, no. 5, p. 728-737
- 13. Kehew, A.E. and Brewer, M.K., 1992, Groundwater Quality Variations in Glacial Drift and Bedrock Aquifers, Barry County, Michigan: *Environmental Geology and Water Science*, v. 20, p. 105-115
- 14. Kehew, A.E., 1993, Glacial-lake outburst erosion of the Grand Valley, Michigan and impacts on glacial lakes in the Lake Michigan basin: *Quaternary Research*, v. 239, p. 36-44
- 15. Kehew, A.E. and Teller, J.T., 1994, Glacial-lake spillway incision and deposition of a coarse-grained fan near Watrous, Saskatchewan: *Canadian Journal of Earth Sciences*, v. 31, p. 544-553
- 16. Kehew, A.E., and Teller, J.T., 1994, History of late glacial runoff along the southwestern margin of the Laurentide Ice Sheet: *in*, Teller, J.T. and Kehew, A.E., guest eds., *Late Glacial History of Large Proglacial Lakes and Meltwater Runoff Along the Laurentide Ice Sheet*, Quaternary Science Reviews, v. 13, p. 859-877
- 17. Teller, J.T. and Kehew, A.E., 1994, Introduction to the Late glacial history of large prolacial lakes and meltwater runoff along the Laurentide Ice Sheet, *Quaternary Science Reviews*, v. 13, p. 795-799
- 18. Kehew, A.E., Straw, W.T., Steinmann, W.K., Barrese, P.G., Passarella, G., and Peng, W.S., 1996, Groundwater quality and flow in a shallow glaciofluvial aquifer impacted by agricultural contamination: *Ground Water*, v. 34, p. 491-500
- 19. Kehew, A.E., Passero, R.N., Krishnamurthy, R.V., Lovett, C.K., Betts, M.A., and Dayharsh, B.A., 1998, Hydrogeochemical interaction between a wetland and an unconfined glacial drift aqufer, southwestern Michigan: *Ground Water* v. 36, no. 5, 849-856
- 20. Kehew, A.E., Nicks, L.P., and Straw, W.T., 1999 Palimpsest tunnel valleys: evidence for relative timing of advances in an interlobate area of the Laurentide Ice Sheet: *Annals of Glaciology*, v. 28, p. 47-52.
- 21. Chase, R.B., Chase, K.E., Kehew, A.E., and Montgomery, W.W. 2001. Determining the kinematics of slope movements using low-cost monitoring and cross-section balancing. *Environmental & Engineering Geoscience*, v. VII, no. 2, p. 193-203.

- 22. Chowdhury, S.H. and Kehew, A.E. 2003. Correlation between nitrate contamination and ground water pollution potential. *Ground Water*, v. 41, no. 6, p. 735-745.
- 23. Unterreiner, G.A. and Kehew, A.E. 2005. Spatial and temporal distribution of herbicides and herbicide degradates in a shallow glacial drift aquifer/surface water system, southwestern Michigan. Groundwater Monitoring & Remediation, v. 25, no. 2, p. 1-10.
- 24. Kozlowski, A.L., Kehew, A.E. and Bird, B.C 2005. Outburst flood origin of the Central Kalamazoo River Valley, Michigan, U.S.A. Quaternary Science Reviews 24 2354-2374
- 25. Kehew, A.E., Beukema, S. P., Bird, B.C. and Kozlowski:, A.L. 2005. Fast flow of the Lake Michigan Lobe of the Laurentide Ice Sheet: evidence from sediment-landform assemblages in southwestern Michigan, USA, Quaternary Science Reviews 24 2335-2353
- 26. Kehew, A.E., Lord, M.L., and Kozlowski, A.L. 2007. Glacifluvial landforms of erosion: in Elias, S.A., Ed-in-Chief, Encyclopedia of Quaternary Science, Elsevier, p 818-830
- 27. Chase, R.B., Kehew, A.E., Kaunda, R.B., and Glynn, M.E., 2007, Mitigation of slope failures in a freeze/thaw environment by removal of ground water: 1st North American Landslide Conference: Association of Engineering Geologists Special Publication 23, pp.1582-1594
- 28. Chase, R.B., Kehew, A.E., Glynn, M.E., and Selegean, J.P., 2007, Modeling debris slide geometry with balanced cross-sections: a rigorous field test: *Environmental and Engineering Geoscience*, v. XIII, No.1, pp.193-203.
- 29. Kehew, A. E. and Kozlowski, A.L. 2007. Tunnel Channels of the Saginaw Lobe, Michigan, USA, in, Johannsson, P., and Sarala, P. (eds.) Applied Quaternary research in the central part of glaciated terrain, Geological Survey of Finland, Special Paper 46, pp. 69-77.
- 30. Kaunda, R.B. Chase, R.B. Kehew A.E., Kaugers, K. Selegean, J.P. 2008. Interpretation of a Progressive Slope Movement Using Balanced Cross Sections and Numerical Integration, Engineering and Environmental Geoscience, 14, 121-131.
- 31. Kehew, A.E., Lord, M.L., Kozlowski, A.L. and Fisher, T.G. 2009, Proglacial megaflooding along the margins of the Laurentide Ice Sheet. In, Burr, D., Carling, P.A., and Baker, V.R., Megaflooding on earth and Mars, Cambridge University Press 121-131.
- 32. Kaunda, R.B., Chase, R.B., Kehew. A.E., Kaugars, K, 2010, Neural network modeling applications in active slope stability problems: *Environmental Earth Sciences*, 60, 1545-1558
- 33. Kehew, A.E., Milewski, A., and Soliman F. 2010, Reconstructing an extreme flood from boulder transport and rainfall-runoff modeling: Wadi Isla, South Sinai Egypt: Global and Planetary Change 70, 64-75.
- 34. Kehew, A.E. and Lynch, P.M. 2011, Concentration trends and water-level fluctuations at UST sites. Environmental Earth Sciences, 62, 985-998.
- 35. Barnes, N. A., Kehew, A.E., Krishnamurthy, R.V., and Koretsky, C. M. 2011. Redox evolution in glacial drift aquifers: role of diamictons in reduction of Fe(III). *Environmental Earth Sciences*, 62, 1027-1038
- 36. Kehew, A.E., Esch, J.M., Kozlowski, A.L. and Ewald, S.K. (2012) Glacial landsystems and dynamics of the Saginaw Lobe of the Laurentide Ice Sheet, Michigan, USA. Quaternary International 60, 21-31

- 37. Kehew, A.E., Piotrowski, J.A. and Jørgensen, F. 2012. Tunnel Valleys: Concepts and controversies—A review: Earth Science Reviews 113, 33-58.
- 38. Abouelmagd, A., Sultan, M., Milewski, A., Kehew, A.E., Sturchio, N.C., Soliman, F., Krishnamurthy, R.V. and Cutrim, E. 2012. Toward a better understanding of paleoclimatic regimes that recharged the fossil aquifers in North Aftrica: Inferences from stable isotope and remote sensing data. Palaeogeography, Palaeoclimatology, Palaeoecology 329-330, 137-149.
- 39. Kehew, A.E., Ewald, S.K., Esch, J.M. and Kozlowski, A.L. 2013. On the origin of tunnel channels of the Saginaw Lobe, Laurentide Ice Sheet, Michigan USA. Boreas, Vol. 42, pp. 442–462.
- 40. Kehew, A.E., Kozlowski, A.L., Bird, B.C. and Esch, J.M. 2013, Contrasting terrains of the Lake Michigan and Saginawlobes of the Laurentide Ice Sheet in southern Michigan, *in*, Gillespie, R., ed., Insights into the Michigan Basin, Geological Society of American, Field Guide 31, p. 15-36.
- 41. Korany, E., Aggour, T., Mosad, S., Kehew, A., and , Salim, A., 2012, Hydrogeological impacts of recent recharge to Nubia Sandstone aquifer In Tuska-Abu Simble area, Western Desert, Egypt, *Egyptian Journal of Geology, v. 56, 2012, p.33-51*
- 42. Kehew, A.E., Lord, M.L. and Kozlowski, A.L 2013. GLACIAL LANDFORMS | Glaciofluvial Landforms of Erosion. Encyclopedia of Quaternary Science, 2<sup>nd</sup> Ed. Elsevier, p 825-838.
- 43. Abouelmagd, A., Sultan, M., Sturchio, N.C., Soliman, F., Rashed, M., Ahmed, M., Kehew, A.E. and Chouinard, K. 2014. Paleoclimate record in the Nubian Sandstone Aquifer, Sinai Peninsula, Egypt. Quaternary Research 81, 158-167.

#### **RESEARCH REPORTS, SYMPOSIA PROCEEDINGS**

- 1. Kehew, A.E. and Knudsen, G.W., 1979, Effect on groundwater of the Cavalier, North Dakota sanitary landfill: Proceedings, Seventeenth Annual Symposium on Engineering Geology and Soils Engineering, Moscow, Idaho, p. 161-180.
- 2. Kehew, A.E., Peterson, N.L. and Schwindt, F.J., 1980, North Dakota surface wastewater report: North Dakota Geological Survey Open File Report OF-2, 40 p.
- 3. Kehew, A.E., 1983, Geology and geotechnical conditions of Minot, North Dakota: North Dakota Geological Survey Report of Investigation 73, 35 p.
- 4. Kehew, A.E. and Groenewold, G.H, 1983, Earth resistivity investigations in reclaimed surface lignite mine spoils: North Dakota Geological Survey Report of Investigation 77, 92 p.
- 5. Kehew, A.E., Schwindt, F.J., and Brown, D.J., 1983, Effect of seepage from unlined municipal waste stabilization lagoons on chemical quality of groundwater in shallow aquifers: North Dakota Geological Survey Report of Investigation 80,140 p.
- 6. Murphy, E.C. and Kehew, A.E., 1984, The effect of oil and gas well drilling fluids on shallow groundwater in western North Dakota: North Dakota Geological Survey Report of Investigation 82, 155 p.

- 7. Murphy, E.C., Kehew, A.E., Groenewold, G.H., and Beal, W.A., 1985, Investigation of a surface brine flow from an abandoned seismic shot hole in the Black Slough Oil Field, Burke County, North Dakota: Task 4-1 <u>in</u> Characterization of detrimental effects of salts and other chemical constituents carried in surface and subsurface waters from brine and drilling fluid disposal pits buried during oil development, Final Report to North Dakota Water Resources Research Inst.
- 8. Murphy, E.C., Kehew, A.E., Groenewold, G.H., and Beal, W.A., 1985, Movement of leachate from a buried oil and gas brine-disposal pond in the Wylie Field, Bottineau County, North Dakota: Task 4-2, <u>in</u> Characterization of detrimental effects of salts and other chemical constituents carried in surface and subsurface waters from brine and drilling fluid disposal pits buried during oil development, Final Report to North Dakota Water Resources Research Institute.
- 9. Beal, W.A., Murphy, E.C., and Kehew, A.E., 1987, Contaminant migration of oil-and-gas drilling fluids within the glacial sediments of north-central North Dakota: North Dakota Geological Survey Report of Investigation 86, 43 p.
- 10. Murphy, E.C., Beal, W.A., and Kehew, A.E., 1986, The effects of buried drilling fluid on shallow groundwater in North Dakota: Proceedings, National Conference on Drilling Muds, May 29-30, 1986, Norman, Oklahoma, University of Oklahoma Environmental and Ground Water Institute
- 11. Kehew, A.E., Passero, R.N., and Rudder, J.D., Jr., 1988, Inorganic geochemistry of the KL landfill leachate plume, Kalamazoo County, Michigan: Proceedings of the Ground Water Geochemistry Conference, Feb. 16-18, 1988, Denver, CO, National Water Well Association, p. 621-637
- 12. Kehew, A.E., and Bulger, P.R., 1988, Groundwater degradation from the McVille waste stabilization lagoon: Proceedings, North Dakota Groundwater Quality Symposium, March 29-30, 1988, Bismarck, ND, p. 108-123
- 13. Kehew, A. E. and Passero, R.N., 1988, Preliminary statistical analysis of groundwater quality, Berrien County, Michigan: Proceedings, Policy, Planning, and Resource Protection Conference, Western Michigan University, p. 65-80
- 14. Stoline, M.R., Miller, P.S., Kehew, A.E., Passero, R.N., and Rowe, G.W., 1988, Groundwater chemistry statistical summaries for Ingham County, Michigan: Michigan Groundwater Survey, Western Michigan University, 128 p
- 15. Stoline, M.R., Miller, P.S., Kehew, A.E., Passero, R.N., and DeBoer, W.P., 1989, Groundwater Chemistry Statistical Summaries for Barry County, Michigan: Michigan Groundwater Survey, Western Michigan University, 160 p.
- 16. Stoline, M.R., Miller, P.S., Kehew, A.E., Passero, R.N., and McKenzie, B.R. 1989, Groundwater Chemistry Statistical Summaries for Barry County, Michigan: Michigan Groundwater Survey, Western Michigan University, 150 p.
- 17. Stoline, M.R., Miller, P.S., Kehew, A.E., Passero, R.N., and Witkowski, G.T., 1989, Groundwater Chemistry Statistical Summaries for Berrien County, Michigan, Michigan Groundwater Survey, Western Michigan University, 116 p.
- 18. Stoline, M.R., Miller, P.S., Kehew, A.E., Passero, R.N., Bereza, S.E., and Robertson, J.E., 1990, Groundwater Chemistry Statistical Summaries for Calhoun County, Michigan: Michigan Groundwater Survey, Western Michigan University, 120 p.

- 19. Stoline, M.R., Miller, P.S., Kehew, A.E., Passero, R.N., and DeBoer, W.P., 1990, Groundwater Chemistry Statistical Summaries for Eaton County, Michigan: Michigan Groundwater Survey, Western Michigan University, 114 p.
- 20. Kehew, A.E. and Brewer, M.K., 1990, Analysis of Groundwater Quality Data from Barry County Michigan: Michigan Groundwater Survey, Western Michigan University, 45 p.
- 21. Straw, W.T., Passero, R.N., and Kehew, A.E., 1993, Conceptual Hydrogeologic Glacial Facies Models: Implications for Aquifers and Agrichemicals in Southwest Michigan, *in*, Eckstein, Y. and Zaporozec, A., eds., *Hydrogeologic Investigation, Evaluation, and Ground Water Modeling*, Proceedings of the second USA/CIS Joint Conference on Environmental Hydrology and Hydrogeology, Water Environment Federation, Alexandria, VA, p. 35-68
- 22. Passero, R.N., Kehew, A.E., Ervin, J.L, Sauck, W.A., Straw, W.T., Atekwana, E., Stuk, M.A., Lovett, C.K., Betts, M.A., and Chidester, S., 1994, Determinants of Ground-water quality in a multi-layer glacial drift aquifer system: implications for wellhead protection of small community water supply systems in agricultural settings: Institute for Water Research, Michigan State University, East Lansing, MI. Project NO. 92-G2026-02
- 23. Kehew, A.E., Passero, R.N., Sauck, W.A., Straw, W.T., Lovett, C.K., Stuk, M.A., and Betts, M.A., 1994, Hydrogeology of the Donnell Lake Watershed, Part B, in, Ervin, J.L., et al., A Study of Ground Water and Ground Water/Surface Water Interfaces in a Priority Agricultural Watershed, Cass County, Michigan, Institute for Water Research, Michigan State University, 85p
- 24. Lovett, C.K., Krishnamurthy, R.V., Kehew, A.E., and Passero, R.N., 1995, <sup>3</sup>H and del<sup>18</sup>O as indicators of connectivity in a multi-aquifer complex, Cass County, southwestern Michigan: *Tracer Technologies for Hydrological Systems* (Proceedings of a Boulder Symposium, July, 1995) IAHS Publ. no. 229, 1995.
- 25. Lovetere Stephany, C., Kirby, M.J., and Kehew, A.E., 1998, Spatial and temporal variability in the distribution of nitrate in an agriculturally-impacted aquifer, Cass County, Michigan: Proceedings, *Animal Production Systems and the Environment*, 1998 Conference Proceedings, Ames, Iowa, p. p. 513-518
- 26. El-Rayes, A.E., Soliman, F.A., Kehew, A.E., and El-Shamy, I.Z. 2001. Hydrochemical exploration of sulphide mineralization: Application in the Arabo-Nubian Shield, Sinai, Egypt. Wohnlich, S. and Seiler, K.P., eds., New Approaches Characterizing Groundwater Flow, V. 1, A.A. Balkema, Lisse, pg. 49-54. (Proceedings IAH Congress, Sept., 2001).
- 27. Glenn, M.E., Chase, R.B., Kehew, A.E., Selegean, J.P., Ferrick, M.G. and Hansen, C.M. 2012. Lake Michigan Bluff Dewatering and Stabilization Study—Allegan County, Michigan. U.S. Army Corps of Engineers, Engineer Research and Development Center, ERDC TR-12-11, 168 p.

## ABSTRACTS AND OTHER SHORT PUBLICATIONS

- 1. Kehew, A.E., 1977, Environmental geology of Lewiston, Idaho and vicinity: Dissertation Abstracts International, v.38, no. 3, p. 1098-1099.
- 2. Kehew, A.E., 1977, Environmental geology of Lewiston, Idaho and vicinity: Abstracts with Programs, Geological Society of America, Rocky Mountain Section, v. 9, no. 6, p. 737-738.
- 3. Kehew, A.E., 1979, Evidence for late Wisconsinan catastrophic flooding in the Souris River area, north-central North Dakota: Proceedings, North Dakota Academy of Science, v.33, p. 32.

- 4. Kehew, A.E., 1981, Near-surface geology and geotechnical conditions of the Minot area, north-central North Dakota: Abstracts with Programs, Geological Society of America, North Central Section, v. 13, no. 6, p. 283.
- 5. Kehew, A.E. and Betcher, J.T., 1983, Groundwater pollution potential of municipal waste disposal sites in North Dakota: Proceedings of the North Dakota Academy of Science, v. 37, p. 36.
- 6. Kehew, A.E., 1984, Preliminary stratigraphy of glacial deposits in north-central North Dakota: Proceedings, North Dakota Academy of Science, v.38, p. 20.
- 7. Murphy, E.C. and Kehew, A.E., 1984, The use of resistivity methods to delineate leachate generated from buried drilling fluid: Montana Bureau of Mines and Geology Special Publication 91, p. 12-13.
- 8. Kehew, A.E. and Lord, M.L., 1984, Large-scale erosional features produced by proglacial lake drainage in the northern Great Plains: Abstracts with Programs, Geological Society of America, Annual Meeting, v. 16, no.6, p. 556.
- 9. Lord, M.L. and Kehew, A.E., 1984, Paleohydraulic characterization of sudden proglacial lake discharges in the northern Great Plains: Eos, v. 65, p. 893-894.
- Kehew, A.E. and Lord, M.L., 1985, Quantitative analysis of large-scale fluvially streamlined hills in the northern Great Plains: Abstracts with Programs, Geological Society of America, North Central Section, v. 17, no. 5, p. 295.
- 11. Murphy, E.C., Kehew, A.E., Groenewold, G.H., and Beal, W.A., 1985, Movement of leachate from a buried oil and gas brine disposal pit in the Wylie Field, Bottineau County, North Dakota: Midwest Ground Water Conference, St. Paul, Minnesota, Oct., 1985.
- 12. Murphy, E.C., Kehew, A.E., Beal, W.A., and Groenewold, G.H., 1985, The effects of oil and gas exploration and production on shallow groundwater in North Dakota: Abstracts with Programs, Geological Society of America, Annual Meeting, v. 17, no. 7, p. 672.
- 13. Kehew, A. E., 1985, Physical and chemical effects on groundwater of seepage from waste stabilization lagoons (Invited Paper):North Dakota Water Pollution Control Association, 26th Annual Conference, Fargo, ND, Oct., 1985.
- 14. Kehew, A.E. and Boettger, W.M., 1986, Origin of sediment in buried-valley aquifer systems in North Dakota: Abstracts with Programs, Geological Society of America, North Central Section, v. 18, no. 4, p. 312
- 15. Bulger, P.R., Kehew, A.E., and Nelson, R.A. 1986, Evidence for biochemical stabilization of municipal waste water in a shallow aquifer: Abstracts with Programs, Geological Society of America, North Central Section, v. 18, no. 4, p. 312
- 16. Lord, M.L. and Kehew, A.E., 1986, Sedimentology of boulder gravels deposited by floods from glacial-lake outbursts: Proceedings, North Dakota Academy of Science, v. 40, p. 118
- 17. Reid, J.R., Kehew, A.E., and Sandberg, B.S., 1986, Human causes of the Riverdale, North Dakota slump: Proceedings, North Dakota Academy of Science, v. 40, p. 105
- 18. Kehew, A.E., Lord, M.L., and Lowrie, Allen, 1986, Tracing catastrophic glacial-lake outbursts from the southern margin of the Laurentide Ice Sheet to deposition along the Louisiana offshore: Geological Society of America, Abstracts with Programs, Annual Meeting, v. 18, no. 6 p. 653

- Kehew, A.E., Passero, R.N., and Bulger, P.R., 1987, Control of inorganic concentrations by dissolved organics in groundwater contaminant plumes: Geological Society of America Abstracts with Programs, v. 19, no. 4, p. 208
- 20. Lord, M.L. and Kehew, A.E., 1988, Sedimentology and paleohydrology of glacial-lake outburst deposits in southeastern Saskatchewan and northwestern North Dakota: Discussion and reply, Geological Society of America Bulletin, v. 100, p. 1311-1312
- 21. Brown, D.J., Kehew, A.E., and Stoline, M.J., 1988, Interpretation the variability of domestic well water quality from aquifers in southwest Michigan: American Water Resources Association: Nov. 6-11, 1988, Milwaukee, WI
- 22. Kehew, A. E., Passero, R.N., and Soule, C.H., 1989, Degradation of groundwater in a glacial-drift aquifer used for municipal supply by road salt application: Geological Society of America, Abstracts with Programs, v. 21, no. 4, p. 17
- 23. Passero, R.N. and Kehew, A.E., 1989, Environmental Geology: Geotimes, v. 34, no. 2, p. 20-22
- 24. Kehew, A.E., 1990, Environmental Geology: Geotimes, v. 35, no. 2, p. 28-29
- 25. Kehew, A.E. and Lord, M.L., 1990, <u>Comment</u> and reply on "Drumlins, subglacial meltwater floods, and ocean responses": Geology, v. 18, p. 479-480
- 26. Lord, M.L. and Kehew, A.E., 1990, Geomorphology of the Souris River Valley, Saskatchewan, North Dakota, and Manitoba: Journal of the North Dakota Archeological Association, v. 4, p. 8-16
- 27. Kehew, A.E. and Brewer, M.K., 1990, Groundwater quality variations in Barry County, Michigan: Geological Society of America, Abstracts With Programs, North Central Section, v. 22, no. 5, p. 16
- 28. Bulger, P.R. and Kehew, A.E., 1990, Discussion and <u>reply</u> : "Dissimilatory nitrate reduction in a waste-water contaminated aquifer": Journal of Ground Water, v. 28, p. 445-446
- 29. Kehew, A.E., 1990, A glacial lake outburst in the Grand Valley, Michigan and its impacts upon glacial Lake Chicago: Proceedings, CANQUA/AMQUA joint conference, Waterloo, Ontario, June, 1990, p. 22
- 30. Kehew, A.E., Straw, W.T., Barrese, P.G., Steinmann, W.T., and Kasenow, M.C., 1990 (abs.), Ground-water flow systems and distribution of agricultural nonpoint source contaminants in a glaciofluvial fan aquifer: Ground Water, v. 28, no. 5, p. 789
- 31. Straw, W. T., Kehew, A.E., Barrese, P.G., Steinmann, W.K., and Kasenow, M.C., 1990 (abs.), Flow systems in the Schoolcraft aquifer - a study of regional flow interrupted by local flow systems: Geological Society of America, Abstracts with programs, v. 22, no, 7 (Annual Mtg.), p. A64
- 32. Kehew, A.E., 1991, Environmental geology: Geotimes, v. 36, no. 2, p. 50-51
- 33. Kehew, A.E., 1991, Hydrogeological issues considered in evaluation and exclusion of the Lenawee County, Michigan low-level radioactive waste disposal candidate area: Geological Society of America Abstracts With Programs, v. 23, no. 3, p. 21
- 34. Kehew, A.E., Straw, W.T., and Barrese, P.G., 1991, (Abs.) Ground-water quality in a glacial drift aquifer impacted by agricultural fertilizers: American Institute of Hydrology, 1991 Annual Meeting, p. 37

- 35. Kehew, A.E., 1992, Proglacial storage and release: dominoes and spikes: Geological Society of America, Abstracts with programs, v. 24, no. 7, p. A244
- 36. Kehew, A.E. and Teller, J.T. 1992, Paleohydrology of runoff along the southwestern margin of the Laurentide Ice Sheet (Invited paper): Geological Society of America, Abstracts with programs, v. 24, no., p. A273
- 37. Straw, W.T., Kehew, A.E. and Passero, R.N., 1993, (Abs.), Sturgis and Tekonsha Advances: Evidence for thin ice sheets in southern Michigan: Geological Society of America Abstracts with Programs, v. 25, no.3, p. 83
- 38. Kehew, A.E., and Teller, J.T., 1993, History and paleohydrology of Laurentide Ice Sheet runoff to southern Lake Agassiz: Abstracts of the International Geological Correlation Project 253, Winnipeg Meeting, p. 24
- 39. Kehew, A.E. and Teller, J.T. 1993, Glacial-lake outburst deposition and paleohydraulic analysis of a fan-delta near Watrous, Saskatchewan: Geological Society of America, Abstracts with programs, v.25, no. 7, p.
- 40. Betts, M.A., Kehew, A.E., and Passero, R.N., 1994, The effects of a wetland on ground water quality in an agriculturally impacted aquifer: Geological Society of America, Abstracts with Programs, North Central Section, v. 26, no. 5, p. 4
- 41. Lovett, C.K., Kehew, A.E., Passero, R.N., and Stuk, M.A., 1994, A Wellhead protection study of a small agricultural community in glaciated terrain as a model for wellhead protection efforts by similar communities: Geological Society of America, Abstracts with Programs, North Central Section, v. 26, no. 5, p. 50
- 42. Kehew, A.E., Passero, R.N., Straw, W.T., Lovett, C.K., Betts, M.A., and Krishnamurthy, R.V., 1994, Removal of nitrate from ground water during interaction with flow-through wetlands: EOS, Transactions of the American Geophysical Union, Spring Meeting Supplement, p. 153-154
- 43. Kehew, A.E., Passero, R.N., Betts, M.A., Lovett, C.K., Krishnamurthy, R.V., and Dayharsh, B., 1994, The effect of a flow-through wetland on ground-water quality in an agriculturally impacted, glacial-drift aquifer: Abstracts with Programs, Geological Society, Annual Meeting, v. 26, no. 7, p. 132
- 44. Teller, J.T. and Kehew, A.E., 1995, Paleohydrology of Late Glacial Runoff Along the Southwestern Margin of the Laurentide Ice Sheet: Abstracts, INQUA, XIV International Congress, Berlin, Aug. 3-10, 1995
- Straw, W.T. and Kehew, A.E., 1995, Interplay of advances, meltwater events, and surges during retreat of the southeast margin of the Lake Michigan lobe: Geological Society of America, Abstracts With Programs, v. 27, no. 6 (Annual Meeting), p. A-169
- 46. Kehew. A.E., Krishnamurthy, R.V., Passero, R.N., and Dayharsh, B.A., 1995, Hydrochemical and isotopic delineations of wetland recharge/discharge functions: Geological Society of America, Abstracts With Programs, v. 27, no. 6 (Annual Meeting), p. A-257-258
- 47. Clarey, T.L., Chase, R.B., Kehew, A.E., and Machavaram, M.V., 1995, A new method of determining the direction of maximum hdyraulic conductivity in fractured aquifers using slickenside arrays: Geological Society of America, Abstracts With Programs, v. 27, no. 6 (Annual Meeting), p. A-259
- 48. Lovetere, C. and Kehew, A.E., 1996, Spatial and temporal variability in the distribution of nitrate in an agriculturally-impacted aquifer, Cass County, Michigan, Geological Society of America, Abstracts With Programs, v. 28 (North Central Section), p. A-52

- 49. Anderson, L.M. and Kehew, A.E., 1996, A study of the chemical and physical interactions between a wetland and a shallow aquifer in Cass County, Michigan: Geological Society of America Abstracts with Programs, v. 27, no. 6 (North Central Section), p. A-26
- Chase, R.B., Montgomery, W.W., and Kehew, A.E., 1997, Stratigraphic and hydrogeologic controls on mass movements in heterogeneous glacial materials: Geological Society of America, Abstracts With Programs, Annual Meeting, v. 29, no. 6, p. A-64
- 51. Montgomery, W.W., Chase, R.B., and Kehew, A.E., 1997, Relationships between lithology, hydraulic head and shoreline recession of the eastern shore of Lake Michigan: Geological Society of America, Abstracts with Programs, Annual Meeting, v. 29, no. 6, p. A-448
- 52. Kehew, A.E., Straw, W.T., Nicks, L.P., Kendzierski, S.K., Gardner, R.C., Flint, A.C., Hughes, L.D., and Baker, C., 1998, Glacial terrain mapping with hydrogeological applications in St. Joseph County, Michigan: Geological Society of America, Abstracts With Programs, Northeastern Section, v. 30, no.1, p. 29.
- 53. Kozlowski, A.L. and Kehew, A.E., 1998, Maps with hydrogeological implications in a complex glaciated area southwestern Calhoun County and northwestern Branch County, Michigan: Geological Society of America, Abstracts With Programs, Northeastern Section, v. 30, p. 31.
- 54. Kehew, A.E., Nicks, L.P. and Straw, W.T., 1998. Late Wisconsinan interaction between the Lake Michigan and Saginaw lobes of the Laurentide Ice Sheet, Proceedings, International symposium on glaciers and the glaciated landscape, Kiruna, Sweden, Aug., 17-20, 1998.
- 55. Kozlowski, A.L. and Kehew, A.E., 1998, Tunnel valleys of the Saginaw lobe in southwestern Michigan: relationships between bedrock and surficial drainage patterns: Geological Society of America, Annual Meeting, Abstracts With Programs, v.30, no. 7, p. A-386
- 56. Chase, R.B., Chase, K.E., Kehew, A.E., and Montgomery, W.W., 1998, Determinations of slope failure mechanisms in unconsolidated materials using low-cost monitoring and cross-section balancing: Geological Society of America, Annual Meeting, Abstracts With Programs, v. 30, no. 7, p. A-180
- 57. Kehew, A.E., Hughes, L.D., Nicks, L.P., and Passero, R.N., 1998, Aquifer vulnerability overview of St. Joseph County, Michigan: Geological Society of America, Annual Meeting, Abstracts With Programs, v. 30, no. 7, p. A-276
- Kirby, M.J., Sephany, C.L., and Kehew, A.E., 1998, Variation in nitrate-nitrogen concentrations in ground water related to agronomic changes: Geological Society of America, Annual Meeting, Abstracts With Programs, v. 30, no. 7, p. A-322
- 59. Montgomery, W.W., Chase, R.B., Kehew, A.E., and Torrey, V.H. 1998, Factors of safety and relationships to historical bluff recession in Pleistocene deposits on the eastern shore of Lake Michigan: Geological Society of America, Annual Meeting, Abstracts With Programs, v. 30, no. 7, p. A-252
- 60. Chowdhury, S.H., Hughes, L.D., and Kehew, A.E., 1998, A study of aquifer vulnerability in Nottawa Creek Watershed, Calhoun County, Michigan using computerized water well records: Geological Society of America, Annual Meeting, Abstracts With Programs, v. 30, no. 7, p. A-23
- 61. Nicks, L.P., Kehew, A.E., Sauck, W.A., and Gardner, R.C., 1998, Three dimensional mapping using geophysics and conventional techniques has shown a correlation between tunnel valleys and the buried bedrock surface: Geological Society of America, Annual Meeting, Abstracts With Programs, v. 30, no. 7, p. A-137

- 62. Kehew, A.E., Nicks, L.P., Flint, A.C., Gardner, R.C., Kendzierski, S.J., Kozlowski, A.L., and Lee, J.N. 1999, Interactions between the Lake Michigan and Saginaw lobes of the Laurentide Ice Sheets: Results of STATEMAP/EDMAP mapping in southwestern Michigan: Geological Society of America, North Central Section, Abstracts With Programs, v. 31, no. 5., p. A-26.
- 63. Flint, A.C., Brown, S.E., Gardner, R.C., Kehew, A.E., Kendzierski, S.J., Kozlowski, A. L, Lee, J.N., and Nicks, L.P., 1999, Characterization and correlation of a widedly distributed subsurface diamicton in southwestern Michigan: Geological Society of America, North Central Section, Abstracts With Programs, v. 31, no. 5, p. A-16.
- 64. Kozlowski, A.L., Kehew, A.E., flint, A.C., Chowdhury, S.H., Lee, J.N., and Nicks, L.P. 1999, Three dimensional mapping of the East Leroy and Union City, 7.5 minute quadrangles, Michigan: Geological Society of America, North Central Section, , Abstracts With Programs, v. 31, no. 5, p. A-29.
- 65. Hughes, L.D., Kehew, A.E., Nicks, L.P., and Passero, R.N., 1999, Integraton of geologic mapping and aquifer vulnerability analysis for use by local governments in St. Joseph County, Michigan: Geological Society of America, North Central Section, Abstracts With Programs, v. 31, no. 5, p. A-22.
- 66. Brown, S.E., Fisher, T.G., Kehew, A.E., and Taylor, L.D., 1999, Pleistocene geology of north-central Indiana and south-central Michigan: Guidebook for the 45<sup>th</sup> Midwest Friends of the Pleistocene Field Conference, May 21-23-Goshen, Indiana. Indiana Geological Survey Open-File Study, 99-1, 77 p.
- 67. Chowdhury, S.H., Kehew, A.E., Hughes, L.D., and Passero, R.N. 1999. Correlation between the occurrences of nitrate contamination and ground water pollution potential evaluated by using computerized water well records: Geological Society of America, Abstracts with Programs, Annual Meeting, v. 31, no. 7, p. A-100-A101.
- 68. Chase, R.B., Kehew, A.E., and Montgomery, W.W. 1999. The destabilizing influence of perched ground water in shoreline bluffs composed of heterogeneous glacial materials: Geological Society of America, Abstracts with Programs, Annual Meeting, v. 31, no. 7, p. A255.
- 69. Kehew, A.E., Kozlowski, A.,L., and Bird, B.C. 2000. Buried forest bed in southwestern Michigan yields anomalous radiocarbon date: Geological Society of America, Abstracts With Programs, North Central Section Meeting, v. 32, no. 4, p. A-20
- 70. Kozlowski, A.L., Kehew, A.E., and Bird, B.C. 2000. Proglacial Lakes, outburst floods and moraines: results of three-dimensional mapping of the Otsego 7.5 minute quadrangle, Michigan. Geological Society of America, Abstracts With Programs, North Central Section, v. 32, no. 4, p. A-22.
- 71. Kehew, A.E., Hughes, L.D., and Chowdhury, S.H. 2000. Aquifer vulnerability assessments: are they vulnerable to misinterpretation and misuse?, in Bjerg, P.L, Engesgaard, P., and Krom, T., eds., Groundwater 2000: Proceedings of the International Conference on Groundwater Research/Copenhagen/Denmark/ 6-8 June, 2000, A.A. Balkema/ Rotterdam, p. p. 455-456.
- 72. Chase, R.B. and Kehew, A.E. 2000. Potential Stabilization of great lakes shoreline bluffs by removal of ground water. Geological Society of America, Abstracts with Programs, Annual Meeting, v. 32, no. 7, p. A-516
- 73. Werkema, D. D., Jr., Kozlowski, A.L., Bird, B.C., Sauck, W.A., and Kehew, A.E. 2000. Multi-method geophysical profile of the glacial stratigraphy within the Kalamazoo River valley, NW Kalamazoo County, MI. Geological Society of America, Abstracts with Programs, Annual Meeting, v. 32, no. 7, p. A-19.

- 74. Kozlowski, A.L., Bird, B.C., and Kehew, A.E. 2000. Stratigraphy of the Kendall/Valparaiso moraine in southwest Michigan: interaction between dead ice and proglacial lakes. EDMAP results from the Otsego 7.5 minute quadrangle. Geological Society of America, Abstracts with Programs, Annual Meeting v. 32, no. 7, p. A-19
- 75. Bird, B.C., Kozlowski, A.L. and Kehew, A.E. 2000. Interpretations of 3-dimensional glacial mapping of the Paw Paw and Decatur 7.5 minute quadrangles, Michigan. Geological Society of America, Abstracts with Programs, Annual Meeting, v. 32, no. 7, p. A-19.
- 76. Ahmed, Delwar, and Kehew, A.E. 2001, Evaluation of Natural Attenduation of Ketone, Alcohol, and Ether in the Groundwater: A case study of West KL Avenue Landfill Site, Kalamazoo, Michigan. Geological Society of America, Abstracts With Programs, Annual Meeting v. 33, no. 7, p A 188.
- 77. Unterreiner, G.A., and Kehew, A.E. 2001. Tracking agrichemical transport to surface water/groundwater with isotopic and chemical parameters. Geological Society of America, Abstracts with Programs, v. 33, no. 7, p. A-110.
- 78. Bird, B. C., Kozlowski, A.L., and Kehew, A.E. 2001. 3-D glacial mapping of the Lawrence 7.5 minute quadrangle, Van Buren County, Michigan. Geological Society of America, Abstacts With Programs, v. 33, no. 7, p. A-317.
- 79. Kehew, A.E., Bird, B.C., Kozlowski, A.L., Wong, S.A. and Beukema, S. P. 2001. Origin of the Valparaiso moraine, Van Buren County, Michigan. Geological Society of America, Abstracts with Programs, Annual Meeting. v. 33, no. 7, p. A-268.
- 80. Kozlowski, A.L, Kehew, A.E., and Bird, B.C. 2001. An outburst hypothesis for the origin of the Kalamazoo River Valley, Kalamazoo and Allegan County, Michigan. Geological Society of America, Abstracts with Programs, v. 33, No. 7, p. A-269.
- 81. Unterreiner, G.A. and Kehew, A.E. 2001. Chemical, isotopic, and hydrogeologic investigations of an agriculturally impacted area, south central Michiagn. Geological Society of America, Abstracts with Programs, Annual Meeting, v. 33, no. 7, p. A-423.
- 82. Kozlowski, A.L., Bird, B.C. and Kehew, A.E. 2002, Large scale geomorphology of southwestern Michigan. Geological Society of America, Abstracts with Programs, Southeastern/North central Section. v. 34, no. 2, p. A-42.
- 83. Ahmed, D., Kehew, A.E. 2002. Evaluation of natural attenuation of ketone, alcohol, and ether in the groundwater downgradient of west KL landfill site, Kalamazoo, Michigan: Geological Society of America, Annual Meeting Abstracts With Programs.
- 84. Kehew, A.E., Beukema, S.P., Bird, B.C., and Kozlowsi, A.L. 2002. Stratigraphic framework of the eastern margin of the Lake Michigan lobe: Geological Society of America, Abstracts with Programs, Annual Meeting.
- 85. Kehew, A.E., Beukema, S.C., Bird, B.C., and Kozlowski, A.L. 2003. Late Wisconsinan readvance of the Lake Michigan lobe: a possible surge driven by high subglacial pore pressures. Programs with Abstracts, XVI INQUA Congress, Reno Nevada, p. 150
- 86. Kozlowski, A.L., Kehew, A.E. and Bird, B. C. 2003. The origin of the central Kalamazoo River Valley: Relationships between outburst floods, tunnel channels, ice dynamics, and regional drainage history in southwestern Michigan. Programs with Absracts, XVI INQUA Congress, Reno, Nevada, p. 150.

- Kozlowski, A.L., Kehew, A.E., and Bird, B.C. 2003. Tunnel channels of the Saginaw Lobe, southern Michigan, Proceedings, 34<sup>th</sup> Binghamton Geomorphology Symposium, Oct. 3-5, 2003, Binghamton, NY
- Ahmed, D. and Kehew, A.E. 2003. A simple approach to a predictive model for groundwater flow using ARCVIEW. Proceedings, 48<sup>th</sup> Annual Midwest Groundwater Conference, Oct. 1-3, 2003, Kalamazoo, MI, p. 15
- 89. Unterreiner, G.A. and Kehew, A.E. 2003. Agricultural nonpoin nutrient and herbicide impacts on water quality in a shallow glacial drift aquifer/surface water system, south central Michigan, Proceedings, 48<sup>th</sup> Annual Midwest Groundwater Conference, Oct. 1-3, 2003, Kalamazoo, MI, p. 25
- Kirby, M.J. and Kehew, A.E. 2003. Effects of crop rotation on ground water chemistry, Cass County, Michigan. Proceedings, 48<sup>th</sup> Annual Midwest Groundwater Conference, Oct. 1-3, 2003, Kalamazoo, MI, p. 39.
- 91. Kehew, A.E., Bird, B.C., Kozlowski, A.L., and Schmidt, C.J. 2004. Fast flow of the Lake Michigan Lobe, Southwestern Michigan, USA. International Field Symposium on Quaternary Geology and Modern Terrestrial Processes, Latvia, 2004.
- 92. Durham, M.C., Kehew, A.E., and Bird, B.C. 2004. Glacial mapping and subsurface exploration of the Glenn, Lacota, and South Haven U.S.G.S. 7.5 minute quadrangles of Allegan County, Michigan. Geological Society of America, Abstracts with Programs, Annual Meeting, v. 36, no. 5, p 500.
- 93. Beukema, S. P. and Kehew, A. E. 2005. Stratigraphy of Lake Michigan Lobe Lacustrine Deposits. Geological Society of America, Abstracts with Programs, North Central Section, v. 37, no. 5., pg. 14.
- 94. Kozlowski, A.L., Kehew, A.E., and Bird, B.C. 2005. Glacial Lake Plainwell: Sedimentary and stratigraphic evidence for high-elevation proglacial lakes along the eastern margin of the Lake Michigan lobe in southwestern Michigan. Geological Society of America, North Central Section, v. 37, no. 5, pg. 22.
- 95. Kehew, A.E., Bird, B.C., Kozlowski, A.L., and Beukema, S.P. 2005. Fast flow during readvance of the Lake Michigan lobe, southwestern Michigan. Geological Society of America, North Central Section, v. 37, no. 5., p. 92.
- 96. Kehew, A.E., Chase, R.B., Glynn, M.E., Selegean, J.P., Erickson, R.L, and Matus, J. 2005. Design of monitoring and dewatering instrumentation for stabilization of receding Lake Michigan bluffs: Abstracts with Programs, Geological Society of America, Annual Mtg., v 37, no. 7, p 518
- 97. Chase, R.B., Kehew, A.E., Glynn, M.E., Selegean, J.P., Erickson, R.L. 2005. Mitigation of slope failures in Great Lakes coastal environments by removal of groundwater. Abstracts with Programs, Geological Society of America, Annual Mtg., v 37, no. 7, p 518
- 98. Kaunda, R.B., Chase, R.B., Kehew, A.E., and Kaugars, K. 2005. Application of a Gaussian quadrature algorithm to cross-section constructions in bluff displacement modeling studies: Abstracts with Programs, Geological Society of America, Annual Mtg., v 37, no. 7, p 518
- 99. Kehew, A.E. and Kozlowski, A.L. 2006. Palimpsest tunnel channels of the Saginaw Lobe. Abstracts with Programs, Geological Society of America, Northeastern Section
- 100. Kozlowski, A.L. and Kehew, A.E. 2006. Landforms, channel morphology, and cross-cutting relationships: Evidence for time-transgressive formation of Saginaw lobe tunnel channels in southern Michigan:

Abstracts with Programs, Geological Society of America, Northeastern Section.

- 101. Kehew, A.E., Barnes, N., Beukema, S.P., Kozlowski, A.L., and Nicks, L.P. 2006. Applications of USGS STATEMAP and EDMAP mapping projects to aquifer delineation and vulnerability in southwestern Michigan. Abstract Book of the 2006 Ground Water Summit, National Ground Water Association, pg. 48.
- 102. Kehew, A.E. and Kozlowski, A.L. 2006. Tunnel channels of the Saginaw Lobe, USA: Peribaltic Group and Friends of Baltic Quaternary Annual Meeting, Sept. 11-15, 2006, Oulu, Finland.
- 103. Kaunda, R.B., Chase, R.B., and Kehew A., 2006, Using rate-dependent relationships from inclinometer data to monitor landslides and slope movements, *Geological Society of America Abstracts with Programs*, Vol. 38, No. 7
- 104. Kaunda, R.B., Chase, R.B., Kehew A., and Kaugars, K., 2006, Neural network modeling of failure surface development in bluff displacement studies using a simple pole-and-cable survey system: *Geological Society of America Abstracts with Programs*, Vol. 38, No. 4.
- 105. Kaunda, R.B., Chase, R.B., and Kehew A., 2006, Effects of ground water flow patterns on slope stability: Geological Society of America Abstracts with Programs, Vol. 38, No. 7.
- 106. Woolever, Caleb J., Kehew, A.E., Sauck, W.A., and Kozlowski, A.L. 2007. Origin of esker and tunnel valley assemblages in the Saginaw Lobe, Barry County, Michigan. Ann. Mtg., Michigan Academy of Science, Arts, Letters.
- 107. Kehew, A.E., Milewski, A.M., and Soliman, F. 2007. Flood magnitude and velocity from boulder transport data: Wadi Isla, South Sinai, Egypt. Ann. Mtg., Michigan Academy of Science, Arts, Letters.
- 108. Kehew, A.E., Milewski, A.M., and Soliman, F. 2007. Reconstructing an extreme flood from boulder transport: Wadi Isla, South Sinai, Egypt. 4<sup>th</sup> International Palaeoflood Workshop, Crete, Greece, June 24<sup>th</sup>-30<sup>th</sup>, 2007
- 109. Kehew, A.E., Woolever, C., Barnes, N., and Kozlowski, A.L. 2007. Subglacial drainage and aquifer potential, Geological Society of American, Annual Meeting, Abstracts with Programs, Vol. 39, No. 6, p. 117
- 110. Kehew, A.E., Lynch, P.M. and Mitchell, W.M. 2008 Monitored natural attenuation: Predicting site closure time from concentration trends: Michigan Academy of Science, Arts, Letters, Annual Meeting, March 7, 2008, Western Michigan University.
- 111. Kehew, A.E., Barnes, N.A. and Krishnamurthy, R.V. 2008. Distribution and origin of disseminated organic carbon, in glacial drift, southwestern Michigan. Geological Society of America, Annual Meeting, Houston, TX.
- 112. Kehew, Alan E., Barnes, Nathaniel A., and Krishnamurthy, R.V. 2009. Age of Organic carbon in late Wisconsin till, Southwestern Michigan. Geological Society of America Abstracts with Programs, Vol 41, No. 4, p. 59
- 113. Kehew, A.E., Esch, J.M., Ewald, S.K. and Kozlowski, A.L. 2009. Constraints on aquifer occurrence in tunnel channels, Saginaw Lobe, Michigan. Abstracts with Programs, Geological Society of America, Annual Mtg. v. 41, no. 7
- 114. Bird, B.C., Kehew, A.E., and Kozlowski, A.L. 2009. Structural analysis of subglacially deformed sediment in southwest Michigan. Abstracts with Programs, Geological Society of America, Annual

Mtg. v. 41, no. 7

- 115. Abou El-Magd, A., Sultan, M., Kehew, A.E. Krishnamurthy, R.V., Cutrim, E. and Milewski, A. 2009. Towards a better understanding of the paleoclimatic regimes over the African Sahara Desert: Inferences from remote sensing and stable isotope data. Abstracts with Programs, Geological Society of America, Annual Mtg. v. 41, no. 7
- 116. Kehew, A.E. Esch, J. M, Ewald, S. K., and Kozlowski, A. L. 2011. Saginaw Lobe Tunnel Valleys, South-Central Michigan: Depths Of Subglacial Incision And Sediment Fill. Geological Society of America Abstracts with Programs, Vol. 43, No. 1, p. 57
- 117. Kehew, A.E., Esch, John M., Ewald, S. K., and Kozlowski, A. L, 2011. Constraints On Tunnel Valley Formation From Depths Of Incision And Sediment Fills. Geological Society of America Abstracts with Programs, Vol. 43, No. 5, p. 216
- 118. Abouelmagd, A., Krishnamurthy, R.V., Sultan, M., Kehew, A. E., Milewski, A., 2011, Paleoclimatic Insight Into The Depleted Isotopic Ratios Of Fossil Aquifer Waters, Northern Africa, Based On A Raleigh Distillation Model. Geological Society of America Abstracts with Programs, Vol. 43, No. 5, p. 162
- 119. Ewald, S. K., Kehew, A. E., and Esch, J. M., 2011, A Preliminary Stratigraphic Framework For The Saginaw Lobe, Barry And Calhoun Counties, Michigan. Geological Society of America Abstracts with Programs, Vol. 43, No. 5, p. 473
- 120. Kehew, A.E., Esch, J. Ewald, S.K. and Kozlowski, A.L. 2011. Subglacial drainage of the Saginaw Lobe, INQUA Congress, Bern, Switzerland, July, 2011.
- 121. Kehew, A.E., Esch, J.M., Ewald, S.K. and Kozlowski, A.L. 2011. Constraints on tunnel valley formation from depths of incision and sediment fills: Abstracts with Programs, Geological Society Annual Meeting, Minneapolis.
- 122. Kehew, A.E., Sultan, M., Harrison, W.B. III, Harrison, L., Gillespie, R., and Krishnamurthy, R.V. 2012. Restructuring and relocation of the Michigan Geological Survey: Geoscience for Economic Development. Geological Society of American, Abstracts with Programs, North-Central Meeting, Dayton, Ohio, May 2012.
- 123. Kehew, A.E. 2012. Processes and reconstruction of southern Laurentide Ice Sheet meltwater discharges: constraints and uncertainties. Invited paper. GSA Annual Meeting. Charlotte, N.C.
- 124. Kehew, A. E., Esch, J. M., and Linker, J. S. 2013. Landforms and Stratigraphic Architecture of the Saginaw Lobe Terrain, Southern Calhoun County, Michigan (abs.) Geological Society of America, paper 39-18
- 125. Mohamed, Abdelmawgoud, Crossey, Laura J., Karlstrom, Karl E., Kehew, Alan E., Sultan, Mohamed And Krishnamurthy, R.V., 2014. Structural Control Of The Continental-Scale Nubian Sandstone Aquifer System Constrained By Hydrochemical, Stable Isotopes, And Noble Gas Data. (abs.) Geological Society of America Abstracts with Programs, Vol. 46, No. 6, p.117
- 126. Kehew, A.E. and Esch, J.M. 2015, Frank Leverett's Description Of The Saginaw Lobe Terrain InSouthernMichigan: How Does It Stand Up Today? (abs.) Geological Society of American North-Central Meeting, Abstracts with Programs, Vol. 47, No. 5, p.3

- 127. KEHEW, A. E., ESCH, John M., LINKER, John S., KOZLOWSKI, Andrew L., WOOLEVER, Caleb, EWALD, Stephanie K., GUZMAN, Ivan and KARKI, Sita, 2015, A NEW GEOLOGIC MAP FOR BARRY COUNTY, MICHIGAN Geological Society of America Abstracts with Programs. Vol. 47, No. 7, p.120
- 128. HUSSIEN, H.M., KEHEW, A. E., AGGOUR, T.A., KORANY, Ezzat A., ABOTALIB, Z.A., ABDELMOHSEN, H., MORSY, S.M. and RABIE, M. 2015. AN INTEGRATED APPROACH (REMOTE SENSING, GEOPHYSICS, STABLE ISOTOPES, FIELD AND HYDROCHEMISTRY) FOR IDENTIFICATION OF POTENTIAL AQUIFER ZONES IN WADI QENA BASIN, EASTERN DESERT, EGYPT Geological Society of America *Abstracts with Programs*. Vol. 47, No. 7, p.749
- 129. VANDERMEER, Sarah M. and KEHEW, A. E. 2015. SURFICIAL MAPPING OF PICTURED ROCKS NATIONAL LAKESHORE, MICHIGAN: INDIAN TOWN 7.5-MINUTE QUADRANGLE. Geological Society of America *Abstracts with Programs*. Vol. 47, No. 7, p.114
- 130. Kehew, A.E. and Esch, J.M. 2015, Frank Leverett's Description of the Saginaw Lobe Terrain InSouthernMichigan: How Does It Stand Up Today? (abs.) Geological Society of American North-Central Meeting, Abstracts with Programs, Vol. 47, No. 5, p.3

# MAPS

1996-1998 Twelve 71/2 minute quad glacial terrain maps; 1:24,000 scale, in St. Joseph County, Michigan. Released as open-file maps by the Michigan Department of Environmental Quality; Geological Survey Division. Submitted in digital form in ARC INFO format. Various student co-authors.

1999-2002. Twelve 71/2 minute quad glacial terrain maps, 1:24,000 scale in Van Buren County, Michigan. Released as open-file maps by the Michigan Department of Environmental Quality, Geological Survey Division. Submitted in digital form in ARC INFO format. Various student co-authors.

2003-2005. Six 71/2 minute quad glacial terrain maps, 1:24,000 scale in Allegan County, Michigan Released as open-file maps by the Michigan Department of Environmental Quality, Geological Survey Division. Submitted in digital form in ARC INFO format. Various student co-authors.

2007. Two 7/2 minute quad glacial terrain maps, 1:24,000 scale in Barry County, Michigan. Michigan Office of Geological Survey, Dept. of Environmental Quality

2008-2014. One to two 7/12 minute quad glacial terrain maps per year.

# Theses and dissertations supervised: University of North Dakota

1. Brown, David J., M.S., 1983, The effect of waste stabilization pond seepage on groundwater quality of shallow aquifers in eastern North Dakota

2. Murphy, Edward C.,M.S., 1983, The effect of oil and gas well drilling fluids on shallow groundwater in western North Dakota

3. Beaver, Frank W., Jr., M.S., 1984, The effects of seismic blasting on shallow water wells and aquifers in western North Dakota

4. Lord, Mark L., M.S., 1984, Paleohydraulics of Pleistocene drainage development of the Souris, Des Lacs, and Moose Mountain spillways, Saskatchewan and North Dakota

5. Williams, David L., M.S., 1984, The geochemical evolution of saline groundwater within a fresh water aquifer south of Oakes, North Dakota

6. Beal, William A., M.S., 1986, Contaminant migration of oil-and gas drilling fluids within the glaciated sediments of north-central North Dakota

7. Boettger, William M., M.S., 1986, Stratigraphy and depositional processes of Holocene sediments in the Souris and Des Lacs glacial-lake spillways

8. Betcher, John T., M.S., 1989, The hydrogeology of a landfill located in fine-grained lacustrine sediments west of Grand Forks, North Dakota

9. Bulger, Paul R., M.S., 1987, Evaluation of the hydrogeochemical interaction between seepage from the McVille, North Dakota municipal waste stabilization lagoon and a shallow unconfined aquifer

10. Lord, Mark, L., Ph.D., 1988, Sedimentology and stratigraphy of glacial Lake Souris, North Dakota - a proglacial lake basin inundated by catastrophic flooding

# Theses and dissertations supervised: Western Michigan University

- 1. Rudder, J.D. Jr., M.S., 1988, The significance of organic complexing in the mobility of iron in the KL Landfill leachate plume, Kalamazoo, Michigan
- 2. Milejczak, Ray, M.S., 1989, The relation of radium-226 and 228 to the groundwater geochemistry of carbon, sulfur, and chlorine near Michigan's Saginaw Bay
- 3. Kitchin, Sam, M.S., 1993, Groundwater chemistry analysis of the Saginaw Formation in Delhi Township, Michigan
- 4. Bartnik, Patrick, M.S. 1995, Hydrogeochemical delineation of a groundwater flow system, Berrien County, Michigan
- 5. Brewer, Margene K., M.S., 1991, A Regional study of ground-water quality in Barry County, Michigan.
- 6. Fahle, Eric, M.S., 1990, An analysis of dissolved organic compounds and their contribution to iron complexation in the shallow leachate plume of the west KL landfill Kalamazoo, Michigan.
- 7. Baresse, Patrick, M.S., 1991, A Hydrgeochemical characterization of a glacial-drift aquifer system in southwest Michigan

- 8. Tolliver, Robert L. M.S., 1992, Calcite cementation of Pleistocene glacial deposits in southwest Michigan
- 9. Stuk, Matt, M.S., 1993, A study of ground-water quality in a priority agricultural and livestock watershed, Cass County, Michigan
- 10. Allen, Bryan .A., M.S., 1993, The effects of composting of yard wastes on the ground-water quality: WMU Farms site, Kalamazoo, Michigan
- 11. Buening, V.E., M.S., 1994, Investigations of glacial-drift aquifer-lake interactions using hydrogeology, geochemistry, and stable isotopes at Asylum Lake, Michigan
- 12. Finkbeiner, Kim, M.S., 1994, Subsurface glacial geology between the Tekonsha and Kalamazoo moraines, Kalamazoo County, Michigan
- 13. Lovett, Cole, PhD, 1995, A Wellhead Protection Study of a Small Agricultural Community in Glaciated Terrain, As a Model For Wellhead Protection Efforts By Similar Communities
- 14. Anderson, Lisa M., M.S., 1996, A study of the chemical and physical interactions between a wetland and a shallow aquifer in Cass County, Michigan
- 15. LoVetere, Caroline, 1996, M.S., Spatial and temporal variability in the distribution of nitrate in an agriculturally-impacted aquifer, Cass County, Michigan
- 16. Gardner, R. Chris, M.S., 1997, Lithologic and Stratigraphic Analysis of Glacial Diamictons, Sturgis, Michigan
- 17. Kozlowski, Andrew L, M.S. 1999, Three dimensional mapping of the East Leroy and Union City 7.5 minute quadrangles, southwest Michigan
- 18. Chowdhury, Shafiul H., PhD. 1999. A comprehensive approach for evaluation of groundwater vulnerability to contamination.
- 19. Flint, Andrew C., M.S., 1999. Stratigraphic analysis of diamicton units in north-central St. Joseph County, Michigan.
- 20. Steeves, Eric G., M.S., 2001. The Geochemistry of a leaf composting leachate plume, Asylum Lake, Kalamazoo, Michigan.
- 21. Wong, Shannon A., M.S. 2001 Stratigraphic analysis of diamicton units in southern Allegan County, Michigan.
- 22. Unterreiner, Gerald A. PhD. 2002 Chemical, Isotopic, and Hydrogeologic investigations of an agriculturally impacted watershed, Calhoun County, Michigan.
- 23. Carlson, Kurt. M.S. 2002. Inorganic and organic geochemistry of the former Lakeside Refinery in Kalamazoo, Michigan.
- 24. Beukema, Steven P., M.S. 2003. Stratigraphy of Lake Michigan Lobe deposits in Van Buren County, Michigan.
- 25. Wallis, Eric E., M.S. 2003. Application of Geochemical Fingerprinting and Environmental Isotopes to Identify Landfill Gas Impacts to Groundwater.

- 26. Kozlowski, Andrew L, PhD 2004. Origin of the Central Kalamazoo Valley, southwestern Michigan, USA.
- 27. Nicks, Linda P. PhD, 2004. Glacial Geology of southern St. Joseph County, Michigan.
- 28. Bird, Brian C. M.S. 2005. Glacial stratigraphy and surficial geology of the Decatur, Lawrence, and Paw Paw U.S.G.S. 7.5 Minute Quadrangles in Van Buren County, Michigan.
- 29. Kendzierski, Scott, M.S. 2005. An investigation of the Interlobate Area West of Three Rivers, Michigan and Its Relationship to the Late Wisconsinan Glaciation of Southwest Michigan.
- 30. Barnes, Nathaniel A. M.S. 2007. Stratigraphy and organic carbon contents of glacial deposits in the City of Portage, Michigan, U.S. A.
- 31. LeFever, Alan, M. M.S. 2008. Morphological analysis of the Charlevoix-Antrim and Northport drumlin fields, Michigan using digital elevation models.
- 32. Woolever, C. J., M.S. 2008. Origin of Esker and Tunnel Valley Assemblages in the Saginaw Lobe, Barry County, Michigan
- 33. Anderson, Lisa M. PhD. 2009. Low-level pharmaceuticals and personal care products in the waters of Michigan.
- 34. Bird, Brian C., PhD, 2010. Glaciotectonic deformation along the Valparaiso Upland, Southwest Michigan, USA.
- 35. Abouelmagd, Abdou A. PhD 2012 Paleoclimatic regimes of the African Sahara desert during Pleistocene and the origin of groundwater in the Nubian sandstone aquifer system.
- 36. Ewald, Stephanie, M.S. 2012. A Stratigraphic Framework For The Saginaw Lobe, Barry And Calhoun Counties, Michigan.
- 37. Lingle, Derrick, M.S. 2013. High Levels Of Ammonium Originating From The Decay Of *In Situ* Organic Material In A Confined Aquifer, Ottawa County, Michigan
- 38. Ivan Guzman. M.S. 2014. Stratigraphic Framework and Landsystem Correleation for Deposits of the Saginaw Lobe, Michigan, USA.