

Dr. Norman L. Jones

Curriculum Vitae



Address 430Q Engineering Building
Brigham Young University
Provo, Utah
801-422-7569
njones@byu.edu

Position Assistant Professor (1991 - 1996)
Associate Professor (1997 - 2002)
Professor (2002 - present)
Department Chair (2018 - present)
[Dept. of Civil and Environmental Engineering](#)
[Brigham Young University](#)

Education **B.S., April 1986**
[Brigham Young University](#)
Major: Civil Engineering
Outstanding Civil Engineering Graduate
Convocation Speaker for College
Summa Cum Laude.

M.S., May 1988
[University of Texas at Austin](#)
University Fellowship Recipient
Major: Geotechnical Engineering
Thesis: Applications of Computer-Aided Design Techniques for Site Characterization in Civil Engineering

Ph.D., Dec. 1990
[University of Texas at Austin](#)
University Fellowship Recipient
Major: Geotechnical Engineering
Dissertation: Solid Modeling of Earth Masses for Applications in Geotechnical Engineering

Awards

2001 Walter L. Huber Civil Engineering Research Prize

The [American Society of Civil Engineers](#) awards this prize annually to four outstanding researchers age 40 or younger.

2002 College of Engineering & Technology Special Commendation Award

In recognition of my efforts in successfully guiding our department through the ABET re-accreditation process as the Undergraduate Coordinator.

2003 Brigham Young University Technology Transfer Award

Awarded for many years of success in technology transfer. Co-recipient with Jim Nelson and Alan Zundel. At the time of the award, our software was the most successful tech transfer project in BYU history.

2007 Utah Engineering Educator of the Year

Awarded by the Utah Chapter of the [American Council of Engineering Companies](#).

2012 Karl G. Maeser Research and Creative Arts Award

The highest award given at BYU for research.

2016 AWRA Educator of the Year

Utah Section

2021 John Hem Award for Science and Engineering

National Ground Water Association

Teaching

University Courses

I have taught the following courses:

CE En 101 - Introduction to Civil and Environmental Engineering

CE En 201 - Infrastructure

[CE En 270 - Computer Methods in Civil Engineering](#)

CE En 341 - Elementary Soil Mechanics

[CE En 540 - Geo-Environmental Engineering](#)

[CE EN 544 - Seepage and Slope Stability Analysis](#)

[CE En 547 - Ground Water Modeling](#)

CE En 641 - Advanced Soil Mechanics

Prof. Societies/ Committees

AWRA 2014 GIS in Water Resources Technical Program Chair

American Geophysical Union

National Ground Water Association

NGWA Groundwater Modeling Interest Group Committee

American Society of Civil Engineers

EWRI Groundwater Management Committee

EWRI Emerging Technologies Committee

International Editorial Board for the Journal of HydroInformatics

Editor of AQUAmundi Journal

Environmental Modeling Research Laboratory

Formerly the director of the Environmental Modeling Research Laboratory (EMRL). The EMRL was formed in 1998 and at one point was the largest research laboratory at BYU with 35 faculty-staff-students and \$1.2-1.5M per year in externally funded research. Our primary research sponsors were the US Army Corps of Engineers, but we also received funding (both directly and indirectly) from the EPA, DOE, FHWA, and the NRC. In 2007 we moved the software development activities off-campus to a consulting and software development company called [Aquaveo, LLC](#). We continue to do modeling-related research on-campus.

Hydroinformatics Laboratory

I am currently a member of the BYU Hydroinformatics Laboratory along with my BYU colleagues Jim Nelson and Dan Ames. We conduct research on hydroinformatics, big data, GIS, and web-based decision support. We work with several agencies, including NASA. We have about 25 graduate and undergraduate students and our lab is located in 406 EB.

Software

Through my research, I have directed the development of a computer program called the "Department of Defense Groundwater Modeling System" (GMS). GMS is a state-of-the-art three-dimensional environment for ground water model construction and visualization. It includes tools for site characterization including geostatistics and solid modeling of soil stratigraphy. It also includes interfaces to a large number of ground water models including MODFLOW, MODPATH, MT3DMS, SEAM3D, RT3D, FEMWATER, SEEP2D, and ADH. GMS has been designed using a conceptual model approach where model input is created in a grid independent fashion using GIS vector objects. The model discretization is then performed automatically. It also contains state-of-the-art tools for visualization of 3D model results. GMS is the most comprehensive and sophisticated groundwater modeling software available and is used by over 8000 organizations in over 100 countries.

Seminars/Short Courses I have taught approximately 75 seminars and short courses at various locations in the United States and internationally (China, Korea, Australia, Germany). The course topics have included beginning and advanced ground water modeling, and computer simulation of natural attenuation and bio-remediation. The courses are sponsored by National Ground Water Association and Aquaveo.

External Research Grants

1. Automated Mesh Generation For the TABS-2 System, \$19,000, 2/90 - 11/90, U.S. Army Engineer Waterways Experiment Station
2. A Geometry Pre-Processor for HEC-1 Employing Triangulated Irregular Networks, \$20,048, 3/91 - 10/91, U.S. Army Engineer Waterways Experiment Station
3. Real-Time Visualization for the TABS-2 Modelling System, \$14,123, 4/91 - 8/91, U.S. Army Engineer Waterways Experiment Station
4. An Investigation of X-Windows Interface Tools, \$49,556, 1/92 - 8/92, U.S. Army Engineer Waterways Experiment Station
5. Descriptive Geometry and Solid Rendering, \$24,000, 1/92 - 10/92, U.S. Army Engineer Waterways Experiment Station
6. An Investigation of Automated Pre-processing Schemes for TIN-Based Drainage Analysis, \$34,750, 4/92-10/92, U.S. Army Engineer Waterways Experiment Station
7. A Comprehensive Graphical User Environment for Groundwater Flow and Transport Modeling, \$246,526, 6/93-9/94, U.S. Army Engineer Waterways Experiment Station
8. An Integrated Surface Flow Modeling System, \$131,848, 1/94-1/95, U.S. Army Engineer Waterways Experiment Station
9. Productivity and Management Tools for Groundwater Flow and Transport Modeling, \$207,404, 5/94-4/95, U.S. Army Engineer Waterways Experiment Station
10. Enhanced Tools for Quality Control in Automated Groundwater Transport Modeling, \$246,553, 1/95-12/95, U.S. Army Engineer Waterways Experiment Station
11. Visualization for Two-Dimensional Surface Runoff Modeling, \$98,221, 1/95-10/95, U.S. Army Engineer Waterways Experiment Station
12. Visualization Tools for Two-Dimensional Finite Element Hydrologic Modeling, \$93,933, 11/95-10/96, U.S. Army Engineer Waterways Experiment Station
13. A Graphical Environment for Multi-Dimensional Surface Water Modeling, \$49,789, 3/96-9/96, U.S. Army Engineer Waterways Experiment Station
14. A Conceptual Modeling Approach to Pre-processing of Groundwater Models, \$475,743, 11/95-11/97, U.S. Army Engineer Waterways Experiment Station
15. Hydrosystems Modeling, \$2,458,083, 5/97-4/02, U.S. Army Engineer Waterways Experiment Station
16. Second Generation Hydroinformatics Research, \$4,958,127. U.S. Army Engineer Research and Development Center.
17. Flux Calculations and 3D Visualization for the SCAPS Piezocone and GeoViz System, \$34,931, U.S. Navy.
18. Development of modeling methods and tools for predicting coupled reactive transport processes in porous media under multiple scales. \$949,000. US Dept. of Energy. 1/07-12/09.
19. CI-WATER: Cyberinfrastructure to Advance High Performance Water Resource Modeling, \$3,435,873. National Science Foundation - EPSCoR. 9/11-8/14.
20. Comprehensive Streamflow Prediction and Visualization to Support Integrated Water Management, \$599,823. NASA SERVIR, 8/16-8/19.
21. Daniel P. Ames, E. James Nelson, Norman L. Jones, An AmeriGEOSS Cloud-based Platform for Rapid Deployment of GEOGLOWS Water and Food Security Decision Support Apps, \$540,658, NASA GEO, 1/2018-12/2020
22. Geospatial Information Tools That Use Machine-Learning to Enable Sustainable Groundwater Management in West Africa, \$657,232. NASA SERVIR, 11/19-11/22.
23. Advancing the NASA GEOGloWS Toolbox for Regional Water Resources Management and Decision Support. \$1.2M. NASA GEOGLOWS. 2022-2025. Dan Ames, Jim Nelson, Gus Williams, Norm Jones.
24. CIROH: National Cyberinfrastructure Framework for Engaging the Hydrologic Community (NCF). \$1,822,418. National Oceanographic and Atmospheric Administration. 2022-2025. Dan Ames, Jim Nelson, Gus Williams, Norm Jones.

Summary: PI or Co-PI on 24 projects totaling \$19,335,791.

Peer-Reviewed Publications

1. Jones, Norman L., Stephen G. Wright, and David R. Maidment, "Watershed delineation with triangle-based terrain models," *ASCE Journal of Hydraulic Engineering*, October, 1990, pp.

- 1232-1251.
2. Jones, Norman L. and Stephen G. Wright, "Algorithm for smoothing triangulated surfaces," *ASCE Journal of Computing in Civil Engineering*, January, 1991, pp. 85-102.
 3. Jones, Norman L. and Stephen G. Wright, "Solid modeling for site representation in geotechnical engineering," *Geotechnical Engineering Congress*, June, 1991, pp. 1021-1031.
 4. Richards, D.R., Norman L. Jones, H. C. Lin, "Graphical innovations in surface water flow analysis," *First International Conference on Integrating Geographic Information Systems and Environmental Modelling*, Sept. 15-19, 1991, Boulder, Colorado.
 5. Jones, Norman L. and D.R. Richards, "Mesh generation for estuarine flow modelling," *ASCE Journal of Waterway, Port, and Coastal Engineering*, Vol. 118, No. 6, November/December, 1992, pp. 599-614.
 6. Jones, Norman L. and Stephen G. Wright, "Subsurface characterization with solid models," *ASCE Geotechnical Engineering Journal*, Vol. 119, No. 11, November, 1993, pp. 1823-1839.
 7. Nelson, James, Norman L. Jones, and A. Woodruff Miller, "Integrated hydrologic simulation with TINs," *Advances in Hydroscience and Engineering*, Volume 1, Sam S.Y. Wang, Ed., Proceedings of the First International Conference on Hydro-Science and Engineering, Washington, D.C., June 7-11, 1993, pp.571-578.
 8. Jones, Norman L., and Takafumi Saito, "Flow animation techniques for two-dimensional hydrodynamic modeling," *Advances in Hydroscience and Engineering*, Volume 1, Sam S.Y. Wang, Ed., Proceedings of the First International Conference on Hydro-Science and Engineering, Washington, D.C., June 7-11, 1993, pp. 2091-2096.
 9. Jones, Norman L., and E. J. Nelson, "Construction of TINs from borehole data," *Advances in Site Characterization: Data Acquisition, Data Management, and Data Interpretation*, ASCE Geotechnical Publication No. 37, 1993, pp. 13-26.
 10. Nelson, J. E., Norman L. Jones, and A. Woodruff Miller, "An algorithm for precise drainage basin delineation," *ASCE Journal of Hydraulic Engineering*, Vol. 120, No. 3, March, 1994, pp. 298-312.
 11. Jones, Norman L., and D. R. Richards, "A comprehensive modeling environment," *Proceedings of the First International Conference on HYDROINFORMATICS*, Delft, the Netherlands, Sept. 19-23, 1994, pp. 317-322.
 12. Nelson, E. J., and Norman L. Jones, "Reducing roundoff error in digital elevation data," *Journal of Hydrology*, Vol. 169, 1995, pp. 37-49.
 13. Jones, Norman L., S. J. Owen, and E. C. Perry, "Plume characterization with natural neighbor interpolation," *GEOENVIRONMENT 2000*, ASCE Geotechnical Special Publication No 46, 1995, pp. 331-345.
 14. James Nelson, A. Woodruff Miller, and Norman L. Jones, "A TIN based watershed delineation technique for both rural and urban runoff," *Water in the 21st Century: Conservation, Demand, and Supply*, American Water Resources Association, Salt Lake City, Utah, April 1995, pp. 643-652.
 15. Owen, Steven J., Norman L. Jones, and Jeffrey P. Holland, "A comprehensive modeling environment for the simulation of groundwater flow and transport," *Engineering With Computers*, Dec., 1996, pp. 235-242.
 16. Jones, Norman L., and R. J. Davis, "Three-Dimensional Characterization of Contaminant Plumes," 1996 Meeting of the Transportation Research Board, Washington, D.C., January 7-11, 1996.
 17. Alan K. Zundel, and Norman L. Jones, "An integrated surface water modeling system," *Proceedings of the Second International Conference on HYDROINFORMATICS*, Zurich, Switzerland, Sept. 9-13, 1996.
 18. Norman L. Jones, and David R. Richards, "A conceptual model approach to hydroinformatics," *Proceedings of the Second International Conference on HYDROINFORMATICS*, Zurich, Switzerland, Sept. 9-13, 1996.
 19. David R. Richards, and Norman L. Jones, "A blueprint for hydroinformatic design of US Army hydrologic models," *Proceedings of the Second International Conference on HYDROINFORMATICS*, Zurich, Switzerland, Sept. 9-13, 1996.
 20. Jones, Norman L., E.V. Edris, Jr., and M.J. Kennard, "Three-dimensional characterization of contaminant plumes using cone penetrometer data," *Proceedings of the Second International Conference on Environmental Geotechnics*, IS-Osaka '96, Nov. 5-8, 1996, Osaka, Japan.
 21. Staten, Matthew L., and Norman L. Jones, "Local Refinement of Three-Dimensional Finite Element Meshes," *Engineering With Computers*, 1997, Vol. 13, pp. 165-174.
 22. Jones, Norman L., E.V. Edris, Jr., "Calibration tools for hydroinformatics systems," *Proceedings of the Third International Conference on HYDROINFORMATICS*, Copenhagen, Denmark, Aug. 24-26, 1998.
 23. Zundel, A.K., Demirbilek, Z., Fugal, A.L., N.L. Jones, "Automatic definition of two-dimensional finite element coastal models," *Proceedings of the Third International Conference on HYDROINFORMATICS*, Copenhagen, Denmark, Aug. 24-26, 1998.

24. Nelson, E.J., N.L. Jones, R.J. Berrett, "Adaptive tessellation method for creating TINs from GIS data," *ASCE Journal of Hydrologic Engineering*, Vol. 4, No. 1, January, 1999.
25. Jones, Norman L., A.M. Lemon, C. Talbot, "Integrating GIS Data with 3D Finite Element Groundwater Models," *Proceedings of the International Symposium 2000 on Groundwater IAHR*, Saitama, Japan, May 8-10, 2000.
26. Jones, Norman L., Michael J. Kennard, Alan K. Zundel, "Fast algorithm for generating sorted contour strings," *Computers and Geosciences*, Vol. 26, pp. 831-837, 2000.
27. Jones, Norman L., E. James Nelson and Colby T. Manwaring, "Managing temporal data in a comprehensive modeling environment," *Journal of Hydroinformatics*, Vol. 2, No. 2, pp. 105-112, 2000.
28. Jones, Norman L., Alan M. Lemon, and Fred T. Tracy, "A hybrid approach to flow net generation," *International Journal of Numerical and Analytical Methods in Geomechanics*, Vol. 25, pp. 1339-1349, Sept. 2001.
29. Jones, Norman L., Trevor J. Budge, Alan K. Zundel, Alan M. Lemon, "Generating MODFLOW grids from boundary-representation solid models," *Ground Water*, Vol. 40, No. 2, March-April 2002, pp. 194-200.
30. Jones, Norman L., R.J. Davis, W. Sabbah, "A comparison of 3D interpolation techniques for plume characterization," *Ground Water*, Vol. 41, No. 4, July-August 2003, pp. 411-419.
31. Lemon, A.M., N.L. Jones, "Building solid models from boreholes and user-defined cross-sections," *Computers and Geosciences*, Vol. 29, No. 5, June, 2003, pp 547-555.
32. Jones, N.L., 2002, "Using transition probability geostatistics with MODFLOW," *Calibration and Reliability in Groundwater Modelling: A Few Steps Closer to Reality* (Proceedings of ModelCARE'2002, Prague, Czech Republic, 17-20 June 2002). IAHS Publ. no. 277, pp. 359-364.
33. Jones, N.L., J.I. Green, and J.R. Walker, "Stochastic inverse modeling for capture zone analysis," *Groundwater Quality Modeling and Management Under Uncertainty*, Proceedings of the Symposium, EWRI Congress, June 23-26, 2003, Philadelphia, Pa., Srikanta Mishra, Ed., American Society of Civil Engineers, pp. 1-12.
34. Jones, Norman L., J.R. Walker, & S.F. Carle, "Hydrogeologic unit flow characterization using transition probability geostatistics," *Ground Water*, Vol. 43, No. 2, Mar-Apr 2005, pp. 285-289.
35. Wallace, R.M., A. Byrd, C. Butler, N. Jones, R. Jones, "Generic Model Data Format", *Proceedings of the European Simulation Interoperability Workshop 2005*, Toulouse France. June. (document # 05E-SIW-046).
36. Jones, Norman L., T.P. Clement, C.H. Hansen, "A Three-Dimensional Analytical Modeling System for Risk Assessment at Chlorinated Solvent Sites," *Ground Water*, Vol. 44, No. 5, July-August 2006, pp. 613-617.
37. R. Wallace, K. Pathak, J. P. Holland, D. Stuart, C. Butler, D. R. Richards, M. Fife, N. L. Jones and J. Harris, "Information infrastructure for integrated ecohydraulic and water resources modeling and assessment", *Journal of Hydroinformatics*, Vol. 8, No. 4, 2006, pp 317-333.
38. Strasberg G., D.R. Maidment, N.L. Jones, "A geographic data model for representing ground water systems," *Ground Water*, Vol. 45, No. 4, July-August 2007, pp. 515-518.
39. Jones N.L., and G. Strassberg, "The Arc Hydro MODFLOW data model", *Water Resources Impact*, Vol. 10, Num 1, January 2008, pp. 17-19.
40. Williams, G, N. Jones, T. Winkel, A. Mayo, 2008, "Field description and multi-phase modeling of a naturally occurring inverted density groundwater interface," *Proceedings of the American Society of Civil Engineers (ASCE) Environmental and Water Resources Institute*, May 2008, Honolulu, HI.
41. Williams, G, N. Jones, T. Winkel, A. Mayo, 2008, "Field measurements and an osmotic conceptual model of a steady-state groundwater pressure ridge," *Proceedings of the American Society of Civil Engineers (ASCE) Environmental and Water Resources Institute*, May 2008, Honolulu, HI.
42. Jones N.L., J.R. Handy, R.M. Wallace, "Levee Analyst: A GIS-based levee modeling and management system," *Proceedings of the Association of State Dam Safety Officials Annual Conference 2008*, September 7-11, Indian Wells, California.
43. Gustavious P. Williams, Norman Jones, and Jeffrey Handy, "A Heuristic Algorithm for Optimal Alignment and Matching of Borehole Stratigraphy", *Proceedings of the ASCE Environmental and Water Resources Institute 2008 Conference*, Kansas City, Kansas, May 2009.
44. Jones, N., Lemon, A, Patton, R., "Automated well permitting in a coastal region using SEAWAT and ArcGIS", *SWIM21 - 21st Salt Water Intrusion Meeting*, Azores, Portugal, June 21-26, 2010, pp. 187-190.
45. Strassberg, G., Jones, N., "Arc Hydro Groundwater Data Model and Tools: Overview and Use Cases," *AQUA mundi*, Vol. 1, No. 2, December 2010, pp. 101-114.
46. Jones, N.L., M. Smilowitz, and D. Whitehead, "The Sacramento Regional Groundwater Model", *World Environmental & Water Resources Congress 2011*, May 22-26, Palm Springs,

- CA.
47. Jones, N., Wallace, R., Jones, R., Butler, C., Zundel, A. "Efficient Application Programming Interface for Multi-Dimensional Modeling Data", *Journal of Hydroinformatics*, Vol. 14, No 1., 2012, pp 1-12.
 48. Whiteaker, T., N. Jones, G. Strassberg, A. Lemon, D. Gallup, "GIS-based Data Model and Tools for Creating and Managing Two-Dimensional Cross Sections," *Computers and Geosciences*, Vol 29, Feb 2012.
 49. Christensen, Scott D., Michael Burns, Gil Strassberg, and Norman L. Jones. "A Web-Based Groundwater Mapping and Visualization Tool Using Google Earth." In *World Environmental & Water Resources Congress*. Duke Energy Convention Center, Cincinnati, OH, 2013.
 50. Jones, Norman L., E. James Nelson, Gustavious P. Williams, Fred Ogden, David Tarboton, Steve Burian. "CI-WATER: Cyberinfrastructure to Advance High Performance Water Resource Modeling." In *World Environmental & Water Resources Congress*. Duke Energy Convention Center, Cincinnati, OH, 2013.
 51. Latu, Kilisimasi, Nathan R. Swain, Scott D. Christensen, Norman L. Jones, James E. Nelson, and Gustavious P. Williams. "Essential GIS Technologies for Hydrologic Simulation Applications in Cloud Computing." In *World Environmental & Water Resources Congress*. Duke Energy Convention Center, Cincinnati, OH, 2013.
 52. Swain, N. R., Christensen, S. D., Latu, K., Jones, N. L., Nelson, E. J., & Williams, G. P. (2013). A Geospatial Relational Data Model for Ingesting GSSHA Computational Models: A Step Toward Two-Dimensional Hydrologic Modeling in the Cloud. *World Environmental and Water Resources Congress 2013*, 2716–2725. <https://doi.org/10.1061/9780784412947.269>
 53. Jones, N. L., Lemon, A. M. and Kennard, M. J. (2013), Efficient Storage of Large MODFLOW Models. *Ground Water*. doi: 10.1111/gwat.12060
 54. Jones, N., Nelson, J., Swain, N., Christensen, S., Tarboton, D. Dash, P. Tethys: A Software Framework for Web-Based Modeling and Decision Support Applications. In: Ames, D.P., Quinn, N.W.T., Rizzoli, A.E. (Eds.), *Proceedings of the 7th International Congress on Environmental Modelling and Software*, June 15-19, San Diego, California, USA. ISBN: 978-88-9035-744-2
 55. Jones, N., Griffiths, T., Lemon, A., Kudlas, S. Automated Well Permitting in Virginia's Coastal Plain Using SEAWAT and GIS Geoprocessing Tools. In: Ames, D.P., Quinn, N.W.T., Rizzoli, A.E. (Eds.), *Proceedings of the 7th International Congress on Environmental Modelling and Software*, June 15-19, San Diego, California, USA. ISBN: 978-88-9035-744-2
 56. Y. Fan, S. Richard, R. S. Bristol, S. E. Peters, S. E. Ingebritsen, N. Moosdorf, A. Packman, T. Gleeson, I. Zaslavsky, S. Peckham, L. Murdoch, M. Fienen, M. Cardiff, D. Tarboton, N. Jones, R. Hooper, J. Arrigo, D. Gochis, J. Olson and D. Wolock (2014), DigitalCrust – a 4D data system of material properties for transforming research on crustal fluid flow, *GeoFluids*, Article first published online: 7 OCT 2014 | DOI: 10.1111/gfl.12114.
 57. Swain, N.R., K. Latu, S.D. Christensen, N.L. Jones, E.J. Nelson, D.P. Ames, G.P. Williams (2015). "A review of open source software solutions for developing water resources web applications." *Environmental Modeling & Software* 67: 108-117.
 58. Jones, David, Norm Jones, James Greer, and Jim Nelson, "A cloud-based MODFLOW service for aquifer management decision support," *Computers and GeoSciences*, Vol. 78, pp. 81-87, 2015.
 59. Dolder, H., Jones, N., and Nelson, E. (2015). "Simple Method for Using Precomputed Hydrologic Models in Flood Forecasting with Uniform Rainfall and Soil Moisture Pattern." *J. Hydrol. Eng.*, [10.1061/\(ASCE\)HE.1943-5584.0001232](https://doi.org/10.1061/(ASCE)HE.1943-5584.0001232) , 04015039.
 60. Fatichi, S., Vivoni, E.R., Ogden, F.L., Ivanov, V.Y., Mirus, B., Gochis, D., Downer, C.W., Camporese, M., Davidson, J.H., Ebel, B., Jones, N., Kim, J., Mascaro, G., Niswonger, R., Restrepo, P., Rigon, R., Shen, C., Sulis, M., and Tarboton, D. (2016). *An Overview of Challenges, Current Applications and Future Trends of Distributed Process-based Models in Hydrology*. *Journal of Hydrology*. Vol 537, 45-60. DOI:10.1016/j.jhydrol.2016.03.026
 61. Snow, Alan D., Scott D. Christensen, Nathan R. Swain, E. James Nelson, Daniel P. Ames, Norman L. Jones, Deng Ding, Nawajish S. Noman, Cédric H. David, Florian Pappenberger, and Ervin Zsoter, 2016. *A High-Resolution National-Scale Hydrologic Forecast System from a Global Ensemble Land Surface Model*. *Journal of the American Water Resources Association (JAWRA)* 52(4):950–964, DOI: 10.1111/1752-
 62. Perez, J. Fidel, Nathan R. Swain, Herman G. Dolder, Scott D. Christensen, Alan D. Snow, E. James Nelson, and Norman L. Jones, 2016. *From Global to Local: Providing Actionable Flood Forecast Information in a Cloud-Based Computing Environment*. *Journal of the American Water Resources Association (JAWRA)* 52(4):965–978. DOI: 10.1111/1752-1688.12392
 63. Swain, N. R., S. D. Christensen, A. D. Snow, H. Dolder, G. Espinoza-Dávalos, E. Goharian, N. L. Jones, E. J. Nelson, D. P. Ames and S. J. Burian (2016). "A new open source platform for lowering the barrier for environmental web app development." *Environmental Modelling & Software* 85: 11-26.

64. Souffront Alcantara, Michael A.; Crawley, Shawn; Stealey, Michael J.; Nelson, E. James; Ames, Daniel P.; and Jones, Norm L. (2017) "Open Water Data Solutions for Accessing the National Water Model," *Open Water Journal*: Vol. 4 : Iss. 1 , Article 3.
65. Souffront Alcantara, Michael, C Kesler, M Stealey, J Nelson, D Ames, N Jones, 2017. Cyberinfrastructure and Web Apps for Managing and Disseminating the National Water Model, *Journal of the American Water Resources Association, JAWRA Journal of the American Water Resources Association* 54, no. 4 (2018): 859-871.
66. Christensen, Scott D., Nathan R. Swain, Norman L. Jones, E. James Nelson, Alan D. Snow, and Herman G. Dolder. "A Comprehensive Python Toolkit for Accessing High-Throughput Computing to Support Large Hydrologic Modeling Tasks." *JAWRA Journal of the American Water Resources Association* 53, no. 2 (2017): 333-343.
67. Nelson, E. J., Pulla, S. T., Matin, M. A., Shakya, K., Jones, N., Ames, D. P., Ellenberg, W.L., Markert, K.N., Hales, R. (2019). Enabling Stakeholder Decision-Making With Earth Observation and Modeling Data Using Tethys Platform. *Frontiers in Environmental Science*, 7. <https://doi.org/10.3389/fenvs.2019.00148>
68. Purdy, A. J., David, C. H., Sikder, M. S., Reager, J. T., Chandanpurkar, H. A., Jones, N. L., & Matin, M. A. (2019). An Open-Source Tool to Facilitate the Processing of GRACE Observations and GLDAS Outputs: An Evaluation in Bangladesh. *Frontiers in Environmental Science*, 7. <https://doi.org/10.3389/fenvs.2019.00155>
69. Souffront Alcantara, M. A., Nelson, E. J., Shakya, K., Edwards, C., Roberts, W., Krewson, C., Ames, D. P., Jones, N. L., Gutierrez, A. (2019). Hydrologic Modeling as a Service (HMaaS): A New Approach to Address Hydroinformatic Challenges in Developing Countries. *Frontiers in Environmental Science*, 7. <https://doi.org/10.3389/fenvs.2019.00158>
70. Evans, S.; Williams, G.P.; Jones, N.L.; Ames, D.P.; Nelson, E.J. Exploiting Earth Observation Data to Impute Groundwater Level Measurements with an Extreme Learning Machine. *Remote Sens.* 2020, 12, 2044. <https://doi.org/10.3390/rs12122044>
71. Evans, S.W.; Jones, N.L.; Williams, G.P.; Ames, D.P.; Nelson, E.J. (2020). Groundwater Level Mapping Tool: An open source web application for assessing groundwater sustainability. *Environmental Modeling and Software*, Vol 131, September 2020. <https://doi.org/10.1016/j.envsoft.2020.104782>
72. Nelson, S. T., Robinson, S., Rey, K., Brown, L., Jones, N., Dawrs, S. N., et al. (2021). Exposure Pathways of Nontuberculous Mycobacteria Through Soil, Streams, and Groundwater, Hawai'i, USA. *GeoHealth*, 5, e2020GH000350. <https://doi.org/10.1029/2020GH000350>
73. Sanchez Lozano J, Romero Bustamante G, Hales R, Nelson EJ, Williams GP, Ames DP, Jones NL. A Streamflow Bias Correction and Performance Evaluation Web Application for GEOGloWS ECMWF Streamflow Services. *Hydrology*. 2021; 8(2):71. <https://doi.org/10.3390/hydrology8020071>
74. Dolder, Danisa; Williams, Gustavious P.; Miller, A. W.; Nelson, Everett J.; Jones, Norman L.; Ames, Daniel P. 2021. "Introducing an Open-Source Regional Water Quality Data Viewer Tool to Support Research Data Access" *Hydrology* 8, no. 2: 91. <https://doi.org/10.3390/hydrology8020091>
75. Bustamante, G.R.; Nelson, E.J.; Ames, D.P.; Williams, G.P.; Jones, N.L.; Boldrini, E.; Chernov, I.; Sanchez Lozano, J.L. Water Data Explorer: An Open-Source Web Application and Python Library for Water Resources Data Discovery. *Water* 2021, 13, 1850. <https://doi.org/10.3390/w13131850>
76. Hales, R.C.C.; Nelson, E.J.J.; Williams, G.P.P.; Jones, N.; Ames, D.P.P.; Jones, J.E.E. The Grids Python Tool for Querying Spatiotemporal Multidimensional Water Data. *Water* 2021, 13, 2066. <https://doi.org/10.3390/w13152066>
77. Khattar, R., Hales, R., Ames, D. P., Nelson, E. J., Jones, N., & Williams, G. (2021). Tethys App Store: Simplifying deployment of web applications for the international GEOGloWS initiative. *Environmental Modelling & Software*, 105227. <https://doi.org/10.1016/j.envsoft.2021.105227>
78. McStraw, T.C., Pulla, S.T., Jones, N.L., Williams, G.P., David, C.H., Nelson, J.E., and Ames, D.P. 2021. "An Open-Source Web Application for Regional Analysis of GRACE Groundwater Data and Engaging Stakeholders in Groundwater Management." *Journal of the American Water Resources Association* 1– 15. <https://doi.org/10.1111/1752-1688.12968>.
79. Barbosa, S.A.; Pulla, S.T.; Williams, G.P.; Jones, N.L.; Mamane, B.; Sanchez, J.L. Evaluating Groundwater Storage Change and Recharge Using GRACE Data: A Case Study of Aquifers in Niger, West Africa. *Remote Sens.* 2022, 14, 1532. <https://doi.org/10.3390/rs14071532>
80. Nishimura, R.; Jones, N.L.; Williams, G.P.; Ames, D.P.; Mamane, B.; Begou, J. Methods for Characterizing Groundwater Resources with Sparse In Situ Data. *Hydrology* 2022, 9, 134. <https://doi.org/10.3390/hydrology9080134>
81. Ramirez, S. G., Hales, R. C., Williams, G. P., & Jones, N. L. (2022). Extending SC-PDSI-PM with neural network regression using GLDAS data and Permutation Feature Importance.

Environmental Modelling & Software, 105475.

<https://doi.org/10.1016/j.envsoft.2022.105475>

82. Hales, R. C., Nelson, E. J., Souffront, M., Gutierrez, A. L., Prudhomme, C., Kopp, S., Ames, D. P., Williams, G. P., & Jones, N. L. Advancing global hydrologic modeling with the GEOGloWS ECMWF streamflow service. *Journal of Flood Risk Management*, e12859. <https://doi.org/10.1111/jfr3.12859>
83. Ramirez, S.G.; Williams, G.P.; Jones, N.L. Groundwater Level Data Imputation Using Machine Learning and Remote Earth Observations Using Inductive Bias. *Remote Sens.* 2022, *14*, 5509. <https://doi.org/10.3390/rs14215509>
84. Jones, J.E.; Hales, R.C.; Larco, K.; Nelson, E.J.; Ames, D.P.; Jones, N.L.; Iza, M. Building and Validating Multidimensional Datasets in Hydrology for Data and Mapping Web Service Compliance. *Water* 2023, *15*, 411. <https://doi.org/10.3390/w15030411>
85. Ramirez, S.G.; Williams, G.P.; Jones, N.L.; Ames, D.P.; Radebaugh, J. Improving Groundwater Imputation through Iterative Refinement Using Spatial and Temporal Correlations from In Situ Data with Machine Learning. *Water* 2023, *15*, 1236. <https://doi.org/10.3390/w15061236>

Books Manuals Reports

1. Jones, N.L., *FastTABS Reference Manual*, Engineering Computer Graphics Laboratory, Brigham Young University, 1992. 150 pp.
2. Jones, N.L., *FastTABS Tutorials*, Engineering Computer Graphics Laboratory, Brigham Young University, 1992. 85 pp.
3. Jones, N.L., D.R. Richards, *RMA-2 Primer*. , U.S. Army Engineer Waterways Experiment Station, 1993. 165 pp.
4. Jones, N.L., *GMS v1.0 Reference Manual*, Environmental Modeling Research Laboratory, Brigham Young University, Provo, Utah, 1994, 300 pp.
5. Jones, N.L., *GMS v1.0 Tutorials*, Environmental Modeling Research Laboratory, Brigham Young University, Provo, Utah, 1994, 175 pp.
6. Jones, N.L., *GMS v2.0 Reference Manual*, Environmental Modeling Research Laboratory, Brigham Young University, Provo, Utah, 1996, 350 pp.
7. Jones, N.L., *GMS v2.0 Tutorials*, Environmental Modeling Research Laboratory, Brigham Young University, Provo, Utah, 1996, 200 pp.
8. Jones, N.L., *GMS v2.1 Reference Manual*, Environmental Modeling Research Laboratory, Brigham Young University, Provo, Utah, 1997, 425 pp.
9. Jones, N.L., *GMS v2.1 Tutorials*, Environmental Modeling Research Laboratory, Brigham Young University, Provo, Utah, 1997, 230 pp.
10. Lin, Richards, Talbot, Yeh, Cheng, Cheng, Jones, *FEMWATER (version 2.0) : A Three-Dimensional Finite Element Computer Model for Simulating Density-Dependent Flow and Transport in Variably Saturated Media*. Technical Report CHL-97-12, U.S. Army Engineer Waterways Experiment Station, July 1997, 151 pp.
11. Jones, N.L., *GMS v3.0 Reference Manual*, Environmental Modeling Research Laboratory, Brigham Young University, Provo, Utah, 1999, 584 pp.
12. Jones, N.L., *GMS v3.0 Tutorials*, Environmental Modeling Research Laboratory, Brigham Young University, Provo, Utah, 1999, 261 pp.
13. *Jones, N.L., *GMS v3.0 File Formats*, Environmental Modeling Research Laboratory, Brigham Young University, Provo, Utah, 1999, 94 pp.
14. *T.P. Clement, and N.L.Jones, *RT3D Tutorials for GMS v3.0 Users*, Battelle Pacific Northwest National Lab, Hanford, Washington, 1998, 99 pp.
15. Jones, N.L., *SEEP2D Primer*. Environmental Modeling Research Laboratory, Brigham Young University, Provo, Utah, 1999, 94 pp.
16. Richards, Lin, Cheng, Talbot, Jones, *Development of a multidimensional hydroinformatic system for simulating canal, overland, and groundwater flow in South Florida*, US Army Engineer Waterways Experiment Station, Vicksburg, Mississippi, 2000, 350 pp.
17. Jones, N.L., *GMS v3.1 HTML Help Document*, Environmental Modeling Research Laboratory, Brigham Young University, Provo, Utah, 2000.
18. Jones, N.L., *GMS v3.1 Tutorials*, Environmental Modeling Research Laboratory, Brigham Young University, Provo, Utah, 2000, 313 pp.
19. T.P. Clement, and N.L.Jones, *RT3D Tutorials for GMS v3.1 Users*, Environmental Modeling Research Laboratory, Brigham Young University, Provo, Utah, 2000, 97 pp.
20. N.L. Jones, *Ground Water Modeling with GMS Training Manual, EMS-I*, Provo, Utah, 2000.
21. N.L. Jones, *Advance Ground Water Modeling with GMS Training Manual, EMS-I*, Provo, Utah, 2000.
22. Lin, Richards, Talbot, Yeh, Cheng, Cheng, Jones, *FEMWATER: A Three-Dimensional Finite Element Computer Model for Simulating Density-Dependent Flow and Transport in Variably*

- Saturated Media, Version 3.0*. Technical Report CHL-01-??, U.S. Army Engineer Waterways Experiment Station, 2001, 153 pp.
23. EMRL, Groundwater Modeling System (GMS) version 4.0 Help File, Environmental Modeling Research Laboratory, Brigham Young University, Provo, Utah, 2002.
 24. EMRL, Groundwater Modeling System (GMS) version 4.0 Tutorial Documents, Volumes 1-4, Environmental Modeling Research Laboratory, Brigham Young University, Provo, Utah, 2002.
 25. EMRL, Groundwater Modeling System (GMS) version 4.0 Tutorial Documents, Volumes 1-4, Environmental Modeling Research Laboratory, Brigham Young University, Provo, Utah, 2002.
 26. EMRL, Groundwater Modeling System (GMS) version 5.0 Help File, Environmental Modeling Research Laboratory, Brigham Young University, Provo, Utah, 2004.
 27. EMRL, Groundwater Modeling System (GMS) version 5.0 Tutorial Documents, Volumes 1-4, Environmental Modeling Research Laboratory, Brigham Young University, Provo, Utah, 2004.
 28. X MDF User Manual, Environmental Modeling Research Laboratory, Brigham Young University, Provo, Utah, 2004.
 29. EMRL, Groundwater Modeling System (GMS) version 6.0 Help File, Environmental Modeling Research Laboratory, Brigham Young University, Provo, Utah, 2005.
 30. EMRL, Groundwater Modeling System (GMS) version 6.0 Tutorial Documents, Volumes 1-4, Environmental Modeling Research Laboratory, Brigham Young University, Provo, Utah, 2005.
 31. South Florida RSM Peer Review Report.
 32. X MDF manual published as an ERDC technical report.
 33. Sacramento Regional Model Groundwater Modeling Report, Aquaveo LLC, Provo, Utah. 2010
 34. Clement, T.P., M.O. Barnett, C. Zheng, N.L. Jones, Development of Modeling Methods and Tools for Predicting Coupled Reactive Transport Processes in Porous Media at Multiple Scales (2010), Auburn, Auburn University.
 35. Strassberg, G., Jones, N., Maidment, D. (2011). *Arc Hydro Groundwater: GIS for Hydrology*. ESRI Press, Redlands, California, 250 pp.
 36. Jones, N., A. Mayo (2011). *Impact on Proposed SNWA Wells on CPB Water Rights in Northern Spring Valley, Nevada*, Aquaveo LLC, 124 pp.
 37. Ying Fan, Stephen Richard, R. Sky Bristol, Shanan E. Peters, Steven E. Ingebritsen, Nils Moosdorf, Aaron Packman, Tom Gleeson, I. Zaslavsky, S. Peckham, Lawrence Murdoch, Michael Fienen, Michael Cardiff, David Tarboton, Norman Jones, Richard Hooper, Jennifer Arrigo, D. Gochis, J. Olson and David Wolock, *DigitalCrust - a 4D data system of material properties for transforming research on crustal fluid flow*, in *Crustal Permeability*, Tom Gleeson, Steve Ingebritsen, Eds., Wiley-Blackwell, November 2016, 472 pp.
 38. Jones, N. L. and A. L. Mayo (2017). Sustainability of the SNWA Pumping Project in Spring Valley, Nevada. Provo, Utah, Aquaveo LLC: 46.
 39. Jones, N. L. and A. L. Mayo (2017). Response to June 30, 2017 SNWA Exhibits Related to Spring Valley. Provo, Utah, Aquaveo LLC: 38.

Other Technical Publications

1. Jones, Norman L., S. G. Wright, R. Gloyd, and D. Maidment, "An Algorithm for automated drainage analysis of a triangle-based terrain model," *Proceedings of the First International Conference on Applications of Advanced Technology in Transportation Engineering*, San Diego, Calif., Feb 5-8, 1989.
2. Lin, H.C., Norman L. Jones, and D.R. Richards "A microcomputer-based system for two-dimensional flow modelling," *Proceedings of the ASCE 1991 National Conference on Hydraulic Engineering and International Symposium on Ground Water*, Nashville, Tennessee, July 29 - Aug. 2, 1991.
3. Jones, Norman L., and James Nelson, "Drainage analysis using triangulated irregular networks," *ASCE 8th Conference on Computing in Civil Engineering - Symposium on Geographic Information Analysis*, June 7-9, 1992, Dallas, Texas.
4. Jones, Norman L., and James Nelson, "Automated delineation of catchment area boundaries with TINs," *ASCE Water Forum 1992*, Aug 3-5, 1992, Baltimore, Maryland.
5. Lin, H.C., Norman L. Jones, D.R. Richards, "Multitasking application of surface water flow modeling," *ASCE Water Forum 1992*, Aug 3-5, 1992, Baltimore, Maryland.
6. Jones, Norman L. and James Nelson, "Geoscientific modeling with TINs," *GeoByte*, August, 1992, pp. 44-49.
7. Talbot, C., Jones, Norman L., and A. Woodruff Miller, "Floodplain delineation with TINs," *Proceedings of the Fifth International Conference on Computing in Civil Engineering*, Anaheim, California, June 7-9, 1993.
8. Christiansen, H.C., T.W. Sederberg, N.L. Jones, A.K. Zundel, and S.E. Benzley, "The academic role of the Engineering Computer Graphics Laboratory of Brigham Young University," *EduGraphics '93*, Alvor, Algarve, Portugal, Dec. 5-10, pp. 12-20.
9. Jones, Norman L., D. R. Richards, and J. P. Holland, "The Department of Defense groundwater modeling system," *Geotechnical Engineering News*, June, 1994, Vol. 12, No. 2,

- pp. 41-44.
10. Richards, D.R., N.L. Jones, and J.P. Holland, "Department of Defense Groundwater Modeling System," *Proceedings of the 1994 Groundwater Modeling Conference*, August 10-12, 1994, pp. 277-284.
 11. Lin, H.C., G.T. Yeh, N.L. Jones, and D.R. Richards, "A state-of-the-art tool for studying sea water intrusion problems in coastal aquifers," *Proceedings of the 26th Midatlantic Industrial and Hazardous Waste Conference*, Newark, Delaware, August 7-10, 1994.
 12. Jones, Norman L., D.R. Richards, and R.A. Evans, "A graphical environment for three-dimensional finite element groundwater modeling," *Groundwater Management, Proceedings of the International Symposium*, ASCE, San Antonio, Texas, August 14-16, 1995, pp. 373-378.
 13. Jones, Norman L., A.K. Zundel, and R.M. Wallace, "A comprehensive graphical environment for surface water flow modeling," *Water Resources Engineering, Proceedings of the First International Conference*, ASCE, San Antonio, Texas, August 14-16, 1995, pp. 405-409.
 14. Nelson, E.J., N.L. Jones, and J.D. Jorgeson, "A comprehensive environment for watershed modeling and hydrologic analysis," *Water Resources Engineering, Proceedings of the First International Conference*, ASCE, San Antonio, Texas, August 14-16, 1995, pp. 829-833.
 15. Nelson, E.J., and N.L. Jones, "Using the ARC/INFO data model to build conceptual models for environmental/hydraulic/hydrologic simulations," *Proceedings of the 1996 ESRI User Conference*, May 20-24, 1996.
 16. Nelson, E.J., and N.L. Jones, "Automated tools for spatially distributed rainfall/runoff modeling," *Proceedings of the ASCE North American Water and Environment Congress*, Anaheim, California, June 22-28, 1996, 6 pp.
 17. Richards, and N.L. Jones, "The DoD Groundwater Modeling System: a conceptual model approach," *Proceedings of the ASCE North American Water and Environment Congress*, Anaheim, California, June 22-28, 1996, 6 pp.
 18. Zundel, and N.L. Jones, "A graphical environment for multi-dimensional surface water modeling," *Proceedings of the ASCE North American Water and Environment Congress*, Anaheim, California, June 22-28, 1996, 6 pp.
 19. Nelson, N.L. Jones, C. Smemoe, "From a grid or coverage to a hydrograph: unlocking your gis data for hydrologic applications," 1997 ESRI User Group Conference.
 20. Richards, and N.L. Jones, "A conceptual modeling approach to modeling groundwater with GMS," *Proceedings of the ASCE Water Resources Conference*, San Francisco, California, 1997.
 21. N.L. Jones, Edris, E.V., Poeter, E., "Utilizing GIS objects for flux calibration," *Proceedings of the MODFLOW 98 Conference*, Golden, Colorado, Oct. 5-8, 1998.
 22. Kennard, M., Holland, J., Jones, N., "GIS tools in GMS – a state of the art report," *Proceedings of the MODFLOW 98 Conference*, Golden, Colorado, Oct. 5-8, 1998.
 23. Davis, R.J., Jones, N.L., Clement, T.P., "Efficient tools for building multi-component transport models," *Proceedings of the MODFLOW 98 Conference*, Golden, Colorado, Oct. 5-8, 1998.
 24. Lin, H.C., C.A. Talbot, D.R. Richards, E.V. Edris, Jr., H.P. Cheng, N.L. Jones, G.T. Yeh, "Development of a multidimensional hydroinformatic system for simulating canal, overland, and groundwater flow in South Florida," *Proceedings of the International Conference on Hydroinformatics 2000*, July 23-27, 2000, Iowa City, Iowa.
 25. Green, J.I., and N.L. Jones, 2001, "Tools for stochastic simulations in GMS", *Proceedings of the MODFLOW 2001 and Other Modeling Odysseys Conference*, Golden, Colorado, Sept. 11-14, 2001.
 26. Lemon, A.M., and N.L. Jones, 2001, "Managing complex stratigraphy in MODFLOW models," *Proceedings of the MODFLOW 2001 and Other Modeling Odysseys Conference*, Golden, Colorado, Sept. 11-14, 2001.
 27. Jones, N.L., 2001, "Using the Woburn case as a teaching tool," *Proceedings of the MODFLOW 2001 and Other Modeling Odysseys Conference*, Golden, Colorado, Sept. 11-14, 2001.
 28. Jones, N.L., J.R. Walker, S.F. Carle, 2002, "Using transition probability geostatistics with MODFLOW," *ModelCARE 2002: Proceeding of the Fourth International Conference on Calibration and Reliability in Groundwater Modelling*, Prague, Czech Republic, 17-20 June 2002, Vol. I, pp. 295-298.
 29. Talbot, C.A., C.M. Hansen, N.L. Jones, E.V. Edris, 2003, GMS 4.0: New Modeling Tools For Stratigraphic and Stochastic Modeling and Uncertainty Analysis, *Watershed Systems Conference*, Portland, Oregon, May 13-15, 2003.
 30. Quezada, C., C.M. Hansen, T.P. Clement, N.L. Jones, & K.K. Lee, "ART3D: an analytical model for predicting 3-dimensional reactive transport," *MODFLOW and More 2003: Understanding through Modeling – Conference Proceedings*, Poeter, Zheng, Hill, & Doherty, Eds., Sept. 16-19, 2003, Colorado School of Mines, pp. 275-279.
 31. Lemon, A., N.L. Jones, & J. Greer, "A horizons-based approach to modeling complex geology," *MODFLOW and More 2003: Understanding through Modeling – Conference*

- Proceedings*, Sept. 16-19, 2003, Colorado School of Mines, pp. 666-670.
32. N. L. Jones, R. D. Jones, C. D. Butler, and R. M. Wallace, "A Generic Format for Multi-Dimensional Models," *Proceedings of the Groundwater Symposium, EWRI '04 World Water & Environmental Resources Congress*, American Society of Civil Engineers, Salt Lake City, Utah June 27 – July 1, 2004.
 33. N. L. Jones, A.M. Lemon, M.J. Kennard, "Efficient Data Management Strategies for Large MODFLOW Models," *EWRI '05 World Water & Environmental Resources Congress*, American Society of Civil Engineers, Anchorage, Alaska, May 15-19, 2005.
 34. D.R. Maidment, N.L. Jones, & G. Strasberg, "Arc Hydro Groundwater Data Model", IGWMC Newsletter. 2005 (<http://www.mines.edu/igwmc/news/spring05news.pdf>)
 35. Mark Kram, Gary Robbins, Renduo Zhang, Lanbo Liu, and Norm Jones, "Detailed Hydraulic Assessment Using a High-Resolution Piezocone Coupled to the GEOVIS", *Proceedings of the 2006 North American Environmental Field Conference and Exposition: Advances in Environmental Site Characterization and Monitoring Technology*, January 10-12, 2006, University of South Florida, Tampa, Florida.
 36. Aaron Byrd, Rob Wallace, Cary Butler, Norm Jones, Russell Jones, "Generic model data format," *Proceedings of the 3rd Federal Interagency Hydrologic Modeling Conference*, April 2-6, 2006, Reno, Nevada.
 37. Strasberg, G., N.L. Jones., D. Maidment, 2006, "The Arc Hydro ground water data model," *MODFLOW & More 2006 – Managing Ground-Water Systems*, May 22-24, 2006, Golden, Colorado.
 38. Jones, N.L., J. Greer, 2006, "Automated 3D meshing of hydrogeologic units," *MODFLOW & More 2006 – Managing Ground-Water Systems*, May 22-24, 2006, Golden, Colorado.
 39. Strassberg G., N. Jones, and D. Maidment, "The Arc Hydro ground water data model", *Proceedings of the MODFLOW and More 2006 – Managing Ground-Water Systems Conference*, Golden Colorado, May 22-24, 2006.
 40. Kram, M., N. Jones, J. Chau, G. Robbins, and A. Bagtzoglou, 2008, "Mass flux distribution using the high-resolution piezocone and GMS," *Remediation of Chlorinated and Recalcitrant Compounds, The Sixth International Conference*, May 19-22, 2008, Monterrey, California.
 41. Jones, N., G. Strassberg, "A GIS-based MODFLOW data model," *MODFLOW & More 2008: Ground Water and Public Policy*, May 19-21, 2008, Golden, Colorado.
 42. Lemon, A., N. Jones, and M. Kennard, "Efficient storage of massive MODFLOW simulations," *MODFLOW & More 2008: Ground Water and Public Policy*, May 19-21, 2008, Golden, Colorado.
 43. Jones, N.L., Strassberg, G., Lemon, A.M., "Automated Well Permitting via GIS Geoprocessing Tools", *EWRI World Environmental & Water Resources Congress 2010: Challenges of Change*, Providence, R.I., May 16-20, 2010.
 44. Jones, N., Lemon, A., Gallup, D., "Automated well permitting using Arc Hydro Groundwater", *AWRA 2010 Spring Specialty Conference*, Orlando, FL, March 29-31, 2010.
 45. Whiteaker, T., Jones, N., Strassberg, G., Gallup, D., "Hydrogeologic site characterization via cross section editing", *AWRA 2010 Spring Specialty Conference*, Orlando, FL, March 29-31, 2010.
 46. Smilowitz, M., Jones, N., Whitehead, D., "Application of Arc Hydro Groundwater to the Sacramento regional model", *AWRA 2010 Spring Specialty Conference*, Orlando, FL, March 29-31, 2010.
 47. Jones, N., Strassberg, G., "The Arc Hydro Groundwater Data Model and Tools", *AWRA 2010 Spring Specialty Conference*, Orlando, FL, March 29-31, 2010.
 48. Lemon, A., N. G. Strassberg, N. Jones, T. Whitaker, "3D Characterization of Hydrogeology Using ArcGIS", *MODFLOW and More 2011 - Integrated Hydrologic Modeling*, June 5-8, 2011, Golden, Colorado, pp 662-666.
 49. Jones, N., G. Strassberg, D. Gallup, "MODFLOW Scripting via ArcGIS Geoprocessing Tools", *MODFLOW and More 2011 - Integrated Hydrologic Modeling*, June 5-8, 2011, Golden, Colorado, pp 657-661.
 50. Christensen, Scott D., Norman L. Jones, Michael Burns, and Gil Strassberg. "A Web-Based Groundwater Mapping and Visualization Tool Using Google Earth." In *MODFLOW and More 2013: Translating Science into Practice*. Integrated Groundwater Modeling Center (IGWMC) Colorado School of Mines, Golden, CO, 2013.
 51. Norman L. Jones, Alan Mayo. "Debating the Long Term Impact of the Nevada Pumping Project." In *MODFLOW and More 2013: Translating Science into Practice*. Integrated Groundwater Modeling Center (IGWMC) Colorado School of Mines, Golden, CO, 2013.
 52. Angelica Gutierrez-Magness, Bradley Doorn, Richard Lawford, Cesar Garay, Norman Jones, Ivan DeLoatch, Eldrich Frazier. GEO Global Water Sustainability (GEOGLOWS): Earth Observations for sustainability in water management in the Americas and around the world, XVI World Water Congress, Cancun, Quintana Roo Mexico May 29 – June 2, 2017