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BIRTHPLACE

December 4, 1947
Amarillo, Texas

AREA OF SPECIALIZATION:

Water quality modeling and environmental software development.

EDUCATION

Ph.D. in Civil/Environmental Engineering, Texas A & M University, College Station, Texas, 1984 (Major Prof: Dr. Steve Chapra).

B.S. in Civil Engineering, Texas A & M University, College Station, Texas, 1981.

M.S. in Biology/Aquatic Biology, Southwest Texas State University, San Marcos, Texas, 1976.

B.S. in Wildlife Science, Texas A & M University, College Station, Texas, 1970.

SUMMARY OF QUALIFICATIONS AND EXPERIENCE:

James L. Martin, Ph.D., P.E., has over 30 years of experience in conducting and managing water quality modeling projects. Previously, he conducted studies while a Research Civil Engineer with the Water Quality and Contaminant Modeling Branch with the U.S. Army Corps of Engineers Waterways Experiment Station (WES), while Vice President and Director of Engineering with ASCl Corporation, and while a Research Environmental Scientist with the U.S Environmental Protection Agency at its Large Lakes Research Station. For five years he provided contract support to the U.S. EPA Center for Exposure Assessment Modeling through model development, providing technical assistance to the EPA, state and local agencies, and through model application. He has authored/co-authored over 100 technical reports and publications, including E.P.A. guidance documents and model user documentation. He is the former Editor of the ASCE Journal of Energy Engineering, former Chair of the Executive Committee, ASCE Energy Division, and former member of the ASCE Technical Activities Committee (TAC). He has been involved in the development of a number of hydrodynamic and water quality models in common usage. He is author of the textbook Hydro-Environmental Analysis: Fresh-Water Environments (December 2013), senior editor and author of Energy Production and Reservoir Water Quality (2007) and senior author of the textbook Hydrodynamics and Transport for Water Quality Modeling (1999). He is a Diplomate, Water Resources Engineering, American Academy of Water Resources Engineers and Fellow, American Society of Civil Engineers. He is presently a Professor and Kelly Gene Cook, Sr. Chair in the Department of Civil and Environmental Engineering, Mississippi State University.

PROFESSIONAL REGISTRATION

Registered Professional Engineer in Florida (inactive, 46293)

Registered Professional Engineer in Georgia (inactive, 20491),

Registered professional Engineer in Mississippi (9949)

Diplomate, Water Resources Engineer (00107), American Academy of Water Resource Engineers

PROFESSIONAL EXPERIENCE

Professor and Kelly Gene Cook, Sr. Chair in Civil and Environmental Engineering, Department of Civil and Environmental Engineering, Mississippi State University, 2001-present. Teaches and conducts research concerning water quality modeling and assessment.

Visiting Professor. Universiti teknologi Malaysia, Department of Civil Engineering, Skudai, Malaysia. July 2008 and July-August 2011.

Research Civil Engineer, US Army Engineer Research and Development Center, Waterways Experiment Station, Water Quality and Contaminant Modeling Branch, 1999-2001. Conducted research and applied studies concerning water quality modeling and assessment.

Vice President, AScl Corporation, 1993-1999. Assisted the President, AScl Corporation, in the overall management and operations of an international environmental contracting firm, headquartered in McLean, Virginia.

Director of Engineering, AScl Corporation, 1990-1993. Directed engineering operations of an international environmental contracting firm, headquartered in McLean, Virginia. Assisted in the planning of projects, communication with client offices, selection of staff and other corporate responsibilities. Conducted mathematical modeling studies and model development for various clients.

Manager, AScl Corporation at the USEPA Environmental Laboratory, Athens, Georgia, 1988-1990. Supervised multi-disciplinary staff and provided technical support for the Center for Exposure Assessment Modeling. Tested and refined exposure assessment techniques as well as provided training in assessment modeling for EPA and state personnel. Developed and applied mathematical models of contaminant transport and fate.

Research Environmental Scientist, Large Lakes Research Station, U.S. Environmental Protection Agency, 1986 - 1988. Served as Project Manager for a research team dealing with data acquisition and mathematical modeling of toxic substances in the Great Lakes as well as Project Officer for extramural research dealing with mathematical modeling activities. Acted as a consultant to the EPA and other government agencies on mathematical modeling and represented EPA on committees and work groups at the International level.

Civil Engineer, Water Quality Modeling Group, Environmental Laboratory, U.S. Army Engineer Waterways Experiment Station, 1984-1986. Involved in the development and application of water quality models. Served as principal investigator on studies of reservoir tailwaters, effects of peaking hydropower on fisheries habitat, riverine water quality under steady and unsteady flow, development and application of a two-dimensional hydrodynamic and water quality model, and other studies. Acted as a consultant to Corp offices and other government agencies on water quality and contaminant modeling.

Lecturer, Civil Engineering, Texas A & M University, 1984. Instructed courses in Engineering Analysis, Water Resources Engineering, Computer Applications in Engineering and Construction (Numerical Methods) and Environmental Engineering Laboratories.

Research Assistant, Civil Engineering, Texas A & M University, 1980-1984. Involved in collection and analysis of water, sediment, and biota samples for nutrients, trace metals, and selected organic contaminants; environmental impact assessment.

Teaching Assistant, Chemistry, Texas A & M University, 1979. Instructed laboratories in inorganic chemistry.

Biology Instructor, Victoria Texas C.I.S.D., 1976-1979. Instructed secondary courses in Biology.

Laboratory Instructor, Biology, Southwest Texas State University, 1974-1976. Instructed laboratories in Biology, Mammalogy, Wildlife Management, Field Biology.

Science Instructor, Nixon, Texas I.S.D., 1971-1974. Instructed secondary courses in Mathematics, Physics, Earth Science, and Chemistry.

MILITARY EXPERIENCE

Texas Army National Guard (Enlisted, SP 5), 1st Battalion (Airborne Infantry), 143d Infantry, 1971-1977.

AWARDS AND HONORS

Sigma Xi – Member

Certificate of Commendation, Department of the Army, June 1996

ASCE Award for Distinguished Achievement, 1991

Certification of Appreciation, American Society of Civil Engineers, Environmental Management, 1996

Certificate of Commendation, Department of the Army, June 1999

Certificate of Commendation, Department of the Army, June 2000

Hydraulic Achievement Award 2004, Mississippi American Society of Civil Engineers

Elected Fellow, American Society of Civil Engineers (F. ASCE), July 2005

Founding Diplomate, Water Resources Engineering (D. WRE), American Academy of Water Resources Engineers (October 2005)

Elected to Bagley College of Engineering Academy of Fellows, Mississippi State University, February 2006.

Elected to GeoResources Institute Research Fellow, Mississippi State University (2008)

Nominated by College of Engineering for the MSU Faculty Achievement Award (2012)

Nominated by College of Engineering for the Giles Distinguished Professorship (2013)

Elected to Bagley College of Engineering Academy of Distinguished Teachers (2013)

American Society of Civil Engineers Samuel Arnold Greeley Award "For the paper "Modeling the Factors Controlling Phytoplankton in the St. Louis Bay Estuary, Mississippi and Evaluating Estuarine Responses to Nutrient Load (co-author), 2016

PROFESSIONAL SERVICE

American Society of Civil Engineers

Fellow, American Society of Civil Engineers (2005-present)

Member, American Society of Civil Engineers (1985-2005)

Editor-in-Chief, ASCE Journal of Energy Engineering (2002-2005)

Chair, Energy Division, Executive Committee (2005-2006)

Past-Chair, Executive Committee, Energy Division (2006-2007)

Member, Editorial Board, Energy Division (2002-2007)

Chair, Environmental Effects Committee, Energy Division (2005-2007)

Member, Task Committee on Energy Production and Reservoir Water Quality (2002-2007)

Chair, ASCE Paper Awards Committee (2007-2010)

Member, ASCE Visioning Implementation Subcommittee (2007-2010)

Member, ASCE Technical Activities Committee (2007-2010)

Member- ASCE COPRI Marine Renewable Energy - In Stream Hydrokinetic Subcommittee Member (2010-Present)

Member-ASCE EWRI Total Maximum Load Task Committee (2012-present)

Member-ASCE EWRI Watershed Management Technical Committee (2015-Present)

Reviewer for Journal of Environmental Engineering

Reviewer for Journal of Energy Engineering

North American Lake Management Society

Member and Associate Editor

Sigma Xi – Member

Delegate, Universities Council on Water Resources (UCOWR).

Mississippi Department of Environmental Quality

Member, Mississippi Department of Environmental Quality's Nutrient Task Force

(2004-present)

Member, Conjunctive Use Task Force (2012-Present)

UNIVERSITY SERVICE

- MSU University Service
 - Elected Member Robert Holland Faculty Senate Faculty Senate (2005-2007, 2013-2015)
 - Student Affairs committee, Robert Holland Faculty Senate (2005-2007).
 - University P&T Committee (2009-2012)
- College of Engineering
 - University P&T Committee (2007-2010)
 - Distance Education Committee (2007-2010)
 - Dean Search Committee (2014-2015)
 - BCOE Graduate Student Hall of Fame Selection Committee (2014-present)
- Department of Civil and Environmental Engineering
 - Chair of CE Department Scholarship Committee (2007-present)
 - Chair of CE Department Graduate Committee (2007-present)
 - Member, CE Department P&T Committee (2012-present)
 - Graduate Coordinator (2007-present)

PANELS AND ADVISORY BOARDS (RECENT)

Member, June 1999-August 2001, Peer Review Panel, Total Maximum Daily Load Group, Modeling Studies of the Savannah Harbor (invited and funded participant by CE District Savannah and USEPA Region 4)

Member, June 1999-August 2001, Modeling Technical Review Panel, Modeling Studies of the Savannah Harbor (invited and funded participant by CE District Savannah)

Member, June 2001-Present, American Society of Civil Engineers, Energy Engineering Division (EY), Committee on Environmental Effects, Task Committee For Developing Guidelines Manual on Reservoir and River Hydrodynamic and Water Quality Modeling Related to Energy Production (product to be Guidelines Manual).

Member, August 2001-2002, Expert Review Panel, Delaware Estuary Water Quality Model, Delaware River Basins Commission (invited and funded participant in November 29-30, 2001 peer review meetings) Member, August 2001-2002, Expert Review Panel, Delaware Estuary Water Quality Model, Delaware River Basins Commission (invited and funded participant in November 29-30, 2001 peer review meetings)

Member, September-December, 2001, Review Panel for Workshop for Development of a Water Budget for Tampa Bay, Florida, Tampa Bay National Estuary Program (NEP), Tampa, FL (invited panelist, at December 4-5, 2001 meeting to aid in synthesizing workshop recommendations and developing research plans for the NEP)

Member, Expert Panel on Simplified Approaches for Modeling Sediment Movement, Joint EPA/COE Workshop on Sediment Processes, New Orleans, LA, January 22-24, 2002 (Panel product was white paper).

Member, Invited Participant in Modeling Session in workshop “Science to Support Nutrient-Management Decisions Related to Hypoxia in the Northern Gulf of Mexico and Water Quality in the Mississippi River Basin,” October 16-18, 2002, St. Louis, MO.

Invited Peer Review Panelist, “LOTOX 2 Peer Review Session,” July 16-17, 2003, New York City, NY.

Invited Peer Review Panelist, U.S. Environmental Protection Agency, Great Lakes National Program Office, peer review of the Lake Michigan Mass Balance PCB Modeling. 2004.

Invited Peer Review Panelist, Environmental Protection Agency, Office of Water, draft cumulative impacts analysis (CIA) report for the Uniform National Discharge Standards (UNDS; coordinated by Versar). 2004.

Invited Peer Review Panelist, St. Johns Water Management District's model evaluation group for the Indian River Lagoon studies. 2004-2005.

Member, August 2001-Present, Expert Review Panel, Delaware Estuary PCB Model, Delaware River Basins Commission (invited and funded participant).

Invited Expert Review, 2008. Modeling studies of Bow River, Alberta, CA.

Invited Expert Review. 2010. Provided review of modeling group of Universidad Nacional de Colombia within the framework of the project for “Dynamic water quality modeling of the River Bogotá” developed for the Water Utility Empresa de Acueducto y Alcantarillado de Bogotá, EAAB by Universidad Nacional de Colombia – Bogotá, March 2010, Bogota, Colombia.

Invited Expert Review, 2008-2011. Proposed Surface Water Withdrawals from the St. Johns and Ocklawaha Rivers, St. Johns River Water Management District, Palatka, FL

Subject Matter Expert, 2010-Present, Tampa Bay Studies, Tampa Bay National Estuary Program and Southwest Florida Water Management District

EXPERT TESTIMONY

Law Environmental, Atlanta, Georgia: Provided expert review of modeling studies on the Dugdemona River, Louisiana (January-March 2002).

Southeast Clean Water Network, Tallahassee, FL: Provided expert review, deposition and court testimony related to modeling studies used in development of a discharge permit to the Lower St. Johns River, FL. (January through February 2002).

PUBLICATIONS: ENVIRONMENTAL SOFTWARE

Public Domain

1. **MICHRIV**: A screening level model for metals transport in rivers. Co-author of final documentation. Distributed by U.S. EPA Large Lakes Research Station, Grosse Ile, MI.
2. **STEADY**: A screening level model for dissolved oxygen and temperature in rivers. Author of code and documentation. Distributed by U.S. Corps of Engineers Waterways Experiment Station, Vicksburg, MS.
3. **WASP**: A generalized modeling framework for modeling eutrophication and organic chemicals in surface waters. Co-author of documentation and code (Versions 4-8). Distributed by U.S. EPA Center for Exposure Assessment Modeling (CEAM), Athens, GA
4. **META4**: A generalized modeling framework for modeling metals transport and speciation in surface waters. Co-author of documentation and code. Distributed by U.S. EPA Hazardous Waste Reduction Laboratory, Cincinnati, OH.
5. **FLWASP**: A generalized modeling framework for modeling eutrophication and solids transport. Co-author of documentation and code. Distributed by South Florida Water Management District, West Palm Beach, FL.
6. **CE-QUAL-ICM**: Organic Chemical Model, a generalized model of organic contaminants specifically designed for coupling with multi-dimensional hydrodynamic models. Contributor to organic chemical model and co-author of user documentation. Distributed by U.S. Corps of Engineers Waterways Experiment Station, Vicksburg, MS.
7. **CE-QUAL-W2**: A two-dimensional (x/z) hydrodynamic and water quality (eutrophication) model. Principal author of Version 1.0 and model code. Distributed by U.S. Corps of Engineers Waterways Experiment Station, Vicksburg, MS.
8. **CE-QUAL-RIV1**: A one-dimensional hydrodynamic and quality model. Contributing author and code developer for Version 1.0-3.0 and documentation. Distributed by U.S. Corps of Engineers Waterways Experiment Station, Vicksburg, MS.
9. **EPD-RIV1**: A one-dimensional hydrodynamic and quality model. Senior author of user documentation and code (based on CE-QUAL-RIV1). Distributed by Georgia Environmental Protection Division, Atlanta, GA.
10. **RIVMOD**: A one-dimensional hydrodynamic model for rivers. Co-author of user documentation. Distributed by U.S. EPA Center for Exposure Assessment Modeling (CEAM), Athens, GA
11. **STREAM**. A one-dimensional dissolved oxygen model for streams and rivers. Co-author of model and user documentation. Mississippi Department of Environmental Quality, TMDL/WLA Branch, Surface Water Division.
12. **LAKE2K**, a one-dimensional (vertical) reservoir water quality model. Co-author of model and user documentation (with Steve Chapra and Rene Camacho)

Proprietary

1. **OMNIWASP**: A modified version of the WASP eutrophication model including the impact of macrophytes. Co-author of documentation and code. Developed for Omni Environmental, Princeton, New Jersey.
2. **WIN/WASP +**. A modified version of WASP developed for Windows95, Contributor to code development and design. AScl Corporation, Environmental Engineering Division, Athens, GA.
3. **STEADY-STATE**: A modified version of the WASP organic chemical model (TOXIWASP) designed to compute steady-state concentration distributions in water and sediment. Principal developer. Developed for Hart Crowser, Seattle, WA.

PUBLICATIONS: TECHNICAL BOOKS

1. Dortch, M.S. and **J.L. Martin**. 1988. "Water quality modeling in regulated stream environments", In: Alternatives in Regulated Flow Management (Ed. J.A. Gore). CRC Press, Boca Raton, FL.
2. Medine, Allen J., **Martin, James L.**, 2002. Development of the Metal Speciation-based Metal Exposure and Transformation Assessment Model (META4): Application to Copper and Zinc Problems in the Alamosa River, Colorado. In: Fate and Transport of Chemicals in the Environment: Impacts, Monitoring and Remediation. R.L. Lipnick, R.P. Mason, M.L. Phillips, and C.U. Pittman (Eds.) ACS Publications, Washington.
3. McCutcheon, S.C., **J.L. Martin** and T.O. Barnwell, Jr. 1993. "Water Quality," In Handbook of Hydrology (Ed. D.R. Maidment), McGraw-Hill, New York, NY, pp. 11.1-11.73.
4. **Martin, J.L.** and S.C. McCutcheon. 1999. Hydrodynamics and Transport in Water Quality Modeling CRC Press, Boca Raton, FL, 794 p.
5. French, R, S.C. McCutcheon, and **J.L. Martin**. 1999. "Environmental Hydraulics," In: Hydraulic Design Handbook (Ed. L.W. Mays), McGraw-Hill, New York, NY, pp.5.1-5.31.
6. **J. L. Martin**, J. Edinger, J. A. Gordon and J. Higgins (Editors). 2007. Energy Production and Reservoir Water Quality, American Society of Civil Engineers, Reston, VA.
 - a. **James L. Martin**, Craig Hesterlee and Jeffery A. Ballweber. 2007. "Chapter 2: Energy Production, Reservoir and River Water Quality: Regulatory Framework," IN: J. L. Martin, J. Edinger, J. A. Gordon and J. Higgins (Editors). 2007. Energy Production and Reservoir Water Quality, American Society of Civil Engineers, Reston, VA.
 - b. Scott Wells, J. Russell Manson and **James L. Martin**. 2007. "Chapter 4: Energy Production, Reservoir and River Water Quality: Numerical Hydrodynamic and Transport Models for Reservoirs," IN: J. L. Martin, J. Edinger, J. A. Gordon and J. Higgins (Editors). 2007. Energy Production and Reservoir Water Quality,

American Society of Civil Engineers, Reston, VA.

- c. John Eric Edinger, **James Martin**, and Gregory Pelletier. 2007. "Chapter 5: Energy Production, Reservoir and River Water Quality: Water Quality Modeling Theory," IN: J. L. Martin, J. Edinger, J. A. Gordon and J. Higgins (Editors). 2007. Energy Production and Reservoir Water Quality, American Society of Civil Engineers, Reston, VA.
 - d. Edward Buchak, Jerad Bales and **James Martin**. 2007. "Chapter 6: Energy Production, Reservoir and River Water Quality: Modeling Systems and Their Application," IN: J. L. Martin, J. Edinger, J. A. Gordon and J. Higgins (Editors). 2007. Energy Production and Reservoir Water Quality, American Society of Civil Engineers, Reston, VA.
7. Alarcon, V. J., McAnally, W. H., Diaz-Ramirez, J., **Martin, J.**, & Cartwright, J. H. 2009. A Hydrological Model of the Mobile River Watershed. In G. Maroulis, T.E. Simos (Eds.), Computational Methods in Science and Engineering: Advances in Computational Science.. Paramus, New Jersey: American Institute of Physics. Volume 1148, 641-645.
 8. Alarcon, V. J., McAnally, W. H., Wasson, L. L., **Martin, J.**, & Cartwright, J. H. 2009. Using NEXRAD Precipitation Data for Enriching Hydrological and Hydrodynamic Models in the Northern Gulf of Mexico. Computational Methods in Science and Engineering: Advances in Computational Science (Maroulis, G. and Simos, T. E., Eds.). American Institute of Physics. Volume 1148, 646-650.
 9. Aziz, W., Alarcon, V. J., McAnally, W. H., **Martin, J.**, & Cartwright, J. H. 2009. An Application of the Mesh Generation and Refinement Tool to Mobile Bay, Alabama, USA. Computational Methods in Science and Engineering: Advances in Computational Science (Maroulis, G. and Simos, T. E., Eds.). Paramus, New Jersey: American Institute of Physics. Volume 1148, 651-656.
 10. **Martin, J.L.** 2013. Hydro-Environmental Analysis: Freshwater Environments. CRC Press. Boca Raton, Fl. 567 pages (December 11, 2013). ISBN-10: 1482206072

PUBLICATIONS: BOOKS (NON-TECHNICAL)

1. Martin, James, Joyce Martin. 2007. Backyard Visions: The Ruby-Throated Hummingbird. ISBN 978-1-4303-1769-2, Lulu.com, Rochester, NY. 96 pp.
2. Martin, James, Joyce Martin. 2007. The Rookery at Noxubee Wildlife Refuge. ISBN 978-1-4303-2356-3, Lulu.com, Rochester, NY. 100 pp.
3. Martin, James, Joyce Martin. 2007. Images of North American Big Game. ISBN 978-1-4357-0076-5, Lulu.com, Rochester, NY, 108 pp.
4. Martin, James, Joyce Martin. 2008. The Red-cockaded Woodpecker at Noxubee National Wildlife Refuge, Lulu.com, Rochester, NY. 32 pp.
5. Martin, James, Joyce Martin. 2008. The Eagles at Noxubee NWR: Our 2008 Diary, Lulu.com, Rochester, NY. 56 pp.
6. Martin, James, Joyce Martin. 2014. The Great American Bluebird, Blurb.com, 32 pp.

7. Martin, James, Joyce Martin. 2014. Hummingbirds of the U.S.A., a Pictorial Essay, Lulu.com, Rochester, NY. 88 pp.

PUBLICATIONS: THESIS/DISSERTATION

1. **Martin, J.L.** "An analysis of the community and population dynamics of the helminths of Sigmodon hispidus (Rodentia: Cricetidae) from the area of San Marcos, Texas", M.S. Thesis, Southwest Texas State University, San Marcos, TX, 112 p., 1976.
2. **Martin, J.L.** "Models of diel variations of water quality in a stratified eutrophic reservoir (Lake Livingston, Texas)", Ph.D. Dissertation, Texas A & M University, College Station, TX, 359 p., 1984.

PUBLICATION: JOURNALS

1. **Martin, J.L.** and J. Ilika. "Review: Ayers, D.M. Bioscientific Terminology" Reading World, 14: 28, 1974.
2. **Martin, J.L.** and D.G. Huffman. "An analysis of the community and population dynamics of the helminths of Sigmodon hispidus (Rodentia: Cricetidae) from three central Texas vegetational regions", Proceedings of the Helmintho. Soc. Wash. 47: 247-255; 1980.
3. **Martin, J.L.**, B. Batchelor and S.C. Chapra. "Modification of a metal adsorption model to describe the effect of pH." J. Water Poll. Control Fed.: pp. 425-427; 1985.
4. **Martin, J.L.** "Application of a two-dimensional model to DeGray Lake, Arkansas." Am. Society Civil Engineers, Journal of the Environmental Engineering Division. Vol. 114(2), pp. 317-336; April 1988.
5. **Martin, J.L.**, W.L. Richardson, S.C. McCutcheon and J.F. Paul. "Modeling Studies for Planning: The Green Bay Project," Water Resources Bulletin 27(3), pp. 429-436, June 1991.
6. Wang, P.F. and **J.L. Martin**. "Temperature and Conductivity Simulations of the Buffalo River, NY," J. Great Lakes Research 17(4), pp. 495-503, Dec. 1991.
7. Velleux, M.L., J.E. Rathbun, R.G. Kreis, Jr., **J.L. Martin**, M.J. Mac, and M.L. Tuchman. "Investigation of Contaminant Transport from the Saginaw Confined Disposal Facility," J. Great Lakes Research 19(1), pp. 158-174, 1993.
8. Lung, W.S., **J.L. Martin** and S.C. McCutcheon. "Eutrophication and Mixing Analysis of Embayments in Prince Williams Sound, Alaska," ASCE J. Environmental Engineering Division. 119(5), pp. 811-824, 1993.
9. James, R. T., **J.L. Martin**, T. Wool and P.F. Wang. "A Sediment Resuspension and Eutrophication Model of Lake Okeechobee," J. American Water Resources Association, 33(3), pp. 661-680, 1997.

10. Wang, P.F., **J.L. Martin**, T.A. Wool and T. Mill. "Fate and Transport of Metam Spill in the Sacramento River," ASCE J. Environmental Engineering Division, pp. 704-712, July 1997.
11. Wang, P.F., **J.L. Martin**, and T. Wool. "Water Quality Modeling and Eutrophication in Tampa Bay, Florida," Estuarine, Coastal and Shelf Science, 49, pp. 1-20, 1999.
12. **Martin, J.L.** and C. Hesterlee. "Energy Production And Reservoir And River Water Quality: Regulatory Framework," ASCE J. Energy Engineering, 129(3), pp. 33-59, 2002.
13. **Martin, J.L.** "Linear Superposition in TMDL Applications: The Steady-State Response Matrix Revisited," J. American Water Resources Association 43(5), pp. 1270-1279, 2007.
14. J. N. Diaz - Ramirez, V. J. Alarcon, Z. Duan, M. L. Tagert, W. H. McAnally, **J. L. Martin**, C. G. O'Hara, 2008. "Impacts of Land Use Characterization in Modeling Hydrology and Sediments for the Luxapallila Creek Watershed, Alabama and Mississippi," Transactions of the American Society of Agricultural and Biological Engineers, Vol. 51(1): 139-151
15. Alarcon V. J., McAnally, W., Diaz-Ramirez, J., **Martin, J.**, Cartwright, J., 2008. A Hydrological Model of the Mobile River Watershed, Southeastern USA. Proceedings ICCMSE 2008, American Institute of Physics.
16. Alarcon V. J., McAnally, W., Wasson, L., **Martin, J.**, Cartwright, J., 2008. Using NEXRAD Precipitation Data for Enriching Hydrological and Hydrodynamic Models in the Northern Gulf of Mexico. Proceedings ICCMSE 2008, American Institute of Physics.
17. Aziz, W., Alarcon V. J., McAnally, W., **Martin, J.**, Cartwright, J., 2008. An Application of the Mesh Generation and Refinement Tool to Mobile Bay, Alabama, USA. Proceedings ICCMSE 2008, American Institute of Physics.
18. Duan, Z., Jairo N. Diaz, **James L. Martin** and William H. McAnally. 2008. "Effects of Land-Use Change on St. Louis Bay Watershed Simulations," Journal of Coastal Research, Special Issue 52, pp. 117-124.
19. Diaz-Ramirez, Jairo, Zhiyong Duan, William McAnally, and **James Martin**, 2008. "Sensitivity of the HSPF Model to Land Use/Land Cover Datasets," Journal of Coastal Research, Special Issue 52, pp. 89-94.
20. Diaz-Ramirez, J.N., V. Alarcon, Z. Duan, M.L. Tagert, W. H. McAnally, **J. L. Martin**, and C.G. O'Hara. 2008. Impacts of Land Use Characterization in Modeling Hydrology and Sediments for the Luxapallila Creek Watershed, Alabama/Mississippi. Transactions of the ASABE 51(1): 139-151.
21. Duan, Zhiyong, **James L. Martin**, William H. McAnally, and Richard L. Stockstill. 2009. Combined Effects of Wind and Streamflow on Gas-Liquid Transfer Rate, J. Envir. Engrg. Volume 135, Issue 8, pp. 653-659 (August 2009)
22. Duan, Zhiyong, **James L. Martin**, Richard L. Stockstill, William H. McAnally, David H. Bridges. 2009. Modeling Streamflow-Driven Gas-Liquid Transfer Rate, Environmental Engineering Science. January 2009, 26(1): 155-162

23. Diaz-Ramirez, J.N., B.E. Johnson, W.H. McAnally, **J.L. Martin**, V.J. Alarcon, and J.J. Ramirez-Avila. Global Parameter Sensitivity and Uncertainty of the USEPA HSPF Model: A Hydrology Model Evaluation in Alabama and Mississippi. Submitted to Environmental Modeling & Software [In review since March, 2009).
24. Wilkerson, G. Wayne, William H. McAnally, **James L. Martin**, Jeff A. Ballweber, Kim Collins Pevey, Jairo Diaz-Ramirez, and Austin Moore. 2010. "Latis: A Spatial Decision Support System to Assess Low-Impact Site Development Strategies," Advances in Civil Engineering, Volume 2010 (2010), Article ID 810402, 18 pages.
25. Edinger, John E. and **James L. Martin**. 2010. "Effects of the Addition of Multi-Slip Docks On Reservoir Flushing and Water Quality: Hydrodynamic Modeling; Aquatic Impact; Regulatory Limits," Journal of Transdisciplinary Environmental Studies vol. 9, no. 1, 2010
26. Diaz-Ramirez, J.N., W.H. McAnally and **J.L. Martin**. 2011. "Analysis of Hydrologic Processes Applying the HSPF Model in Selected watersheds in Alabama, Mississippi and Puerto Rico," Applied Engineering in Agriculture, vol. 27(6), pp. 937-954.
27. Yi Xiong, Vladimir J. Alarcon, **James L. Martin**, William H. McAnally. 2012. "WASP_SEDDEER: Incorporation of SEDDEER into WASP," Energy and Environment Research, Vol 2, No 1, 157-181.
28. Camacho, Rene A. and **James L. Martin**. 2012. "Hydrodynamic Modeling of First Order Transport Time Scales in the St. Louis Bay Estuary, Mississippi, the ASCE J. Environmental Engineering, 10.1061/(ASCE)EE.1943-7870.0000647
29. Diaz-Ramirez, Jairo N., William McAnally, and James Martin. 2012. "Sensitivity of Simulating Hydrologic Processes to Gauge and Radar Rainfall Data in Subtropical Coastal Catchments," Water Resour Manage (2012) 26:3515–3538.
30. Xiong, Y. V. J. Alarcon, J. L. Martin, W. H. McAnally. 2012. "SEDDEER: A Sediment Transport Model for Water Quality Modeling," Transactions ASABE, Vol. 55(6): 2147-2161.
31. Diaz-Ramirez, J., Camacho, R., McAnally, W. and Martin, J. 2012. "Parameter uncertainty methods in evaluating a lumped hydrological model. Obras y Proyectos 12, 42-56
32. Camacho, R.A. and Martin, J.L., 2013. Bayesian Monte Carlo for evaluation of uncertainty in hydrodynamic models of coastal systems. Journal of Coastal Research, Special Issue No. 65
33. Diaz-Ramirez, Jairo N., Billy E. Johnson. 2013. William H. McAnally, James L. Martin, Vladimir J. Alarcon and Rene A. Camacho. 2013. "Estimation and Propagation of Parameter Uncertainty in Lumped Hydrological Models: A Case Study of HSPF Model Applied to Luxapallila Creek," J Hydrogeol Hydrol Eng, 2:1
34. Diaz-Ramirez J, Martin JL, William HM. 2013. Modelling Phosphorus Export from Humid Subtropical Agricultural Fields: A Case Study Using the HSPF Model in the Mississippi Alluvial Plain. J Earth Sci Clim Change 4: 162. doi:10.4172/2157-7617.1000162

35. Diaz-Ramirez, Jairo, James L. Martin, William H. McAnally and Richard Rebich. 2013. "Modeling Phosphorus Export from Humid Subtropical Agricultural Fields: A Case Study using the HSPF Model in the Mississippi Alluvial Plain," Invited paper, *Earth Sci Clim Change* 2013, 4:6
36. Camacho, Rene A., James L. Martin, William McAnally, Jairo Diaz-Ramirez, Pete Sucsy, Hugo Rodriguez, and Song Zhang. 2014. "Uncertainty analysis of estuarine hydrodynamic models: an evaluation of input data uncertainty in the Weeks Bay estuary, Alabama," *Applied Ocean research*, 47(2104) pp. 138-153.
37. VanZwieten, James, William McAnally, Jameel Ahmad, Trey Davis, James Martin, Mark Bevelhimer, Allison Cribbs, Renee Lippert, and Thomas Hudon. 2014. "In-Stream Hydrokinetic Power – A Review and Appraisal," *ASCE Journal of Energy Engineering*, 10.1061/(ASCE)EY.1943-7897.0000197
38. Camacho, René A., James L. Martin, Jairo Diaz-Ramirez, William McAnally, Hugo Rodriguez, Peter Sucsy, and Song Zhang. (2014). "Uncertainty analysis of estuarine hydrodynamic models: An evaluation of input data uncertainty in the Weeks Bay estuary, Alabama," *Applied Ocean Research* 47 (2014) 138–153
39. Camacho, R.A, Martin, J.L, Watson, B., Paul, M., Zheng, L., and Stribling, J. (2015). Modeling the Factors Controlling Phytoplankton in the St. Louis Bay Estuary, Mississippi and Evaluating Estuarine Responses to Nutrient Load Modifications. *ASCE J. Environ. Eng.*, 141(3) (2016 **Samuel Arnold Greeley Award winning paper for "the paper that makes the most valuable contribution to the environmental engineering profession"**)
40. Rene A. Camacho, James L. Martin, William McAnally, Jairo Diaz-Ramirez, Hugo Rodriguez, Peter Sucsy, and Song Zhang. 2015."A Comparison of Bayesian Methods for Uncertainty Analysis In Hydraulic And Hydrodynamic Modeling," *American Water Resources Association*, Volume 51, Issue 5, pages 1372–1393, October 2015
41. Martinez-Guerra, Edith, Yi Jiang, Gordon Lee, Bahareh Kokabian, Sara Fast, Dennis D. Truax, James L. Martin, Benjamin S. and Veera Gnanaswar Gude. 2015. "Wetlands for Wastewater Treatment," *Water Environment Research*, Volume 87, Number 10

PUBLICATIONS: CONFERENCE PROCEEDINGS (REFEREED)

1. **Martin, J.L.** and J. Wlosinski. "A comparison of reservoir oxygen predictions from one and two-dimensional models." In: *Lake and Reservoir Management*, Vol. II., Proc. 5th Annu. Conf. Int. Symp. N. Am. Lake Manage. Soc., N. Am. Lake Manage. Soc., Washington, DC, pp. 98-103, 1986.
2. Wang, P.F., S. C. McCutcheon, M. Zakikhani and **J.L. Martin**. "Environmental Support Needed for Hydraulics and Sediment Transport Research in Environmental Protection," Section 14.0 of Proceedings of National Science Foundation Workshop on

Equipment and Facilities Needs for Hydraulics Research, U.S.A.E. Waterways Experiment Station, Vicksburg, MS, 1991.

3. Morrison, G., A. Janicki, D. Wade, **J. Martin**, G. Vargo and R. Johannson. "Estimated Nitrogen Fluxes and Nitrogen-Chlorophyll Relationships in Tampa Bay, 1985-1994," Proceedings of the Tampa Bay Area Scientific Information Symposium 3. (Ed. S. Treat), Tampa, FL, 1997.
4. J.L. Martin , C. Hesterlee and T. Cole. "Two-Dimensional Reservoir Water Quality Modeling using CEQUAL-W2 on Selected Reservoirs," Proceedings of the 1999 Georgia Water Resources Conference, Athens, GA.
5. Medine, Allen J. and **James L. Martin**. "Development of a Metal Exposure and Transformation Assessment Model for use in Watershed Management, Restoration and TMDL Analyses," Proceedings of Watershed 2000, Water Environment Federation and British Columbia Water and Waste Association and Western Canada Water and Wastewater Association, July 8-12, 2000.
6. M. Dortch , **J.L. Martin**, B.E. Johnson and P. Deliman. "Corps TMDL Modeling Activities," Proceedings of Watershed Management 2000, Am. Society of Civil Engineers, Baltimore, MD, 2000.
7. Hendrickson, J., **J.L. Martin**, and C. Cerco. "Photo-Decomposition Model for Colored Dissolved Organic Matter In A Blackwater Estuary." Proceedings of the AWRA Conference on Water Quality Monitoring and Modeling, April 30-May 2, San Antonio, TX, 2001.
8. **Martin, J.L.**, Dorothy Tillman, Carl Cerco, John Hendrickson, and Mark Dortch. "A Three-Dimensional Water Quality Model for estimating TMDLs in a Blackwater River Estuary, the Lower St. Johns River, FL", Estuarine and Coastal Modeling, Proceedings of the 7th International Conference (Ed. M. Spaulding), American Society of Civil Engineers, Reston, VA., 2002.
9. **Martin, J.L.**, Barry Bunch , and Ajit Vaidya. "A Modeling Framework for Determination of Total Maximum Daily Loads to the Grand Calumet Watershed, Indiana," Proceedings, National TMDL Science and Policy 2002, November 13-16, Phoenix, AZ., 2002.
10. D. DeLeon, T. Thornburg, and **J. Martin**, 2004. "Preventing Sediment Recontamination in an Urban Waterway, Tacoma, Washington." Proceedings of the 77th Annual Water Environment Federation Technical Exhibition and Conference, New Orleans, October 2-6, 2004.
11. Vladimir J. Alarcon, Charles G. O'Hara, William McAnally, James Martin, Jairo Diaz, and Zhiyong Duan. 2005. "Sensitivity of HSPF-Estimated Flow-Rate To Topographical Parameter Values For A Coastal Watershed In Mississippi," Proceedings, Geographic Information Systems And Water Resources IV, AWRA Spring Specialty Conference, Houston, Texas, May 8-10, 2006.
12. Vladimir J. Alarcon, Charles G. O'Hara, William McAnally, **James Martin**, Jairo Diaz, and Zhiyong Duan. 2005. "Influence of Elevation Dataset On Watershed Delineation Of Three Catchments In Mississippi," Proceedings, Geographic Information Systems And

Water Resources IV, AWRA Spring Specialty Conference, Houston, Texas, May 8-10, 2006.

13. Alarcon, V. J., O'Hara, C. G., Viger, R., Toll, D., Diaz, J., Tagert, M. L., McAnally, W., and **Martin, J.**, 2006. Rapid Prototyping Capabilities for Evaluating Current and Future NASA Data in Multi-Scale Sensitivity Analysis in Watershed Hydrology Modeling. Eos Trans. AGU, 87(52), Fall Meet. Suppl., Abstract IN33B-1350.
14. Wilkerson, G. Wayne, William H. McAnally, **James L. Martin**, Jeffrey A. Ballweber, Kim Collins, and Gaurav Savant. 2007. "LATIS: A Spatial Decision Support System to Assess Low Impact Site Development Strategies," Proceedings of the 2nd National Low Impact Development Conference, March 12-14, 2007, Wilmington, NC
15. Diaz, J.N, W.H. McAnally, **J.L. Martin**, 2007. Evaluation of HSPF Uncertainty Bounds. Proceedings of the Fourth Conference on Watershed Management to Meet Quality and TMDLs, March 10-14, San Antonio, TX.
16. Duan, Z., **J. Martin**, W. McAnally, and R. Stockstill. 2007. "Formulations for Wind-driven Gas-liquid Transfer Rate," Proceedings of the ASCE/EWRI World Environmental and Water Resources Congress 2007, Tampa, FL.
17. Duan, Z., Jairo N. Diaz, **James L. Martin** and William H. McAnally. 2007. "Effects of Land Use Change on the Simulations of Hydrologic and Water Quality Parameters for the St. Louis Bay Watershed," Proceedings of FLUCOM 2007, Tallahassee, FL.
18. Diaz-Ramirez, Jairo, Zhiyong Duan, William McAnally, and **James Martin**, "Sensitivity of the HSPF Model to Land Use/Land Cover Datasets," Proceedings of FLUCOM 2007, Tallahassee, FL.
19. Alarcon V. J., W. McAnally, J. Diaz-Ramirez, **J. Martin**, and J. Cartwright, 2008. A Hydrological Model of the Mobile River Watershed, Southeastern USA. Proceedings ICCMSE 2008, American Institute of Physics.
20. Diaz-Ramirez, J. N., W. H. McAnally, and **J. L. Martin**. 2008. Parameter Uncertainty Propagation on Streamflow Simulations and Parameter Sensitivity Evaluation of a Lumped Watershed Model: A Case Study. World Environmental & Water Resources Conference, Honolulu, HI, May 13-16. Meeting of the Environmental & Water Resources Institute of ASCE, Reston, VA.
21. Ramirez-Avila, J. J., McAnally, W. H., **Martin, J.**, Ortega-Achury, S. L., & Diaz-Ramirez, J. (Sep 2008). "Evaluation and Prediction of Sediment Loads Within the Town Creek Watershed," Agricultural Research Service, U.S. Department of Agriculture, Oxford, Mississippi: 50 Years of Soil and Water Research in a Changing Agricultural Environment Conference.
22. Ortega-Achury, S.L., John J. Ramirez-Avila, William H. McAnally, **James L. Martin**, and Trey E. Davis. 2009. Nutrient and sediment production, watershed characteristics, and land use in the Town Creek Watershed, Mississippi. Proceedings of the American Society of Biological and Biological Engineering – ASABE Annual International Meeting. Reno, NV
23. Diaz-Ramirez, J.N., W.H. McAnally, **J.L. Martin**. 2010. "A Review of HSPF Evaluations

on the Southern United States and Puerto Rico,” 21st Century Watershed Technology: Improving Water Quality and the Environment. February 21-24, Costa Rica. Meeting of the ASABE and EARTH University.

24. Alarcon V. J., W. McNally, J. Diaz-Ramirez, **J. Martin**, and J. Cartwright, 2009. “A Hydrological Model of the Mobile River Watershed, Southeastern USA,” AIP Conf. Proc. 1148:641-645, DOI:10.1063/1.3225392.
25. Ramírez-Avila, J.J., W.H. McNally, **J.L. Martin**, S.L. Ortega-Achury, and J.N. Díaz-Ramírez. 2009. Monitoring and Prediction of Sediment Discharges within Town Creek Watershed, MS. ASABE Annual International Meeting, Reno, Nevada, June 21 – 24.
26. Ramírez-Avila, J. J. , E. J. Langendoen, W. H. McNally, **J. L. Martin**, S. L. Ortega-Achury, and J. N. Díaz-Ramírez. 2010. “Streambank Erosion Assessment in Southeastern Plains Ecoregion Channels Using In Situ Monitoring and Submerged Jet Testing,” Proceedings of the ASCE/EWRI World Environmental and Water Resources Congress, Providence, RI, May 2010.
27. Duan, Zhiyong, **James L. Martin**, and Yong Tang. 2010. “Modeling Oxygen Mass Transfer Rate through the Air-Water Surface in Stratified Flows,” Proceedings of the ASCE/EWRI World Environmental and Water Resources Congress, Providence, RI, May 2010.
28. Ramirez-Avila, J. J., Langendoen, E. J., McNally, W. H., Ortega-Achury, S. L., & **Martin, J.** (2011). Sediment Rating Parameters and Their Implications in the Town Creek Watershed, MS. 2011 ASABE Annual International Meeting. Louisville, KY: American Society of Agricultural and Biological Engineers.
29. Ramírez-Avila J.J., E. J. Langendoen, W. H. McNally, J. Martin and S. L. Ortega-Achury. 2011. The Role of Streambank Erosion Contributions to Sediment Loads in the Town Creek Watershed in Mississippi. Ed. Flanagan, D.C., J.C. Ascough II, and J.L. Nieber. Proceeding of the 2011 International Symposium on Erosion and Landscape Evolution (ISELE), Anchorage, Alaska. September 18-21, 2011. Paper 11124. 9 pp.

30. Camacho, Rene A. and **James L. Martin**. 2012. “A Methodological Framework for Evaluating Uncertainty in Hydrodynamic Models,” Proceedings of the 10th International Conference on Hydroscience and Engineering, November 4-7, Orlando, FL
31. Diaz-Ramirez, Jairo, James Martin and William McNally. 2012. Modeling Sediment and Phosphorus Yields from Agricultural Areas: A Case Study Evaluating the HSPF Model in the Mississippi Delta 10th International Conference on Hydroscience & Engineering, November 4-7, 2012, Orlando, Florida
32. Salazar-Mejia, Germania, Jairo Diaz-Ramirez, William McNally, and James Martin. 2012. Evaluation of Lumped, Semi-Distributed, and Gridded Hydrologic Models at the Farm Scale in the Mississippi Alluvial Valley. Conference on Hydroscience & Engineering, November 4-7, 2012, Orlando, Florida

33. Camacho, Rene A. and James L. Martin. 2013. "Evaluation of parametric and input data uncertainty in a DO model using a synthetic experiment," 2013 World Environmental & Water Resources Congress, Cincinnati, OH.
34. Ramirez-Avila, J. J., Oldham, J.L., Oliveras, M., Ortega-Achury, S. L., & Martin, James L. 2013. Phosphorus Risk Assessment in Agricultural Fields of the Mississippi Delta. 2013 ASA-CSA-SSA International Meeting, Tampa, FL.
35. Burke, Roger, Robert Mckinley, Mel Parsons, Karen McNeal, and James Martin. 2014. "Sediment Pore Water Ammonium Concentrations in Old Tampa Bay as Determined By the Diffusive Equilibration in Thin Films (DET) Technique," Joint Science Conference, Bridging Genes to Ecosystems: Aquatic Science at a Time of Rapid Change, May 18-23, Portland, OR
36. Camacho R.A and Martin J. Uncertainty analysis in water quality modeling: Predictive uncertainty (PU) and the model conditional processor (MCP). World Environmental and Water Resources Congress. Portland, Oregon. June 1-5, 2014
37. Pérez-Gutiérrez, Juan D., James L. Martin, and John J. Ramirez-Avila. 2015. "A Review of the Technical Approaches Used for TMDLs Development in Mississippi," Proceedings of the ASABE Annual International Meeting, New Orleans, Louisiana, July 26 – 29, 2015
38. Martin, James L., Deva K. Borah, Edith Martinez-Guerra and Juan D. Pérez-Gutiérrez. 2015. "TMDL Modeling Approaches, Model Surveys, and Advances," Proceedings of the World Environmental and Water Resources Congress 2015: Water without Borders, Reston, VA
39. Borah, Deva K., James L. Martin and G. Padmanabhan. 2016. "TMDL Model Selections: Simple Analytical to Complex Hydrodynamic and Water Quality Models," The Virginia Water Conference, March 13-15, Richmond, VA

PUBLICATIONS: REPORTS/RESEARCH

1. **Martin, J.L.** and S.C. Chapra. "Preliminary investigations of diel variations in the water quality of Livingston Reservoir (Texas)", Texas A & M Environmental Engineering Special Report 100, College Station, TX, 1983.
2. **Martin, J.L.** "Evaluation of Contaminant Models for the Indiana Harbor Study," Letter Report prepared for the U.S. Army Engineers Chicago District, Chicago, IL, 1985.
3. **Martin, J.L.** "Steady-state temperature and dissolved oxygen analysis of the Cumberland River below Wolf Creek Dam", Letter Report prepared for the U.S. Army Engineer Nashville District, TN, 1985.
4. **Martin, J.L.**, L.T. Curtis, and J.M. Nestler. "Effects of flow alterations on trout habitat in the Cumberland River below Wolf Creek Dam," Miscellaneous Paper E-86-11, U.S. Army

Engineer Waterways Experiment Station, Vicksburg, MS, 1985.

5. **Martin, J.L.** "Water Quality of proposed reregulation dam downstream of Wolf Creek Dam, Cumberland River, Kentucky," Miscellaneous Paper EL-86-4, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS, 1985.
6. Curtis, L.T., **J.L. Martin**, and J.M. Nestler. "Comparative Effects of Trout Habitat of Hydropower Upgrade With and Without Reregulation in the Cumberland River Below Wolf Creek Dam," Miscellaneous Paper E-86-11, U.S. Army Waterways Experiment Station, Vicksburg, MS, 1985.
7. **Martin, J.L.** "Simplified, Steady-State, Temperature and Dissolved Oxygen Model: User's Guide," Instruction Report E-86-4, U.S. Army Engineers Waterways Experiment Station, Vicksburg, MS, 1986.
8. Waterways Experiment Station," Work Plan for Three-Dimensional, Time-Varying, Hydrodynamic, and Water Quality Model of Chesapeake Bay," (Contributing Author), Miscellaneous Paper EL-88-9, U.S. Army Engineers Waterways Experiment Station, Vicksburg, MS, 1986 (Published 1988).
9. Environmental and Hydraulics laboratories. "CE-QUAL-W2: A Two-dimensional, Laterally Averaged, Model of Hydrodynamics and Water Quality, User's Manual", Instruction Report E-86-5, Environmental and Hydraulics Laboratories, Waterways Experiment Station, Vicksburg, MS, 1986 (**J.L. Martin** primary author and technical editor).
10. Brannon, J.M., D. Gunnison, D. Averett, **J.L. Martin**, and Rex Chen, "Analyses of Impacts of Bottom Sediments from Grand Calumet River and Indiana Harbor on Water Quality, Miscellaneous Paper EL-86, U.S. Army Engineers Waterways Experiment Station, Vicksburg, MS, 1986.
11. **Martin, J.L.** "Water Quality Modeling Study of the Red River, Louisiana," Miscellaneous Paper EL-87-11, U.S. Army Waterways Experiment Station, Vicksburg, MS, 1987.
12. **Martin, J.L.** "Application of a Two-Dimensional Model of Hydrodynamics and Water Quality (CE-QUAL-W2) to DeGray Lake, Arkansas," Technical Report E-87-1, U.S. Army Engineers Waterways Experiment Station, Vicksburg, MS, 1987.
13. Environmental Laboratory-Duluth. "An Assessment of the Sources and Effects of the Pollution of the Clark Fork River and Lake Pend Oreille," Internal Report, USEPA Environmental Research Laboratory-Duluth, MN, May 1987 (Contributing author).
14. Rygwelski, K.R., V.E. Smith, W.A. Frez, **J.L. Martin**, J.E. Rathbun, S.G. Rood, and J.A. Schneider. "Input-Output Mass Balance Models of Toxic and Conventional Pollutants in Trenton Channel, Detroit River: Activities C.1 and F.5 in the Upper Great Lakes Connecting Channels Study (UGLCCS), USEPA Large Lakes Research Station, Grosse Ile, MI, Interim Report, March 1987.
15. Large Lakes Research Station, "User' Manual for the Transport and Fate Model MICHRIV", Interactive Version EPA 2.0, USEPA Environmental Research Laboratory-Duluth, MN, August 1987 (Contributing author).

16. **Martin, J.L.**, M. Velleux, and K. Rygwelski, "Application of TOXIWASP to Green Bay: Screening and Sensitivity Analyses," IN: Report on Project Planning for the Green Bay Physical-Chemical Mass Balance and Food Chain Models," Internal Report, USEPA Large Lakes Research Station, Grosse Ile, MI, 1988.
17. **Martin, J.L.**, M. Velleux, and K. Rygwelski, "Application of Food-Cain Model (WASTOX: Part II) to Green Bay, Lake Michigan: Screening and Sensitivity Analyses of PCBs in Lake Trout," IN: Report on Project Planning for the Green Bay Physical-Chemical Mass Balance and Food Chain Models," Internal Report, USEPA Large Lakes Research Station, Grosse Ile, MI, 1988.
18. **Martin, J.L.**, S.C. McCutcheon, and R.B. Ambrose. "Assessment Protocols for Confined Disposal Facilities: Time Variable TOXI4 Based CDF Model," Internal Report, USEPA Center for Exposure Assessment Modeling, Athens, GA, 1988.
19. McCutcheon, S.C., R.B. Ambrose, and **J.L. Martin**. "Analysis of Disposal Alternatives for Dredged Spoils Containing Hydrophobic Chemicals," Internal Report, USEPA Center for Exposure Assessment Modeling, Athens, GA, 1988.
20. Nestler, J.M., J.A. Gore, L.T. Curtis, and **J.L. Martin**, "Predicted Effects of Hydropower Uprate on Trout Habitat in the Cumberland River, Downstream of Wolf Creek Dam, Kentucky," Miscellaneous Paper EL-88-10, U.S. Army Engineers Waterways Experiment Station, Vicksburg, MS, 1988.
21. Environmental Laboratory, "CE-QUAL-RIV1: A dynamic, one-dimensional (longitudinal) water quality model for streams, User's Manual," (Listed in preface as contributing author of the revised manual with M. Dortch), Instruction Report E-90-1, US Army Engineer's Waterways Experiment Station, Vicksburg, MS, 1990.
22. Ambrose, R.B. and **J.L. Martin** (Editors). "Technical Guidance Manual for Performing Waste Load Allocations, Book III: Estuaries, Part I, Estuaries and Waste Load Allocations," EPA 823/R-92-002, U.S. Environmental Protection Agency, Washington, DC, 1990.
23. **Martin, J.L.**, R.B. Ambrose and S.C. McCutcheon (Editors). "Technical Guidance Manual for Performing Waste Load Allocations, Book III: Estuaries, Part II: Application of Estuarine Wasteload Allocation Models," EPA#: 823/R-92-003, U.S. Environmental Protection Agency, Washington, DC, 1990.
24. **Martin, J.L.** "Monitoring Protocols for Calibration and Validation of Estuarine Waste Load Allocation Models," IN: Ambrose, R.B. and **J.L. Martin** (Editors). "Technical Guidance Manual for Performing Waste Load Allocations, Book III: Estuaries, Part II" EPA#: 823/R-92-003 , U.S. Environmental Protection Agency, Washington, DC, 1990.
25. **Martin, J.L.**, Ambrose, R.B., and J.F. Paul, "Estuarine Processes," IN: Ambrose, R.B. and **J.L. Martin** (Editors). "Technical Guidance Manual for Performing Waste Load Allocations, Book III: Estuaries, Part I," EPA 823/R-92-002, U.S. Environmental Protection Agency, Washington, DC, 1990.
26. Laniak, G.F., **J.L. Martin**, W.W. Sutton, K.P. Brown, C. McConnell, and S.C. McCutcheon. "Baseline Human Health Risk Assessment: Buffalo River, New York",

- Internal Report, USEPA Center for Exposure Assessment Modeling, Prepared for the U.S. Environmental Protection Agency, Great Lakes National Program Office, Chicago, IL, 1990.
27. Crane, J., **J.L. Martin** and W.W. Sutton. "Baseline Human Health Risk Assessment: Indiana Harbor/Grand Calumet River, Indiana", Internal Report, USEPA Center for Exposure Assessment Modeling, Prepared for the U.S. Environmental Protection Agency, Great Lakes National Program Office, Chicago, IL, 1991.
 28. McCutcheon, S.C., W.S. Lung, and **J.L. Martin**. "Eutrophication and Mixing Analysis following EXXON VALDEZ Oil Spill," Prepared for Science Advisory Board, Washington, DC, October, 1991.
 29. Ambrose, R.B, Jr., T.A. Wool, **J.L. Martin**, J.P. Connolly and R.W. Schanz. "WASP4, A Hydrodynamic and Water Quality Model- Model Theory, User's Manual, and Programmer's Guide," Revision 1, Internal Report, USEPA Center for Exposure Assessment Modeling, U.S. Environmental Protection Agency, Athens, GA, August 1990.
 30. Hosseini-pour, E.Z. and **J.L. Martin**. "RIVMOD, a One-Dimensional Model of Hydrodynamics and Sediment Transport," Internal Report, USEPA Center for Exposure Assessment Modeling, U.S. Environmental Protection Agency, Environmental Research Laboratory, Athens, GA, 1991.
 31. Brown, K.P., E.Z. Hosseini-pour, **J.L. Martin** and R.B. Ambrose, Jr. "Application of a Water Quality Assessment Modeling System at a Superfund Site," EPA/600/3-91/046, 81 p., Athens, GA, 1991.
 32. Jirka, G.H. (Eds. R.B. Ambrose and **J.L. Martin**). "Technical Guidance Manual for Performing Waste Load Allocations, Book III, Estuaries, Part 3: Use of Mixing Zone Models in Estuarine Waste Load Allocations," EPA#: 823/R-92-004, U.S. Environmental Protection Agency, Washington, DC, 1992.
 33. **Martin, J.L.** and S.C. McCutcheon, "Overview of Processes Impacting Contaminant Releases from Confined Disposal Facilities," Contract Report D-92-1, U.S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, MS, 1992.
 34. Ambrose, R.A, and **J.L. Martin** (Editors). 1992. "Use of Mixing Zone Models in Estuarine Waste Load Allocation," by G.H. Jirka, Book III of Technical Guidance Manual for Performing Waste Load Allocations, U.S. EPA, Washington, D.C., EPA-823-R-92-004, 1992.
 35. **Martin, J.L.** and J.L. Crane. "Guidance Document: Risk Assessment and Modeling of Contaminated Sediments," Assessment and Remediation of Contaminated Sediments Program (ARCS) report, Distributed by EPA Great Lakes National Program Office, Chicago, IL, 1992.
 36. **Martin, J.L.** "MERC4, A Mercury Transport and Kinetics Model, Beat Test Version 1.0: Model Theory and User's Guide," AScl Contract Report, Prepared for the USEPA Center for Exposure Assessment Modeling, U.S. Environmental Protection Agency, Athens, GA, July 1992.

37. Ambrose, B, Jr., T.A. Wool, and **J.L. Martin**, "The Water Quality Analysis Simulation Program, WASP5. Part B: the WASP5 Input Dataset, Version 5.00," Internal Report, Distributed by USEPA Center for Exposure Assessment Modeling, U.S. Environmental Protection Agency, Athens, GA, May 1993.
38. Ambrose, B, Jr., T.A. Wool, and **J.L. Martin**, "The Water Quality Analysis Simulation Program, WASP5; Part A: Model Documentation," Internal Report Distributed by USEPA Center for Exposure Assessment Modeling, U.S. Environmental Protection Agency, Athens, GA, June 1993.
39. Wang, P.F., **J.L. Martin** and T.Wool, "Modeling of the fate of Metam-Sodium spilled into the Sacramento River, CA" AScl Contract report to Lief, Cabraser and Heimann, Attorneys at Law. Sacramento, CA, 1993.
40. **Martin, J.L.** "Linkage of the SWMM Transport Block and WASP5 model, AScl Contract Report prepared for Camp, Dresser and McKee, Rouge Program Management Office, Detroit, MI, September 1993.
41. Myers, T.E., M.R. Palmero, T. Olin, D. Averett, D. Reible, **J.L. Martin**, and S.C. McCutcheon. "Estimating Contaminant Losses from Components of Remediation Alternatives for Contaminated Sediments," EPA905-R94, U.S. Environmental Protection Agency, Great Lakes National Program Office, Chicago, IL, April 1994.
42. **Martin, J.L.** and J. Crane. "Assessment and Remediation of Contaminated Sediments (ARCS) Program, Risk Assessment and Modeling Overview Document," U.S. EPA Great Lakes National Program Office, EPA 905-R93-007, Chicago, IL, December 1993.
43. Wang, P.F., **Martin, J.L.** and T. Wool. "A Mathematical Model of Tampa Bay Florida: Phase II", AScl Contract Report prepared for the Surface Water Improvement and Management (SWIM) Section, Southwest Florida Water Management District, Tampa, FL, June 1994.
44. **Martin, J.L.** and T. Wool. "Sediment/Solids Enhancements to WASP and Application to Lake Okeechobee, Florida," AScl Contract Report prepared for the South Florida Water Management District, Contract C-5236, West Palm Beach, FL, September 1994.
45. **Martin, J.L.** "Chattahoochee River Modeling Project Summary Report: Enhancements to CE-QUAL-RIV1 Model Capabilities," AScl Contract Report, Prepared for Law Environmental, Inc., Kennesaw, GA, March 1995.
46. **Martin, J.L.** and T. Wool. "A Multi-Class Phytoplankton and Water Quality Model of Lake Okeechobee," AScl Contract C-5236 Report, Prepared for the South Florida Water Management District, Contract C-5236, West Palm Beach, FL, June 1995.
47. James, R. T., **J.L. Martin**, T. Wool and P.F. Wang. "The Lake Okeechobee Model: Calibration and Analysis," Task 3.6 Final Manuscript, Contract C-5236, South Florida Water Management District, West Palm Beach, FL, August 1995.
48. Wang, P.F., **J.L. Martin**, and T. Wool. "CE-QUAL-ICM Contaminant Model, User Guide," AScl, Inc. Contract Report prepared for the U.S. Army Engineers Waterways Experiment Station, Vicksburg, MS, October 1995.

49. **Martin, J.L.**, P.F. Wang, T. Wool. And G. Morrison. "A Mechanistic, Management Oriented Water Quality Model for Tampa Bay: Calibration, Testing, and Load Response Evaluation," Surface Water Improvement and Management (SWIM) Department, Southwest Florida Water Management District, Tampa, FL, December 1995.
50. Environmental Laboratory. CE-QUAL-RIV1: A Dynamic, One-Dimensional (Longitudinal) Water Quality Model for Streams, User's Manual," Instruction Report EL-95-2, U.S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, MS, 1995. (**J.L. Martin** listed in preface as author of manual revisions and code).
51. **J.L. Martin**, P.F. Wang, T. Wool. And G. Morrison. "A Mechanistic, Management Oriented Water Quality Model for Tampa Bay: Calibration, Testing, and Load Response Evaluation," Surface Water Improvement and Management (SWIM) Department, Southwest Florida Water Management District, Tampa, FL, December 1995.
52. Myers, T.E., D.E. Averett T.J. Olin, M.R. Palermo, D.D. Reible, **J.L. Martin** and S.C. McCutcheon. "Estimating Contaminant Losses From Components of Remediation Alternatives for Contaminated Sediments," EPA 905-R96-001, U.S. EPA Great Lakes National Program Office, Chicago, IL, March 1996.
53. **Martin, J.L.** and T. Wool. "EPD-RIV1: a Hydrodynamic and Water Quality Model, User's Guide" AScl, Inc. Contract Report prepared for the Georgia Department of Environmental Protection, Atlanta, GA, December 1998.
54. **Martin, J. L.** and C. Hesterlee. "Detailed Reservoir Water Quality Modeling to Support Environmental Impact Statements for the Evaluation of ACT and ACF River Basins Water Allocation," Contract Report prepared for the U.S. Army Engineer District-Mobile, March 1998.
55. **Martin, J.L.** and T. Wool. "Temperature Modeling Study of the Kananaskis River," AScl Contract Report submitted to Fisheries and Recreation Enhancement Working Group, the Alberta Department of Environmental Protection, Calgary, Alberta, 1999.
56. **Martin, J.L.** and T. Wool. "Thermal modeling of the Highwood River, Alberta" AScl Contract Report prepared for the Alberta Department of Environmental Protection, Calgary, Alberta, 1999.
57. **J.L. Martin** and R.H. Kennedy. "Total Maximum Daily Loads (TMDLs): A Perspective," WOTS Water Quality Technical Note, ERDC WQTN-MI-07, ERDC Waterways Experiment Station, Vicksburg, MS, 20 pp., 2000.
58. **J.L. Martin** and R.H. Kennedy. "Total Maximum Daily Loads (TMDLs): A Perspective," DOTS Technical Note, ERDC/TN EEDP-01-46, ERDC Waterways Experiment Station, Vicksburg, MS, 20 pp., 2000.
59. **J.L. Martin** and T. Cole. "Water Quality Modeling of J. Percy Priest Reservoir," Technical Report, ERDC /EL SR-00-9, ERDC Waterways Experiment Station, Vicksburg, MS, 2000.
60. Wool, T., R. Ambrose and **J.L. Martin**. "The Water Analysis Simulation Program, User Documentation for Version 6.0," Distributed by USEPA Region 4, Atlanta, GA, 2001

61. **Martin, J.L.**, "Application of CE-QUAL-RIV1 to the Harpeth River, TN," Contract report prepared for Tetra Tech, Inc., Atlanta, GA, 2002.
62. **Martin, J.L.**, "A Review and Evaluation of Sediment Diagenesis Routines for Potential Incorporation into the Water Analysis Simulation Program (WASP)," Contract report prepared for Tetra Tech, Inc., Atlanta, GA, 2002.
63. **J. L. Martin**, W. L. Kingery, V. J. Alarcon, W. H. McAnally, "Modeling the Big Sunflower River for TMDL Development," Completion report, Mississippi State University, prepared for the Mississippi Department of Environmental Quality, TMDL Program, Jackson, MS. 2003.
64. MDEQ and MSU (authors **J. L. Martin**, W. L. Kingery, V. J. Alarcon, W. H. McAnally), "TMDL for Organic Enrichment, Nutrients and Sediment for the Big Sunflower River, Yazoo River Basin," Mississippi State University, and the Mississippi Department of Environmental Quality, TMDL Program, Jackson, MS. June 2003.
65. **J. L. Martin**. "Review of the HydroQual Jackson River Periphyton Model," prepared for Tetra Tech, Inc., Atlanta, GA. August 2003
66. Tillman, Dottie, Carl F. Cerco, Mark R. Noel, **James L. Martin**, and John Hamrick. "Three-Dimensional Eutrophication Model of the Lower St. Johns River, Florida," ERDC/EL TR-04-13, U.S. Army Engineers Engineering Research and Development Center, Vicksburg, MS. August, 2004
67. **J. L. Martin**. "Supplement to Water Analysis Simulation Program (WASP) User Documentation: WASP Sediment Diagenesis Routines: Model Theory and User's Guide," Contract report prepared for Tetra Tech, Inc., Atlanta, Georgia, 10 October 2004.
68. **J.L. Martin**. "Supplement to Water Analysis Simulation Program (WASP) User Documentation: WASP Sediment Periphyton Routines: Model Theory and User's Guide," Contract report prepared for Tetra Tech, Inc., Atlanta, Georgia, 10 October 2004.
69. **J. L. Martin**. "Pre-Release Testing of CE-QUAL-RIV1: Version 3.0," Contract Report DACW42-03-P-0343-P00001. Prepared for the Water Quality and Contaminant Modeling Branch, Environmental Laboratory, Corps of Engineers Engineering Research and Development Center, Vicksburg, MS. December, 2004.
70. G.W. Wilkerson, W. H. McAnally, **J.L. Martin**, R. Jackson and J. Ballweber. 2005. "Final Report: Using Spatial Decision Support Systems (SDSS) to Assess Low Impact Site Development Strategies," Mississippi State University, Prepared for Economic Development Technical Services, Tennessee Valley Authority, Nashville, TN. May, 2005.
71. William H. McAnally, Gaurav Savant, G. Wayne Wilkerson, Rita Jackson, Mary Love Tagert, Jeffrey Ballweber, and **James L. Martin**. "FINAL REPORT: Using Spatial Decision Support Systems (SDSS) to Assess Low Impact Site Development Strategies: Sumner Point Application," Submitted to: Center for Economic Development and Resource Stewardship, Knoxville, TN 37909. May 2005.
72. **James L. Martin**. 2005. "Final Report: Modeling of the Big Sunflower River," Mississippi State University Contract Report prepared for the U.S. Army Corps of Engineers District-

Vicksburg, January, 2006.

73. McAnally, W.H., **J.L. Martin**, J.N. Diaz, Z. Duan, C.A. Mancilla, M.L. Tagert, C. O'Hara, and J.A. Ballweber, 2006. Assimilating remotely sensed data into hydrologic decision support systems: BASINS evaluation. Department of Civil Engineering and GeoResources Institute, Mississippi State University, MS.
74. **Martin, J.L.**, R. Ambrose, and T. Wool. 2006. "WASP7 Benthic Algae - Model Theory and User's Guide, Supplement to Water Analysis Simulation Program (WASP) User Documentation," U.S. Environmental Protection Agency, National Exposure Research Laboratory, Ecosystems Research Division, Athens, GA.
75. Wilkerson, G.W., W.H. McAnally, **J.L. Martin**, R. Jackson, J. Ballweber, G. Savant, S.J. Mulley. 2006. LATIS: A Scaleable Low Impact Development Site Assessment Tool. Mississippi State University, MS
76. Wool, T, R. Ambrose and **J.L. Martin**. 2008. "WASP7 Temperature and Fecal Coliform – Model Theory and User's Guide Supplement to Water Quality Analysis Simulation Program (WASP) User Documentation," U.S. Environmental Protection Agency Office of Research and Development, Washington, DC 20460.
77. **Martin, James L.**, David W. Evans, William H. McAnally, Karen S. McNeal and Matthew Horton. 2010. "Evaluation of the Factors Affecting the Fate and Transport of Mercury in Coastal Estuaries with a Focus on Mobile Bay," NOAA - Northern Gulf Institute, MSU, MS.
78. Diaz-Ramirez, J.N., B.E. Johnson, W.H. McAnally, and **J.L. Martin**. 2010. Multidimensional and Lumped Overland flow Modeling: A Study Case. NOAA - Northern Gulf Institute, MSU, MS.
79. Diaz-Ramirez, J.N., W.H., McAnally, and **J.L. Martin**. 2010. Weeks Bay Watershed Hydrology Simulation. NOAA - Northern Gulf Institute, MSU, MS.
80. Chapra, S.C., **Martin, J.L.** Camacho R.A 2011. "LAKE2K Version 2.0: A Modeling Framework for Simulating Lake Water Quality," Draft Users Manual and Documentation and Model. Mississippi State University and Tufts University.
81. **Martin, James L.**, Barbara A. Butler, and Tim A. Wool. 2011. "Model Documentation for WASP 8: META4-WASP, A Metal Exposure and Transformation Assessment Model: Model Theory and User's Guide," U.S. Environmental Protection Agency US EPA-ORD-NRMRL-LRPCD-RRB, Cincinnati, OH.
82. Martin, James L. and Tim Wool. 2013. "Supplement to Water Analysis Simulation Program User Documentation: WASP Sediment Diagenesis Routines: Model Theory and User's Guide;" U.S. EPA, Region 4 Water Management Division, Atlanta, Georgia
83. Diaz-Ramirez, Jairo, Robbie Kröger, William McAnally and James Martin. 2014. Evaluating Impacts of Porous Check Dams on Flow Routing and Sediment Transport in Agricultural Ditches: A Case Study in The Mississippi Delta. Bulletin 1213, December 2014, Mississippi Agricultural and Forestry Experiment Station (MAFES).

84. McNeal, Karen S., James Martin, Sandra Ortega-Achury, Jonathon Geroux, Curry Templeton, and Erin Anderson. 2014. "Improving TMDL and Waste Load Allocation Permit Limits by Determination and Application of New Sediment Diagenesis Input Parameters in Current Water Quality Models," Final Report to USEPA, RARE Grant, Mississippi State University
85. Martin, James L. 2014. WASP8 Macro Algae - Model Theory and User's Guide, Supplement to Water Analysis Simulation Program (WASP) User Documentation, U.S. Environmental Protection Agency National Exposure Research Laboratory Ecosystems Research Division, Athens, Georgia, July 30, 2014

PRESENTATIONS: CONFERENCES AND SYMPOSIA

1. **Martin, J.L.** and D.G. Huffman. "Notes on the helminths of the cotton rat, *Sigmodon hispidus*," Presented at the 1975 meeting of the Texas Academy of Sciences, Sam Houston State University. Huntsville, TX.
2. **Martin, J.L.** and D.G. Huffman. "The helminths of *Sigmodon hispidus*. II. The effects of season, habitat, and the sex, age, and weight of the host", Presented at the 1976 meeting of the Texas Academy of Sciences, Texas A & M University, College Station, TX.
3. **Martin, J.L.** and D. G. Huffman. "An ecological study of the helminths of the cotton rat, *Sigmodon hispidus*, in the area of San Marcos, Texas", Presented at the 1976 meeting of the Southwestern Association of Parasitologists, University of Oklahoma, Oklahoma City, OK.
4. **Martin, J.L.** "Helminth population dynamics in the hispid cotton rat, *Sigmodon hispidus*." Presented at the 1976 meeting of the American Society of Parasitologists, San Antonio, TX.
5. **Martin, J.L.** and J. Wlosinski. "A comparison of reservoir oxygen predictions from one and two-dimensional models." Presented at the 1985 International Symposium on Applied Lake and Watershed Management, Lake Geneva, WI.
6. **Martin, J.L.**, R. Hall and S. Bird. "Multidimensional water quality modeling," Presented at the 25-27 February, 1986 US Army Corps of Engineers Committee on Water Quality Sixth Seminar, New Orleans, LA.
7. **Martin, J.L.** and J. Nestler. "Cumberland river hydropower studies, steady flow analysis," Presented at the April 30, 1986 Workshop on Tailwaters, American Fisheries Societies Trout Subcommittee, Southern Division, Tech Aqua, TN.
8. **Martin, J.L.** and J. Nestler. "Cumberland river hydropower studies, unsteady flow analysis," Presented at the April 30, 1986 Workshop on Tailwaters, American Fisheries Societies Trout Subcommittee, Southern Division, Tech Aqua, TN.

9. Smith, V.E., J.E. Rathbun, W.A. Frez, S.G. Rood, M.D. Mullin and **J.L. Martin**. "Use of Persistent PCB Congeners as Environmental Tracers," Presented at the Nov. 9-12, 1987 meeting of the Soc. of Environ. Toxicology and Chemistry, Pensacola, FL.
10. Richardson, W.L., R. Kreis, M.D. Mullin, **J.L. Martin**, and J. Filkens. "Results of the Binational Study of the Great Lakes Upper Connecting Channels-- The Detroit River," Presented at the May 5-11, 1988 meeting of the American Chemical Society, Toronto, Ontario.
11. Richardson, W.L., R.G. Kreis, and **J.L. Martin**. "A Modeling Framework for Planning a Mass Balance Project for Green Bay, Lake Michigan," Presented at the May 17-20, 1988 meeting of the International Association for Great Lakes Research, Hamilton, Ontario.
12. Rygwelski, K.R., **J.L. Martin**, W.L. Richardson and S.L. Kleiber. "Mass Budget of Toxic and Conventional Pollutants in the Trenton Channel," Presented at the May 17-20, 1988 meeting of the International Association for Great Lakes Research, Hamilton, Ontario.
13. **Martin, J.L.**, W.L. Richardson, S.C. McCutcheon, and J.F. Paul. "Modeling Studies for Planning: The Green Bay Project," Presented at the 24 Annual Conference of the American Water Resources Association, November 6-11, 1988, Milwaukee, WI.
14. Paul, J.F., W.L. Richardson, **J.L. Martin**, and S.C. McCutcheon. "Modeling Toxic Substances in Green Bay: Development of the Modeling Framework," Presented at the 24 Annual Conference of the American Water Resources Association, November 6-11, 1988, Milwaukee, WI.
15. Richardson, W.L., **J.L. Martin**, J.F. Paul, and S.C. McCutcheon, "Influence of Modeling in Planning Large Scale, Integrated Water Quality Studies: Green Bay Case Study," Presented at the 24 Annual Conference of the American Water Resources Association, November 6-11, 1988, Milwaukee, WI.
16. **Martin, J.L.** "Modeling the Migration and Effects of PCBs from Confined Disposal Facilities," Presented at the Ninth Annual Meeting of the Society of Environmental Toxicology and Chemistry, Nov. 13-17, 1988, Arlington, VA.
17. **Martin, J.L.** , M. Velleux and K. Rygwelski. "Screening Level PCB Model of Green Bay, Lake Michigan," Presented at the 32nd Conference of the International Association for Great Lakes Research, May 30-June 2, 1989, Madison, WI.
18. **Martin, J.L.** , S. McCutcheon and M. Zakikhani. "Modeling the Migration of PCBs from Confined Disposal Facilities," Presented at the 32nd Conference of the International Association for Great Lakes Research, May 30-June 2, 1989, Madison, WI.
19. Velleux, M., **Martin, J.**, Rathbun, J., and Kreis, R. "Observed and Predicted Impacts of Contaminant Transport from the Saginaw Diked Facility," presented at the 33rd Conference of the Society of Environmental Toxicology and Chemistry (SETAC), October 30-November 4, 1989, Toronto, Ontario.
20. W. Lung, **J. L. Martin** and S. McCutcheon. "Eutrophication Potential in Selected Embayments of Price William Sound Following Fertilizer Application," Presented at the 11th meeting of the Society for Environmental Toxicology and Chemistry, November 11-

- 15, 1990, Arlington, VA.
21. Wang, P.F. and **J.L. Martin**. "Mass Balance Modeling of the Buffalo River, NY: Hydrodynamics and Transport," Presented at the 34th Conference of the International Association for Great Lakes Research, June 2-6, 1991, Buffalo, NY.
 22. **Martin, J.L.** and W.L. Richardson. "Mass Balance Modeling of Selected Great Lakes Areas of Concern, An Overview," Presented at the 34th Conference of the International Association for Great Lakes Research, June 2-6, 1991, Buffalo, NY.
 23. Morrison, G., **J. Martin**, H. Greening. "Use of the WASP4 model to develop load reduction goals for nutrients in the Tampa Bay watershed," Presented at the 12th International Estuarine Research Federation Conference, November 14-18, 1993, Hilton Head Island, SC.
 24. Wang, P.F., **J.L. Martin**, and G. Morrison. "Nutrient Budget Analysis for Tampa Bay, Florida," Presented at the 14th International Symposium on Lake and Reservoir Management, October 31-November 5, 1994, Orlando, FL.
 25. Wool, T., **J.L. Martin**, and R. Schottman. "The Linked Watershed/Waterbody Model (LWWM): A Watershed Management Modeling System," Presented at the 14th International Symposium on Lake and Reservoir Management, October 31-November 5, 1994, Orlando, FL.
 26. Greening, H, R. Eckenrod, G. Morrison, T. Janecki and **J. Martin**. "Using Seagrass Water Quality Requirements to Determine Watershed Management Targets for Tampa Bay, Florida" Presented at the 13th Conference of the Estuarine Research Federation, November 12-16, 1995, Corpus Christi, TX.
 27. **J.L. Martin** and T. Wool. "The Linked Watershed/Waterbody Model (LWWM): A Watershed Management Modeling System," Presented at the American Society of Civil Engineers Environmental Management 1996, March 28, 1996, Tampa, FL.
 28. Morrison, G., A. Janicki, D. Wade, **J. Martin**, G. Vargo and R. Johannson. "Estimated Nitrogen Fluxes and Nitrogen-Chlorophyll Relationships in Tampa Bay, 1985-1994," Tampa Bay Area Scientific Information Symposium 3, 1996, Tampa, FL.
 29. **Martin, J.L.**, L. Owoputi, and M. Lichte. "Water Quality Model Application to Youghiogheny River Lake and Youghiogheny River, Pennsylvania," Presented at the 17th International Symposium on Lake and Reservoir Management, December 2-5, 1997, Houston, TX.
 30. T. Wool, **J.L. Martin**, R. Olson, R. Burke III, and J. Geenfield. "Development of a State-of-the-Art Riverine Total Maximum Daily Load Water Quality Model," Presented at the 17th International Symposium on Lake and Reservoir Management, December 2-5, 1997, Houston, TX.
 31. L. Owoputi, and **J.L. Martin**. "Water Quality Model Application to Stonewall Jackson Lake and River, Pennsylvania," Presented at the 18th International Symposium on Lake and Reservoir Management, November 10-13, 1998, Banff, Alberta.

32. **J.L. Martin** , C. Hesterlee and T. Cole. "Two-Dimensional Reservoir Water Quality Modeling using CEQUAL-W2 on Selected Reservoirs," Presented at the 1999 Georgia Water Resources Conference, Athens, GA.
33. **J.L. Martin**. "Total maximum Daily Loads, and Overview," Invited paper presented at the American Association of Port Authorities Harbors, Navigation & Environment Seminar, February 2, 2000, Miami, FL.
34. M. Dortch , **J.L. Martin**, B.E. Johnson and P. Deliman. "Corps TMDL Modeling Activities," Presented at Watershed Management and Operations Management 2000, June 21-24, 2000, Fort Collins, CO.
35. M. Dortch and **J.L. Martin**. "TMDLs, the Process and Potential Impact to the Corps, Presented at Water 2000 – Watershed Management in the 21st Century – A Team Approach, August 28-30, 2000, St. Paul, MN.
36. Medine, A.J. and **J.L. Martin**. "Development of a Metal Exposure and Transformation Model for Use in Watershed Management, Restoration and TMDL Analysis, Watershed 2000, July 9-12, 2000, Vancouver, BC.
37. Medine, A.J. and **J.L. Martin**. "Development of the Speciation-Based Exposure and Transformation Assessment Model (META4): Application to Copper and Zinc Problems in the Alamosa River, Colorado," Presented at the American Chemical Society, Environmental Chemistry Division Symposium, August, 2000, Boulder, CO.
38. **Martin, J.L.** "TMDL Modeling using CE-QUAL-ICM in Grand Calumet River Watershed," Presented at Water Quality Workshop 2000-2010, February 23-24, 2000, Nashville, TN.
39. Hendrickson, J., **J.L. Martin**, and C. Cerco. "Photo-Decomposition Model For Colored Dissolved Organic Matter In A Blackwater Estuary." Presented at the AWRA Conference on Water Quality Monitoring and Modeling, April 30-May 2, 2001, San Antonio, TX.
40. **Martin, J.L.** "The Total Maximum Daily Load Program: Modeling Implications, " Presented to the Navy Space and Naval Warfare Systems Command, June 27, 2001, San Diego, CA.
41. **Martin, J.L.** and M.S. Dortch. "Coupling of Hydraulic and Environmental Quality Models: Issues and Approaches, " Invited keynote presentation at the General Fluids, Hydrodynamics, Transport Processes and Environmental Fluids Session, ASCE/ASME 2001 Mechanics And Materials Conference, June 27-29, 2001, San Diego, CA.
42. **Martin, J.L.**, Dorothy Tillman, Carl Cerco, John Hendrickson, and Mark Dortch. "A Three-Dimensional Water Quality Model for estimating TMDLs in a Blackwater River Estuary, the Lower St. Johns River, FL Presented at the 7th International Conference on Estuarine and Coastal Modeling, November 5-7, 2001, St. Petersburg, FL.
43. **Martin, J.L.** "Empirical Methods to Evaluate Stability," presented at the Sediment Stability Workshop, sponsored by the U.S. EPA, USACE, and U.S. Navy, January 22-24, 2002, New Orleans, LA.
44. **Martin, J.L.**, Barry Bunch , and Ajit Vaidya. "A Modeling Framework for Determination of

Total Maximum Daily Loads to the Grand Calumet Watershed, Indiana," National TMDL Science and Policy 2002, November 13-16, Phoenix, AZ.

45. T. Wool, R.B. Ambrose, **J. Martin**, S. Davie, and W. Anderson. "Modifications of WASP for simulating periphyton dynamics," National TMDL Science and Policy 2003, Chicago, IL, November 16-18, 2003.
46. **Martin, J.L.** "Water Quality Modeling: Current Trends Current Issues," Invited presentation at the U.S. EPA's Office of Research and Development, Ecosystem Research Division, Athens, GA , September 15, 2004.
47. **Martin, J.L.** "Low Flow Analysis of the Big Sunflower River," 2004 Joint Section Meeting of the American Society of Civil Engineers and Association of Engineering Geologists, September 23-24, Vicksburg, Mississippi.
48. De Leon, D., T. Thornburg, and **J. L. Martin**, 2004. "Preventing sediment recontamination in an urban waterway, Tacoma, Washington," Proceedings of the 77th Annual Water Environment Federation Technical Exhibition and Conference (WEFTEC), New Orleans, October 2-6, 2004
49. Alarcon, V. J., O'Hara, C. G., McAnally, W., **Martin, J.**, Diaz, J., Duan, Z., 2006. "Influence of Elevation dataset on Watershed Delineation of Three Catchments in Mississippi". Geographic Information Systems and Water Resources IV AWRA Spring Specialty Conference, Houston, TX.
50. Alarcon, V. J., O'Hara, C. G., McAnally, W., **Martin, J.**, Diaz, J., Duan, Z., 2006. "Sensitivity of HSPF-estimated Flow-rate to Topographical Parameter Values for a Coastal Watershed in Mississippi". Geographic Information Systems and Water Resources IV AWRA Spring Specialty Conference, Houston, TX.
51. Duan, Zhiyong and *James L. Martin*. 2007. "Evaluation of Gas-Liquid Transfer Rate Formulae," Presented at the MS ASCE Section Meeting, November 2nd, 2006
52. Diaz, J.N, W.H. McAnally, **J.L. Martin**, 2007. "Evaluation of HSPF Uncertainty Bounds," Fourth Conference on Watershed Management to Meet Quality and TMDLs, March 10-13, San Antonio, TX.
53. Wilkerson, G. Wayne, William H. McAnally, **James L. Martin**, Jeffrey A. Ballweber, Kim Collins, and Gaurav Savant. 2007. "LATIS: A Spatial Decision Support System to Assess Low Impact Site Development Strategies," 2nd National Low Impact Development Conference, March 12-14, 2007, Wilmington, NC.
54. Diaz, J.N., W.H. McAnally, and **J.L. Martin**. 2007. "Evaluation of HSPF Uncertainty Bounds Due to Potential Evapotranspiration Bias and Parameter Variability," Presented at the 37th Annual Mississippi Water Resources Conference, April 24-25, Jackson, MS.
55. McAnally, W.H., **J.L. Martin**, M.L. Tagert and J. Sharp. 2007. "Modeling Mobile Bay Sediments with New Technologies," Presented at the 37th Annual Mississippi Water Resources Conference, April 24-25, Jackson, MS.
56. Duan, Z. and **J.L. Martin**. 2007. "Integration of Impact Factors of Gas-Liquid Transfer Rate," Presented at the 37th Annual Mississippi Water Resources Conference, April 24-

25, Jackson, MS.

57. Tagert, M.L., Q. White, **J.L. Martin**, and J. Pote. 2007. "Water Quality Impacts of Failing Septic Systems in a Coastal Area," Presented at the 37th Annual Mississippi Water Resources Conference, April 24-25, Jackson, MS.
58. Tagert, Mary Love., Jonathan Pote, **James Martin**, and Quinton White. 2007. "Geospatial Technologies for Assessing Water Quality Impacts of Failing Septic Systems in a Coastal Area," Presented at NOAA's Coastal Geo Tools Conference, March 2007, Myrtle Beach, SC.
59. Duan, Z., **J. Martin**, W. McAnally, and R. Stockstill. 2007. "Formulations for Wind-driven Gas-liquid Transfer Rate," ASCE/EWRI World Environmental and Water Resources Congress 2007, Tampa, FL.
60. Duan, Z., Jairo N. Diaz, **James L. Martin** and William H. McAnally. 2007. "Effects of Land Use Change on the Simulations of Hydrologic and Water Quality Parameters for the St. Louis Bay Watershed," FLUCOME, Ninth International Symposium on Fluid Control, Measurement and Visualization September 16-19, 2007, Tallahassee, FL.
61. Diaz-Ramirez, Jairo, Zhiyong Duan, William McAnally, and **James Martin**, "Sensitivity of the HSPF Model to Land Use/Land Cover Datasets," FLUCOME, Ninth International Symposium on Fluid Control, Measurement and Visualization September 16-19, 2007, Tallahassee, FL.
62. Ramirez-Avila, J., J.N. Diaz-Ramirez, **J.L. Martin**, and W.H. McAnally. 2008. "Sediment Transport using HEC-RAS 4.0." Presented at the April 15-16, 2008 Mississippi Water Resources Conference, Jackson, MS.
63. Diaz-Ramirez, Jairo, V. J. Alarcon, W.H. McAnally, and **J.L. Martin**. 2008. "The Mobile River Basin: A Review of Physiographic, Climatic, Water Quantity and Water Quality Characteristics," Presented at the April 15-16, 2008 Mississippi Water Resources Conference, Jackson, MS. Ramirez-Avila, J., J.N. Diaz-Ramirez, J.L. Martin, and W.H. McAnally. 2008. "Sediment Transport using HEC-RAS 4.0." Presented at the April 15-16, 2008 Mississippi Water Resources Conference, Jackson, MS.
64. **James L. Martin**, William H. McAnally, Richie McComas, and Sandra Ortega-Achury. 2008. "Data Collection for Model and Remote Sensing Evaluation in the Mobile Bay," Gulf of Mexico Alliance, 1st Annual Monitoring Forum, St. Petersburg, FL, June 3-6, 2008
65. Ramirez-Avila, J.J., W.H. McAnally, **J.L. Martin**, S.L. Ortega-Achury, and J.N. Diaz-Ramirez. 2008. Evaluation and Prediction of Sediment Loads within the Town Creek Watershed. 50 Years of Soil and Water Research in a Changing Agricultural Environment Conference, Oxford, MS, September 3-5. Meeting of the Agricultural Research Service, U.S. Department of Agriculture.
66. Ortega-Achury, Sandra L., William H. McAnally, John J. Ramirez Avila, and **James L. Martin**, 2009. Water quality assessment in the Town Creek Watershed, MS. Presented at the Mississippi Water Resource Conference, Tunica, MS, August 5-9, 2009.

67. Ramírez-Avila, John J., Eddy J. Langendoen, William H. McAnally, and **James L. Martin**. 2009. Identification of streambank erosion processes and channel changes in Northeastern Mississippi. Presented at the Mississippi Water Resource Conference, Tunica, MS, August 5-9, 2009
68. Ramírez-Avila J.J., S.L. Ortega-Achury, W.H. McAnally, **J.L. Martin**, and J.N. Díaz-Ramírez. 2009. Evaluation and Prediction of Sediment and Phosphorus Loads Within the Town Creek Watershed, MS. Northern Gulf Institute Annual Conference, Biloxi, May 20-21. Meeting of the Northern Gulf Institute, MSU, MS.
69. Ramírez-Avila J.J., W.H. McAnally, **J.L. Martin**, E. Langendoen, S.L. Ortega Achury, and J.N. Díaz-Ramírez. 2009. Northern Gulf Institute Annual Conference, Biloxi, May 20-21. Meeting of the Northern Gulf Institute, MSU, MS. [Poster].
70. J. M. Prince, J. D. Madsen, D. R. Shaw, J. L. Harvill, G. E. Ervin, **J. L. Martin**, and S. A. Samson. Modeling Eurasian Watermilfoil (*Myriophyllum spicatum*) with Geographic Information Systems. Midsouth Aquatic Plant Management Society Conference. Sep. 15-17, 2009, Lake Guntersville State Park, AL.
71. Diaz-Ramirez, J.N., W.H. McAnally, and **J.L. Martin**. 2010. "Rainfall Database Effects on Hydrology Simulation in a Small Coastal Catchment," Alabama Water Resources Conference, September 8-10, Perdido Beach Resort, Orange Beach, Alabama.
72. Diaz-Ramirez, J.N., W.H. McAnally, **J.L. Martin**, K. McNeal, J.E. Ezell, J. Sharp, K. Pevey, M. Follum, and S. Phipps. 2010. "Assessment of Weeks Bay and Its Watershed, Alabama," Alabama Water Resources Conference, September 8-10, Perdido Beach Resort, Orange Beach, Alabama. [Poster].
73. Diaz-Ramirez, J.N., W.H. McAnally, and **J.L. Martin**. 2010. "Hydrological Modeling of Coastal Catchments in Alabama," Northern Gulf Institute Annual Conference, Mobile, May 18-20. Meeting of the Northern Gulf Institute, MSU, MS.
74. Diaz-Ramirez, J.N., B.E. Johnson, W.H. McAnally, and **J.L. Martin**. 2010. "Comparison of Lumped and Distributed Hydrologic Models for the Runoff Simulation of a Large Watershed in Alabama and Mississippi," Northern Gulf Institute Annual Conference, Mobile, May 18-20. Meeting of the Northern Gulf Institute, MSU, MS.
75. McAnally, W.H., J. Cartwright, R. Jackson, **J. Martin**, and J.N. Diaz-Ramirez. 2010, "Sulis - A Tool for Healthy Watersheds, Healthy Oceans, Healthy Ecosystems," Northern Gulf Institute Annual Conference, Mobile, May 18-20. Meeting of the Northern Gulf Institute, MSU, MS. [Presentation and Poster]
76. Ramírez-Avila, J. J., E. J. Langendoen, W. H. McAnally, **J. L. Martin** and S. L. Ortega-Achury, 2010. "A Sediment Budget for Town Creek Watershed: Preliminary Results from Streambank Erosion Processes and Rates Assessment, " ASABE Annual International Meeting.
77. Diaz-Ramirez, J.N., W.H. McAnally, J.L. Martin, K. McNeal, J.E. Ezell, J. Sharp, K. Pevey, M. Follum, and S. Phipps. 2010. "Assessment of Weeks Bay and Its Watershed, Alabama," Alabama Water Resources Conference, September 8-10, Perdido Beach Resort, Orange Beach, Alabama. [Poster].

78. Ramírez-Avila, J. J., E. J. Langendoen, W. H. McAnally, J. L. Martin and S. L. Ortega-Achury, 2010. "A Sediment Budget for Town Creek Watershed: Preliminary Results from Streambank Erosion Processes and Rates Assessment," ASABE Annual International Meeting.
79. Salazar, G., A. Moore, W. Wilkerson, J. Diaz-Ramirez, and **J. Martin**. 2010. "Developing a User-Friendly Tool for BMP/LID Modeling Using VBA Programming," Northern Gulf Institute Annual Conference, Mobile, May 18-20. Meeting of the Northern Gulf Institute, MSU, MS. [Poster]
80. Diaz-Ramirez, J.N., W.H. McAnally, **J.L. Martin**. 2010. "A Review of HSPF Evaluations on the Southern United States and Puerto Rico. 21st Century Watershed Technology: Improving Water Quality and the Environment," February 21-24, Costa Rica. Meeting of the ASABE and EARTH University
81. Ramirez-Avila, J. J., McAnally, W. H., Langendoen, E. J., Ortega-Achury, S. L., & Martin, J. (2011). "Assessment and Prediction of Streambank Erosion Rates in the Town Creek Watershed." 2011 NGI Annual Conference. Mobile, AL: Northern Gulf Institute.
82. Ramirez-Avila, J. J., McAnally, W. H., Langendoen, E. J., Ortega-Achury, S. L., & Martin, J. (2011). "Changes in Suspended Sediment Transport in the Town Creek Watershed: Interpretation of Sediment Rating Curves," 2011 NGI Annual Conference. Mobile, AL: Northern Gulf Institute.
83. Alarcon, V. J., McAnally, W. H., Xiong, Y., & Martin, J. (2011). Modeling and Simulation of Hydrodynamics and Dye Transport in Grand Bay, MS, and Perdido Bay, FL. 2011 Northern Gulf Institute Conference. Mobile, AL.
84. McAnally, W. H., Evans, D., Martin, J., Sloan, J., & Alarcon, V. J. (2011). Sediment and Mercury Path and Fate Modeling. 2011 Northern Gulf Institute Conference. Mobile, AL.
85. Ramírez-Avila, J. J., E.J. Langendoen, W. H. McAnally, S.L. Ortega-Achury, J.L. Martin, R. Bingner. 2012. Assessing and Modeling Sediment Loads from Stream Corridor Erosion along the Town Creek in Mississippi. 2012 Mississippi Water Resources Conference. Jackson, Mississippi, April 3-4, 2012.
86. Ramírez-Avila, J. J., S.L. Ortega-Achury, W. H. McAnally, J.L. Martin, J. Diaz. 2012. Runoff Quality Effects of Simulated Conservation Practice Scenarios in a Mississippi Delta's Watershed. 2012 Mississippi Water Resources Conference. Jackson, Mississippi, April 3-4, 2012.
87. Pérez-Gutiérrez, Juan D., James L. Martin, and John J. Ramirez-Avila. 2015. "A Review of the Technical Approaches Used for TMDLs Development in Mississippi," ASABE Annual International Meeting, New Orleans, Louisiana, July 26 – 29, 2015
88. Martin, James L., Deva K. Borah, Edith Martinez-Guerra and Juan D. Pérez-Gutiérrez. 2015. "TMDL Modeling Approaches, Model Surveys, and Advances," World Environmental and Water Resources Congress 2015: Water without Borders, Reston, VAS

PRESENTATIONS: WORKSHOPS AND LECTURES:

1. **Martin, J.L.** "Reservoir processes: Considerations in modeling reservoir processes," Presented at the Hydrologic Engineering Center training course on Water Quality Modeling of Rivers and Reservoirs, 25 February-March 1, 1985, Davis, CA.
2. **Martin, J.L.** "An overview of recent developments in water quality modeling from the EWQOS program," Presented at the US Army Engineers Pacific Ocean Division's EWQOS briefing, December 16-20, 1985, Honolulu, HI.
3. **Martin, J.L.** "An overview of water quality modeling capabilities at the Waterways Experiment Station," presented at the January 27, 1986 meeting of the Chesapeake Bay Program's Water Quality Modeling Subgroup, Baltimore, MD.
4. Dortch, M.S., **J.L. Martin**, M. Zimmerman, and D. Hamlin. "Water quality modeling of regulated streams," Presented at the 28-30 October, 1986, USACE Workshop on Reservoir Releases, Atlanta, GA.
5. **Martin, J.L.**, M.S. Dortch, J. Wlosinski and M. Zimmerman. "Reservoir Water Quality Modeling," Presented at the March 30-April 3, 1987 USAE Workshop on Reservoir Water Quality Modeling, Denver, CO.
6. **Martin, J.L.**, R.B. Ambrose, T. Wool, W. Lung, S. McCutcheon, Selected lectures presented at the U.S. EPA Workshop on "Estuarine Waste Load Allocation," September 11-13, 1990, Athens, GA.
7. McCutcheon, S.C., **J.L. Martin** and E.Z. Hosseinipour. "Modeling of Contaminated Sediment Movement," Presented at the Contaminated Sediment Seminar Series on Remedial Approaches for Sites with Contaminated Sediments, June 18-19, 1991, Atlanta Georgia, and June 20, Philadelphia, PA.
8. **Martin, J.L.**, R.B. Ambrose, and T. Wool. Selected Topics on Water Quality Modeling presented at the U.S. EPA Workshop "Introduction to Water Quality Modeling" April 8-12, 1991, Athens, GA.
9. **Martin, J.L.** and R.B. Ambrose. "Water Quality Modeling," Presented to the Institute for Meteorology and Water, May 13-23, 1991, Warsaw, Poland.
10. **Martin, J.L.**, R.B. Ambrose, J. Connolly and T. Wool. Selected topics on water quality modeling presented at the U.S. EPA Workshop "Advanced Water Quality Modeling with the Water Analysis Simulation Program", July 29-August 2, 1991, Boulder, CO.
11. **Martin, J.L.**, and T. Wool. "Water Quality Modeling with the Water Analysis Simulation Program", Presented at the ASCl workshop, August 16-20, 1993, Portland, OR.
12. **Martin, J.L.** "Hydrodynamic Modeling," Presented at the U.S. EPA Great Lakes Program Office's Mass Balance and Risk Assessment Workshop," November 14-17, 1994, Ann Arbor, MI.
13. **Martin, J.L.** "Contaminant Modeling," Presented at the U.S. EPA Great Lakes Program Office's Mass Balance and Risk Assessment Workshop," November 14-17, 1994, Ann Arbor, MI.

14. **Martin, J.L.**, and T. Wool. "Water Quality Modeling with the Water Analysis Simulation Program", Presented to the New York Department of Water Control, January 22-25, 1994, Valhalla, NY.
15. **Martin, J.L.**, and T. Wool. Selected topics on water quality modeling presented at the AScl workshop "Water Quality Modeling with the Water Analysis Simulation Program", January 22-25, 1996, Kissimmee, FL.
16. **Martin, J.L.**, and T. Wool. Selected topics on water quality modeling presented at the AScl workshop "Linked Watershed Waterbody Model", January 23-26, 1996, Kissimmee, FL.
17. **Martin, J.L.**, and T. Wool. Selected topics on water quality modeling presented at the AScl workshop "Water Quality Modeling with the Water Analysis Simulation Program", September 23-27, 1996, Athens, GA.
18. **Martin, J.L.**, and T. Wool. "Water Quality Modeling with the Water Analysis Simulation Program", Presented to the Alberta Department of Environmental Protection, March 22-25, 1997, Edmonton, Alberta.
19. **Martin, J.L.**, and T. Wool. Selected topics on water quality modeling presented at the AScl workshop "Water Quality Modeling with the Water Analysis Simulation Program", October 27-30, 1997, Athens, GA.
20. **Martin, J.L.**, and T. Wool. Selected topics on water quality modeling presented at the AScl workshop "Water Quality Modeling with the Water Analysis Simulation Program", March 1-5, 1997, Washington, D.C.
21. **Martin, J.L.** and T. Wool. Selected topics on water quality modeling presented at the AScl workshop "Water Quality Modeling with the Water Analysis Simulation Program", October 7-9, 1998, Athens, GA.
22. **Martin, J.L.** "Watershed Hydrology and Runoff Processes," Presented at the Short Course on Water Quality Modeling and TMDL Development, University of Georgia, January 11-15, 1999, Athens, GA.
23. **Martin, J.L.** and C. Hesterlee. "A Primer on Waste Load Allocation and TMDL Modeling", Presented to the Mississippi Department of Environmental Quality, January 25-28, 1999, Jackson, MS.
24. **Martin, J.L.** and T. Wool. "Short Course 2: Water Quality Modeling and TMDL Development, the WASP Model," Presented at the Short Course on Water Quality Modeling and TMDL Development, University of Georgia, May 11-15, 1999, Athens, GA.
25. **J.L. Martin**, "Overview of Selected Applications of CE-QUAL-W2", Presented at the CE-QUAL-W2 Workshop, August 20, 1999, Portland, OR
26. **J.L. Martin**, "Application of CE-QUAL-W2 to J. Percy Priest Reservoir", Presented at the CE-QUAL-W2 Workshop, August 21-24, 2000, Portland, OR
27. **Martin, J.L.** and A. Wool. Selected topics on water quality modeling presented at the EPA Region 4 workshop "TMDLs and Water Quality Modeling with the Water Analysis

Simulation Program", June 18-22, 2001, Atlanta, GA.

28. **Martin, J.L.** and A. Vaidya. Selected topics on TMDL Development and Waste Load Allocations presented to the Indiana Department of Environmental Management, October 30, 2001, Indianapolis, IN.
29. **Martin, J.L.** 2002. Presentation on "Empirical Methods to Evaluate Stability," and invited panelist, Sediment Stability Workshop, sponsored by the U.S. EPA, USACE, and U.S. Navy, January 22-24, 2002, New Orleans, LA.
30. **Martin, J.L.** Invited presentation on modeling needs at workshop "Science to Support Nutrient-Management Decisions Related to Hypoxia in the Northern Gulf of Mexico and Water Quality in the Mississippi River Basin," October 16-18, 2002, St. Louis, MO.
31. **Martin, J.L.** Workshop on "Water Quality Modeling," Presented to the National Environment and Planning Agency, Kingston, Jamaica, August 9-13, 2004.
32. **Martin, J.L.** "Water Quality Modeling: Current Trends Current Issues," Invited presentation at the U.S. EPA's Office of Research and Development, Ecosystem Research Division, Athens, GA , September 15, 2004.
33. **Martin, J.L.** Workshop on "Water Quality and Eutrophication Modeling," Presented to the St. Johns Water Management District, July 12-13, 2005.
34. **Martin, J.L.** and Andy Stoddard. "WASP Water Quality Modeling," Presented to the Florida Department of Environmental Protection, June 3-4, 2008, Tallahassee, FL
35. **Martin, J.L.** and Noor Baharim Hashim "TMDLs and Waste Load Allocations Strategies in the U.S.", Presented to the Malaysia Department of Environment, State Office of Johor, Johor, Malaysia, 15 July, 2008
36. **Martin, J.L.** and Noor Baharim Hashim TMDLs and Waste Load Allocations Strategies in the U.S.", Presented to the Malaysia Department of the Environment, State Office of Senlangor, Kuala Lumpur, Malaysia, 17 July, 2008
37. **Martin, J.L.** and Noor Baharim Hashim "Water Quality Modeling in the U.S. : History and Current Practices," Presented to the National Hydraulic Research Institute of Malaysia (NAHRIM), Kuala Lumpur, Malaysia, 18 July 2008
38. **James L. Martin** and Ali Erturk. 2010. "Modeling with HEC-RAS," July 13-17, 2009, IGEM Akademy, İstanbul, Turkey (see flyer in Appendix, course was canceled)
39. **James L. Martin**, Jairo N. Díaz and John J. Ramirez , Mississippi State University; Carlos A. González and Luis A. Camacho, National University of Colombia. 2010. "The IV International Engineering Seminar, Universidad Nacional de Colombia, Environmental Issues in Developing Countries, "July 6th – 30th, 2010.
40. **James L. Martin.** Short Talk: Applied water Quality Modeling, Dean Alumni, University Teknologi Malaysia (UTM), Johor, Malaysia, 5 July 2011.
41. **James L. Martin.** Applied water Quality Modeling, Langkawi Malaysia, 12-14 July 2011.

42. **James L. Martin.** Selected invited topics on water quality modeling, Presented at the U.S. EPA Workshop on the Water Analysis Simulation Program, August 6-10, 2012, Atlanta Georgia
43. **James L. Martin.** Selected invited topics on water quality modeling, Presented at the U.S. EPA Workshop on the Water Analysis Simulation Program, July 15-19, 2013, Atlanta Georgia
44. James L. Martin. Research Needs, presented to National Academy of Sciences, National Academy of Engineering, National Research Council, Advisory Group for The Gulf Research Program. November, 2013, Long Beach, MS.
45. G. Padmanabhan, **James L. Martin**, Andrew Parker, Deva K. Borah, and Yusuf Mohamoud. 2014. Short Course: "Modeling for Watershed Management and TMDL Development," World Environmental and Water Resources Congress. Portland, Oregon. June 1, 2014
46. **James L. Martin.** 2014. Invited presenter at U.S. Environmental Protection Agency Workshop, "The Water Analysis Simulation Program,' August 4-8, 2014, USEPA Region 4, Atlanta, GA
47. G. Padmanabhan, James L. Martin, Andrew Parker, Deva K. Borah, and Yusuf Mohamoud. 2015. Short Course: "Modeling for Watershed Management and TMDL Development," World Environmental and Water Resources Congress. Austin, Texas. May 16, 2015
48. James L. Martin. 2015. Invited presenter at U.S. Environmental Protection Agency Workshop, "The Water Analysis Simulation Program,' July 27-31, USEPA Region 4, Atlanta, GA
49. G. Padmanabhan, James L. Martin, Andrew Parker, Deva K. Borah, and Yusuf Mohamoud. 2015. Short Course: "Modeling for Watershed Management and TMDL Development (Part 1 & 2)," EWRI Watershed Management Symposium 2015, Reston, VA

COURSES TAUGHT

<u>Number</u>	<u>Title</u>
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CE 3523/3503: Water Resources Engineering: Hydraulics of closed conduits; groundwater hydraulics; open channel flow; reservoir and storage analysis; hydraulic structures and machinery. (S02, S03, F03; class removed from curriculum in 2004)

CE 2803: Environmental Engineering Issues: An overview of the scientific, social and legal issues impacting environmental management and protection in the United States. (F07, F08, F09, F10, F11, F12, F13, F14, S15, F15)

CE 3803: Environmental and Water Resources Engineering I: An introduction to the analysis and designing of systems for hydraulic and hydrologic management, water supply, and wastewater reclamation (F05, F06, Summer 05, 06 & 07)

CE 3813: Environmental and Water Resources Engineering II: Pressurized flow in pipe networks. Analysis and design of water distribution , stormwater collection and sanitary sewer systems.(F05, S06, S07, S08, S09, S10, S11, S1q2, S13)

CE 4523/6523: Open Channel Hydraulics: Continuity. energy and momentum principles in open channel flow; flow resistance; uniform and non-uniform flow; channel controls and transitions; unsteady flow routing. (F01, 02, 05, 07, 08, F09)

CE 4533/6533: Computations in Water Resources: Review of relevant numerical analysis; numerical methods for kinematic wave, St. Venant, Boussinesq and depth-averaged equations; simulation of one- and two-dimensional free-surface flows. (S07, S09, F11, F13, F15)

CE 4990/6990: Numerical Methods in Civil Engineering; . A survey of numerical methods for civil engineering practice, with applications in MATLAB and Visual Basic. (Summer 06, S12)

CE 8573: Hydro-environmental Analysis: Environmental engineering aspects of physical/chemical/ biological processes impacting conventional and toxic materials in surface waters. Characteristics of rivers/streams, lakes and estuaries related to environmental quality (F06, F08, F10, F12, F14)

CE 8923: Surface Water Quality Modeling: Water quality modeling of conventional pollutants in surface waters and their impacts (pathogens, temperature, dissolved oxygen, nutrients, and aquatic plants in relation to issues such as health impacts, hypoxia, nuisance and harmful algal blooms). Discussion of the present state-of-the-art of modeling and a review of recent trends. (S02, S04, S06, S07, S08, S10, S12, S14)

CE 8933: Water Quality Modeling II : Water quality model of toxic materials. Modeling of the fate and transport of toxic materials in surface waters including pH and acidification, legacy persistent organic pollutants, metals, mercury, oil spills and emerging pollutants. (F04, S09, S11, S13, S15)

CE 7000: Problems: Modeling River Systems Using HEC-RAS (S02, 3 students)

CE 7000: Problems: Visual Basic Applications in Civil Engineering (S05, F07, S08, summer 08, F10)

CE 7000: Problems: Water Quality Modeling Approaches to Contaminants (F07)

CE 8990: Problems: Numerical Methods in Water Resources Engineering (summer 07)

PROFESSIONAL CONSULTING (2001-PRESENT)

1. Hart Crowser, Seattle, Washington. Provided expert review of documents related to the Thea Foss Waterway superfund site (November 2001-January 2002).
2. Law Environmental, Atlanta, Georgia: Provided expert review of modeling studies on the Dugdeмона River, Louisiana (January-March 2002).
3. Southeast Clean Water Network, Tallahassee, FL: Provided expert review, deposition and court testimony related to modeling studies used in development of a discharge permit to the Lower St. Johns River, FL. (January through February 2002).

4. HydroQual, Inc. Developed modifications of the one-dimensional hydrodynamic model CE-QUAL-RIV1 (February through March 2002).
5. GBMc & Associates, Bryant, AR, Provided technical review of water quality modeling studies.(February-March 2006).
6. PBS&J, Provided technical review of WASP model application to Joes Creek, FL (Jan-Mar 2007)
7. PBS&J, Provided technical review and data collection recommendations for the Winter Haven Chain of Lakes, FL (Jan-March 2007)
8. City of Calgary, Alberta, provided expert review of Bow River modeling studies (Jan-March 2007)
9. Southern California Coastal Water Research Project, modeling of Loma Alta Slough (June-December 2011)
10. Revision of the USEPA Rates and Kinetics Manual, CADMUS engineering, January-December, 2015.
11. Eutrophication TMDL study in the Santa Margarita River, Camp Pendleton, SPAWAR SYSTEMS CENTER PACIFIC. U/S. Navy (April 2012-December 2015)