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Assistant Professor

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Education

- **Ph.D.** Environmental Engineering Sciences, University of Florida May 2006
- **M.E.** Environmental Engineering Sciences, University of Florida December 2001
- **B.S.** Environmental Studies, Richard Stockton College of New Jersey May 1996

Research and Professional History

Assistant Professor

September 2007 – present

Department of Agricultural and Biological Engineering, University of Florida

Post-Doctoral Research Associate

May 2006 – August 2007

Department of Agricultural and Biological Engineering, University of Florida

USDA National Needs Fellow

January 2002 – May 2006

Department of Environmental Engineering Sciences, University of Florida

Graduate Research Assistant

August 1998 – December 2001

Department of Environmental Engineering Sciences, University of Florida

Undergraduate Research Assistant

September 1995 – May 1996

Department of Environmental Studies, Richard Stockton College of New Jersey

Teaching Experience

- ALS 3133 Agriculture and Environmental Quality
- ENV 5518 Field Methods in Environmental Hydrology
- ABE 6254 Simulation of Agricultural Watersheds (50%)
- ENV 4501 Environmental Hydrology (Teaching Assistant)
- ENV 3040 Computational Methods in Environmental Engineering Science (Teaching Assistant)

Refereed Publications

Martinez, C.J. and J.W. Jones. Atlantic and Pacific sea surface temperatures and corn yields in the southeast USA. Submitted to the *International Journal of Climatology*.

Martinez, C.J., Baigorria, G.A., and J.W. Jones. Use of climate indices to predict corn yields in the southeast USA. Submitted to the *International Journal of Climatology*.

Martinez, C.J., Campbell, K.L., Annable, M.D., and G.A. Kiker. 2008. An object-oriented hydrologic model for humid, shallow water-table environments. *Journal of Hydrology*, 351(3-4): 368-381.

Kiker, G.A., Clark, D.J., **Martinez, C.J.**, and R.E. Schulze. 2006. A Java-based, object-oriented modeling system for southern African hydrology. *Transactions of the American Society of Agricultural and Biological Engineers*, 49(5): 1419-1433.

Wang, H., Jawitz, J.W., White, J.R., **Martinez, C.J.**, and M.D. Sees. 2006. Rejuvenating the largest municipal treatment wetland in Florida. *Ecological Engineering*, 26(2): 132-146.

- Martinez, C.J.**, and W.R. Wise. 2003. Analysis of constructed treatment wetland hydraulics with the transient storage model OTIS. *Ecological Engineering*, 20(3): 211-222.
- Martinez, C.J.**, and W.R. Wise. 2003. Hydraulic analysis of the Orlando Easterly Wetland. *Journal of Environmental Engineering*, 129(6): 553-560.

Non-Refereed Conference Papers, Abstracts, and Presentations

- Hwang, S., Newman, M.A., Graham, W.D., **Martinez, C.J.**, Jones, J.W., Asefa, T and A. Adams. Investigating the benefit of improved rainfall forecasts on regional groundwater level predictions. Presented at the Climate Information for Managing Risks (CIMR) International Symposium. St. Pete Beach, Florida, June 10 – 13, 2008.
- Martinez, C.J.** and J.W. Jones. Atlantic and Pacific sea surface temperatures and corn yields in the southeast USA. Presented at the Climate Information for Managing Risks (CIMR) International Symposium. St. Pete Beach, Florida, June 10 – 13, 2008.
- Martinez, C.J.** and J.W. Jones. Atlantic and Pacific sea surface temperatures and corn yields in the southeast USA. Presented at the Southeast Climate Consortium Program Review. Gainesville, Florida, March 20 – 21, 2008.
- Martinez, C.J.**, Newman, M.A., Jones, J.W., and W.D. Graham. The relationship between sea surface temperatures and rainfall in the Tampa Bay region: Potential for long-term predictability. Presented at the University of Florida Water Institute Symposium: Florida Challenges Global Solutions. Gainesville, Florida, February 27 – 28, 2008.
- Martinez, C.J.**, Newman, M.A., Jones, J.W., and W.D. Graham. Coupled modes of variability between Pacific and Atlantic sea surface temperatures and monthly precipitation in southwest Florida. Presented at the American Geophysical Union Fall Meeting, San Francisco, California, December 10 – 14, 2007.
- Martinez, C.J.**, Newman, M.A., Jones, J.W., and W.D. Graham. Relationships between Pacific and Atlantic sea surface temperatures and monthly precipitation in southwest Florida. Presented at the NOAA 32nd Annual Climate Diagnostics and Prediction Workshop. Tallahassee, Florida, October 22 – 26, 2007.
- Newman, M.A., **Martinez, C.J.**, Graham, W.D., and J.W. Jones. Use of seasonal climate forecasts for improving regional public water supply management. Presented at the NOAA 32nd Annual Climate Diagnostics and Prediction Workshop. Tallahassee, Florida, October 22 – 26, 2007.
- Martinez, C.J.**, Campbell, K.L., and G.A. Kiker. An integrated carbon, nitrogen, and phosphorus model for predicting nutrient loads from pastures in the Lake Okeechobee Watershed. Presented at the Florida Section of the American Society of Agricultural and Biological Engineers Annual Conference, St. Pete Beach, Florida, May 30 – June 2, 2007.
- Martinez, C.J.**, Jones, J.W. and W.D. Graham. Tampa Bay Water: Use of climate forecasts to reduce risks in regional water supply management. Presented at the Southeast Climate Consortium Program Review. Griffin, Georgia, May 14 – 16, 2007.
- Martinez, C.J.**, Baigorria, G.A., and J.W. Jones. Influence of climate variability on corn production in the southeast USA. Presented at the Southeast Climate Consortium Program Review. Griffin, Georgia, May 14 – 16, 2007.
- Martinez, C.J.**, Campbell, K.L., Annable, M.D., and G.A. Kiker. Testing and validation of a Java-based object-oriented model for flatwoods water quality. Presented at the American Society of Agricultural and Biological Engineers Annual International Meeting, Tampa, Florida, July 17 – 20, 2005.
- Martinez, C.J.**, Annable, M.D., Jawitz, J.W., and K.L. Campbell. Steady-state upward flow through layered soils under shallow water table conditions. Presented at the American Geophysical Union Fall Meeting, San Francisco, California, December 13 – 17, 2004.

- Martinez, C.J.**, Campbell, K.L., Annable, M.D., and G.A. Kiker. Testing and validation of a Java-based object-oriented model for flatwoods hydrology: Simulation of a dynamic water table. Presented at the American Water Resources Association Annual Water Resources Conference, Orlando, Florida, November 1 – 4, 2004.
- White, J.R., Wise, W.R., Reddy, K.R., DeBusk, W.F., **Martinez, C.J.**, and C. Miner. Long-term phosphorus removal capacity of a municipal wastewater treatment wetland. Presented at the Symposium – Wetlands and the Urban Environment, Soil Science Society of America National Meeting, Charlotte, North Carolina, October 21 – 25, 2001.
- Brooks, M.C., **Martinez, C.J.**, and W.R. Wise. Estimating errors during moment analysis of breakthrough curves: Theory and example. World Water and Environmental Resources Congress, American Society of Civil Engineers, Orlando, Florida, May 20 – 24, 2001.

Technical Reports

- Campbell, K.L., Kiker, G.A., **Martinez, C.J.**, Bohlen, P.J., and J.C. Capece. Pasture Water Management for Reduced Phosphorus Loading in the Lake Okeechobee Watershed. Final Report to the Florida Department of Agriculture and Consumer Services. 147 pp., March 2007.
- Martinez, C.J.** ACRU2000-FL: A Model for Agricultural Hydrology and Water Quality, User Manual. Department of Agricultural and Biological Engineering, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL. 49 pp., June 2006.
- Martinez, C.J.** and W.R. Wise. Analysis of Hydraulic Performance of the Orlando Easterly Wetland Cells: Tracer Study Results. 58 pp. In: White, J.R., K.R. Reddy, W.F. DeBusk, W.R. Wise, and T.L. Crisman. Phosphorus Removal Capacity of the Orlando Easterly Wetland Treatment System, Final Report to the City of Orlando. 312 pp., March 2002.
- Wise, W.R., **Martinez, C.J.**, and M.D. Annable. Field Measurement and Modeling of Hydraulic Connectivity of Isolated Wetlands with Surficial Aquifers, Final Report to South Florida Water Management District. 62 pp., June 2000.

Other Professional Activities/Professional Affiliations/Academic Awards

- Faculty advisor of the University of Florida student chapter of the American Water Resources Association
- Associate Editor of the Florida Watershed Journal
- American Geophysical Union, 2001 – present
- American Society of Agricultural and Biological Engineers, 2002 – present
- American Society of Civil Engineers, 2001 – present
- American Water Resources Association, 2000 – present
- Chi Epsilon, Civil Engineering Honor Society, 2003 – present
- Engineering Intern, State of Florida # 1100008170, March 2003
- Florida Stormwater Association, 2008 – present
- National Ground Water Association, 2003 – present
- Society of Wetland Scientists, 2004 – present
- Soil Science Society of America, 2003 – present
- United States Department of Agriculture, National Needs Fellow, 2002 – 2006
- University of Florida, Institute of Food and Agricultural Sciences Research Innovation Award, 2007
- Water Environment Federation, 2007 – present