

## **Steven A. Ruberg**

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## **Education**

B.S., Electrical Engineering, University of Kentucky, Lexington, KY. 1982  
M.S.E., Systems Engineering, Wright State University, Dayton, OH. 1994

## **Appointments**

Acting Supervisor, Observing Systems and Advanced Technology, NOAA/GLERL, 2011-present.  
Principle Investigator, Synthesis, Observations and Response project, NOAA/GLERL, 2010 – present.  
Principle Investigator, Observing Systems Research, NOAA/GLERL, 1994-present.

## **Research Interests**

Real-time coastal observation networks applied to fisheries research, harmful algal bloom research, and a hypoxia early warning system for water intakes. Hyperspectral detection, mapping and classification of harmful algal blooms.

## **Five Related Publications**

- Ruberg S**, E Guasp, N Hawley, R Muzzi, S Brandt, H Vanderploeg, J Lane, T Miller, S Constant. Societal Benefits of the Real-time Coastal Observation Network (ReCON): Implications for Municipal Drinking Water Quality *Marine Technology Society Journal*, 42 (3): 103-109, Fall 2008
- Vanderploeg, H.A., S.A. Ludsin, **S.A. Ruberg**, T.O. Höök, S.A. Pothoven, S.B. Brandt, G.A. Lang, J.R. Liebig, and J.F. Cavaletto. Hypoxia affects spatial distributions and overlap of pelagic fish, zooplankton, and phytoplankton in Lake Erie. *Journal of Experimental Marine Biology and Ecology* 381:S92-S107 (2009)
- Beletsky D, Hawley N, Rao Y, Vanderploeg H, Beletsky R, Schwab D, **Ruberg S**, Summer thermal structure and anticyclonic circulation of Lake Erie. *Geophysical Research Letters*, American Geophysical Union, 39:L06605 (DOI:10.1029/2012GL051002) (2012)
- Dekker, T.J., J.V. DePinto, **S.A. Ruberg**, M.C. Colton, J. Read, D.J. Schwab and N. Booth. Design of the Great Lakes Observing System Enterprise Architecture. Proceedings, Integrated Ocean Observing System (IOOS) Summit 2012: A New Decade for an Integrated and Sustained Ocean Observing System, Herndon, VA, November 13-16, 2012. Interagency Ocean Observation Committee (IOOC), 9pp. (2012)
- Ruberg S**, Brandt S, Muzzi R, Hawley N, Bridgeman T, Leshkevich G, Lane J, Miller T, A Wireless Real-Time Coastal Observation Network, *Eos*, Transactions, American Geophysical Union, Vol. 88(28) : 285-286, 10 July 2007

## Five Other Publications

- M. Baskaran, T. Novell, K. Nash, **S.A. Ruberg**, B. A. Biddanda, T. Johengen, N. Hawley and J. V. Klump. Tracing the seepage of subsurface sinkhole vent waters into Lake Huron using radium and stable isotopes of oxygen and hydrogen. *Aquatic Geochemistry*. In Press.
- Nold, S.C., M.J. Bellecourt, S.T. Kendall, **S.A. Ruberg**, T.G. Sanders, J. Val Klump, and B.A. Biddanda. Underwater sinkhole sediments sequester Lake Huron's carbon. *Biogeochemistry* February 2013:16 pp. (DOI:10.1007/s10533-013-9830-8) (2013).
- Ruberg, S.A.**, S.T. Kendall, B.A. Biddanda, T. Black, S.C. Nold, W.R. Lusardi, R. Green, T. Casserley, E. Smith, T.G. Sanders, G.A. Lang, and S.A. Constant. Observations of the Middle Island sinkhole in Lake Huron: A unique hydrogeologic and glacial creation of 400 million years. *Marine Technology Society Journal* 42(4):12-21 (2009)
- Biddanda, B.A., S.C. Nold, **S.A. Ruberg**, S.T. Kendall, T.G. Sanders, and J.J. Gray. Great Lakes sinkholes: A microbiogeochemical frontier. *EOS Transactions* 90(8):61-62 (2009)
- Ruberg, S.A.**, D.F. Coleman, T.H. Johengen, G.A. Meadows, H.W. VanSumeren, G. A. Lang, and B. A. Biddanda. Groundwater plume mapping in a submerged sinkhole in Lake Huron. *Marine Technology Society Journal* 39(2):65-69 (2005).

## Professional Activities

- . Cooperative Institute for Limnology and Ecosystems Research Management Council
- . Grand Valley State University Adjunct Graduate Faculty
- . Great Lakes Observing System Regional Association Member
- . Institute for Electrical and Electronics Engineers / Ocean Engineering Society Member
- . NOAA Great Lakes Environmental Research Lab Management Council
- . NOAA Great Lakes Environmental Research Lab Science Council
- . NOAA Lead for Great Lakes Restoration Initiative Focus Area 5.