

RONALD BUSCIOLANO

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Day: 631-220-6843 | Evening: 631-220-6843

Supervisory Hydrologist, GS-1315-13

PROFESSIONAL SUMMARY

Accomplished supervisory hydrologist with the U.S. Geological Survey (USGS), New York Water Science Center (NYWSC) with a strong record of success in providing leadership, oversight, implementation, and analysis of large multi-disciplined hydrologic-data collection programs, based on expertise gained during a more than 30 year career with the USGS. Demonstrates extensive field and technical knowledge of the hydrogeology of the New York region, and is highly skilled in the technical analysis and interpretation of long-term groundwater and surface-water data.

PROFESSIONAL EXPERIENCE:

Current Employer:

U.S. Geological Survey, New York Water Science Center, Coram Program Office

2045 Route 112, Building 4, Coram, NY 11727

(631) 736-0783, ext. 104

Present duties include Data Chief of the Hydrologic Surveillance and Analysis Section for the USGS NYWSC, Coram Program Office; North Atlantic Region Coordinator for the USGS Surge, Wave, and Tide Hydrodynamics (SWaTH) Network, and Theme 3 Lead for the USGS Hurricane Sandy Science Plan. Has authored numerous hydrologic-data reports, abstracts, and presentations (see <http://profile.usgs.gov/rjbuscio>).

Positions and Selected Accomplishments:

Theme 3 Lead, USGS Hurricane Sandy Science Plan – April 2015 to current

Proficiently manage operations for Theme 3 (Impacts of Storm-Surge and Estuarine and Bay Hydrology) of the Hurricane Sandy Science Plan (<http://pubs.usgs.gov/circ/1390/circ1390.pdf>) A Science Plan implemented by the USGS to provide critical scientific information necessary to inform management decisions for recovery of coastal communities and aid in the preparation for future natural hazards. Theme 3 is a \$7.6 million part of this overall Science Plan, with the funds being used to provide increased capabilities to collect, analyze, and disseminate storm-tide, storm-surge, and wave-dynamics data produced by severe coastal storms, and to coordinate these activities with stakeholders and other agencies.

North Atlantic Region Coordinator, USGS SWaTH Network – January 2014 to current

Supervise the timely and scientifically relevant design, implementation, and testing of the USGS SWaTH Network (<http://water.usgs.gov/floods/swath>); part of the Theme 3 work for the USGS Hurricane Sandy Science Plan. The Network was developed collaboratively with local, State, Tribal, and Federal agency partners, and features the integration of long-term real-time tide gages, storm deployable real-time rapid-deployment gages, and mobile storm-tide and wave sensors at over 700 pre-determined locations along the eastern seaboard from North Carolina to Maine.

Provide efficient management and coordination for activation of the USGS SWaTH Network during intense coastal storms. Provide guidance to USGS Water Science Centers from North Carolina to

Maine on the scope and timing of any such deployment, and provide integration with other USGS regional coordinators, the USGS Office of Surface Water, the USGS Office of Natural Hazards, other governmental agencies, such as FEMA, NOAA, NWS, NPS, FWS, and USACE, and with local emergency managers and coastal scientists. Oversee efficient dissemination of collected data, and provide frequent updates to partner agencies, stakeholders, and the media.

Data Chief, Hydrologic-Surveillance and Analysis Section, USGS NYWSC, Coram Program Office – February 2006 to current

Oversee the operation and administration of a multi-disciplinary data-collection program with an annual budget of about one million dollars. This program encompasses a network of approximately 600 groundwater and surface-water stations, and is the primary source of hydrologic data for the southeastern New York State region, which includes the five boroughs of New York City, one of the most populated areas in the Nation. Has extensive field and technical knowledge of southeastern New York's hydrogeology.

Coordinated and supervised multiple large-scale storm-tide sensor deployments; successful deployments were administered for the New York area for Hurricane Earl in 2010, Hurricane Irene in 2011, and Hurricane Sandy in 2012, and for the northeastern United States for Hurricane Joaquin in 2015, and the Nor'easter of January 2016.

Highly skilled in technical analysis and data interpretation. Complete understanding of USGS's standards for data analysis and integrity, and with report and illustration preparation. Proficient presentation skills; frequently presents results of data-collection and hydrologic studies to both technical and non-technical audiences.

**Project Chief, Groundwater-Data Section, USGS NYWSC, Coram Program Office
October 1988 to February 2006**

Efficiently supervised the development, operation, and administration of an extensive groundwater data-collection program, consisting of over 600 wells located in the southeastern New York region. Initiated the first ever long-term synoptic data-collection program on Long Island, consisting of over 700 wells, streams, and lakes measured annually during a two week period in April. This annual effort provides the timely data needed to create a "snap-shot" of annual groundwater conditions on Long Island, which is used for the production of island-wide water-level and depth-to-water maps, model calibration, and other hydrologic research.

Developed the first drought-monitoring network on Long Island by using statistical analysis of long-term groundwater, surface-water, and precipitation records. This network is the first of its kind to be developed for Long Island, and is available for monitoring drought conditions in the Island's aquifer system.

**Hydrologic Technician, USGS NYWSC
July 1985 to October 1988**

Part-time student employee for the NYWSC, Coram Program Office, Hydrologic-Surveillance and Analysis Section; converted to full time in February 1986. Responsible for groundwater, surface-water, and water-quality data collection, data entry and review, and network maintenance.

EDUCATION

The City College of New York, New York, NY

February 1987 to June 1994

Completed course work for an M.S. Degree in Hydrology, but did not complete thesis due to a long-term illness.

Adelphi University, Garden City, NY

January 1989 to December 1989

Graduate course work towards M.S. Degree in Hydrology at The City College of New York.

Long Island University, C.W. Post Campus, Brookville, NY

September 1981 to December 1985

Graduated in 1985 with a B.S. Degree in Geology.

Harborfields High School, Greenlawn, NY

Graduated in June, 1981

SELECTED PUBLICATIONS:

Schubert, Christopher E., Busciolano, Ronald, Hearn, Paul P., Jr., Rahav, Ami N.; Behrens, Riley, Finkelstein, Jason, Monti, Jack, Jr., and Simonson, Amy E., 2015. Analysis of storm-tide impacts from Hurricane Sandy in New York: U.S. Geological Survey Scientific Investigations Report 2015-5036, 75 p., <https://pubs.er.usgs.gov/publication/sir20155036>.

Como, M.D., Noll, M.L., Finkelstein, J.S., Monti, Jack, Jr., and Busciolano, Ronald, 2015. Water-table and potentiometric-surface altitudes in the Upper Glacial, Magothy, and Lloyd aquifers of Long Island, New York, April–May 2013: U.S. Geological Survey Scientific Investigations Map 3326, 4 sheets, scale 1:125,000, 6 p., <http://pubs.usgs.gov/sim/3326>.

Busciolano, Ronald, Verdi, Richard, Fulton, John, and Pepler, Marie, 2015. Understanding and preparing for coastal storm impacts -- Observing overland surge, wave, and tide hydrodynamics: in National Hydrologic Warning Council Transmission, February 2015, <https://nhwc.clubexpress.com/docs.ashx?id=199110>.

McCallum, Brian E., Wicklein, Shaun M., Reiser, Robert G., Busciolano, Ronald, Morrison, Jonathan, Verdi, Richard J., Painter, Jaime A., Frantz, Eric R., Gotvald, Anthony J., 2013. Monitoring storm tide and flooding from Hurricane Sandy along the Atlantic coast of the United States, October 2012: U.S. Geological Survey Open-File Report 2013-1043, 42 p.; tables 2-6, <https://pubs.er.usgs.gov/publication/ofr20131043>.

Busciolano, Ronald and Schubert, Christopher E., 2012. Tracking the storm tide from Hurricane Irene as it moved up the coast and made landfall in New York [abs.]: in Association of American Geographers, Annual Meeting, February 24-28, 2012, New York, NY, <http://meridian.aag.org/callforpapers/program/AbstractDetail.cfm?AbstractID=46155>.

Busciolano, Ronald, 2005. Statistical analysis of long-term hydrologic records for selection of drought-monitoring sites on Long Island, New York: U.S. Geological Survey Scientific Investigations Report 2004-5152, 47 p., <http://ny.water.usgs.gov/pubs/wri/sir045152>.

Busciolano, Ronald, 2002. Water-table and potentiometric-surface altitudes of the Upper Glacial, Magothy, and Lloyd aquifers on Long Island, New York, in March-April 2000, with a summary of hydrogeologic conditions: U.S. Geological Survey Water-Resources Investigations Report 2001-4165, 17 p., 3 pls. (6 sheets), <http://ny.water.usgs.gov/pubs/wri/wri014165>.

Busciolano, Ronald, Monti, Jack, Jr., Chu, Anthony, 1998. Water-table and potentiometric-surface altitudes of the Upper Glacial, Magothy, and Lloyd aquifers on Long Island, New York, in March-April 1997, with a summary of hydrogeologic conditions: U.S. Geological Survey Water-Resources Investigations Report 98-4019, 17 p., 3 pls. (6 sheets), <https://pubs.er.usgs.gov/publication/wri984019>.

Busciolano, Ronald, 1997, Water-table and potentiometric-surface altitudes of the upper glacial, Magothy, and Lloyd aquifers on Long Island, New York, in March-April, 1990, with a summary of hydrogeologic and ground-water conditions: U.S. Geological Survey Water-Resources Investigations Report 97-4030.

Schubert, Christopher E., and Busciolano, Ronald, 1994: Peak storm-tide elevations produced by the December 1992 storm along the coast of Long Island, New York, with historical peak storm-tide elevations: in Association of Long Island Geologists, First Conference on Geology of Long Island and Metropolitan New York, Programs with Abstracts, State University of New York at Stony Brook, NY, April 23, 1994, <https://dspace.sunyconnect.suny.edu/bitstream/handle/1951/47899/SCHUBE00.pdf>.