

# Linda Ruiz. McCall

## Professional Summary

September 27, 2021

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### Professional Preparation

#### Academic Background

M.A. Secondary Science Education, Teachers College of Columbia University, 2004

M.B.A. Finance, The University of Texas at Austin, 1985

B.S. Geological Sciences, The University of Texas at Austin, 1981

#### Professional Appointments

Present Position: RSA III - Public Information Geologist, Bureau of Economic Geology, The University of Texas at Austin (May 2013 - Present).

Program Manager and Education Specialist, Water Science and Conservation, Texas Water Development Board (March 2007 - May 2013).

- o Managed and marketed conservation education programs

- o Developed and led professional development workshops for K-12 educators statewide
- o Assisted community groups in forming collaborative partnerships for educational outreach
- o Led webinar outreach efforts to promote water conservation.

Earth Science Teacher, Sleepy Hollow Independent School District/The Heritage School of Harlem, New York (August 2002 - June 2005).

- o Worked with "at-risk" youth and English Language Learners

- o Experienced in high-stakes assessment
- o Specializing in incorporating computer technology in the classroom
- o Secondary Science teacher with experience in urban and suburban settings.

Manager of Internal Control and Risk Management Accounting, Lyondell Petrochemical Company (June 1987 - June 1990).

- o Manager of Risk Management Accounting and Accounts Receivable

- o Communications with executive level of company
- o Assisted in company policy formation
- o Worked with initial public offering team for Lyondell Petrochemical Company.

Internal Control Analyst, Atlantic Richfield Corporation (June 1985 - May 1987).

- o Internal auditor in a fully integrated oil and gas corporation

- o Policy review experience
- o Contact with highest levels of management
- o Knowledgeable about energy production, refining, and marketing operations.

Hydrologic Technician, United States Geological Survey (June 1982 - June 1985).

- o Assisted hydrologist in field studies, and data analysis

- o Created subsurface geologic maps
- o Assisted in research of Barton Springs segment of the Edwards Aquifer near Austin, TX
- o Participated in flood studies and, groundwater monitoring activities

- o Assisted in data processing for a computer simulation model.

Student Assistant, The University of Texas at Austin (September 1978 - June 1985). o Operator of a Scanning Electron microscope

- o Assisted research scientists in the Department of Geological Sciences.

## Professional Registrations and Certificates

Accredited Rainwater Harvesting Professional

## Theses

A Benefit Cost Analysis of the Proposed Recharge Lake on Onion Creek near Austin, Texas, The University of Texas at Austin, Graduate School of Business, 1985, 70 p.

## Areas of Expertise

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Geology, business administration, secondary science education, project management, and communication with an emphasis on geology, water, and energy resources

## Awards

### Awards and Honorary Societies

Nominee - Outstanding Women in Texas Government Awards, 2012

Water Science and Conservation Award for Outstanding Performance, 2008

## Service

### University Committees

Chair, Events Committee, Bureau of Economic Geology, University of Texas at Austin, September 1, 2013-September 1, 2016

### External Committees Participation

Member, Texas Groundwater Protection Committee, Public Outreach and Education subcommittee, September, 2013 - present

Member, Education and Outreach Committee, Alliance for Water Efficiency, Austin, Texas, January, 2013

Member, Texas Environmental Education Advisory Committee, Texas Education Agency, Austin, Texas, January, 2013

Member, Texas Groundwater Protection Committee, Public Outreach and Education subcommittee, September, 2008 - 2010

### Outreach Activities

Tour of Stoneburner Rock Garden, Core Research Center, and Multipurpose Room Mineral Gallery: presented to Texas Commission on Environmental Quality Groundwater Team, presented at Bureau of Economic Geology, Austin, Tex., December 5, 2019.

Bureau of Economic Geology and Bureau Store exhibit booth: presented at Conference for the Advancement of Science Teaching (CAST), Dallas, Tex., November 21-23, 2019.

Tour of Stoneburner Rock Garden and Core Viewing Room: presented to Jackson School of Geosciences Enhancing Diversity in Geosciences Graduate Education (EDGE) Graduate School Preview, presented at Bureau of Economic Geology visit, Austin, Tex., October 25, 2019.

20th Annual Austin Earth Science Week Career Day: presented to middle school students from the Austin region, presented at Commons Conference Center, J. J. Pickle Research Campus,

The University of Texas at Austin, Austin, Tex., October 11, 2019.

7th Annual Bureau Research Symposium: presented to Bureau staff, presented at Bureau of Economic Geology, Austin, Tex., September 27, 2019.

Bureau of Economic Geology and Bureau Store exhibit booth: presented to American Association of Petroleum Geologists, presented at 2019 American Association of Petroleum Geologists Annual Convention and Exhibition, San Antonio, Tex., May 19-22, 2019.

Judge: presented to Switch Energy Project Case Challenge, presented at The University of Texas at Austin, Austin, Tex., April 6, 2019.

Bureau of Economic Geology outreach: presented to students, parents, teachers, and community members from across Texas, presented at Explore UT, Austin, Tex., March 2, 2019.

Surface-water/Groundwater Interactions Demonstration: presented to the public, presented at Austin Cave Festival, Ladybird Johnson Wildflower Center, Austin, Tex., February 23, 2019.

Bureau of Economic Geology Field Day for Texas Environmental Education Advisory Council (TEEAC): presented to TEEAC, presented at Bureau of Economic Geology, Austin, Tex., January 3, 2019.

Texas Floods Revisited--Catastrophic Floods Near Austin, Texas: presented to Akins High School Green Tech/OnRamps Academy, Austin, Texas, November 2, 2017.

Bureau overview and tour of Austin Core Repository: presented to GeoForce 12th Grade Academy, presented at Bureau of Economic Geology, Austin, Tex., July 10-August 1, 2017.

Workshop: Texas Industrial Minerals: presented to Texas Mining and Reclamation educator workshop, presented at Bureau of Economic Geology, Austin, Tex., June 20, 2017.

Bureau overview, research scientist presentations and tour of Austin Core Repository: presented to high school students in the Schlumberger externship program, presented at Bureau of Economic Geology, Austin, Tex., June 16, 2017.

Presentation: Exploring Erosion with Geologic Maps and Google Earth and Rock Types: presented to Little Blue Dot workshop for middle school educators, presented at NASA Center for Space Research, Austin, Tex., June 14, 2017.

Presentation: Edwards Balcones Fault Zone Aquifer: presented to Groundwater to the Gulf Institute, presented at Lady Bird Johnson Wildflower Center, Austin, Tex., June 13, 2017.

Bureau overview and tour of Austin Core Repository: presented to Aldine Independent School District secondary science teachers, presented at Bureau of Economic Geology, Austin, Tex., June 7, 2017.

Bureau overview of environmental research programs and tour of Austin Core Repository: presented to Austin Regional Sierra Club, presented at Bureau of Economic Geology, Austin, Tex., June 2, 2017.

Workshop: Bureau overview, research scientist presentations and tour of Austin Core Repository: presented to San Angelo State undergraduate geology students, presented at Bureau of Economic Geology, Austin, Tex., April 7, 2017.

Rocks and Minerals: presented to Boy Scout 2017 STEMboree, presented at Anderson High School, Austin, Tex., April 1, 2017.

Presentation: Publications and Resources of the Bureau of Economic Geology: presented to Austin Gem and Mineral Society monthly meeting, Austin, Tex., March 23, 2017.

Surface Water/Groundwater Interactions demonstration: presented to Austin Geological Society Science Fair students and family members, presented at Bureau of Economic Geology, Austin, Tex., March 6, 2017.

Presentation: Texas Through Time: presented to Texas Association of Community Colleges, presented at TACC Annual Convention, Austin, Tex., February 25, 2017.

Webinar: Weathering, Erosion, and Deposition: presented to Austin Middle School, presented at Distance-Learning Using Nepris Platform, Irving, Tex., February 16, 2017.

Exhibit: Careers in Geosciences: presented to Austin Youth Council Career Fair, presented at Palmer Events Center, Austin, Tex., January 31, 2017.

Presentation: Texas Through Time: presented to Texas Environmental Education Advisory Council annual meeting, Austin, Tex., January 20, 2017.

Bureau overview and tour of Austin Core Repository: presented to Austin Children in Nature homeschool group, presented at Bureau of Economic Geology, Austin, Texas, January 19, 2017.

17th Annual Austin Earth Science Week Career Day: presented to middle school students from the Austin region, presented at The Commons Learning Center, Pickle Research Campus of The University of Texas at Austin, Austin, Texas, October 7, 2016.

GeoForce Instructor, Texas Coastal Field Experience: presented to GeoForce 9th Grade Academy, Corpus Christi, Texas, July 10-16, 2016.

Industrial Minerals Workshop Day: presented to middle-school educators, presented at Texas Mining and Reclamation Association Industrial Minerals Workshop, Bureau of Economic Geology, Austin, Texas, June 29, 2016.

Educational Resources of the Bureau of Economic Geology: presented to Texas Regional Collaboratives Annual Meeting, Austin, Texas, June 22, 2016.

Edwards Balcones Fault Zone Aquifer: presented to middle-school educators, presented at Groundwater to the Gulf Institute, Lady Bird Johnson Wildflower Center of The University of Texas at Austin, June 21, 2016.

Austin-area field trip: presented to high school students, presented at UT San Antonio TRIO Upward Bound, Austin, Texas, June 17, 2016.

Educational Resources of the Bureau of Economic Geology: presented to Highland Lakes Chapter of the Texas Master Naturalists, June meeting, Marble Falls, Texas, June 1, 2016.

Rocks and Minerals: presented to Texas School for the Blind and Visually Impaired, classroom presentation, Austin, Texas, May 16, 2016.

Rocks and Minerals: presented to Boy Scouts of America, STEMboree, Austin, Texas, April 23, 2016.

Explore UT: presented to The University of Texas at Austin, campus-wide open house, Austin, Texas, March 5, 2016.

Tour of Austin Core Repository, Bureau of Economic Geology: presented to UT Forum: Osher Lifelong Learning Institute, Austin, Texas, February 10, 2016.

16th Annual Austin Earth Science Week Career Day: presented to middle schools from the Austin region, presented at The Commons Learning Center, Pickle Research Campus, The University of Texas at Austin, October 9, 2015.

Watershed/water catchment activity: presented to 2015 Groundwater to the Gulf Institute, presented at Ladybird Johnson Wildflower Center, Austin, Texas, June 23, 2015.

Presentation of the Bureau of Economic Geology publications and educational resources: presented to Texas Regional Collaboratives Annual Meeting, Austin, Texas, June 16, 2015.

MBA Alumni Tour: presented at Bureau of Economic Geology Administration Building and Core Repository, The University of Texas at Austin, Austin, Texas, May 7, 2015.

Stiles Middle School Tour: presented at Bureau of Economic Geology Administration Building and Core Repository, The University of Texas at Austin, Austin, Texas, April 24, 2015.

Exploring rocks and minerals: presented to Boy Scout STEMboree, presented at Frank Fickett Center, Austin, Texas, March 28, 2015.

Explore UT, Bureau of Economic Geology presenter and organizer: presented to University of Texas Explore UT Open House, presented at Jackson School of Geosciences, Austin, Texas, March 7, 2015.

GeoForce Instructor: Young Geoscientists, Uvalde field experience, Uvalde, Texas, July 2013.

## Teaching and Advising

### Field Trips Leadership

Instructor, STEMForce/GeoFORCE 12th Grade Academy, GeoFORCE Texas, Central Texas, June 13-22, 2019.

## Presentations

### Invited Presentations

CO<sub>2</sub> and Carbon Capture: presented at Groundwater to the Gulf Institute, Ladybird Johnson Wildflower Center, Austin, Texas, June 11, 2019.

Barton Creek Greenbelt, Violet Crown Trail - Geology and Hydrogeology: presented at Guided Hike coordinated by the Save Barton Creek Association, Austin, Texas, March 22, 2019.

Geology of Bastrop County: presented to Bastrop County Audubon Society, presented at Monthly Meeting, Bastrop, Texas, March 19, 2019.

Early Formation of the Earth: presented to St. Anne's Guild, presented at The Episcopal Church of the Good Shepard, Austin, Texas, January 22, 2019.

Geologic history of the Texas Hill Country: presented to Osher Lifelong Learning Institute, presented at Texas Tech University Higher Education Teaching Site at Highland Lakes, Marble Falls, Texas, December 7, 2015.

Geologic overview of Central Texas and Williamson County: presented to Good Water Master Naturalists, presented at Texas A&M AgriLife Meeting Room, Georgetown, Texas, November 3, 2015.

Geologic overview and educational resources for the Llano Uplift: presented to Llano Eco Summit, presented at American Legion Hall, Llano, Texas, September 4, 2015.

Exploring Erosion with Geologic Maps and Google Earth, Prehistoric Landslides - Chilicotal Mountains, Big Bend National Park, Texas: presented to Texas Regional Collaboratives, Earth Science Professional Training, presented at Norris Conference Center, Austin, Texas, April 23, 2015.

### Presentations

Austin Earth Science Zoomerama: presented to Science Teachers Association of Texas (STAT), presented at Conference for the Advancement of Science Teaching (CAST), Zoom conference, November 7, 2020.

Austin Earth Science Zoomerama 2020: presented to classrooms nationwide, presented at Zoom conference hosted by the Bureau of Economic Geology, Zoom, October 1-29, 2020.

Surface water/groundwater interactions demonstration with a physical groundwater model: presented at Austin Cave Festival, Ladybird Johnson Wildflower Center, Austin, Tex., February 22, 2020.

Texas Environmental Education Advisory Council: presented to Texas Education Administration

and Texas Department of Parks and Wildlife, presented at Annual meeting 2020, Pickle Research Campus of The University of Texas at Austin, January 6, 2020.

Building Awareness of Geoheritage in Texas: presented to Geological Society of America, presented at Annual Meeting, Phoenix, Arizona, September 23, 2019.

Industrial Minerals of Texas: presented at Texas Mining and Reclamation - Industrial Minerals Educator Workshop, Austin, Texas, June 25, 2019.

Texas Through Time: Lone Star Geology, Landscapes, and Resources: presented to Texas Earth Science Teachers Association, presented at Conference for the Advancement of Science Teaching, San Antonio, Texas, November 11, 2016.

Prehistoric Landslides on the Chilicotal Mountains of the Big Bend National Park: presented to Region 15 Education Service Center, presented at STEM Expo, San Angelo, Texas, August 2, 2016.

Texas through time: Lone Star geology, landscapes, and resources: presented to Conference for the Advancement of Science Teaching, presented at CAST 2015, Fort Worth, Texas, November 12, 2015.

Catastrophic floods in the Austin area: presented to Akins High School Green Tech Academy, presented at Web conference, Nepris educational learning platform, October 29, 2015.

Introduction to the Bureau of Economic Geology and the value of rock core samples: presented to Texas Mineral Reclamation Association, presented at Industrial Mineral Educator Workshop, Austin, Texas, July 7, 2015.

Impacts of human activity on surface water and groundwater: presented to Science Teachers Association of Texas, presented at Conference for the Advancement of Science Teaching, Dallas, Texas, November 20-22, 2014.

Geology of the Balcones Canyonlands Preserve: exploring the Balcones Fault Zone: presented at City of Austin, Balcones Canyonland Preserve Educational Program (open to the general public), Austin, Texas, July 24, 2014.

How core samples are collected and why they are valuable to scientists: presented at Texas Mining and Reclamation Association Industrial Minerals Workshop, Austin, Texas, July 14-16, 2014.

Explore UT 2014 (presenter): Jackson School of Geosciences, The University of Texas at Austin, Austin, Texas, March 2014.

Interactive 3D visualizations and video resource review for the Hill Country Science Mill Museum: presented at the Bureau of Economic Geology, Austin, Texas, January 2014.

Surface water and groundwater interactions: presented to the El Camino Real Master Naturalists' advanced training, Cameron, Texas, November 2013.

Texas rocks: presented to the Boy Scouts, Pack 202, at Cub World at Camp Tom Wooten, Lost Pines Boy Scout Camp, Texas, November 2013.

Interactive 3D at BEG: presented to Rouse High School students at the Bureau of Economic Geology Virtual Reality Room, Austin, Texas, September 2013.

Interactive 3D at BEG: presented to the Bureau Summer Lecture Series, Austin, Texas, June 2013.

Karst formation, watersheds and water catchment: presented at the Groundwater to the Gulf Institute, Austin, Texas, June 2013.

Surface water and groundwater interactions: presented at Perot Museum of Nature and Science, June 2013.

Surface water and groundwater interactions: presented at the Project Wild Aquatic workshop at Perot Museum of Nature and Science, Dallas, Texas, June 2013.

Webinars--Reaching your target audience with low-cost multimedia information: proceedings of the Texas Water Works Association, April 11 2013.

New media and water conservation--How to leverage outreach resources: proceedings of Texas Water 2012, Texas Water Works Association, April 2012.

## Activities of a Professional Nature

### Professional Societies

Austin Geological Society

Geological Society of America

### Activities of a Professional Nature

Content author: Put some blue in your green school, activity for high-school level (<http://serc.carleton.edu/NAGTWorkshops/servicelearning/activities/39067.html>)

Content author: Rainwater harvesting service learning project, activity for middle-school through adult level (<http://serc.carleton.edu/NAGTWorkshops/servicelearning/activities/39050.html>)

Contributor to the Texas section of the State Geologist Journal, September 2013

Facilitator for First Annual Bureau Staff Poster Session, Bureau of Economic Geology, September 2013

Facilitator for professional development experience at the Bureau of Economic Geology for the Desk and Derrick Club, Wichita Falls, Texas, November 2013

Mentor and coordinator for Bureau support of the Westlake High School annual Senior Career Day, November 2013

Program Chair, 14th Annual Earth Science Week Career Day, Pickle Research Center, October 2013.

Project Leader: Water Exploration, web-based education program for high school students (<http://www.waterexploration.org/developers/index.asp#linda>)

## Publications

### Published Reports

McCall, L., and Mastrangelo, F. M., 2020, The Exploring Earth Science in Texas Coloring Book: Bureau of Economic Geology, The University of Texas at Austin 15 p.

Slade, R. M., Dorsey, M. E., and Ruiz, L. M., 1986, Geohydrology of the Edwards Aquifer in the Austin area, Texas: Texas Water Development Board, 76 p.

Gaylord, J. L., Slade, R. M., McCall, L., Welborn, C. T., Baker, E. T., 1985, Water-resources appraisal of the Camp Swift lignite area, central Texas, U.S. Geological Survey, 164 p., Water-Resources Investigations Report, Series Number 84-4333.

Slade, R. M., Ruiz, L. M., and Slagle, D., 1985, Simulation of the flow system of Barton Springs and associated Edwards aquifer in the Austin area, Texas: U.S. Geological Survey, Water-Resources Investigations Report, no. 85-4299, 49 p.

### Published Abstracts

McCall, L., and Woodruff, C. M., Jr., 2019, Building awareness of geoh heritage in Texas (abs.): Geological Society of America Abstracts with Programs, v. 51, no. 5, 1 p., <http://doi.org/10.1130/abs/2019AM-340453>.

McCall, L., 2015, Sustaining public education events through partnerships: joining forces for a

common goal (abs.): American Geophysical Union 2015 Fall Meeting, <https://agu.confex.com/agu/fm15/meetingapp.cgi/Paper/61487>.

McCall, L., 2013, How water conservation is engaging the next generation of geoscientists (abs.): in Proceedings of the South Central Section of the Geological Society of America.

Ellins, K. K., McCall, L., Amos, S., McGowan, R. F., Mote, A., Negrito, K., and Cameron, B., 2010, Water exploration: An online high school water resource education program (abs.): in AGU Fall Meeting Abstracts, v. 1, p. 0717.

McCall, L., Ellins, K. K., and Cameron, B., 2010, Water conservation: A tool to build understanding, service and awareness about natural resources (abs.), in AGU Fall Meeting Abstracts, Vol. 1, p. 0588.