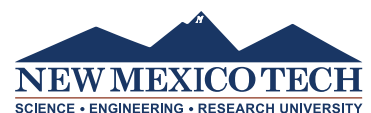


New Mexico Water Leaders Workshop

April 14–16, 2025
Silver City, New Mexico
REFERENCE BOOK

Open-File Report 638
Edited by Stacy Timmons

Hosted by New Mexico Bureau of Geology and Mineral Resources
at New Mexico Institute of Mining and Technology



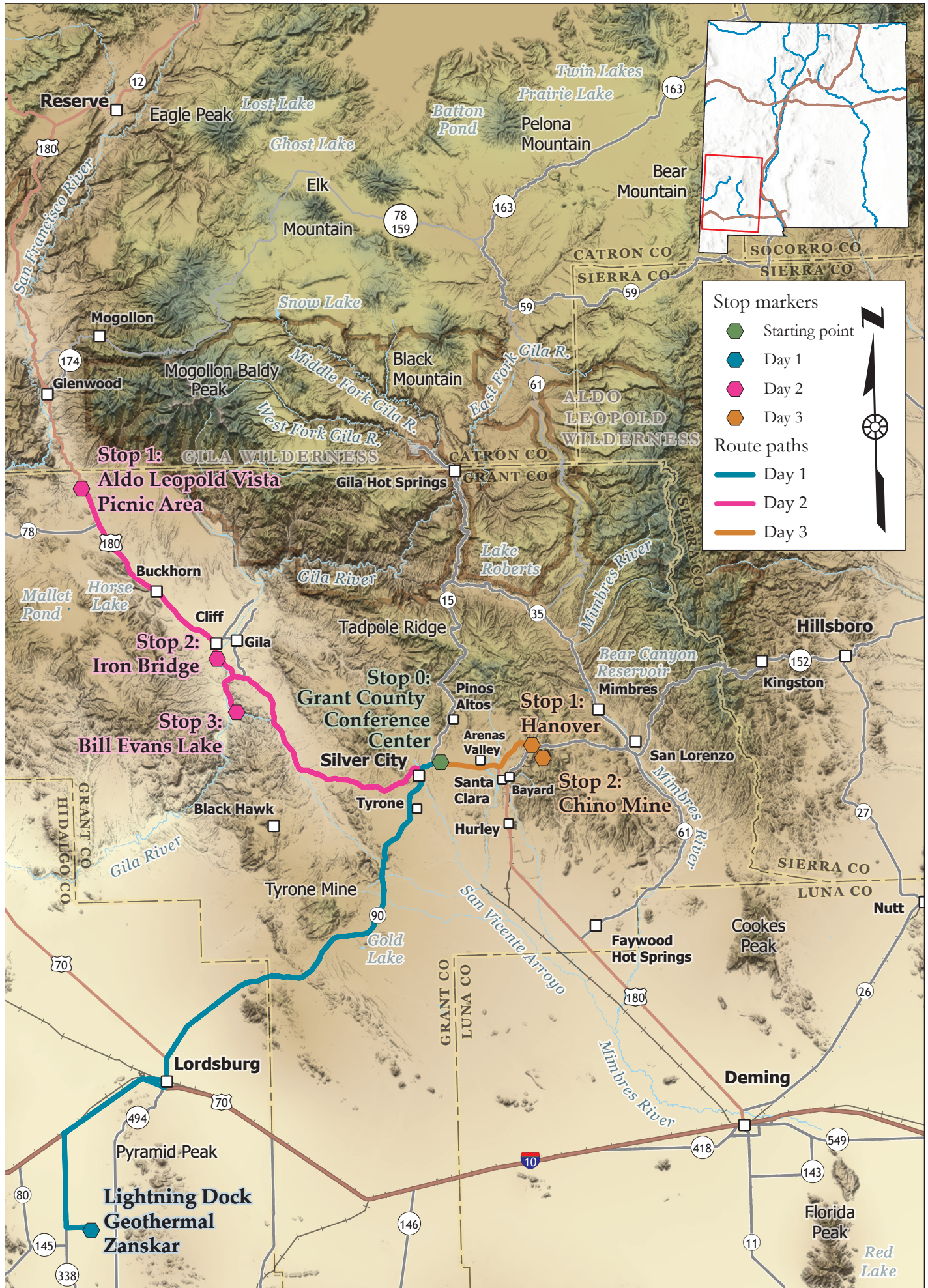


CONTENTS

Regional Map	2
Agenda	3
Presenter Bios and Contact Information	6

Supported by





AGENDA

DAY 1: MONDAY, APRIL 14, 2025

11:00 am: Meet at the Grant County Conference Center in Silver City (3031 U.S. Hwy 180 East)

11:30 am–12:45 pm: Bus ride to field trip site

1:00–3:00 pm: Visit and tours at Lightning Dock geothermal power plant

- Station 1: History of This Region and Geology—Shari Kelley, NM Bureau of Geology and Mineral Resources, and Jim Witcher, Witcher and Associates
- Station 2: Water and Geothermal—Joel Edwards, Zanskar
- Station 3: Plant Tour—Zanskar representatives

3:00–4:30 pm: Bus ride back to Silver City

5:30–6:30 pm: Social hour at Whiskey Creek Zócalo (11786 U.S. Hwy 180 East, Arenas Valley, NM)

6:30–8:30 pm: Dinner at Whiskey Creek Zócalo

DAY 2: TUESDAY, APRIL 15, 2025

7:30–8:00 am: Breakfast at the Grant County Conference Center

8:00–8:10 am: Welcome and opening remarks—Mike Timmons and Kate Leary, NM Bureau of Geology and Mineral Resources

8:10–9:10 am: **Panel 1: Statewide Perspectives**

- State of Water in New Mexico—Elizabeth Anderson, NM Office of the State Engineer
- Interstate Stream Commission Updates—Hannah Riseley-White, NM Interstate Stream Commission
- Water and Infrastructure Update from the Governor's Office—Rebecca Roose, Office of the Governor
- Legal Updates and Ongoing Indian Water Rights Settlements—Nat Chakeres, NM Office of the State Engineer
- Questions (20 minutes)

9:10–10:10 am: **Panel 2: Water in the Southwest Region**

- Water Use in the Region—Julie Valdez, NM Office of the State Engineer
- Hydrologic Overview of the Region and History of Interstate Water Obligations—Ali Effati, NM Interstate Stream Commission
- Municipal Water Use in Deming—David McSherry, City of Deming
- Farming and Agricultural Water Use in the Cliff-Gila Valley: Past, Present, and Future—Wendel Hann, Agricultural Producer
- Questions (20 minutes)

10:10–10:20 am: Break

10:20–11:20 am: **Panel 3: Regional Water Challenges and Creative Solutions**

- Arizona Water Settlement Act and Funding Opportunities, Updates, and Lessons Learned—Colleen Cunningham, NM Interstate Stream Commission
- Challenges for the Efficient Distribution of New Mexico Unit Funds—Peter Russell, Commissioner, NM Interstate Stream Commission
- Regional Collaborations and Funding Solutions—Priscilla Lucero, Southwest New Mexico Council of Governments
- Grant County Regional Water Project—Alex Brown, Town of Silver City
- Questions (20 minutes)

Tuesday, continued

11:30 am–12:30 pm: Bus ride to Aldo Leopold Vista Picnic Area

- Bus talk: Gila River Overview and Monitoring—Ellen Soles, Gila River Researcher

12:40–1:30 pm: **Stop 1: Landscapes of the Southwest: Geology, Water, and Fire**

- Geologic History of Southwest New Mexico—Matt Zimmerer, NM Bureau of Geology and Mineral Resources
- Forest Management, Fire and Water Challenges, and Successes—Laura McCarthy, NM Energy, Minerals and Natural Resources Department
- Hazardous Fuel Reductions for Communities at Risk—Tom Zegler, NM Energy, Minerals and Natural Resources Department
- Questions (10 minutes)

1:40–2:10 pm: Bus ride to Iron Bridge

2:20–3:10 pm: **Stop 2: Iron Bridge on the Gila River**

- History of Farming in the Cliff-Gila Valley and Present-Day Challenges—Dusty Hunt, Agricultural Producer
- Building Resilience Through Watershed Restoration—Allyson Siwik, Gila Resources Information Project
- The Nature Conservancy Restoration Efforts at Iron Bridge—Martha Cooper, The Nature Conservancy
- Questions and walk to the river (20 minutes)

3:20–3:40 pm: Bus ride to Bill Evans Lake

3:50–4:20 pm: **Stop 3: Bill Evans Lake**

- Water Rights and Water Management in the Region—Lloyd Valentine, NM Office of the State Engineer
- Mining and Water Use at Bill Evans Lake—Ty Bays, Freeport-McMoRan Inc.
- Questions (10 minutes)

4:30–5:00 pm: Bus ride back to Silver City

5:30–6:30 pm: Social hour at the Murray Hotel (200 W Broadway St, Silver City, NM)

6:30–8:30 pm: Dinner and keynote speaker at the Murray Hotel

- Keynote speaker: Gregory McNamee, “Gila: Life and Death of an American River”



GREGORY MCNAMEE

Research Associate, Southwest Center, University of Arizona
gregorymcnamee@gmail.com

Gregory McNamee is a writer, editor, photographer, and publisher. He is the author or title-page editor of more than 45 books and the author of more than 10,000 periodical pieces, including articles, news features, essays, reviews, interviews, editorials, poems, and short stories. McNamee is a contributing editor to the *Encyclopaedia Britannica* and a contributing writer to *Kirkus Reviews*. He is a research associate at the Southwest Center of the University of Arizona and a former lecturer in the Department of Economics there.

DAY 3: WEDNESDAY, APRIL 16, 2025

7:30–8:00 am: Breakfast at the Grant County Conference Center

8:00–8:10 am: Welcome back and logistics review for the day

8:10–9:10 am: **Panel 1: Statewide and Regional Updates**

- Aquifer Characterization and Monitoring Updates—Stacy Timmons, NM Bureau of Geology and Mineral Resources
- Hydrogeology of Southwest New Mexico: Update on Regional Study—Geoff Rawling, NM Bureau of Geology and Mineral Resources
- Water Data Act Updates—Rachel Hobbs, NM Bureau of Geology and Mineral Resources
- New Surface Water Quality Permitting Updates—Jonas Armstrong, NM Environment Department
- Questions (20 minutes)

9:10–10:10 am: **Panel 2: Water and Mining in the Region**

- Past and Future of Mining in the Region—John Rakovan, NM Bureau of Geology and Mineral Resources
- Critical Minerals in the Region—Ginger McLemore, NM Bureau of Geology and Mineral Resources
- Regulating Groundwater Quality in the Region—Jason Herman, NM Environment Department
- Overview of Water Use in Hard Rock Minerals Processing—David Ennis and Albert Chang, NM Energy, Minerals and Natural Resources Department
- Questions (20 minutes)

10:10–10:20 am: Break and depart on buses

10:30–10:45 am: Bus ride to Fort Bayard Fire Station

10:45–11:45 am: **Water and Mining in the Region (continued)**

- Hanover, Santa Clara, and the Regional Water Plan in Action—Sheila Hudman, Village of Santa Clara, and Priscilla Lucero, Southwest New Mexico Council of Governments
- Mining Overview of the Operations—Sharon Offutt, Freeport-McMoRan Inc.

Afternoon Field Trip, **Option 1**

12:00–1:30 pm: **Mine Overlook**

12:00–12:15 pm: Bus ride to Chino Mine overlook

12:15–1:10 pm: Presentations from mine staff and photo opportunity

1:15–1:30 pm: Bus ride back to Silver City

1:30 pm: Workshop adjourns

Afternoon Field Trip, **Option 2**

12:00–3:15 pm: **Mine Field Trip**

12:00–12:30 pm: Van ride to Chino Mine

12:30–2:00 pm: Pit tour and photo opportunity

2:00–2:45 pm: Concentrator tour*

** Note: This portion requires stair climbing, walking across a catwalk, and navigating heights.*

2:45 pm: Van ride to Fort Bayard Fire Station

3:00–3:15 pm: Bus ride back to Silver City

3:15 pm: Workshop adjourns

PRESENTER BIOS AND CONTACT INFORMATION



ELIZABETH K. ANDERSON

State Engineer, New Mexico Office of the State Engineer
elizabeth.anderson@ose.nm.gov

Elizabeth Anderson, PE, served as senior advisor for the former State Engineer Mike Hamman before she was appointed as the New Mexico State Engineer in 2024. Before that role, Ms. Anderson was the chief planning officer for the Albuquerque Bernalillo County Water Utility Authority, where she managed the engineering, asset management, and water resources departments. She also worked as an engineering consultant for water and wastewater systems and interned at Sandia National Laboratories. Ms. Anderson holds a BS in civil engineering and an MS in environmental engineering from the University of New Mexico. She is a registered professional engineer, a certified operator for water and wastewater systems, and a LEED accredited professional.



JONAS ARMSTRONG

Water Protection Division Director, New Mexico Environment Department
jonas.armstrong2@env.nm.gov

Jonas Armstrong is the director of the New Mexico Environment Department's Water Protection Division and previously served as the department's director of strategic initiatives. Before joining NMED, he served as an attorney for the New Mexico Interstate Stream Commission, working with the acequia and water planning programs. Jonas has also worked at the Public Regulation Commission, where he analyzed and advised the commission on legal and policy issues, and at the City of Albuquerque, where he served as general counsel to the Albuquerque Police Department and provided legal services to the Economic Development Department. Jonas began his career with New Mexico's Legislative Finance Committee, analyzing natural resource agency budgets, operations, proposed legislation, and infrastructure projects. He received his Juris Doctor from the University of New Mexico School of Law.



TY BAYS

Senior Land and Water Resource Analyst/Engineer, Freeport-McMoRan Copper & Gold Inc.

tbays@fmi.com

Ty Bays is a New Mexico native, raised on family ranches in Grant County. He attended Clarendon Junior College on a livestock judging scholarship and completed a bachelor's degree in agricultural and extension education and a master's degree in animal science at New Mexico State University. Ty is currently a senior land and water resource analyst for New Mexico operations, overseeing land, water, wildlife, and mining claims. He previously worked for the New Mexico State Land Office as a land use specialist and was a loan officer for Western Bank. He owns and operates a beef cattle ranch, raising registered Hereford and Angus cattle, and a commercial herd in Grant and Luna Counties. He is actively involved in several local and statewide organizations, including serving as chairman of the Cliff-Gila Grant County Fair Board and the New Mexico Federal Lands Council and as an elected board member of the Grant Soil and Water Conservation District. Throughout his career, Ty has been involved with numerous water rights, land, and mining transactions and has participated in multiple endangered species research and mitigation projects.



ALEX BROWN

Town Manager, Town of Silver City

abrown@silvercitynm.gov

Alex C. Brown is the town manager of Silver City, New Mexico, and has served in that role since 2001. He also served as finance director until October 2021 and has witnessed tremendous growth in the town's budget—from \$13 million to more than \$81 million—during his tenure. Alex has also served as the chairman of the Grant County Water Commission since 2007, working tirelessly to develop a regional water system to ensure a safe, sufficient source of water for residential and commercial water customers for decades to come. Silver City is the commercial hub of Grant County and much of southwestern New Mexico, and the development of the regional water system not only creates a secondary water supply for all five municipalities and three domestic water associations in the county but also provides vital infrastructure to support ongoing economic development in the region. A Grant County native, Alex is a graduate of Western New Mexico University, and in his leisure time, he enjoys traveling, camping with his family, and honing his golf game.



NAT CHAKERES

General Counsel, New Mexico Office of the State Engineer
nathaniel.chakeres@ose.nm.gov

Nat Chakeres is the general counsel to the state engineer. He has worked for the Office of the State Engineer/Interstate Stream Commission since 2018. He received his bachelor's degree from Harvard University and his law degree from the University of New Mexico School of Law. After law school, he clerked for the Tenth Circuit Court of Appeals and then became an honors attorney in the Environmental Enforcement Section of the U.S. Department of Justice. At DOJ, he was one of the core trial attorneys in the Clean Water Act enforcement case stemming from the Deepwater Horizon oil spill, which ultimately resulted in the largest environmental settlement in U.S. history. He currently oversees all stream system adjudications, general litigation, and rulemaking for OSE.



ALBERT CHANG

Mining and Minerals Division Director, New Mexico Energy, Minerals and Natural Resources Department
albert.chang@emnrd.nm.gov

Albert C.S. Chang joined New Mexico's Energy, Minerals and Natural Resources Department as director of the Mining and Minerals Division in 2023. Mr. Chang comes to EMNRD from the City of Albuquerque, where he served as deputy director of the Environmental Health Department for the Air Quality Program. Before that, Mr. Chang served as an environmental engineer with the Washington State Department of Ecology and the Puget Sound Clean Air Agency. A graduate of the University of Washington School of Law, Mr. Chang also holds a master's degree in public administration and a bachelor's degree in chemical engineering.



MARTHA COOPER

Freshwater Program Director, The Nature Conservancy in New Mexico
mschumann@tnc.org

Martha provides strategic direction for The Nature Conservancy in New Mexico's freshwater conservation priorities, works closely with the Conservancy's Colorado River Program, and collaborates with partners to restore or mimic natural processes on rivers and watersheds in New Mexico. Martha began working for The Nature Conservancy in 2006, focused on the Gila and Mimbres Rivers. Before working with The Nature Conservancy, she worked for six years in northern New Mexico on forest and watershed restoration, participatory research, and education. Martha received her MS in forest ecosystem science from the University of Maine and a BA in biology from Amherst College.



COLLEEN CUNNINGHAM

Environmental Coordinator, New Mexico Interstate Stream Commission
colleen.cunningham@ose.nm.gov

Ms. Cunningham is currently the environmental coordinator for the New Mexico Interstate Stream Commission and acting in a temporary capacity as the Arizona Water Settlements Act program manager. She has degrees in biology, environmental science, and public affairs. Ms. Cunningham joined NMISC in 2018 as a National Environmental Policy Act specialist to support the New Mexico Unit Project. Her experience before joining NMISC includes working as an environmental consultant with companies that supported both private industry and the federal government and working with the Federal Emergency Management Agency.



JOEL EDWARDS

Co-Founder and CTO, Zanskar
joel@zanskar.us

Joel Edwards is the co-founder and CTO at Zanskar, where he is supporting the discovery and development of new geothermal resources by building and utilizing modern tools that de-risk drilling decisions. Joel received his PhD in earth sciences from the University of California–Santa Cruz, his MS in geology from the University of Nevada–Reno, and his BS in geology from Brigham Young University.



ALI EFFATI

Colorado River Basin Bureau Chief, New Mexico Interstate Stream Commission
ali.effati@ose.nm.gov

Ali Effati is chief of the Colorado River Basin Bureau with the New Mexico Interstate Stream Commission. Ali serves as the technical advisor to the New Mexico Colorado River Compact Commissioner. He also represents the state of New Mexico as the governor's primary representative on the Glen Canyon Dam Adaptive Management Program. Ali has been with the state of New Mexico as a senior water resources specialist and manager for the past 12 years. His duties have been related to implementing the state's obligations under compacts and decrees in the Colorado River Basin, as well as protecting New Mexico's interests in that basin. Previously, he worked as a civil engineer in the private sector and worked on several water projects, including flood control, erosion control, and bank stabilization for binational projects. Ali has a bachelor's degree in civil engineering and a master's degree in civil/water engineering.



DAVID ENNIS

Mining Act Reclamation Program Manager, New Mexico Energy, Minerals and Natural Resources Department
david.ennis@emnrd.nm.gov

David Ennis is the manager of the Mining Act Reclamation Program at the New Mexico Energy, Minerals and Natural Resources Department, which regulates active hard rock mining and exploration in the state. He has been with MARP for 14 years and has another 15 years of experience in environmental consulting and regulatory compliance in multiple states. David is a graduate of New Mexico Tech with degrees in geology and geochemistry.



EMILY GEERY

Water Planning Consultant to the New Mexico Bureau of Geology and Mineral Resources, Water + Planning
emilygeery@waterandplanning.org

Emily Geery is a water planning consultant with 18 years of experience in water resources, community and regional planning, and communications. For the past two years, she has helped organize and facilitate the Water Leaders Workshops, bringing together diverse stakeholders to address pressing water challenges and solutions. Prior to consulting, she spent eight years working with the New Mexico Interstate Stream Commission, Office of the State Engineer, and Environment Department in various roles. Her experience spans regional and state water planning, the Water Data Initiative, source water protection, and water conservation. Emily holds dual master's degrees in water resources and community and regional planning from the University of New Mexico.



JASON HERMAN

Pollution Prevention Section Program Manager, Ground Water Quality Bureau, New Mexico Environment Department
jason.herman@state.nm.us

Jason worked in Florida for 10 years, installing and maintaining reverse osmosis systems and other high-purity water technologies before moving back to New Mexico in 2013. After receiving his master's degrees in water resources management and community and regional planning in 2017, he began working for the New Mexico Environment Department in the Ground Water Quality Bureau. At NMED, Jason began his regulatory work reviewing and drafting groundwater protection discharge permits for a wide variety of facilities around New Mexico. In his current role as the program manager for the Pollution Prevention Section, he oversees a four-team program responsible for more than 500 discharge permits. The Pollution Prevention Section regulates the majority of the domestic and industrial wastewater treatment plants in New Mexico, including any type of discharges that have the potential to impact New Mexico's groundwater resources.

**RACHEL HOBBS**

Water Data Program Manager, New Mexico Bureau of Geology and Mineral Resources

rachel.hobbs@nmt.edu

Rachel Hobbs received her master's degree in geology from the University of Idaho. A professional geologist and project management professional, Rachel worked on groundwater site investigations in New Mexico before joining the New Mexico Bureau of Geology in October 2022, where she is now the manager for the Water Data Program.

**SHEILA HUDMAN**

Village Administrator, Village of Santa Clara

santaclara7@villageofsantaclara.com

Sheila Hudman has served the Village of Santa Clara for 11 years as a clerk and for the past two years as the village administrator. In this role, she oversees village operations and works to enhance the quality of life for residents. Sheila manages an average of \$3 to \$5 million in annual funding, with water projects being a primary focus.

**SHARI KELLEY**

Senior Geophysicist and Field Geologist, New Mexico Bureau of Geology and Mineral Resources

shari.kelley@nmt.edu

Shari Kelley works as a geophysicist and field geologist at the New Mexico Bureau of Geology and Mineral Resources, a research and service division of the New Mexico Institute of Mining and Technology in Socorro. She is responsible for the geothermal program at the bureau. In recent years, she has evaluated the geothermal potential of the Raton Basin, the Acoma Basin, southwestern New Mexico, and the San Juan Basin. She serves as faculty for the Summer of Applied Geophysical Experience (SAGE) field program, teaching undergraduate and graduate students about geothermal exploration methods. She has also made geologic maps of the Jemez Mountains volcanic field, Mt. Taylor, the northeastern Tularosa Basin, and, most recently, the southern Jornada del Muerto near Las Cruces.



KATE LEARY

Water Education Program Manager, New Mexico Bureau of Geology and Mineral Resources

kate.leary@nmt.edu

Dr. Kate Leary is the Water Education Program manager at the New Mexico Bureau of Geology and Mineral Resources. Kate has a BA in geology and religion from Whitman College and a PhD in geology from Arizona State University. Before joining NMBGMR, she was an assistant professor of hydrology at the New Mexico Institute of Mining and Technology. Kate's passion is rivers—both the processes of how rivers evolve through time and how society interacts with and utilizes river systems. As an assistant professor, she studied the nitty gritty details of sediment transport in sand-bedded river systems such as the Rio Grande. As manager of the Water Education Program, Kate is dedicated to building educational experiences for New Mexico water policy and decision-makers to explore, digest, and discuss present and future water challenges facing our state.



PRISCILLA LUCERO

Executive Director, Southwest New Mexico Council of Governments

priscillalucero@swnmkog.org

Priscilla has worked for the Southwest New Mexico Council of Governments since 1987 and became executive director in 2003. She provides technical assistance to local governments in Catron, Grant, Hidalgo, and Luna Counties in the areas of community and economic development, transportation, housing, water and wastewater infrastructure, and legislative needs. She is also currently involved with the New Mexico Colonias Infrastructure Board, the Opportunity Enterprise Act Board, and the New Mexico Mortgage Finance Authority Weatherization Committee. She has been appointed by Governor Lujan Grisham to the Housing New Mexico Trust Fund Committee and the New Mexico Finance Authority Water Trust Board. Her passion is to improve the quality of life for the residents in rural and frontier communities in her region and in New Mexico. Some of her awards include Grant County Citizen of the Year, Girl Scouts of the Desert Southwest Woman of Distinction, the Rotary Service Above Self Award, and the Joe Guillen Award for Outstanding Service to New Mexico Communities.



LAURA McCARTHY

State Forester, New Mexico Energy, Minerals and Natural Resources Department

laura.mccarthy@emnrd.nm.gov

Laura McCarthy was appointed New Mexico State Forester in 2019 and assumed responsibility for wildfire response and forest management on 43 million acres of state and private lands. She is chair of the state Forest and Watershed Restoration Advisory Board and administers tens of millions of dollars of state and federal funding for projects to improve forest health across the state. Under her leadership, the Forestry Division has doubled in size, modernized business systems, and taken on the challenges of postfire recovery and reforestation of burned areas with the year 2100 climate in mind. Previously, Laura was associate state director for The Nature Conservancy in New Mexico, The Nature Conservancy's senior policy advisor for fire and forests, manager of the Rio Grande Water Fund, and associate director of the Forest Stewards Guild. Her other prior work includes more than a decade with the U.S. Forest Service as a firefighter and planner in Idaho, California, Vermont, and New Hampshire.



VIRGINIA "GINGER" McLEMORE

Principal Senior Economic Geologist, New Mexico Bureau of Geology and Mineral Resources

virginia.mclemore@nmt.edu

Ginger is the principal senior economic geologist at New Mexico Bureau of Geology and Mineral Resources, a research and service division of the New Mexico Institute of Mining and Technology. She joined the bureau in 1980. She is also an adjunct professor at New Mexico Tech. She holds BS degrees in geology and geophysics and an MS degree in geology from New Mexico Tech and a PhD in geoscience from the University of Texas at El Paso. Ginger studies New Mexico's mineral resources, including how these minerals form, exploring for new resources, how to mine these resources, and how to reclaim sites after mining. Ginger has written over 400 publications. In 2023, she was inducted into the New Mexico Mining Hall of Fame in recognition of her work with the mining industry.



DAVID McSHERRY

Public Works Director, City of Deming

dmcsherry@cityofdeming.org

David McSherry, PE, holds a master's degree in industrial engineering and a bachelor's degree in agricultural engineering from New Mexico State University. David has worked for the City of Deming for seven years. For the first five years, he was a project coordinator in the Community Services Department and applied his engineering expertise to projects related to streets, cemetery platting, and design for recreational facilities. Two years ago, he was promoted to public works director, overseeing gas, water, wastewater, and solid waste utilities. His primary initiatives for his department are staff professional development through operator certification, safety, standardization of operations, and valuable cross-training across all utilities. David has earned a Water Supply Operator IV and Wastewater Operator IV certification from the New Mexico Environment Department. He previously served as Luna County manager and was on the Deming Public Schools Board of Education for eight years. He is a licensed commercial pesticide applicator and has operated his private pest control business locally.



JOHN RAKOVAN

State Mineralogist and Senior Museum Curator, New Mexico Bureau of Geology and Mineral Resources

john.rakovan@nmt.edu

John Rakovan is the state mineralogist and senior museum curator of the New Mexico Mineral Museum at the New Mexico Bureau of Geology and Mineral Resources. He has been an executive editor of and regular contributor to *Rocks & Minerals* magazine since 2001 and was a professor of mineralogy at Miami University for 25 years. John has broad research interests, including structural and morphologic crystallography, crystal growth, and mineral deposit formation. He has worked on minerals and mineral deposits in New Mexico since 1998.



GEOFF RAWLING

Hydrogeologist, New Mexico Bureau of Geology and Mineral Resources

geoffrey.rawling@nmt.edu

Geoff Rawling works as a hydrogeologist in the New Mexico Bureau of Geology's Aquifer Mapping and Geologic Mapping Programs. His responsibilities include collecting physical and chemical hydrologic data, conducting geologic mapping, and performing subsequent data analysis and interpretation. He has mapped all or part of more than 20 7.5-minute quadrangles across New Mexico and created several regional geologic maps, performing all compilations of new and legacy geologic mapping, subsurface geologic interpretation, and digital cartography. In addition to preparing technical reports and peer-reviewed scientific papers, he frequently presents the results of Bureau of Geology research programs to diverse audiences, including scientists, conservation districts, state and local government officials, and groups of concerned citizens.



HANNAH RISELEY-WHITE

Director, New Mexico Interstate Stream Commission

hannah.riseley-white@state.nm.us

Hannah Riseley-White serves as director of the New Mexico Interstate Stream Commission. Previously, she served as NMISC deputy director and chief of the Pecos River Bureau. The NMISC works to support New Mexico in complying with eight interstate compacts, as well as federal environmental regulations, including the Endangered Species Act. In addition, NMISC conducts statewide and regional water planning. Hannah holds a master's degree in environmental science and management from the University of California–Santa Barbara. She is a native New Mexican and enjoys spending time with family and exploring our beautiful outdoor landscapes.



REBECCA ROOSE

Infrastructure Advisor, Office of the Governor

rebecca.roose@exec.nm.gov

In October 2023, Governor Michelle Lujan Grisham appointed Rebecca Roose to serve as New Mexico's infrastructure advisor. In this role, Rebecca provides strategic leadership for federal and state infrastructure programs to support resilient communities across New Mexico. In her former role as deputy cabinet secretary for the New Mexico Environment Department, Rebecca oversaw New Mexico environmental and public health initiatives across all NMED programs and served as the agency's lead on infrastructure, tribal relations, and water policy. In 2022, Rebecca was one of four executive committee members providing leadership for the New Mexico Water Policy and Infrastructure Task Force. She also served the state as NMED's Water Protection Division director for two years. Before joining the state government in 2019, Rebecca led national environmental programs at the U.S. Environmental Protection Agency in Washington, D.C., over her 13-year federal career. Rebecca received her law degree from the University of New Mexico School of Law and her undergraduate degree in geography from Valparaiso University.



ALLYSON SIWIK

Executive Director, Gila Resources Information Project
allysonsiwik@gmail.com

Since 2003, Allyson Siwik has served as the executive director of the Gila Resources Information Project. She is also the director of the Gila Conservation Coalition, which works to protect the free flow of the Gila River. Allyson graduated with a BA in biology from Colby College and a Master of Environmental Management from Duke University School of the Environment. She has 30 years of experience in environmental protection, conservation, and advocacy, including with the U.S. Environmental Protection Agency in North Carolina and El Paso, Texas. She has worked extensively with local communities in the borderlands to resolve environmental problems, including binational air quality management, mining environmental impacts, water quality and water supply concerns, and communitywide initiatives on climate change and sustainability. She has served on several local, state, and federal boards, including the Good Neighbor Environmental Board, which advises the president and Congress on U.S.-Mexico border environmental and infrastructure issues.



ELLEN S. SOLES

Long-Term Researcher, Gila River, New Mexico
Ellen.Soles@nau.edu

Ellen Soles received a master's degree in rural geography, with an emphasis on the hydrology of semiarid river systems, from Northern Arizona University. She taught in the Department of Geography and Department of Environmental Engineering at NAU from 2000 to 2007. She worked with the National Park Service Inventory & Monitoring Division for over a decade to implement long-term monitoring strategies for assessing ecological trends in parks across the southern Colorado Plateau. In 2006, she wrote the initial versions of the Watershed Restoration Action Strategies for the Gila and Mimbres River watersheds. Her major focus over the past two decades has been on interactions between alluvial groundwater and surface flows, especially long-term monitoring of the effects of flow regime on vegetation communities of the Gila River.



MIKE TIMMONS

Director and State Geologist, New Mexico Bureau of Geology and Mineral Resources

mike.timmons@nmt.edu

Dr. J. Michael Timmons is the director and state geologist at the New Mexico Bureau of Geology and Mineral Resources. Mike received a BS in geology from the University of Nebraska at Omaha, followed by an MSc and PhD in geology from the University of New Mexico. In 2004, Mike was hired as a field geologist and manager of the bureau's Geologic Mapping Program, where he was tasked with leading one of the nation's most successful mapping programs. During the first 18 years of Mike's leadership, the program expanded through soft money contracts, geologic mapping staff, and GIS staff. The New Mexico Bureau of Geology remains the nation's leading geologic mapping program, securing more funding from the U.S. Geological Survey's National Cooperative Mapping Program than any other state survey. As director and state geologist, Mike sees that the Bureau of Geology plays a critical role in the future health and prosperity of New Mexico. Whether it is understanding the quality, quantity, and distribution of the state's fresh and brackish water resources, understanding the availability and potential economic value of critical and strategic minerals, or understanding the geologic framework for natural storage of carbon and hydrogen in a low-carbon energy future, the bureau has the institutional knowledge, data, and research skills for evaluating all of these resources.



STACY TIMMONS

Associate Director of Hydrogeology Programs, New Mexico Bureau of Geology and Mineral Resources

stacy.timmons@nmt.edu

Stacy Timmons is an associate director of hydrogeology programs at the New Mexico Bureau of Geology and Mineral Resources. As a hydrogeologist working with the Bureau of Geology since 2004, Stacy's experience has grown from collecting water data and reporting on a wide range of hydrogeologic research to working toward building programs and applied science projects to respond to the state's greatest hydrogeologic science needs. Building from the bureau's Aquifer Mapping and Monitoring Program, Stacy launched the implementation of the Water Data Initiative in 2019 and the Water Leaders Education Program in 2022. Additionally, since 2019, Stacy's service to the state of New Mexico has broadened to include appointments as a commissioner on the Interstate Stream Commission (2020–present) and the Water Quality Control Commission (2019–2022).



JULIE VALDEZ

Water Use and Conservation Bureau Chief, New Mexico Office of the State Engineer

julie.valdez@ose.nm.gov

Julie Valdez is chief of the Water Use and Conservation Bureau with the New Mexico Office of the State Engineer. Julie received a BS in environmental engineering from the New Mexico Institute of Mining and Technology. She has 22 years of experience working with NMOSE. Julie began her career administering water rights applications and providing technical support for hydrographic surveys. For the past 19 years, Julie has worked in NMOSE's WUCB, where she manages the bureau's day-to-day activities as well as NMOSE's outreach program and the subdivision review process. She is also the agency's expert regarding irrigation water requirements, water conservation plans, and water development plans. Julie was a principal author of the 2005, 2010, 2015, and 2020 New Mexico Water Use by Categories Reports, which quantify all water use in the state.



LLOYD VALENTINE

District 3 Manager, New Mexico Office of the State Engineer

lloyd.valentine@ose.nm.gov

Lloyd R. Valentine has served as the Office of the State Engineer's District 3 manager since August 2014. The District 3 office is responsible for administering water rights in southwest New Mexico. Lloyd has over 26 years of experience in water resource management, including six years producing potable water in the U.S. Navy, six years working for the City of Deming, and over 16 years working for the Office of the State Engineer. Lloyd earned a BS in mathematics and an MBA from Western New Mexico University and an MS in water resource management from California State University-Fresno.



JAMES WITCHER

Principal, Witcher and Associates

jimwitcher@zianet.com

James (Jim) Witcher has 47 years of professional experience in geothermal energy exploration and development and extensive knowledge of the geothermal resources of the Southwest. As a geologist with the Arizona Geological Survey from 1978 to 1982, Witcher led the compilation of the *Geothermal Resources of Arizona* map (1:500,000 scale). Between 1982 and 1984, Witcher was co-owner of Stone and Witcher in Tucson, providing geoscience services. While working at the Southwest Technology Development Institute at New Mexico State University from 1984 until 2004, Witcher compiled the first comprehensive digital geothermal database for New Mexico and discovered an important “blind” geothermal system at Rincon. Since 2005, Witcher has performed geoscience consulting, specializing in aqueous geochemistry, potential fields geophysics, structural geology, hydrogeology, and drilling management. Witcher’s clients include Masson Farms in Radium Springs, New Mexico, the largest geothermally-heated greenhouse (40 acres) in the nation, and AmeriCulture, the major tilapia fry supplier for North America. Witcher served in the U.S. Army from 1969 to 1972 and graduated with bachelor’s and master’s degrees from NMSU.



TOM ZEGLER

Special Projects Forester, Forestry Division Socorro District,
New Mexico Energy, Minerals and Natural Resources Department

tomj.zegler@emnrd.nm.gov

Tom Zegler is the special projects forester at the Silver City satellite office of the State Forestry Division’s Socorro District. Tom began his forestry career in 2006, earned an MS in forestry from Northern Arizona University in 2011, and joined the Forestry Division in 2014. He performs site visits on state and private lands to evaluate natural resource concerns and management objectives, writes treatment plans for land managers and property owners, and manages hazardous fuels reduction projects for a variety of assistance programs and collaborative agreements. Tom has a strong technical background in forest health and tree mortality—he knows the insects and diseases that kill trees. His main professional goal is to sharpen the axe of traditional silviculture with sound forest ecology and wield it to restore woodlands and forests and protect communities at risk.



MATT ZIMMERER

Geologic Mapping Program Manager, New Mexico Bureau of Geology and Mineral Resources

matthew.zimmerer@nmt.edu

Matt Zimmerer is the manager of the Geologic Mapping Program at the New Mexico Bureau of Geology and Mineral Resources. He earned his BS from the University of Kentucky, followed by MS and PhD degrees from New Mexico Tech. Matt’s research uses radiometric dating and geologic mapping to understand volcanic processes, particularly in New Mexico and West Antarctica.

NOTES



WATER LEADERS WORKSHOP
2025