

DANIEL J. KONING
Senior Field Geologist (tenured)

New Mexico Bureau of Geology and Mineral Resources
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EDUCATION

M.S., 1999, Earth and Planetary Sciences, University of New Mexico. Concentrations in Quaternary geology, paleoseismicity, and tectonic geomorphology. Thesis topic: *Paleoseismicity and fault segmentation of the Alamogordo fault, southern New Mexico.* Advisor: Dr. Frank J. Pazzaglia

B.S., 1994, Geology, University of California, Riverside.

PROFESSIONAL EXPERTISE AND INTERESTS

Integrating field-based studies with multi-disciplinary datasets to interpret tectonic and paleoclimatic controls on basin sedimentation, surface erosion, depositional facies distribution, river integration, and unconformities. Interests include stratigraphy, sedimentology, tectonic and soil geomorphology, rock falls and landslides, and hydrogeology.

PROFESSIONAL EXPERIENCE

New Mexico Bureau of Geology and Mineral Resources

New Mexico Institute of Mining and Technology, 801 Leroy Place, Socorro, NM 87801

Field geologist (July, 2003, to present)

- Served as lead author on 25 geologic maps (1:24000 and 1:12000 scale), funded by the STATEMAP joint state-Federal program.
- Assisted in completion of 20 other geologic maps
- Lead author in two compilation geologic maps (1:48,000) scale: one in Santa Fe area and one in northeastern Tularosa Basin
- Participated in AQUIFERMAP, NM Office of the State Engineer, and USGS studies assessing the subsurface extent, thicknesses, and hydraulic conductivities of aquifers in the Española Basin (Española-Santa Fe area), San Agustin Plains, Alamosa Creek (northwest of Truth or Consequences), and Albuquerque Basin

- Served as a PI in managing budgets, contracts, and personnel for five projects, one of which is on-going:
 - 1) Project with N.M. Office of the State Engineer (NMOSE); 2005-2006:**
Characterization of lateral variations of sediment texture on alluvial fans south of Alamogordo; interpretation of causes of local ground fissures in that area (professional services contract # 06-550-P551-0061).
 - 2) Project with Los Alamos National Laboratories (LANL); 2007-2009:**
Assisted in construction of a 3-dimensional geologic model for the southern Española Basin.
 - 3) Project funded as a FEMA sub-grant through the N.M. Department of Homeland Security and Emergency Management (DHSEM sub-grant number FEMA-4152-DR-NM-020), 2016-2018.** Supervised project that created statewide susceptibility maps and associated reports for landslides, collapsible soils, and rock falls for New Mexico. Constructed two rockfall susceptibility maps for New Mexico (NM Bureau of Geology Open-file Report #595) and assisted in the making of a deep-seated landslide map for the entire state ((NM Bureau of Geology Open-file Report #594).
 - 4) Project funded by Ohkay Owingeh, 2018:** Constructed structural contours for the following stratigraphic units in the northern Española Basin: (1) Top of bedrock, (2) Top of Tesuque Formation older than 13.1 Ma, and (3) Top of volcanic and volcanoclastic strata. Released to Intera, Inc., for purpose of making a hydrogeologic model of the Española Basin.
 - 5) Project funded by the Albuquerque Bernalillo County Water Utility Authority, 2018-2019:** Make two maps showing suitability for managed aquifer recharge in the Albuquerque area, east of the Rio Grande. Maps and associated report released as New Mexico Bureau of Geology and Mineral Resources OFR-605.
- Assisted geologic consulting firms, ranchers, and private landowners regarding groundwater and other geologic issues of concern to those parties.

- Presented results of my geologic studies to municipal water companies and other public organizations, as well as land owners and ranchers.
- Led and organized geological field trips and related educational activities for the public, college classes and professionals.
- Working with Amanda Dougherty and Ethan Mamer (NM Bureau of Geology) to make a 3D depiction of the aquifer underlying Rio Rancho (on-going)_

Contract Mapper (Summer of 1998 and June 1999-June 2003)

- Served as lead author on 9 geologic maps (1:24000 scale), funded by the STATEMAP and EDMAP joint state-Federal program.
- Assisted in completion of 2 other geologic maps

University of New Mexico

Teaching assistant (September 1996-May 1998)

- Physical Geology (EPS 105L) and Advanced Geomorphology (EPS 481L)

EMCON

Burbank and San Bernardino offices in California

Staff geologist (November 1994-May 1996)

- Supervised installation of ground water monitoring wells at landfills, tabulated ground water chemical data and assisted in its data interpretation, conducted geologic mapping at three landfills, and assisted in a paleoseismic study at one landfill.

U.S. Geological Survey

Student intern (under the NAGT summer internship program, June-July of 1994)

- Assisted in geologic mapping north of Glenwood Springs, CO
- Sampled dust traps and conducted field work related to neotectonic studies in eastern California, under the guidance of Marith Reheis.

University of California, Riverside

Student assistant to Dr. Stephen Wells (summers of 1992 and 1993)

- Mapped desert pavements in southern Mojave Desert (scale of 1:100,000). Evaluated potential uses of detailed GPS surveying in desert pavement evolution.

PROFESSIONAL AFFILIATIONS

Geological Society of America

New Mexico Geological Society

COMPUTER EXPERIENCE

Moderately to highly experienced with: ARCGIS (v. 10.5), Adobe Illustrator, and MS Office Suite.

GRANTS AND AWARDS

- Florence Bascom Geologic Mapping Award – Geological Society of America Annual Conference in Denver, October 9, 2023.
- John C. Frye Memorial Award in Environmental Geology, in recognition of the outstanding publication: "Geology and hydrology of groundwater-fed springs and wetlands at La Cienega, Santa Fe County, New Mexico." Presented September 2016 at the Annual Meeting of the Geological Society of America
- Tenure granted on September 21, 2015
- Geological Society of America student research grant (#6270-98), 1998
- Outstanding Student Research Award, Geological Society of America, 1998
- Arthur D. Howard Research Grant, Geological Society of America, 1997
- U.S. Geological Society Cooperative Summer Field Training Program, 1994 (internship awarded by Nat. Assoc of Geology Teachers for performing well in summer field camp the previous summer)

PROFESSIONAL VOLUNTEER ACTIVITIES

- Organized and led the 2022 New Mexico Geological Society Fall Field Conference
- Served on the Executive Committee of the New Mexico Geological Society, rotating through the positions of Secretary, Treasurer, Vice President, President, and Past-President (2016-2020).
- Co-organizer of the 2014 NM Geological Society Fall Field Conference
- Student evaluator for 2012 Kottlowski Fellowship award
- Organized and led the 2011 NM Geological Society Fall Field Conference (September 19-22)

- Technical Program Chair for the 2010 NM Geological Society Spring Meeting (April 16)
- Co-organizer of 2011 EBTAG field trip to Española Basin (Thursday, February 24)
- Organized and led the 2005 EBTAG field trip of Santa Fe area (March 2, 2005)
- Organized and led the 2003 EBTAG field trip to Buckman well field (Wed., March 5)

POST-GRADUATE STUDENT EDUCATION

- Audited class called "Interdisciplinary Field Research" (GEOL 532 at New Mexico Tech, taught by Fred Phillips, Gary Axen, and Bruce Harrison). This class enhanced my knowledge of geodynamic and deep crustal processes: including faulting, magmatism, tectonics, and fluid flow. I also learned more about cosmogenic dating plus measuring land surface changes using Interferometric Synthetic Aperture Radar and leveling surveys.

LIST OF PUBLICATIONS

Published Guidebook (2)

Koning, D.J., Hobbs, K.M., Phillips, F.M., Nelson, W.J., Cather, S.M., Jakle, A.C., and Van Der Werff, B., 2022, Socorro Region III: New Mexico Geological Society: 72nd Annual Field Conference, 423 p.

Koning, D.J., Karlstrom, K.E., Kelley, S.A., Lueth, V.W., and Aby, S.B., 2011, Geology of the Tusas Mountains and Ojo Caliente: New Mexico Geological Society, 62nd Field Conference, 418 p.

Published papers (65)

2022

Chamberlin, R.M., McIntosh, W.C., Heizler, M.T., and **Koning, D.J.**, 2022, A new constraint on the onset of Cenozoic crustal extension in the central Rio Grande rift near Socorro, New Mexico: New Mexico Geological Society, 72nd Annual Field Conference, p. 60-62.

Gallant, K.K., **Koning, D.J.**, Jochems, A.P., and Rinehart, A., 2022, Elucidating the structural geometry and major faults of the San Marcial basin, Socorro County, using total Bouguer gravity anomaly data: New Mexico Geological Society, 72nd Annual Field Conference, p. 341-356.

Kelley, S.A., and **Koning, D.J.**, 2022, Audio-magnetotelluric survey of a shallow aquifer east of Mesa del Contadero, central New Mexico: New Mexico Geological Society, 72nd Annual Field Conference, p. 329-339.

Koning, D.J., History of San Antonio, New Mexico: New Mexico Geological Society, 72nd Annual Field Conference, p. 25-26.

Koning, D.J., 2022, How geology and topography influenced the Battle of Valverde (February 21, 1862): New Mexico Geological Society, 72nd Annual Field Conference, p. 413-423.

Koning, D.J., and Heizler, M., 2022, Stratigraphy and sedimentology of the Santa Fe Group adjoining the Little San Pascual Mountains – implications for footwall exhumation and evolution of the Little San Pascual Mountain fault zone: New Mexico Geological Society, 72nd Annual Field Conference, p. 203-220.

Koning, D.J., Hobbs, K.M., Jochems, A.P., and Chamberlin, R.M., 2022, Sedimentologic evidence for a major paleogeographic change at 8.5-6.5 Ma near San Antonio, south-central New Mexico: New Mexico Geological Society, 72nd Annual Field Conference, p. 221-238.

Love, D.W., Celep, E., McCraw, D.J., and **Koning, D.J.**, 2022, Summary of the stratigraphy of both foot- and hanging-wall exposures of the Cliff fault, southern embayment of the

Albuquerque Basin, Socorro County, New Mexico: New Mexico Geological Society, 72nd Annual Field Conference, p. 253-263.

Morgan, G.S., **Koning, D.J.**, Shackley, M.S., Love, D.W., Hobbs, K.M., and Jochems, A.P., 2022, Early Pleistocene (late Blancan) vertebrates from Simon Canyon, Socorro County, central New Mexico: New Mexico Geological Society: 72nd Annual Field Conference, p. 265-279.

Nelson, W.J., and **Koning, D.J.**, 2022, Socorro's 1964 UFO Incident: New Mexico Geological Society, 72nd Annual Field Conference, p. 114-116.

2021

Barnes, H., Hinojosa, J.R., Spinelli, G.A., Mozley, P.S., Koning, D., Sproule, T.G., and Wilson, J.L., 2021, Detecting fault zone characteristics and paleovalley incision using electrical resistivity: Loma Blanca fault, New Mexico: Geophysics, vol. 86, issue 3, p. B209-B221, <https://doi.org/10.1190/geo2020-0375.1>.

2020

Koning, D.J., Heizler, M., and Jochems, A., 2020, Clues from the Santa Fe Group for Oligocene-Miocene paleogeography of the southeastern Colorado Plateau near Grants, New Mexico: New Mexico Geological Society, Special Publication 14, Geology of the Mount Taylor Area, p. 153-166.

2019

Liu, Y.A., Murphy, M.A., van Wijk, J., **Koning, D.J.**, Smith, T., and Andrea, R.A., 2019, Progressive opening of the northern Rio Grande rift based on fault structure and kinematics of the Tusas-Abiquiu segment in north-central New Mexico, U.S.: Tectonophysics, v. 753, p. 15-35.

2018

van Wijk, J., **Koning, D.**, Axen, G., Coblenz, D., Graff, E., and Sion, B., 2018, Tectonic subsidence, geoid analysis, and the Miocene-Pliocene unconformity in the Rio Grande rift, southwestern United States: Implications for mantle upwelling as a driving force for rift opening: Geosphere, v. 14, no. 2, 6 figs, 13 tables; doi: 10.1130/GESO1522.1.

Koning, D.J., Jochems, A.P., and Heizler, M.T., 2018, Early Pliocene paleovalley incision during early Rio Grande evolution in southern New Mexico, in Mack, G.H., Hampton, B.A., Ramos, F.C., Witcher, J.C., and Ulmer-Scholle, D.S., eds., Las Cruces Country III: New Mexico Geological Society, 69th Field Conference Guidebook, p. 93-108.

2016

Koning, D.J., Aby, S., Grauch, V.J.S., and Zimmerer, M.J., 2016, Latest Miocene-earliest Pliocene evolution of the ancestral Rio Grande at the Española-San Luis Basin boundary, northern New Mexico: New Mexico Geology, v. 38, no. 2, p. 24-49.

Koning, D.J., Jochems, A.P., Morgan, G.S., Lueth, V., and Peters, L., 2016, Stratigraphy, gravel provenance, and age of early Rio Grande deposits exposed 1-2 km northwest of downtown Truth or Consequences, New Mexico, *in* Frey, B.A., Karlstrom, K.E., Lucas, S.G., Williams, S., Ziegler, K., McLemore, V., and Ulmer-Scholle, D., eds., *The Geology of the Belen area: New Mexico Geological Society, 67th Annual Field Conference, Guidebook*, p. 459-478.

Repasch, M., Karlstrom, K., Heizler, M., and **Koning, D.**, 2016, New insights on the late Pleistocene Rio Grande-Rio Chama fluvial system from detrital zircon dating, *in* Frey, B.A., Karlstrom, K.E., Lucas, S.G., Williams, S., Ziegler, K., McLemore, V., and Ulmer-Scholle, D., eds., *The Geology of the Belen area: New Mexico Geological Society, 67th Annual Field Conference, Guidebook*, p. 479-489.

2015

Jochems, A.P., and **Koning, D.J.**, 2015, Holocene stratigraphy and a preliminary geomorphic history for the Palomas Basin, south-central New Mexico: *New Mexico Geology*, v. 37, no. 4, p. 77-88.

2014

Kelley, S.A., **Koning, D.J.**, Goff, F., Cikoski, C., Peters, L., and McIntosh, W., 2014, Stratigraphy of the northwestern Sierra Blanca volcanic field: *New Mexico Geological Society Guidebook, 65th Annual Field Conference*, p. 197-208.

Koning, D.J., and Roberts, L., 2014, Redefinition of the base of the Cub Mountain Formation and preliminary depositional and tectonic interpretations of early-middle Eocene strata in the Sierra Blanca basin, New Mexico: *New Mexico Geological Society Guidebook, 65th Field Conference*, p. 273-286.

Koning, D.J., Rawling, G.C., Kelley, S., Goff, F., McIntosh, W., and Peters, L., 2014, Structure and tectonic evolution of the Sierra Blanca basin: *New Mexico Geological Society Guidebook, 65th Field Conference*, p. 209-226.

Koning, D.J., 2014, Exposure of the Alamogordo fault at Laborcita Canyon and radiocarbon age constraints for its last rupture event [non-peer reviewed mini-paper]: *New Mexico Geological Society Guidebook, 65th Field Conference*, p. 92-94.

2013

Johnson, P.S., **Koning, D.J.**, and Partey, F.K., 2013, Shallow groundwater geochemistry in the Española Basin, Rio Grande rift, New Mexico: Evidence for structural control of a deep thermal source, *in* Hudson, M., and Grauch, V.J.S., eds., *New Perspectives on the Rio Grande rift: From Tectonics to Groundwater: Geological Society of America, Special Paper 494*, p. 261-301, doi:10.1130/2013.2494(11).

Kelley, S.A., Kempter, K.A., McIntosh, W.C., Maldonado, F., Smith, G.A., Connell, S.D., **Koning, D.J.**, and Whiteis, J., 2013, Syndepositional deformation and provenance of Oligocene to lower Miocene sedimentary rocks along the western margin of the Rio Grande rift, Jemez Mountains, New Mexico, *in* Hudson, M., and Grauch, V.J.S., eds., *New Perspectives on the Rio Grande rift: From Tectonics to Groundwater: Geological Society of America, Special Paper 494*, p. 101-123, doi:10.1130/2013.2494(05).

Koning, D.J., Cikoski, C., and Dunbar, N., 2013, Deciphering local landscape stability and surficial processes at a paleovalley margin during a pluvial-interpluvial transition (marine oxygen isotope stages 16-15), central New Mexico, *in* Zeigler, K., Timmons, J.M., Timmons, S., and Semken, S., eds., *Geology of Route 66 Region: Flagstaff to Grants: New Mexico Geological Society, 64th Annual Field Conference Guidebook*, p. 181-198.

Koning, D.J., Grauch, V.J.S., Connell, S.D., Ferguson, J., McIntosh, W., Slate, J.L., Wan, E., and Baldrige, W.S., 2013, Structure and tectonic evolution of the eastern Española Basin, Rio Grande rift, north-central New Mexico, *in* Hudson, M., and Grauch, V.J.S., eds., *New Perspectives on the Rio Grande rift: From Tectonics to Groundwater: Geological Society of America, Special Paper 494*, p. 185-219, doi:10.1130/2013.2494(08).

Slate, J.L., Sarna-Wojcicki, A.M., **Koning, D.J.**, Wan, E., Wahl, D., Connell, S.D., and Perkins, M.E., 2013, Upper Neogene tephrochronologic correlations of the Española Basin and Jemez Mountains volcanic field, northern Rio Grande rift, north-central New Mexico, *in* Hudson, M., and Grauch, V.J.S., eds., *New Perspectives on the Rio Grande rift: From Tectonics to Groundwater: Geological Society of America, Special Paper 494*, p. 303-322, doi:10.1130/2013.2494(12).

WoldeGabriel, G., **Koning, D.J.**, Broxton, D., and Warren, R.G., 2013, Chronology of volcanism, tectonics, and sedimentation near the western boundary fault of the Española Basin, Rio Grande rift, New Mexico, *in* Hudson, M., and Grauch, V.J.S., eds., *New Perspectives on the Rio Grande rift: From Tectonics to Groundwater: Geological Society of America, Special Paper 494*, p. 221-238, doi:10.1130/2013.2494(09).

2012

Koning, D.J., 2012, The Santa Fe Group in the northern Winston graben, southwest New Mexico, and how changing Rio Grande rift tectonism may have influenced its deposition and erosion: *New Mexico Geological Society Guidebook, 63rd Field Conference, Warm Springs Region*, p. 457-474.

Koning, D.J., and Connell, S.D., 2012, The Evolution of the Rio Grande: N.M. Lite Geology, Issue 32, p. 2-6. < <http://geoinfo.nmt.edu/publications/periodicals/litegeology/> > (accessed on February 15, 2013).

McLemore, V.T., Heizler, M., Love, D.W., Cikoski, C.T., and **Koning, D.J.**, 2012, $^{40}\text{Ar}/^{39}\text{Ar}$ ages of selected basalts in the Sierra Cuchillo and Mud Springs Mountains, Sierra and Socorro Counties, New Mexico: *New Mexico Geological Society, 63rd Field Conference Guidebook, Warm Springs Region*, p. 285-292.

2011

Aby, S.B., Kempter, K., and **Koning, D.**, 2011, Recent mapping of the Oligo-Miocene Los Pinos Formation and associated units in the Tusas Mountains, New Mexico: *New Mexico Geological Society, 62nd Field Conference Guidebook, Geology of the Tusas Mountains and Ojo Caliente*, p. 275-280.

- Aby, S.B., Morgan, G.S., and **Koning, D.J.**, 2011, A paleontological survey of a part of the Tesuque Formation near Chimayó, New Mexico, and a summary of the biostratigraphy of the Pojoaque Member (middle Miocene, late Barstovian): New Mexico Geological Society, 62nd Field Conference Guidebook, Geology of the Tusas Mountains and Ojo Caliente, p. 347-358.
- Garcia, L., Petronis, M., **Koning, D.**, Zimmerer, M., and Dunbar, N., 2011, Structural, anisotropy of magnetic susceptibility, geochemistry, and paleomagnetic investigations of a steeply dipping, welded tuff (Amalia Tuff) south of Petaca, New Mexico Vallecitos [non-peer reviewed mini-paper]: New Mexico Geological Society, 62nd Field Conference Guidebook, Geology of the Tusas Mountains and Ojo Caliente, p. 105-109.
- Koning, D.J.**, 2011, A brief history of Ojo Caliente, New Mexico [non-peer reviewed mini-paper]: New Mexico Geological Society, 62nd Field Conference Guidebook, Geology of the Tusas Mountains and Ojo Caliente, p. 50-51.
- Koning, D.J.**, 2011, High-level, quartzitic gravel deposits in the southern Tusas Mountains and development of the fault-bounded escarpment east of the Rio Vallecitos [non-peer reviewed mini-paper]: New Mexico Geological Society, 62nd Field Conference Guidebook, Geology of the Tusas Mountains and Ojo Caliente, p. 52-54.
- Koning, D.J.**, 2011, Late Oligocene-early Miocene stratigraphy in lower Cañon de los Alamos and the evolution of early rift drainages northeast of La Madera [non-peer reviewed mini-paper]: New Mexico Geological Society, 62nd Field Conference Guidebook, Geology of the Tusas Mountains and Ojo Caliente, p. 110-113.
- Koning, D.J.**, 2011, Poseyemu, the pan-pueblo culture hero [non-peer reviewed mini-paper]: New Mexico Geological Society, 62nd Field Conference Guidebook, Geology of the Tusas Mountains and Ojo Caliente, p. 99.
- Koning, D.J.**, Aby, S.B., and Kempter, K.A., 2011, Stratigraphy near South Petaca, north-central New Mexico [non-peer reviewed mini-paper]: New Mexico Geological Society Guidebook, 62nd Field Conference, Geology of the Tusas Mountains and Ojo Caliente, p. 102-105.
- Koning, D.J.**, Kempter, K.A., Peters, L., McIntosh, W.C., and May, J.S., 2011, Miocene-Oligocene volcanoclastic deposits in the northern Abiquiu embayment and southern Tusas Mountains, New Mexico: New Mexico Geological Society, 62nd Field Conference Guidebook, Geology of the Tusas Mountains and Ojo Caliente, p. 251-274.
- Koning, D.J.**, McIntosh, W., and Dunbar, N., 2011, Geology of southern Black Mesa, Española Basin, New Mexico: New stratigraphic age control and interpretations of the southern Embudo fault system of the Rio Grande rift: New Mexico Geological Society, 62nd Field Conference Guidebook, Geology of the Tusas Mountains and Ojo Caliente, p. 191-214.
- Koning, D.J.**, Newell, D.L., Sarna-Wojcicki, A., Dunbar, N., Karlstrom, K., Salem, A., and Crossey, L., 2011, Terrace stratigraphy, ages, and incision rates along the Rio Ojo Caliente, north-central New Mexico: New Mexico Geological Society, 62nd Field Conference Guidebook, Geology of the Tusas Mountains and Ojo Caliente, p. 281-300.

McIntosh, W.C., **Koning, D.J.**, and Zimmerer, M., 2011, Irregular bodies of non-welded Amalia tuff within the Peña Tank Rhyolite, western San Luis Basin, north-central New Mexico: New Mexico Geological Society, 62nd Field Conference Guidebook, Geology of the Tusas Mountains and Ojo Caliente, p. 223-234.

2009

Grauch, V.J.S., Phillips, J.D., **Koning, D.J.**, Johnson, P.S., and Bankey, V., 2009, Geophysical interpretations of the southern Española basin, New Mexico, that contribute to understanding its hydrogeologic framework: U.S. Geological Survey Professional Paper 1761, 114 manuscript pages, 32 figures, 4 tables, 4 appendixes, and 2 plates.

Keating, E.H., Fessenden, J., Kanjorski, N., **Koning, D.J.**, and Pawar, R., 2009, The impact of CO₂ on shallow groundwater chemistry: observations at a natural analog site and implications for carbon sequestration: Environmental Earth Science, online publication, DOI 10.1007/s12665-009-0192-4. Article published with open access at Springerlink.com.

2007

Connell, S.D., **Koning, D.J.**, Kelley, S.A., and Brandes, N.N., 2007, Oligocene and early Miocene sedimentation in the southwestern Jemez Mountains and northwestern Albuquerque Basin, New Mexico: New Mexico Geological Society, 58th Field Conference Guidebook, Geology of the Jemez Mountains Region II, p. 195-208.

Koning, D.J., 2007, Stratigraphic notes on Santa Fe Group exposures west of the Rio Grande between Otowi and Española [non-peer-reviewed mini-paper]: New Mexico Geological Society Guidebook, 58th Field Conference Guidebook, Geology of the Jemez Mountains Region II, p. 41-43.

Koning, D.J., and Kempter, K., 2007, Inferences regarding middle to late Miocene vertical motion on the Canada de Almagre and Cerritos faults near Clara Peak, northeastern Jemez Mountains [non-peer-reviewed mini-paper]: New Mexico Geological Society, 58th Field Conference Guidebook, Geology of the Jemez Mountains Region II, p. 49-51.

Koning, D.J., Aby, A., and Finch, S., 2007, Where is the water? – A preliminary assessment of hydrogeologic characteristics of lithostratigraphic units near Española, north-central New Mexico: New Mexico Geological Society, 58th Field Conference Guidebook, Geology of the Jemez Mountains Region II, p. 475-484.

Koning, D.J., Broxton, D., Sawyer, D., Vaniman, D., and Shomaker, J., 2007, Surface and subsurface stratigraphy of the Santa Fe Group near White Rock and the Buckman areas of the Española Basin, north-central New Mexico: New Mexico Geological Society, 58th Field Conference Guidebook, Geology of the Jemez Mountains Region II, p. 209-224.

Koning, D.J., Connell, S.D., Slate, J.L., and Wan, E., 2007, Stratigraphic constraints for Miocene-age, vertical motion along the Santa Clara fault, Española Basin, north-central New Mexico: New Mexico Geological Society, 58th Field Conference Guidebook, Geology of the Jemez Mountains Region II, p. 225-238.

Koning, D.J., Kelley, S.A., and Kempter, K.A., 2007, Geologic structures near the boundary of the Abiquiu embayment and Colorado Plateau – a long history of faulting [non-peer-reviewed mini-paper]: New Mexico Geological Society, 58th Field Conference Guidebook, Geology of the Jemez Mountains Region II, p. 43-46.

Koning, D.J., Peters, L., Kelley, S., and McIntosh, W.C., 2007, Evidence for rhyo-dacitic volcanism in the northern Jemez Mountains at 11-13 Ma [non-peer-reviewed mini-paper]: New Mexico Geological Society Guidebook, 58th Field Conference Guidebook, Geology of the Jemez Mountains Region II, p. 39-41.

2005

Koning, D. J., 2005, Quaternary terrace deposits along the lower Rio Chama and the Rio Chama-Rio Grande confluence: stratigraphic relations and possible displacement by the Santa Clara fault [non-peer-reviewed mini-paper]: New Mexico Geological Society, 56th Field Conference Guidebook, Geology of the Chama Basin, p. 6-7.

Koning, D.J., and Aby, S.B., 2005, Proposed Members of the Chamita Formation, north-central New Mexico; New Mexico Geological Society, 56th Field Conference Guidebook, Geology of the Chama Basin, p. 258-278.

Koning, D.J., Connell, S.D., Morgan, G.S., Peters, L., and McIntosh, W.C., 2005, Stratigraphy and depositional trends in the Santa Fe Group near Española, north-central New Mexico: tectonic and climatic implications: New Mexico Geological Society, 56th Field Conference Guidebook, Geology of the Chama Basin, p. 237-257.

Koning, D.J., Kelley, S., and Kempter, Kirt, 2005, Pliocene geologic features at the top of southern Black Mesa, Española basin, and a peculiar alignment of topographic knobs in the Servilleta Basalt [non-peer-reviewed mini-paper]: New Mexico Geological Society, 56th Field Conference Guidebook, Geology of the Chama Basin, p. 9-10.

Morgan, G.S., **Koning, D.J.**, and Lucas, S.G., 2005, Late Hemphillian (late Miocene) vertebrate fauna from the Black Mesa Quarry, Chamita Formation, Rio Arriba County, New Mexico: New Mexico Geological Society, 56th Field Conference Guidebook, Geology of the Chama Basin, p. 408-415.

2004

Aby, S.B., and **Koning, D.J.**, 2004, Sedimentology of the Tesuque Formation and tectonics of the Embudo fault system near Dixon, New Mexico: New Mexico Geological Society, 55th Field Conference Guidebook, Geology of the Taos Region, p. 351-358.

Bauer, P.W., Kelson, K.I., and **Koning, D.J.**, Plate 7: Cenozoic geologic timeline -- Taos area: New Mexico Geological Society, 55th Field Conference Guidebook, Geology of the Taos Region, p. 122.

Koning, D.J., Plate 11: Geologic map of the Velarde graben - northern Española Basin: New Mexico Geological Society, 55th Field Conference Guidebook, Geology of the Taos Region, p. 128.

Koning, D.J., Aby, S.B., and Dunbar, N., 2004, Middle-upper Miocene stratigraphy of the Velarde graben, north-central New Mexico: tectonic and paleogeographic implications: New Mexico Geological Society, 55th Field Conference Guidebook, Geology of the Taos Region, p. 359-373.

Koning, D.J., Ferguson, J.F., Paul, P.J., and Baldrige, W.S., 2004, Geologic structure of the Velarde graben and southern Embudo fault system, north-central N.M.: New Mexico Geological Society, 55th Field Conference Guidebook, Geology of the Taos Region, p. 158-171.

Smith, G.A., with contributions from Bauer, P.W., and **Koning, D.J.**, 2004, Plate 8: Paleogeographic maps of the Taos area: New Mexico Geological Society, 55th Field Conference Guidebook, Geology of the Taos Region, p. 123-125.

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2002

Koning, D.J., 2002, Depositional trends of the upper Tesuque Formation, Española Basin, N.M., and inferred tectonic and climatic influences on aggradation [abstract]: *Geological Society of America, Abstracts with Programs*, October 2002, vol. 34, issue 6, p. 281.

Koning, D.J., 2002, Geology of the Española 7.5-minute quadrangle and implications regarding middle Miocene deposition and tectonism in the Rio Grande rift, north-central New Mexico: *New Mexico Geology*, vol. 24, no. 2, p. 63.

2001

Connell, S.D., Cather, S.M., McIntosh, W.C., Dunbar, N.W., **Koning, D.J.**, and Tedford, R.H., 2001, Stratigraphy of lower Santa Fe Group deposits in the Hagan embayment and near Zia Pueblo, New Mexico; implications for Oligo-Miocene development of the Albuquerque Basin: *New Mexico Geology*, vol. 23, no. 2, p. 60.

Koning, D.J., Connell, S.D., McIntosh, W.C., Love, D.W., and Pazzaglia, F.J., 2001, Stratigraphy of the Ancha and Tuerto Formations (upper Santa Fe Group), Santa Fe and Hagan embayments, north-central New Mexico: Geological Society of America, *Abstracts with Programs*, April 2001, vol. 33, issue 5, p. 48.

Read, A., and **Koning, D.J.**, 2001, Preliminary compilation of recent mapping in the Santa Fe area: Geological Society of America, *Abstracts with Programs*, April 2001, vol. 33, issue 5, p. 8.

1998-1999

Koning, D.J., and Pazzaglia, F.J., 1999, Late Quaternary paleoseismicity of the Alamogordo fault adjacent to the Sacramento Mountains: *New Mexico Geology*, vol. 21, no. 2, p. 39.

Koning, D.J., 1998, Alluvial fan stratigraphy along the southern Sacramento Mountains and paleoseismic interpretations for the Alamogordo fault: *New Mexico Geology*, vol. 20, no. 2, p. 55-56.

Koning, D.J., and Pazzaglia, F.J., 1998, Paleoseismicity, fault segmentation, and persistence of mountain-front landforms in a continental rift setting, Alamogordo fault, southern New Mexico: Geological Society of America, *Abstracts with Programs*, 1998, vol. 30, issue 7, p. 329.

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Koning, D.J., 1999, Fault segmentation and paleoseismicity of the southern Alamogordo fault, southern Rio Grande rift, New Mexico: Albuquerque, University of New Mexico, 286 p.

JOURNALS EDITED

New Mexico Geology [Fall issue of 2015 through Summer issue of 2016].

POST-2015 RESEARCH GRANTS AWARDED

Hydrostratigraphic framework of two deep aquifers extending under Rio Rancho—the Arroyo Ojito and Cerro Conejo Formations. Funding agency: Rio Rancho Water Utility. Principal Investigator: Daniel J. Koning. Project Budget: \$59,385. Sep. of 2019 through Sep. of 2020.

Mapping recharge areas in Albuquerque Basin. Funding agency: Albuquerque Bernalillo County Water Utility Authority. Principal Investigator: Daniel J. Koning. Project budget: \$39,502. NM Project start and end dates: Sep. of 2018 through July 1, 2019

Constructing structural contour map of northern Española Basin. Funding agency: Ohkay Owingeh Pueblo. Principal Investigator: Daniel Koning. Project Budget: \$17,100 Project start and end dates: March 22, 2018, to December 31, 2018.

Landslide and Collapsible Soil Risk Assessment and Workshop. Funding agency: New Mexico Department of Homeland Security and Emergency Management. Principal Investigator: Daniel Koning. Co-investigator: Alex Rinehart. Project Budget: \$129,806, of which \$97,354 is from FEMA and \$32,452 is from New Mexico Tech. Project start and end dates: 2016-2018.

NEW MEXICO TECH GRADUATE STUDENT COMMITTEES

Samuel Martin: Structural evolution of the Reserve graben, New Mexico.

Johnny Ray Hinojosa: Surface geologic mapping and subsurface characterization near the Loma Blanca fault, central New Mexico.

Eda Celep: Lithofacies analysis of the Sierra Ladroens Formation near the Sevilleta National Wildlife Refuge Headquarters (southern Albuquerque Basin, N.M.): Implications for Cliff fault activity in the early Pleistocene. Main advisor: Daniel Koning.

Logan Roberts: Reconstructing the paleogeography and Laramide tectonic setting of the basin associated with the Cub Mountain Formation. Major advisor: Daniel Koning. Discontinued in June of 2016.

SERVICE ON COMMISSIONS/COUNCILS/BOARDS

2021-2023

Head of tenure committee for Kevin Hobbs (NM Bureau of Geology and Mineral Resources).

Served on tenure committees for Matt Zimmerer, Snir Attia, and Jacob Thacker (NM Bureau of Geology and Mineral Resources).

Helped organize Rockin' New Mexico (July-2021 and 2023, New Mexico Bureau of Geology and Mineral Resources).

2020

Past-President of the New Mexico Geological Society

2019

President of the New Mexico Geological Society.

2016-2018

Secretary, Treasurer, and Vice President of the Executive Committee of the New Mexico Geological Society.

New Mexico representative for the Basin and Range subcommittee of the Western States Seismic Policy Council

2015

Geological Survey Representative for New Mexico to the Western States Seismic Policy Council

January 21, 2015: Participated in Hydrogeology Working Group meeting pertaining to the Kirkland Air Force Base fuel spill.

2014

July 21, morning: Participate in the Basin and Range Province Committee Meeting held in Anchorage, Alaska (via phone). We adopted or proposed to revise draft policy recommendations that related to earthquakes in the Basin and Range, the most controversial one being how to define an active fault. .

July 22, afternoon: Participate in the Western States Seismic Policy Council business meeting via phone.

May 21-22: Attended a meeting for Earthquake Program Managers, which related to my new position as the New Mexico representative for the Western States Seismic Policy Council.

January through May: Part of a two-man committee (together with Dan Cadol) to organize the Weekly Seminar Series for the Earth and Environmental Science Department and the New Mexico Bureau of Geology.

Served on the NMG editorial board.

Serve as the research advisor for a master student, Logan Roberts, in the Earth and Environmental Science Department.

2013

Part of a two-man committee (together with Dan Cadol) to organize the Weekly Seminar Series for the Earth and Environmental Science Department and the New Mexico Bureau of Geology

Served on the NMGS editorial board. Meeting held on April 12, 2013.

Served on a hiring committee for a groundwater position at the N.M. Bureau of Geology and Mineral Resources.

Served on hiring committee for a field geologist position at the N.M. Bureau of Geology and Mineral Resources.