**MEMO** 

**DATE: January 13, 2016** 

TO: NMGS Exec Comm

FROM: Virginia McLemore and Bonnie Frey

TOPIC: Proposed key-note session for the 2017 NMGS Spring Meeting in Socorro

We would like to propose a key-note session for the 2017 NMGS Spring Meeting on Uranium Issues in New Mexico, with an emphasis on insitu recovery and reclamation. We just completed a workshop on In-situ Uranium Issues sponsored in part by the NM EPSCoR, an NSF program. The participants of the workshop included representatives from UNM, NMT, industry, and consultant firms. One of the outcomes of this workshop was to have a symposium on Uranium Issues in New Mexico, and we felt that the NMGS Spring Meeting would be appropriate. We expect the topics to include uranium transport, mineralogy, microbiology, geochemistry, hydrology, recovery and restoration, modeling, environmental and legacy impacts, and regulation. We have numerous contacts in industry who would be invited to participate, and there is a significant amount of student research that would be presented, some of which is and has been funded by NMGS. Therefore, we would like to be the chairs of the 2017 NMGS Spring Meeting.

#### NMGS 2015 Year end Sales

Item Description	Qty Sold	Ext Price
canvas bag	17	255
Gdbk 10 CD-ROM West-Central New Mexico	1	10
Gdbk 11 Rio Chama Country	3	14
Gdbk 12 Albuquerque Country	8	36.5
Gdbk 13 Mogollon Rim Region - SPE	5	23.75
Gdbk 15 Ruidoso Country	4	19
Gdbk 16 Southwestern New Mexico	8	34.75
Gdbk 19 San Juan, San Miguel, La Plata Region	2	10
Gdbk 2 San Juan Basin (AZ & NM)	3	13.75
Gdbk 20 The Border Region	5	25
Gdbk 21 Tyrone, Big Hatchet Mtn., Florida Mtns. Region	10	44.75
Gdbk 23 East-Central New Mexico	8	37.75
Gdbk 24 Monument Valley	4	20
Gdbk 25 Ghost Ranch	15	70
Gdbk 26 Las Cruces Country	8	40
Gdbk 26 Map Tectonic Map of Rio	6	13.65
Gdbk 27 Vermejo Park	4	18.25
Gdbk 28 San Juan Basin III	8	35.5
Gdbk 29 Land of Cochise	9	38.75
Gdbk 3 Rio Grande Country	4	18.75
Gdbk 30 Santa Fe Country	6	27.75
Gdbk 31 Trans-Pecos Region	9	42
Gdbk 32 Western Slope	5	24
Gdbk 33 Albuquerque Country II	10	47.75
Gdbk 33 Road Logs to Albuquerque Country	6	30
Gdbk 34 Socorro Region II	7	34
Gdbk 35 Rio Grande Rift (Northern NM)	17	83
Gdbk 36 Santa Rosa, Tucumcari Region	7	29
Gdbk 37 Truth or Consequences Region	8	34
Gdbk 38 Northeastern New Mexico	5	22
Gdbk 39 Cretaceous & Laramide Tectonic Evolution of SW NM	8	34.75
Gdbk 40 Southeastern Colorado Plateau	10	45.5
College AA Toologie Development of	10	45.25
Gdbk 42 Geology of The Sierra Blanca, Sacramento & Capitan Ranges	8	36.75
Gdbk 43 San Juan Basin IV	9	42
Gdbk 45 Mogollon Stope	5	24
Gdbk 46 Geology of the Santa Fe	14	66
Gdbk 47 CD-ROM Jemez Mountains Region	4	40
Gdbk 48 Mesozoic Geology & Paleontology of the Four Corners	7	30.75
Gdbk 49 Las Cruces Country II	5	25
Gdbk 5 Southeastern New Mexico	4	20
Gdbk 50 Albuquerque Geology	16	73.75
Gdbk 51 Southwest Passage: A Trip through the Phanerozoic	6	30
Gdbk 52 Geology of Llano Estacado	4	17.75

Gdbk 53 Geology of White Sands			9	42
Gdbk 54 Geology of the Zuni Plateau			12	58.75
Gdbk 55 Geology of the Taos Region			15	248.75
Gdbk 56 Geology of the Chama Basin			3	73.5
Gdbk 57 Caves & Karst of SE New			5	105.95
Gdbk 58 Geology of the Jemez Region II			8	175.46
Gdbk 58 Geology of the Jemez Region II Road Log			10	164.59
Gdbk 59 Geology of the Gila Wildemess-Silver City area	1		13	276.76
Gdbk 59 Geology of the Gila Wilderness-Silver City area	Road Log		23	322.2
Gdbk 6 South-Central New Mexico			4	18.75
Gdbk 60 Geology of the Chupadera Mesa			5	117
Gdbk 60 Geology of the Chupadera Mesa			7	97.76
Gdbk 61 Geology of the Four Corners Country			14	647.5
Gdbk 61 Geology of the Four Corners Country Road Log	1		11	198.5
Gdbk 62 Geology of the Tusas Mountains and Ojo Calie	nte		8	346.5
Gdbk 62 Geology of the Tusas Mountains and Ojo Calie	nte		10	167.5
Gdbk 63 Geology of the Warm Springs Region			8	455
Gdbk 63 Geology of the Warm Springs Region			6	117.5
Gdbk 64 - Geology of Route 66 Region: Flagstaff to Gra	nts		24	1,378.00
Gdbk 64 (road logs only) - Geology of Route 66 Region:	Flagstaff to Grants		4	95
Gdbk 65 (road logs only) Sacramento Mountains Region			14	277.4
Gdbk 65 Sacramento Mountains Region			33	1,375.00
Gdbk 66 (road logs only) Geology of the Las Vegas Reg	on		18	279.3
Gdbk 66 Geology of the Las Vegas Region			208	2,032.25
Gdbk 8 Southwestern San Juan Mtns. (Colorado)			9	42.75
Gdbk 9 Black Mesa Basin (Northeastern AZ)			5	25
Geologic Highway Map of NM 2005			1,274	8,586.00
SP10-Environmental Geology & Hydrotogy in NM			4	17.55
SP11-The Geology of New Mexico			33	1,172.25
SP12-A Brief History of Geological Studies in New Mexic	0		28	1,102.50
SP1-Biblio & Index of NMGS GDBKs, 1950-63			1 1	3
SP2-History of NM Geologic-SPE			4	6.5
SP3-The San Andres Limestone			1	10
SP4-Subsurface Geology East-Central NM			2	6
SP5-Cenozoic Volcanism SW NM			2	10
SP6-Tectonics & Mineral Resources SW North America			3	22.5
SP7-Field Guide Cauldrons & Mining Dist. Datil-Mogollor	Volcanic Field		9	44
SP8-Archaeology & History Santa			5	9.1
SP9-Ash-Flow Tuffs			6	43.5
		_	2,180	21,855.72

### 2015 NMGS Year End Inventory

2015 NIMGS Year End Inventory			
Item Name	Item Description	Cmp Qty	
G00002S	Gdbk 2 San Juan Basin (AZ & NM)	11	
G00003S	Gdbk 3 Rio Grande Country	8	
G00005S	Gdbk 5 Southeastern New Mexico	3	
G00006S	Gdbk 6 South-Central New Mexico	618	
G00008S	Gdbk 8 Southwestern San Juan Mtn	408	
G00009S	Gdbk 9 Black Mesa Basin (Northea	320	
G00010H	Gdbk 10 CD-ROM West-Central N	0	
G00011H	Gdbk 11 Rio Chama Country	37	
G00012H	Gdbk 12 Albuquerque Country	335	
G00012MAP	Gdbk 12 Map Geologic Map of the	100	
G00013S	Gdbk 13 Mogollon Rim Region - SP	246	
G00015MAP	Gdbk 15 Map Tectonic Map of Ruid	128	
G00015S	Gdbk 15 Ruidoso Country	312	
G00016H	Gdbk 16 Southwestern New Mexico	269	
G00018MAP	Gdbk 18 Map Tectonic Map Defianc	97	
G00019S	Gdbk 19 San Juan, San Miguel, La	221	
G00020H	Gdbk 20 The Border Region	338	
G00021S	Gdbk 21 Tyrone, Big Hatchet Mtn.	520	
G00023H	Gdbk 23 East-Central New Mexico	23	
G00024H	Gdbk 24 Monument Valley	103	
G00025H	Gdbk 25 Ghost Ranch	451	
G00026H	Gdbk 26 Las Cruces Country	718	
G00026MAP	Gdbk 26 Map Tectonic Map of Rio	31	
G00027MAP	Gdbk 27 Map Tectonic Map of Sout	9	
G00027\$	Gdbk 27 Vermejo Park	959	
G00028S	Gdbk 28 San Juan Basin III	317	
G00029S	Gdbk 29 Land of Cochise	549	
G00030H	Gdbk 30 Santa Fe Country	690	
G00031S	Gdbk 31 Trans-Pecos Region	655	
G00032S	Gdbk 32 Western Slope	731	
G00033S	Gdbk 33 Albuquerque Country II	1,121	
G00033SP	Gdbk 33 Road Logs to Albuquerque	233	
G00034S	Gdbk 34 Socorro Region II	1,090	
G00035H	Gdbk 35 Rio Grande Rift (Norther	524	
G00036H	Gdbk 36 Santa Rosa, Tucumcari Re	912	
G00037S	Gdbk 37 Truth or Consequences Re	616	
G00038H	Gdbk 38 Northeastern New Mexico	783	
G00039H	Gdbk 39 Cretaceous & Laramide Te	233	
G00040H	Gdbk 40 Southeastern Colorado Pl	272	
G00041H	Gdbk 41 Tectonic Development of	164	
G00041H	Gdbk 42 Geology of The Sierra Bl	284	
G00043H	Gdbk 43 San Juan Basin IV	373	
G00045N	Gdbk 45 Mogollon Stope	421	
G00046S	Gdbk 46 Geology of the Santa Fe		
G000003	Gunk 40 Geology of the Santa Fe	222	

G00048S	Gdbk 48 Mesozoic Geology & Paleo	427
G00049S	Gdbk 49 Las Cruces Country II	549
G00050S	Gdbk 50 Albuquerque Geology	392
G00051S	Gdbk 51 Southwest Passage: A Tri	590
G00052S	Gdbk 52 Geology of Llano Estacad	620
G00053	Gdbk 53 Geology of White Sands	444
G00054	Gdbk 54 Geology of the Zuni Plat	557
G00055	Gdbk 55 Geology of the Taos Regi	273
G00056	Gdbk 56 Geology of the Chama Bas	585
G00057S	Gdbk 57 Caves & Karst of SE New	475
G00058S	Gdbk 58 Geology of the Jemez Reg	_ 17
G00058SP	Gdbk 58 Geology of the Jemez	960
G00059S	Gdbk 59 Geology of the Gila Wild	158
G00059SP	Gdbk 59 Geology of the Gila W	243
G00060S	Gdbk 60 Geology of the Chupadera	157
G00060SP	Gdbk 60 Geology of the Chupad	343
G00061S	Gdbk 61 Geology of the Four Corn	291
G00061SP	Gdbk 61 Geology of the Four C	403
G00062S	Gdbk 62 Geology of the Tusas Mou	361
G00062SP	Gdbk 62 Geology of the Tusas Mou	402
G00063S	Gdbk 63 Geology of the Warm Spri	140
G00063SP	Gdbk 63 Geology of the Warm Spri	457
G00064S	Gdbk 64 - Geology of Route 66	297
G00064SP	Gdbk 64 (road logs only) - Ge	397
G00065S	Gdbk 65 Sacramento Mountains	360
G00065SP	Gdbk 65 (road logs only) Sacr	405
G00066S	Gdbk 66 Geology of the Las Ve	334
G00066SP	Gdbk 66 (road logs only) Geol	392
NMGS Canvas Bag	canvas bag	467
NMGS MAP	Geologic Highway Map of NM 2005	16,071
SP00001	SP1-Biblio & Index of NMGS GDBKs	109
SP00002	SP2-History of NM Geologic-SPE	281
SP00003	SP3-The San Andres Limestone	48
SP00004	SP4-Subsurface Geology East-Cent	253
SP00005	SP5-Cenozoic Volcanism SW NM	706
SP00005MAP	Cenozoic volcanism SW NM - map	26
SP00006	SP6-Tectonics & Mineral Resource	93
SP00007	SP7-Field Guide Cauldrons & Mini	458
SP00007MAP	Geological & Geophysical Map of	10
SP00008	SP8-Archaeology & History Santa	1,126
SP00009	SP9-Ash-Flow Tuffs	576
SP00010	SP10-Environmental Geology & Hyd	486
SP00011	SP11-The Geology of New Mexico	1,121
SP00012	SP12-A Brief History of Geolo	394
		49,709

### Out of Print NMGS Publications- January 2016

FFC-1 San Juan Basin (New Mexico and Colorado), Kelley, V. C.; Beaumont, E. C.; Silver, C.; [eds.], 1950, 152 pages, NMGS, (Reprinted 1996).

FFC-4 Southwestern New Mexico, Kottlowski, F. E.; [ed.], 1953, 153 pages, NMGS, (Reprinted 1996).

FFC-5 Southeastern New Mexico, Stipp, T. F.; [ed.], 1954, 209 pages, NMGS, (Reprinted 1996).

FFC-7 Southeastern Sangre de Cristo Mountains, Rosenweig, A.; [ed.], 1956, 151 pages, NMGS, (Reprinted 1996).

FFC-10 West-Central New Mexico, Weir, J. E., Jr.; Baltz, E. H.; [eds.], 1959

FFC-14 Socorro Region, Kuellmer, F. J.; [ed.], 1963, 204 pages, NMGS, (Reprinted 1996).

FFC-17 Taos-Raton-Spanish Peaks Country (New Mexico and Colorado), Northrop, S. A.; Read, C. B.; [eds.], 1966, 128 pages, NMGS, (Reprinted 1996).

FFC-22 San Luis Basin (Colorado), James, H. L.; [ed.], 1971, 340 pages,

FFC-44 Carlsbad Region (New Mexico and West Texas), Love, D. W.; Hawley, J. W.; Kues, B. S.; Austin, G. S.; Lucas, S. G.; [eds.], 1993, 357 pages, NMGS.

FFC-47 Jemez Mountains Region, Goff, F.; Kues, B. S.; Rogers, M. A.; McFadden, L. S.; Gardner, J. N.; [eds.], 1996, 484 pages, NMGS,

# NMGS Publications Sales Report 2015 Summary For First Quarter 2016 NMGS EC meeting Presented by Virginal McLemore, prepared by Nelia Dunbar

January 15, 2016

Our total publication sales during 2015 were \$21669 for publications and \$255 for canvas bags. Our 2015 sales were intermediate between 2014 (\$22692) and 2013 (\$20081).

As always, the highway map was out biggest seller (1274 copies). In terms of the more conventional publications, the biggest sales, besides the guidebook for the Fall Field Conference, were Special Volume 11 (33) and the Sacramento Mtns guidebook (33). Special Volume 12 sold 28 copies, the Rt. 66 guidebook sold 24, Guidebook 59 (Silver City) sold 23 and many other guidebooks sold between 10 and 20 (see NMGS 2015 year end sales).

Guidebook 10 (West-Central New Mexico, 1959) sold the last print copy during the past year, and is now available only on CD-ROM. Other out of print guidebooks are listed in the accompanying handout. We are well-supplied with most other guidebooks and other publications, as can be seen in the 2015 Inventory document.

Yearly Sales Executive Meeting, Jan 15, 2016

MONTH	2010	2011	2012	2013	2014	2015
JANUARY	\$2,591.67	\$3,988.20	\$2,379.22	\$2,367.07	\$1,771.00	\$2,307.00
FEBRUARY	\$2,090.13	\$2,010.19	\$2,566.62	\$1,633.94	\$1,690.00	\$1,105.00
MARCH	\$3,078.12	\$2,088.63	\$2,551.51	\$2,201.45	\$2,520.00	\$1,901.00
APRIL	\$2,297.26	\$1,806.45	\$2,010.97	\$1,445.16	\$3,046.00	\$1,644.76
MAY	\$2,774.45	\$2,252.63	\$2,812.58	\$1,122.27	\$1,175.31	\$1,532.84
JUNE	\$3,043.00	\$2,643.89	\$5,115.82	\$1,589.70	\$2,337.24	\$3,130.00
JULY	\$2,045.22	\$1,786.20	\$479.63	\$1,367.14	\$760.66	\$791.00
AUGUST	\$1,398.94	\$2,936.96	\$1,508.33	\$1,941.97	\$1,462.00	\$1,765.00
SEPTEMBER	\$1,814.25	\$1,721.58	\$1,459.50	\$1,338.45	\$3,452.83	\$1,671.00
OCTOBER	\$5,315.99	\$2,530.60	\$2,529.64	\$2,171.25	\$1,542.98	\$2,568.00
NOVEMBER	\$2,957.88	\$2,551.34	\$2,797.70	\$1,954.75	\$2,640.57	\$2,237.00
DECEMBER	\$1,458.50	\$1,642.75	\$1,303.96	\$947.50	\$293.00	\$1,017.26
TOTAL	\$30,865.41	\$27,959.42	\$27,515.48	\$20,080.65	\$22,691.59	\$21,669.86

**MEMO** 

DATE: January 14, 2016

TO: NMGS Exec Comm

FROM: Virginia McLemore, Publications Comm Chair

The Bureau of Geology is planning to start using the Digital Object Identifier (DOI) system (see CrossRef.org). This system maintains a location for digital objects in the event that websites change where online content is stored. Most geoscience publishers are now using this system and the NMGS should consider using it too. Annual fees are about \$275/year plus negligible fees for new entries. There would also be a one-time fee of about \$300 to add DOI numbers to all existing NMGS guidebook papers and other publications. New publication reference lists would also have to include DOI numbers for references that have them.

Action Item: Motion to approve NMGS to use DOIs and pay for the cost unless it is possible to piggy back on NMBMGR.

#### **MEMO**

**DATE: January 14, 2016** 

**TO: NMGS Executive Committee** 

FROM: Virginia McLemore

I just wanted to bring everyone up-to-date on the current status of the Energy and Minerals Resources of NM publication. We are going to co-publish this as a NMBGMR Memoir 50 and NMGS Special Publication 13. We plan to have this published by June 2016.

### Here are the outline and progress

- 1. Petroleum Geology of New Mexico, Ronald F. Broadhead Completed in layout
- 2. Coal in New Mexico, Gretchen K. Hoffman almost ready for layout
- 3. Uranium Resources in New Mexico, Virginia T. McLemore and William L. Chenoweth –ready for layout
- 4. Metallic Mineral Deposits in New Mexico: An Overview, Virginia T. McLemore and Virgil W. Lueth —ready for layout
- 5. Industrial Minerals and Rocks of New Mexico, Virginia T. McLemore and George S. Austin in editing
- 6. The Valles Caldera (Baca) geothermal System, New Mexico, Fraser Goff and Cathy J. Goff in editing

We are working on the introduction, preface, and inside covers for each of these. If you have any outstanding photos for the covers, please send them ASAP. Some of you already have.

Everyone expect layout proofs sometime in the spring.

Another noteworthy item is that the Director of NMBGMR feels very strongly that the cost-sharing of the publication be changed from our typical arrangement, in order to more truly reflect the fact that this publication is a de facto Bureau effort (even the non-Bureau co-authors are actually Bureau associates). The Director suggests 80% to Bureau and 20% to NMGS.

### What we are asking NMGS to contribute is

- \$10,000 for editing (\$8000 paid to NMBG to be paid as \$4000 stipends to Brigitte and Stacy, and \$2000 to Allan Sauter). We would like NMGS to pay the editing costs now. The remaining substantial editing and redrafting costs will be covered by the Bureau.
- A portion of the printing costs. The estimated printing cost should be under \$40,000 for 1000 copies of the volumes and 500 boxes. We would like to know how much NMGS will contribute so we can budget for the remaining printing costs.

### **NMGS** Webmaster Report

Adam Read

15-January-2016

#### **Ballot:**

There were 65 votes cast online. Dave Love received some votes on paper and will have the official results. Our turnout might be improved if we could have the ballot ready before the FFC and could announce it then, or as part of the registration process. A higher turnout could positively affect member participation in the society.

### Scholarships:

The 2016 online scholarship application went live on January 1<sup>st</sup> and will close on February 19<sup>th</sup>. We plan to post scholarship recipient's names and schools after awards are made (but not amounts). When time allows, I'll write the code to pull that information from the database and add a way to manage this feature on the scholarship management pages.

### **Spring Meeting:**

The online registration and abstract submission applications will be ready to go as soon as we have details about the 2016 meeting.

### News, Meetings, & Announcements:

There is now an online form for managing news, meetings, and announcements on the website. I could provide permission to perhaps the NMGS secretary to manage this, or I can continue to post content as I receive it. In any case, it would be great to have regular updates appear on the website.

#### Website Statistics:

I haven't produced these for a while, but here is a link to website statistics for the NMGS site for calendar year 2015:

http://nmgs.nmt.edu/webstats/2015/NMGS-Report 2015.html

### Summary:

0 3 4

Successful requests for pages: 1,982,908

• Distinct hosts served (visitors): 98,117

Data transferred: 1,401,016,326,111 bytes

### Proposal for 2018 NMGS Fall Field Conference in Las Cruces

The Las Cruces area is noted for a great variety of geologic features, as well as the unique fauna, flora, and scenery of the Chihuahua Desert. The last time the NMGS Fall Field Conference was headquartered in Las Cruces was 1998. Since that time new research has been carried out and new geologic faculty have arrived at New Mexico State University, resulting in many new perspectives on the geologic history of the region. The 2018 Fall Field Conference will be designed to highlight some of the new ideas and to introduce some of the new faculty to the geologic community.

Leaders. The general chairman will be Greg Mack, who has previous experience in the organization and execution of the Fall Field Conferences of 1986, 1988, 1998, 2008, and 2014. Co-leaders will be Jim Witcher, Frank Ramos, and Brian Hampton. The division of labor is as follows:

Road logs: Greg Mack, chairman, Brian Hampton, member.

Guidebook editors: Brian Hampton, chairman, Greg Mack, member.

Logistics: Jim Witcher, chairman, Greg Mack and Frank Ramos, members.

Budget: Frank Ramos, chairman, Jim Witcher and Greg Mack, members.

**Headquarters**. The headquarters hotel has not yet been selected, but all three nights will be in Las Cruces

**Transportation.** For the first two days we will use rental vans. We also plan to elicit the use of vans and carryalls from the geology departments at NMSU, UNM, NM Tech, NM Highlands, and western NM, as well as from the New Mexico Bureau of Geology. Private vehicles will be used on the last morning of the conference.

Schedule of Stops: Although the current list of geologic stops may change in the future, the general approach to the trip is set. The first two days will involve only two or three stops per day, with each stop involving short hikes of low to moderate difficulty. Because the participants will move at different rates, students will be stationed at each of the key outcrops or vistas on the traverse, in order to answer questions about the geology and to direct the participants to the next stop. At this time we are planning to provide two or three optional trips for the third morning of the conference. The participants will sign up for the trip of their choice during registration.

### **Tentative Schedule**

Day One: Theme: Cenozoic volcanism.

Stop 1. Southern Dona Ana Mountains: the 35.5 Ma Dona Ana caldera.

Lunch: I-25 rest stop en route to stop 2. It has covered picnic sites and provides a scenic view of local mountain ranges.

Stop 2. Point of Rocks: ash-flow tuff outflow sheets and interbedded sedimentary rocks of the latest Eocene-early Oligocene Bell Top Formation and the younger Uvas Basaltic Andesite.

Stop 3. Highway 85 roadcut near Radium Springs: late Eocene andesitic volcaniclastic rocks of the Palm Park Formation.

Barbecue: Leesburg State Park. The park has covered picnic sites and overlooks the northern Robledo Mountains and Rio Grande.

Day Two: Theme: Permian sedimentology; Laramide tectonics, sedimentation, and volcanism; Rio Grande rift structure and sedimentation.

Stop 1. Lucero Arroyo, northern Dona Ana Mountains: northern Mesilla half graben and rift sediments; Laramide structure, sedimentology, and volocanology; sedimentology of Lower Permian limestones and siliciclastic rocks.

Lunch. Fort Selden Historical Site. Time will be made available to see ruins of the fort.

Stop 2. Southern Robledo Mountains, Prehistoric Trackways National Monument: East Robledo range boundary fault; Lower Permian marine limestones and their fossils; Laramide paleovalley fill; rhyolite sills; rift basalts.

Page 2 of \$3

Banquet. Site to be determined.

Day Three: possible optional trips (will probably settle on two or three choices).

Tortugas "A" Mountain: Permian carbonate sedimentology.

Aden Crater: late Pleistocene basalt volcano and flows.

Rincon Hills: late Pliocene geothermal opal and calcite beds.

Dripping Springs Park: Organ Mountain caldera.

## NMGS 2019 Fall Field Conference Proposal Front Range to High Plains: Geology of Northeastern New Mexico Co-conveners: Matthew Zimmerer, Kate Zeigler, Frank Ramos

November 30, 2015

To the NMGS Executive Committee:

We propose to lead the 2019 Fall Field Conference in far northeastern New Mexico with the trip focusing on new data sets related to eruptive history of the Raton-Capulin-Clayton volcanic field, as well as paleontology, stratigraphy and hydrogeology of Union, Colfax and Mora Counties. We plan to base the conference in Raton with trips to Johnson Mesa, Capulin and other nearby volcanic features and the Dry Cimarron.

Sincerely,

Matt Zimmerer NM Bureau of Geology and Mineral Resources

Kate Zeigler Zeigler Geologic Consulting, LLC

Frank Ramos New Mexico State University