

Wednesday, 15 September 2021 - 2:00 P.M.

## NMGS Executive Committee Meeting Minutes – Q4 2021

Held online via Zoom video conference due to COVID-19 Pandemic

Reported by Kevin Hobbs

### Attending

**Dan Cadol**

**Adam Read**

**Kevin Hobbs**

**Brian Hampton**

**Shannon Williams**

**Scott Baldrige**

**David Lemke**

**Bonnie Frey**

**Dan Koning**

**Susan Lucas-Kamat**

**Connie Apache**

### Open Meeting:

1. Call to order (Dan Cadol) at 2:02 P.M.
2. Discussion of canceled Mt Taylor FFC: options to reschedule, refund, etc. (Bonnie Frey, Shari Kelly): Bonnie is open to the idea of holding the trip in May 2022. Dan Cadol is in favor of trying to run both the Mt. Taylor and the Socorro FFCs in 2022. Connie says that 38 registrants kept their registration open for the spring; 19 want refunds, and she hasn't heard from the remainder of the registrants. Discussion of the logistics of hotels, caterers, etc., continues. Dan Koning voices his preference to have the Socorro FFC take place in the fall, though he doesn't really care which year (2022 vs. 2023). Brian raises the question of deleting all indoor portions of the FFC if COVID-19 cases are on the rise again. Bonnie replies that the postponed 2021 FFC was designed that way (mostly outdoors). Susan says the biggest risk is/was being the vehicles together. All agree that none of us in this meeting is an epidemiologist and that conjecture is not worth much at this point.
3. Socorro 2022 Fall Field Conference update (Dan Koning, Susan LucasKamat): As of right now, the conference will still take place in Fall 2022. Dan Koning sent out a call for papers to the EC (Attachment 1). The outline of the field trip is included in attachment 1; minor changes might still happen as land access/permissions change. Dan Koning raises the idea of having the guidebook editors solicit outside reviews for the guidebook manuscripts rather than having authors find their own reviewers as is the precedent for FFC guidebooks. All agree that this is a more rigorous process and will be more work but will lead to a slightly higher quality of papers. Bonnie Frey mentions that this likely will lead to fewer late paper submittals. Lining up the reviewers might be a challenge. Bonnie Frey says that the Mt. Taylor FFC

guidebook had 5 editors; Dan Koning proposes 4 editors for Socorro FFC in 2022.

- a. Discussion of effort to find a new Field Guide Editor: Dan Koning contacted Virgil Leuth, but received no response. Scott Baldrige knows a potential editor, but doesn't know if she has the time; she also is not a geologist. Bonnie says that Nelia Dunbar knows a good editor, but Dan Koning says that that editor has fallen through and is no longer a possibility. Nelia has a list of 3-4 potential editors. Adam Read proposes that we poll the NMGS membership to see if any names rise to the top. Dan Koning asks Bonnie her opinion on timing for deadlines for manuscripts, reviews, etc. Bonnie suggests late March/April. An email will be sent to the NMGS membership soon to solicit potential guidebook editors; this email will include a survey regarding the possible May 2022 Mt. Taylor Field Conference.

2:53 P.M. – Dan Koning leaves the meeting.

4. Optional: update on 2023 FFC – Southeast NM (Lewis Land) – no report since Lewis is not in attendance.
5. Spring Meeting 2022 update – combined with Ft. Stanton Cave Conference (Talon Newton, Johanna Blake, Dan Cadol): Macey Center is reserved for 7-8 April 2022. Field trip options will be included on the online registration form for the Spring Meeting, which will go online sometime in February 2022. The registration will be slightly more complicated due to the a la carte nature of meeting days and field trips, but Adam Read says that it should be no problem for him to set up if he has a week's warning before it has to be posted. Connie says that Talon Newton has mentioned that there is a separate account for the Ft. Stanton Conference; Dan Cadol says that the EC has decided that all funding will be handled through NMGS in order to simplify the process.
6. Webmaster Report (Adam Read) – report attached as Attachment 2. Adam asks if FFC guidebook front matter (road logs, etc.) should be viewable to members on the NMGS website. Adam says that this will be easy to implement if the EC chooses to do so. Dan Cadol motion that the NMGS adopt the DOI system when the NMBGMR does (likely in 2022). Scott seconds. There is no discussion. The motion passes unanimously.

2:59 P.M. – Connie Apache and Bonnie Frey leave the meeting.

7. Publications Committee report (David Lemke): Report attached as Attachment 3. Sales numbers are not yet available but will be shared ASAP. Discussion of making old guidebooks available as e-books vs. as PDFs; the issue is a size problem – guidebooks would likely be GB in size and therefore too large to post online.
8. Scholarship Committee (Susan Lucas-Kamat): Report attached as Attachment 4. The list of donations is included as Attachment 5. EC will need to confer with the NMGS Foundation to work out how to fund 2022 student scholarships. An additional scholarship will be necessary in 2022 for UNM-Taos. Susan asks if student scholarships for the spring meeting will include all three meetings/field trips, or if the scholarship will only cover the NMGS meeting but not the Ft. Stanton conference or the Ft. Stanton field

trip.

9. Dan Cadol closes the open meeting at 3:42 P.M.

## **CLOSED MEETING**

1. Called to order at 3:54 P.M. by Dan Cadol.
2. Approval of minutes (Dan Cadol) – Dan motions to approve minutes; Brian seconds. All vote to approve minutes and the motion passes.
3. Secretary report (Kevin Hobbs) – The EC will present 2020 honorary membership to Bonnie Frey via video from Shannon Williams. The committee will reach out to Johanna Blake (USGS, Albuquerque) and Corinne Myers (UNM EPS) for EC duties beginning in 2022.
4. Treasurer report (Brian Hampton) – Dana Ulmer-Scholle asked for an additional \$500 in her final invoice for the 2021 FFC Guidebook. The price increase was due to late submittals and improper figure formatting that Dana had to correct. The committee agrees to pay that additional amount. Dan motions to pay the extra \$500, Shannon seconds; the motion carries. Current account balances: Checking = \$63060.67. Savings = \$31481.16. Connie Apache thinks that even with shipping costs, the NMGS will break even and be in the black with T-shirts from the postponed 2021 FFC.
5. Vice president report (Scott Baldrige) – The board met last Saturday; their interests focus on plans for the potential spring Mt. Taylor Field Conference. They are interested in potential cost increases, but not overly concerned. They want to be kept in the loop on potential cost increases; otherwise, they are in support of the spring field conference. The board wants to know how reimbursements will happen (will the money be left with Connie to be used for the Spring meeting, or will they be reimbursed?). In general, the board wants not to be surprised by any last-minute costs/charges. Board member Frank Ramos is pushing for \$1 million in board investments.
6. President report (Dan Cadol) – Dan is continuing to recruit the next members of the EC and will await news on the names mentioned above.
7. Past President report (Shannon Williams) – NMGS and AIPG will collaborate on student outreach, including a field trip to White Mesa in Sandoval County on 30 October.
8. Schedule 1st Quarter 2022 Meeting – Wednesday, 19 January 2022 @ 2:00 P.M. via Zoom.
9. Adjournment at 4:50 P.M.

## Third Quarter 2021 Executive Committee Email Business

**9 July 2021:** Dan Cadol emailed the EC re: suggestions for new EC members for 2022. He recommended Laura Waters, Nicole Hurtig, Laila Sturgis, Marissa Fichera, Susan Hoines, Johanna Blake, and Amy Galanter.

**27 July 2021:** Bonnie Frey emailed the EC re: the need for bestowal of honorary NMGS memberships for 2020 and 2021. In separate emails among the EC, Fraser Goff and Bonnie Frey are nominated for honorary memberships. Dan Cadol motions via email on 15 August 2021 to bestow honorary memberships on Bonnie Frey and Fraser Goff. The motion receives two votes in favor and awaits passage as of 15 September 2021.

**22 August 2021:** Dan Cadol emails the EC to confirm that the NMGS's insurance was renewed for 2021-2022. Brian Hampton confirms that it was renewed with payment on 22 August.

**1 September 2021:** The EC and the 2021 FFC committee met to discuss logistics for the upcoming FFC. Minutes from this meeting are below:

A NMGS FFC COVID advisory meeting happened today (1 Sept 2021) at 2:00 P.M. via Zoom. In attendance were Shari Kelly, Susan Lucas-Kamat, Connie Apache, Adam Read, Bonnie Frey, Soctt Baldrige, and Kevin Hobbs. Bulleted takeaways are below:

1. The NMGS FFC COVID advisory board will reconvene via Zoom on Tuesday, 7 September, at 8:00 A.M. to decide whether or not to cancel the 2021 FFC due to COVID concerns. The board was not comfortable making that call in today's meeting due to the rapidly evolving nature of COVID concerns.

2. Adam Read will extend the refund deadline to 8 September, ensuring that registrants who cancel until then will receive a refund.

- 2a. There likely will be an option to refund the registration fee minus the guidebook cost should registrants still want their guidebooks; more details to follow in next week's meeting.

3. If the board decides to cancel the FFC, then all registrants will receive a full refund. See 2a. above re: guidebooks.

4. Susan Lucas-Kamat will compose a draft email to the NMGS membership outlining the state of the 2021 FFC. This email will inform of the possible forthcoming cancellation of the FFC. It will inform that if the FFC happens, then masks are to be worn at all times and that vaccination is requested. This email will be signed by the EC, **so we all need to review it ASAP when it arrives in our inboxes. We will also need to have a motion, second, and approval of the email before it is sent** (Adam Read will be the one who sends it from the NMGS account). Susan and Bonnie requested that the EC do this by 8 A.M. tomorrow, Thursday, 2 September.

**1 September 2021:** Bonnie Frey emails the EC and the 2021 Mt. Taylor FFC Committee to call a meeting on 7 September to discuss logistics of the upcoming 2021 FFC.

**1 September 2021:** Susan Lucas-Kamat emails the EC with the list of student recipients of the 2021 FFC scholarship, listed below:

|   |                 |  |                |
|---|-----------------|--|----------------|
| Eastern New Mexico University             | James Alles     | <a href="mailto:james.alles@enmu.edu">james.alles@enmu.edu</a>                               | 818-355-0534   |
| Eastern New Mexico University             | Jose Duran      | <a href="mailto:joe.duran@enmu.edu">joe.duran@enmu.edu</a>                                   | 575-749-9531   |
| Eastern New Mexico University             | Julian Cata     | <a href="mailto:julian.cata@enmu.edu">julian.cata@enmu.edu</a>                               | (505) 927-6887 |
| Navajo Technical University               | Kirby Morris    | <a href="mailto:kirby.morris@student.navajotech.edu">kirby.morris@student.navajotech.edu</a> |                |
| Navajo Technical University               | Jared Pino      | <a href="mailto:jared.pino@student.navajotech.edu">jared.pino@student.navajotech.edu</a>     |                |
| New Mexico Highlands University           | Amber Southern  | <a href="mailto:asouthern@live.nmhu.edu">asouthern@live.nmhu.edu</a>                         |                |
| New Mexico Highlands University           | Luke Romero     | <a href="mailto:lromero29@live.nmhu.edu">lromero29@live.nmhu.edu</a>                         |                |
| New Mexico Highlands University           | Megan Begay     | <a href="mailto:mbegay24@live.nmhu.edu">mbegay24@live.nmhu.edu</a>                           |                |
| New Mexico Tech                           | Mason Woodard   | <a href="mailto:mason.woodard@student.nmt.edu">mason.woodard@student.nmt.edu</a>             |                |
| New Mexico Tech                           | Jacob Gehrz     | <a href="mailto:jacob.gehrz@student.nmt.edu">jacob.gehrz@student.nmt.edu</a>                 |                |
| New Mexico Tech                           | Tyler Cantrell  | <a href="mailto:tyler.cantrell@student.nmt.edu">tyler.cantrell@student.nmt.edu</a>           |                |
| New Mexico State University               | Justin Friend   | <a href="mailto:jmfriend@nmsu.edu">jmfriend@nmsu.edu</a>                                     | (575) 646-2708 |
| New Mexico State University               | Michael Murphy  | <a href="mailto:mmurphy1@nmsu.edu">mmurphy1@nmsu.edu</a>                                     | (575) 646-2708 |
| New Mexico State University               | Ethan Schneider | <a href="mailto:ejschn1@nmsu.edu">ejschn1@nmsu.edu</a>                                       | (575) 646-2708 |
| New Mexico State University - Grants      | Erica Miller    | <a href="mailto:millere@nmsu.edu">millere@nmsu.edu</a>                                       |                |
| San Juan College                          | Serena Lewis    | <a href="mailto:snlewis28@my.sanjuacollege.edu">snlewis28@my.sanjuacollege.edu</a>           | 505-716-1625   |
| Southwestern Indian Polytechnic Institute |                 |  |                |
| University of New Mexico                  | Cameron Reed    | <a href="mailto:creed5@unm.edu">creed5@unm.edu</a>   |                |
| University of New Mexico                  | Loring Schaible | <a href="mailto:lschaible@unm.edu">lschaible@unm.edu</a>                                     |                |
| University of New Mexico                  | Spencer Staley  | <a href="mailto:sestaley@unm.edu">sestaley@unm.edu</a>                                       |                |

**5 September 2021:** Bonnie Frey emails the EC and the 2021 FFC Committee that she and Shari Kelley (co-convenor of the 2021 FFC) met yesterday and decided to cancel/postpone the 2021 FFC due to concerns surrounding COVID-19. Bonnie proposes re-scheduling the FFC in mid-May, and asks the committees to consider this proposal and discuss in future meetings in the upcoming 2 weeks.

**7 September 2021:** Shannon Williams emails the EC to propose that a presentation of the honorary memberships for 2020 and 2021 take place via Zoom or a pre-recorded video sent out to the membership of the NMGS.

**10 September 2021:** Dan Koning (convener of the 2022 FFC in Socorro) emails the EC to request that we help find a guidebook editor for the 2022 FFC guidebook. Dan Koning proposes that we ask Virgil Lueth and Brigitte Felix, both of whom are experienced editors.

**14 September 2021:** Dan Koning shares a “Call for Papers” with the EC for the 2022 Socorro FFC Guidebook.

# CALL FOR PAPERS

## 2022 SOCORRO REGION III FALL FIELD CONFERENCE GUIDEBOOK



Lower narrows of Nogal Canyon, which are incised into the Lemitar Tuff 5 miles west of San Antonio.

We invite you to submit papers for the 2022 NMGS Fall Field Conference (October 19-22, 2022). There is no denying that the geology in the Socorro region is fantastic, even if it may seem familiar to those of us who live here, and well-worth a third NMGS visit. The 2022 Fall Field Conference will showcase new mapping, geochronology, and other geologic studies that have occurred in the Socorro region since the 1983 Fall Field Conference.

The deadline for pre-review paper submissions is February 15, 2022. This year, we will be using external reviewers. Please find the instructions for authors here:

<https://nmgs.nmt.edu//ffc/authors/AuthorInstruc.pdf>

The field trip will be hosted from the city of Socorro.

Field trip leaders: Dan Koning, Richard Chamberlin, John Nelson, Scott Elrick, Kevin Hobbs, Susan Lucas Kamat

Please contact Dan Koning by December 1 if you are interested in submitting a technical paper or mini-paper: [dan.koning@nm.edu](mailto:dan.koning@nm.edu).

## Itinerary

**Pre-meeting trip (October 19): Rift-flank uplift(s) south of Socorro** – As an optional pre-meeting trip, we will visit either the Fra Cristobal Mountains or the Little San Pascual Mountains, located south of Socorro on the east side of the Rio Grande rift. Both offer wonderful exposures of late Paleozoic strata deformed by both the Laramide orogeny and rift-related extension. We will also visit Santa Fe Group exposures on the western flank of these uplifts, which in the Fra Cristobals have dated basalts, and discuss their implications for rift basin evolution.

**Day 1 (October 20): Quebradas region east of Socorro** – The Quebradas hills are spectacularly exposed and easy to access from Socorro. There, we will acquaint ourselves with the late Paleozoic stratigraphy and learn how to interpret various fault-related folds. We will also discuss low-angle detachment faults (nicely illustrated in the about-to-be-released Quebradas compilation map of Steve Cather), Laramide structures, and the nature of the geologic structure along the eastern margin of the Socorro basin. Two stops on the way to the Quebradas will focus on middle-late Quaternary terrace evolution (Sion et al., 2021) as well as Dan Cadol's Arroyo del los Pinos monitoring station.

**Day 2 (October 21): Chupadera Hills south-southwest of Socorro** – The geology here is some of the most complex you will see in New Mexico, and we thankfully have the detailed mapping of Richard Chamberlin and Ted Eggleston to make sense of it. Near the Box Canyon, Richard will expound on the tilt reversal across the Socorro Accommodation zone and the early Oligocene volcanic history that can be deciphered here (involving two major calderas). We also observe outcrops altered by potassic metasomatism and mineralized by manganese precipitation, discuss their relative age control and cross-cutting relations, and ponder the paleo-groundwater regime in which they formed. Another intriguing topic is late Miocene through Quaternary paleogeography, the interpretation of which is aided by key volcanic strata, and how this can be used to interpret the timing and nature of the downstream-orientated integration of the paleo Rio Grande. Depending on road conditions, the trip will travel south from The Box and then down scenic Nogal Canyon to San Antonio.

**Day 3 (October 22): Lemitar Mountains and San Lorenzo Canyon north of Socorro** – How does the crust respond to extension and heat flow? We address this question using outcrops illustrating low-angle faulting, domino-block tilting, and relay-ramp structures. After visiting the Lemitar Mountains, the trip travels up San Lorenzo Canyon. Here, we will stop at the much-photographed butte illustrating the Miocene-Quaternary angular unconformity before venturing up the spectacular narrows of the canyon.



Fault-bend propagation fold in Atrasado Formation (Pennsylvanian), Arroyo del Tajo, Quebradas east of Socorro.

----- END OF ATTACHMENT 1 -----

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## Attachment 2

### **NMGS Webmaster Report**

Adam Read  
15-September-2021

#### **Fall Field Conference:**

Given the possibility of two conferences next year, I think that we should identify the Mt Taylor trip as 2021\* (or something like that) and explain the postponement on our web pages. That will keep the book and the trip synchronized by year.

#### **Spring Meeting:**

I'll need to be updated on the parameters of the 3-day meeting so that I can prepare a registration page. This can wait until next year though.

We should have a call for abstracts ready to go out on January 1<sup>st</sup>, or when we return from the holidays.

#### **Guidebook Front Matter:**

There was some discussion at a prior EC meeting regarding whether we should continue to exclude road logs and other guidebook front matter from the website. What is the current status of that? We could easily make these materials only viewable by current members via their login. This was how recent papers were handled before we went to a full open-access model.

#### **DOI System:** (<http://www.doi.org/> and <http://www.crossref.org/>):

The Bureau is considering subscribing to the Digital Object Identifier (DOI) system and NMGS should consider using it too to keep both systems synchronized. I expect that the Bureau will try to implement this in 2022.

The DOI system maps digital objects (like PDF files) to particular URLs. If we decide to rename our web server (or change URLs), the DOI system allows future researchers to find a cited document. We'd have to pay a \$275 annual fee for this service and a small fee for each document identifier (paid in bulk once a year). Back files (old publications) are cheaper.

DOIs are widely used and add a certain level of academic legitimacy to papers these days.

#### **Ongoing:**

- The NMGS website has automated News, Events, and Announcements functions. If there is anything new that should be posted, please let me know. It is also possible for EC members, with permission, to create postings via a web form.

- New banner pictures, especially of NM, are welcome. It is also possible for any member, with permission, to create postings via a web form.

-----END OF ATTACHMENT 2-----

## ATTACHMENT 3

### NMGS Publications Report

#### 3<sup>rd</sup> Quarter 2021 NMGS EC Meeting

David Lemke

Publications Committee Chair

September 15, 2021

- **Q3 2021 Publication Sales** ○ Will send after EC meeting when I receive data from the bookstore.
- **Publication Permissions** ○ We received three requests for permission to use content and figures from guidebooks and special publications. One from the City of Alamogordo to request permission to add links in Facebook to Guidebook 53 and 65 articles about fossils in support of October 13<sup>th</sup> National Fossil Day. Another was a request for digital copies to Special Publication 11: The Geology of New Mexico. An alternate solution was provided and Kelly Luster assisted. Third, a request to include figures from Guidebook 47 for inclusion in the upcoming Bureau bulletin “Climate Change in New Mexico over the Next 50 Years: Impacts on Water Resources”.
- **Tom Giordino manuscript on History of Geology Program at NMSU 1890-2015** ○ I will restart this project in late October and complete this before year’s end.
- **Fall Field Conference video** ○ In anticipation of the conference, I’ve purchased all the necessary equipment to support a video project. Bonnie, Shari and I will work on attempting some version of a video version of the Mt Taylor.
- **Reprint Guidebook 58 – Geology of the Jemez II.** ○ Too expensive to reprint, so decided not to move forward.
- **Consolidate digital data for Fall Field Conference guidebooks** ○ I have contacted Virgil Lueth, Stacy Timmons and Dana Ulmer-Scholle to start organizing the gathering of each of the guidebooks they managed. I will plan a trip to Socorro in the next few weeks to copy each of the guidebook files onto an external disk drive. I’ll develop a consistent file structure for all of the consolidated guidebooks. Finally, move the guidebooks to a protected long-term archival location. Likely, I’ll develop an archival process that can be used as the last step in finalizing the guidebook each year.
- **Video in geoscience workshops** ○ The previously discussed mid-August presentation by Bob Stern didn’t get organized. Primarily because I focused on video preparations for FFC and this fell by the wayside. I will touch base with Bob shortly (September) to see if we can still schedule something in October.

• **Publish e-Pubs of guidebooks** ○ Guidebook 58 might be a good initial candidate for this. Essentially, the process is to republish the InDesign electronic files as an eBook and sell on Amazon. I will take care of the republishing, so there would be no cost to do this.

-----END OF ATTACHMENT 3-----

## ATTACHMENT 4

| Spring Meeting Outstanding Papers<br>Description | CY2021 PROPOSED |        |        | CY2021 ACTUAL |                                  | Guidelines   |
|--|-----------------|--------|--------|---------------|----------------------------------|--|
|  | Qty             | Amt    | Total  | Total         |                                  |  |
| Outstanding student presentation, undergraduate  | 2               | \$ 100 | \$ 200 | 2             | \$ 200                           | Oral presentation & poster for undergraduate students. Selected by NMGS judging group.   |
| Outstanding student presentation, graduate       | 2               | \$ 100 | \$ 200 | 2             | \$ 200                           | Oral presentation & poster for graduate students. Selected by NMGS poster judging group. |
| <b>\$ 400</b>                                    |                 |        |        | <b>\$ 400</b> | <b>Total, outstanding papers</b> |  |

| Fall Field Conference Scholarships<br>Description    | CY2021 PROPOSED |        |          | CY2021 ACTUAL |                                | Notes  |
|--|-----------------|--------|----------|---------------|--------------------------------|--|
|  | Qty             | Amt    | Total    | Total         |                                |  |
| Los Alamos Geological Society (LAGS) FFC Scholarship | 4               | \$ 550 | \$ 2,200 | 0             | \$ -                           | LAGS funds 4 scholarships  |
| James and Susan Cearley FFC Scholarship              | 10              | \$ 550 | \$ 5,500 | 0             | \$ -                           | Cearley funds 10 scholarships  |
| FFC Scholarship                                      | 18              | \$ 550 | \$ 9,900 | 0             | \$ -                           | NMGS Scholarship and FCC Committees determine numbers. Committee may vacate unclaimed scholarships OR reassign between schools or FCC flaggers. For 2021, 2 scholarships per university (NMSU, NMT, UNM, ENMU, NTU, NMHU); 1 per community college/ minor (WNMU, CNM, Mesalands, San Juan, SIPI, Dona Anna); 2 per local institution (NMSU - Grants); and 0 for flaggers. Students selected by school. |
| <b>\$ 17,600</b>                                     |                 |        |          | <b>\$ -</b>   | <b>Total, FFC Scholarships</b> |  |

FFC 2021 Mt Taylor has 20 spots for student scholarships. Flagger duties will be shared among students. Cost projected at \$350 FCC registration and \$200 stipend.

| Science Fair Awards<br>Description | CY2021 PROPOSED |        |        | CY2021 ACTUAL |  | Guidelines  |
|------------------------------------|-----------------|--------|--------|---------------|--|---|
|                                    | Qty             | Amt    | Total  | Total         |  |   |
| Science & Engineering Fair Winners | 2               | \$ 100 | \$ 200 |               | \$ -                                       | Awards at NM Science & Engineering Fair. Coordinate with NM BGMR Outreach Coordinator. Not awarded in 2021. |
| <b>\$ 200</b>                      |                 |        |        | <b>\$ -</b>   | <b>Total, science and engineering fair</b> |   |

|                                   |                     |                                   |
|-----------------------------------|---------------------|-----------------------------------|
| BUDGETED                          | PROJECTED           | ACTUALS TO DATE (August 31, 2021) |
| <b>EXPENDITURES: \$ 60,750.00</b> | <b>\$ 42,610.00</b> | <b>\$ 39,950.00</b>               |

**REIMBURSEMENT REQUEST FROM NMGS FOUNDATION:**      **SPRING 2021**      **\$ 28,550.00**  
 covers undergrad awards; GIA/Ras; spring meeting/memberships; outstanding orals/posters minus Cearley donations/carryover

**FALL 2021 (estimated)**      **\$ 2,660**  
 covers graduate awards; FCC/memberships; science fair awards

### 2021 GRADUATE SCHOLARSHIPS

#### Robert Wellnitz Memorial Scholarship

|                          |             |  |          |
|--------------------------|-------------|--|----------|
| University of New Mexico | Naomi DeLay | Field-based water resource geochemistry research in New Mexico | \$ 1,000 |
|--------------------------|-------------|--|----------|

#### Beverly Wellnitz Memorial Scholarship

|                             |                  |   |        |
|-----------------------------|------------------|---|--------|
| New Mexico Tech             | Stephanie Rousse | Analyze evapotranspiration in the riparian zone of the Rio Grande in the reach near San Marcial that was affected by the Tiffany Fire                       | \$ 500 |
| New Mexico State University | Justin Friend    | Determining the extent and degree of diagenetic albittization of K-feldspar in Early Permian (Wolfcampian) arkosic, nonmarine, strata throughout New Mexico | \$ 500 |

## 2021 FALL FIELD CONFERENCE SCHOLARSHIPS

|   |                 |                                     |                |    |     |
|---|-----------------|-------------------------------------|----------------|----|-----|
| Eastern New Mexico University             | James Alles     | james.alles@enmu.edu                | 818-355-0534   | \$ | 150 |
| Eastern New Mexico University             | Jose Duran      | joe.duran@enmu.edu                  | 575-749-9531   | \$ | 250 |
| Eastern New Mexico University             | Julian Cata     | julian.cata@enmu.edu                | (505) 927-6887 | \$ | 250 |
| Navajo Technical University               | Kirby Morris    | kirby.morris@student.navajotech.edu |                | \$ | 250 |
| Navajo Technical University               | Jared Pino      | jared.pino@student.navajotech.edu   |                | \$ | 250 |
| New Mexico Highlands University           | Amber Southern  | asouthern@live.nmhu.edu             |                | \$ | 250 |
| New Mexico Highlands University           | Luke Romero     | lromero29@live.nmhu.edu             |                | \$ | 250 |
| New Mexico Highlands University           | Megan Begay     | mbegay24@live.nmhu.edu              |                | \$ | 250 |
| New Mexico Tech                           | Mason Woodard   | mason.woodard@student.nmt.edu       |                | \$ | 250 |
| New Mexico Tech                           | Jacob Gehrz     | jacob.gehrz@student.nmt.edu         |                | \$ | 250 |
| New Mexico Tech                           | Tyler Cantrell  | tyler.cantrell@student.nmt.edu      |                | \$ | 250 |
| New Mexico State University               | Justin Friend   | jmfriend@nmsu.edu                   | (575) 646-2708 | \$ | 250 |
| New Mexico State University               | Michael Murphy  | mmurphy1@nmsu.edu                   | (575) 646-2708 | \$ | 250 |
| New Mexico State University               | Ethan Schneider | ejschn1@nmsu.edu                    | (575) 646-2708 | \$ | 250 |
| New Mexico State University - Grants      | Erica Miller    | millere@nmsu.edu                    |                | \$ | 250 |
| San Juan College                          | Serena Lewis    | snlewis28@my.sanjuancollege.edu     | 505-716-1625   | \$ | 250 |
| Southwestern Indian Polytechnic Institute |                 |                                     |                | \$ | 250 |
| University of New Mexico                  | Cameron Reed    | creed5@unm.edu                      |                | \$ | 250 |
| University of New Mexico                  | Loring Schaible | lschaible@unm.edu                   |                | \$ | 250 |
| University of New Mexico                  | Spencer Staley  | sestaley@unm.edu                    |                | \$ | 250 |

### DECLINED

|                                      |   |  |  |    |     |
|--------------------------------------|---|--|--|----|-----|
| Western New Mexico University        | DECLINED, email Corrie Neighbors on 08/20/2024      |  |  | \$ | 250 |
| University of New Mexico - Taos      | DECLINED, email Deborah Ragland on 08/20/2024       |  |  | \$ | 250 |
| Central New Mexico Community College | did not respond by 8/24/2021                        |  |  | \$ | 250 |
| Dona Ana Community College           | did not respond by 8/24/2021                        |  |  | \$ | 250 |
| Mesalands Community College          | did not respond by 8/24/2021                        |  |  | \$ | 250 |
| New Mexico State University - Grants | DECLINED, email from Eyrusalem Bedasso on 8/31/2017 |  |  | \$ | 250 |

### Priority List for excess Scholarships

Navajo Technical University

## 2021 SPRING MEETING OUTSTANDING POSTER AND ORAL PRESENTATIONS

### Outstanding Posters

|                 |  |                           |
|-----------------|--|---------------------------|
| Haley Dietz     | Geochemistry of the U-Th-REE mineralized Tajo granite, Socorro County, New Mexico  | NM Tech                   |
| Jason Velasquez | Evaluating the tectonic significance of the Moore Gulch shear zone, central Arizona with geochronologic, geochemical, and isotopic analysis of Paleoproterozoic plutonic rocks | West Texas A&M University |

### Outstanding Oral

|            |  |         |
|------------|--|---------|
| Kyle Stark | Global context of sediment transport rates from a New Mexican ephemeral channel  | NM Tech |
| Shay Ridl  | Detrital Zircon Provenance Trends Across the Plio-Pleistocene Upper Santa Fe Group, Implications for Drainage Evolution of the Ancestral Rio Grande Fluvial System | NMSU    |

## 2021 UNDERGRADUATE SCHOLARSHIPS AND AWARDS

### Lucille H. Pipkin Outstanding Senior Award

|                                    |                 |    |     |
|------------------------------------|-----------------|----|-----|
| Eastern New Mexico University      | James Alles     | \$ | 500 |
| Navajo Technical University        | Dalyna Hannah   | \$ | 500 |
| New Mexico Highlands University    | Letisha Mailboy | \$ | 500 |
| New Mexico Tech                    | Taylor Yazzie   | \$ | 500 |
| New Mexico State University (NMSU) | Keaton Ward     | \$ | 500 |
| University of New Mexico (UNM)     | Isaiah Mez      | \$ | 500 |

### Outstanding Senior Award

|                               |                     |    |   |
|-------------------------------|---------------------|----|---|
| Western New Mexico University | No student for 2021 | \$ | - |
|-------------------------------|---------------------|----|---|

### Lucille H. Pipkin Book Scholarship, Universities

|                                 |                        |    |     |
|---------------------------------|------------------------|----|-----|
| Eastern New Mexico University   | Lydia Barron           | \$ | 150 |
| Eastern New Mexico University   | Jose Duran             | \$ | 150 |
| Navajo Technical University     | Hayeden DuBoise        | \$ | 100 |
| Navajo Technical University     | Phaizon Osborne        | \$ | 100 |
| Navajo Technical University     | Jared Pino             | \$ | 100 |
| New Mexico Highlands University | Amber Southern         | \$ | 100 |
| New Mexico Highlands University | Ezekiel Tapia          | \$ | 100 |
| New Mexico Highlands University | Milaan van Wyk         | \$ | 100 |
| New Mexico Tech                 | Riley Heath            | \$ | 100 |
| New Mexico Tech                 | Antonio Chavez         | \$ | 100 |
| New Mexico Tech                 | Zachary Chavez         | \$ | 100 |
| New Mexico State University     | Akirha Wilson          | \$ | 100 |
| New Mexico State University     | Diego Avila            | \$ | 100 |
| New Mexico State University     | Adriana Sanchez-Marcos | \$ | 100 |
| University of New Mexico        | Raven Alcott           | \$ | 150 |
| University of New Mexico        | Sarah Gorell           | \$ | 150 |
| Western New Mexico University   | Katelyn Byrd           | \$ | 150 |

### Lucille H. Pipkin Book Scholarship, Community Colleges

|   |                         |    |    |
|---|-------------------------|----|----|
| Central New Mexico Community College      | Lauren Lobue            | \$ | 50 |
| Central New Mexico Community College      | Michael Kvasnak         | \$ | 50 |
| Central New Mexico Community College      | Zachary Wyrick          | \$ | 50 |
| Dona Ana Community College                | Melody Martinez         | \$ | 50 |
| Dona Ana Community College                | Jessica Martin          | \$ | 50 |
| Dona Ana Community College                | Ashley Rivas            | \$ | 50 |
| Mesalands Community College               | Austin M. Gorton        | \$ | 50 |
| Mesalands Community College               | Ethan W. Bartlett       | \$ | 50 |
| Mesalands Community College               | Tristan C. Rolfing      | \$ | 50 |
| New Mexico State University - Grants      | Andrea Blatchford       | \$ | 75 |
| New Mexico State University - Grants      | Araceli Ortega          | \$ | 75 |
| San Juan Community College                | Alejandra Ruiz-Mendiola | \$ | 50 |
| San Juan Community College                | Myles Sterrett          | \$ | 50 |
| San Juan Community College                | Matthew Stradling       | \$ | 50 |
| Southwestern Indian Polytechnic Institute | Arika Peacock           | \$ | 75 |
| Southwestern Indian Polytechnic Institute | Nicholas Cann           | \$ | 75 |
| University of New Mexico -Taos            | Peggy De'scoville       | \$ | 50 |
| University of New Mexico -Taos            | Kamren Moore            | \$ | 50 |
| University of New Mexico -Taos            | Dillon Alexander        | \$ | 50 |

## 2021 RESEARCH AWARDS AND GRANTS-IN-AID

| Name                    | School | Degree | Prior Funding | Title  |
|-------------------------|--------|--------|---------------|--|
| Tyler Cantrell          | NMT    | MS     | N             | Improvements of ultra-high precision sanidine dating towards a better understanding of the temporal evolution of New Mexico volcanism                      |
| Naomi Tamsen DeLay      | UNM    | MS     | N             | Hydrogeochemical Analysis of Springs in the Cibola National Forest: Implications for Springs/Wetlands Sustainability & Geochemical Response to Forest Fire |
| Matthew Friend          | NMSU   | MS     | N             | Determining the extent and degree of diagenetic albitization of K-feldspar in Early Permian (Wolfcampian) arkosic, nonmarine, strata throughout New Mexico |
| Sandra Glasgo           | NMT    | MS     | N             | Flow Connectivity and Sediment Transport Modeling in Flashy Ephemeral Channel Network  |
| Ethan Brady Haft        | NMT    | BS     | Y             | Comparing extension-related rare earth element deposits: Oligocene Gallinas fluorite veins and Cambrian-Ordovician Lemitar carbonatites                    |
| Nicholas G. Harrison    | NMT    | BS     | Y             | A study of Abandoned Mine Lands in New Mexico  |
| Marina Carolina Hein    | NMT    | MS     | N             | Eco-Riparian Hydrology of the Middle Rio Grande  |
| Frederick Noah Hobbs    | NMT    | PhD    | N             | Is Laramide deformation caused by end-loading or basal shear?  |
| Dola Diego Lucero       | NMT    | PhD    | N             | Thermochronological constraints on geodynamic models of flat-slab subduction   |
| Jose Maria Marmolejo    | NMSU   | MS     | N             | Interpreting the Plumbing of the Rincon Geothermal System using Electromagnetic Surveys and Hydrothermal Models  |
| Samuel Gregory Martin   | NMT    | MS     | N             | Remote sensing modeling and spectroscopic analysis of abandoned mining activity in southern New Mexico   |
| Katie McLain            | NMT    | MS     | N             | Structural development of the Reserve graben, New Mexico: implications for late Cenozoic extension in southwestern North America                           |
| John Mitchel McLaughlin | NMT    | MS     | N             | Identifying Factors Controlling Flow Conveyance Losses in the Middle Rio Grande  |
| Evan Owen               | NMT    | MS     | N             | Seismic analysis of bedload transport during flash floods in central New Mexico  |
| Cody D. Schwenk         | NMT    | MS     | N             | Geochemistry, Mineral Paragenesis, and Alteration Vectoring of REE-(Cu)-F Bearing Veins and Breccias in the Gallinas Mountains, New Mexico                 |
| Ethan Brady Williams    | NMT    | MS     | N             | Geochronology of Hydrothermal Pb-Zn-Ag-F Mineralization in the Cooke's Range, New Mexico   |
|                         |        |        |               | Quantifying Groundwater to Surface Water Exchanges in the Belen Reach of the MGRD  |

## 2021 RESEARCH AWAR

| Name                    | Undergrad Research Award | Kottlowski & Cearley | Graduate Grant-In-Aid | Mentorship Amount | Geochron Amount | Total award  | Notes      |
|-------------------------|--------------------------|----------------------|-----------------------|-------------------|-----------------|--------------|------------|
| Tyler Cantrell          | \$ -                     | \$ -                 | \$ 1,600.00           | \$ -              | \$ 900.00       | \$ 2,500.00  |            |
| Naomi Tamsen DeLay      | \$ -                     | \$ -                 | \$ 1,750.00           | \$ -              | \$ -            | \$ 1,750.00  |            |
| Matthew Friend          | \$ -                     | \$ -                 | \$ 2,000.00           | \$ -              | \$ -            | \$ 2,000.00  |            |
| Sandra Glasgo           | \$ -                     | \$ -                 | \$ 1,000.00           | \$ 1,500.00       | \$ -            | \$ 2,500.00  |            |
| Ethan Brady Haft        | \$ 1,000.00              | \$ -                 | \$ -                  | \$ -              | \$ 0            | \$ 1,000.00  | PIPKIN     |
| Nicholas G. Harrison    | \$ 750.00                | \$ -                 | \$ -                  | \$ -              | \$ -            | \$ 750.00    | PIPKIN     |
| Marina Carolina Hein    | \$ -                     | \$ -                 | \$ 1,250.00           | \$ -              | \$ -            | \$ 1,250.00  |            |
| Frederick Noah Hobbs    | \$ -                     | \$ -                 | \$ -                  | \$ -              | \$ 2,000.00     | \$ 2,000.00  |            |
| Dola Diego Lucero       | \$ -                     | \$ -                 | \$ 1,525.00           | \$ -              | \$ 0            | \$ 1,525.00  |            |
| Jose Maria Marmolejo    | \$ -                     | \$ -                 | \$ 1,050.00           | \$ -              | \$ -            | \$ 1,050.00  |            |
| Samuel Gregory Martin   | \$ -                     | \$ 2,500.00          | \$ -                  | \$ -              | \$ 1,500.00     | \$ 4,000.00  | KOTTLAWSKI |
| Katie McLain            | \$ -                     | \$ 2,500.00          | \$ -                  | \$ 1,500.00       | \$ -            | \$ 4,000.00  | CEARLEY    |
| John Mitchel McLaughlin | \$ -                     | \$ -                 | \$ 1,250.00           | \$ -              | \$ 0            | \$ 1,250.00  |            |
| Evan Owen               | \$ -                     | \$ -                 | \$ 2,000.00           | \$ -              | \$ -            | \$ 2,000.00  |            |
| Cody D. Schwenk         | \$ -                     | \$ -                 | \$ 925.00             | \$ -              | \$ 2,000.00     | \$ 2,925.00  |            |
| Ethan Brady Williams    | \$ -                     | \$ 2,500.00          | \$ -                  | \$ -              | \$ -            | \$ 2,500.00  | CEARLEY    |
|                         | \$ 1,750.00              | \$ 7,500.00          | \$ 14,350.00          | \$ 3,000.00       | \$ 6,400.00     | \$ 33,000.00 | TOTALS     |

-----END OF ATTACHMENT 4-----

## ATTACHMENT 5

### 2021 SPRING NMGS DONATIONS

|  | STUDENT SCHOLARSHIPS  | GENERAL   | MIXER | SPRING MTG. | NOTES                      |
|--|---|-----------|-------|-------------|----------------------------|
| <b>W. John Nelson</b><br>PO Box 109<br>Pesotum, IL 61863<br>jnelson49@gmail.com                                    |   | \$ 25.00  |       |             | 1/28/2021<br>Check #7518   |
| <b>James &amp; Susan Cearley</b><br>13504 Pino Canyon Pl NE<br>Albuquerque, NM 87111<br>jbcearley@yahoo.com        | \$10,000.00<br>\$2500-Undergrad<br>\$2500-Graduate<br>\$5000-Geochron |           |       |             | 3/22/2021<br>Check #993461 |
| <b>Deac Lancaster</b><br>1111 Morse Ave SPC 169<br>Sunnyvale, CA 94089<br>deac33@gmail.com                         |   |           |       | \$ 10.00    | 4/8/2021<br>VISA           |
| <b>Charles (Jack) Oviatt</b><br>904 Leroy Place<br>Socorro, NM 87801<br>joviatt@ksu.edu                            |   | \$ 25.00  |       |             | 4/8/2021<br>VISA           |
| <b>Nicholas Harrison</b><br>PO Box 3342<br>Socorro, NM 87801<br>nicholas.harrison@student.nmt.edu                  |   | \$ 5.00   |       | \$ 5.00     | 4/8/2021<br>VISA           |
| <b>Robert Couch</b><br>Applied Research Associates<br>156 Desert Willow Rd<br>Corrales, NM 87048<br>Rcouch@ara.com |   | \$ 100.00 |       | \$ 50.00    | 4/8/2021<br>AM EXP         |
|  |   |           |       |             |                            |

2021 SPRING NMGS DONATIONS

| TOTAL 2020 DONATIONS   |  |           |  |          |                   |
|--|--|-----------|--|----------|-------------------|
| <b>Angela Shankle</b><br>Dona Anna Community College<br>2200 Laguna Dr.<br>Las Cruces, NM 88011<br>ashankle@nmsu.edu     |  | \$ 10.00  |  |          | 4/8/2021<br>VISA  |
| <b>Dylan Rose-Coss</b><br>NM Oil Conservation Division<br>1440 Paseo Norteno<br>Santa Fe, NM 87507<br>dylan435@gmail.com |  |           |  | \$ 10.00 | 4/9/2021<br>VISA  |
| <b>Steve Dubyk</b><br>1828 Quiet Ln SW<br>Albuquerque, NM 87105<br>sdubyk@msn.com  |  |           |  | \$ 25.00 | 4/12/2021<br>VISA |
| <b>Eric Stautberg</b><br>6521 Vera Ln<br>Evergreen, CO 80439<br>je.stautberg@gmail.com                                   |  | \$ 100.00 |  |          | 4/14/2021<br>VISA |
| <b>Peter Barkmann</b><br>Colorado Geological Survey<br>PO Box 1344<br>Conifer, CO 80433<br>telebark@myedl.com            |  | \$50.00   |  |          | 4/15/2021         |
|  |  |           |  |          |                   |
|  |  |           |  |          |                   |
|  |  |           |  |          |                   |



2021 NMGS FFC  
DONATIONS

|  | STUDENT<br>SPONSORSHIP | GENERAL  |             |
|--|------------------------|----------|-------------|
| David Lemke<br>HC 74 Box 620<br>Pecos, NM 87552<br>dlemke@sbcglobal.net  | \$ 100.00              | \$ 50.00 | Credit Card |
| Kevin Hobbs<br>NM Bureau of Geology & Mineral Resources<br>801 Leroy Place<br>Socorro, NM 87801<br>Kevin.hobbs@nmt.edu       | \$ 10.00               |          | Credit Card |
| Boyd, Melissa<br>2382 S Carr Ct<br>Lakewood, CO 80227<br>melissa_dimeo@yahoo.com   |                        | \$ 25.00 | Credit Card |
| Sandor, Jonathan<br>Iowa State University<br>PO BOX 1994<br>Corrales, NM87048<br>jasandor@iastate.edu                        | \$ 50.00               |          | Credit Card |
| Wasiolek, Maryann<br>Hydroscience Associates Inc.<br>PO Box 1994<br>Corrales, NM 87048<br>mwhydrosci@yahoo.com               | \$ 50.00               |          | Credit Card |
| Sallee, James<br>Petrotechnical Resources of Alaska (Retired)<br>1812 Valdez<br>Albuquerque, NM 87112<br>Jsallee59@gmail.com | \$ 25.00               |          | Credit Card |
| Burck, Peter<br>US Fish & Wildlife Service<br>PO Box 1245<br>Sandia Park, NM 87047<br>hydro@prodigy.net                      | \$ 25.00               | \$ 25.00 | Credit Card |
| Hoines, Susan<br>PO Box 1245<br>Sandia Park, NM 87047  | \$ 25.00               | \$ 25.00 | Credit Card |

**2021 NMGS FFC  
DONATIONS**

|  |             |           |                    |
|--|-------------|-----------|--------------------|
| emhurlbut@yahoo.com  |             |           |                    |
| <b>Oviatt, Jack</b><br>904 Leroy Place<br>Socorro, NM 87801<br>oviattcharles853@gmail.com  | \$ 25.00    |           | Credit Card        |
| <b>Spradlin, Ernest &amp; Jeanie</b><br>1524 North Lakeside Ridge Drive<br>Sand Springs, OK 74063<br>jspradlin4@att.net            |             | \$ 50.00  | Credit Card        |
| <b>James &amp; Susan Cearley</b><br>Chevron (Retired)<br>13504 Pino Canyon PI NE<br>Albuquerque, NM 87111<br>jbc Cearley@yahoo.com | \$ 5,000.00 |           | Check #<br>1051370 |
| <b>Fred &amp; Colleen Hinker</b><br>Spirithaven Hinker Ranch<br>PO Box 504<br>Santa Rosa, NM 88435<br>spirithaven@plateautel.net   |             | \$ 200.00 | Check #<br>2040    |
|  |             |           |                    |
|  |             |           |                    |
|  |             |           |                    |
|  | \$ 5,300.00 | \$ 375.00 |                    |
| <b>TOTAL 2021 FFC DONATIONS</b>  |             |           | <b>\$ 5,675.00</b> |
|  |             |           |                    |
|  |             |           |                    |
|  |             |           |                    |
|  |             |           |                    |

-----END OF ATTACHMENT 5-----