



# Grand Staircase-Escalante National Monument

## Monument Advisory Committee Meeting Notes

Tuesday, Sept. 12, 2023, 9:00 am to 4:00 pm

**Meeting format.** Zoom

**In attendance. (MAC)** Shea Owens (State Government), Hank Stevens (Tribal Interests), Joel Pederson (Education), Sarah Bauman (Conservation), Jacqueline Grant (Public at Large), Nathan Waggoner (Outfitters and Guides), Sheriff Glover (Kane County), Christa Sadler (Geology), Kevin Ballard (Grazing permittee)

**(BLM)** Joe Mendez (BLM Utah Associate State Director), Christi Judd (BLM Utah Communications Director), Artemisia Turiya (Paria River District Planning and Environmental Coordinator), David Hercher (BLM Utah Public Affairs Specialist)

**(Media and Members of the public)** KSL Assignment Desk, Julie Brugger, Hillary Angelo, Wendy Lessig (Recreational Aviation Foundation), Dave Stevenson, Liam O'Malley, Steph Wacha (Grand Canyon Trust), Simone Griffin (BlueRibbon Coalition), Don Heyse (CSU), Kyle Wilson (Senator Mitt Romney), Patrick McKay (Colorado Offroad Trail Defenders), Laura Welp (Western Watersheds Project), Robert King, Kya Marienfeld (Southern Utah Wilderness Alliance), Mike Popejoy, Rob Torres (FOX13), Dale Mahoney, Taylor Glover (Kane County), Clayton Cutler, Marc Coles-Ritchie (BLM), Brandie Hardman (Boulder Mountain Guest Ranch), Hayden Ballard (PLPCO), Patrick Jacolenne, John Holland (GSEP), Brian Murphy (Utah Luxury Tours), Theresa Pasqual (Acoma Tribal Historic Preservation Office), Moyle Johnson (Willis Creek Ranch), Jessica Lowrey, Valerie Amerkhail, Danielle Tilley, Y Lee (Ramah Navajo School Board, Inc.), Lincoln Dalton, Paula Crockett, Dee Leggett, David Kiesel, Sam Van Wetter (Rural Utah Project), Dick Hingson (Sierra Club), Patty Weicht, Jane Stewart (Great Old Broads for Wilderness), Bryan Bates, Lura Snow (Wildland Trekking Company)

**Meeting agenda review.**

TIME	TOPIC	PRESENTER
9 a.m. (5 minutes)	Virtual meeting logistics	<i>Alli Yamnitsky</i> , EMPSi
9:05 a.m. (10 minutes)	Welcome and introductions	<i>Greg Sheehan</i> , BLM Utah State Director  <i>Harry Barber</i> , Paria River District Manager
9:15 a.m. (30 minutes)	MAC chairperson nominations	<i>Harry Barber</i> , Paria River District Manager

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9:45 am (15 minutes)	<ul style="list-style-type: none"> <li>• Call to Order, Remarks by Advisory Chair</li> <li>• Official vote for approval of meeting minutes from June 27, 2023</li> </ul>	MAC Chairperson
10 a.m. (10 minutes)	Resource Management Planning update	<i>Artemisia Turiya</i> , Paria River District Planning & Environmental Coordinator
10:10 a.m. (10 minutes)	Science Sub-committee determination update	<i>Harry Barber</i> , Paria River District Manager
10:20 a.m. (40 minutes)	MAC open-topic discussion <ul style="list-style-type: none"> <li>• Discuss 2024 meetings and schedule.</li> <li>• Propose Agenda Topics</li> </ul>	MAC Chairperson
11 a.m. (10 minutes)	10-minute break and reminder to public about registration if they wish to speak during public comment period	MAC Chairperson
11:10 a.m. (50 minutes)	BLM presentation Science Plan Content: A Deeper Dive	<i>Artemisia Turiya</i> , Paria River District Planning & Environmental Coordinator
12 p.m. (30 minutes)	30-minute lunch and reminder to public about registration if they wish to speak during public comment period	MAC Chairperson
12:30 p.m. (30 minutes)	MAC discussion and Q&A regarding science plan presentation	<i>Artemisia Turiya</i> , Paria River District Planning & Environmental Coordinator
1 p.m. (30 minutes)	MAC discussion related to draft RMP/EIS	MAC Chairperson
1:30 p.m. (45 minutes)	Scheduled public comment period	Members of the public. Sign-up provided for those interested in providing oral comments.
2:15 p.m. (60 minutes)	MAC open discussion continued	MAC Chairperson



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3:15 p.m. (30 minutes)	MAC formal recommendations	MAC Chairperson
3:45 p.m. (15 minutes)	Final thoughts and wrap up. Identify future MAC agenda items and meeting dates.	MAC Chairperson
4 p.m.	Adjourn	All
*The public comment period scheduled to commence at 1:30 p.m. and is scheduled for 45 minutes or until all public comments have concluded, whichever occurs first.		

### Welcome and introductions.

Bureau of Land Management Utah Associate State Director Joe Mendez

### Opening remarks.

- Welcomed MAC members.
- On Wed., Sept. 6, 2023, the Secretary of Interior Deb Haaland appointed **three new committee members** and **re-appointed one** committee member.
- Please welcome the following new members: **Sheriff Tracy Glover (representing Kane County interests on the monument); Dr. Kevin Ballard (representing grazing interests on the monument); and Nathan Waggoner (representing outfitters & guides interests on the monument).**
- **Welcomed back Commissioner Tebbs, who has been reappointed to represent Garfield County interests on the monument.**
- This committee now has a total of 12 members. A few other nomination packages are awaiting action, but the current status still needs to be determined.
- As of Monday, Sept. 11, 2023, we had 32 attendees from the public scheduled to join us, so welcome and thank you very much for your continued interest.
- **Please know that we will have a public comment period scheduled to begin today at 1:30 p.m. MT.**



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### Planning Effort Re-Cap.

- Today, I'd like to start by recapping planning updates since our last meeting.
- **On Aug. 11, 2023, the BLM published a Notice of Availability (NOA)** for the Grand Staircase-Escalante National Monument Draft Resource Management Plan and Draft Environmental Impact Statement.
- **Initiating a 90-day public comment period** for the **Draft RMP/EIS; proposed recreational target shooting closures; and proposed Areas of Critical Environmental Concern (ACEC designations).**
- **Public comments will be accepted through Thursday, Nov. 9, 2023.**
- On Wed., Sept. 6, 2023, GSENM held the **first of six public comment meetings.**
- These public comment meetings are intended to provide opportunities for the public to learn more about the Draft RMP/EIS.
- **Dates, times, and locations for the remaining public meetings may be found on the [GSENM MAC webpage](#) and Alli will place that link in the chat for us. Thank you Alli.**

### Miscellaneous.

- Other topics of interest discussed in our previous meeting include a request for a clearer definition of a **quorum and clearer guidance on subcommittee guidance & regulations.** You will see in today's agenda that we have set aside some time to provide that information and will get to that as we progress through today's meeting.
- At this point, I would like to turn the meeting over to our Designated Federal Officer Harry Barber. Thank you!

-break-

### Minutes Certification.

Harry Barber took a vote, June 27, 2023 minutes approved, certified, and posted to the Advisory Committee webpage.

### Committee discussion.

- Citizen science (data collection and continued monitoring) – Committee discussed formal recommendations for establishing a citizen science component that would:
  - Encourage a citizen science component to all research on the monument.
  - Create programs that go to local schools of all levels to get the students involved in citizen science.
  - Have specific Citizen Science programs for children.
  - Encourage service projects with outfitters and guides.
  - Encourage citizen science programs between tribes and others.
  - Maintain a digital science journal subscription service.



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### **BLM presentation: Resource Management Planning update.**

Presented by Artemisia Turiya, Paria River District Planning & Environmental Coordinator

- Provided a review of current status of Monument RMP/EIS planning process and next steps.
- Discussed planned public comment period/meeting open house format.
- [Presentation: Resource Management Plan Update](#)

### **MAC open discussion.**

**Jacqueline Grant.** There were many partners listed in all these discussions. What does the BLM expect the role of the MAC moving forward? Our role as the MAC is to provide advice and provide scientific input. I would appreciate some clarification.

**Harry Barber.** Regarding the MAC, you are correct that the MAC's purpose is to provide advice, read through the Draft RMP/EIS, and become familiar with it. You're right on both accounts, and we have set aside time later in the agenda to discuss.

**Joel Pederson.** Why isn't the MAC listed as an official participant in the planning process? Does the MAC have any unique avenue for submitting comments outside the general public comment period?

**Harry Barber.** Reiterated the need for a committee chairperson, which is needed for the MAC to bring a formal recommendation to the BLM. Meanwhile, MAC members can submit comments as individuals.

**Sarah Bauman.** Asked if there is a legal mandate, a mechanism for the MAC to be included, similar to a cooperating agency.

**Artemisia Turiya.** The MAC is an advisory committee. Cooperating agencies are designated by law; advisory committees are not.

**David Hercher.** Once a committee chairperson is elected, the MAC can make a formal recommendation; the MAC is an advisory committee. This advisory committee does not have a special status like a cooperating agency or government-to-government body would.

**Harry Barber.** In lieu of an elected committee chairperson, the Designated Federal Officer was chosen to serve as acting chair for the day.

Collectively, MAC members discussed the need for another meeting before the end of the calendar year or at a minimum, early 2024, preferably January or February.



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**Artemisia Turiya.** A recommendation from the MAC is not the same as a public comment. A MAC recommendation is separate from the law and regulation of NEPA, so we are discussing two different things here. But with an EIS, the comment period ends when the comment period ends.

The comment analysis will likely be accomplished between December and February, but it doesn't mean that something vitally important won't be heard. However, if people have new information to share, please do so during the comment period.

**Sarah Bauman.** Asked about the likelihood of having another MAC meeting before the end of the calendar year.

**David Hercher.** Discussed the Federal Register process requirement, stating that there is no time to schedule another public meeting in that short of a timeframe. He recommended that the MAC submit agenda items as soon as possible so agenda items can be developed and included in the next Federal Register package for the upcoming calendar year.

**Hank Stevens.** Discussed the need to reevaluate the planning timeline as it hinders the Tribes' ability to participate in the process. Requested opportunity to have a Tribal presentation included in a future MAC agenda.

**Harry Barber.** In keeping with the agenda timeline, transitioned the conversation to the topic of initiating a science subcommittee. He reiterated that per FACA regulation, a science subcommittee is held to the same regulations as the MAC, and as such, must be held as a public meeting.

**David Hercher.** Reiterated that the 15-days outlined in the regulations is for public notification only (i.e.: when the news release would publish) but that the entire Federal Register process still applies; a process that is approximately 120 days, which is why it would not be possible to have another meeting before the end of the calendar year.

**Nathan Waggoner.** Recommended a recreation subcommittee and inclusion of SRP relationships into a future agenda.

**Shea Owens.** Recommended the MAC consider a grazing subcommittee.

**Kevin Ballard.** Recommended that a grazing subcommittee would be important to consider, as well as a recreation subcommittee. Also recommended the MAC consider limiting the number of subcommittees.

**David Hercher.** Asked the group to consider the BLM's capacity and cost associated with having multiple subcommittees in addition to the regular MAC meetings.



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**Christa Sadler.** Expressed concern that the MAC spent a year meeting but felt like the progress was not made. *Science is the underpinning of everything we are trying to do.* Made the motion to establish a science subcommittee.

**Shea Owens.** Asked the group who should be proposed to serve on a science subcommittee.

**Christa Sadler.** Recommended an ecologist, archaeologist, paleontologist, tribal representation, climate scientist; recommend scientists from outside this core group.

**Shea Owens.** Added that the MAC consider we have representation with respect to traditional ecological knowledge.

**Joel Pederson.** Supports establishing a science subcommittee. Asked that MAC consider including representatives from state agencies and academia, as well as a tribal subcommittee, and that the MAC also consider a recreation subcommittee and wildlife-grazing subcommittee at a future meeting. Recommended that future meetings be in-person.

**Nathan Waggoner.** Added that too many subcommittees negate the need for a MAC. He recommends three at most and that the MAC gather information, bring it forward and decide how to best approach moving forward.

Further discussion resulted in several committee members expressing the need for the following subcommittees: science, recreation, tribal, travel management, livestock grazing, and multiple use.

**Sheriff Glover.** As a new MAC member, said he is not yet comfortable voting in favor of subcommittees.

**Shea Owens.** Wants to know what direction MAC members plan to give to subcommittees. There should be an objective, rather than creating subcommittees for the purpose of creating subcommittees.

**Christa Sadler.** Subcommittees need to be looking further into the future. For example, regarding grazing, a subcommittee might look 20-to-30 years out, and as things change, questions arise, or situations change over time, there may be specific needs or broader issues that a subcommittee can address. I'd like to see experts from outside the MAC advise us.

**Shea Owens.** Expressed concern that the scope is too broad. Recommend narrowing by asking subcommittee members to investigate the MAC's specific questions to be more productive. He recommended defining the purpose of a subcommittee before voting on establishing one.



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**Artemisia Turiya.** GSENM is an NLCS unit that supersedes multiple-use in the usual sense under FLPMA, meaning that if considering something like livestock grazing, we need to consider that the BLM looks at science in two ways - monitoring and research, which means that for the proclamation, science could supersede multiple-use but that we also do the best job we can to ensure grazing management is done where it is compatible to do so. Further discussed scientific methodology regarding specific resources (i.e., grazing science issues) and further embracing tribal interests in traditional ecological knowledge.

**-break-**

### **BLM presentation: Science Plan Content - A Deeper Dive**

Presented by Artemisia Turiya, Paria River District Planning & Environmental Coordinator

[Presentation: Science Plan Update](#)

- Discussed the purpose of a science plan, including administrative tasks, clarification of anticipated monitoring and research, and applications of science management.
- Discussed integration of science into management, using citizen science, creating brand awareness.
- Status updates included:
  - BLM is currently reviewing policy and other relevant information, such as emails related to the science to plan, partial documents that already exist that might relate to content relevant to a science plan, etc., and bringing it all together through the contractor.
  - BLM-contractor meetings are occurring to discuss the compilation of information reviewed, outlining, and conceptualizing the next steps.
  - Determining the science plan role as an administrative document that guides us in administering a science program.
  - Discussed basic, applied, and citizen science and how each may be incorporated into the administrative document.
  - The monument has limited capacity and no budget for science.

**-break-**

Committee members continued open dialogue about establishing subcommittees, conceptually, what the role of those subcommittees might be, and how subcommittees will roll into the overall development of a monument science plan (i.e., implementation of a monitoring plan).

**Sarah Bauman.** Can science plan draft be shared with the MAC prior to publication?





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Discussion continued regarding the establishment of subcommittees. MAC members demonstrate a firm desire to establish three to four distinct subcommittees.

**Christa Sadler.** Reiterated the need for a science subcommittee to help develop an implementation plan.

**Nathan Waggoner.** Would like to see annual training provided to outfitters and guides to educate them about the appropriate research studies occurring on the monument; to consider guides as a tool for helping protect monument antiquities through education.

**-break-**

### Public comment period.

**Steph Wacha (Grand Canyon Trust).** I want to speak directly to the MAC on two primary issues—first, the subcommittees, and then some of the administrative and implementation-level plans. I want to encourage the formation of a tribal subcommittee.

While I appreciate the extent to which tribal priorities are being considered by this field office and the monument, I see them being relegated and tracked to the cultural resource management plan and tribal co-stewardship plan. I think that if we're going to have an effective representation of tribal priorities, there needs to be holistic consideration. The tribal subcommittee needs to be able to weigh in on all issues regarding the monument and represent an earth-to-sky perspective. Everything from the medicinal, ceremonial, and traditional plants to springs must be managed for their cultural and ecological significance. Beyond having the tribal subcommittee, we know that tribal representatives have an extraordinary demand on their time with their ancestral landscapes extending across the southwest. I really like the idea of having tribal representation across all subcommittees.

One theme I'm noticing is the way people are discussing science. It's not inclusive of multiple perspectives. In addition to having people with specific areas of expertise on the science plan, the agency's priority is that people understand science. It is limited to understanding the Western scientific method. I want to delineate here that traditional ecological knowledge, traditional indigenous knowledge, and indigenous science are all different concepts. They are different fields with differing needs. We need to be more granular in talking about these things.

When I state that indigenous science be considered in the science plan, I understand that the science plan is an administrative document. It's not just about different methodologies. When you have different epistemologies, they don't necessarily fit into the framework provided by a traditional BLM administrative document, and I think that I would like to encourage the MAC



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to encourage the BLM to be more expansive in their thinking. So, it's not just consulting with cultural advisors and tribal leaders. If you look at indigenous academics, many people have learned to walk in two worlds. As people in the dominant mainstream society in Western science, that hasn't been a necessity.

I want to encourage everybody within the dominant framework to step outside that box. I put some reading recommendations into the chat, (**Research is Ceremony** by Shawn Wilson, **Decolonizing Methodologies** by Linda Tuhiwai Smith, and **Native Science** by Gregory Cajete), because indigenous academics have historically not only had indigenous communities experienced harm, like direct harm from Western science, but indigenous academics have faced administrative roadblocks in implementing their methodology and their research in the academic framework, and I fear that going be replicated in the science plan. And so, while I fully understand that it's just an administrative document, I think we're potentially setting tribal academics up for unnecessary burdens in the future.

Also noted an expressed desire to have tribal priorities included in the science plan to be more protected. There was a reference to implementing those priorities into the Co-Stewardship plan. If those are both implementation-level plans, I'm curious about the policy difference and how the Co-Stewardship Plan provides greater protection than the science plan. Thank you.

**Wendy Lessig (Recreational Aviation Foundation).** Today's meeting doesn't cover a lot as far as aviation goes. I'm interested in hearing all about the science plan and how the RMP is proceeding. Thank you.

**Julie Brugger.** I want to respond to Nate's discussion about educational components for guides in the resource management plan instead of the implementation plan. When I looked at the proposed resource management plan, I noticed that the education component had been removed compared to the 2020 plan. What has happened is that they decided to put that in the implementation plan. I encourage the MAC to recommend that an education component be upfront in a document that the public can comment on and see that the BLM is committed to. If you wait to put it in the implementation plan, that's not a public commenting process. What's the guarantee that it's going to be there? So, education is not just missing from the guide component but from the whole RMP. How do you make the public aware of the kind of research that's going on in the monument? One way to do that is to require an education component. You may have to put it under every resource, but at least that commitment is made public. Thank you.



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**Mike Popejoy (Grand Canyon Trust).** In previous meetings, there have been discussions about annual monitoring reports. I recommend that monitoring reports be shared with MAC and discussed at subsequent MAC meetings. Thank you!

**Sarah Bauman.** Would like to finalize recommendations for subcommittees and determine the process to establish subcommittees and fully define.

**Nathan Waggoner.** Recommended removing the interpretation component from RMP and replacing it with an educational component.

**Christa Sadler.** Agreed that an educational subcommittee is crucial. Added that education needs to contain a tribal component.

**Nathan Waggoner.** Guides need education training, but this applies to more than just cultural sites. For example, I encourage basic geology training.

Further subcommittee recommendations included science, tribal, education, recreation, and grazing.

**Sarah Bauman.** Recommended consolidating subcommittees to a more manageable number.

**Jacqueline Grant.** We need guidance from the BLM on how our expertise can help and what help is necessary. What does the BLM need from the MAC, and how can we get it to you?

**Sarah Bauman.** We need to get together in a subcommittee format, where the BLM asks the subcommittee questions and solicits recommendations. Some questions will take thoughtfulness and input from other people with expertise who are absent. It may be the best way to gather informed recommendations about science-related questions.

**Shea Owens.** Expressed concern regarding subcommittee responsibility, processes, and assignment/recruitment. Recommended further discussion of identifying the role of citizen scientists in the RMP.

**David Hercher.** Reminded MAC that subcommittees are subject to all FACA regulations.

-conversation transitioned to citizen science discussion-

**Christa Sadler.** Provided five ideas of how to get citizen scientists involved with the monument:

1. Encourage a citizen science component to all research on the monument where possible.



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2. Create programs that go to local schools of all levels to get the students involved in citizen science.
3. Have specific citizen science programs for children.
4. Encourage service projects with outfitters and guides.
5. Encourage citizen science programs between tribes and others.
6. iNaturalist database

Potential participants might include the public, tourists, students, scientists, tribal members, university students, other researchers, and partnerships between organizations, between schools and BLM, between tribes and non-tribal members, local residents, and guide services.

**Kevin Ballard.** Grazing permittees welcome the opportunity to participate in local science projects and, as boots-on-the-ground, would be ideal to help gather repeat data, similar to guides.

**Shea Owens.** How does the MAC recommend maintaining scientific integrity?

**Christa Sadler.** Citizen science programs are already highly valuable to the research community.

**Shea Owens.** Expressed concern that some scientific groups have a clear, biased intention. Owens used Western Watersheds as an example of an organization with a goal to reduce livestock on public lands by monitoring vegetation health in areas where livestock has grazed, with little concern with an honest evaluation.

**Christa Sadler.** In response to Shea's concern, stated that if a group conducts monitoring with a particular agenda in mind (i.e., pro-grazing or anti-grazing), then that is not legitimate science. The whole point of science is that you might have a hypothesis. Maybe your theory is "grazing is bad for the land," but you can't go out there and only look for evidence that says grazing is terrible for the land. You have to look at all the evidence you can find.

Understanding what science is about is essential. The point is to try and disprove your hypothesis, not prove it. You can always find evidence that might support your hypothesis, but you have to try and disprove it. If all the evidence experiments, research, and data collected can't disprove the hypothesis, it still doesn't prove it. It supports it until something else comes along, which is where citizen science helps through data collection.

If a hypothesis cannot be disproven, then it stands for the time being, but science is an ever-evolving process, which is why it is critical to help teach citizen scientists what and why they are collecting data.



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**Kevin Ballard.** Added that the monument already has built-in sub-groups of people interested in science. Proposed that we use these groups to come together to help conduct science on the monument.

**Jacqueline Grant.** Expressed agreement with Kevin and Christa. Also commented that many citizen science databases are not necessarily associated with a group with an agenda but that most are publicly available databases containing observation data ranging from paleontology to pollinators, night sky to light pollution data.

Has personally run citizen science groups on the monument, and many people are willing to collect data for the BLM.

**Christa Sadler.** It is essential to know the organization behind the science; most are universities and museums producing viable and valuable science.

**Sarah Bauman.** We now have an erosion project that is predominately on private lands adjacent to the monument, using structures to help capture water and help habitat vegetation around ephemeral washes. I envision expanding from there and incorporating it into the science plan. Also, numerous stakeholders' partner with the BLM, i.e., Escalante River Watershed Partnership.

**Nathan Waggoner.** There are active communities of volunteers willing to get involved, i.e., spoke briefly about hummingbird research. Waggoner provides guide services in Zion and commented that guides are a potential resource, i.e., when there are closures due to nesting birds, we can be another possible resource for monitoring. It is educational in helping guides understand why an area may be off limits as they can serve as an additional resource to monitor damage to cultural resources or landscapes, depending on the needs of the BLM.

**Sarah Bauman.** Commented that site stewardship training would also be valuable to those monitoring and collecting information.

**Nathan Waggoner.** We need to build the capacity/interest. Recreation attracts many visitors, but many are looking for something deeper. We could consider a platform where people can sign up for those events.

**Christa Sadler.** Recommends utilizing visitor centers to enhance monitoring data collection by introducing visitors to iNaturalist.

**Sarah Bauman.** Once the initial science plan is made available, will the MAC still be able to make recommendations?



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**Artemisia Turiya.** The intent is to write the language broadly enough to have much flexibility. I hope that that helps. However, some soft language will recommend a review at least every five years with the flexibility to rewrite sections if deemed appropriate.

**Christa Sadler.** It would also be beneficial for the BLM to conduct interdisciplinary field training annually and maintain a digital research library for researchers not connected with universities to access.

**Nathan Waggoner.** Mentioned the Guide Association Symposium as another venue for additional training and education.

**Sarah Bauman.** In determining what we hope to gain from a science subcommittee, shared the following:

1. Integrating the best available and effective science into management activities that will ensure relevant and timely scientific information is accessible to BLM staff and managers.
2. Maintaining biodiversity, improving, and maintaining ecosystem functions.
3. Inform and evaluate management activities.
4. Addressing climate change as it relates to landscape-scale planning.

**Shea Owens.** State policy on management actions is that it's based in sound science. For those of us that don't run around in the science world, can you tell us some of the proposed scientific research that's going on in the monument right now?

**Artemisia Turiya.** It can range from collecting data about rock striations to studying different species of insects or populations of lizards.

**Harry Barber.** The Division of Wildlife Resources has approached us about bighorn sheep and pronghorn on the monument. We have conducted telemetry studies on wild turkeys. BYU has conducted small mammal studies, and there have been studies done on bees native to the monument. We have also provided permits for botanical work, for geology studies, reptiles, amphibians, etc.

**Artemisia Turiya.** But it's not all biological. Research requests could also include studies of visitor increases on trails or putting sound detectors in different parts of the monument to see how quiet it is.

**Shea Owens.** What is the approval process like? Is there a committee that needs to approve a research request? How would John Doe bring a research proposal to the BLM?



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**Artemisia Turiya.** The science plan will outline the process. Step one will begin with a research proposal. The science plan will incorporate more coaching to help people improve written proposals. An IDT will then review and determine if NEPA is required. The BLM will assist the proponent in tweaking research proposals to be approved. There will be exceptions, of course. Anything related to cultural or paleontological resources will also be vetted through the state office.

The science plan will also outline expectations, i.e., filing an annual report.

**Christa Sadler.** Recommend that the BLM consider publishing an annual newsletter written in layperson's terms describing the research conducted on the monument, why it is valuable to science, and what the researcher has accomplished.

**Shea Owens.** How does the MAC plan to avoid suspect research?

**Jacqueline Grant.** In addition to Peer review, researchers must consider the literature as a whole. One thing I do with my students is to have them learn how to do a systematic quantitative literature review so that they're not cherry-picking the published papers that support their views but instead have a picture of what has been published as a whole.

My students do this because if there is much-published literature, they can easily choose what they want to show, even though it might be wrong. It goes back to what Christa was saying about we're not here to prove something. We're here to disprove it until we can no longer support the idea of remaining neutral, which can be incorporated into the permitting process.

**Joel Pederson.** The answer to Shea's question lies in the process that the BLM uses to review and award research permits. Some criteria may be to consider how the research is funded and determine if the research has already gone through a peer review process and vetted.

**Shea Owens.** Is the awarding of permits part of the science plan, or is that something separate?

**Artemisia Turiya.** Yes, guidelines for awarding research permits are part of the science plan. It can get technical, but we are already adding additional criteria that must be met, knowing that we are trying to support almost all the science proposed. So yes, such considerations will be outlined in the science plan as we determine best practices for the approval process.

**Sarah Bauman.** Returning to an earlier conversation about indigenous science and how we will support indigenous researchers on the ground, how can we ensure that this science plan process does not create additional barriers?



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**Artemisia Turiya.** We are not going to be supporting any researchers on the ground. Although we may be monitoring, our primary goal is to review a proposal and the applicant's criteria - meaning we will not require scientists to conduct their research in a certain way. However, we will try to ensure that within their field, we can confirm that their request is viable, which may also mean looking into the realm and perspectives of indigenous knowledge. Framework! But we want to make sure that all proposals are vetted for quality.

This is a good example of where we might have to find someone from outside our staff to vet those kinds of proposals or ask the state office tribal specialist to vet. But remember, all culturally related proposals will go through a state office process anyway because such requests are considered more sensitive, more nuanced than many other kinds of science proposals.

**Shea Owens.** The BLM may be over committed in terms of capacity to take on another commitment at the moment.

### Formal recommendation discussion.

The MAC recommends beginning the process of creating up to four subcommittees, the details of which are to be determined during the February 2024 MAC meeting. As such, the following notes are outlined to aid committee members in planning for further discussion.

- Determine the current areas for MAC input about the science plan.
- Establish a process to regularly review what science is occurring in the monument and what has been learned that can help improve best management practices.
- Incorporate science and citizen science into the monument's management, determining ways to help integrate science into management.
  - Interdisciplinary field trips.
  - Access to different resource databases.
    - Encourage communication and cooperation between different agency scientists in other regions.
    - Stipulate that research be published in open-access journals.
  - Ensure monument resource specialists have continuing education access to the latest research in their field.





# Grand Staircase-Escalante National Monument

## Monument Advisory Committee Meeting Notes

Tuesday, Sept. 12, 2023, 9:00 am to 4:00 pm

- Integrate best-available, effective, and consistent science into management activities, ensuring that relevant, timely scientific information is accessible to BLM staff and managers.
- Allow and encourage science across disciplines that will:
  - maintain biodiversity,
  - improve and maintain ecosystem function,
  - and inform and evaluate management activities.
- Determine best practices to engage with local and regional Tribes on Traditional Ecological Knowledge (TEK) and Indigenous Science, to protect cultural activities and contribute to monitoring and management.
- Conduct annual training to network and discuss the integration of science into the science plan and, ultimately, into the monument's management.
- Develop or plug into science-based education and outreach programs.
- Develop science-based education and outreach, ensuring that GSENM visitors, staff, and the general public learn and benefit from research on GSENM resources.
- Encourage communication and cooperation between different agencies and scientists in other regions.
- Invite researchers from different areas of the region to present and talk about their research.
- Publish a newsletter about science scientific research that would be available at the visitor centers. Request that any researchers write a summary of their research and results in laypeople's terms and make available at visitor centers; include references to the original documents for more in-depth review.
- Request researchers produce a 5-to-10-minute, 508-compliant video about their findings as part of the permit renewal process.
- Integrate step-down planning (i.e., educational component) into the science plan.
- Narrow the focus of recommendations relevant to the science plan and recommended subcommittees.
- Determine a consistent structure for and number of subcommittees.
  - Organization of subcommittees.



# Grand Staircase-Escalante National Monument

## Monument Advisory Committee Meeting Notes

Tuesday, Sept. 12, 2023, 9:00 am to 4:00 pm

- Recruitment & membership size.
- Scheduling.
- Subcommittee suggestions (Science, Tribal, Grazing, Recreation)
- Determining a process to ensure subcommittees are responsive to requests from the MAC and the BLM, recognizing that subcommittees are responsible for reporting to the MAC. Examples include.
  - The science subcommittee will be responsive to questions from the MAC regarding the quality and substance of scientific research on the monument. The subcommittee will provide guidance about scientific research on the monument to the MAC.
  - The science subcommittee will be responsive to tasks set by the MAC in response to questions from the MAC or the BLM regarding management, research, monitoring, administration, or other aspects of science on the monument.
  - The \_\_\_\_ subcommittee will respond to tasks set by the MAC and report to it with findings in response to needs and requests from the Monument.
- Acknowledgment that questions given to subcommittees may originate from the BLM or any MAC member.
- Provide science-based information to managers to help ensure that proposed uses do not negatively impact the monument resources.
- Recommendations brought to the parent committee will be scheduled for further MAC discussion and official committee vote, upon which the MAC will formally communicate recommendations to the BLM in writing.
  - The scope of science questions may extend beyond monitoring and research (i.e., administrative or volunteer groups).
- Encourage citizens to be involved in monitoring, not just initial data collection, using tools and venues to build interest: iNaturalist, signups at monument visitor centers.
  - Potential participants could include tourists, students, scientists, tribal members, university students, other researchers, or partnerships between organizations, between schools and BLM, between tribes and non-tribal members.
  - Encourage a citizen science component to all research on the monument where possible.



U.S. Department of the Interior  
Bureau of Land Management

# Grand Staircase-Escalante National Monument

## Monument Advisory Committee Meeting Notes

Tuesday, Sept. 12, 2023, 9:00 am to 4:00 pm

- Create programs that go to local schools of all levels to get the students involved in citizen science.
- Have specific C.S. programs for children.
- Encourage service projects with outfitters and guides.
- Encourage citizen science programs between tribes and others.

**-END-**

DRAFT