

**BOARD OF FORESTRY AND FIRE PROTECTION**

P.O. Box 944246  
SACRAMENTO, CA 94244-2460  
Website: [www.bof.fire.ca.gov](http://www.bof.fire.ca.gov)  
(916) 653-8007



## **RANGE MANAGEMENT ADVISORY COMMITTEE** **MEETING MINUTES**

**Meeting Date:** Monday, July 17, 2023, 12:30 PM

The RMAC Meeting was hosted via teleconference, as authorized pursuant to Government Code section 11133. In addition to the teleconference, members of the Range Management Advisory Committee or anyone from the interested public was able to attend at the following physical location:

**California Natural Resources Agency Headquarters:** 715 P Street, Sacramento, CA 95814, 2<sup>nd</sup> floor Conference Room 2-301

The meeting recording may be retained for a limited amount of time, and during that time, may be observed by completing registration at the following weblink. Access to the recording is not guaranteed at any given time. Please see the [July meeting agenda \(https://bof.fire.ca.gov/media/ustemvwx/04-july-17-2023-agenda-final\\_ada.pdf\)](https://bof.fire.ca.gov/media/ustemvwx/04-july-17-2023-agenda-final_ada.pdf) for further details.

### **Webinar Recording Access Link:**

<https://attendee.gotowebinar.com/recording/8735014484316641195>

### **ROLL CALL**

#### **RMAC Members Present**

Chair, Dr. Marc Horney – in person  
Bart Cremers – in person

#### **RMAC Members Absent**

Joel Kramer – virtual  
Cole Bush – virtual  
Dr. Paul Starrs – virtual  
Andrée Soares – virtual  
Katie Delbar, ex officio member – virtual  
Vice Chair, Rich Ross  
Lance Criley  
Dr. Stephanie Larson  
Taylor Hagata  
Billie Roney

*The Board's mission is to lead California in developing policies and programs that serve the public interest in environmentally, economically, and socially sustainable management of forest and rangelands, and a fire protection system that protects and serves the people of the state.*

## **Board Staff**

Dr. Kristina Wolf, Environmental Scientist – in person  
Deniele Cade – virtual

## **Department Staff**

Steven He, Technical Support – in person

**Invited Speakers** – Dr. Ken Tate, Dr. Susan E. Marshall

**Public Attendees** – Tristan Brenner, Ari DeMarco, Lawrence Ford, Forest Fortescue, Kenneth Fulgham, Mike Garabedian, Jeanette Griffin, John Harper, Tom Hawkett, Robert Heim, Rene Leclerc, Jessica Leonard, Katie Little, Gary Montgomery, Danielle Ruiz, Tracy Schohr, Nathaniel Slinkert, Jonathan Warmerdam, Kirk Wilbur, Angela Wilson

## **AGENDA ITEMS and MEETING MINUTES:**

---

Items are numbered by their corresponding number on the agenda and documented below in order of their introduction during the meeting. Times are approximate.

### ***Time: 5:10***

#### **1. Call to Order, Webinar Meeting Format, and Roll Call – Dr. Kristina Wolf, *Board Staff***

See results of roll call, above. Dr. Wolf reviewed the webinar format and functionality.

### ***Time: 8:10***

#### **2. Staff/Chairman's report – Dr. Marc Horney, *Chair***

Chair Horney reported that the RMAC educational workshops and series has been concluded for this year, which included the Field Day in Paso Robles looking at the Salinas River Fuels Management Project that Althouse & Meade worked to develop. One webinar on June 6<sup>th</sup> was also conducted as part of that series.

### ***Time: 9:45***

#### **3. Approval of May 2023 meeting minutes – Dr. Wolf, *Board Staff***

The draft meeting minutes were sent out to the RMAC members for their review prior to the meeting, but a quorum was not present in person at noticed locations, so no vote was conducted. This item was tabled until the next meeting.

### ***Time: 10:00***

#### **4. Workforce Development Grant Update – Dr. Susan Marshall, *Cal Poly Humboldt***

Dr. Marshall is a faculty member at Cal Poly Humboldt and has been a leader in the Society for Range Management (SRM) working at state and national levels to improve the candidate pool and expertise in the range field. She recently initiated a grant proposal to the USDA to develop a multi-institutional effort to develop training programs in range management, and also specifically for individuals wanting to take the Certified Rangeland Manager (CRM) exam.

Dr. Marshall reported on efforts on three fronts for developing the range management workforce. They did not get the \$10 million Learning to Leading Grant, unfortunately. The second effort (SRM 0454 Workshop) at the level of the national parent society, SRM, is ongoing and will be reviewed today. On the third front, the USDA-funded California Rangeland Education (CRED) program is also in development.

**SRM 0454 Workshop:** At the last SRM meeting in Boise, there was a large workshop of ~75 participants to discuss solving issues associated with the federal job series 0454. This was centered around four working groups to gather information on needs, constraints, and solutions. Individuals from US Forest Service, Bureau of Land Management, NRCS, and SRM representatives have been involved in this effort, and a 3-page report was created and can be requested from Dr. Marshall via email at [susan.marshall@humboldt.edu](mailto:susan.marshall@humboldt.edu). The workshop focused on four main topics: 1) they would like to create an annual report card on the state of the industry; 2) they are interested in branding for this profession, and they are mindful of the opportunity in 2026 (United Nations Year of Rangelands and Pastoralists) to promote the profession; 3) youth education; and 4) the 0454 series qualifications. Thus, the workshop was geared solely around federal employment for the 0454 series, and 401 Natural Resource Professionals, which may be just a few classes away from being able to qualify for the 0454 classification. The University of Nevada, Reno, has been instrumental in that realm, creating many online and in-person courses that would help individuals qualify for the 0454 series.

The Highest Priorities established at this workshop were to: 1) Reinstate or create an Employment Affairs Committee to assist individuals in identifying the requirements of and qualifying for the 0454 series; 2) Develop an Annual Report Card on the state of the society at the annual meeting based on human resources agencies (retention rates, vacancy rates, reasons for exit, etc) to identify the gap between the need and the resources; and 3) Develop a portal of educational resources for teachers and youth that is easily accessed and navigated (range curricula is not as strong in California as it is in many other states; good example is at [www.soils4teachers.org](http://www.soils4teachers.org)); and 4) Propose a symposium at various Annual Meetings for High School Youth Forum and Range Camp participants to share ideas, best practices, and other guidance to improve teaching and learning.

**CREC Program:** This effort stemmed from conversations over the years about the need for qualified consultants, particularly on smaller parcels and ranches. This effort is investigating what is happening in California in terms of meeting requirements for meeting the 0454 series, and for taking the CRM exam for certification. As part of this effort they collected feedback from over 100 attendees at the June California/Nevada Cattlemen's meeting in Sparks, NV about that they thought we needed, and about 90% did not know what a CRM was. Many ranchers were enthusiastic about developing the idea further and hosting an event at their property. One of the ideas is that the best CRMs would be ranchers with field experience; a smooth pathway for this would really be the best scenario possible. They also contacted about a dozen people remotely from CRCC attendees to obtain more information about what people in California are interested in in terms of continuing education or changes to the education system we have now. Objectives for and topics included:

- 1) Looking at the curricula being offered in range (only Cal Poly Humboldt and San Luis Obispo are really offering a substantial number of courses) and cross-walking courses across the nation tying them to 0454 requirements; this is not the same as for CRMs but there is a lot of crossover. They are also obtaining information and feedback from other colleges across the state, including community colleges. Dr. Horney will also likely develop (with the assistance of his students) a CRM study guide that could be hosted at the learning resources website discussed above, or elsewhere. They are also inventorying recent publications to determine what is helpful to study for the CRM exam.
- 2) Weaknesses in their own curricula – in this discussion, they determined they could develop a hybrid range course with contributions from Cal Poly Humboldt, Berkeley, and San Luis Obispo.

- 3) Develop a diagnostic questionnaire that would help determine a CRM or 0454 applicants weaknesses are so they can address them.
- 4) Build a learning cohort on a working ranch, e.g., Swanton Pacific Ranch perhaps as the pilot trial, and then on additional ranches later on.

### **Discussion**

- Public attendee Kenneth Fulgham stated that the work that is being done is critical to increase visibility in the realm of educational opportunities for students and professionals.
- Dr. Horney stated that several positions within NRCS and the USFS have gone unfilled over time because there were no qualified applications.
- Dr. Marshall stated that retention is also a very big issue right now, with huge attrition from the range workforce. We have to understand why this is happening.
- Dr. Marshall noted that ranchers understand the economics and business side of things, so they would make great CRMs as often this component is missing in recent graduates.
- Public attendee Jeanette Griffin asked if there have been any efforts around addressing the needs of full-time workers who want to meet the qualifications for 0454 or the CRM exam. Yes, but one big issue is that the training has to be a “college course” and they need to show up on a transcript, so this is a sticky problem. Oregon State University does offer an online course, and University of Nevada, Reno also has something similar, but there are not a lot of options for this, and they won’t be as pertinent to California’s ecosystems. We have the ability to offer these courses through extended education functions, so they are thinking about putting together a pilot program offering two courses, and then you wouldn’t need to be matriculated at a university to take those courses. Jeanette noted this would be a good option for Humboldt Wildlife students, and Dr. Marshall responded that Animal Science students would also be a good fit.

### **Resources**

- [Dr. Susan Marshall Presentation](#)
- [3-page summary from 0454 workshop](#)
- RangeDocs Searchable Science Platform: <https://docs.rangelandsgateway.org/>

### **Potential Actions**

- Dr. Susan Marshall may be contacted at [susan.marshall@humboldt.edu](mailto:susan.marshall@humboldt.edu).

### **Time: 43:30**

#### **5. Current Standards for Riparian Grazing Practices** – Dr. Ken Tate, *University of California, Davis; U.C. Cooperative Extension in Rangeland Watershed Science*

Dr. Tate spoke about the history and current best management practices around ranch water quality planning and livestock grazing in riparian areas. In the western US, riparian areas are spatially small (<1% of rangeland landscapes) but they are an important component. They are found in private and public lands and provide critical aquatic habitat; habitat for sensitive species in terrestrial and riparian systems; forage for wildlife and livestock; clean water; and may sequester nutrients such as carbon and nitrogen, and attenuate impacts from floods.

There have been conflicting observations over the past thirty+ years in California and the west as to the impacts of livestock in riparian areas within range. Questions around the sustainability of livestock grazing in and around riparian areas have continued, with polarizing opinions ranging

from those who believe livestock always decimate riparian areas to those who feel livestock are essential to sustainable riparian management. The current understanding based on the “Best Available Science” for sustainable management of livestock grazing in riparian areas comes down to context: plenty of papers support the paradigm that riparian areas can decimate them, while others support the idea that they can be beneficial.

Part of these conflicting opinions likely come from the focus on outcomes in riparian areas, particularly in public lands, which have tended to fall into two eras: studies from the 1970’s through the mid-90’s indicate that management at that time tended to treat riparian zones as sacrifice areas, focusing primarily on livestock production and gains, and outcomes were generally fairly negative (see Kauffman and Krueger 1984, Armour et al. 1994; Trimble and Mendel 1995; Belsky et al. 1999). These studies documented that unmanaged riparian grazing often results in damaged riparian vegetation due to continued grazing of plants and impacts to root density and strength which can lead to unstable stream banks, and eventually stream channel erosion and losses to the water table, habitat, and water quality. Once a threshold for damage is passed (e.g., downcut streams), recovery of function and stability of the riparian system is difficult.

The American Fisheries Society pushed strongly for improved livestock management practices that resulted in the recovery and protection of riparian areas on public and private lands (Armour et al. 1994); this position is also reflected in the thinking of the Society for Range Management. In the late 1990’s to 2000’s, the U.S. Forest Service published guidance for best management practices in meadows, including: limits to herbaceous vegetation use, minimum residual stubble heights (perhaps a bit redundant to limits on herbaceous vegetation use), limits on riparian woody plant browsing, and limits to streambank disturbance due to livestock hoof impacts. Not all of these are in USFS allotment plans, but they usually exist in at least some form, and there is good science to support these initial guides for management. Research demonstrating the effectiveness of these kinds of guidelines for enhancing riparian health has led to continued implementation of such practices. Some wetlands may even be dependent on grazing for maintaining certain functions or habitats (e.g., vernal pools) (see Clary 1999; Marty et al. 2005; George et al. 2011; Freitas et al. 2014; Oles et al. 2017; Roche et al. 2013; Marty et al. 2015; Michaels et al. 2021; Jones et al. 2009; McIlroy et al. 2013). Some of the principles for sustainable riparian grazing are: set enhancement goals (and can the site achieve that); set targets and limits on browsing/grazing to desired plants and limit disturbance to streambanks; and then develop grazing management protocols to meet the targets.

Dr. Tate provided two case studies to demonstrate the potential effectiveness of a sustainable grazing strategy. On the Kern Plateau in the Inyo National Forest in the high Sierras, there is a lot of attention paid to grazing management in the allotment. Odion et al. 1988 found that within exclosures there was significantly greater plant density, but outside the exclosures, there was 80% use of vegetation, 75% browse on willows, and more. This work led to the comparison of areas where grazing was excluded to areas where grazing was retained but was subject to riparian grazing standards: all allotments had been grazed with no riparian standards prior to 2000, but after 2000 two of the allotments were grazed with riparian standards, while grazing was excluded in the other two. These systems were monitored in 2000 (baseline), 2005, and 2010. Results showed that ungrazed meadows did not recover faster than grazed meadows, and that all systems (e.g., species richness and diversity) recovered at a similar rate (Freitas et al. 2014). This research was conducted in the same place as the research from Odion et al. 1988, which showed degradation from grazing. However, the difference was the establishment of riparian grazing standards that protected these systems.

Another study surveyed 130 streams across California ranging from excellent to poor health, and then correlated these to management practices. They used the EPA-CDFW Stream Health Assessment method to document stream health. Results showed that practices that had a greater probability of healthy systems were off-stream attractants, herding to control utilization and time spent in riparian areas, and longer rest periods per year. Practices that were correlated with less healthy stream systems were the duration of grazing, livestock density during grazing episodes, and frequency of grazing episodes per year (Roche et al. 2013). A follow-up of 46 sites from that study also compared stocking rate and livestock distribution practices to riparian healthy based on benthic macroinvertebrates (Derose et al. 2020). This showed that stocking rate and the simple implementation of livestock distributional practices was not related to riparian health. However, these sites were also very large, so livestock had plenty of access to forage. What did affect health (species richness of macroinvertebrates) however was the amount of time that managers spent on distributional practices. Even one week's investment in a grazing season could result in a greater than 50% increase in riparian health.

In conclusion, the science is actually NOT conflicting: research conducted into practices occurring before the mid-1990's (no conservation goals) as compared to thereafter (riparian limits and conservation grazing) are reflected in the very different management practices that were common in those eras. Therefore, standards and guidelines are an important component and starting point for sustainable management, but management also needs to be adaptive to achieve rangeland goals and targets.

### ***Discussion***

- Public participant Ken Fulgham commented that he has seen intermittent exclosures placed around the riparian areas in USFS allotments which resulted in doubled stocking rates and decimation in unfenced areas. This provides support to Dr. Marshall's efforts around the 0454, which hopes to support increased consultation with CRMs when developing sustainable grazing management plans. Partial fencing may result in even worse results by pushing twice as many animals into unfenced areas. Dr. Tate has also seen similar impacts.
- Member Joel Kramer noted that he works with a reserve manager who is hesitant to introduce cattle grazing, perhaps due to wetland areas, and he is wondering how grazing might impact grassland/upland areas and the hydrology of those annual grasslands. Dr. Tate stated that we know a lot more about overgrazing in uplands, and we know that if you overgraze the annual types we see reduced productivity by modifying the plant community composition (e.g., by increasing grazing-resistant species, or increasing less palatable weedy plants) over the long term. This could also result in soil compaction. Dr. Toby O'Geen from UC Davis is a good source for information on this, especially about "cow pans" (i.e., a compacted layer that limits root penetration, infiltration capacity, and carbon sequestration, and increase runoff). But with proper stocking rates, this can mitigate or avoid this kind of compaction in grasslands. A global meta-analysis showed that moderate stocking rates maintain soil function such as nutrient accumulation and water infiltration.
- Public participant Ken Fulgham commented again that frequency and duration in addition to stocking rate are critical components to maintaining soil health. Dr. Tate echoed this and stated that there is really no downside to grazing in grasslands if stocking rates are kept moderate as a starting point.
- Public participant Jonathan Warmerdam from the Water Board noted that we see similar outcomes in forests when we compare past practices and outcomes to current practices and

outcomes, and asked about the difficulty on federal lands where staff are very limited to oversee grazing activities and livestock might be grazing many thousands of acres at a time. Is the adaptive management element being implemented to a level that can keep outcomes sustainable? Dr. Tate agreed that understaffing is problematic, but the underlying policy is good, and he sees that the standard is not the problem, but the implementation and monitoring seem to be falling short. Increased outreach to permittees and managers may be important to improving these outcomes. It is up to the permittees to meet the standards, and their understanding of the standards and reasons behind them, as well as what it takes to meet those standards (e.g., effort matters!).

- Public participant Nathaniel Slinkert asked about virtual fencing technology: given the high cost and difficulty of installing and maintaining permanent fencing, is there a role for these technologies to help in this matter? Dr. Tate stated while range management has generally been pretty low-tech, at least two cooperative extension groups are doing trials with non-permanent fencing methods to look at the possibilities for improving livestock movement and distribution. Technologies such as GPS collars and virtual fencing could be a real benefit in these huge landscapes.
- Public participant Ken Fulgham commented that when they removed livestock wildflowers stopped producing and certain bird species stopped nesting. He was hired to develop a strategy to mitigate that, and they implemented time-controlled grazing (as opposed to open, uncontrolled grazing) over five years, and the wildflowers and birds came back. Managing the intensity, frequency, and duration of grazing improved the outcomes.

### **Resources**

- More information on citations given the notes above are provided in [Dr. Tate's presentation](#) available online.
- Dr. Tate noted that the Ranch Water Quality Short Course materials are available [online](#).
- Cooperative Extension at the county level is a good resource as well for folks wanting more information about livestock grazing in riparian areas.

### **Potential Actions**

- Attend the State Water Board meeting tomorrow: [Agenda](#)

**Time: 1:54:30**

## **6. Progress Update on Annual Priorities – Dr. Horney, *Chair* and RMAC Members**

The annual priorities to be discussed today are agendaized in Items 7, 8, 10, and 11, below, and will be brought up with those agenda items. [RMAC Objective Assignments](#) are online.

## **7. Selection of Topics and Timelines for Educational Workshop Series 2023/24 – Dr. Horney, *Chair***

Dr. Horney noted that he had two ideas: livestock grazing impacts on native plant and animal habitats, and the interaction of integrating grazing with other fuels treatments. Dr. Wolf compiled a list of topics briefly mentioned at the last meeting, and integrated additional topics live during the meeting. Dr. Wolf stated that a variety of RMAC efforts around fuels management and the integration of livestock grazing are starting to come together, and this could be a good natural extension of those efforts. Other topics from the previous meeting included rangeland ecological targets and emergency response around livestock operations.

## **Discussion**

- Member Kramer suggested that we attract the reserve manager and rancher audiences by exploring the definition of a working natural lands. He also suggested a topic around contingency planning (e.g., around drought, flood, emergency).
- Jonathan Warmerdam submitted a comment that a water quality or condition target should be included.
- Dr. Paul Starrs, in his capacity as a public participant, commented that Ecological Site Descriptions (ESDs) might be included in the topic of rangeland ecological targets; there is a need for more ESDs in California.
- Outreach to elementary and high school students could be incorporated into the workshop series.
- Dr. Wolf noted that suggestions for locations and timing are also needed. Last year we planned on conducting the workshops in February (although that ultimately spanned January through June) for a variety of reasons (including avoiding rain, calving/lambing/kidding seasons, legislative sessions, etc).
  - Dr. Horney noted that past meetings have been successful in September, November, and March/April; he suggested that February/March might work well.
- Public participant Kenneth Fulgham commented that Mel George and he had a grant to develop ESDs for western Juniper in Modoc, Lassen, and Eastern Siskiyou counties, so he knows they exist. He also thinks there are some for annual grasslands as well. Mel George may be a good speaker if we go that route. Dr. Horney noted that many of those ESDs never were accepted as full ESDs for a number of reasons, but that the work that was done could be finished. He will reach out to Dr. George.
- Dr. Horney noted it would be nice to come up with a schedule of topics to focus on in coming years so we don't have to keep doing this every year.
  - He asked if folks are tired of the fuels/grazing topic, and Dr. Wolf noted that the work that has been conducted so far has not been completed, and the efforts thus far have not been particularly effective and this method for managing fuels has not been institutionalized at the state level. Lack of progress is not due to lack of effort, and there are a lot of conversations happening behind the scenes that have not yet come to fruition, and still may. Dr. Wolf supports an ongoing program on fuels management, which dovetails nicely with several RMAC ongoing efforts around grazing for fuels reduction, and which are taking a lot of time and are complementary to the workshops and could even be utilized to provide additional input into those other ongoing efforts (e.g., prescribed herbivory white paper, etc).
  - Member Kramer noted that farmers and ranchers are generally more available in February/March. He also suggested that perhaps we could target the fuels management audience by potentially partnering with a forestry organization. This connects to the topic of collaborative CRM-RPF workshops and trainings, which is another ongoing RMAC effort. Member Kramer suggested that such a workshop could happen at the CA RCD Conference in December, and then a workshop could follow in the spring.



### **Potential Actions**

- Provide feedback to the [poll](#) that Dr. Wolf will send out. The poll will include the topics discussed today and will allow for additional suggestions. The committee and the public may participate in this poll.
- Send additional suggestions to Dr. Wolf at [kristina.wolf@bof.ca.gov](mailto:kristina.wolf@bof.ca.gov).
- Dr. Horney will reach out to Dr. George about the ESDs mentioned above.

**Time: 1:54:30**

### **8. Identification of Contributors, Deliverables, and Timeline for Prescribed Herbivory White Paper – Member Cole Bush**

Member Bush was unable to join the meeting so Dr. Wolf provided a brief recap of these efforts:

- CAL FIRE Fuels Reduction Guidance draft – CAL FIRE noted that they would NOT be publishing the [prescribed grazing informational draft](#) produced by members of the RMAC and the California Wool Growers Association Targeted Grazing Committee in the [CAL FIRE Fuels Reduction Guidance](#), but the conversation will not end there: Dr. Wolf, the executive officer of the Board, and other CAL FIRE personnel will continue this conversation to determine if further edits are needed to improve the content to the point that it could be published in future version of it. This draft document somehow made its way into the public forum as a talking point about prescribed grazing by CAL FIRE, so the RMAC has ongoing efforts to ensure that this is appropriately disseminated only when it is finalized and approved and is credited to the individuals and organizations that produced it.
- 2015 Prescribed Grazing White Paper – this document is going to be updated; previous contributors were noted as Member Bush, Dr. Wolf, Member Kramer, Member Dr. Larson, and Member Dr. Starrs.
- Prescribed Grazing Technical Guide – this document would also be produced concurrently as the updated white paper.
- Timeline – Member Bush was able to join and provide some input: four weeks on the Targeted Grazing (TG) Committee side is a reasonable turnaround for reviewing the paper. So the RMAC would want to have a draft of the white paper by the September meeting, and it could be discussed and sent to the TG committee sometime in October. Then it would be finalized for presentation at the November meeting.

### **Potential Actions:**

- Dr. Wolf will continue to try to get an answer from CAL FIRE about next steps for the one-page information sheet on prescribed grazing.
- RMAC members work on updating the white paper to produce a draft by the September meeting.

**Time: 2:38:30 – skipped to Item 10**

### **10. Chair's Review of the State Lands Grazing License & Land Management (SLGLLM) sub-Committee Deliverables – Dr. Horney, Chair**

Dr. Horney noted that he reviewed the three basic deliverables that had been submitted previously by the SLGLLM team: 1) Grazing Agreement, 2) Grazing Management Plan, and 3) Guidance Booklet. Of those materials, #1 was most complete, #2 was also pretty well developed, and #3 was relatively incomplete. He noted that for deliverables #1 and #2 he had been hoping for a more

template-type document that could be filled out. He suggested that perhaps we have fictitious versions developed as examples to be associated with those materials. Dr. Wolf suggested that developing the guidance booklet content at the same time that the examples are developed for #1 and #2 would be an efficient approach.

**Potential Actions:**

- Dr. Wolf will follow up with the Department of General Services (DGS) to review the draft documents.
- Member Cremers will work to bring the deliverables to a more complete state and find examples to demonstrate the use of deliverables #1 and #2.

**Time: 2:50:00 – returned to Item 9**

**9. Cal Polytechnic State University, San Luis Obispo Range Lab: Field Technologies in LiDAR Research – Dr. Horney, Chair; Cal Poly SLO**

Dr. Horney is starting a lab at Cal Poly SLO called the “Geospatial Technologies in Environmental Management”. They have purchased a remote-controlled helicopter and LiDAR system to measure the fuels/biomass, including size, density, height of shrubs, trees, and herbaceous materials around shrubs and trees. Ultimately, he would like to estimate biomass and the impact of grazing animals on these landscapes. They will be looking for large grazing projects to trial this technology.

**Time: 2:5:30 – resumed with Item 11**

**11. Update on Working Groups or Advised Agencies – Dr. Wolf, Board staff**

**Natural Working Lands Expert Advisory Committee**

- Meeting tomorrow, July 18, 1 PM: agenda - <https://resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/Expanding-Nature-Based-Solutions/July2023AgendaAB1757NtrlWrkngLndsEAC.pdf>
- Registration link for public virtual participation - <https://events.gcc.teams.microsoft.com/event/62bc4d46-3070-4caf-b0da-b8c8331e7aaf@b71d5652-4b83-4257-afcd-7fd177884564>

**State Water Resources Control Board**

- July 18<sup>th</sup> Water Board meeting: [Agenda](#)

**12. Updates from Partner Organizations & Public Forum**

**a. Legislative Updates**

- **SB 675 (Limón): Prescribed Grazing for Wildfire Mitigation** – Dr. Wolf reported that this bill has passed out of committee with unanimous support and will continue through the legislative process.

**b. Updates from Partner Organizations**

- California Farm Bureau**
- California Cattlemen’s Association**
- University of California Cooperative Extension**
- California Wool Growers Association**
- California Resource Conservation Districts (CA RCD)**

Robert Heim provided a quick update on behalf of Sonoma RCD: “Also on this call today is my teammate Ari DeMarco. We are collaborating with Gold Ridge RCD on the

LandSmart Grazing Program. This program started about two years ago. It reimburses landowners in Sonoma County to have targeted sheep and goat grazing conducted on their properties to reduce fuel load and wildfire risk. The RCDs recently received funding from two sources, the Sonoma County Ag + Open Space District and the California State Coastal Conservancy, to continue the program. The California State Coastal Conservancy funding is \$480,000 and will last for three years. It will prioritize grazing on public lands and adjacent private lands. It will take a more partner-centered approach, working with Sonoma County Regional Parks and others to develop projects that meet their needs. We intend to support a total of 12 projects. This funding will also provide educational components, such as workshops on grazing/animal husbandry and technical assistance in collaboration with our partners. Updates about the LandSmart Grazing Program will be provided here: <https://sonomarcd.org/get-involved/landsmart-grazing-program/> and in Sonoma RCD's monthly e-newsletter."

- c. Members of the public may address the Committee on any topic within its jurisdiction not otherwise on the agenda. Items will not be discussed in depth but may be agendized for the next committee meeting.***

### **13. Adjourn**