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.
Items are numbered by their Item Number on the agenda and documented below in order of their introduction during the meeting.

1) Call to Order – continued after Item 2b, below

2) Staff/Chairman’s Report
   a. Summary of Lahontan Regional Water Quality Board meeting with local ranchers
      i. A small meeting was held in Bishop between the LRWQB and some local ranchers, including Dr. Ken Tate, other UCCE staff, NRCS staff, and some Tribal staff. The goal was to discuss opportunities for addressing water quality. The LRWQB would like to build a voluntary program modeled after the UCCE Ranch Water Quality Program. A field tour of selected surrounding ranchlands was conducted, along with a discussion and input from NRCS, UCCE, and others. Another meeting will occur in October. The Chair will update the RMAC at future meetings about progress made and next steps.
      ii. Ed Hancock with the LRWQB announced a CEQA Scoping Meeting on September 8th, which would be related to water quality objectives for the Lahontan Region. He also indicated—as a correction to the record—that there is no TMDL in the Bishop Creek Watershed, although it is listed as an impaired water body with the EPA due to fecal coliforms, which are chronically high during the recreation and irrigation season (Apr–Oct).

   b. Update on RMAC 2021 Workshop Series on Grazing for Fuels Management – Chair Horney indicated that the first 2 of 3 workshops in the RMAC webinar series on contract grazing for fuels management have gone well, and when available, the recordings of the webinars with automated transcription will be hosted online, and registrants will be notified by email. Over 180 people registered for the series, with 60–100 attendees each at the first two workshops in the series. The final day in the series will be Thursday, August 12th. UCCE’s Devii Rao in Monterey County will also be having a webinar on service grazing for fuels management on August 30th.

Note: four RMAC member positions will expire in January 2022, so we will want to address this at the end of 2021.

Agenda Item 1, Call to Order, continued – Dr. Wolf reviewed the GoTo Webinar format and functionality.

Agenda Item 2, Staff/Chairman’s Report, continued – Membership Updates

Dr. Horney indicated that John Van Duyn has a new job assignment and is not able to continue as a committee member. Sheryl Landrum also indicated that she will be moving to Texas in the next month and will no longer be a California resident thereafter. While not a requirement to maintain California residency, we will ask for suggestions to fill Member Landrum’s seat, along with Member Van Duyn’s, on the committee. Please send ideas and suggestions for finding replacements to fill these two seats to Chair Horney or Dr. Wolf. In particular, a person with expertise or experience in Southern California would be helpful in filling Member Landrum’s seat. We would like to have suggestions to discuss by the November meeting.
3) Approval of April 2021 and June 2021 Meeting Minutes

Dr. Wolf presented the April 27, 2021 meeting minutes. Member Criley moved to accept the meeting minutes. Member Soares seconded the motion.

**Roll Call Vote for Approval of April 27, 2021 Meeting Minutes:**

- Horney  Aye
- Hagata  Aye
- Ross  Aye
- Cremers  Aye
- Soares  Aye
- Van Duyn  Absent
- Roney  Absent
- Watson  Absent
- Landrum  Aye
- Criley  Aye
- Murphy  Absent

The motion carries with 7 ayes and 3 absences at the time of the vote. *The final approved meeting minutes will be posted to the RMAC webpage under Meeting Minutes.*

The June meeting minutes were not presented at this meeting because the audio recording of the meeting was inaccessible by the date of this meeting; efforts to access the audio call to produce detailed meeting minutes will continue in concert with the Board’s IT department.

4) Discussion of RMAC Sponsorship of 8th California Oak Symposium – Chair Marc Horney and Bill Tietje, Co-Chair of the California Oak Symposium Program Committee

Chair Horney gave a brief review of the topics and dates of the upcoming California Oak Symposium. Bill Tietje contacted the RMAC to ask about the potential for RMAC to sponsor the symposium. Ms. Hannigan indicated that Board staff are looking into budgetary guidelines and availability of funds for this purpose, and more information will be forthcoming. *The 8th CA Oak Symposium Draft Agenda and Advertisement Flyer will be posted to the RMAC webpage under Meeting Materials.*

5) Prescribed Herbivory and the California Vegetation Treatment Program (CalVTP) – Dan Macon, U.C. Cooperative Extension Livestock and Natural Resources Advisor

Mr. Macon shared a presentation on prescribed herbivory within the context of the CalVTP for fuels treatments, including the purpose of the CalVTP, information on the use of prescribed herbivory and other fuel treatments tools, the geographic applicability of the CalVTP, the types of treatment activities covered by the CalVTP, the process for submitting a project proposal through the CalVTP, potential for funding assistance in completing the required environmental review documents in partnership with consulting firm Ascent Environmental, and how the use of the CalVTP to increase the pace and scale of fuels treatments, particularly for prescribed herbivory. More detailed information on the CalVTP, training videos, and how to use the CalVTP is available online at:
Larry Ford thanked Mr. Macon’s valuable insight and presentation on this topic, and added a comment that there seems to be a gap in fuels management in the peri-urban space (e.g., abandoned parking lots, in between houses, interstitial spaces within neighborhoods); Dr. Ford asked if there is potential for the use of livestock grazing in these areas to manage fuels and wildfire risk. Mr. Macon indicated that these landscapes can be just as complicated in terms of management, and more work would be necessary in the areas of public perception and education to make something like that work. Member Soares stated that having updates from Mr. Macon on a regular basis would be appreciated, and Chair Horney echoed that message.

Mr. Macon’s presentation will be posted to the RMAC webpage under meeting materials.

6) Discussion of Grazing Licenses on State Lands, and the Role of RMAC in Developing Grazing Licenses and Land Management Plans – Kevin Conway, State Forests Program Manager; Katie Delbar, USDA County Executive Director; Larry Ford, LD Ford Rangeland Conservation Science; John Rocha and Jennifer Clausse, Department of General Services; Laura Cockrell, California Department of Fish & Wildlife; Clayton Koopman, San Francisco Public Utilities Commission; Kristina Wolf, Board staff; and Chair Marc Horney

Chair Horney provided a brief background summary of the need for a consistent grazing license for use by state agencies that is acceptable to the Department of General Services (DGS)—which administers all grazing licenses on State lands—and that is more amenable to grazing operators. The RMAC brought together a panel of experts involved in the use and development of grazing licenses to discuss five core questions. The goal of this panel is to investigate some of the issues involved in the use and development of grazing licenses and discuss needs and potential next steps. The questions and panel member responses are briefly summarized below. The list of panel members, their qualifications, and the Powerpoint with the core questions discussed will be posted to the RMAC webpage under meeting materials.

Core Question 1: How can these discussions be translated into guidance for grazing management planning and effective grazing programs for use on state lands, and in particular, California Demonstration State Forests (DSF)?

- Larry Ford – would be useful to develop a guidelines booklet for grazing, in addition to templates or checklists, that would be circulated to land managers, agencies, and grazing lessees. He commented that DSFs are primarily focused on goat grazing, and should consider grazing with sheep and cattle as well.
- Katie Delbar – concur with Larry, particularly on the booklet, and supports the idea that this merits further discussion, in addition to the other documents mentioned.
- Marc Horney – concurs with Larry and thinks a booklet is worth producing. Original idea was to develop a grazing license template that people can build from and adapt to their circumstances and locations, and to develop a grazing management plan template that would inform the agreement, but also thinks having a grazing guidance booklet would be very worthwhile.
• Kristina Wolf – pass  
• John Rocha – pass  
• Jennifer Clausse – pass  
• Clayton Koopman – concurs with Larry; the Certified Rangeland Manager (CRM) process should be incorporated into the booklet proposed by Larry, with a list of CRMs that would be available to assist agencies with the process.  
• Laura Cockrell – concurs with Larry; any guidance (i.e., a booklet) for grazing on state lands will be useful, and thinks including a flowchart boiled down to the basic points could be useful for determining in short time if the documents and process would be useful for a particular agency or situation.  
• Kevin Conway – manages the CAL FIRE DSF program, and the Jackson DSF; Jackson DSF has acquired some land in Shasta County, and they will very likely be inheriting a grazing lease with PG&E (note: this is the sample grazing lease that was shared at a prior RMAC meeting, and which received some critical feedback). The grazing guidance book would be very useful because these issues are outside the realm of expertise of the DSFs and managers. A few years back they did work to produce the prescribed herbivory document with RMAC, and felt that was a very worthwhile endeavor.

Core Question 2: Why do some state agencies and NGOs exclude versus utilize livestock grazing? What are the policy histories for those agencies choosing to continue, exclude, or restart grazing? What are the constraints that may exclude grazing (e.g., Social, Economic, and Environmental)?

• Larry Ford – started doing this kind of work 45 years ago at a UC NRS, and at that time the system was very anti-grazing, and grazing was considered a management tool, and the NRS they didn’t want any “management” of the ecosystems; this was the result of a fundamental misunderstanding of management. This is an example of a state agency that excluded livestock grazing where this led to some serious ramifications including increased and more severe wildfire. State Parks has the idea that they can manage their properties without any grazing in spite of the fact that CA grasslands are dominated with non-native species that evolved with livestock, and this led to biologists with State Parks who were largely anti-grazing. This history has ramifications still today, and at many other state agencies this sentiment has changed, and now the ideas are shifting to the concept of using grazing and an understanding of the science behind this to better manage ecosystems.

• Katie Delbar – in terms of constraints, thinking back to the example PGE lease that Kevin Conway shared, the grazing lease sample just was not feasible for livestock owners and managers. The economics of that sample grazing lease do not pencil out.

• Marc Horney – Agrees with Larry, and thinks that agency decisions about using grazing or not, it is very agency-, time-, and personality-specific, and the reasoning behind why grazing may or may not be used is probably due to several complicating factors. But there have been long-term processes over time that have influenced anti-grazing sentiments. Chair Horney is interested in ways to reduce resistance to grazing and address reasons why an agency or person may not want to graze. He also pointed out that in Dan Macon’s presentation on the CalVTP prescribed herbivory, Dan pointed out that livestock cannot just go into a shop
when you don’t need them; the economics of the business operation means that those animals have to be in a place where they can have feed and water, so this makes it difficult for some state contracts. Some state contracts are 1-2 years in length, but in terms of the business side of livestock production, you need to plan a few years in advance ideally to manage the business. If they have to change things every year, that makes it infeasible and is a major constraint.

- Kristina Wolf – in terms of constraints that could exclude grazing, there have been perceptions of livestock being dangerous or increasing agency liability, or that recreationists don’t want livestock present, or that livestock grazing always has a negative outcome. The grazing lease timeframes being too short is one of the bigger issues: the cost of getting the livestock there, getting to know the landscape, setting up infrastructure – that is a long term process, it is not a 1-2 year process. The short lease terms strongly limit the ability of livestock managers to graze State lands.

- John Rocha – from the County point of view, he agrees that constraints come in the form of the lease agreements that may restrict use based on ecological (e.g., endangered species) or cultural resources (e.g., bone, shell, human remains). The language in the agreements ensures that the appropriate agencies are involved when it comes to these protected resources.
Jennifer Clausse – County DGS uses two templates for grazing (generally non-irrigated) or crop (irrigated) purposes, and it is either or, but not both.

Clayton Koopman – thinks political climate and misconceptions about the benefits of a well-managed grazing system limit grazing in public agencies. Lack of knowledge of grazing management of livestock, lack of staff power to handle such programs, and costs of infrastructure can be prohibitive, and the unnecessary complexity of grazing management plans makes implementation or enforcement almost impossible. There is a lot of science on the benefits of well-managed grazing, but perhaps the right people have not seen this information. Length of leases is extremely important; as a rancher you have a vested interest in the parcel, and lease terms need to be longer so you can make improvements, build relationships, and see results. Also, there are always bad apples: most ranchers do a good job and care about ecological values and do things in a sustainable manner because if they do it will help them and their animals; but if people see the bad apples, that gives the wrong impression. So in areas that are grazed it is important to get the right person in there that is going to do a good job and has aligned interests and goals with the state agencies.

Laura Cockrell – The California Department of Fish and Wildlife (CDFW) does have properties that have active grazing leases, and the agency is agreeable to using livestock in areas where appropriate. Often the feasibility of grazing has to do with infrastructure; if present, then grazing is easier to incorporate; if not, then that falls on the department to build or to the lessee to do everything, and then they would have to walk away from the time and money invested in that infrastructure when the grazing lease term ends. All leases have to go through a bid process, and that is a complex procedure and can be difficult to navigate for some applicants, including understanding of the lease agreements at a basic level, especially for first-time applicants. So for State lands, having a guide for bidders that could walk them through the process would be necessary.

Kevin Conway – Concurs with Laura regarding the bidding process. In terms of the leases that the Jackson DSF was going to inherit, things that came up during that was enforceability of performance standards, establishment of fair market value and how that relates to AUMs, and the five-year maximum term being problematic. Also, the DSFs don’t have the authority to enter into leases themselves, and so they have to go through DGS, and there needs to be some action to bridge the gaps between the needs of the State and the grazer. Other challenges on DSF lands are that forests are denser now than they used to be making them less useful for grazing livestock; foresters don’t work with livestock much and the knowledge level and expertise for grazing is not sufficient within the DSF personnel, making this more difficult to implement on DSFs. Livestock grazing to help maintain fuel breaks could be helpful, and management with grazing in shrublands as fire hazard mitigation as land cover changes could also be useful. There is also a perception among foresters that animals are not compatible with young tree plantations due to crop damage. Another challenge is the low absolute value coming back to the agency due to things like high up-front costs of infrastructure installation, etc, and we need to figure out a way to internally value the fire reduction and conservation goals as a result of the grazing, and not just monetary value.

Core Question 3: What are the main components of a grazing license, and what are some of the requirements of a grazing license? (in terms of limitations or
expectations for compliance on the part of the lessee and lessor, e.g., monitoring, liability, cost, responsibilities, or outlook on length of leases being negotiable beyond 5 years)

- Larry Ford – wants to clarify the difference between a license (enforceable contract) and a lease. Lots of advantages to using the term license rather than lease, where you are often asking for very specific services to be provided, in addition to the actual grazing. So it is not always just about grazing or getting the maximum value from the livestock operator. In fact, in many situations, it is the reverse, especially with goats: landowner has to pay to get the grazing. So all of this has to be carefully defined. A good license would refer to a living document that might be called a grazing management plan, so it is not all incorporated into the grazing license. Recommends to keep the two separate to keep the responsibilities separate, with the license being more defined and the plan being adaptable as science and management reveals new information or the needs change.

- Katie Delbar – Hopefully at some point these talks will address the lease term limits; five years is when you are just really getting things right. Prescribed grazing on State lands can be an opportunity, particularly on forestlands, to conduct training; train foresters about use of livestock, because they don’t know what to do with them and assume fencing of everything is required (e.g., roads, streams, everything), and they have no idea how to deal with management of livestock. Some agencies on state lands also could benefit from such trainings. Responsibility, cost, monitoring, etc., need to all be in there. But to keep this fair, the bidding process needs to be more accessible and understandable to more people (grazing managers/bidders).

- Marc Horney – Wants to put out a template with some of the main elements; there are already some useful publications about the main elements of a grazing license or lease, and RMAC can build on these specifically for the purpose of creating a grazing license template for State lands. The idea of using livestock for manipulating vegetation is still relatively new, but the idea of it being a business enterprise is even newer. In the past, grazing licenses were focused on how many animals for how long, but now the main goal needs to also include some expectations about the desired impacts that animals are to have on the vegetation. Another important piece will be some acknowledgement that environmental conditions change inter-annually; the agreements will need to include some information on expected weather and climate, but nature has a way of getting around those expectations, so if something happens and it is NOT the grazier’s fault, how that will be addressed needs to be included. Some flexibility will be needed.

- Kristina Wolf – pass

- John Rocha – any agreements needs to define the parcel ownerships, the parties, the terms (length, rent, responsibilities), use, compliance with laws, grazing methods and limitations, and provisions for waste and nuisance, anything involving hazardous materials, and anything that could result in an environmental audit. Include language for protected natural and cultural resources. Provisions for maintenance of existing improvements (water ditches, fencing, etc.). Provisions for fire breaks or weed abatements. Default remedies if the lessee is not using the land in the manner agreed to. Provisions regarding damages and destruction.
• Jennifer Clausse – A grazing plan needs to be submitted by the lessee and approved with each license. Should include any approvals for things like disking or tillage; number of animals allowed and when; fencing requirements, supplemental feeding and content schedules, infrastructure maintenance, etc.

• Clayton Koopman – the AUM-based rate rent is important in terms of achieving ecological benefits; the length of lease, perhaps with a 5-year term and the option to renew for another 5 years would be helpful if performance standards have largely been met and goals and objectives have been achieved; rent credits for infrastructure maintenance or installation could be helpful, and NRCS EQIP funds should be investigated for use. With the leases, similar to the GMPs, keeping them as simple as possible and easy to digest will help with interpretation and implementation.

• Laura Cockrell – Insurance, liability, etc. have already been covered. The land management plans should be flexible for different goals, but ecological monitoring over time will be important, particularly if sensitive species are present. AUMs are all standard and should be included, along with main goals. For CDFW lands the license contents are very dependent on the property and the lease itself.

• Kevin Conway – Noted some unsuccessful legislation this year to extend grazing leases for up to 20 years (AB 434). This would require a legislative change to alter.

Core Question 4: What topics should be covered in a grazing management plan (GMP) for public lands? What performance standards should be included? Who should have the responsibility for monitoring (e.g., agency, grazing lessee)? What are reasonable limits to labor costs and level of effort for an effective monitoring program (e.g., priority variables to measure, level of “research” rigor, assuring the monitoring results in a report for adjustment of management decisions)? What published science-based resources are available to guide development of a monitoring program?

• Larry Ford – a GMP should identify specific expectations about what vegetation management objectives the agency has, and those should stem from goals; and to have goals you need to know what is on the property, so a grazing plan should include what resources are present on the property, which are sensitive to grazing and how; what to expect if weather changes and how that changes management of each of those resources to achieve optimal results given the constraints and conditions; vegetation/habitat management objectives, and problem areas (e.g., weeds, fire hazard reduction zones in strategic locations, eroded or degraded areas, etc.); performance standards, with a logical relationships between goals, objectives, and those standards; flexibility in terms of number of animals, based on the resource needs or changes in resource conditions due to weather or climate factors (note, how often do we have “normal” conditions? rarely).

• Katie Delbar – concurs with Larry, but wanted to ask if state agencies have funds to put together grazing licenses and management plans – what are the constraints on producing and implementing these?

• Marc Horney – concurs with Larry

• Kristina Wolf – pass

• John Rocha – concurs with Larry; also adds that stipulations should be included in regards to performance standards, placement of supplemental feeds to reduce soil compaction; keep animals contained at all times; use of water sources is rotated; any specifications for deviations from specified grazing periods.
• Jennifer Clausse – stocking rates, fencing requirements, irrigation/water rotation/grazing schedules.
• Clayton Koopman – concurs with Larry; there are a lot of template examples out there; the agency needs to have goals, objectives, and targets, and the plan needs to be conducive to meeting those. Average, below-, and above-average production year estimates and appropriate stocking rate guidelines for those years.
• Laura Cockrell – concurs with prior speakers; everything should be laid out so there is as little guesswork as possible in terms of what can and can’t be done.
• Kevin Conway – can hire directly up to about a $10K threshold for development of GMPs, but there have been internal roadblocks in the process.

Core Question 5: How is a fair market value determined?

• Larry Ford – really difficult question, and perhaps the hardest question in this whole panel. There is no good answer; the way fair market value is often determined is based on a NOT-fair market, and is also often based on the highest bidder, and that can outprice many other operators; this can also be based on market value of animals. The variations in market value, though, can be extreme from month-to-month and year-to-year, and that is problematic since livestock operators are operating on a 10-15 year cycle. So instead we should focus on the value derived from grazing and make computations for what you would want to pay for those services. It will often turn out that you are getting a higher value in those services than you could possibly get from a lease payment, so in those cases it could be more appropriate to actually PAY the livestock operator. We need to adjust our expectations; grazing is a very effective tool and often we should actually be paying for it, and if we don't, we won't be getting as good of results.
• Katie Delbar – concurs with Larry
• Marc Horney – concurs with Larry
• Kristina Wolf – pass
• John Rocha – concurs with Larry; most grazing comes from Requests for Proposals (RFPs) but often the highest bidder is the one that gets the lease. The county has not been in the habit of establishing a well thought out market value, and has focused primarily on making the county “whole” so to speak.
• Jennifer Clausse – dropped call, pass
• Clayton Koopman – cannot emphasize enough the importance of selecting grazing tenants based on qualifications, experience, and results as opposed to a high bidder if you want to see any accomplishment of goals and objectives. For fall calvers, they sell typically in June, so they assess the value of their calves at that time and that determines an AUM rate – so the rate is determined based on one point in time and how the market is doing at that time. If the market is good, the tenant pays more, and vice versa; this may be a decent way to determine a fair market value at this point. But stay away from the high bid process, use an RFP instead, and choose the best manager for the property.

• Laura Cockrell – Often selection depends on the specific objectives of the property.
• Kevin Conway – often work items are included for the lessee to do/meet, and that might help increase the quality of bidders.

Next steps: the RMAC has discussed ultimately developing a template grazing license or checklist, field guide, booklet, or other guidance that would work better for grazing managers and operators, and would be acceptable to the State Department of General Services.

Chair Horney: If we think this is a worthwhile undertaking, would anyone be interested in helping in this endeavor?

**Kevin Conway volunteered, and also iterated that identifying the limitations of state contracting will be very important.**

Marc: set a deadline that by the June 2022 meeting RMAC would like to have a template developed, a handbook for guidance of how to assemble and organize this information, and create a grazing management plan outline. Would any RMAC members like to participate in such a working group, if formed?

**Lance Criley, and Bart Cremers volunteered. Larry Ford would also be happy to be involved in some capacity. We will be recruiting other experts to participate as well. We will move forward on this.**

7) **Update and Discussion of State Water Resources Control Board Development of Grazing Guidance – Jessica Leonard, State Water Resources Control Board (SWRCB); Kristina Wolf, Board staff; and Chair Marc Horney**

Jessica Leonard, an Environmental Scientist with the SWRCB, gave a presentation on a non-regulatory document currently in development for establishing some guidance on best management practices for grazing on rangelands in the context of water quality. Ms. Leonard reviewed the history of water quality management plans, objectives, training opportunities, and regulations. Current project is utilizing prior Grazing Regulatory Action Project (GRAP), but is also decoupling it from regulatory aspects and focusing on updating the technical resources and the science, with the additional goals of fostering collaboration and working together to reduce impacts by increasing education and access to technical resources. The SWRCB has conducted stakeholder outreach starting in April 2020, and is looking to develop a comprehensive list of management practices to be included in the guidance to encourage practices that will protect water quality. Draft documents will be released for public comment, and this will probably occur in November or December. Goals are to:
Promote effective management practices, educate the public on potential impacts to water quality from grazing, and update the 25-year old Rangeland Water Quality Management Plan.

Chair Horney and Dr. Wolf participated in the SWRCB forum to provide feedback on the BMPs, and RMAC members or stakeholders can submit comments on the SWRCB BMPs by emailing Dr. Wolf by close of business August 24th.

Member Soares asked if positive impacts of grazing on water quality will be included in the document; Ms. Leonard stated that yes, that would be acknowledged.

Chair Horney stated that he is working on some grazing projects in riparian areas on the Central Coast for the purpose of controlling vegetation, mitigating wildfire risk, etc., and he asked if the grazing guidelines address livestock in riparian ecosystems for the purpose of these kinds of benefits or BMPs in these conditions. Ms. Leonard stated that the SWRCB will be researching BMPs for targeted grazing in riparian areas, and is entertaining the idea of including these in the grazing guidance if the information gathering indicates it would be appropriate to do so.

Chair Horney asked about recommend practices for monitoring water quality in grazing operations. Ms. Leonard stated that if anything will be included in the guidance on this, it would be in the form, perhaps, of information sheets on this topic. The guidance document will not, however, likely address this in any detail, although the SWRCB is accepting feedback on the components of this grazing guidance.

Ms. Leonard would be happy to come back again as we get closer to the draft release date, and she can be reached by the email in her presentation.

Ms. Leonard’s presentation and draft BMPs will be posted to the RMAC webpage under meeting materials.

8) Updates from Partner Organizations & Public Forum

None.

Chair Horney asked if Member Criley is aware of the IQ Agreement that the USFS is using for grazing contracts, and if we can get a copy of one of them. Member Criley said he will try to track that down.

At 5 PM today the Society for Range Management is holding an online webinar for grazing around solar power installations.

The last RMAC workshop is coming up this Thursday, August 12th.

Next meeting: TBA

Meeting Adjourned at 3:28 PM.