

Range Management Advisory Committee

State Lands Grazing License and Land Management Guidebook



California State Board of Forestry and Fire Protection ('Board')
Range Management Advisory Committee (RMAC)
State Grazing License and Land Management Sub-Committee ('RMAC Sub-Committee')



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Acronyms

ATV All-terrain vehicle

AU Animal Unit

AUM Animal Unit Month

BOF Board of Forestry and Fire Protection ('Board')

CCR California Code of Regulations

CDFW California department of Fish and Wildlife
CEQA California Environmental Quality Act

CRM Certified Rangeland Manager
GMP Grazing Management Plan
MAP Management Action Plan

RDM Residual Dry Matter

RMAC Range Management Advisory Committee

RMP Resource Management Plan

PRC Public Resources Code

SLGLLM State Lands Grazing License and Land Management ('Sub-committee')

USDA United States Department of Agriculture

Definitions

Contract grazing

Contractee

Contractor

Fire fuels

Grazier

Licensee

Licensor

Managed grazing

Overgrazing

Prescribed grazing

Targeted grazing

Tenant

FOREWORD

The Range Management Advisory Committee (RMAC) is authorized by Section 741 of the Public Resources Code (PRC) (CITE) of the State of California to provide a source of counsel for the Board of Forestry and Fire Protection ('Board') concerning the rangelands of California. The mission of RMAC is to consider issues related to California's rangeland resources, provide recommendations on addressing them, facilitate strong relationships with local, state and federal agencies and develop solutions that are based on environmental, social, and economic information that is current, data-driven, and considers diverse perspectives.

A subcommittee of the RMAC developed templates for a Grazing License Agreement for Public Lands template ('License template'; see **Appendix A**) and a Management Action Plan (MAP) template ('MAP template'; see **Appendix B**) to guide and support California government agencies and graziers in utilizing managed livestock grazing as a tool to enhance ecological and sustainability values and to reduce fire fuels on public lands.

The MAP template includes a Grazing Management Plan (GMP) section that should guide the implementation of specific grazing-related actions and activities developed by the landowner and to accomplish goals and objectives stated in a more comprehensive, related Resource Management Plan (RMP) for a property or set of properties. Not all properties will have an RMP, but it is recommended that one be developed to provide an overarching document outlining the resources, goals, and needs of the

THE 'STATE LANDS GRAZING PACKET' CONSISTS OF THREE DOCUMENTS:

- GRAZING LICENSE AGREEMENT
- MANAGEMENT ACTION PLAN
- GUIDEBOOK

property or properties. The MAP would then act as a supplement to the RMP on properties that are grazed by livestock.

This Guidebook was developed as a supplement to the License and MAP templates to provide more in-depth information related to the development of specific items and to provide a directory of related resources. Many historical sustainable grazing management programs exist on state lands that can serve as a model to those looking to utilize grazing as a land management tool on public lands. Collectively, the three documents developed by the State Lands Grazing License and Land Management (SLGLLM) sub-committee—the License template, MAP template, and Guidebook—are referred to as the 'State Lands Grazing Packet'. Together, these three documents of the State Lands Grazing Packet provide tools to assist agency staff in streamlining the implementation of grazing management programs as well as providing resources to guide existing grazing programs. While developed for use on California's Public Lands, the principles within these documents can be applied to other public and private lands.

The efforts to develop the State Lands Grazing Packet contribute to meeting the RMAC's Strategic Plan objective to "Share information and education with Certified Range Managers and government agency rangeland and forestry staff to grow professional knowledge in the field of rangeland health."

State Lands Grazing License and Land Management (SLGLLM) sub-committee Members:

- Bart Cremers* RMAC, WILDLANDS and rancher
- Lawrence Ford, PhD* Rangeland Conservation Science (consultants)
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NOTE: Additional editing and contributions were made via stakeholders across various public agencies and during two public comment periods, which were opened during the development of the State Lands Grazing Packet: a 30-day review beginning July 22, 2022 and a 15-day review beginning September 18, 2024.







INTRODUCTION

California Rangelands

California's grasslands in its Mediterranean climate zone are presently dominated by annual grasses and forbs. These plants were first introduced to California shores as seed from ship-borne livestock feed harvested and transported from the European Mediterranean region during Spanish exploration and colonization beginning in the mid-1500s and peaking in the mid through late 1700s. Mediterranean grasslands of Europe had evolved plant communities characterized by a diversity of both annual and perennial grasses, together with annual and perennial herbs, and various woody species. The introduction of these annual grasses into California's Mediterranean climate zone resulted in their dominance of most of California's Mediterranean-type grasslands. In high-altitude meadows, the Transverse Ranges, Mojave Desert, and east of the Mediterranean climate zone, many of the introduced Mediterranean species occur in the grasslands with the original native grassland and shrubland species. Paradoxically, California's Mediterranean grasslands are recognized as a global "hotspot" of biodiversity, with high numbers of endangered and threatened native species (Bartolome et al. 2014). Many of these native species benefit from grazing by livestock that reduces the mass and height of the introduced annual grasses. Without ongoing management, these grasslands can build up high volumes of annual grass residues, which together with woody fuels, increase ignition risks and the intensity and spread of wildfires (Ratcliff et al. 2022). These herbaceous fuels can often be effectively reduced by livestock grazing, and so also can some canopy components of shrublands be thinned and collapsed to reduce combustion rates and flame lengths.

Livestock Grazing as a Management Tool

Livestock grazing can be a practical and economical management tool for habitat conservation and fire fuel reduction in California grasslands. It is challenging for managers to balance grazing operations with the integration of conservation goals associated with many State lands. These objectives combine the conventional range management goals of preserving ecological functions, ecosystem stability, resilience, and productivity with the conservation objectives of minimizing soil erosion, invasive pest plant infestations and spread, and water pollution, and improving and sustaining conventional grazing operations to accomplish the combined objectives in specific locations and circumstances. Succeeding at this throughout California's diverse and dynamic grasslands, driven ecologically by variable and unpredictable weather, and by the demands for economically sustainable grazing operations, will require adaptable management guided by the best available science.

When grazing is chosen as a management tool, the land manager must keep in mind that the management measures and parameters must be compatible with the livestock operation and allow for a profitable livestock enterprise. Understanding the annual schedule of both the animals and the livestock industry are important in developing a successful grazing program on any site. A successful program will balance the site-specific habitat and related conservation needs with the needs of the livestock operation to develop a plan that optimizes both. It is important to understand that any one site is part of a larger grazing system, and the livestock have seasonal requirements and limitations as does the other land within the grazing system. For instance, there are typical grazing seasons for any type of livestock, which a land manager needs to understand and consider when developing a grazing license agreement and associated grazing management plan. Starting or ending the contract period of a License at a non-conventional time of year may make it difficult for grazers to accommodate, or make it financially less

viable for a grazer, and therefore make it more difficult to find an operation able and willing to graze. Often the timing that livestock go to one property may be dictated by when they have to leave another property, either based on environmental conditions such as feed or water availability or lease stipulations. Extensive planning goes into securing forages throughout the year that meet the livestock's requirements and they are not generally moved around on a whim. Livestock are not simply waiting somewhere until spontaneously needed at another location.

The information contained in this Guidebook will address a variety of these factors and assist managers in developing a comprehensive MAP and embedded GMP that will help managers achieve their local goals and objectives. For these reasons, it is important for land managers to seek input from experienced livestock managers and rangeland managers-preferably Certified Rangeland Managers (CRM) before finalizing the agreement and management plan details. This Guidebook will explain some of these concepts and provide additional information to help land managers better understand the necessary considerations when using the License and MAP templates.

Purpose of the Management Action Plan (MAP)

Management Action Plans (MAPs) are written as implementation plans for specific actions and activities identified to accomplish goals and objectives stated in the Resource Management Plans (RMPs) for a property. In many cases, these may take the form of supplemental California Environmental Quality Act (CEQA) documents which tier off existing RMPs, other land management plans, and other documents with similar purposes. One example is the use of prescribed grazing, which this document focuses on, but can include many other activities based on the type of land and its uses. Land use or environmental objectives can range from simple "general vegetation reduction" for portions of the property to more selective reduction of specific plant canopies for wildlife habitat, minimizing fuels, maintaining access to trails, or other purposes. In the case of grazing, a state agency may need to establish an agreement with a livestock manager/grazing service provider for the work. The grazing agreement would be based on a MAP drafted to cover the grazing practice being contracted.

We recognize that some public agencies, conservation organizations, and private landowners might not have sufficient time or funding to develop a plan as described here prior to utilizing grazing, where an immediate need exists. We recommend those in that position seek assistance in developing a simplified initial plan. For state agencies or conservation organizations, such plans might be developed by modifying existing plans already created for other similar properties managed by the agency/organization or from plans created by other state or federal land management agencies or allied organizations. Sections identified with asterisks (*) in the outlines are critical to address in any simplified plan. Examples of management plans that follow the suggested structure and content will be posted by RMAC and updated periodically for reference. These examples will eventually represent a fuller range of complexity and specificity in terms of land management objectives and operational constraints.

Private landowners can also receive planning assistance from staff at their local USDA Natural Resource Conservation Service office (<u>See</u> under "Find your Local Service Center" on https://www.nrcs.usda.gov/conservation-basics/conservation-by-state/california) or their local University of California Cooperative Extension/UCANR office (https://ucanr.edu/About/Locations/).

As noted above, the MAP for grazing management will be separate from the RMP, which should include a broader explanation of how management of the subject land is governed by any purposefully or legally

mandated processes, objectives, or constraints such as easements, Habitat Conservation Plans, resource management plans, or timber/forest management plans. The MAP for grazing management is meant to complement the RMP as a means of accomplishing the RMP's grazing-related goals and objectives. Like any other management action undertaken with the purpose of producing specific outcomes, a practical evaluation of whether the grazing treatment(s) have produced these outcomes to the level intended must be a part of the MAP. The MAP need not reiterate all the work in the RMP, but should build on it.

Existing RMPs for a specific property may have information already developed that assesses relevant resource vulnerabilities to and benefits from grazing. In such cases, the current MAP for grazing management need only reference the RMP. An RMP will not normally provide for assessments of the implementation of specific land treatments, where a variety of different alternatives are possible, unless it is part of a RMP or other document used to comply with CEQA. It *should* provide for how the resources affected by those treatments will be monitored, though, and that information will be carried over into the monitoring component of the MAP for grazing management. Good documentation of how grazing and other land treatments were implemented, and other site-specific environmental factors at the time are crucial to interpreting the results of the efforts. The current planning effort presented at the link below should cover all items in the template. The Multi-Agency Cooperative Forest Management Plan developed by CAL FIRE (https://ucanr.edu/sites/forestry/files/318079.docx) is one example of an RMP. Other divisions within the California Natural Resources Agency likely have their own.

Livestock grazing has many interacting effects on resources of rangeland and associated pastureland that should be included in a plan that is intended to conserve ecosystems, not just targeted species or agricultural opportunities. The plan should include both real and effective conservation, but also be feasible and sustainable for grazing operators and their broader community that supports each grazing contractor (lessee/licensee). Plans for all significant management actions, including grazing, must include measurable objectives and performance standards, and include monitoring of implementation and effects (results/outcomes). Grazing management plans should include monitoring and adaptation plans, with methods and processes for making adjustments to the plan of operation well described.

The management goals and objectives derived from the RMP or developed separately from an RMP process and clearly stated in the MAP for grazing management should drive the actual grazing management. Grazing management strategies should be chosen to best achieve the identified natural resource objectives. Grazing management strategies should detail specifically the desired outcomes of the grazing. Conventionally, specifics of the grazing operation are included:

- WHEN and WHERE the grazing will occur;
- WHAT STANDARDS for forage utilization will apply (e.g., Residual Dry Matter standards in annual dominated grasslands, percent utilization in perennial systems);
- WHAT KINDS OF ANIMALS will be used (e.g., species, approximate weight, stage of production);
- **HOW LONG** the animals will remain in the property;
- **RETURN INTERVALS** (i.e., whether the grazing treatment is to be repeated within a season);
- HOW FREQUENTLY the animals are expected to return (e.g., how long in the property, how long removed before the return); and,
- Indication of likely conditions which would cause grazing to be suspended (e.g., saturated

soils, public use, drought, etc.).

In general, it can be advantageous to allow the grazing operator to decide how to graze the land to best achieve the stated goals and objectives, so long as the pre-defined performance standards are met, and subject to the terms of the MAP for grazing management and the grazing lease/license. This gives more opportunity for collaboration, and more frequently results in the desired resource conditions. It also makes the job of monitoring more focused on results of grazing management rather than the grazing operations, and thus more likely to be conducted and useful.

Alternative text to above paragraph (beginning with "In general... and ending with ... conducted and useful"): It can be advantageous to allow the grazing operator to decide how to graze the land to best achieve the stated goals and objectives, as long as the pre-defined performance standards are met, and subject to the terms of the MAP for grazing management and the grazing lease/license. This allows for more collaboration, which results more frequently in the desired resource conditions. It also focuses monitoring on the results of grazing management rather than the grazing operations, which can lead to monitoring data to be complete and useful for rangeland and grazing resources.

USING THIS GUIDEBOOK

The License template (**Appendix A**) and MAP template (**Appendix B**) were developed with general language that could be applied to any property or project, with the addition of site-specific details. Some of the items within the outlines are self-explanatory, such as the parties involved, property location, assessor's parcel numbers, etc. Other items, such as structuring grazing fees, may have several options with different implications and may require more specific knowledge of grazing systems or livestock production. In this Guidebook, the **Grazing License Agreement** section contains a list of explanations and additional information as is relates to specific items in the License template (**Appendix A**). The section on the **Management Action Plan** contains explanations and additional information pertaining to specific items in the MAP template (**Appendix B**). This Guidebook ends with a list of References and Resources providing supplemental information on these subjects.

GRAZING LICENSE AGREEMENT

It can be helpful when putting together a License to also develop and attach various exhibits to clearly illustrate boundaries of the property on an aerial photo, assessors' parcels, fencing, infrastructure, etc. In addition to these exhibits, when managing sensitive habitat areas, a land management plan should be developed to include habitat stewardship goals, grazing management goals, and monitoring (see **Appendix B**). The License should focus primarily on the legal aspects of the agreement and work in conjunction with the MAP, which focuses on the stewardship of the land.

The following explanations pertain to the corresponding numbered and/or alphabetical items in the License template (**Appendix A**) and are meant to highlight items to be taken into consideration and to provide additional information to land managers to assist in the decision-making process when developing this agreement. As not all numbered items in the License template require extensive explanation, not all numbered items will be represented below.

Grazing License Agreement Guidance

2. Description of the property

c. As part of the Agency's authority to lease the property, they may also need to include nondiscrimination language and Americans with Disabilities Act language.

3. Term of License, termination, or extension

A grazing agreement can be structured to cover any duration, depending on Agency policies. A typical grazing license would be one year minimum, and up to five years or more. In general, a longer-duration license is more desirable to the grazing tenant ('licensee'), allowing them to plan long-term. A tenant is also more likely to make improvements to the site if they know they can benefit from the improvements for several years. A longer-term agreement also benefits the Agency by not having to seek a new tenant and conduct the bid process annually, and it also provides continuity of management. A potential downfall of a longer-term agreement is that if a tenant has a multi-year agreement, it can be more difficult to switch tenants if management is not performed to expectations. Tenants are generally less likely to make any improvements on the property if they don't know how much return they will get in the form of continued use. Ideally a grazing tenant would treat the land well no matter the duration of the agreement, but a longer-term agreement incentivizes taking care of the land because the tenant knows they are coming back the next year. One option to offer security and incentive to the tenant if Agency policies prohibit a multi-year agreement is to offer an automatic renewal for a given number of years.

- b. Possession vs. occupation, for example if you move onto an allotment do you take possession or just occupy in conjunction with other users.
- c. It is common for grazing to be seasonal on a site, based on the site's habitat management needs, availability of forages and water, nutritional value of forages, and the livestock's needs. These seasons generally correspond to a "winter" grazing season, October or November to May or June, and a "summer" grazing season from May or June to October or November. The License should specify on/off dates with the ability to move these dates earlier or later in the season in any given year, based on annual conditions. For example, in a poor rain year, livestock may need to be removed from winter pasture earlier than normal due to lack of forages or water availability. Under the same circumstances summer pasture may become drier earlier, or may have less snow which melts earlier, allowing the lease to start earlier than normal. In a year with abundant rainfall, a winter lease may last longer to remove excess vegetation later in the season, to take advantage of high-quality forages later in the season, or water availability may extend the grazing season. A summer lease may start later due to excess snow that melts later in the season or a later thaw. These environmental factors affect not only the site that the livestock are currently grazing but could also affect the site that the livestock are moving to for the next season. For this reason, there should be a strong working relationship between the land manager and the grazing tenant so that decisions such as altering the duration of the grazing season can be made with input from both sides, with enough advance notice for planning.
- d. Many different circumstances could trigger early termination of the grazing agreement from either party in the agreement. A catastrophic environmental occurrence such as drought, fire, or flooding could cause damage to infrastructure or loss of feed, rendering the site ungrazeable.

Other examples of why a tenant may want to terminate an agreement early could be plant toxicity, water source contamination, disease, or unmanageable predation. Poor management such as not following the terms of the grazing license, not following the Grazing Management Plan, or failing to meet performance standards could cause early termination of the grazing agreement by the landowner. In general, if the cause for early termination is environmental or vandalism and not the fault of the grazing tenant, the tenant would be credited a prorated portion of the rent and may be credited the lost grazing seasons, once the site is grazeable again, rather than having to bid on the grazing again. If the cause of early termination is the fault of the tenant, such as not meeting performance standards or not following the license terms, then the tenant generally does not receive any payment credit. It is important to note that performance standards must be clear and measurable to be enforceable in circumstances such as early termination of a grazing agreement.

e. If Agency policies limit the length of a grazing agreement to one year, automatic term renewals can be used to offer incentive and security to the potential tenant. For example, a license could be written to automatically renew for three annual terms if the licensee continually complies with the associated MAP and meets performance standards. This gives the licensee the security of a three-year grazing agreement and the incentive to make improvements on site which benefit the licensee and can also benefit the property and future tenants.

4. Rent or payment; credits for improvements; fee-for-service

a. Rent payments can be structured around several parameters, each with their own benefits and drawbacks. Typical methods to calculate payments include a per acre basis, a per head basis, an animal unit month basis, or by weight gain. The per acre and per head options could be based on an annual basis which would be the same regardless of how long the grazing season lasts, or on a monthly basis depending on how long the site is grazed each season. The per acre per year structure is the easiest method to use because the land manager doesn't need to keep track of how many animals are on site or how long they are there, the fee is the same regardless. However, this method can also lead to overgrazing, as a tenant is more likely to maximize the number of animals or length of season to recuperate their cost since there is no cost increase to graze more. They may also be less likely to remove livestock in a poor forage year since they are paying for grazing regardless. This is especially true if a tenant has overpaid to secure the grazing license. To alleviate some of these potential problems, a maximum stocking rate or off date can be included in the grazing license as well as performance standards in an associated grazing plan. In addition, rent could be structured on a per acre per month basis so that if the lessee removes their animals due to poor forage conditions, they are not still paying.



Paying on a per head or animal unit month (AUM) basis can work well from an ecological standpoint as it can reduce the incentive to overutilize the site because the more animals or time spent on site cost more for the licensee. Because the tenant only pays for what they use, if they must remove animals in a poor feed year, they are not charged for that feed. However, this could also lead to under-grazing because the lessee is only paying for the animals that are there, so they could leave areas ungrazed or under-grazed which might not meet management goals. Moreover, this method

An animal unit (AU) is equivalent to one 1,000-pound cow and her nursing calf, and an animal unit month (AUM) is the amount of forage required to support one animal unit for one month. More information on AUMs and AUM equivalencies across species can be found in the link in the References and Resources section.

requires more accounting by the landowner to track the number of animals and on off dates, or a certain amount of trust that the licensee will accurately report this information. The screening that occurs during the bid process should help to select a trustworthy licensee.

Rent can also be assessed on a per pound of gain rate. This would require use of a certified scale to weigh the livestock when they arrive at the beginning of the grazing season and when they are shipped at the end of the grazing season. This method would be geared more toward a stocker grazing operation than a cow/calf operation and rent payments could be low in a drought year where the cattle do not gain well.

Another payment option which can benefit both parties is to offer fee credits for improvements. These improvements could include building fence, building corrals, or developing or expanding the water system. A per foot price for fence or an overall project cost would be agreed upon beforehand and this value would be credited toward the rent payment after the work is completed. The same idea could be applied to management practices that go beyond the scope of normal grazing such as exotic weed treatment or an intensified grazing treatment on part of the property that requires more labor or temporary fencing. This additional work which is credited toward the rent payment benefits the tenant as it guarantees that rent payments go directly to the property in the form of infrastructure that can be used in future grazing seasons or potential increased forages in the case of vegetation treatments. It also benefits the landowner by getting work done on the land in the form of permanent infrastructure that they own that will benefit the property for years as well as potential habitat improvements. Agency policies may vary on whether they can offer credits for on-site improvements or if they require cash payments for rent.

There is not one correct fee structure that fits all situations and multiple options could work for one situation. The pros and cons should be weighed for each site and each situation and ultimately it will come down to the type of livestock used, site-specific parameters, and Agency preferences.

6. Uses of the property

a. Explain the distinction between a "license to graze" and a "license of the property". Also explain what the term "lease" means and talk about exclusive use of property.

8. Maintenance, repairs, and improvements

a. Generally, the property owner is responsible for providing all infrastructure on site in good working order at the beginning of the grazing term. The licensee is typically responsible for general maintenance to keep the infrastructure in working order throughout the grazing term. The grazing license should clearly specify these details. A dollar threshold may be specified in the license signifying when something goes beyond the responsibility of the licensee (maintenance) to the responsibility of the landowner (repair). An example of this might be the tenant conducting routine maintenance on a pump, but when the pump fails, the landowner repairs or replaces it. Another example could be the tenant maintains broken fence wire throughout the season but if a car crashes into the fence, knocking out gates and brace posts, the landowner replaces that. If the tenant will be responsible for building or maintaining fencing, the property owner should consider including fence specifications in the license. California Food and Agriculture Code § 17121 (CITE) describes a 'lawful fence":

A lawful fence is any fence which is good, strong, substantial, and sufficient to prevent the ingress and egress of livestock. No wire fence is a good and substantial fence within the meaning of this article unless it has three tightly stretched barbed wires securely fastened to posts of reasonable strength, firmly set in the ground not more than one rod apart, one of which wires shall be at least four feet above the surface of the ground. Any kind of wire or other fence of height, strength and capacity equal to or greater than the wire fence herein described is a good and substantial fence within the meaning of this article. The term "lawful fence" includes cattle guards of such width, depth, rail spacing, and construction as will effectively turn livestock.







This lawful fence definition is a minimum standard. Some landowners might consider specifying spacing between t-posts (12 feet is an accepted standard), weight of t-posts (1.33 pounds/foot is an accepted standard), and number of wires (four to five is an accepted standard) when the lessee will be repairing and replacing fence to maintain acceptable standards on site. Some agencies prefer to use "wildlife friendly" fences which may include smooth top and bottom wires at specific heights to allow for easier wildlife passage whilestill containing livestock. These fences can be compatible with cattle but are less compatible with sheep and goats. Any desired fence specifications should be detailed in the license.

10. Additional limits or restrictions on ranching/farming practices

c. Often a license will have language prohibiting use of offroad vehicles (e.g., all-terrain vehicles) or limiting vehicle travel to designated roads. All-terrain vehicles (ATVs) are an important management tool for many grazing operations used for everything from checking, treating, and gathering livestock to hauling nutrient supplements to checking and fixing fences. Most of these activities cannot be limited to designated roads. It is important in the license to distinguish between recreation vehicle use and use of vehicles for management purposes. ATVs used for animal management and husbandry should be avoided with ATVs, in which case, these areas should be clearly mapped and described in the license.

11. Subcontracting

a. Subcontracting or subletting is when the party holding a grazing license (i.e., the 'Licensee') then rents all or a portion of the property to *another* party for their use. The party initially selected for the lease may no longer be involved once they subcontract the grazing. Subcontracting is generally not accepted as it involves a potentially unknown third party who was not part of the application or screening process. In addition, since the person grazing the property is not on the grazing license it can be difficult to enforce performance standards and can have legal ramifications if something goes wrong on site.

This section should also address the policy on taking in "pasture cattle". This is a term used when the licensee grazes cattle they do not own. An example would be if the licensee brought in stocker cattle, owned by someone else, who was paying the licensee on a per-pound-of-gain basis to feed and manage the cattle for the season. This is like subcontracting but has some distinct differences. The main difference is that the licensee is still managing the livestock and the grazing and is still the on-site presence. With subcontracting, the licensee would be hands-off while a third-party would bring in the livestock and conduct the management on site. Taking in "pasture cattle" is generally more accepted in grazing agreements than subcontracting but should be considered on a case-by-case basis, depending on the situation. This can also be addressed in the "Entry" section of the license (Section 7) that outlines who is allowed to enter/use the property.

14. Damage or Destruction

a. This section should specify policies for the livestock, payment credits, and future use of the property if the property is damaged by an act of nature vs. vandalism vs. the fault of the licensee. The same policies would apply as were described in Section 3b, above.

MANAGEMENT ACTION PLAN

The MAP template (**Appendix B**) was designed to assist land managers in developing a proper grazing plan to achieve stated goals and objectives for use on a working landscape. The MAP template details the critical items to be included in any MAP as well as additional items for inclusion in a more comprehensive or specialized plan (i.e., such as a larger RMP). While the comprehensive version is recommended, the condensed version still compiles all the resources necessary for a successful MAP. The outline does not describe every detail suggested by commenters, but provides the topics to develop, including those issues. It guides the rangeland manager in developing the MAP from resource assessment and management objectives through monitoring and adaptation.

Land managed by state agencies is often associated with specific management goals and objectives related to the property's acquisition and landowner policies, often including uses such as recreation and wildlife habitat, and are usually defined in a comprehensive RMP. When grazing management is used as a tool there are generally additional goals and objectives that range from habitat enhancement to fire fuel reduction. The objectives should be clearly outlined in the MAP. These plans can range from simple to complex, but at the very least they should clearly outline the objectives of the management and how success of these objectives will be measured. The plan should define desired and expected grazing management results and the performance standards for each objective that can demonstrate compliance with and effectiveness of the plan. MAPs should be developed with a Certified Range Manager (CRM) where required, and with input from an experienced livestock manager. Engagement of

a Certified Rangeland Manager is not required in all circumstances. See the section on **Certified Rangeland Managers** for more information on the importance of utilizing a CRM to develop MAPs and other grazing recommendations.

Management Action Plan Guidance

This section elaborates on specific items from the Land/Grazing Management Outline (**Appendix B**) that warrant further discussion and clarification.

TBD...

viore information can be obtained working with the regional RCD or local UC extensions agent.

Monitoring

One common aspect of management plans is monitoring. Monitoring can be used to measure the effectiveness of management practices at meeting the objectives. Many resources have been published detailing various rangeland monitoring methods and their uses. A monitoring regime is project specific and should be tailored toward the specific site and specific objectives. For these reasons, this document will not get into specific monitoring methodology, as it is much too vast of a subject area. However, many useful monitoring resources are provided below in the section on **References and Resources**.

Certified Rangeland Managers

MAP Preparation by a Certified Range Manager

Preparation of Management Action Plans (MAPs) for grazing management should be overseen or prepared by a professional with expertise in both rangeland ecology and management and livestock management. Individuals holding California Certified Range Manager (CRM) licenses can provide this expertise (Public Resources Code sections 762, 766, and 772 and California Code of Regulations, title 14, sections 1650 and 1651; California Code of Regulations, title 14, section 1651(a)). CRMs practice rangeland management as field of forestry, and as a certified specialty instead of being registered as a "professional forester."

Policy Number 12 of the Board of Forestry and Fire Protection (BOF) specifically requires a CRM for the following:

- 1. "Drafting rangeland management plans to meet specific natural resource objectives, including:
 - a. Vegetative fuel management on rangelands;
 - b. Control or management of invasive species;
 - c. Reintroduction or increase of desirable species;
 - d. Improvement of economic viability of rangeland;
 - e. Mitigation of potential environmental effects.
- 2. Developing and implementing means of improving or maintaining watershed function.
- 3. Conducting rangeland inventories and assessments.
- 4. Making recommendations regarding prescriptive grazing on rangelands.
- 5. Planning and implementation of rangeland monitoring programs.
- 6. Providing recommendations regarding conservation of, and regard for, rangeland as an expression of open space, viewshed, watershed, and other public benefits."

Policy Number 12 "... recognizes that performance of the following tasks does not constitute the practice of rangeland management, under the Professional Foresters Law, unless the tasks are exclusively directed toward the management and treatment of rangelands:

- 1. Mapping, acreage/vegetative cover determination or other site evaluations through photogrammetry, Geographical Information Systems (GIS), and/or surveyed location.
- 2. Mitigating or recommending mitigation of impacts from previous or proposed land use activities by other environmental experts within their field of expertise.
- 3. Determinations of significance pursuant to the California Environmental Quality Act (CEQA)."

A useful assessment of these legal requirements was provided by the California Attorney General (Bagley 2008). This assessment also helps clarify differences between the requirement and the recommendation to involve CRMs in professional rangeland management. Those rangeland management activities performed personally on the subject property by the landowner are exempt (PRC Sections 756 and 757) (CITE). Other rangelands and other professional work in rangelands may also be exempt under these regulations. For example, California Code of Regulations (CCR), title 14, section 1621 (CITE) states that landscape gardening, horticulture, and agricultural pursuits not related to tree growing are exempt.

How to Become a Certified Range Manager

The Program for Certification of Rangeland Managers supports a Certification Panel of the California-Pacific Section of the Society for Range Management (BOF 2021). In all circumstances, the Section recommends involvement of a licensed CRM to provide the benefits of professional competency, to protect the public interest, and to ensure proper management of California's rangeland resources. A CRM applies scientific principles to the art and science of managing rangelands in the context of the Professional Foresters Law definition of "forested landscapes." The CRM Certification Panel certifies applicants based on their educational and experience qualifications, including experience with California rangelands. Following review of applications, the Panel may recommend individuals to the Board of Forestry and Fire Protection for the CRM exam, which is developed and graded by the Panel. The exam focuses on principles and skills as applied to California rangeland types. If passed, the examinee is recommended to the Board of Forestry and Fire Protection for licensing. CRMs are obliged to follow a Code of Ethics and are encouraged to maintain their proficiency through continuing education.

When is a Certified Range Manager Required?

A person is required to be a CRM to practice professional rangeland management on state and private lands when it involves activities undertaken on "forested landscapes." CCR Title 14, Section 754 defines forested landscapes as "...tree dominated landscapes and their associated vegetation types on which there is growing a significant stand of tree species, or which are naturally capable of growing a significant stand of native trees in perpetuity, and is not otherwise devoted to non-forestry commercial, urban, or farming uses."

PRC Section 756 stipulates that a CRM must be in charge of any professional practice or the work of others who are not licensed; and that all professional work or documents must be produced by or under the supervision of the CRM for covered rangelands.

It is becoming an increasing common practice to require CRM licenses for both employees and grantrecipients of public and private organizations that manage California rangelands (e.g. University of California Department of Agriculture and Natural Resources, California Department of Food and Agriculture's Healthy Soils Program). The Certification Panel is currently working to improve the certification process to produce more CRMs to meet the increasing demand for their services. The Panel is working on new ways to:

- 1. Make more existing CRMs available.
- 2. Provide more opportunities for potentially interested students and applicants to fulfill educational deficiencies.
- 3. Support more non-conventional rangeland managers to go through the process to become a licensed CRM.

Thus, this RMAC Sub-Committee strongly endorses the practice of grazing management plan development by a CRM.



REFERENCES AND RESOURCES

Grazing License Agreements

- Guide to Regenerative Grazing Leases: Opportunities for Resilience Published in 2022, this booklet provides dozens of resources and reference for land managers. This publication focuses on livestock grazing leases on private lands but can provide useful resources and case studies for public land managers.
 - https://www.californiafarmlink.org/resources/guide-to-regenerative-grazing-leases-opportunities-for-resilience/
- A Guide to Livestock Leases for Annual Rangelands: University of California Agriculture and Natural Resources, 2020. https://anrcatalog.ucanr.edu/pdf/8679.pdf

Land/Grazing Management Plans:

Monitoring:

- Guide to Regenerative Grazing Leases: Opportunities for Resilience
 https://www.californiafarmlink.org/resources/guide-to-regenerative-grazing-leases-opportunities-for-resilience/
- Monitoring for Successful Grazing Management
 https://extension.oregonstate.edu/animals-livestock/beef/monitoring-key-successful-grazing-management

Additional Resources

- University of California Cooperative Extension Livestock and Natural Resources Advisors: A
 network of scientists and educators located across the state of California that can provide
 technical advice on the development of grazing programs, assist with solicitation of grazing
 opportunities to the livestock industry, and more. UC Cooperative Extension Advisors conduct
 science-based extension and outreach; along with scientific studies to advance sustainable
 livestock grazing management.
- Certified Rangeland Mangers: There are over 100 individuals in California that are a "Certified Rangeland Manager" (CRM), licensed under the California Board of Forestry and Fire Protection. These professionals can serve as technical advisors to state agencies looking to implement grazing programs. Learn more at https://casrm.rangelands.org/index.html.
- Determining Carrying Capacity and Stocking Rates: NDSU Extension
 https://www.nrcs.usda.gov/sites/default/files/2022-10/Determining%20Carry%20Capacity%20and%20Stocking%20Rates%20 ND.pdf

ADDITIONAL CONTENT TO ADDRESS

- Include a process for making decisions, resolving conflict, and settling on details of the agreement.
- Do we want to give any general monitoring guidelines in the Guidance Document such as when RDM monitoring would be appropriate vs. vegetation heights, vs. species relevè, etc. or some combination? Or does that start to get too complex?

FROM MAP TEAM:

- Differentiate various purposes of land management plans and tier any plan to existing planning documents.
- We strongly recommend following the comprehensive plan template outlined in the Management Action Plan document; and recognize that some entities will not have the resources to complete it, thus requiring a condensed template.
- Those authorizing such planning must identify who is to be responsible for developing these plans (usually the landowner, not the lessee/licensee if public lands).
- Those authorizing such planning must also identify who will be responsible for conducting the required monitoring (usually the landowner, with supplementary monitoring by the licensee).
- We strongly recommend employing professional expertise (such as a state-licensed Certified Rangeland Manager) to lead plan development and conduct the monitoring on non-federal rangelands covered by state resources code.¹ Those authorizing such planning must identify who will pay for such services (usually the landowner).
- Plan for pilot implementations of these templates as well as a review period for these templates after 3-5 years for testing, adjustments, and updates.
- RMAC should develop a Bibliography and Glossary to supplement the Management Action Plan template, to be made available on a dedicated website.
- Need to cite the FAC about "good and substantial fence", and address conflicts between FAC and some agency guidelines.



¹ Conduct of such work is required to comply with state resources code. Note that landowners are exempt from these requirements when directly managing their own lands. Refer to Professional Foresters Examining Committee (PFEC) Policy 12 "Guidance on the Certified Rangeland Manager Program" approved by the California Board of Forestry on July 14, 2021 (https://casrm.rangelands.org/pdfs/pfec-policy-statements-adopted-july-14-2021 ada.pdf) and California Deputy Attorney General Bagley's 2008 analysis (https://www.elkhornsloughctp.org/uploads/files/1223682249DAG%20Opinion%20on%20CRM.pdf).