

Purpose of this document: This is a living document developed to support the Range Management Advisory Committee (RMAC) and in the implementation of SB 675, and to provide a source of information to interested parties.

If you have questions, comments, or proposed revisions/additions, email Kristina.Wolf@bof.ca.gov.

Information on SB 675

- **Bill Language:** [SB 675 Prescribed grazing: local assistance grant program: Wildfire and Forest Resilience Task Force. \(2023-2024\)](#)

An act to amend Section 4124.5 of, and to add Sections 741.5 and 4771.6 to, the Public Resources Code, relating to fire prevention. Approved by the governor Sept 27, 2024

- **New Legislation (Eff. Jan 1 2025)**

- [Public Resources Code \(PRC\) § 741.5](#) (new legislation): **State Board of Forestry and Fire Protection (RMAC)**
- [PRC § 4124.5](#) (amended): **Fire Prevention Grants Program**
- [PRC § 4771.6](#) (amended): **California Wildfire and Forest Resilience Action Plan Goals**

- **Pending Legislation**

CNRA has introduced a bill to support implementation of SB 675; more information will be provided when it is available.

- **Related Bill Language:** [AB 297: Wildfires: local assistance grant program: prescribed grazing: advance payments. \(2023-2024\)](#)

An act to amend Sections 4124 and 4124.5 of, and to add Section 4004.5 to, the Public Resources Code, relating to fire prevention. Approved by the governor Oct 8, 2023

- **New Legislation (Eff. Jan 1 2024)**

- [PRC § 4124](#): **Fire Prevention Grants Program** – defines fire prevention activities
- [PRC § 4124.5](#): **Fire Prevention Grants Program** – directs department to develop a local assistance grant program
- [PRC § 4004.5](#): **Definitions** – defines prescribed grazing

SB 675 Mandates

- **Related AB 297 Mandates**

Three elements of SB 675 were copied into another bill (AB 297: 2023, Fong) which was signed into law in September 2023, one year before SB 675 (these elements were removed from SB 675):

- **Defines prescribed grazing in statute**

“Prescribed grazing means the lawful application of grazing by a specific kind of livestock at a determined season, duration, and intensity to accomplish defined vegetation or conservation goals, including reducing the risk of wildfire by reducing fuel loads, controlling undesirable or invasive plants, and promoting biodiversity and habitat for special status species. Prescribed grazing may involve any or multiple kinds of livestock.”

- **Makes prescribed grazing training an eligible "outreach/education" activity in the Wildfire Prevention Grants Program**

“Public education outreach regarding making homes and communities more wildfire resilient, including training on defensible space and prescribed grazing.”

- **Removes a sunset on advance payments for equipment and supplies in the Wildfire Prevention Grants Program**

- **SB 675 Mandates**

The remainder of SB 675 was signed into law in September 2024 and included the following:

- **Clarifies eligibility of projects including fencing or watering improvements**

“(A) Projects involving the application of prescribed grazing, which may include the installation of fencing or watering improvements... (B) Watering improvements described in subparagraph (A) shall not include the creation of a well or replacement of well infrastructure.”

- **Requires RMAC to develop guidance for local or regional prescribed grazing plans, in consultation with relevant agencies and experts, by July 1, 2025**

*“On or before July 1, 2025, the Range Management Advisory Committee, established pursuant to Section 741, **in consultation with the Department of Fish and Wildlife, fire ecologists with expertise in the full range of California's vegetation communities, and the University of California Cooperative Extension Livestock and Natural Resources Advisors and Specialists, shall develop guidance for local or regional prescribed grazing plans. The guidance shall include all of the following... (9 items):***

- 1) Best practices for **identifying and selecting priority areas** for prescribed grazing.

- 2) Best practices for **developing project plans and metrics** for applying, monitoring, and evaluating the effectiveness and impacts of prescribed grazing.
- 3) Best practices for using prescribed grazing to **increase the diversity and abundance of native species and decrease the abundance of invasive species**, including through adaptive management, exclusion areas, wildlife-friendly fencing, and monitoring.
- 4) Recommendations for **securing sufficient land and resources**, including forage, needed to pasture livestock when not engaged in a prescribed grazing project.
- 5) Best practices for **building community support and engaging with public and private landowners** to improve the implementation and outcomes of a prescribed grazing plan.
- 6) Methods to identify **opportunities to house and maintain shared grazing infrastructure**.
- 7) Best practices to use prescribed grazing to **support and enhance prescribed burns and other vegetation management projects**.
- 8) Best practices for use of prescribed grazing for **reducing wildfire risk in and near fire-threatened communities**, as that term is defined in paragraph (2) of subdivision (b) of Section 4124.5.
- 9) Other recommendations to **increase the pace and scale of prescribed grazing** at the local or regional levels, where appropriate.

○ **Requires State Wildfire & Forest Resilience Task Force to develop a strategic action plan to expand the use of prescribed grazing, in consultation with RMAC, by June 30, 2025**

“On or before June 30, 2025, the task force, in consultation with the Range Management Advisory Committee of the State Board of Forestry and Fire Protection, established pursuant to Section 741, shall develop a strategic action plan to expand the use of prescribed grazing to support the state’s efforts to increase the pace and scale of wildfire and forest resilience activities and strengthen the protection of communities and reduce their fire risk.”

“The plan shall include a focus on reducing wildfire risk in and near ‘fire-threatened communities,’ as that term is defined in paragraph (2) of subdivision (b) of Section 4124.5.”

“The strategic action plan shall include a component on monitoring and evaluating the effectiveness of prescribed grazing on reducing wildfire risk, including near communities, and the impacts of prescribed grazing on forest and wildland health, promoting the diversity and abundance of native species, and decreasing the abundance of invasive species.”

“The task force shall consider incorporating prescribed grazing in the January 1, 2026, update to the state’s ‘Wildfire and Forest Resilience Action Plan.’”

A Prescribed Herbivory Working Group, comprising range experts from across the state, including three RMAC members, developed guidance for inclusion in the Wildfire and Resilience Task Force’s (‘Task Force’) Updated Strategic Action Plan. A brief describing this information is available here:

<https://rangelands.ucdavis.edu/blog/expanding-prescribed-grazing-wildfire-resilience-california>

Regional Action Teams

- **Wildfire and Resilience Task Force Regions: Regional Profiles and Resource Kits**

Regional Action Team Leads are named for each region, below. The Local/Regional Grazing Guidance will be developed to cover the entire state and will include locally- and regionally-based contextual recommendations and guidance, based on the four regions developed by the Task Force. These regions are as follows:

Note: Counties marked with an (*) contain areas in another region as well.

- **Coastal Inland – Dr. Marc Horney, mhorney@calpoly.edu & Devii Rao, deviirao@ucanr.edu**

Counties: Alameda, Contra Costa, Fresno*, Kern*, Kings, Madera*, Marin*, Mariposa*, Merced, Monterey, San Benito, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, Santa Cruz, Stanislaus, Tulare*, Ventura*

- **Sierra-Cascade-Inyo – Dr. Kristina Wolf, Kristina.Wolf@bof.ca.gov & Noah Lopez, noah@wrstrat.com**

Counties: Alpine, Amador, Butte*, Calaveras, El Dorado, Fresno*, Inyo, Kern*, Lassen, Madera*, Mariposa*, Modoc*, Mono, Nevada, Placer*, Plumas, Shasta*, Sierra, Siskiyou*, Tehama*, Trinity*, Tulare*, Tuolumne, Yuba*

- **Northern – Dr. Stephanie Larson, slarson@ucanr.edu**

Counties: Butte*, Colusa, Del Norte, Glenn, Humboldt, Lake, Marin*, Mendocino, Modoc*, Napa, Placer*, Sacramento, Shasta*, Siskiyou*, Solano, Sonoma, Sutter, Tehama*, Trinity*, Yolo, Yuba*

- **Southern – Cole Bush, bcb@shepherdesslandl.co & Joel Kramer, joel.kramer@rcdsandiego.org**

Counties: Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, Ventura*

Prescribed Grazing Resources (incl. information on applications to wildfire):

- **Statewide Kickoff April 28, 2025: Meeting Presentations**

- **S. Larson – Role of SB 675**

- **K. Wolf, C. Bush – SB 675 Implementation and Prescribed Grazing**

- **C. Bush – Ecological Considerations**

- **Online/web resources**

- **RangeDocs**

Online range-related research database: <https://docs.rangelandsgateway.org/>

- **RMAC Resources**

- **[RMAC Webpage](#)**

Visit this page to find out about upcoming RMAC meetings, workshops, and events related to SB 675.

The “Workshops” dropdown menus near the bottom of this page provide a variety of links to past events and workshops, including slides and handouts from field days, virtual workshops, and other events that the RMAC has sponsored, partnered to implement, or presented at.

- ☐ See the **Prescribed/Targeted Grazing Resources List** developed for the RMAC-led Prescribed Grazing Symposium at the 2024 Society for Range Management Annual Conference: [Supplementary Resources List](#)
- ☐ The Board of Forestry & Fire Protection recently approved a [RMAC State Lands Grazing Packet](#), which includes a Grazing Agreement (license) approved for use by the Department of General Services, a Management Action Plan (including Grazing Plan), and a Guidebook to walk users through the development and implementation of grazing on state lands, with applications for use on any grazing lands. The final version will be provided on the RMAC webpage in the upcoming weeks.

- **2025 California Rangeland Conservation Coalition and Russell Rustici Rangeland Symposium presentations:**

- [2025 Rustici Symposium Poster - RMAC M. Horney](#)
 - [2025 CRCC Symposium - S. Larson](#)

- Supplementary Resources**

- ☐ [Additional Background Resources Folder](#)

- ☐ **Presentations:**

- ✓ [Speaker Sections 1–4, with slides from B. Artadi-Soares, C. Bush, M. Gabica, M. Horney, and K. Wolf](#)
 - ✓ [S. Larson – Section 2, Targeted Grazing](#)
 - ✓ [S. Larson – Section 3, Match.Graze](#)

- **Grey/white literature**

- **Cheatum, M.; Casey, F.; Alvarez, P.; Parkhurst, B. 2011.** Payments for ecosystem services: A California rancher perspective. Washington, DC: Nicholas Institute for Environmental Policy Solutions, Duke University. 74 p. https://carangeland.org/images/payments_for_ecosystem_services_a_california_rancher_perspective.pdf.
- [RDM levels & fire behavior \(Presentation; Foss et al. paper in process/review\)](#)
- **Nolte, H. 2021.** Alone on the range? Rangeland stakeholder perceptions of public lands, community change and maintaining rural livelihoods. Humboldt, CA: Cal Poly Humboldt. Masters. <https://digitalcommons.humboldt.edu/etd/504/>. (February 12, 2025).
- **SBCFSC. 2024.** Prescribed herbivory. Santa Barbara County Fire Safe Council. <https://sbfiresafecouncil.org/prescribedherbivory/>.
- **Quinton, A. 2021.** California's local meat suppliers struggle to stay in business. UC Davis. <https://www.ucdavis.edu/food/news/californias-local-meat-suppliers-struggle-stay-business>.
- **Roche, L.; Tate, K.; Davy, J.; Eastburn, D.J. 2016.** Adaptive grazing management for weed control. UC Davis rangeland weeds and pests workshop. PowerPoint Presentation. <https://ranchwaterqualityplanning.org/wp-content/uploads/2018/02/5LeslieRoche1.pdf>.
- **Shapero, M. 2016.** Ecology and management of medusahead. UC ANR. PowerPoint Presentation. <https://ranchwaterqualityplanning.org/wp-content/uploads/2018/02/3MatthewShapero.pdf>.
- **Shobe, B. 2023.** Using grazing animals to reduce the risks of wildfires. Blog. California Climate & Agriculture Network (CalCAN). <https://calclimateag.org/using-grazing-animals-to-reduce-the-risk-of-wildfires/>.

- **Peer-reviewed and UCCE/UCANR or Federal government publications**

- **Targeted/Prescribed Grazing and Adaptive Management**

- **American Sheep Industry. 2025.** Targeted Grazing 101: Starting & Sustaining a Grazing Service Enterprise. Englewood, CO. <https://www.sheepusa.org/product/targeted-grazing-101>.
- **Bailey, D.W., Mosley, J.C., Estell, R.E., Cibils, A.F., Horney, M., Hendrickson, J.R., Walker, J.W., Launchbaugh, K.L. and Burritt, E.A., 2019.** Synthesis paper: targeted livestock grazing: prescription for healthy rangelands. *Rangeland Ecology & Management*, 72(6), pp.865-877. <https://www.sciencedirect.com/science/article/pii/S1550742419300399>
- **Derner, J.D.; Budd, B.; Grissom, G.; Kachergis, E.J.; Augustine, D.J.; Wilmer, H.; Scasta, J.D.; Ritten, J.P. 2022.** Adaptive grazing management in semiarid rangelands: An outcome-driven focus. *Rangelands*. 44(1 p.111-118): 111-118. <https://www.sciencedirect.com/science/article/am/pii/S0190052821000171>.

- **Macon, D.; Roche, L. 2025.** Expanding prescribed grazing for wildfire resilience in California: A Brief on opportunities and strategies for strengthening wildfire preparedness and resilience efforts. [Macon and Roche 2025](#).
- **Macon, D. 2018.** [Targeted Grazing. A Primer for Consumers](#). UCANR.
- **Marchetto, K.M., Wolf, T.M. and Larkin, D.J., 2021.** The effectiveness of using targeted grazing for vegetation management: a meta-analysis. *Restoration Ecology*, 29(5), p.e13422. <https://onlinelibrary.wiley.com/doi/pdf/10.1111/rec.13422>.
- **Taylor, C.A. 2006.** Targeted grazing to manage fire risk. In: Targeted grazing : A natural approach to vegetation management and landscape enhancement. Centennial, CO: American Sheep Industry Association: 108-115. Chapter 12. <https://www.sheepusa.org/wp-content/uploads/2022/01/Targeted-Grazing-Book-compressed.pdf>.
- **UC ANR. 2025.** Grazing. University of California Agriculture and Natural Resources. <https://ucanr.edu/sites/fire/Preparedness/Treatment/Grazing/>.

○ Wildfire, Invasive Plants

- **Balch, J.K.; Bradley, B.A.; D'Antonio, C.M.; Gomez-Dans, J. 2013.** Introduced annual grass increases regional fire activity across the arid western USA (1980-2009). *Glob Chang Biol*. 19(1): 173-83. <https://doi.org/10.1111/gcb.12046>.
- **Bell, C.E.; Ditomaso, J.M.; Brooks, M.L. 2009.** Invasive plants and wildfires in southern California. 8397. Oakland, CA: UC Division of Agriculture and Natural Resources. <https://anrcatalog.ucanr.edu/pdf/8397.pdf>.
- **Brooks, M.; Matchett, J. 2006.** Spatial and temporal patterns of wildfires in the Mojave desert, 1980-2004. *Journal of Arid Environments*. 67: 148-164. <https://doi.org/10.1016/j.jaridenv.2006.09.027>.
- **D'Antonio, C.; Bainbridge, S.; Kennedy, C.; Bartolome, J.; Reynolds, S. 2002.** Ecology and restoration of California grasslands with special emphasis on the influence of fire and grazing on native grassland species. Report to the Packard Foundation. 1-99 p. <https://ucanr.edu/sites/default/files/2016-12/252884.pdf>
- **D'Antonio, C.M.; Vitousek, P.M. 1992.** Biological invasions by exotic grasses, the grass fire cycle, and global change. *Annual Review of Ecology and Systematics*. 23: 63-87. <https://doi.org/10.1146/annurev.es.23.110192.000431>.
- **Davies, K.W.; Wollstein, K.; Dragt, B.; O'Connor, C. 2022.** Grazing management to reduce wildfire risk in invasive annual grass prone sagebrush communities. *Rangelands*. 44(3): 194-199. <https://doi.org/10.1016/j.rala.2022.02.001>.
- **Davy, J.S.; Roche, L.M.; Robertson, A.V.; Nay, D.E.; Tate, K.W. 2015.** Introducing cattle grazing to a noxious weed-dominated rangeland shifts plant communities. *California Agriculture*. 69(4): 230-236. <https://doi.org/10.3733/ca.v069n04p230>.

- **Dong, C.Y.; Williams, A.P.; Abatzoglou, J.T.; Lin, K.R.; Okin, G.S.; Gillespie, T.W.; Long, D.; Lin, Y.H.; Hall, A.; MacDonald, G.M. 2022.** The season for large fires in southern California is projected to lengthen in a changing climate. *Communications Earth & Environment*. 3(1) <https://doi.org/10.1038/s43247-022-00344-6>.
- **Fusco, E.J.; Finn, J.T.; Balch, J.K.; Nagy, R.C.; Bradley, B.A. 2019.** Invasive grasses increase fire occurrence and frequency across us ecoregions. *Proceedings of the National Academy of Sciences*. 116(47): 23594-23599. <https://doi.org/10.1073/pnas.1908253116>.
- **Goss, M.; Swain, D.L.; Abatzoglou, J.T.; Sarhadi, A.; Kolden, C.A.; Williams, A.P.; Diffenbaugh, N.S. 2020.** Climate change is increasing the likelihood of extreme autumn wildfire conditions across California. *Environmental Research Letters*. 15(9): 094016. <https://doi.org/10.1088/1748-9326/ab83a7>.
- **Greenlee, J.M.; Langenheim, J.H. 1990.** Historic fire regimes and their relation to vegetation patterns in the Monterey Bay area of California. *American Midland Naturalist*. 124(2): 239-253. <https://doi.org/10.2307/2426173>.
- **Gruppenhoff, A.R.; Safford, H.D. 2024.** High fire frequency in California chaparral reduces postfire shrub regeneration and native plant diversity. *Ecosphere*. 15(12) <https://doi.org/10.1002/ecs2.70128>.
- **James, J.; Brownsey, P.; Davy, J.; Forero, L.; Stackhouse, J.; Shapero, M.; Becchetti, T.; Rinella, M. 2022.** Management strategies determine how invasive plant impacts on rangeland provisioning services change net revenue on California annual rangeland. *Rangeland Ecology & Management*. 82(1): 29-36. <https://doi.org/10.1016/j.rama.2022.02.001>.
- **James, J.; Gornish, E.; DiTomaso, J.; Davy, J.; Doran, M.; Becchetti, T.; Lile, D.; Brownsey, P.; Laca, E. 2015.** Managing medusahead (*Taeniatherum caput-medusae*) on rangeland: A meta-analysis of control effects and assessment of stakeholder needs. *Rangeland Ecology & Management*. 68(3): 215-223. <https://doi.org/10.1016/j.rama.2015.03.006>.
- **Keeley, J.E.; Brennan, T.J. 2012.** Fire-driven alien invasion in a fire-adapted ecosystem. *Oecologia*. 169(4): 1043-52. <https://doi.org/10.1007/s00442-012-2253-8>.
- **Keeley, J.E.; Brennan, T.J.; Syphard, A.D. 2022.** The effects of prolonged drought on vegetation dieback and megafires in southern California chaparral. *Ecosphere*. 13(8) <https://doi.org/10.1002/ecs2.4203>.
- **Keeley, J.E.; Fotheringham, C.J. 2003.** Impact of past, present, and future fire regimes on North American mediterranean shrublands. In: Veblen, T.T.; Baker, W.L.; Montenegro, G.; Swetnam, T.W., eds. *Fire and climatic change in temperate ecosystems of the western Americas*. Ecological studies. New York, NY: Springer New York: 218-262. Chapter 8. https://doi.org/10.1007/0-387-21710-x_8.

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- **Lambert, A.M.; D'Antonio, C.M.; Dudley, T.L. 2010.** Invasive species and fire in California ecosystems. *Fremontia*. 38(2): 29-36. https://rivrlab.msi.ucsb.edu/sites/default/files/publications/frem38.2_38.3_lambert_etal.pdf
- **Li, Z.; Angerer, J.P.; Wu, X.B. 2021.** Temporal patterns of large wildfires and their burn severity in rangelands of western united states. *Geophysical Research Letters*. 48(7) <https://doi.org/10.1029/2020gl091636>.
- **Lovreglio, R., Meddour-Sahar, O. and Leone, V., 2014.** Goat grazing as a wildfire prevention tool: A basic review. *Iforest-Biogeosciences and Forestry*, 7(4), p.260. <https://iforest.sisef.org/contents/?id=ifor1112-007&v=abstr>.
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<https://doi.org/https://doi.org/10.1016/j.jenvman.2022.116092>.
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<https://doi.org/10.5751/es-15080-290310>.
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- **Vincent, C.H. 2019.** Grazing fees: Overview and issues. RS21232. Washington, D.C.: Congressional Research Service. 15 p. <https://sgp.fas.org/crs/misc/RS21232.pdf>.
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- **Barry, S.; Huntsinger, L. 2021.** Rangeland land-sharing, livestock grazing's role in the conservation of imperiled species. *Sustainability*. 13(8): 4466. <https://doi.org/10.3390/su13084466>.
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