



April 6, 2022

The Honorable Gavin Newsom  
 Governor of California  
 State Capitol  
 Sacramento, CA 95814

**Re: Request \$8 million for Prescribed & Targeted Grazing Infrastructure for Wildfire Prevention and Biodiversity Enhancement, FY 22-23**

Dear Governor Newsom:

As herders, ranchers, land managers, conservationists, scientists and sustainable agriculture organizations who study and steward California's rangelands, we have been on the front lines of wildfires in California. We request \$8 million in FY 22-23 for the California Department of Food

and Agriculture (CDFA) to invest in prescribed and targeted grazing infrastructure such as portable and stationary fencing, corrals, water tanks, troughs, pumps, and trailers for livestock transportation. This relatively small investment in infrastructure can scale up a proven and effective strategy for wildfire prevention and severity reduction across our diverse regions as well as improve a variety of ecosystem services.

Grasslands account for approximately 10% of California's total land area, and oak woodlands and coastal scrublands, in which grasses make up a key part of the understory, account for another 8% of California's land area.<sup>1</sup> In addition to food and fiber, grasslands provide many ecosystem services, including wildlife habitat, water filtration and storage, and carbon sequestration. In fact, California's grasslands are a more reliable carbon sink than trees.<sup>2</sup> California's current grassland ecosystems are dominated by non-native annual grasses which, left unmanaged, grow profusely and degrade habitat for native plants and animals while increasing wildfire risks.<sup>3</sup> In this context, grazing (or another disturbance like prescribed fire) is necessary to manage these grasslands for conservation and wildfire risk reduction purposes.<sup>4</sup> While people tend to imagine "forest fires" when they hear about wildfires, a large portion of the state's wildfires actually occur in grasslands, oak woodlands, and coastal scrublands. Moreover, most wildfire ignitions start in grasses and then spread from the ground up into taller vegetation ("ladder" fuels), which is why fuel reduction efforts often target grasses. Prescribed and targeted grazing is an important and growing tool to reduce wildfire risks on these landscapes.

Prescribed and targeted grazing – the application of livestock at a specific season, duration, and intensity to accomplish defined vegetation or resource management goals – is a natural, biological vegetation management practice that reduces wildfire risk and provides multiple benefits, including enhanced biodiversity and carbon sequestration.<sup>5</sup> Grazing also naturally cycles nutrients and removes fine fuels more effectively than mowing (which can spark fires<sup>6</sup>) and herbicide treatments – the two most common vegetation reduction alternatives.

Grazing reduces flame length and fire intensity, and can therefore shift grasses from a highly flammable and effective fire *spreader* into a natural fire *barrier*, which has both ecological and safety benefits. For example, researchers at the UC Hopland Research and Extension Center have observed that sheep grazing in the Center's oak woodlands prior to the Mendocino Complex Fire in 2018 reduced the fire intensity, which resulted in less tree damage, higher tree

---

<sup>1</sup> *Ecosystems of California* by Harold Mooney & Erika Zavaleta. (2016) Available at: <https://www.ucpress.edu/book/9780520278806/ecosystems-of-california>

<sup>2</sup> "Grasslands More Reliable Carbon Sink Than Trees" (2018). Available at: <https://climatechange.ucdavis.edu/climate/news/grasslands-more-reliable-carbon-sink-than-trees>

<sup>3</sup> "The Benefits of Livestock Grazing California's Annual Grasslands" (2015). Available at: <https://anrcatalog.ucanr.edu/pdf/8517.pdf>

<sup>4</sup> Ibid

<sup>5</sup> "Targeted Grazing: A Natural Approach to Vegetation Management and Landscape Enhancement" (2006). Available at: <https://www.webpages.uidaho.edu/rx-grazing/Handbook.htm>

<sup>6</sup> CalFIRE's Equipment Use site: <https://www.readyforwildfire.org/prevent-wildfire/equipment-use/>

survival rates, and less seed mortality.<sup>7</sup> Recent fire behavior modeling done by UC researchers predicts that grazing fine fuels to 1225 pounds per acre on flat ground in dry summer conditions will keep flame lengths below eight feet with winds up to 15 miles per hour – a critical threshold that allows firefighters to use direct measures (such as heavy equipment) on the ground to fight fires.<sup>8</sup> For this reason, grazing is often used as a complimentary tool both before and after prescribed burns.

Prescribed and targeted grazing have gained recognition as effective fire mitigation strategies in state policy in recent years. In 2015, the Board of Forestry and Fire Protection's Range Management Advisory Committee released a white paper outlining the benefits, limitations, best management practices, and CEQA considerations for "prescribed herbivory" projects.<sup>9</sup> Prescribed herbivory was subsequently included in the 2019 Vegetation Treatment Program (CalVTP) Environmental Impact Report (EIR), which recommends prescribed herbivory be used to treat a minimum of 25,000 acres per year.

To meet the growing demand for prescribed and targeted grazing from cities and counties, utilities, homeowner associations, and a variety of public and private land managers, California will need more experienced grazing managers and more targeted grazing service businesses with both permanent and portable infrastructure.

One of the key barriers to scaling up prescribed and targeted grazing is the initial capital cost of infrastructure necessary to manage grazing animals in a way that maximizes ecological and climate benefits, as well as animal health and safety. A startup grazing service business, for example, needs approximately \$220,000 to purchase 500 sheep or goats (\$100,000) and infrastructure necessary to operate the business (\$120,000), including fencing, water tanks and pumps, and trailers.<sup>10</sup>

An investment of \$8 million in FY 22-23 in this type of infrastructure would enable more professional livestock managers to start and/or scale up grazing services. As folks on the frontlines of California wildfires who study and steward our state's cherished rangelands, we stand ready to expand and advocate for effective multi benefit solutions and management strategies.

Sincerely,

---

<sup>7</sup> CA Fire Science Consortium's webinar on "Wildland Fuels: A Primer for Concerned Citizens and Grazers" (2020). Available at: <https://www.cafiresci.org/events-webinars-source/category/rmac>

<sup>8</sup> "Cattle Grazing Reduces Fine Fuels and Wildfire Flame Lengths in California Rangelands." Ratcliff, F.; Rao, D.; Barry, S.; Dewees, S.; Moritz, M.; Macaulay, L.; Peterson, R.; Larsen, R.; Shapero, M.; Forero, L. (In Press). California Agriculture. Accepted 10/18/2021

<sup>9</sup> "Prescribed Herbivory for Vegetation Treatment Projects" (2015). Available at: <https://bof.fire.ca.gov/media/7208/white-paper.pdf>

<sup>10</sup> "Targeted Grazing Survey Report to the Range Management Advisory Council." (2022). Available at: [https://bof.fire.ca.gov/media/cu4f2cof/5-cwga-2021-targeted-grazing-survey-report-to-rmac\\_ada.pdf](https://bof.fire.ca.gov/media/cu4f2cof/5-cwga-2021-targeted-grazing-survey-report-to-rmac_ada.pdf)

Brian Shobe  
Associate Policy Director  
California Climate & Agriculture Network

Kirk Wilbur  
Vice President of Government Affairs  
California Cattlemen's Association

Ed Anchordoguy  
President  
California Wool Growers Association

Katie Little  
Policy Advocate  
Government Affairs Division  
California Farm Bureau

Rebecca Burgess  
Executive Director  
Fibershed

Karen Sweet  
Executive Director  
CA Rangeland Conservation Coalition

Laetitia Benador  
Policy Research Specialist  
California Certified Organic Farmers  
(CCOF)

Cynthia A. Daley, Ph.D.  
Director, Center for Regenerative  
Agriculture & Resilient Systems at  
California State University Chico

Michaelyn McDonnell  
Rangeland Stewardship Specialist  
California Rangeland Trust

Christopher Danch  
Executive Director  
Ojai Valley Fire Safe Council

Molly Taylor  
Climate Smart Agriculture Program  
Manager  
Community Environmental Council

Kay Ogden  
Executive Director/ CEO  
Eastern Sierra Land Trust

Ellie M. Cohen  
Chief Executive Officer  
Climate Center

Marce Evans  
President & Executive Director  
The HERD Foundation

Rob Rutherford  
Professor Emeritus  
California Polytechnic State University  
Past President  
California Wool Growers Association

Kristina Wolf, PhD  
Certified Rangeland Manager #122

Devii Rao  
Livestock and Natural Resources Advisor  
University of California Cooperative  
Extension

Matthew Austin Sablove  
Co-founder & Co-operator  
Good Shepherds Regenerative Land  
Management

Julie & Joe Morris  
Founders & Owners  
Morris Grassfed

Doniga & Erik Markegard  
Owners  
Markegard Family Grass-Fed

Cole Bush  
Founder & Owner  
Shepherdess Land and Livestock Co. LLC

Carrie Richards  
Owner/Land Manager  
Richards Grassfed Beef

Lisa & Loren Poncia  
Co-owners  
Stemple Creek Ranch

Emily Taylor  
Owner  
PT Ranch

Michael Leicht  
Founder/Owner  
Ventura Brush Goat LLC

Abbey Kingdon-Smith, Jackie Eshelman, &  
Andrea Malmberg  
Owners  
UVE

Wendy Millet  
Director  
TomKat Ranch

Marie Hoff  
Owner/Operator  
Full Circle Wool

John & Elizabeth Austel  
Owners  
4J Horse & Livestock Co

Cole, Katie, & Lani Estill  
Owners  
Lani's Lana - Fine Rambouillet Wool

Riaan and Anna Odendaal  
Owners  
ALE Sheep Company

Dean Cockrell  
Owner  
JRD Beef

John Estill  
Owner/Operator  
Estill Ranches, LLC

Scott & Kenneth Stone  
Owners  
Yolo Land & Cattle Co.

Jaime Irwin & Robert Irwin  
Owners  
Kaos Sheep Outfit

Kevin Muno  
President  
Perennial Pastures

Frank Fitzpatrick  
Owner  
5 Bar Beef

Guido Frosini  
Owner  
True Grass Farms

Andrew Lee  
President  
Hollister Ranch Collective