BOARD OF FORESTRY RANGE MANAGEMENT ADVISORY COMMITTEE MEMBER NOMINATION FORM

Please use a separate sheet for each nominee: <u>Use additional pages to expand</u> <u>upon nominee's background and qualifications where needed</u>. Please type or print clearly.

EMAIL to: Kristina.wolf@bof.ca.gov, or

MAIL to: Board of Forestry, P.O. Box 944246, Sacramento, CA 94244-2460, Attention Kristina Wolf

- 1. Name of Nominee: Dr. Stephanie Larson
- (please print)
 2. Address: ______
 3. Telephone Number:
- 4. Check the appropriate representation of nominee:

Public Organization UC Cooperative Extension (print org name)

5. Is the nominee willing to serve: Yes X Not Known

6. Brief resume of the nominee's background and qualifications:

Dr. Larson holds a PhD from Oregon State in Range Ecology and Management and was recognized as the Range Manager of the Year by California Pacific Society for Range Management in 2016. For the past 30 years, she has served as the Livestock and Range Advisor for University of California Cooperative Extension in Sonoma and Marin Counties. Her program integrates ecosystem services provided by rangelands and highlight the benefits of using grazing animals as tools to manage local landscapes. As a CA licensed Certified Rangeland Manager (#73), she works with land managers to implement sound ecologic decisions about managing working landscapes for multiple benefits. She has focused on ecosystem services, water quality, fuels management, targeted grazing, invasive species, agritourism, economic development to name a few. Dr. Larson has also developed a website and platform to facilitate matching landowners with livestock owners to create opportunities for grazing and reducing fuel loads.

7. PRINT name of nominator: Sheila Barry and Theresa Becchetti

Nominator Address:

- 8. Telephone:
- 9. Group represented, if any: <u>University of California Cooperative Extension</u>



University of **California** Agriculture and Natural Resources Sonoma County

133 Aviation Blvd., Suite 109 Santa Rosa CA 95403 (707) 565-2621 office (707) 565-2623 fax http://CESonoma.ucanr.edu



December 28, 2021

Kristina Wolf Board of Forestry Administrative Assistant Range Management Advisory Committee Edith.hannigan@bof.ca.gov

Dear Kristina,

I am submitting my application to serve on the Range Management Advisory Committee (RMAC) serving as an organization supporting rangelands, University of California Ag and Natural Resources. As the livestock and range management advisor in Sonoma and Marin Counties, my innovative programs have addressed critical issues that maintain and increase the sustainability of rangelands on the north coast. With my PhD in Rangeland Management and Ecology, I have focused my educational and research-based programs on California's working landscapes, in particular rangelands.

A recent study showed that per-acre greenhouse gas (GHG) emissions from farmlands in California are an average of 58 times lower than the state's urban areas¹. Additional research showing natural landscapes such as oak woodlands can sequester millions of tons of carbon²; my research and outreach approaches for addressing change have offered an opportunity to value and reward particularly important services provided by working landscapes. I recognized historically it has been difficult to measure the value of services that rangelands provide and the economic benefits they provide to local communities. And these lands are at risk of being converted to other uses; my program's directive has been to recognize and value the services provided by rangelands, and assist landowners and policy makers on land use decisions. I am currently working on payment structures that will pay landowners for these benefits, improving their sustainability, using management practices that maximize ecosystem services, such as food protection, clean water, and scenic values. Some of my innovative research has used assessment tools to quantify the biophysical properties of rangelands, such as carbon sequestration, water filtration, sediment and nutrient retention and viewscapes. It will be critical for groups, such as RMAC, to help policy maker, advocacy groups and the public to understand just how important rangelands are to the health and well-being of California and in turn, the health and well-being of our local communities.

Recently, I have focused on documenting the "positive impacts" that rangelands played in Sonoma County's recent fires. I am working across agencies, government officials and commodity groups to development information on how grazed lands slowed and at times, stopped the fire. I developed a toolkit that

The University of California working in cooperation with Sonoma County and the USDA



¹Shaffer, S. and Thompson, E. 2015. A New Comparison of Greenhouse Gas Emissions from California Agricultural and Urban Land Uses. Retrieved from https://4aa2dc132bb150caf1aa-7bb737f4349b47aa42dce777a72d5264.ssl.cf5.rackcdn.com/AFTCrop-UrbanGreenhouseGasReport-Feburary2015.Edited-May2015.pdf.

² Gaman, T. 2008. Oaks 2040: Carbon Resources in California Oak Woodlands. Report for the California Oak Foundation. Retrieved from <u>http://www.forestdata.com/oaks2040_carbon.pdf</u>.

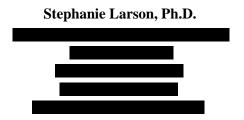
highlights grazing to reduce fire fuel load. This toolkit includes how landowners lease their lands, the proper animal to use, and the appropriate grazing style for specific land type. I will work with agencies such as Cal Fire to demonstrate using grazing as a tool to reduce fire fuels, while improving biodiversity.

Throughout my career, I have promoted educational outreach and research-based information on rangelands as working landscapes. I believe I bring years of experience and knowledge to the RMAC committee and I have the University of California's support to be a member of this committee. Please don't hesitate to contact me if you need additional information.

Sincerely,

Stephance Raison

Stephanie Larson, Ph.D. Certified Rangeland Manager #73



Provide educational and research based information on animal science and range management to agricultural producers, agencies and general public. Promote local agriculture and rangeland management, especially related to working landscapes for the production of food and ecosystem services. Provide educational opportunities for youth and students; promote mentoring experiences in sustainable agriculture and life skills.

Work Experience: University of California Cooperative Extension

Administrative:

2008 – Present: University of California Cooperative Extension, Sonoma County Director. Directs all research and extension programs in Agriculture, Natural Resources, Range Management, Master Gardeners, and 4-H. Supervises 10 employees and manages a 1 million dollar budget.

Programmatic:

1985 – Present: University of California Cooperative Extension, Livestock and Range Management Advisor. Provides educational and research based information in animal and dairy science and rangeland ecology and management to livestock and dairy producers and rangeland managers in Sonoma and Marin Counties. Interface and create local food systems that increase sustainable agriculture; local food systems to increase agriculture sustainability and food security.

Santa Rosa Junior College

2005 – Present: Santa Rosa Junior College, Department of Agriculture and Natural Resources, Adjunct Faculty. Teach Rangeland Management, Livestock Behavior and Humane Management, Basic Animal Science, and Sheep Science classes.

2015 - 2016: Santa Rosa Junior College, Department of Agriculture and Natural Resources, Animal Science Program Coordinator.

Education:

- 2005 2010 Ph.D. Rangeland Ecology and Management, Oregon State University, Corvallis, Oregon. "Modeling Animal Movement to Manage Landscapes".
- 1981 1983 M.S. Animal Science, University of Wyoming, Laramie, Wyoming. "Effects of Ralgro on Growth and Carcass Traits of Conventional and Heave Weight Lambs".
- 1977 1983 B.S. Animal Science, University of Idaho, Moscow, Idaho.

License & Awards:

Professional License: Certification Rangeland Manager #73. Licensed professional by the State of California Department of Forestry and Fire Prevention

Awards:Society for Range Management, Range Manager of the Year, 2017 Sonoma
County Harvest Fair, Friend of Sonoma County Agriculture, 2015, Outstanding
Achievement Award – Research/Academia, Society for Range Management, 2015
Outstanding Ph.D. Student, Oregon State University, 2009
CF Industries National Watershed Award, Terrene Institute, 1998
Golden Fleece, CA Woolgrowers Association, 1996
UCCE Distinguished Service – Outstanding Teaching Farm Advisor, 1995
Butsic V, Shapero M, Moanga D, Larson S. 2017. Using InVEST to assess ecosystem services on

conserved properties in Sonoma County, CA. Calif Agr 71(2):81-89. https://doi.org/10.3733/ca.2017a0008.

Philip Brownsey, Jeremy J. James, Sheila J. Barry, Theresa A. Becchetti, Josh S. Davy, Morgan P. Doran, Larry C. Forero, John M. Harper, Royce E. Larsen, **Stephanie R. Larson-Praplan**, Jimin Zhang, and Emilio A. Laca. 2017. Using Phenology to Optimize Timing of Mowing and Grazing Treatments for Medusahead (*Taeniatherum caput-medusae*). Range Ecology and Management. Vol. 70, Issue 2, pgs 210-218. <u>https://doi.org/10.1016/j.rama.2016.08.011</u>.

Larson, Stephanie, Devan A. McGranahan, and Robert M. Timm. The Marin County Livestock Protection Program: 15 Years in Review. Proc. 27th Vertebr. Pest Conf. (R. M. Timm and R. A. Baldwin, Eds.) Published at University of California - Davis. 2016.

Larson, S.; Barry, S.; and Bush, L. (2015) "Understanding Working Rangelands: Bay Area Ranching Heritage: A Continuing Legacy". ANR Publication (8528), 5 p

Larson, S.; Barry, S.; Bush, L.; Sweet, D. (2015) "Understanding Working Rangelands: Caring for Cattle and Sheep to Provide Safe and Wholesome Meat". ANR Publication (8530), 9 p

Barry, S.; Larson, S.; and Bush, L. (2015) "Understanding Working Rangelands: Cows Need Water, Too: Water Sources, Wetlands and Riparian Areas". ANR Publication (8525), 5 p

Larson, S.; Barry, S.; and Bush, L. (2015) "Understanding Working Rangelands: Sharing Open Space: What to Expect from Grazing Livestock". ANR Publication (8516), 5 p

Barry, S.; Larson, S.; Ford, L.; and Bush, L. (2015) "Understanding Working Rangelands: The Benefits of Livestock Grazing California's Annual Grasslands". ANR Publication (8517), 7 p

Barry, S., **Larson, S.** August 27-30, 2015. "Promoting an understanding of Beef Production and the Value of Cattle Grazing and the Ecosystem Services it provides to an Urban Public. Abstract for Controversies and Consensus in Bovine Health, Industry and Economics in Berlin, Germany."

Barry, S., Larson, S. Ford, L. and Bush, L. 2015. "Understanding Working Rangelands: Grazing Systems Management." ANR Publication 8529 6p., August.

Brownsey, P., Barry, S, Becchetti, T., Davy, J., Doran, M., Forero, L., Harper, J., Larsen, R., **Larson-Praplan, S**., and Laca, E. 2015. Using Multi-State Modeling to Describe Optimal Treatment Windows for Medusahead and Barbed Goatgrass. Abstract for 2015 Society for Range Management National Meeting, Sacramento California February 3, 2015.