

Targeted Livestock Grazing to Strategically Reduce Fine Fuels

1. Introduction

Wildfires are increasing in size and frequency. The impacts to private and public resources in the Great Basin are due in large part to invasive annual grasses, especially cheatgrass. Large mega-fires (>250,000 acres) are having a disproportionate effect on public lands and the ability of managers to implement an effective fire suppression program (Figure 1).

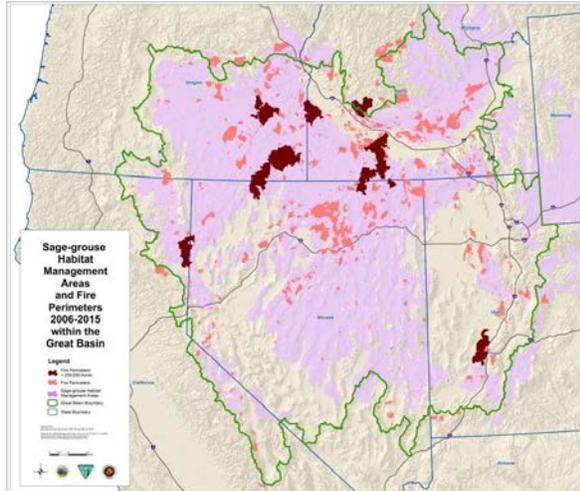


Figure 1. Eight Great Basin mega-fires (>250,000 acres) accounted for 27% (3.7 million acres) of the 13.8 million acres of rangeland burned from 2006-2015.

The Bureau of Land Management (BLM) implemented a call to action with the release of the Integrated Rangeland Fire Management Strategy (IRFMS) in 2015. The intent of the IRFMS is to improve the efficiency and efficacy of actions to address rangeland fire, to better prevent and suppress rangeland fire, and improve efforts to restore fire-impacted landscapes. The IRFMS specifically addresses the need to explore opportunities to use **targeted livestock grazing as a strategic fuels management option** and to develop scalable and adaptive grazing management plans for reducing the abundance of invasive annual grasses.

In 2015, the BLM assembled an interagency team composed of state and federal representatives from Idaho, Nevada, and Utah to implement this project. This team developed an implementation plan for the relevant IRFMS action items and an outreach plan based on the input of 80 participants at a Targeted Grazing Workshop held in Reno, Nevada in October 2016 (Figure 2).



Figure 2. October 2016 Targeted Grazing Workshop, Reno, Nevada.

Successful targeted grazing must involve working with BLM permittees, state land agencies, and private landowners. Implementation of a strategic targeted grazing program is necessary to protect and conserve sagebrush-steppe habitats across all ownerships and jurisdictions. The BLM has conducted concerted outreach and feedback programs, including presentations at the Society for Range Management, the Association of Fire Ecologists, the National Cattlemen's Beef Association, and the Public Lands Council.

A Memorandum of Understanding was signed in April 2016 by the BLM, Natural Resource Conservation Service, and U.S. Forest Service to accomplish common goals in sagebrush habitats, including implementing practices across land ownerships to reduce risks of fire and invasive species, which also supports this landscape scale program of strategic targeted grazing to reduce fine fuels.

2. Project Accomplishments

2018 Demonstration Areas

Soda Fire Targeted Grazing Demonstration Area. The BLM Boise and Vale Districts implemented a 35 mile targeted grazing project in the spring of 2018. It crosses all pastures managed by five grazing permittees. This linear fuel break runs parallel to the base of the Owyhee Mountains. Livestock are concentrated along an upgraded road to manage livestock water and supplement placement. The districts also used herding to accomplish the fuels management target of a two-inch stubble height on fine fuels.

Elko District Targeted Grazing Demonstration Areas. Implementation of this demonstration area utilized four allotments with 40 miles of strategically grazed fuel breaks (8,800 acres). The largest project is the T Lazy S allotment grazed fuel break. It is a 25 mile long fenced pasture that follows an existing road to facilitate water hauling and supplement placement. It was grazed in the spring of 2018 and in July the Boulder Creek wildfire burned into the fuel break pasture. The road and the livestock use stopped the wildfire over a one-mile stretch.



Figure 3. Wildfire before it contacted the water haul road.



Figure 4. Contact of Boulder Creek wildfire and fuel break/road.

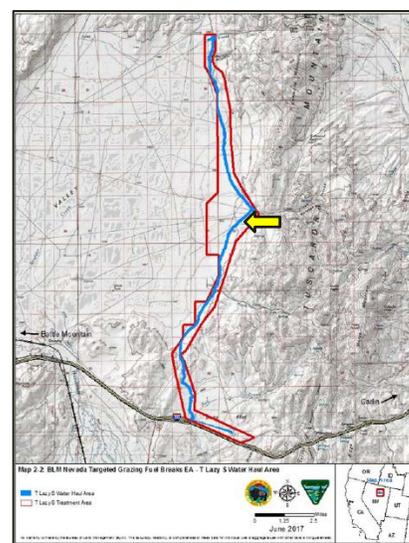


Figure 5. T Lazy S fuel break pasture. The yellow arrow points to where the Boulder Creek wildfire contacted the grazed area.

The Agricultural Research Service Northwest Watershed Research Center is conducting scientific studies (fuel modification, vegetation composition, and soils) on all the grazed fuel breaks. Results of these studies are currently being compiled and analyzed.

Web-Based Targeted Grazing Resource Center

A web page dedicated to both the strategic targeted grazing program and the dormant season grazing of invasive annual grasses is being set up on the Great Basin Fire Science Exchange website (www.greatbasinfirescience.org). Currently, the website contains relevant scientific publications on managing fine fuels with targeted grazing. There are plans to expand the website to include policies; planning and environmental assessment information; targeted grazing demonstration area information and reports; lessons learned; and targeted grazing workshop schedules.

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