



# YAMPA RIVER LEAFY SPURGE PROJECT

Engages landowners, agencies, educators and organizations—  
working together to establish effective programs  
of integrated management for invasive leafy spurge

[www.yampariverleafyspurgeproject.com](http://www.yampariverleafyspurgeproject.com)

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## **2019 Status of Grant-Supported Work—Funding Provided by Routt and Moffat Counties and the Yampa-White-Green Basin Roundtable/Colorado Water Conservation Board**

### OVERVIEW

Leafy spurge is a Eurasian plant accidentally introduced to North America in the early 19<sup>th</sup> century. It aggressively invades riparian and upland plant communities, including agricultural lands. Millions of acres are affected in 29 states. Leafy spurge is listed among the top 25 invasive terrestrial species in a recent (2018) [report](#) by the Western Governors Association.

The Yampa River and its associated agricultural water delivery systems are spreading leafy spurge seeds downstream from a large infestation that has occupied floodplain areas between Hayden and Craig for several decades. Since the 2011 high water run-off season, an exponential increase in the leafy spurge population has been observed in riparian habitat along the Yampa River. Riparian habitat quality and agricultural productivity are actively being degraded downstream for 166 miles to the confluence with the Green River. Tributary streams are also affected (e.g., Little Snake River, Fortification Creek, etc.).

This project will provide information necessary for development of effective and sustainable management programs for riparian environments in the Yampa River Basin. It will support needed scientific work, engage local youth, and build on local knowledge and relationships as we strive to protect both agricultural and environmental land and water uses for our future.

### OBJECTIVES

- Work with stakeholders and the University of Wyoming to develop a robust spatial data set documenting the current distribution of leafy spurge in riparian habitat associated with the Yampa River, tributary streams, and irrigation water delivery systems in the Yampa Valley.
- Utilize remote sensing technology to direct and enhance monitoring and mapping efforts.
- Develop a susceptibility model to predict where new leafy spurge invasion is most likely in Moffat and Routt Counties.
- Quantify the current seed load produced by leafy spurge populations in four or five specific riparian habitats along the Yampa River and associated tributaries.
- Study and evaluate best integrated management practices for reducing cover and seed production of leafy spurge in diverse riparian systems in the Yampa Valley.
- Develop a map of known and potential leafy spurge biological control sites in the Yampa Valley, and work with the Colorado Department of Agriculture to develop kid-friendly monitoring protocols in anticipation of a future adopt-a-spurge-bug-patch program for engagement of local Boys and Girls Club, school science classes, and other youth organizations, aimed at improving understanding and appreciation for the relationships between the river, associated riparian habitat, agricultural water delivery systems, and invasive weeds.

## 2019-2020 WORK PLAN

### Task #1

Research—Develop a spatial data set (map) documenting current distribution of leafy spurge in riparian habitat associated with the Yampa River, tributary streams and water delivery systems. Use remote sensing and field-collected analog data to develop a susceptibility model to predict where spread is most likely to occur in Yampa Valley.

#### Partners

University of Wyoming  
Local landowners  
Colorado State Land Board  
Routt and Moffat Counties

Colorado Parks & Wildlife  
BLM—Little Snake Field Office  
NPS—Dinosaur National Monument  
YRLSP volunteers

### Task #2

Research—Identify best integrated management practices for reducing leafy spurge seed production in specific riparian habitat types in the Yampa Valley. Methods will include targeted sheep grazing, low-rate herbicide application and strategic mechanical removal.

#### Partners

University of Wyoming  
Local landowners  
Colorado State Land Board  
Moffat County

TNC-Carpenter Ranch  
Colorado Parks & Wildlife  
YRLSP volunteers

### Task #3

Education and Outreach—Engage youth in the Yampa River Leafy spurge Project, using biological control as a means to encourage learning, participation and productive involvement.

#### Partners

CSU Extension (Moffat and Routt Counties)  
Boys and Girls Clubs  
Colorado Master Gardeners  
Colorado Department of Agriculture—Palisade Insectary  
BLM—Little Snake Field Office  
CPW—Yampa River State Wildlife area  
Local Landowners  
YRLSP Volunteers

For more information or to volunteer—

Contact Tamara Naumann, 970-620-0182 or [williapa@toast.net](mailto:williapa@toast.net)

Visit the Yampa River Leafy Spurge Project website [www.yampariverleafyspurgeproject.com](http://www.yampariverleafyspurgeproject.com)