Tamarisk Management Efforts in Colorado

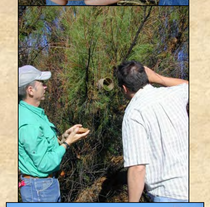
USDA NRCS United States Department of Agriculture Natural Resources Conservation Service

"Helping People Help the Land"

INTRODUCTION

Every day invasive plant species are threatening the conservation of our nation's vital agricultural and natural resources. Tamarisk (saltcedar, *Tamarix* spp.) has spread across Colorado along riparian areas, irrigation ditches, stock ponds, reservoirs and roadside and gravel borrow pits, establishing readily on moist bare soil. NRCS and partners have been actively involved in a variety of tamarisk removal and restoration projects utilizing innovative methods, partnerships and a unique combination of resources and support. This poster highlights many of the NRCS and partner activities that, in combination, have greatly affected the distribution and spread of tamarisk throughout Colorado. Partners have combined forces to inventory, monitor and treat affected resources areas.

Methods



Tamarisk Beetles

Introduction of the tamarisk leaf beetle in Delta County was an excellent opportunity to generate interest in a variety of NRCS conservation practices, supported by EQIP, to re-vegetate and restore native plant communities after tamarisk control. The Painted Sky RC&D Council in partnership with the Colorado Department of Agriculture Palisade Insectary introduced and evaluated the use of the tamarisk leaf beetle for tamarisk control in various locations in the Gunnison River watershed.

Control and eradication methods include:

- Foliar herbicide applications
- Mechanical removal
- Mechanical removal followed by herbicide applications
- Biological control – tamarisk leaf beetles

Un-grazed site, post -tamarisk treatment, showing flush of kochia

Post-tamarisk treatment after grazing showing control of kochia

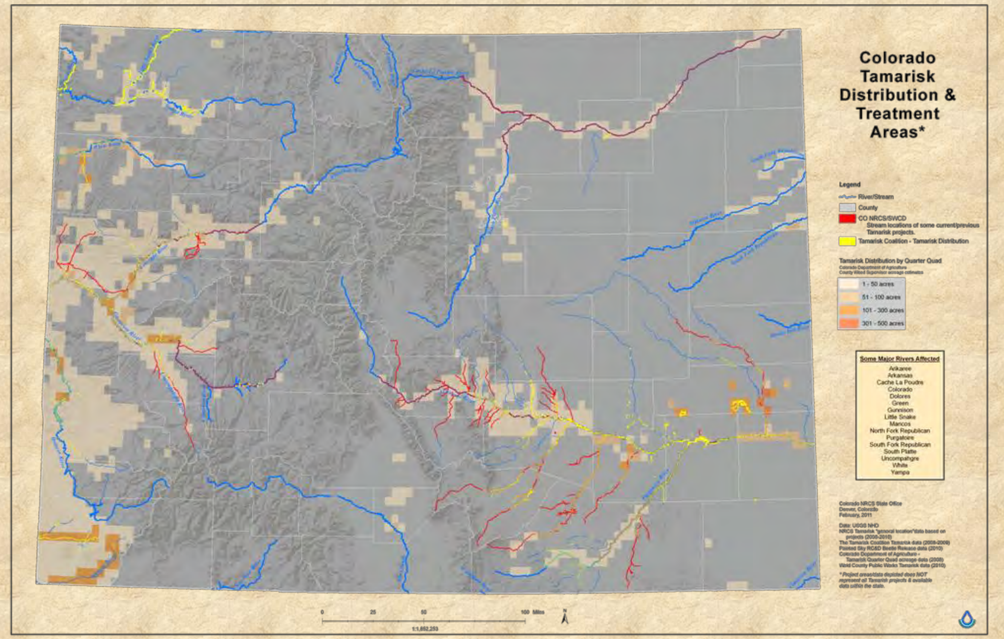
Research and Demonstration

Stan Young owns a ranch along East Salt Creek in Mesa County. The Colorado Department of Agriculture, in cooperation with the NRCS, the Upper Colorado Environmental Plant Center (UCEPC) and the Tamarisk Coalition have worked with Stan to control tamarisk on his property and to ensure that the land comes back in vegetation desirable for wildlife habitat and grazing. The Mack site is host to three different re-vegetation projects, including biocontrol.

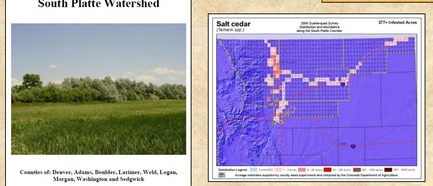
CSU researchers are working to increase our understanding of the interaction between fires and tamarisk, in how fire can be used to manage the species and in how unintentional burns impact subsequent management efforts.

Mapping

The Colorado Department of Agriculture, The Tamarisk Coalition, NRCS, and many state and local partners have committed to collaborating information detailing the present day distribution and treatment efforts of tamarisk.



Education



Effective Watershed management and invasive species control efforts rely on a coordinated approach. The Platte Invasives Endeavor (PIE) Plan is a great example of coordinating public education and outreach efforts to increase the understanding of the impacts from non-native invasive plants.

The Upper Colorado Environmental Plant Center and the Los Lunas Plant Center have teamed with the Tamarisk Coalition to provide both classroom and hands-on training on post-tamarisk treatment and re-vegetation methods and techniques. Guidelines for planting long-stem transplants and seeding considerations provided practical training for private landowners, interested individuals associated with public and private organizations.

Partnerships

Partnerships have been instrumental

- Colorado Conservation Districts
- Colorado County Weed Control Programs
- Colorado Legends and Legacies Youth Corps
- Cooperative Weed Management Areas
- Colorado Water Conservation Board
- Flood Districts
- Foundations
- Local Businesses
- Municipalities
- Native American Tribes
- NRCS Field Offices
- NRCS Plant Materials Program
- Private Landowners and Ranchers
- Resource Conservation & Development (RC&D) Councils
- Rocky Mountain Bird Conservatory
- The Nature Conservancy
- The Tamarisk Coalition
- Universities and Colleges
- US Department of Agriculture
- US Department of Interior
- Watershed Organizations

NRCS Programs

- Environmental Quality Incentives Program (EQIP)
- Conservation Innovation Grants (CIG)
- Conservation Stewardship Program (CSP)
- Conservation Partnership Program (CPP)
- Wildlife Habitat Incentives Program (WHIP)

The effectiveness of Colorado's tamarisk treatment efforts is measured by the partnerships and successful leveraging of support. NRCS programs in many cases have been utilized to leverage additional, private, state, and federal funds.

Results

Partnership with Garfield County Commissioners, NRCS, Garfield County Vegetation Management, South Side Conservation District and local landowners resulted in the Mamm Creek Tamarisk Project - $75,000 cost share project with the following accomplishments:

- Hired intern
- Inventoried tamarisk and Russian Olive
- Released 10,000 tamarisk leaf beetles
- Planning assistance for landowners and ranchers
- Partnered with the Upper Colorado Environmental Plant Center to assist South Side District with pole plantings.

Restored riparian areas in the Upper and Lower Arkansas River Basin and throughout Colorado are the result of coordinated partnerships. NRCS and partners continue their work to effectively manage tamarisk across the state. Projects continue to expand the tamarisk treatment areas, including educational outreach and compilation of treatment and distribution efforts.

For more information contact Colorado Plant Materials Program, Christine Taliga, Plant Materials Specialist, 720-544-2840, christine.taliga@co.usda.gov or http://www.co.nrcs.usda.gov/; USDA NRCs is an equal opportunity employer and provider.