

Colorado State Conservation Board 2009 Matching Grants Project:  
Dolores Conservation District: McElmo Creek Riparian Restoration Project

**What natural resource problem(s) did the project address?**

Dolores Conservation District is located in Montezuma County on the western edge of southern Colorado. **The county suffers from an infestation of around 1,000 acres of tamarisk** and the district, county and Dolores Tamarisk Action Group (DTAG) have been engaged in a battle to control and eradicate this shrubby noxious weed for 5 years. Tamarisk came to Colorado as an attractive garden ornamental that then escaped to wreak havoc in riparian areas. It destroys habitat for native plants and wildlife by its dominating growth habits and by releasing salts into the soil that suppress other plant growth - its other common name is "salt cedar".

Current tamarisk control efforts are focused on the McElmo Creek watershed. DTAG has been successful on 500 acres in other areas and also with a demonstration project on a highly visible tract in McElmo canyon. They involve **eliminating the tamarisk and establishing "islands" of native vegetation that will act as reservoirs to repopulate the area with native plants.** CSCB Matching Grant funds were used to continue tamarisk eradication and native plant reestablishment in the McElmo Creek watershed where 99% of the over 100 landowners affected gave permission for DTAG activity on their land.

**What was achieved?**

- Two sites were planted with "pockets" of native plants as reseeding source for 292 acres after removal of tamarisk by hand and chain saws and chemical treatment of cut stumps
- Hydrosource cross-link polymer crystals and drip irrigation used to enhance seedling survival.
- Southwest Conservation Corp 4-week summer youth program provided volunteer labor
- Seedling survival was 70-80% but growth stunted - identified underlying Mancos shale soil combined with tamarisk salt deposits on these sites as underlying problem for seedling success. Drought in areas without drip irrigation and fall grasshopper infestation also contributed to seedling stress.
- Plans made to replace seedlings that fail by next year and drip irrigation to be maintained for at least one more year to encourage plant growth and root establishment. More widespread drip irrigation options being investigated.
- Slow establishment of plants cause greater than expected Russian knapweed infestations in some areas - landowners being advised of treatment options and winter grass seeding planned to suppress weed establishment. Use of wheat grasses and sand drop grasses being considered for their greater competitive ability with Russian knapweed than other grasses for short-term vegetation establishment.
- Follow-up foliar treatment planned of re-sprouting tamarisk.



*The Southwest Conservation Corp remove tamarisk and chemically treat the cut stumps (above left). Re-establishing native plants is the next critical step and that can be the hardest part of restoration efforts (above right).*