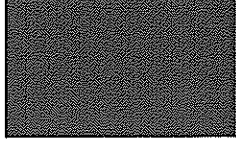




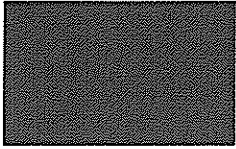
Colorado Parks and Wildlife

TAMARISK AND RUSSIAN OLIVE REMOVAL UPDATE:
FEBRUARY 27, 2018

Mission Statement of CPW



- ▶ The mission of Colorado Parks and Wildlife is to perpetuate the wildlife resources of the state, provide a quality state parks system, and to provide enjoyable and sustainable outdoor recreation opportunities that educate and inspire current and future generations to serve as active stewards of Colorado's natural resources.



Agency Plans and Requirements

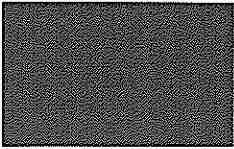
- ▶ 2011 Weed Management plan and statutory requirements based on Colorado Weed List
 - ▶ 50% of vegetation at Connected was on list. Does not include pampas grass.
- ▶ 2016 Forest Management plan (Hazard Tree Assessment)



Funding Opportunities For

Habitat Restoration

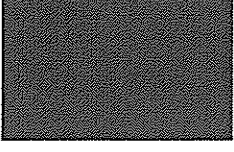
- ▶ CPW Youth Corps Program; Solicited and received 1-2 Weeks/Year from WCCC 2010+
- ▶ Tamarisk Coalition through Colorado Water Conservation Board
 - ▶ 2012 \$64,000 cleared and reclaimed 22 acres at Connected Lakes
 - ▶ 2016 \$53,800 cleared an additional 8 acres at Connected Lakes. Reclamation is in progress.
 - ▶ 2016 \$30,000 cleared an additional 5 acres at Pear Park. Reclamation in progress



Other Funding Opportunities

- ▶ CPW Wetlands Program
 - ▶ \$38,000 at Pear Park cleared and restored 6.5 acres of Riparian habitat.
 - ▶ \$50,000 at 34 Rd clearing and restoration is in progress. 5.4 acres cleared to date.
- ▶ USFWS Mitigation Funds
 - ▶ \$10,000 to clear and restore 7 acres
- ▶ CPW yearly operational funds \$12,000

October 2013 Pre- Removal



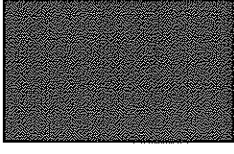
TRO Removal/Year 1

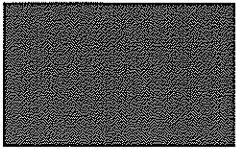
- ▶ Implementation (Removal)
 - ▶ USACE Permitting
 - ▶ Scheduling contractor (breeding seasons, soil conditions, visitation and staffing demands)
 - ▶ Public notice (Transients and trail users)
 - ▶ Traffic control and safety practices
 - ▶ Type of Removal (e.g. sawyer crew, hydro-axe, track hoe with thumb attachment)

- Disposal of biomass



March 3, 2017 Post Removal

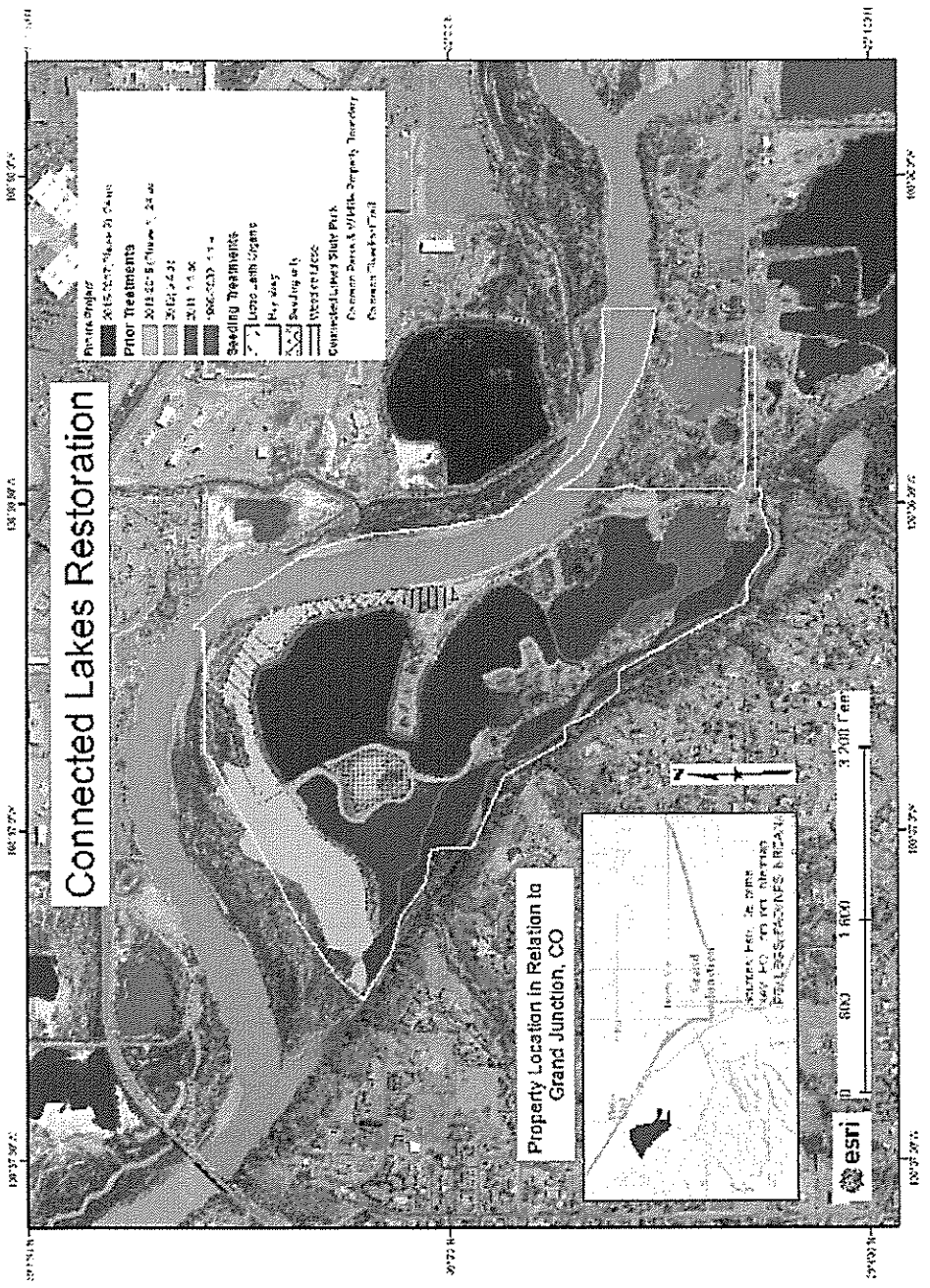




Control of resprouts and secondary weeds-Year 2

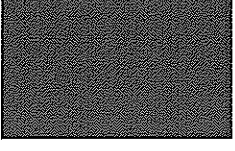
- ▶ Implementation (Herbicide application)
- ▶ **Scheduling (Spring and Fall)**
 - ▶ Spring; TrumpCard and Escort for secondary weeds.
 - ▶ Fall; Rodeo for Pampas grass; Milestone and Escort for secondary weeds; Garlon 3A and Amine 2-4D for TRO
- ▶ Contract labor or in house?
- ▶ Public Notice

Connected Lakes

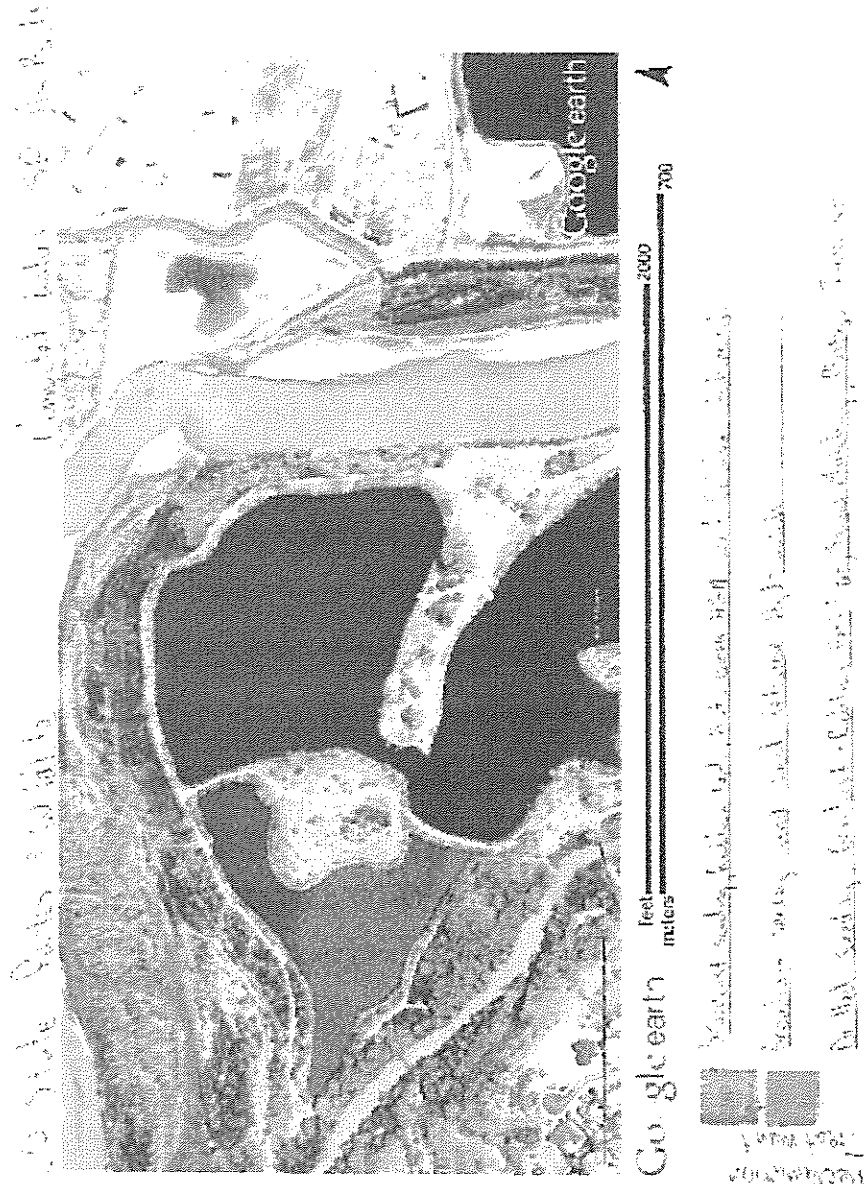


Reclamation – Year 3

- ▶ Cottonwood pole plantings
- ▶ Willow stakes
- ▶ Shrubs including sumac, big basin sage, buffalo berry, Mormon tea, rabbit brush, four wing saltbush and woods rose
- ▶ Grasses
 - ▶ 57% Western Wheatgrass
 - ▶ 16% Bottlebrush Squirreltail
 - ▶ 6% Inland Saltgrass
 - ▶ 6% Alkali Sacaton
 - ▶ 4% Bird's eye
 - ▶ 4% Alkali grass



Connected Amendments

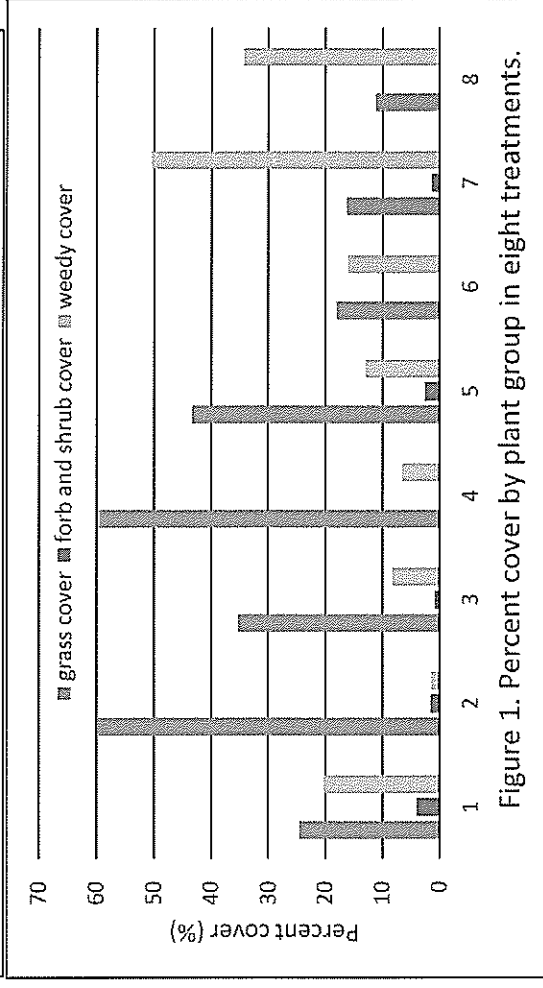
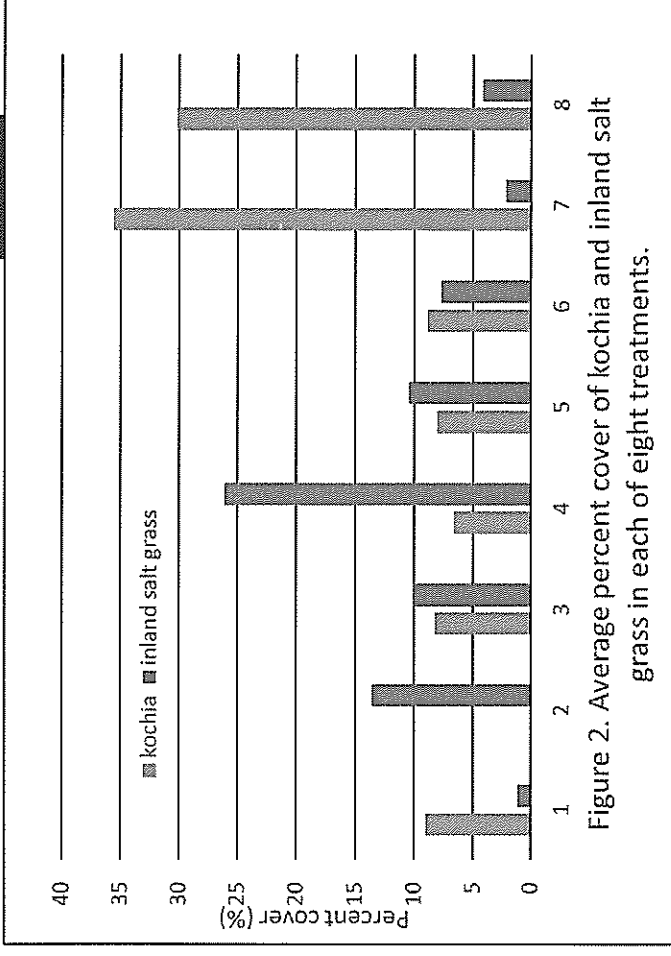


4/15/2015

Coyle Park

Success of Reclamation

1. Thumb attachment, broadcast seeding, no treatment
2. Hydromulcher, broadcast seeding, biotic earth, wood cellulose
3. Hydromulcher, broadcast seeding wood cellulose.
4. Hydromulcher, no treatment?
5. Biotic earth and broadcast seeding?
6. Wood cellulose, hydromulch
7. Thumb attachment, no treatment
8. Straw mulch
9. 2016 TC intern assessment 30%-50% desirable cover. Wheatgrass being most successful.



Lessons Learned

- ▶ Community Outreach
- ▶ Apex bud on Cottonwoods
- ▶ Caging vegetation from ungulates and rodents
- ▶ Tractor operations
- ▶ Controlled Burns
- ▶ Insect damage
- ▶ Neonictonoids
- ▶ Herbicide application/spills



Leaf Beetles



M.D.A.

Questions?

