

# River Partners and the Conservation Corps

## *A Win-Win Partnership for Job Creation, Invasive Species Removal, and Habitat Restoration*

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# River Partners

- Founded in 1998, our mission is: *creating wildlife habitat for the benefit of people and the environment*
- State-wide nonprofit specializing in ecological restoration
- 12,000+ ac. restored, 1.8+ million trees and shrubs planted, and demonstrated success recovering T/E species
- Innovative conservation solutions in managed landscapes
- [www.riverpartners.org](http://www.riverpartners.org)



# RIVER PARTNERS PROJECT MAP





# River Partners



*Creating Wildlife Habitat for the Benefit of People and the Environment*

# River Partners





# River Partners

## *Otay River Delta*



August 2013



August 2014

# Job Creation

**Large-scale invasive species removal and habitat restoration projects have many benefits, but are very labor-intensive**

- Many projects occur in regions with chronic unemployment
- River Partners emphasizes job creation and local investment
- Significant overlap with missions of Conservation Corps

# Job Creation

- San Joaquin Regional Conservation Corp
- California Conservation Corps
- Urban Corps of San Diego County
- Related programs
  - Farmworker Institute of Ed. & Leadership Development
  - AmeriCorps Watershed Stewards Program
  - River Partners Summer Internships



San Joaquin  
Regional Conservation Corps





# Job Creation

We have partnered with Conservation Corps since 2010 for cost-effective implementation of invasive species removal and habitat restoration projects

Conservation Corps	Salaries	Total hours
Urban Corps of San Diego	\$30,960	1,178
San Gabriel Valley Conservation Corps	\$205,729	10,962
San Joaquin Regional Conservation Corps	\$712,433	36,818
California Conservation Corps	\$2,251,000	119,933
	<b>~\$3.2 million*</b>	<b>~170,000 hrs</b>

**\*SJRCC has contributed ~\$300,000 of labor through EDRiP**

# Job Training & Fieldwork

- Corpsmembers work on the full life cycle of projects
  - Controlling invasive species
  - Collecting native plant material
  - Preparing restoration sites and installing irrigation
  - Planting native species
  - Assisting with public outreach
- Staff work with supervisors to provide hands-on training that helps corpsmembers advance their own careers



# Site Preparation

## *Invasive Weed Treatment*

Corpsmembers are trained to use hand tools, herbicide, and heavy equipment to remove many invasive weeds including:

- Giant reed (*Arundo donax*)
- Red sesbania (*Sesbania punicea*)
- Salt cedar (*Tamarix* spp.)
- Edible fig (*Ficus carica*)
- Crown daisy (*Glebionis coronaria*)
- Himalayan blackberry (*Rubus armeniacus*)
- Yellow starthistle (*Centaurea solstitialis*)
- Tree of heaven (*Ailanthus altissima*)
- Tree tobacco (*Nicotiana glauca*)
- Perennial pepperweed (*Lepidium latifolium*)
- Castor bean (*Ricinus communis*)





A photograph showing three workers in a field of crown daisy. The workers are wearing hard hats and work clothes. One worker in the center is using a long-handled tool to pull weeds. Another worker on the right is also using a tool. A third worker is visible in the background on the left. The field is covered with yellow flowers and green foliage. In the background, there is a tall fence and a clear sky.

Corpmembers controlling crown daisy  
along the banks of the Otay River





Corpmembers controlling crown daisy  
along the banks of the Otay River



# Corpsmembers spraying herbicide on pepperweed at Great Valley Grasslands SP in the San Joaquin Valley





# Corpsmembers spraying herbicide on pepperweed at Great Valley Grasslands SP in the San Joaquin Valley






Corpsmembers use hand tools to remove weeds around native plants on “bunny mounds” at the SJR NWR







**Can't we just  
use dynamite?!**

**Corpsmembers strategize the  
treatment of arundo near Fresno**



Corpsmembers use chainsaws to remove arundo from a site in the San Joaquin Valley





# Corpsmembers cut and drag arundo from irrigation ditches near Fresno





# Corpsmembers cut and drag arundo from irrigation ditches near Fresno





# Corpsmembers cut and drag arundo from irrigation ditches near Fresno





Corpsmembers create an “arundo burrito”  
to remove biomass after treatment







Corpsmembers remove the bundled  
arundo from the project site



# Cut arundo is transported off-site for disposal





# Corpsmembers controlling Himalayan blackberry at Hatfield State Park





# Corpmembers controlling Himalayan blackberry in the San Joaquin Valley





# Corpmembers controlling Himalayan blackberry in the San Joaquin Valley





Corpsmembers rake sesbania seed pods and debris  
to prevent resprouts and downstream dispersal





# Corpsmembers clearing large woody debris at Hatfield State Park





# Corpsmembers clearing invasive species and woody debris in the San Joaquin Valley





# Site Preparation

## *Debris Removal*

Prior to restoration, Corpsmembers remove trash, tires, woody debris, old fencing, and other materials





# Site Preparation

## *Irrigation Installation*

- Corpsmembers also assist with installing water-efficient irrigation systems
- Precision delivery of water to native species is especially important during drought



Irrigation installation at Rancho Jamul





## Irrigation installation in Fall 2015 in the San Joaquin Valley



# Irrigation installation in Fall 2015 at Riverbottom Park





# Irrigation installation in Fall 2015 at Riverbottom Park






# Collecting & Processing Plant Materials

- Corpsmembers also collect and process seeds and cuttings from native plants
- Training includes plant i.d., plant ecology, and processing of native plant materials



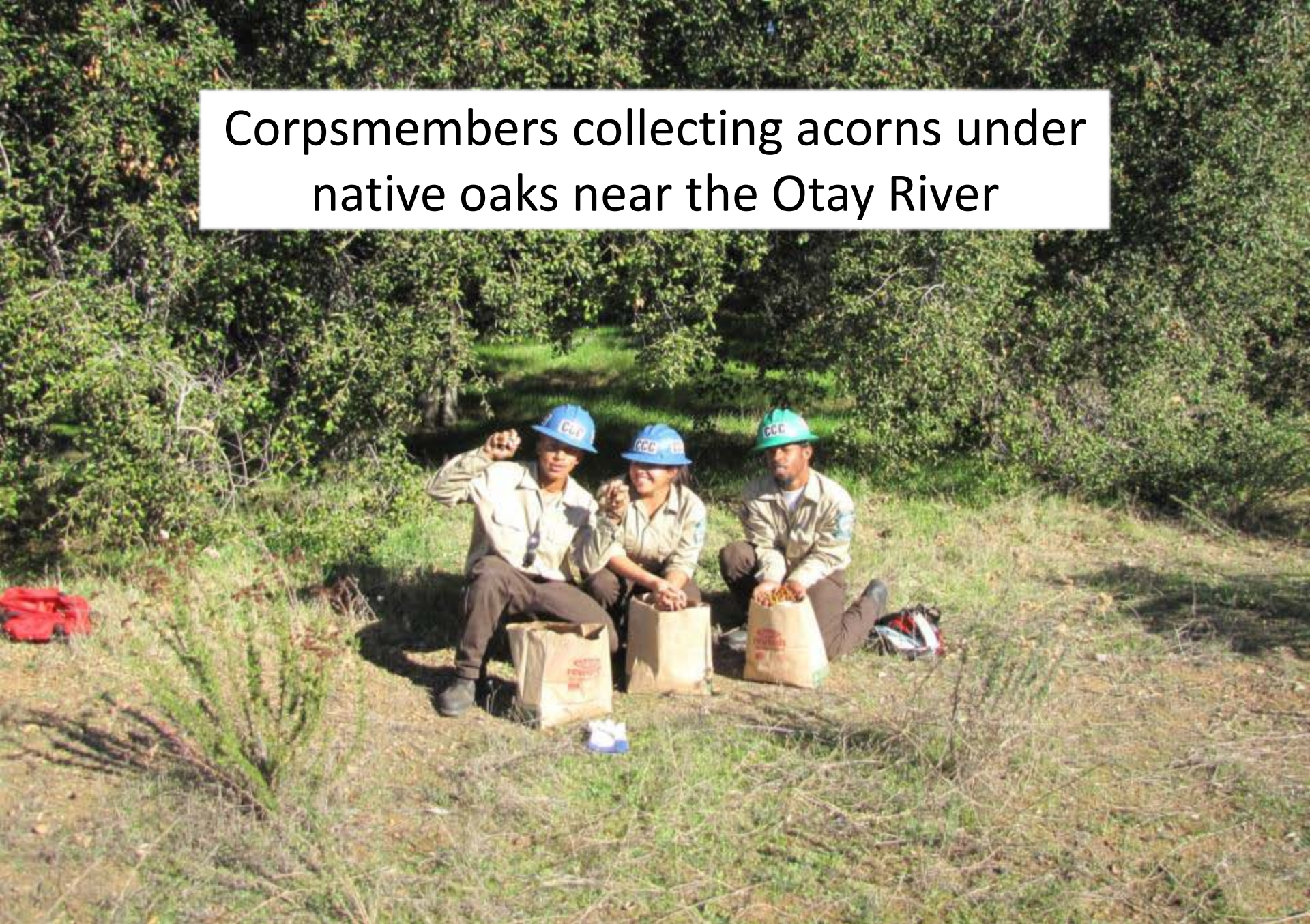


A photograph showing three people in a forest, likely engaged in a conservation activity. They are wearing hard hats and light-colored shirts, and are crouching or kneeling on the ground, possibly collecting acorns from under large trees. The scene is outdoors, with sunlight filtering through the dense canopy of green leaves. The ground is covered with grass and fallen leaves.

# Corpsmembers collecting acorns under native oaks near the Otay River



# Corpsmembers collecting acorns under native oaks near the Otay River





# Corpsmembers mixing seeds of native understory species prior to planting





# Planting Native Trees & Shrubs

- Corpsmembers also assist with planting native species from seed, cuttings, and containers
- Attention to detail is critical, since each plant has an exact location according to the restoration plan





# Corpsmembers install stakes and labels prior to planting at the San Joaquin River NWR





Corpsmembers have helped plant 160,000+ native trees and shrubs on 600 acres at Dos Rios Ranch





# Corpsmembers planting native trees and shrubs at Panorama Vista Preserve in Bakersfield







A corpsmember broadcasts native understory seed at Dos Rios Ranch



# Corpsmembers plant plugs of native creeping wildrye in the Delta





# Site Maintenance After Planting

- Corpsmembers help maintain irrigation, control weeds, and replant native species
- Site maintenance is critical to restoration success



Corpsmembers take a water break while weeding at Dos Rios Ranch





San Diego County Urban Corps replanting native trees and shrubs along pathways at Otay Delta



# Supporting Outreach Activities

- Corpsmembers also assist with volunteer planting days and other outreach events
- Additional job experience that complements field work







Corpsmembers taking a quick “time out”  
during a volunteer planting event



# Corpmembers assisting during a volunteer clean-up at Riverbottom Park near Fresno





# Career Pathways

- We are always happy when Corpsmembers move on in their own careers – especially when they work with us!
- Former CCC **Ryan Shepherd** has joined our Southern CA office as the Restoration Field Foreman
- Ryan's experience helps him work efficiently with Corps crews on projects throughout Southern California



# Conclusion

- River Partners has successfully partnered with Conservation Corps across California to implement complex invasive species control and restoration projects
- These partnerships will expand alongside our organization into new regions
- Contact us regarding opportunities in your region



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