

**PARIA BEACH RIPARIAN RESTORATION
IN GLEN CANYON NATIONAL RECREATION AREA,
LEES FERRY, ARIZONA**

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GRAND CANYON
WILDLANDS COUNCIL,
INC.**



GRAND CANYON WILDLANDS COUNCIL

FLAGSTAFF, ARIZONA

Launched: 1 March 1996

Mission: *Safe havens and safe passages for all the Grand Canyon region's native wild creatures*

Staff: Kelly Burke (ED), Larry Stevens (Ecologist), Brian Stultz (Environmental Coordinator)

GCWC Projects:

- Ecological inventory and assessment
- Agency advisement
- Landscape and species conservation and rehabilitation
- Educational outreach



PROJECT STATEMENT

The Paria Beach is one of the most intensively visited recreation sites downstream from Glen Canyon Dam, but with the advent of the tamarisk leaf beetle, it is now covered with dead and dying tamarisk.

Building on several previous riparian restoration projects, and working with Glen Canyon National Recreation Area, GCWC requested and received support from the Arizona Water Protection Fund to rehabilitate the 4 ac riparian zone of Paria Beach in 2020-2023.



THE PARIA BEACH

Problem: Tamarisk dominance “solved” by introduction of *Diorhabda* leaf beetles, decimating tamarisk but no recovery of native phreatophytes or habitat.

Result: Degradation of headwater and higher stream order riparian wildlife habitat, function, visitor experience.

Solution: Riparian restoration/rehabilitation, likely permanent improvements in site- and river corridor habitat through enhanced habitat, native seed production, visitor experience



AWPF-Funded GCWC and Fred Philli Lees Ferry Riparian Resto 2001 - 2012

Methods

- 10 ac (4 ha), easy access
- Mechanical tamarisk removal
- Irrigation system installation
- Revegetation with native species
- Monitoring

Results

- Native vegetation cover, 5 yr
- Avian diversity rebounded >2 yr
- Use of landscape by wildlife
- Recreational use for camping

Stevens, L.E., K.J. Burke, J.R. Spence, L. Pilkington, and C. Hughes. 2015. Colorado River riparian ecosystem rehabilitation in Glen and Grand Canyons, Arizona. Pp. 353-376 in Huenneke, L.F., C. van Riper III, and K.A. Hayes-Gilpin, editors. The Colorado Plateau VI: Science and Management at the Landscape Scale. University of Arizona Press, Tucson.

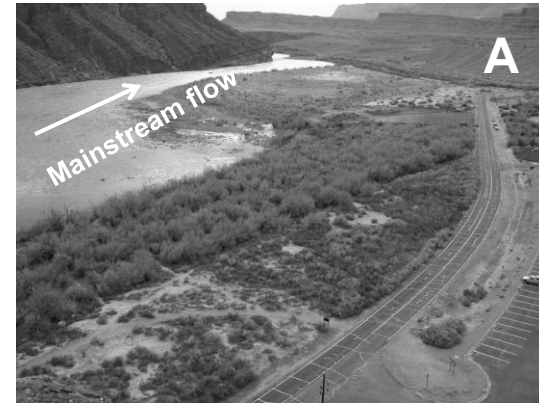
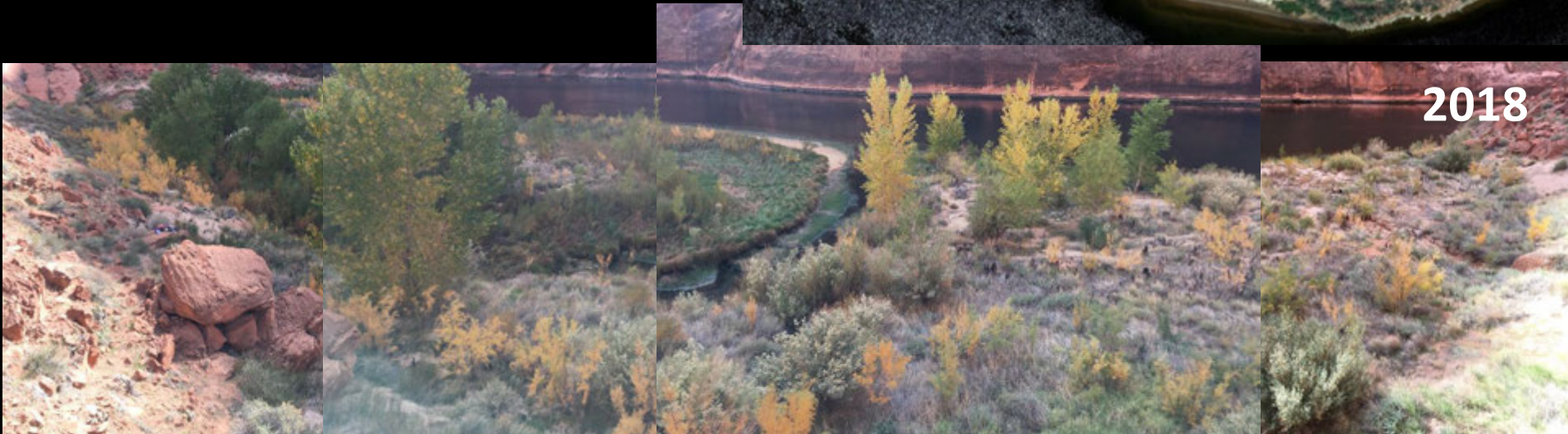
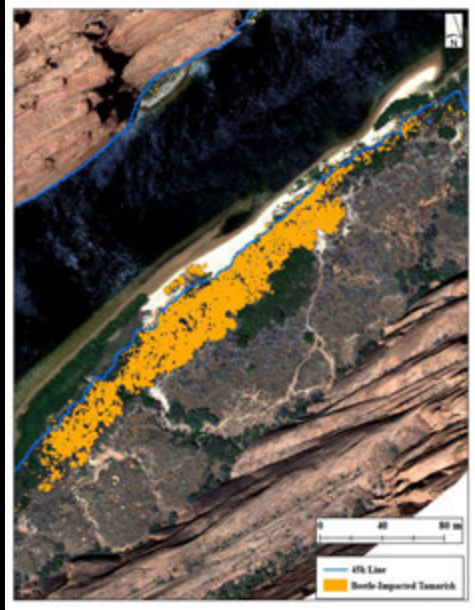


Fig. 2.2: Lees Ferry pilot rehabilitation site. A – Pre-treatment, 2001; B – Post Treatment, 2002; C – native phreatophyte growth in 2011.

**AWPF-funded GLCA
Hidden Slough (-6.5R)
Riparian Restoration:
7 acre, remote site,
2008-2017**



GLCA “LUNCH BEACH” (-7 L) REHABILITATION BY GLEN CANYON NATIONAL RECREATION AREA STAFF



Timeframe: 2018-2020

Area: 1 ha (2.5 ac)

- Tasks:**
- 1) Planning
 - 2) Compliance
 - 3) Volunteer-based removal of tamarisk
 - 4) Providing firewood to public
 - 5) Replanting/reseeding
 - 6) Monitoring

PARIA BEACH REHABILITATION GOALS AND TASKS

Goals

- Goal 1: Further the GCWC mission through active collaboration with land management agencies
- Goal 2: Restore natural shoreline configuration, native riparian vegetation, and natural habitats along the Colorado River
- Goal 3: Conduct restoration activities in a fashion fully consistent with the NPS mission, and in accord with NPS management policies, practices, and public education.

Tasks

- Task 1: Obtain permits, authorizations, clearances and agreements
- Task 2: Compilation and assessment of background information
- Task 3: Develop restoration, maintenance, monitoring plans
- Task 4: Monitor vegetation, inverts, herps, birds, mammals
- Task 5: Implement restoration
- Task 6: Public outreach
- Task 7: Final report

ON-THE-GROUND WORK

Mechanical cut/clear decadent tamarisk

Slash disposal – several options

Make firewood available to the public

Replant with native vegetation:

Goodding's Willow

Fremont Cottonwood

Coyote Willow

Box Elder

Upper terrace – Saltbush, grasses

Experimental spp – Hoptree, etc.

Monitor

Feedback to improve future mgt.



**GCWC expresses its deep gratitude to GLCA and to AWPf
for past and on-going support**

Questions and Discussion

