Grand Canyon

National Park Service U.S. Department of the Interior

Grand Canyon National Park Division of Science and Resource Management



Soap Creek Camp Restoration





Grand Canyon National Park staff and volunteers are restoring the upper terrace area at Soap Creek as part of the implementation of the Colorado River Management Plan. Restoring sites impacted by visitor use is an integral part of the Colorado River Management Plan, and the restoration of the highly impacted Soap Creek Camp will be a focus of mitigation work in the Colorado River corridor for the next several years.

Although the upper terrace in the Old High Water Zone at Soap Creek was previously used for camping, river users and backpackers must now camp within the durable sandy riparian zones below the fragile areas in order to assist in the recovery of this important ecosystem.

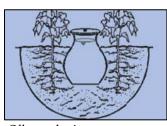
Old High Water Zone

dam riparian zone along the Colorado River is particularly fragile, as it no longer receives the benefits of spring floods due to regulated river flows. This area typically supports native vegetation, such as mesquite and acacia, and is characterized by healthy biological soil crusts. Biological soil crusts are communities of organisms that live on the soil surface that include algae, bacteria, lichens, mosses, and fungi. Soil crusts are crucial in the desert environment because they prevent soil erosion, contribute nutrients, and retain water, yet they are susceptible to damage by trampling.

The Old High Water Zone above the sandy, post-

Soap Creek has always been a very popular site and is used as a lunch spot or camp by river users and backpackers. As a result, a large area in the Old High Water Zone at Soap Creek is being highly impacted by social trails, damaged vegetation, compacted soils, and damaged soil crusts. Impacts in the Old High Water Zone are difficult to repair. Soil crusts can take decades to completely recover. It is also extremely difficult for new plants to become established in impacted zones because of diminished water availability and soil compaction.

Restoration



Olla gardening

Restoration

In 2008, the National Park Service began an aggressive restoration project at Soap Creek Camp. Eight new campsites were established in the sandy zone near the river, and social trails and campsites were obliterated in the Old High Water Zone. In November 2009, park staff will initiate an extensive replanting effort in the large denuded area in the Old High Water Zone.

This multi-year restoration effort will utilize *olla gardening*, a centuries-old method of irrigation. Plantings will be clustered around partially buried modern unglazed commercially-produced

clay pots that are filled with water. The plants will "self-water" by pulling water through the porous clay on an as needed basis.

The use of *olla gardening* at Soap Creek is experimental. This is the first time that this method has been used at Grand Canyon. Park staff will continually monitor the water level in the pots to determine appropriate refilling rates and monitor the survival rates of the plants in the *olla gardening* plots. Plantings will continue in future years until the large denuded area in the upper terrace is completely restored.

The restoration of the Old High Water Zone at Soap Creek will only be successful with the collaboration and cooperation of visitors to Grand Canyon's backcountry. It is essential that river users and backpackers camp in the sandy zone close to the river, use established trails, and stay out of planting zones. Learn to recognize other areas that have been impacted, and take care to avoid creating new impacts. As you explore Grand Canyon, Leave No Trace and have a great adventure.

For further information about the Soap Creek Camp restoration project or the Colorado River Management Plan, visit http://www.nps.gov/grca/parkmgmt/riv_mgt.htm or contact the park via email at GRCA_CRMP@nps.gov.

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Soap Creek Camp

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