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**Park/NPS Unit:** Canyon de Chelly National Monument (CACH)

**Title of Project:** Incorporating TEK into Watershed Restoration Planning at Canyon de Chelly National Monument

**Administered through the: (pick from drop down list):** Colorado Plateau Cooperative Ecosystem Studies Unit Cooperative Agreement Number H1200-09-0005

**CESU Partner (pick from drop down list):** Northern Arizona University

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**NPS Technical Expert (if appropriate):** None

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**Project Dates:**

**Start Date:** March 21, 2011

**Any Other Product Milestone Dates you need to include:** (full dates can go in with the project description)

**End Date:** September 30, 2013

**PROJECT ABSTRACT:**

Traditional Ecological Knowledge (TEK) historically guided Native American resource management across western landscapes. Given the challenges of current resource management (e.g., invasive species management, threatened and endangered species, global warming) and an emerging understanding of historical resource use, many stakeholders now propose integrating western science and TEK into NPS resource management. However, few park units have intentionally documented and integrated TEK into resource management. This participatory research study elucidates TEK of Navajos living and farming in Canyon de Chelly National Monument for integration into ongoing NPS riparian restoration efforts. Knowledge documented by this study is intended to enrich and improve cultural livelihoods through culturally appropriate riparian restoration. Incorporating TEK into Canyon de Chelly resource management not only fulfills the NPS mission and values, but should also empower tribal residents by validating tribal knowledge in resource management.

Canyon de Chelly National Monument is located in the heart of the Navajo Nation. It is a unique site because the NPS is only responsible for managing historic cultural resources, features of scientific interest, and visitors, while the Navajo Nation retains rights to and is responsible for land management under tribal trust status. The presence of invasive tamarisk (*Tamarix ramosissima, Tamarix chiensis* and hybrids) and Russian olive (*Elaeaganus angustifolia*) in Canyon de Chelly generates significant environmental and cultural impacts. By decreasing farmland and biodiversity, and affecting hydrologic processes and flood regimes these species threaten the traditional Navajo way of life in the canyon and park resources (NPS, 2005). The management structure of Canyon de Chelly provides an opportunity for integrating social and ecological systems and western and indigenous knowledge of the area into restoration efforts.The history of people living in the canyons goes back thousands of years with farming as a major component beginning around 1,500 B.C. (NPS, 2005). The Navajos who live in the canyon now can be traced back to the 1700s and many still hold a deep attachment to the land (NPS, 2005). Therefore, Canyon de Chelly and its residents provide an excellent setting to actively document and integrate TEK into NPS led restoration activities. TEK may help to generate a baseline of riparian ecosystem conditions and uses based on hundreds of years of resource management and observations. It will also contribute to planning of revegetation efforts once the invasive species have been removed and benefit both biological resources and living culture within the canyon.