

PANEL PRESENTATION AND DISCUSSION

**LANDSCAPE AND LEGACY: INTEGRATED STRATEGIES FOR RESOURCE PROTECTION,
TRANSPORTATION AND STEWARDSHIP AT GRAND CANYON NATIONAL PARK**

Presenter Names and Affiliations

Vicky Stinson (928-638-7364, victoria_stinson@nps.gov) Landscape Architect / Project Manager, RLA, B.S. in Landscape Horticulture
Grand Canyon National Park, National Park Service
1824 South Thompson Street, Suite 200
Flagstaff, AZ 86004

Jan Busco (928-638-7782, janice_busco@nps.gov) Horticulturist, B.S. in Horticulture, M.S. in Forestry
Grand Canyon National Park, National Park Service
1824 South Thompson Street, Suite 200
Flagstaff, AZ 86004

Andy Dufford (303-455-9656, andy@chevostudios.com) Owner, Artist / Sculptor,
Chevo Studios
3222 Tejon Street, Suite H
Denver, CO 80211

Jason Fann (928-778-0170, jfann@fanncontracting.com) Co-Owner and Project Manager, B.S. in Construction Management
Fann Contracting, Inc
1403 Industrial Way
Prescott, AZ 86302

ABSTRACT

Description

This case study follows planning, design and construction processes utilized to resolve pressing transportation issues at Grand Canyon's South Rim. The goal of solving transportation issues was accomplished, however this transportation 'fix' evolved into a legacy project that fundamentally changed how millions of visitors experience the Grand Canyon.

Goals and Objectives

1. Holistic transportation solutions can increase user capacity while enhancing landscape environments;
2. Use of native materials can inspire beautiful, enduring designs;
3. Contracting strategies can build in flexibility in addressing the unknowns and enables contractors to respond with "best fit" solutions;
4. Collaboration between contractors, artists, engineers and resource specialists results in high quality outcomes with long-term protection of natural resources.

Relevance to Current Issues in Ecology and Transportation

Grand Canyon's most pressing transportation issues included traffic congestion and resource degradation at Mather Point and a significant parking shortage. Increasing visitor traffic and illegal parking in sensitive roadside areas was resulted in significant impacts. The National Park Service (NPS) took a holistic approach to addressing those transportation/ecology issues. New parking lots and the roadway were moved away from critical landscapes. The realignment created a more intuitive arrival experience, allowing for restoration and protection of sensitive landscapes. To address traffic congestion, an inviting landscape was created that gives visitors many reasons to park and leave their cars. A re-purposed visitor center, bike rental/café, interpretive plaza, tribal landmark, rim amphitheater and universal access to Mather Point provide a welcoming landscape where visitors can have a fulfilling stay without leaving the area. In addition, it provide new artistic features and an enhanced experience that would create new interests even for repeat visitors. Those who have more time and want to see more of what the Grand Canyon has to offer can leave their cars parked at this central location and catch three different shuttle bus routes from a single shuttle bus transit hub.

The redesign of this area created opportunities for landscape restoration in critical areas along the canyon rim and the opportunity to practice ecologically sound resource management during construction. Park policy dictates that all planting must be genetically pure to the area. All plants were either grown from collected seed or salvaged from within the Park. Nearly 200 evergreen trees and hundreds of small shrubs, forbs and grasses were salvaged and transplanted. Volunteers and Park vegetation staff have planted nearly 20,000 native plants and irrigate for establishment with reclaimed water. The landmark and amphitheater also made use of reclaimed resources. Those features are constructed of Kaibab limestone, a native material left over from previous Park construction projects; no mining was required and hauling distance was minimal.

The completed project also has the potential for a larger ecological reach. The renovated Visitor Center, plaza and trails and amphitheater provide places for active and passive education. Interpretive displays and ranger programs give visitors the knowledge and the challenge to protect and preserve this fragile desert landscape.

Sequence of Presenters

This session will be presented as a case study of one complex project through the perspectives of four people who had key, yet very diverse roles in making this project a success. Vicky Stinson, NPS Project Manager, will provide a broad overview of the planning, design and construction processes, including the transportation issues to be resolved; how transportation became the impetus for providing a much enhanced experience for visitors; and, selection processes for assembling a ‘dream team’. Jan Busco, NPS Horticulturist, will discuss the challenges and processes required for landscape restoration, including collecting, growing, planting and nurturing plant material of local ecotype in this high desert landscape. Andy Dufford, Artist/Sculptor, will discuss the integration of art and native stone into the landscape, including collaborative meetings with affiliated tribes for integration of their stories. As a general contractor, Jason Fann will discuss the challenges and benefits of responding to the needs of a diverse team and working with that team through a variety of unknown conditions to create unanticipated outcomes.

Insight to be gained

The completed project offers much more than the elimination of traffic congestion; it provides areas/opportunities for people to interact and share common experiences of viewing the canyon, learn about the Park’s resources and protection efforts, and gain an appreciation for the cultures that consider the canyon their home. The session intent is to engage the audience in discussions about utilizing these broad based strategies in other locales to go beyond limited transportation solutions to holistic projects that address both immediate needs and long term ecological restoration and protection.

BIOGRAPHICAL SKETCHES

Vicky Stinson

Vicky Stinson is a Registered Landscape Architect and Project Manager at Grand Canyon National Park. She provided direction and oversight for planning, design and construction phases of major improvements at the park’s visitor center and Mather Point. Vicky has worked for the National Park Service for 20 years, with a focus on alternative transportation projects, including the implementation of the Zion Shuttle Bus system. She graduated from Colorado State University with a B.S. in Landscape Horticulture. Vicky’s love for her job is surpassed only by her passion to explore and recreate in the beautiful lands where she gets to work.

Jan Busco

Jan Busco is Horticulturist at Grand Canyon National Park. She has written three books on gardening with western native plants, *Native Plants for High-Elevation Western Gardens*, *First Gardens: Getting Started in Southwest Gardening* and *First Gardens: Getting Started in California Gardening*. Jan Earned her BS in Horticulture at California State Polytechnic University and her MS in Forestry at Northern Arizona University. Before coming to Grand Canyon in 2006, Jan spent 7 years as horticulturist at the Arboretum at Flagstaff and 7 years as Co-Director of the Theodore Payne Foundation for Wildflowers and Native Plants in Los Angeles.

Andy Dufford

Andy Dufford is the lead artist and owner of Chevo Studios, a design/build firm specializing in the creation of artful, interactive spaces. His installations link with nature, culture and history to enhance a sense of place and a feeling of belonging. Andy’s background includes training in fine art, environmental design and community development and he has developed an approach to making art that is collaborative and inclusive. Andy has created over fifty site-specific public art projects, including work for Grand Canyon NP, Lewis and Clark National Historic Trail, Kansas City Zoo, and the Alaska Department of Fish and Game.

Jason Fann

Jason Fann is Co-Owner and Project Manger of Fann Contracting, Inc., and has managed several construction projects at Grand Canyon National Park. Jason graduated from Arizona State University with a B.S. in Construction Management. With experience in both horizontal and vertical construction, Jason has been involved in managing multi-million and billion dollar construction projects for major companies such as Bechtel Corporation, Wynn Design & Development, and now for the family business, Fann Contracting. Fann is a Northern Arizona based heavy-civil contractor specializing in a wide range of civil construction services and contracting methods. Jason's primary focus is customer and employee satisfaction.