Superintendent’s Annual Report
Fiscal Year 2006

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Superintendent’s Office

2006 was another very productive year for the staff at Joshua Tree National Park. Many new partnerships were formed, existing partnerships were strengthened, and support from the community continues to be overwhelmingly evident.

Safety remains a constant priority and the major component of any work initiated. The Safety Committee continues to be active, including monthly meetings, ongoing safety messages being distributed to all park staff, and many on site safety inspections were completed. Park staff participated in two safety stand down days, which included speakers on a variety of topics unique to our work environments. The Safety Committee and the Employee Association started to partner together to plan All Employee Luncheons and meetings. Literature and safety trinkets have been produced and distributed during All Employee activities. Safety continues to be a part of everyday life at Joshua Tree.

We launched the Joshua Tree Initiative. Personal motivation through empowerment and pride are the key components of this Initiative. The staff have been empowered to take on tasks that are necessary to create and foster a safer work environment, find new ways and means to get the job accomplished efficiently, and to challenge ourselves to be better human beings. This ongoing process has been facilitated through Employee Appreciation luncheons, issuance of team building and employee morale shirts, Time in Service Awards being issued in a timely fashion, and an entire new library was created revolving around various topics such as Goal Setting, Self Motivation, Working Together, Communication, Time Management and Team Building. The park conducted a weekend workshop for all park staff to attend utilizing these resources. A large portion of the staff attended a Motivational Workshop, sponsored by “Get Motivated Seminars” with positive comments from all who attended. The staff appreciate this empowerment and support from upper management.

The Superintendent and his staff began hosting “Town Tours” which created opportunities for networking with local community officials, planning and town council members, high ranking officials from the Twentynine Palms U.S. Marine Corps Base, and Chamber of Commerce staff from the three northern boundary communities. These tours were offered three times during the spring of 2006, and were extremely well received by all who attended.

In March of 2006, the Superintendent and his staff coordinated a Community Stewardship Organization Workshop in cooperation with the Sonoran Institute. With the significant increase in development surrounding the park, it was necessary to investigate various realistic options for planned growth. The workshop was attended by over 60 participants, and started the ball rolling for communication among the three very distinct communities along the north boundary of the park. The participants included members from various planning departments, conservation groups, the local building association, scientists and elected officials.

During July 2006, the park staff pulled together in an extraordinary and exemplary manner, when six lightning fires started, five of which resulted in numerous operational periods of intense logistical and firefighting activities. During the last fire, the Whispering Pines fire, the decision was made to invite a Type II Management Team to assist with firefighting and support efforts.
The staff of Joshua Tree was highly commended by local fire officials, and by Team members during the transition from the park staff to the team and back to the park. Cooperation between multiple local agencies, and a sense of camaraderie was immediately evident during the intense fire storm, with the community of Yucca Valley threatened by the fire. Many employees had the opportunity to assist with the fires, initiate Task Books, and had a very positive experience, with a sense of accomplishment and a high level of pride as the park came together to fight the fires of 2006.

In the early fall of 2006, the City Manager of Yucca Valley approached the park and asked to discuss the concept of open space areas, or buffers around the community. This first meeting has developed into an Open Space Committee, complete with a Steering Committee to investigate how to manage the growing development pressure. We look forward to sharing concrete examples of the progress of this group in the 2007 Annual Report.

Due to changes in the organizational structure of the Fire Program in the California Desert District, the Superintendent was involved with a significant number of meetings, in efforts to streamline operations, development more cohesive working relationships with area fire staff, and to create a more coordinated effort for firefighting in southern CA. These meetings resulted in a clarification of roles and responsibilities for fire staff and improving communications.

Solar power projects have been in the developmental stages, with the Superintendent and the Facility Manager attending meetings for various proposals, to partner with Copper Mountain College, SunWize Systems and others, as of yet unidentified partners.

The Mojave Desert Land Trust was created. This organization successfully negotiated to be the managing organization for land acquisition between the Resources Legacy Fund Foundation and Mojave, Death Valley and Joshua Tree parks. Lands acquisition in FY06 was at least triple the amount of lands acquired in FY05.

The Superintendent continues to be an active member of the Desert Manager’s Group, the Morongo Basin Economic Consortium, the Coachella Mountains Conservancy, Rotary and the Basinwide Foundation.

Relationships with the National Parks and Conservation Association, the CA Wilderness Coalition, the Sierra Club, the Citizens for Chuckwalla Valley and the Nature Conservancy were all fostered through meetings, phone calls, e:mails, and generally a cooperative spirit. This ensures that the park’s resources continue to be protected not only by the efforts of park staff, but also by a variety of watchdog and user groups. Considerable time was spent working on background information for Congresswoman Bono’s staff, for the introduction of HR6270, which occurred in the fall of 2006.

The park hosted several meetings, including the Nature Conservancy, the National Resource Advisory Committee, the Vanishing Treasures Committee, the Joshua Tree National Park Association Advisory Board and a tour of the park specifically for the local concierges from the Palm Springs environs.
The park participated in several public forums, including Open House activities as part of the Black Rock Redesign Charette process, a charette meeting for a possible joint Cultural Center and new Visitor Center with the City of Twentynine Palms, celebrated the Grand Opening of the Joshua Tree Visitor Center with a tri-city Chamber Mixer, a wildlife connectivity workshop with the South Coast Wildlands staff, a Fundraiser for the JTNP held in the lower desert as part of an outreach program, and assisted with the planning and coordination of the first Summit on Practical Alternative Energy conference, held in cooperation with Copper Mountain College and the Basinwide Foundation.

**Administration**

**Human Resources**
The park’s human resources officer assumed responsibility for the personnel security and suitability adjudications of all NPS positions that handle government money and to work with WASO staff to develop, write, and review bulletins and policies related to human resources and suitability issues. The position was upgraded to GS-12 and operations in WASO provided fifty percent of the salary costs for the human resources officer position, and obtained funding for one GS-5 full-time SCEP human resources assistant and one GS-4 part time SCEP human resources assistant.

As of September 30, the number of encumbered permanent positions in the targeted occupational series 0025, 0193, 0301, 1010, 1015, and 1640 was 21. Ten, or 48 percent, met the definition of diverse employees. All park employees have performance standards linked to strategic and annual goals.

Throughout the year, the Human Resources Specialist and the staff participated in the writing of a draft policy for background investigations in order to have a clear policy to be used Servicewide. Policy has been on hold till the new HSPD-12 issues are resolved and can be incorporated. The human resource staff have also been involved with the following activities:

- Adjudicated and established security files for an exceptional quantity of cases (2,586) during FY06. Effectively explained complex cases to supervisors and WASO staff (i.e., YOSE and MOJA cases) and legally defended decisions.
- Issued 550 caution letters for cases with issues.
- Referred cases with potential material falsification back to OPM for consideration.
- Recommended disciplinary actions to be taken for several employees with regard to material falsification.
- All three of the WASO Fee Adjudication staff attended eQip training and spent two days assisting the security staff in the WASO office.
- Planned and prioritized work for WASO and JOTR to meet workload demands in a timely manner in order to avoid conflicts.
• During the month long fires at Joshua Tree National Park, all deadlines continued to be met and creative methods were put in place to assure that all SAC’s continued to be adjudicated, phone messages and email responded to on a daily basis regardless of the staff being utilized on fire assignments.

• Issues or complaints continue to be a top priority. Resolving employee/supervisor conflicts or complaints immediately has resulted in zero formal complaints this year.

• The work accomplished by the entire JOTR Human Resources Office is staggering in quantity. Regardless of the ever increasing volume of work, the work is completed in a timely and very professional manner.

• We have trained HR staff from other Parks and accomplished site visits to assist with area concerns and needs.

**Information Technology Services**
The primary task in IT services this past year was the wiring of the new maintenance building for network and telephone access. Coordination for connection of burglar and fire alarm systems was also accomplished. In the arena of sharing resources, within the Mediterranean & Mojave network, the JOTR IT Specialist assisted LAME in relocating and terminating fiber cable at their park.

During fire season, the IT Specialist was called out on Area Command Team 1 to Payette National Forest.

**Procurement, Contracting, and Accountable Property**
The park again used the DELL asset recovery program to easily and efficiently recycle various electronic equipment (CPU’s, printers, monitors and other miscellaneous equipment).

The park was able to donate two rodent-infested trailers to a local non-profit animal rescue group. Other real property issues dealt with two buildings which were removed from real property records due being destroyed (burned) during the Whispering Pines Fire.

The warrant amount of the park’s Contracting Officer increased to $100,000 from $25,000 open market, and authority to sign interagency agreements was added up to $100,000. Prior to this change, we were not able to sign agreements locally. FPDS-NG, a new program that records socio-economic information about vendors who were awarded contracts, was utilized for tracking purposes.

**Budget/Finance**
This year’s Servicewide Comprehensive Call (SCC) was achieved through joint collaboration within the park’s management team. The park is hoping the effort will yield positive results especially in one of the more complex funding requirements within the SCC: FLREA with a focus of deferred maintenance.
Base funding for fiscal year 2006 was $4,195,000. Outside the more routine fund sources of repair/rehabilitation and cyclic maintenance, FLERA (Fee Demonstration Program) and Federal Lands Highway Program, and, with the larger fires that occurred in 2006, BAER funding was requested and approved.

The added complexity of BAER funding put a burden on budget personnel although the flip side is funds have been provided to fill the voids where needed.

The Budget Analyst has been fulfilling more of the basic parkwide budgeting than in prior years due to lack of staff allocating their time to budget programming and planning in AFS3.

**Employee Housing**
Employee housing rentals generated $30,432. The Black Rock residence remained vacant for most of the year.

**Facility Management**

FY06 began with the appointment of a new Facility Manager (FM) at JOTR. The new Facility Manager, John Slaughter arrived at the park full time in January 2006. John came to Joshua Tree NP from Manzanar NHS. Since MANZ is also a part of the Mojave Network, the new Facility Manager was already familiar with issues unique to this network and had an existing network of partner relationships throughout the PWR and WASO. Many of these relationships are familiar JOTR partners including Devils Postpile NM, Lake Mead NRA, Death Valley NP and numerous Regional and WASO support programs. Some mutual professional contacts include SunWize Solar Products, Granite Construction, CalTrans and at least two reliable 8(a) contractors.

Before the SCC at the end of FY06, the maintenance division was instrumental in providing guidance and understanding of Deferred Maintenance (DM) and Facility Condition Index (FCI) for the park. This information was used in the Superintendent’s Recreation Fee Program “Stand Down” meeting sessions used to plan out the park’s 5-year Fee program. The maintenance division explained the connection between DM and Fee projects using Facility Management Software System (FMSS) documents such as the FCI/API “Scatter Plot” and various asset condition reports. This information served as the groundwork for the rest of the management team’s understanding of the relationship between FMSS and how projects/operations are prioritized and planned in the park. Through this process, the park has developed a fee revenue spending plan which addresses the regional deferred maintenance goals and uses a strategic approach to reduce the overall park FCI. During FY06 the park completed Comprehensive Condition Assessments on all buildings and complex utility systems. These assessments assisted the park in gaining a more comprehensive knowledge base to assist with the strategic approach to operations, fee revenue expenditures, Repair & Rehab projects and Regular Cyclic programming.
The maintenance team was successful in promoting the Facility Management Leadership Development Program to its employees. Although there were numerous qualified employees at the park, the decision was made to nominate Ken Hornback, Trails Supervisor for the program. Ken was selected by the Region and WASO to participate in the program which began in August, 2006. Ken’s participation in the program has significantly added to the quality maintenance program at JOTR as well as adding to networking opportunities and providing the PWR with another highly competent future Facility Manager.

During FY06 the Facility Management Division continued to build upon established partnerships and the maintenance team completed numerous partner or “Buddy” projects as well as ensuring a multitude of successes at JOTR. Many of the projects completed and/or continuing are outlined in the departmental reports that follow.

**Buildings and Utilities**

FY06 realized the completion of the second building replacement in the Headquarters Area rehabilitation project. The new maintenance office building replaced the existing modular building. The old building had documented deferred maintenance costs which were more than the cost of building the new structure. Features of the new building include sustainable metal roofing, ceramic floor tile throughout, physical training room, showers, ADA accessibility, and 2200 SF of office space for administrative use. This project was completed using in-park staff resulting in a 40% savings over contracting.

JOTR received over $400,000 in Regular Cyclic Maintenance funding. This money assisted the park in lowering FCI’s in trails, Roads, Campgrounds, & Buildings and Utilities. Joshua Tree has the largest contingency of alternative energy solar systems in the NPS. The park used nearly $100K replacing batteries and repairing the back-up generator for the “stand-alone” Solar system which provides the only power in the Cottonwood district for the visitor center, maintenance, housing and campground areas.

During FY06 numerous utility systems were repaired or upgraded throughout the park. The most extensive repairs were to the septic system at the Cottonwood Visitor Center. Crews replace approximately 100’ of pipe which had been infiltrated by roots. Other systems repaired or upgraded include water distribution systems at Cottonwood campgrounds, and Blackrock campground.

The park completed the rehabilitation of two comfort stations at the Cottonwood campground. This project eliminated all deferred maintenance on these structures bringing the FCI to 0.00 in FMSS.

JOTR partnered with DEPO to provide emergency roofing repairs to one of the employee cabins. This project was initiated and completed within 3 weeks, just before DEPO closed for the
winter. The B&U crew purchased the material and installed the new metal roof system, replacing the existing cedar shake roof.

**Roads Department**

The park’s road crew removed 4500 linear feet of failed asphalt surface and parking in Indian Cove Campground by means of pulverization. It was graded, wet and compacted for a uniform stable surface. Then a 3 to 5 inch lift of Class 2 road base was placed over top of grindings, then graded and compacted the surface to provide sustainability and uniformity. By stabilizing this section it has brought it into a viable cyclic condition allowing for a safer surface for vehicular traffic and reducing the environmental footprint impact to the park.

JOTR Road Crew provided operational maintenance to all of the park’s paved and unpaved surfaces, signage, delineation control, erosion control, and performed storm damage repairs. Pot holes and shoulder edges were patched and repaired throughout JOTR. 98 miles of paved surfaces, approximately 68 road signs, posts and related items were repaired or replaced. Crack sealing of roadway fissures was performed on 2100 linear feet of route # 400, 1200 linear feet of route 206, 1800 linear feet of route # 205 and 2300 linear feet of the Pinto Wye Maintenance yard. Erosion control and drainage devices were repaired or replaced park-wide due to storm events.

Entry control access gates were repaired or replaced at Indian Cove Campground, Lost Horse Ranger Station, Lost Horse Mine road, Keys View Road, Headquarters Maintenance Yard, Sheep Pass Borrow Pit, Sheep Pass Campground, Route # 11 at the Cottonwood Visitor Center and Ryan Campground. Operational grading of 107 miles of unpaved surfaces was accomplished. Delineation of 24 parking areas was performed to help reduce the impacts on vegetation from vehicle traffic. Approximately 60,000 gallons of water was hauled and distributed to all of the 6 water points located in the park. Roadside shoulder brushing was performed on 50 miles of paved and 32 miles of unpaved surfaces. Operational roadway sweeping was performed on 98 miles of paved surfaces.

**PMIS 102217A Cyclic repair Devils Post Pile Entrance Road**

This was a partner project that involved Joshua Tree National Park’s Maintenance Road Crew with assistance from the DEPO Maintenance staff. The roadway was repaired by JOTR, in preparation for Chip and Oil sealing in FY07, by an IDIQ Contractor. All roadway fissures were crack sealed, shoulders were armored with class 2 rip rap rock, drain cuts were installed to
provide adequate water drainage, pot holes were filled and entry ramps were created to provide access to facilities.

**PMIS 88539C Partner project with JOTR and MANZ.**
This was a partner project with the assistance from MANZ maintenance staff and the JOTR Road crew. The JOTR crew removed 7920 linear feet of failed hardened surface on Manzanar National Historic Site Loop Road. By stabilizing this section it will bring it into a viable cyclic condition allowing for a safer surface for vehicular traffic.

**PMIS 65885**
The park installed four new road information signs in the town of Joshua Tree, California. These were installed to provide directional information to the Joshua Tree National Park and the Visitor contact station located in Joshua Tree California. This provides a consistent graphic image on roadside directional signs that is readily associated with the National Park Service by the use of the arrowhead.

**PMIS 98419.**
Using Environmental Management Program funds, the park removed two 5000 gallon tar tanks, pipe and a tar trailer at Pinto Wye maintenance yard. The project purged remaining material and cleaned up excess tar in the surrounding area. Work was performed by an outside hazardous material abatement contractor. This project addressed EAP audit finding # JOTR-051. This met the goal and objective under the waste reduction and management directives to reduce solid and hazardous waste, storage, & disposal.

**Trails Department**
Utilizing RCM, Fee, R&R and ONPS funding the trail crew preformed numerous projects throughout the park including the following:
41 new wayside exhibits were installed replacing older deteriorated exhibits.
Performed cyclic maintenance on 34 total miles of trail and trail corridor.
Repaired and resurfaced tread trail tread on 34030 linear feet of trail.
Brushed and trimmed 22740 linear feet of trail corridor.
Restored outslope and grade to 5690 linear feet of trail edge.
Installed 113 waterbars and repaired 98 others.
Removed 7 downed trees.
Repaired 216 sq ft of stone retaining wall.
Repaired 260 sq ft of stone steps/checkdams.
Removed 3 tons of rockslide.
Realigned 2600 linear feet of overgrown trail corridor.
Closed and rehabilitated 6 social trails for a total of 600 linear feet.
Constructed 400 linear feet of barrier fencing in parking and climber access areas.
Developed a sign plan to address the conversion of signs to Uni-Guide system.
Constructed 25 signs for other NPS units including PINN & DEPO.
Constructed and installed 37 trail signs throughout the park.
Constructed 29 road and facility signs throughout the park.

The Trails crew began implementation of the new UNI-Guide sign standards at the recently acquired Joshua Tree Visitor Center. Along with a new look for the directional signs along the
roadways, the crew reconstructed the large entrance sign combining the new graphics and colors with a stone facade. Due to the positive response from both the management team and the public the crew is now looking at implementing the new standards park wide.

In the summer of 2006 the Youth Conservation Corps crew installed 40 wayside exhibits along 125 miles of park roadway. The work was phase 1 of a heritage project designed to replace the entire interpretive wayside system with upgraded exhibits, backcountry registration boards, maps, and information kiosks. The crew also traveled to Great Basin National Park and Pinnacles National Monument, where they camped and worked, replacing a rough hewn wooden footbridge, realigning segments of a 7 mile backcountry trail, picnic table and fire ring replacement, brush thinning, and campsite delineation.

**Campgrounds Department**

The 4 person campground crew at JOTR provided operation and maintenance of 7 campgrounds, 25 Day-use Areas, 78 vault toilets and custodial operations of day in and day out of 1 Visitor Center, 8 office building, 19 comfort stations.

Regular Cyclic Maintenance projects completed included, conducted landscaping in Cottonwood campground in 62 family and 29 group sites. In the family sites, 62 deteriorated wood picnic tables were removed and 62 ADA approved concrete picnic tables were installed. In the group sites, 29 deteriorated wood picnic tables were removed and 29 ADA approved concrete tables were installed.

Partnering with the California Conservation Corps, the campground crew replaced 22 handicap exterior vault toilet signs and 13 interior vault toilet signs that had been vandalized. The crews also removed ashes from 101 fire rings in the Indian Cove family sites. They did erosion control around the campsite parking areas and replaced fill dirt around vault toilets that had been washed away by the rains, removing dirt off the accessible walkways to the vault toilets, caused by the summer storms.

The campground crew installed site number clips and posts to identify sites taken. 18 in were installed at Belle campground, 15 installed at White tank campground, 125 installed at Jumbo Rocks campground, 6 installed at Sheep Pass campground, 45 installed at Hidden Valley campground and broken clips were replaced at Indian Cove campground.
Natural and Cultural Resources

The Resource Management Division had a productive and busy year in 2006. Work was accomplished in all program areas despite the fires in July and the Burned Area Emergency Response (BAER) actions in August and September. BAER actions impacted each of the program areas to some extent and created challenges to completing the division’s program area work plans.

Archeology
Archeological work continued in developed Park areas. Archeological survey work was completed in areas of the park scheduled for ground disturbing maintenance activities and all cultural remains were recorded to current standards. An Archeological Overview and Assessment for the park was contracted under a Task Agreement to Sonoma State University, Anthropological Studies Center. A draft report was received from Drs. Joan Schneider, Karen Swope, and Claude Warren (UNLV) for a field school project done at Keys Ranch in 1997-1998.

Cultural Landscapes
Michigan Technical University was contracted to conduct a landscape assessment that focused on historic objects in the yard at Keys Ranch. Fieldwork was completed, a digital GIS map with detailed sketches and descriptions has been produced, and a draft report is being prepared.

Ethnography
The Traditional Use Study regarding rock art was completed in a final draft form by Douglas Deur. The park has worked with Mr. Deur to ensure that issues related to rock art conservation are discussed and addressed in a manner that ensures proper management of these resources. A Native American Graves Protection and Repatriation Act project was completed in the park after over a year’s worth of consultation with tribes associated with the Park.

Environmental Compliance
The park continued implementation of the online PEPC system to facilitate documentation of NEPA and NHPA compliance. Several programmatic categorical exclusions were initiated to cover repetitive operational issues such as issuing scientific research permits, incident business activities, cultural resource operations, vegetation program operations and regular maintenance activities. No environmental assessments were completed or initiated in 2006.

History
The Historic Resources Study for the lands added to the Park in 1994, along with National Register of Historic Places nominations and site records, was submitted by Dr. Donald Hardesty (UNR) for review and approval. The Cultural Resource Program Manager and the Regional Office are reviewing the document to ensure that it meets National Park Service standards and is adequate for use as a reference document for the park. Under a separate contract, a final draft Multiple Property nomination for the National Register was received from Dr. Hardesty as well.

Historic Structure Stabilization
Under the direction of David Yubeta, four historic structures stabilization projects were completed by the preservation crew from Tumacacori NHP. The two masonry water tanks at
Lost Horse Mine were stabilized and flashing was placed on a composite wood wheel on the mill. At Wall Street Mill stabilization work was completed primarily on the office structure. A new roof was put on the Disney Shed at Keys Ranch. At Ryan Ranch the lime plaster on main house was re-patinated.

**Museum Collections**
Cataloging continued with numerous archeological, historical, and archival items, which were entered into the Automated National Catalog System database in 2006. The park’s Museum Collection Emergency Operation Plan was completed under contract by Katherine Hanson and Dale Durham. This plan recommended that a regional emergency response team be created.

The Park’s museum curator purchased and assembled museum collections’ emergency response supply kits for network parks. She also assisted both Lake Mead National Recreation Area and the Alaska Region with moving collections to new storage facilities. In addition, she assisted with the BORAX Corporation’s donation of objects to Death Valley National Park.

**Paleontology**
The Pacific West Region’s Paleontologist visited the Park with staff from the San Bernardino County Museum. A reconnaissance was completed to assess the probability of fossil bearing strata throughout the park. A field trip was undertaken by the above mentioned and park staff to the fossil rich localities in the Pinto Basin.

**Research**
The Joshua Tree National Park Association and the Lee Foundation again funded a $12,000 grant for a competitive research project related to Joshua Tree National Park. Dr. Rick Redak from the University of California, Riverside was awarded the grant to study arthropods along the park’s wilderness/urban interface boundary in the Black Rock/Covington Flat area. William Godsoe and Dr. Olle Pellmyr began implementation of their proposal (funded through the Desert Southwest Cooperative Ecosystems Studies Unit and Joshua Tree National Park) to study the relationship between yucca moths and Joshua trees.

The final report for a project previously funded by the Association and the Lee Foundation was submitted by Dr. Jessica Smith, and is entitled “A Land of Plenty: Depression-era Mining and Landscape Capital in the Mojave Desert, California.”

**Physical Sciences**
The Park Geologist continued to implement the mine safing program within the park and assisted Lake Mead NRA by providing consultative services. The Desert Queen and Morgan Kimball mines now have safe exclosures. Work was initiated in 2006 on a ground water study; wells throughout the park are being located and water depth measurements are being recorded. Air quality monitoring work has continued. The South Coast Air Quality Management District has agreed to provide support for the Cottonwood Air Quality Monitoring Station. Dr. Joel Burley of St. Mary’s College and some of his students volunteered almost a thousand hours of their time to assist in a synoptic study of air movement through the park and used back trajectory analysis to determine source locations. A partnership program with the Natural Resources Conservation Service has been initiated to complete a soils survey for the park.
Vegetation Management
The Center for Arid Lands Restoration propagated plants for park road reconstruction projects, for the Indian Cove Borrow Pit restoration project, for cultural site rehabilitation, and for contracts with Fort Irwin and the Bureau of Land Management. The nursery currently has four volunteers that contributed 140 total hours throughout the year. The National Park Conservation Association's Center for Park Management completed a feasibility study for improving management of the Center for Arid Lands Restoration. Three alternatives were presented to the park, with a recommended action of expanding the Center. A significant investment will need to be made to accomplish expansion of the Center.

The Federal Highways projects continued this year; monitoring of past restoration efforts continued along Park Boulevard as well as mapping and preparing for the rehabilitation of Key's View Road. Almost one hundred Joshua trees were transplanted within the construction corridor to prevent destruction of the plants.

Weed eradication projects continued to keep us busy this year. The Park managed to remove quite a load of invasive plant material including Sahara Mustard, London Rocket, Russian thistle, Fountain Grass and Tumble mustard. Most importantly, we had a lot of help from a very strong volunteer force this year who contributed several hundred hours to remove weeds.

Potential and known locality maps were updated for most of our rare plant species. Work on the Herbarium collection continued with a dedicated staff collecting and preparing voucher specimens and entering database information that can be exported to the ANCS+ program.

Research projects continuing this year include: 1) a study addressing the most effective way to minimize social trail proliferation; 2) a demographic study of Pinus monophylla was continued; 3) a lichen flora of the Park.

Wildlife Ecology
Desert tortoise monitoring using transmitter-tagged individuals expanded this year along the main roads in the park. Eleven individuals have been tagged from the Pinto Basin to Lost Horse. A curbing experimental test was implemented to assess the effect of curbing in the park as it relates to tortoise movement.

The park has continued to cooperate in preparation of a raven management plan environmental assessment for the Desert Manager's Group.

The guzzler survey was continued that used motion trigger cameras to monitor which wildlife species are using the guzzlers. The damaged Rattlesnake guzzler was rehabilitated so that it can re-enter this study. This effort is a small part of the larger need to determine the efficacy of guzzlers in wilderness and their impacts on wildlife, primarily bighorn sheep.

Pitfall trapping in the park continued to collect data on the rodent and reptile distribution in the park. Currently under reevaluation, this project will be converting from an inventory project to a monitoring project.
Michael Vamstad acted as the park’s Wildlife Ecologist for almost nine months, and accepted the position full time in October.

**Rock Climbing**

The Joshua Tree Climbing Management Work Group continued meeting in the park and requesting park participation in arranging meeting space and discussion. The group is not a park-organized group and meets independent of park participation. It has identified a need for a common ground approach to how climbing is managed in the park. A study of the effectiveness of barriers in areas used by the public to access climbing routes continued from 2005. Different types of barrier methods were developed and observations of visitor access patterns were initiated. Installation of barriers and their effectiveness will continue to be studied through the busy visitor season of spring 2007.

**Resource and Visitor Protection**

The Division of Visitor and Resource Protection continued to manage the park’s law enforcement, fire, emergency medical, search and rescue, fee collection, campground management, special use, and emergency operations programs. The division also managed backcountry, wilderness and recreational climbing use. Rangers responded to approximately 501 incidents in 2006.

The Division continued to work closely with the Bureau of Land Management and the United States Forest Service in our partnership for managing the Federal Interagency Communications Center. We partner with Riverside County and San Bernardino Sheriffs’ Offices, and the California Highway Patrol units, and coordinated the prosecution of cases with the Assistant U.S. Attorney’s Office, and the U.S. Magistrate Judge. Many incidents were worked cooperatively based on good relationships with surrounding agencies.

High profile patrols were regularly conducted in areas with traditionally high visitor use. Educational contacts continued to be a priority in climbing areas. The activity of the volunteer equestrian patrol unit increased with support in backcountry and campground patrols. The equestrian volunteers represented the park in local community parades and assisted the resource management staff by packing in supplies for remote, overnight projects.

In 2006, the Resource and Visitor Protection Division continued to foster relationships with the climbing community by attending meetings with a local climbing coalition comprised of environmental and climbing organizations. The staff promoted stewardship and the “Leave No Trace” outdoor ethic through a special program called “Climber’s Coffee”.

Rangers maintained high profile road patrols, conducting traffic enforcement aimed at reducing the number of motor vehicle accidents. Rangers responded to over 40 requests for emergency medical services, and 24 requests for rescues. The park incurred 2 fatalities in 2006. The Joshua Tree Search and Rescue (JOSAR) Team had 30 volunteers participating providing approximately 5000 hours of support and training time.
The division staff continued to maintain compliance with the national EMS policy, by working to obtain “white cards” for all emergency medical providers. The National Registry Test was administered and the Ranger staff completed requirements for National Registry status. The park’s EMS Coordinator held the annual EMS refresher and trained staff from JOTR, MOJA and DEVA. Sufficient additional training was provided to allow all park EMT’s to maintain their certifications, and CPR was taught to employees and volunteers in all park divisions and training in basic first aid was provided to staff.

The Chief Ranger participated in an interagency team that coordinated the relocation of the Federal Communication Dispatch Center during the move of the San Bernardino Forest Supervisor’s office move. This move was accomplished during the summer, with no loss of communication capability and a minimal amount of disruption. The protection staff participated in teams that developed Standard Operating procedures for the dispatch center that was necessary to promote quality assurance and consistent service. These policies were approved and put into place after training was provided for the entire park staff.

The Ranger division continued to support all of the mountain top repeater sites. The Park Radio Coordinator supported several other divisions with technical support.

Staff continued to chair the Wilderness Steering Committee, and continued implementation of the Backcountry Management Plan. The committee includes members from all park divisions, charged with park wide coordination of wilderness projects and conducting minimal tool analyses for the park.

Archeological Sites
Rangers routinely conducted backcountry patrols, monitoring archaeological sites. There were nine incidents of damage to archaeological resources documented, no citations were issued for damage, but there was one 19(jj) case that recovered $10,000 in damages to an archaeological site by one individual.

Disturbed Lands
The Ranger Division continued to represent the park on the Desert Managers Group Hazardous Materials Working Group which coordinates the cleanup of illegal dumpsites in the California Desert. However, due to lack of funds, there were not any dumpsites cleaned up in 2006. The Ranger Division investigated 67 incidents of resource damage from off road vehicle use.

Employee Safety
The staff continued to implement service-wide medical standards testing in accordance with DO-57. Ranger Division employees in identified arduous positions participated in a physical fitness program, including commissioned employees and fire fighters. Commissioned employees participated in physical fitness testing, using the FLETC standard test of the PEB.

The Lost Horse District Ranger continues to serve as the park’s aviation program coordinator and participated in flights for rescues, flights for the transport of personnel to complete water surveys in the Pinto Basin, and several flights to transport supplies into mine areas for the
purpose of manufacturing mine saifing gates on site. There were not any safety incidents during these many hours of flight time.

The Backcountry Travel Plan was drafted which included a Job Hazard Analysis for Backcountry Travel. The approval of the plan is expected in January of 2007.

**Fee Program**
During 2006, a new Fee Collection Supervisor was hired after the previous supervisor left for a promotion in a different park. The entrance stations were staffed year round, with minimal disruptions in operations, due to staff turnover. Educational materials were distributed from the stations, including park safety information, rules and regulations and general guides and brochures. A new collection point was established at the new Joshua Tree Visitor Center, which opened in May 2006. The Fee Program collected $2.2 million dollars in 2006. Fee staff administered the NPS camping reservation system and continued to coordinate and implement policies in relation to the Federal Lands Recreation Enhancement Program.

**Special Park Use Office**
The Special Use Permit Coordinator issued and monitored over 54 incidental business permits, 52 commercial filming permits, and 49 special use permits, including permits for weddings and special events. Park staff monitored 65 days of filming within the park. The Special Use program continued to work within the new NEPA guidelines as outlined in DO-12, to ensure all special use permits comply with the NEPA process.

**Threatened Species**
Visitor protection monitored critical desert tortoise habitat, and conducted specialized patrol operations targeting wildlife violations.

In cooperation with the Resource Management staff, the rangers monitored and enforced two Superintendent Closures which were established to protect nesting Desert Tortoise and Great Horned Owls. These closures were maintained and monitored until the nests were no longer occupied.

**Visitor Safety**
The staff participated in the park’s safety program by attending safety training sessions, with one member participating in the park’s safety committee, distributing safety messages, identifying safety issues and correcting them when necessary.

**Visitor Use Statistics**
In 2006, the park welcomed 1,260,972 visitors for an 8.63% decrease in the park’s visitation from 2005. There were 5,497 Backcountry overnight stays and a total of 189,724 campground stays.

**Wildland Fire Activity**
This year the park experienced a severe wildland fire season. The Wildland fire engine crew responded to 5 fires within the park and provided emergency support during a fire storm on the
Sawtooth Complex located in the neighboring community of Pioneertown. A large number of park staff provided various support to all the fire incidents including firefighting, timekeepers, logistics, local drivers and public information. The park experienced five lightening caused fires during the month of July which burned approximately 4,000 acres of vegetation. During the Whispering Pines Fire which was the most complex, a Type II Incident Management Team responded to assist the park. Park visitors were informed of the activities and the area of Covington was closed until the fire was controlled. The park cooperated with local fire agencies provide protection to the wildland-urban interface. Two NPS structures and several privately owned structures and/or trailers were destroyed at the Whispering Pines within the park boundary, but no structures outside the park were threatened. The park worked with the BAER team to identify rehabilitation needs and was successful in obtaining funding for rehabilitation projects.

**Division of Interpretation and Education**

This year, Joshua Tree National Park opened a new partnership visitor center together with the Joshua Tree National Park Association (JTNPA). Located within the community of Joshua Tree, the building and property were purchased by JTNPA to address a need identified in the park's General Management Plan for a visitor center near the park's West Entrance. The Joshua Tree Visitor Center was opened on Memorial Day weekend and was formally dedicated on September 29, 2006. The park interpretive staff scrambled to create exhibits for a 2,500 sq. ft. exhibit area during April, the peak of our visitor season. A very nice set of HFC-designed temporary exhibits was produced and installed for less than $5,000. It is anticipated that this facility will eventually become the park's busiest visitor center with traffic of upwards of 150,000 people annually. It will also serve as a cornerstone of the Joshua Tree community business district.

Phase I of the park’s new waysides (about 40 exhibits) were installed this year by park maintenance and YCC crews and were an immediate hit with park visitors. Additional wayside installation will occur in 2007.

A new solar-powered amphitheater was constructed at Cottonwood Campground with Recreation Fee dollars. This wheel-chair accessible facility marks the third solar-powered amphitheater the park has built. Park Exhibit Specialist Anne Staley coordinated the design, fabrication, and installation of refurbished visitor center exhibits for the Cottonwood Visitor Center. Funded with Exhibit Cyclic funds, the exhibits focused on area history, geology, night sky and air quality, and the desert tortoise. The new exhibits and the Cottonwood Campground Amphitheater were dedicated in November.

The park education program enjoyed another successful year with over 19,000 students served. A new program called “Saving the Ancients” was started with a Parks As Classrooms grant.

The redesigned, CMS-based park web site was launched in August. Visual Information Specialist Sandra Kaye coordinated the redesign effort for the new web pages. A major redesign of the park unigrid folder started, and a team from the HFC Publication Division visited the park in May. A new brochure targeted to serve the rock climbing community was published.
Thanks to being awarded funding from the Harpers Ferry Center, the park also began development of a Long-Range Interpretive Plan. HFC Interpretive Planner Paul Lee convened in initial meeting of the park LRIP Team in September.

A five-year decline in ranger-conducted programs was halted in 2006 and the number of formal programs increased by over 200 with visitor contacts at programs increasing by over 7,000. The increase in programs and attendance was partly due to having the Cottonwood Area Interpreter position filled again as well as the hiring of one additional seasonal interpreter position over 2005. In addition, safety issues surrounding the dams at Keys Ranch were largely resolved resulting in fewer closures of the Ranch and more public tours than in 2005. Some of the increase in formal programs was accomplished at the cost of reduced roving rangers which experienced a slight decline in contacts. With the opening of the Joshua Tree Visitor Center in May, an immediate need was created to shift staff resources to the new facility. This could place pressure on Interpretation’s ability to provide visitor programs in 2007 as more FTE will be needed to staff the new visitor center.

Ranger-led programs and other visitor services provided in 2006 are summarized in Table 1 below. FY2005 figures are provided for comparison purposes.

<table>
<thead>
<tr>
<th>Service</th>
<th>FY2005</th>
<th>FY2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visitor Center Contacts (inc. JTVC in 2006)</td>
<td>212,927</td>
<td>204,615</td>
</tr>
<tr>
<td>Formal Interpretation</td>
<td>11,218</td>
<td>18,812</td>
</tr>
<tr>
<td>Informal Interpretation</td>
<td>4,414</td>
<td>3,182</td>
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<tr>
<td>Education Programs</td>
<td>16,569</td>
<td>19,264</td>
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<tr>
<td>Junior Ranger Program</td>
<td>1,327</td>
<td>1,992</td>
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<tr>
<td>Community Programs</td>
<td>233</td>
<td>270</td>
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<tr>
<td>Loan Materials</td>
<td>456</td>
<td>1,477</td>
</tr>
<tr>
<td>Audio Visual &amp; Electronic Media</td>
<td>11,471</td>
<td>10,253</td>
</tr>
<tr>
<td>Publications Distributed</td>
<td>109,250</td>
<td>212,250</td>
</tr>
</tbody>
</table>

Table 1

Taken from the Servicewide Interpretive Report, Form 10-769

The Division of Interpretation at Joshua Tree initiated a major grant-funded outreach program this year on behalf of the interagency partnership, the Desert Managers Group. The outreach program is focused on recovery efforts for the threatened desert tortoise. An Outreach
Coordinator was hired in October, and a multi-faceted campaign was launched with $130,000 in non-federal grants. The outreach campaign has significant education components that are being planned and produced by the park Education staff.

Desert Tortoise Outreach Coordinator Anne Staley introduces Mojave Max to southern California school children. The Mojave Max Emergence Contest had 250 entrants in 2006.

**Volunteer Program Highlights**

In 2006, a total of 490 park volunteers contributed 28,224 hours of labor in support of park operations. Included in these figures are 15 Student Conservation Association volunteers, six campground hosts, and two Artists-in-Residence. A new partnership with a local organization called Desert Parks Partners (DPP) was formed to assist the park in recruitment of volunteers. The DPP brought together 100 volunteers for National Public Lands Day to help with trash clean-up and pulling of exotic weeds throughout the park. Volunteers also provided logistical support for firefighting efforts as the park experienced five lightning-caused wildfires in July.

Table 2 shows the breakdown of volunteer hours by activity:

<table>
<thead>
<tr>
<th>Program Area/Activity</th>
<th>Hours Contributed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>101</td>
</tr>
<tr>
<td>Campground Hosts</td>
<td>321</td>
</tr>
<tr>
<td>Cultural Resource Management</td>
<td>297</td>
</tr>
<tr>
<td>Interpretation</td>
<td>5,408</td>
</tr>
<tr>
<td>Maintenance</td>
<td>364</td>
</tr>
<tr>
<td>Natural Resources Management</td>
<td>13,929</td>
</tr>
<tr>
<td>Visitor &amp; Resource Protection</td>
<td>7,804</td>
</tr>
</tbody>
</table>

Table 2. Joshua Tree National Park FY06 Volunteer Program
Contributed Volunteer Hours by Activity

**Cooperating Association Activities**

The Joshua Tree National Park Association experienced a landmark year on a variety of fronts. The purchase of the former Park Center for $1,000,000 allowed the Association to open a facility
at a location long identified as a prime spot for reaching the park visitor population. This acquisition has the potential to dramatically transform Association operations for the foreseeable future. Though visitor traffic was slow during the summer months, by the close of the year the site was fulfilling its promise as visitation and sales began to show healthy increases.

For the year, JTNPA had revenues of $833,018.72 and contributed a total of $188,650.91 in Aid to the National Park Service.

The Association received a $30,000 capacity-building grant from the Resource Grant Fund Foundation for the creation of the Coachella Valley Outreach Program. The goal of the Coachella Valley Outreach Program is to strengthen awareness and support for Joshua Tree National Park through a strategy that would involve awareness building, outreach experiences, hands-on in-park experiences, fundraising and other opportunities.

The Joshua Tree National Park Science Grant Program, funded by the Lee Family Foundation and by JTNPA, was re-designed in 2006 to target graduate student researchers. The goal of the new program is to generate more proposals for more field research projects and to structure the calls for proposals to be better aligned with the typical university calendars. Under the new guidelines, up to three $4,000 research grants will be awarded each year. For 2006, the Science Grant was awarded to Richard Redak of the University of California-Riverside for a project titled *Urban Edge Effects within Desert Ecosystems: Impact on Arthropods*.

The Desert Institute, the adult education program operated by JTNPA, offered 36 weekend classes to 407 students and conducted 17 community lectures for 439 attendees in FY06.