

A2621(WR-RCH)

APR 14 1983

Memorandum

To: Regional Director, Western Region
From: Superintendent, Yosemite
Subject: Superintendent's Annual Report

Enclosed is Yosemite's Superintendent's Annual Report for 1982.

(Sgd.) Robert O. Binnewies

Robert O. Binnewies

Enclosure

bc:

Lisa Dapprich

Yvonne Radanovich

Research Library

Superintendent.....	
✓ Administration.....	copy
✓ Concessions Mgmt.....	copy
Management Asst.....	
✓ Asst. Supt., Park Opr.....	copy
✓ Chief Ranger.....	copy
Chief Interp.....	copy
Safety Mgr.....	
✓ Chief, Maint. Mgmt.....	copy
Chief, Resources Mgmt.....	copy
Asst. Supt., PP&D.....	
Realty Spec.....	
✓ Research Scientist.....	copy
Landscape Arch.....	
Central Park Files.....	
REPLY DUE.....	

Park Highlights for 1982

The year 1982 in Yosemite National Park was highlighted by a visit from Director Russell Dickenson, May 18-20. The Director toured the park with key staff members including Park Superintendent Robert Binnewies and Western Regional Director Howard Chapman. The tour included a briefing on significant park issues, lunch with NPS employees and community members, an all-employees meeting, and a helicopter tour of the park's backcountry.

The objectives of the General Management Plan are to protect the priceless natural beauty of Yosemite, to improve transportation services within the park, to provide more effective, efficient, and sensitive visitor services including accommodations, and to remove nonessential services from the park to Yosemite's Administrative Site at El Portal. The steps taken over this past year and those that are planned in the near future relate strongly to these objectives.

Primary among these steps have been efforts to win legislative approval for long-term leasing authority in El Portal and a continuing effort to develop specific design plans for Yosemite Valley, El Portal, Wawona, and Tuolumne Meadows.

Legislation introduced in the last session of Congress, which would have allowed the Secretary of the Interior to authorize 99-year leases for government-owned land within the El Portal Administrative Site, came very close to passage. Only in the final hours of Congress, when other major legislative initiatives took precedence, did the El Portal legislation fail to come to a vote. But with this delay, a commitment on the part of the local Congressional Representative, Congressman Tony Coelho, assured that the legislation would be reintroduced in the current session of Congress. Our expectation is that this legislation will be passed during the present session and that we will begin soon thereafter to encourage development through private investment at El Portal.

The goal in El Portal is to assure adequate housing, for both concession and NPS employees, and to develop better commercial office and maintenance facilities for the park. The National Park Service and the Yosemite Park and Curry Company are in concert regarding the benefits that would be derived through this type of development.

Along with the El Portal legislative initiative, an effort has been underway for the past several months through the private architectural and engineering firm of ROMA, San Francisco, to develop specific design concepts which will improve visitor services in Yosemite Valley. Emphasis in the design process is being placed on the recognized fact that the Valley is a year-round resource. Visitor facilities and transportation systems must be adjusted and modified to serve the thousands of park visitors who visit Yosemite Valley in fall, winter, and spring. A predominate number of present facilities represent designs of the 1930's when only summer visitation was possible. Work by ROMA is concentrated on Curry Village, Camp 6, and Yosemite Lodge areas of Yosemite Valley, as well as the development priorities for El Portal.

Current construction projects at Yosemite that relate to the General Management Plan include upgrading the water and electric systems in Yosemite Valley, improving and extending the Valley's bicycle system, encouraging and endorsing initiatives taken by the Yosemite Park and Curry Company to improve hotel and restaurant services with special emphasis on Yosemite Lodge, the installation of fire protection systems at the Wawona Hotel, and the initiation of the contract to provide adequate and efficient sewage services in the Wawona section of the park. New facilities are under design which will allow for better concession services at Glacier Point, South Entrance, and Tuolumne Meadows.

The General Management Plan process for Yosemite always has been viewed as a long-term commitment extending forward for at least 10 years. Special attention is being directed toward major implementation of the Plan by 1990, the centennial anniversary of the park. Park staff members and their counterparts at the Regional Office and the Denver Service Center are scheduling construction priorities and development projects with the 1990 goal in mind. Envisioned in this process are new housing for concessioner and park staffs, the redesign and clustering of visitor facilities to provide more attractive and energy-efficient visitor accommodations, the operation of the Wawona Hotel on a year-round basis, the development of better campground facilities at Wawona, and a variety of major health and safety improvements which will modernize the very old and inefficient infrastructure that has for so long plagued Yosemite.

In the initial stages of implementing the General Management Plan, Yosemite has markedly benefitted from funding made available through the PRIP program. Many of the chronic health and safety problems in this park are being resolved.

During the summer of 1982, the Student Conservation Association and the California Conservation Corps provided invaluable assistance with trail work in the backcountry, restoration of projects in the front country and assistance with the issuance of backcountry wilderness permits. Unfortunately, the Youth Conservation Corps (YCC) was not funded for the summer of 1982. We continue to find these programs extremely successful and we heartily endorse their continuation.

On December 3, 1982, the advance team for the Queen of England visited the park to survey the area and determine if Yosemite would be included in her West Coast itinerary.

A major rockslide struck Highway 140 between El Portal and Yosemite Valley on April 3. Approximately 280 feet of roadway and the 12 inch ductile iron sewerline were destroyed. A chlorinator was installed on the sewage line on April 5, and by April 7 a temporary sewage line was installed over the slide. A single lane road was opened to administrative traffic on April 16 and the highway was reopened to two-way traffic on April 24. The final paving commenced on May 4. The cost of the project was \$140,000.

Each Division in Yosemite had unique accomplishments and problems during the year. They are as follows:

Administration

Yosemite was within the one-quarter of 1% in the black of our ONPS funding in FY82.

The Basic Operations Report (Core Mission) was completed.

The FY84 budget submission was prepared and submitted.

10-237 and 10-238 priority lists were updated for the annual operating increases, PRIPO, PRIP, cyclic maintenance, cultural cyclic maintenance, research projects, PEP, and development packages for items identified in the GMP. Health and safety projects and cultural resources preservation were also submitted.

The procurement section processed 17% more purchase orders in FY82 than the previous year for an approximate total of \$3 million.

Many of the old payroll problems submitted to the Regional Office were finally resolved.

Concessions Management

In May 1982, the park purchased nine new shuttle buses at a cost of \$146,000 for each bus. Of the nine buses, one is equipped with a handicapped lift.

On May 14, ARA Services, Inc. was awarded a contract for approximately \$900,000 to operate the Valley shuttle system and the Mariposa Grove trams for the balance of the fiscal year. At the end of FY82, funding was eliminated for the shuttle system and the National Park Service hired temporary bus drivers and assumed operation of the system. In the meantime, negotiations were conducted with the Yosemite Park and Curry Company to assume the operation of the shuttle and to recover costs by increasing the prices of selected goods and services sold in Yosemite. As of the end of the year, the National Park Service was still operating the system.

Due to public health deficiencies, the park made a recommendation to close the El Portal Motor Inn; an agreement was reached with the Regional Office to extend the operation until the end of 1983.

The Yosemite Park and Curry Company began a raft rental on approximately three miles of the Merced River. This raft rental was well-received by the public and increased the safe use of the Merced River.

The Yosemite Park and Curry Company had several rehabilitation projects in 1982, including the redecoration of all the rooms in the Wawona Hotel; reno-

vation of the Indian Room Bar in the Ahwahnee Hotel; renovation of two buildings at Yosemite Lodge--new wallpaper, furniture, carpets, etc.; and work was begun on a proposal by YP&CC to move the Mountain Room Bar from its existing location to the lounge area of Yosemite Lodge in order to expand the seating area of the Mountain Broiler Room and to more advantageously utilize the space in the lounge.

Research

Progress was made this past year on the two major projects in the park--determining carrying capacities for the backcountry and evaluating the role of fire in Yosemite ecosystems.

Over 100,000 wilderness permits were analyzed using the QUOTA program to refine trailhead quotas for Yosemite National Park and for the Hoover Wilderness Area.

Two phases of the fire project are currently underway--the refinement of prescriptions and the characterization of Sierra Nevada coniferous fuels. Fire behavior data from a total of 244 plots were analyzed to determine the relationship between flame length and understory tree mortality. Fuel study of 22 different species is complete except for the heat yield content analysis and the statistical analysis.

Maintenance

The Tioga Road was opened for the season on May 28 and closed November 15.

Reconstruction of Half Dome Trail was completed in October 1982. Work consisted of rebuilding sections of trail that were deteriorated from erosion and heavy use. New cables are to be placed on the Half Dome ladder in the spring. \$80,000 was appropriated for the project (PRIP).

Reconstruction of Yosemite Falls Trail caused from a major rockslide was approximately 80% completed. \$72,000 was made available to do the work. On October 25, a second rockslide occurred below the first slide. \$150,000 has been requested to reconstruct trail through both slide areas. If funding is received, work will be completed by the end of FY83.

Twenty-six CCC employees assisted the backcountry trail crews on trail projects from early April until the end of September.

Emergency safety improvements were made on the Wawona Hotel Complex during the year at a cost of \$72,000.

Bicycle trail construction from Curry Village to the Village Mall (6,000 linear feet of 8-foot wide trail) was awarded to the El Camino Construction Company in the amount of \$137,538 (PRIP). Brushing and excavation work was completed by park staff.

A major road blowout occurred on Route 41 in February. All repair work was contracted by Henley Construction Company at a cost of \$80,000. A major rockslide occurred on Route 140 on April 3. Over 200 feet of 12 inch ductile iron main line sewer line was also demolished. The reconstruction work was completed by park staff and equipment rental agreement in the amount of \$130,000.

A prototype cabin was constructed in Tuolumne Meadows to be used by YNHA in the summer and the ranger patrol in the winter.

A contract for renovating the Glacier Point overlook, rebuilding the trail from the parking area, and installing a temporary restroom with underground utilities was awarded to Nisei Construction Company of Fresno in 1981. Work began in June 1982 and is expected to be completed in FY83. The new leach field and dosing chamber are ready for use. The old Imhoff tanks will be kept on line as long as the concessioner's snack stand remains in its present location. Undergrounding of approximately 1.3 miles of primary distribution lines near Glacier Point has been awarded and work will begin in Summer 1983.

The comprehensive design plan for El Portal was completed by the Denver Service Center, having extensively involved the residents in the process.

Two contracts were awarded for the reconstruction of the El Portal Railroad Exhibit. Antract Railroad Contractors layed the 360 feet of track, and Pete Pereira Company of Pacifica, California relocated the Bagby Station and the railroad cars and engine.

Repairs to the penstock involving construction of 100 foot length of 51 inch I.D. steel pipe supported by 90 foot span truss bridge was completed on April 25 at a cost of approximately \$220,000. The project was supervised by FHWA.

Resources Management

Fire management. The late-melting snowpack and unusually wet summer kept the number of prescribed natural fires to an all-time minimum of five. Only 1.17 acres were burned by these fires. Prescribed burning proceeded on schedule with 3,120 acres burned in two units. 92% of the targeted area in these units was burned despite an unusually limited time in which conditions were within prescription.

Rare, threatened, and endangered plant management. The population of the candidate endangered plant Eriophyllum nubigenum declined by about 90% in 1982 for unknown reasons. A new, small population of this taxon was discovered on the east shoulder of Half Dome. Small populations of candidate endangered plants Lewisia congonii and Allium yosemitense were discovered in the El Portal Administrative Site.

Exotic plant management program. Although the Klamath weed beetles released in Yosemite Valley in 1981 increased in number, the weed continued to spread

across Valley meadows faster than it was being destroyed. Bull thistles accelerated their spread across Valley meadows probably due to the moist summer. Prescribed burning in Yosemite Valley remained suspended pending the establishment of a research and control program for the thistles, which are believed to be stimulated by fire.

Wilderness impact monitoring. In 1982, a pilot wilderness impact inventory and monitoring study was initiated. The objective of the 1982 season was to devise an inventory and monitoring system that could provide campsite and trail specific impact assessments and to test the system through field work. The 1982 field season and subsequent data evaluation have provided the necessary information to initiate a full scale program. Working in the northwest portion of the park, four volunteers and the two resources management staff rated 792 undesignated campsites and 202.3 miles of trails and cross-country routes for impacts.

Air quality monitoring. Two air quality monitoring stations were operated in the park in 1982--one in Yosemite Valley and the other on Turtleback Dome. The Yosemite Valley station monitors total suspended particulates and coefficient of haze (a measure of particulate concentrations useful for predicting visibility impairment). The newly established Turtleback Dome station (established in September) contains a fine particulate sampler and telephotometer. The telephotometer measures visibility impairment. Telephotometer readings are supplemented by daily photographs that document atmospheric qualities such as color, texture, and visual range. Two park technicians were hired to take one to three readings daily at the Turtleback Dome station.

NEPA compliance. The park has, for the first time, a full-time Environmental Specialist, trained and responsible for handling and coordinating all NEPA compliance work. This has made Yosemite's NEPA compliance program extremely effective and has accelerated the review and compliance process.

Hazardous tree removal. Prior to a severe winter storm on December 24, the Resources Forestry crews removed 2,108 hazardous trees from public use areas and other developed sites. Following the storm on the 24th, over 300 green trees that were uprooted, partially uprooted or otherwise damaged by the storm have been found. About 50% of the trees uprooted had extensive root rot. A lesser degree of root rot was noted on an additional 30% of the trees blown down. 61% of these trees demolished 18 tent cabins, 5 cottages, and a laundry room. Roads and ski slopes were also blocked by falling trees, however, no injuries were reported by falling trees.

Endangered Peregrine Falcon. Due to progressive eggshell thinning, it appeared unlikely that the El Capitan eyrie could successfully raise young naturally in 1982. Consequently, the excessively thin eggs were replaced with two healthy, captive-reared nestlings at the proper time. These young were immediately adopted by the nesting pair and both fledged successfully. This was the first incidence of peregrine nest augmentation in Yosemite. The other pair, with a relatively healthy young female, fledged two young without

any manipulation. All nest monitoring, eggshell collection, and analysis and augmentation was carried out by contract with the Predatory Bird Research Group at University of California, Santa Cruz.

Interpretation

The final draft of the park Interpretive Prospectus was completed late in the year.

Development of the Wayside Exhibit Plan got underway. Preliminary proposals were documented and approved.

The Park Information Center was organized and activated.

New bear management and lodgepole needleminer brochures were produced.

A new sound and light show that precedes the orientation slide program in the West Auditorium of the Valley Visitor Center was produced and an automated control system for the expanded show was developed.

Restoration of the Mariposa Grove Museum was completed; the newly rehabilitated exhibits were installed in August. New interpretive signs were installed at the Grizzly Giant and Fallen Tunnel Tree.

Six new orientation exhibit panels were installed behind the windows in the wilderness permit area of the Valley Visitor Center, principally to assist in after-hours information needs.

A different conceptual approach to demonstrating Native American social and material culture in the summer Indian Cultural Program, based on extensive preliminary research, was implemented.

The International Parks-to-Parks program was adopted; Yosemite's sister agency is the Queensland National Parks and Wildlife Service in Australia.

Cultural Heritage Week, a special five-day program of demonstrations and performances at the Pioneer Yosemite History Center, was inaugurated in August.

YNHA assumed leadership and sponsorship of the Seven-Day High Sierra Loop Trip last summer.

Environmental controls and Space-Saver units were installed in the Collections Room vault late in the year.

Native American artist Harry Fonseca donated an original painting to the park Collections in exchange for the use of park housing for two months in the fall.

Members of the interpretive staff played a key role in developing plans and data for a prototype planning study to be implemented by the Denver Service Center at Tuolumne Meadows this summer.

The blacksmith shop at the Pioneer Yosemite History Center was relocated to a site in the main part of the complex.

The Interpretive Division coordinated and helped prepare a grant proposal submitted to NEA by the Harvard University Graduate School of Design through YNHA for a design study in Yosemite Valley. If approved, the study will commence in the spring of 1983.

Visitor Protection

Because of heavy rainfall in the spring with resulting floods, a section of Highway 41 being washed out and a major rockslide on Highway 140, travel was down 4% for a total of 2,506,241 visitors entering Yosemite National Park during 1982. A total of 2,037,275 overnight stays were recorded, which was down 4.2% from 1981. This is the largest number of overnight stays in any area of the National Park System and is summarized by 907,452 overnight stays in concessioner lodging, 1,004,265 overnight stays in NPS campgrounds, and 125,557 overnight stays in Yosemite's backcountry.

1982 was an eventful year fraught with climactic difficulties which called for the use of an Incident Command System. This system allowed the park to meet the complicated emergencies were generated by snow storms, rockslides, road washouts and floods. The Incident Command System is used throughout California and provides a common emergency organization.

1. Badger Pass. 1982 was an excellent year for skiing at Badger Pass. The ski area opened to skiing on the earliest date in its history--November 11, 1982. The total use for the period January to April 1982 and November through December totaled 87,219 skiers. The area was open 140 days during the year. Rangers provided first aid care to 370 skiers and participated in three successful searches for lost persons. The use of the YTS shuttle bus from Yosemite Valley and Wawona to Badger Pass again increased and its operation contributed to a very good season.
2. Hang Gliding. The hang gliding program operated from June 1 through September 30. During the season there were 306 successful flights and only one accident, which occurred when a parachute was inadvertently deployed, resulting in a non-injury rescue. The lower number of flights as compared to past years was a result of the construction work at Glacier Point which limited hang gliding activities to weekends only, until the last week of July when the take-off site was moved to Sentinel Dome.
3. Section 35, Wawona. Community involvement by the District Ranger and the Subdistrict Ranger remained high. Questions of jurisdiction, land use and control, fire response, snow removal, roads maintenance, and community

involvement and cooperation are still common. The District Ranger, the Western Regional Lands Office and the U.S. Attorney's Office developed a mutually beneficial working relationship during the year.

4. Nordic Skiing. For the second consecutive year, sufficient snow did not fall until after Christmas 1981, however, January 1982 proved to be within 10 inches of a record snowfall, only to have the heavy rains in February wash much of it away. Despite lack of snow, and seven days of the Badger Pass road closures in January, nordic use still ran about the same as the first two months the previous year. From February, both day and overnight use fell far below the 1980-81 level. There were a total of 16,134 visitor use days.

5. Yosemite Campground Reservation Statistics:

No. of tickets sold for Yosemite campgrounds	30,862
Total number of nights reserved in Yosemite	107,212
Total dollar amount collected for Yosemite campgrounds	\$ 615,924
Total number of days on reservation system	152
Total number of campsites on reservation system	756
Average number of nights per stay	3.5
Total number of changes made to original reservation	382

6. Incident Command System. The Incident Command System was initiated in Yosemite two years ago by the Fire Management Office of Visitor Protection. It proved so successful that it was recognized and utilized by other branches of the division on all types of emergency and abnormal situations. The Superintendent directed that due to past successful operations using these methods the Fire Dispatch Center be adapted to provide the Communications Center and Command Post for all Incident Command operations. The Command Post, complete with communications, was activated on ten occasions during 1982.

7. Law Enforcement. A custody bail release system was implemented allowing persons arrested for specific petty offenses and misdemeanor crimes to post collateral prior to arraignment. Although arrests were up 10% over 1981, actual prisoner days were reduced by 10% because of this new procedure.

8. Law Enforcement Incident Summary:

<u>Incident</u>	<u>1981</u>	<u>1982</u>
Part I Offenses	808	729
Part II Offenses	11,846	11,596
Motor Vehicle Accidents	526	571
Fatalities	16	14
Custodial Arrests	552	597
Prisoner Days	1,358	1,723
Ambulance Runs	362	384
SAR Operations	138	131
Case Incident Records	26,632	31,533

9. Fire Management Summary:

	<u>1981</u>	<u>1982</u>
Fires Suppressed	163	87
Natural Fires	40	5
Management Fires	1	3
Research Fires	0	0
Total Man-Caused Fires	129	84
% of Total Fires	66%	88%

Summary of Helicopter Use:

Hours	32.9
Flight cost	\$ 20,431
Availability Cost	32,168
Total Cost	52,599
Days Out-of-Service	3
Initial Attack	10
Additional Flights	15
Number of Passengers	205
Pounds of Cargo	23,000
Gallons of Retardant Dropped	8,500

	<u>Number of Rescues/jobs</u>	<u>Hours</u>	<u>Cost</u>	<u>Pounds Cargo</u>	<u>Number of Passengers</u>
SAR Use	52	61.3	38,067	19,927	310
Admin Use	52	91.8	57,008	90,005	294
Recon/Presupp.	19	16.2	10,060	2,000	135
Total services by Helicopter Associates		202.2	125,566	134,982	947

Structural Fire Summary:

	<u>1982</u>
Arson fires	0
Accidentally-caused fires	73
False alarms	12
Emergency medical services	78
Total number of alarms responded to	254
Cost of fire apparatus, mileage and pumps	\$ 6,920
Amount of damage to government property	602
Amount of damage to concession property	12,196
Amount of damage to visitor property	66,868
Amount of damage to other	2,503
Total hours of regular time on fires	711
Amount of overtime and hazard pay	14,504
Fire equipment loss or damage	442

10. Search and Rescue Summary:

	<u>1981</u>	<u>1982</u>
Number of operations	133	216
Number of persons rescued	155	130
Number of persons injured	100	59
SAR-related fatalities	7	9
NPS regular hours spent	3,217	2,498
NPS overtime hours spent	3,973	3,068
Non-NPS hours spent	4,781	1,623
Programmed NPS time	23,858	19,761
Non-programmed time	118,320	102,989
Costs paid by other agencies	\$ 62,641	\$ 55,605