master plan

GUADALUPE MOUNTAINS

NATIONAL PARK / TEXAS

RECOMMENDED:

Glenn O. Hendrix, Manager Denver Service Center	March 29, 1973

CONCURRED:

Donald A. Dayton, Superintendent Guadalupe Mountains National Park	April 4, 1973

APPROVED:

Joseph C. Rumburg, Jr., Regional Director Southwest Region	October 6, 1976

ERRATA SHEET

Since this document was prepared, the National Park Service has concluded to defer any decision on the tramway proposal.

This decision was reached largely because of grave concern on the part of many interested persons, uncertainties of visitor use demand in the immediate future, much more pressing need for other facilities, and the current national economic situation.

If and when consideration is given toward future tramway development, an Environmental Impact Statement on such a proposal would first be prepared and submitted for public review.

In compliance with Executive Order 11593 a complete inventory of the historical and archaeological resources of Guadalupe Mountains National Park has been completed. The Butterfield Stage Station and the Pratt Lodge historic sites were placed on the National Register; and Pratt House, Frijole Ranch, and the Emigrant Trail are being nominated to the Register. A total archaeological survey of the park was completed in August 1976, and sites are still being evaluated. At least eight of the archaeological sites may qualify for nomination to the National Register. The total number of archaeological sites and/or districts to be nominated awaits the evaluation of the final report on the survey.

All cultural resources in the park will be managed in accordance with the management policies of the National Park Service.

guadalupe mountains

united states department of the interior / national park service

CONTENTS

BASIC PLANNING DATA

Natural features of exceptional scientific importance are so combined in Guadalupe Mountains National Park as to create exciting, striking scenery, especially when contrasted with the park's subtle desert backdrop. Here, a small verdant plateau with conifer forest, deep canyons, and a clear mountain stream, set amidst the hot, dry, sterile-appearing Chihuahuan desert, emerges like an "island in the desert." Such dramatic contrasts are the park's greatest appeal.

The southern point of the Guadalupe Mountains, lying in west Texas and extending north to the New Mexico State line, forms the core of the park. Variable terrain distinguishes the land surrounding the park. The low-lying Salt Basin followed by a seemingly endless basin-and-range landscape stretches to the west; the low, barren, and starkly dissected Delaware Mountains extend to the south; and the sloping, sometimes-hilly desert spreads to the east. North and northeast of the park the Guadalupe Mountains continue, but are lower and less dramatic, except for the deep and rugged canyons which break through the barrier reef connecting Guadalupe Mountains National Park with Carlsbad Caverns National Park. The Chihuahuan desert characterizing the general area gives way to scrubby pine and juniper forest on the Guadalupe uplands. The overall impression of the region is one of great open spaces.

Lincoln National Forest's southern unit abuts the park on the northeast. The Forest Service manages this primarily for protection of the watershed and the surrounding irregular country. Continuing exploration for gas, oil, and other minerals raises the possibility of mines or oil wells appearing in this region which possesses such exceptional scenic and scientific values. Elsewhere around the park, lands are under private ownership and used almost exclusively for grazing. Deer are numerous, and hunting is popular on most lands surrounding the park.

The region is sparsely populated and towns far apart. From El Paso, Texas, to Carlsbad, New Mexico, is a distance of 168 miles; Guadalupe Mountains National Park lies about midway between. Six hundred people live in Dell City in the Salt Basin; otherwise, the evidences of habitation are principally in scattered ranch houses. The region's

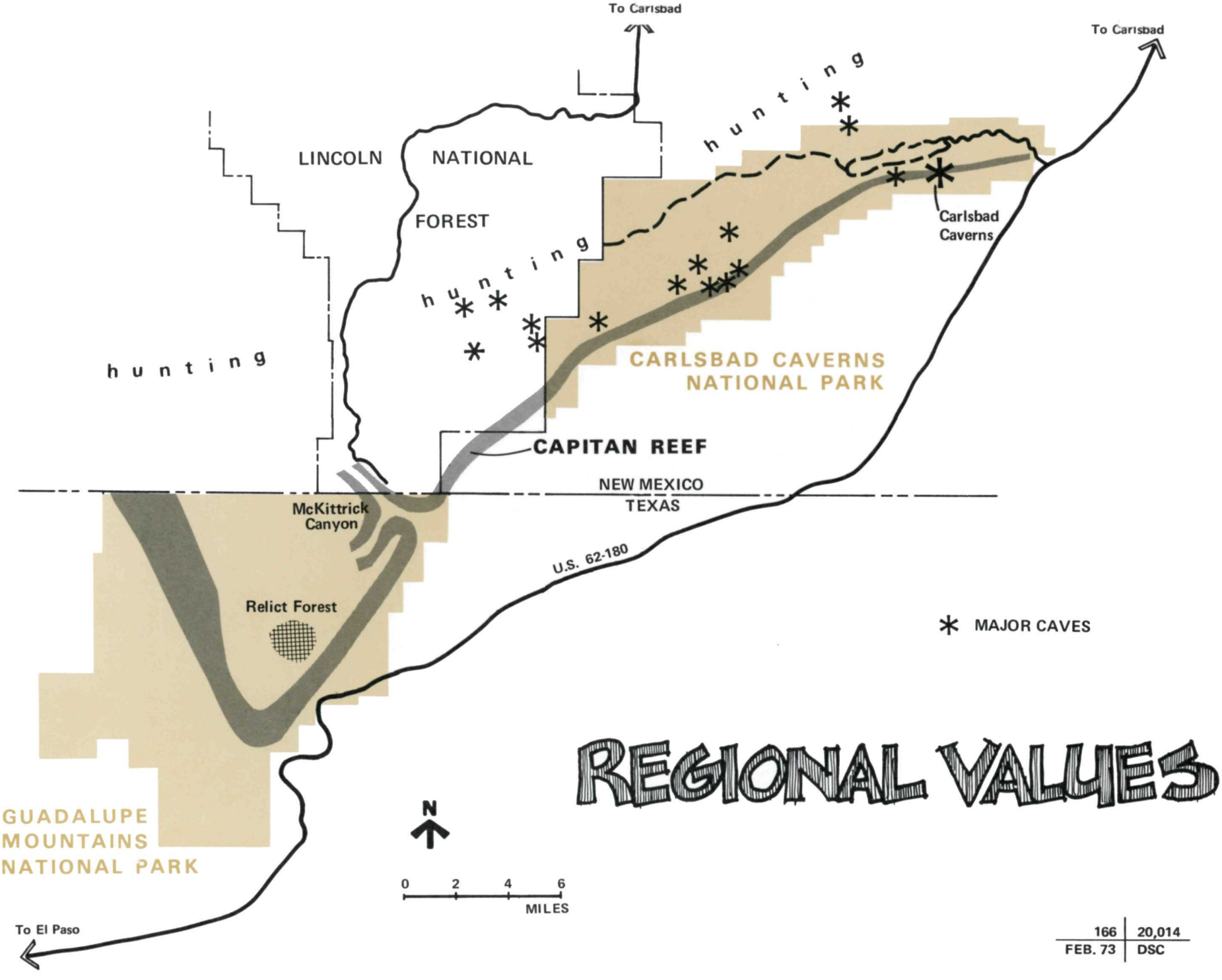
population centers – Carlsbad with 21,000, Van Horn with 2,000, and El Paso with 317,000 – are within a one- to two-hour drive of the park. Livestock constitutes the primary economic base of the area near the park, but there are agricultural production and mineral extraction near Dell City. Tourism generated by the park could become a major factor in the regional economy.

Primary access to the region is by U. S. 62-180 between El Paso and Carlsbad. Most of the 700,000 to 800,000 persons who visit Carlsbad Caverns National Park each year use this route. Commercial airlines service El Paso, a major transportation hub, and Carlsbad. A paved road from Carlsbad into the Lincoln National Forest reaches nearly to the rugged northeastern portion of the park. This road will probably be extended outside the park to Dell City where there is a connection to U. S. 62-180. The north side of the park will then be more accessible.

The region offers little in the way of visitor facilities. Rest stops with picnic tables at scenic locations near the park, and widely spaced gasoline stations and small stores between El Paso, Texas, and Whites City, New Mexico, are about all that is available. Visitors to Guadalupe Mountains National Park must consider either El Paso or Carlsbad – possibly Whites City – as a base for food and shelter.

Experience suggests that Guadalupe Mountains National Park will act as a magnet for visitors. In the general neighborhood of the park, development will occur in response to the travelers' needs. Whether this response is tastefully planned or otherwise, is a serious concern.

The park qualified for national significance through a combination of scenic and scientific attributes. The very features which are of exceptional interest to scientists account for the scenic variety and are the subjects of principal visitor interest. The Permian marine limestone reef is one of the most extensive and significant fossil reefs in the world. Rising from the desert floor in a nearly unbroken scarp, the reef resembles a huge V-shaped wedge pointing south. At the point of the V is El Capitan, which, with its sheer thousand-foot cliffs, is visible for over 50 miles. Directly north of El Capitan is the highest point in Texas, Guadalupe Peak, ascending from a base of about 4,000 feet to a height of 8,751 feet above sea level. Between the arms of the V, hidden from view below, are two major features: a conifer-covered highland, including The Bowl, and the deeply incised McKittrick Canyon.



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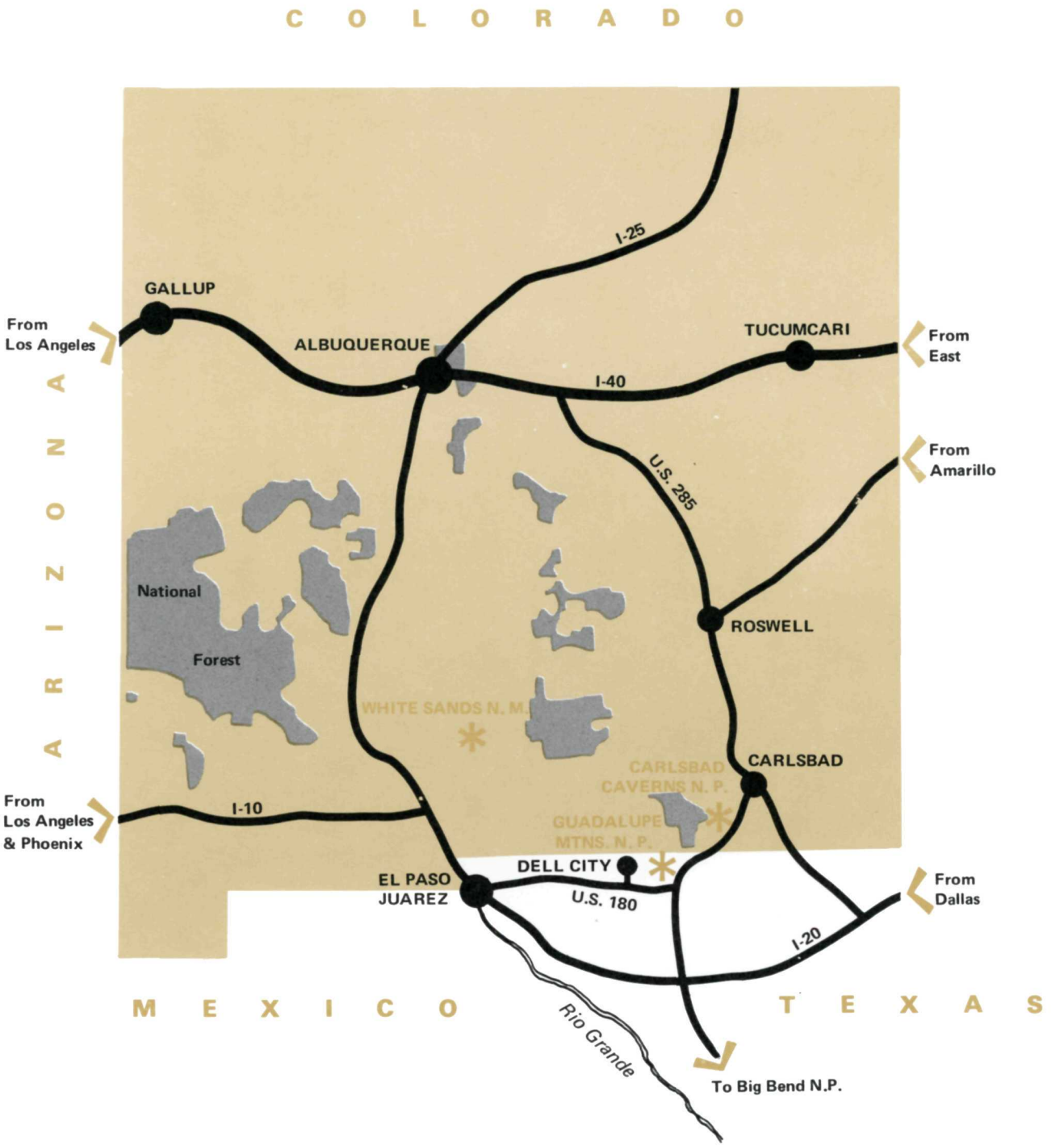

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Archeological and historical remains, documenting man's activities in the region, are also of importance. Indian cooking pits and other signs of habitation record local prehistory. Near Pine Spring, the ruins of the Butterfield Stage Station recall a phase in the country's westward expansion. Nearby is the site of a cavalry encampment and the possible scene of a battle between the cavalry and Mescalero Apache. The Williams and Frijole ranch houses illustrate more recent events and developments in the area's heritage.

The park's rugged topography, its fragile life-forms, and its generally open landscape are major factors to consider in development and use. The greatest distance across the V formed by the reef and fault escarpments is only eleven miles. The relict forest of the upper elevations and the depths of McKittrick Canyon could easily be destroyed. The high visibility of the outer cliffs and bluffs makes their pristine scenic values very susceptible to impairment by possible developments. In general, the desert is extremely slow to recover from disturbance.

Climatic differences within the park are remarkable. Summertime temperatures may be disagreeably hot at lower elevations, while the highlands and moist canyons are cool by contrast. The western escarpment is said to produce a reflector-oven effect on the west side lowlands which is decidedly desirable during cool winter months. At the same time, the highlands can be bitterly cold and snowy. But overall, the climate of the park is mild. Rainfall is highest in summer and generally comes as electrical-storm downpours that may cause dangerous and destructive flash floods. Strong winds are common in spring. Fall is probably the most pleasant time. Visitor-use implications suggest the following: the intermediate elevations in the southeast part of the park are suitable for year-round use; the western portion for fall, winter, and spring; and the upper basin and peaks for late spring, summer, and early fall.

Water, a critical factor, will strongly influence how the park is used. There are a few dependable springs, several of which flow into North and South McKittrick Canyons. The water source of North McKittrick Canyon originates in the State of New Mexico within the Lincoln National Forest. The park's limited riparian vegetation and aquatic habitat could be jeopardized by diversion of these springs for other purposes. There is no water on the mountain tops, but spring water has

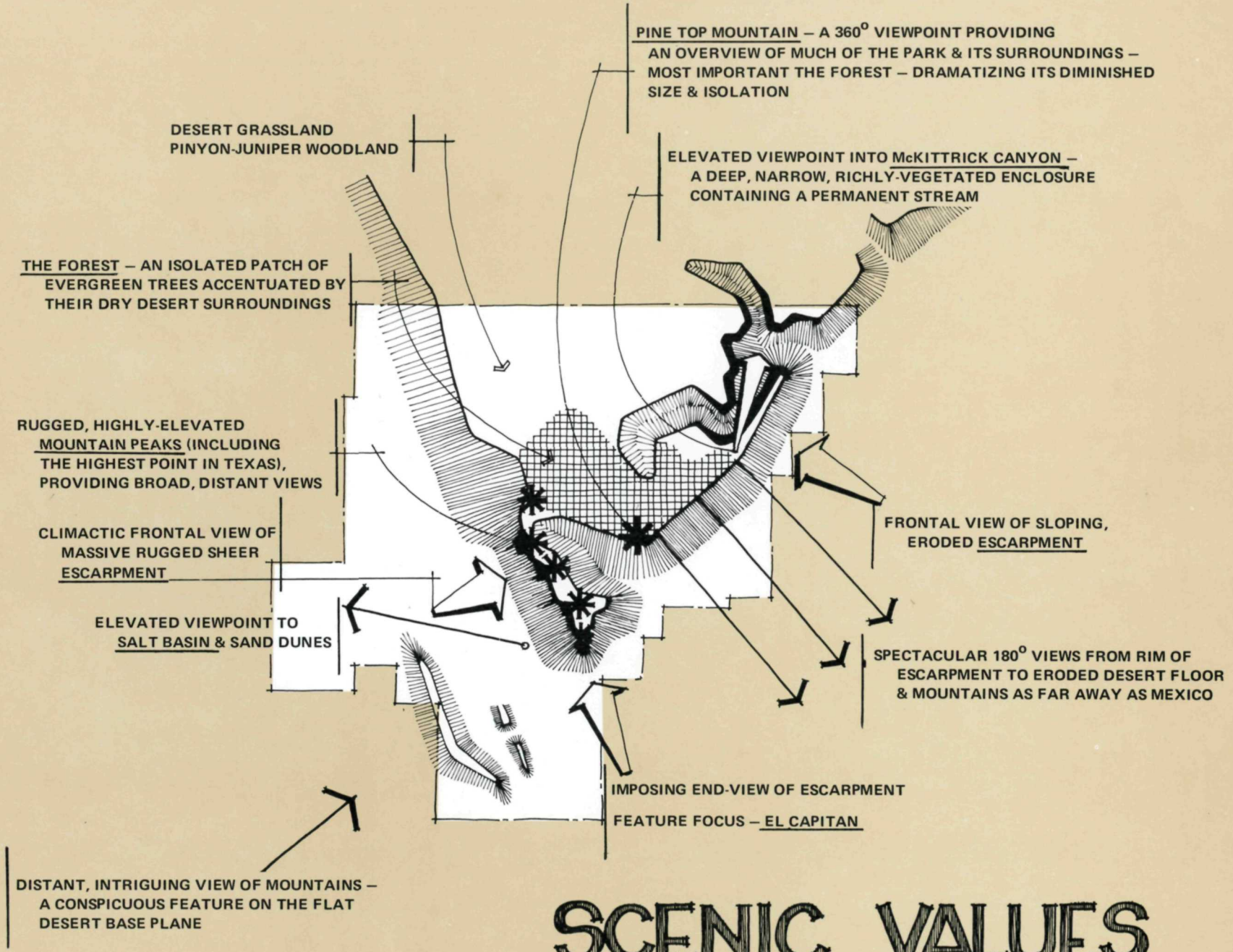
been pumped up to The Bowl where there is also a small earth tank impoundment to catch runoff. In the process of exploratory oil well drilling, additional sources of water have been discovered. Should these be tapped, their relationship to sources of surface water should be investigated to evaluate ecological effects.

Scientific attention is particularly directed toward three features in the park, the same which will be of great interest to lay visitors: the reef's cross-sectional exposures, both in the canyons and on the west fault scarp; the relict forest of The Bowl area; and the unusual biotic associations within McKittrick Canyon. These extensive exposures of the Permian reef are considered by geologists throughout the world as an outdoor laboratory of unique importance for investigating basic scientific principles; for tracing the history of the earth; and for understanding the origins of certain valuable mineral resources such as petroleum, potash, dolomite, and limestone.

The relict forest of The Bowl, containing ponderosa pine, limber pine, and Douglas-fir, is sensitive to environmental changes such as climatic variations. Relatively small for a forest and very fragile, this feature could be viewed as a museum. Yet, overprotection could be disastrous to its scientific value; underprotection could be just as injurious. Other relict communities occur in the park and are likewise susceptible to natural and man-caused alterations to their surroundings.

Within South and North McKittrick Canyons, several compact and easily damaged relict communities exist. Because of the small number of permanent streams in the general area, the aquatic habitat which these few do provide is especially important. Relict communities – some containing hardwoods and pines – occur within the shaded, moist, and secluded environs of the canyons.

The area once had a richer fauna which included species since exterminated – desert bighorn, wolf, and harlequin quail. Even now, wildlife is relatively abundant, particularly the mule deer. Under park protection, presently rare animals – black bear, mountain lion, and golden eagle – may be able to increase. Elk and turkey have been reintroduced with some degree of success. Coyote, fox, and bobcat are probably the only predators remaining in sufficient numbers to be of value in maintaining an ecological balance. Certain of the native species



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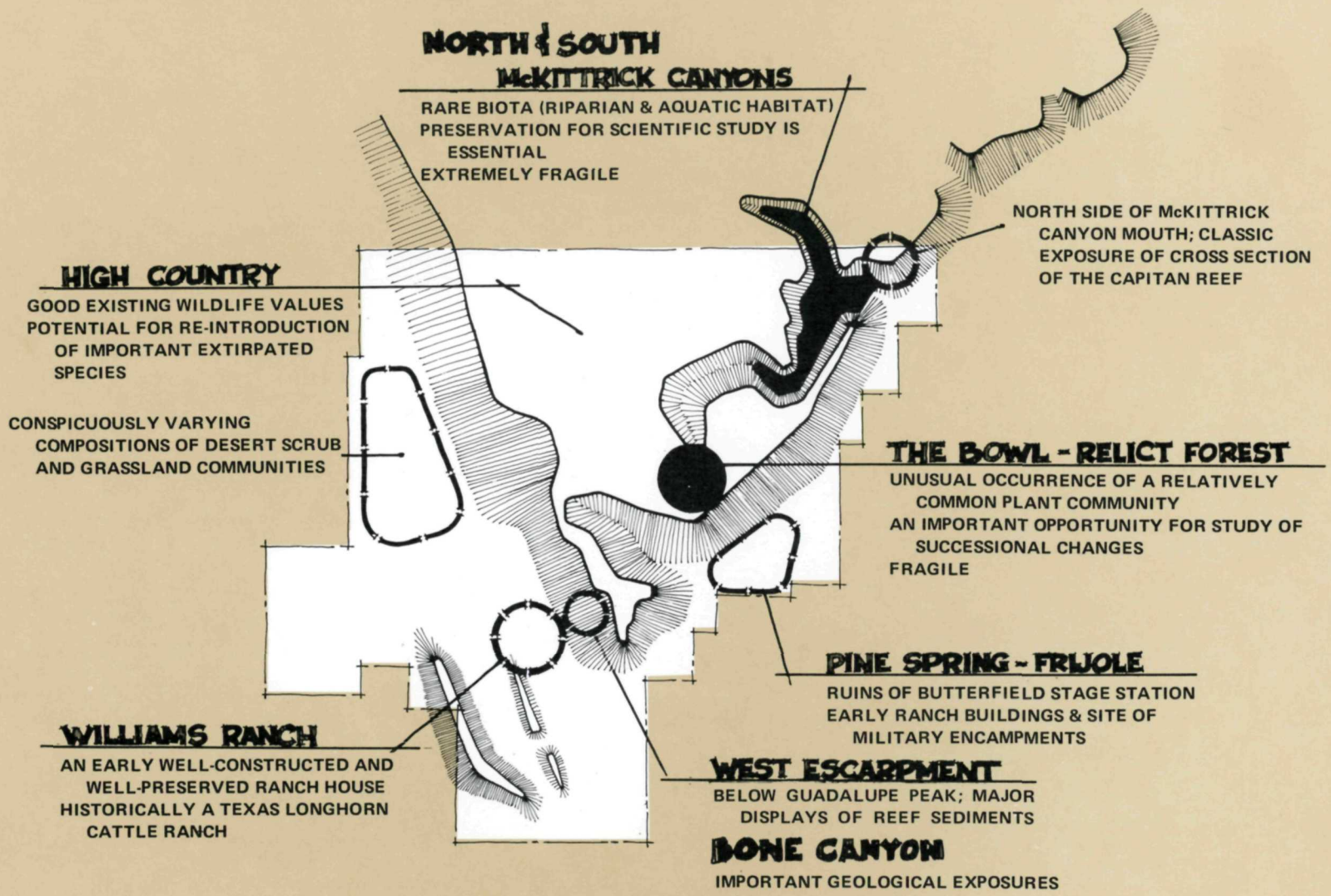

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have suffered through competition with domestic animals. The availability of water is critical for wildlife in this dry region.

The general public's expectations for the park derive, in part, from certain misconceptions. Publicity touting McKittrick Canyon for its "trout stream" has been unfortunate. Although trout were planted in the small stream, they have not fared well. Few remained following the floods of 1968 and 1969. The canyons have high scenic appeal and interesting plants, and the pools are particularly inviting in this generally arid land. However, the canyon walls are precipitous, and there is little space in the canyon bottom. Any number of people – even those with an environmental consciousness – would be damaging to the streamside vegetation and probably would cause stream pollution unless carefully restricted. The recent flood did destroy much of the road leading to the Pratt and Hunter Lodges so that vehicles cannot go beyond the canyon mouth.

The Bowl and its immediate surrounding ridges can be considered as a unit which could offer visitors an opportunity to see the relict forest – something quite foreign to the residents of the west Texas plains. In addition, there is a good view into South McKittrick Canyon; and from Pine Top Mountain and elsewhere on the rim, there are extensive views over the low-lying desert south, east, and west of the park. These scenic panoramas are impressive. From Pine Top Mountain nearly the entire park can be seen in relation to its setting, affording the viewer an increased comprehension of the park's geology and ecology. The high bowl area also provides a pleasant relief from the desert heat. However, visitor use would be limited. The area is small, its resources fragile. There is no natural source of water. Access is difficult. Two steep trails rise 2,500 feet from the base of the escarpment to The Bowl's rim. Further, the scarp's high visibility from the highway, its scenic appeal, and its scientific importance preclude construction of a road on it.

Guadalupe Peak, the highest point above sea level in Texas, is attractive to climbers. This peak, El Capitan to the south, and the peaks to the north comprise an impressive line of rugged high points, jutting upward from the fault scarp which forms the western edge of the Guadalupes. These peaks, The Bowl, and the remainder of the high country within the V become relatively accessible once over the enclosing escarpment.

Although less widely known or studied, the low region between the western escarpment and the Salt Basin possesses such assets as pleasant winter climate, usable space, a water source, and exceptional views of the Guadalupe cliffs and peaks. The Williams Ranch, located in this area, is a historical reminder of the early settlers' endeavors and determination and a disappearing life-style.

The southeast part of the park, near Frijole and Pine Springs, offers a moderate climate, gentle topography, possible sources of water, and accessibility. The area is highly visible from potentially important scenic overlooks and should be developed and managed sensitively. U. S. 62-180 passes through this section and farther south goes through a scenic section which was not included within the park, creating concern over the possibility of incompatible developments that would spoil the view of El Capitan and mar the park approach. Ruins of the Butterfield Stage Station are a feature of special interest in this area. American Airlines once intended to reconstruct this station. Their specifications and drawings are available. Preservation and interpretation of the stage station was a major reason for including the 240 acres surrounding the station within the park. A State road maintenance facility nearby detracts from this historical resource.

It appears likely that the park will become a destination point for residents of Ciudad Juarez, Mexico, and El Paso. For these people and others living in the hot and dry region of west Texas and southeast New Mexico, the coniferous forest and cool highlands offer a welcome contrast. To many potential visitors from the rest of the country, these same features might appear commonplace, and they would generally visit the park only as an incidental part of their travels. Nonetheless, considering the park's location on U. S. 62-180 and the large numbers of travelers en route to or from Carlsbad Caverns and other points, such incidental visits could make up the bulk of park attendance. On the other hand, local residents may account for a great part of the park's visitation. While visitor demand cannot be predicted with any certainty, it could easily exceed the use capacity of the fragile resources.

Until there are camping facilities, motels, and restaurants, visitors will necessarily spend a limited time in the park and probably not be able to visit all the major features. Others, reaching the park late in the day, will not find it practical to stop at all. A large portion of potential

visitors would perhaps place Carlsbad Caverns in higher priority if there were time to visit only one park.

Several buildings have been acquired along with the land, but only the Pratt residence south of the McKittrick Canyon mouth and the Pratt Lodge in McKittrick Canyon appear to be of importance for continued use. Williams Ranch house and the Frijole Ranch house are of considerable value for interpretive purposes.

PARK PURPOSE / MANAGEMENT CATEGORY

Guadalupe Mountains National Park was authorized by Public Law 89-667, October 15, 1966, "to preserve in public ownership an area in the State of Texas possessing outstanding geological values together with scenic and other natural values of great significance . . . ." The entire act is reproduced in the appendix.

Some of the park's responsibilities were indicated in House Report No. 1566, dated June 1, 1966: McKittrick Canyon "has been maintained since the early twenties virtually as a wildlife refuge by its owners." One landholder donated his 5,600 acres in the canyon area to the Government to assure their continued protection as a sanctuary. All but about 5,000 of the remaining 72,000 acres in the park belonged to one man, who expressed his hope that the land would be preserved in public ownership and, subsequently, sold his land to the Government for park purposes.

While McKittrick Canyon is a major park feature, its north fork extends into Lincoln National Forest. In this connection, the House committee recommended that

> "there be very close cooperation between the Forest Service and the National Park Service in preserving it as nearly as possible in its natural condition so that students of geology, botany, and zoology, as well as other visitors to the area, may have the full benefit of this bit of wilderness. Indeed, it would be highly desirable for the two agencies to provide a unified administration for this canyon area."

Guadalupe Mountains National Park is a natural area and shall be planned and managed in accordance with the approved policies for such areas.

THE PLAN

PHILOSOPHY

To the car-borne traveler, the appearance of the Guadalupe Mountains in the desert basin-plains country of west Texas can be likened to a long-awaited landfall on the high seas. Here, the park experience begins far from the park boundaries. On all the park's major approaches, the flat lowlands – with only occasional topographic relief and little vegetation of significant size and density – provide a vital prelude to an impressive show.

The contrasts produced by the unexpected upthrust of the Guadalupes and their coniferous forest and deep canyons afford a dramatic experience. In addition to their visual impact, the mountains comprise a valuable scientific resource. Thus, the real importance of Guadalupe Mountains National Park lies in the remarkable concentration of scientifically significant phenomena displayed in a striking manner. To see this park by foot – an area covering approximately 121 square miles – would take considerable time. However, the visitor, by reaching only a few strategic viewpoints, can gain a basic comprehension of and feeling for the major components that form this "island in the desert."

VISITOR USE

Guadalupe Peak offers a key viewpoint from which the park's major features can be seen and interpreted. This high point, together with the adjoining lands, will be made readily accessible to visitors and will be developed for high-density use.

Considerations of terrain, resource preservation, and visual impact have ruled out a road approach to the observation zone. Instead, a mechanical lift system will transport visitors from the base to the top of the reef escarpment. The park's major interpretive efforts will be associated with this facility.

The mechanical lift, rather than the private automobile, will be the key to enjoyment of the park upland by most visitors; nonetheless, the

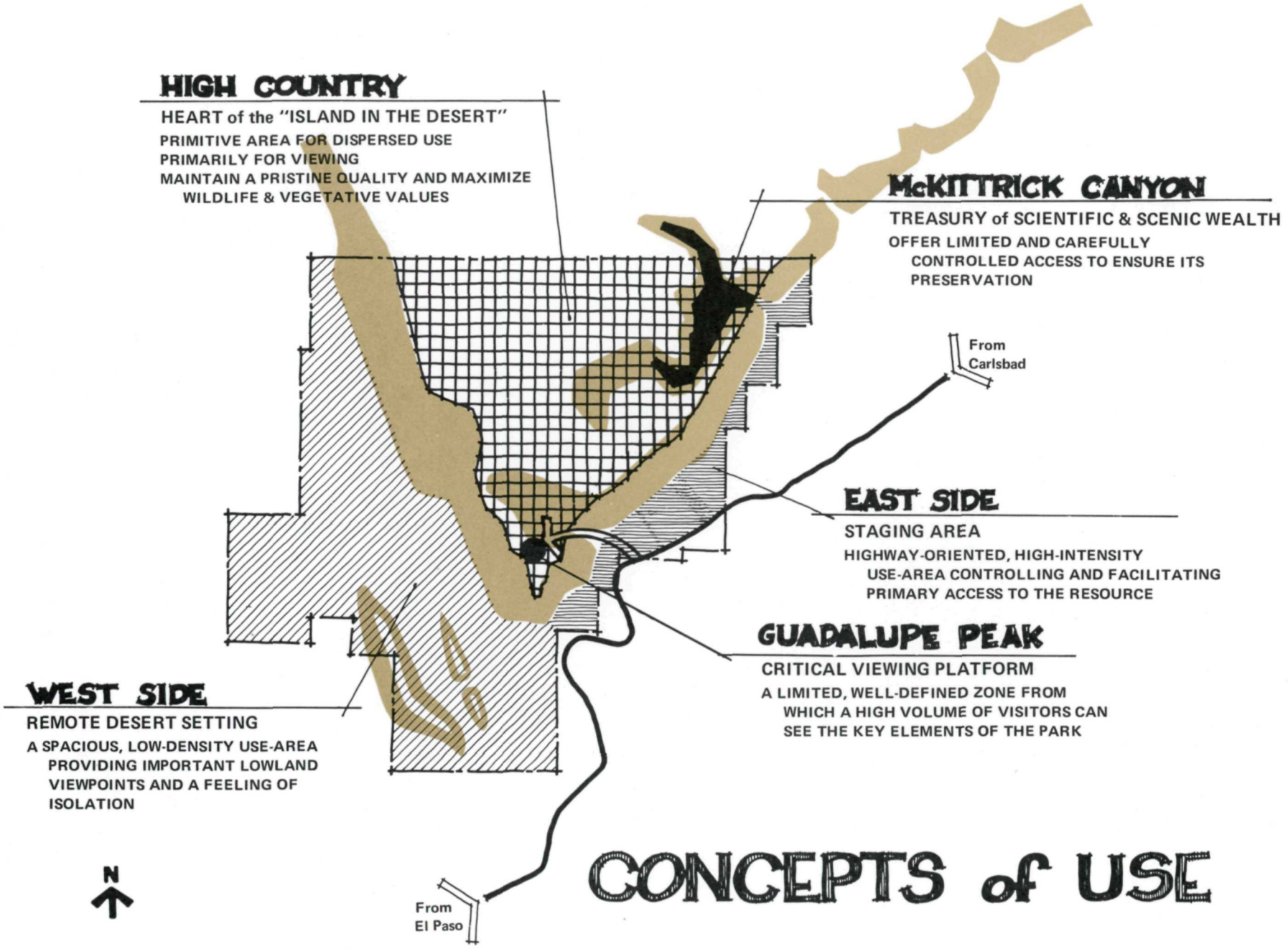
conveyor will provide much the same small-group atmosphere as a personal vehicle.

The lower terminal will be part of the visitor-use complex, a compact unit providing parking, simple food service, orientation, interpretive services, and restrooms. Here the visitor will be introduced to the park's resources and its available activities. To stimulate interest in the park's natural and human history, interpretive materials will be placed on board the transportation system.

The upper terminus will require a shelter to protect visitors from the extreme weather changes that occur frequently. The structure will house orientation devices and a contact station which will be manned as the situation requires.

The lower terminus of the lift system would be located in Pine Spring Canyon approximately half-a-mile from U.S. Highway 62-180. The upper terminus of the lift will be located on a ridge approximately 500 feet below and east of Guadalupe Peak. The peak itself will be accessible from the terminus by a foot trail. The lift will closely follow the canyon walls in its ascent and will be inconspicuously located. The upper terminus, well below the summit, will not infringe on this natural feature. The terrain near Guadalupe Peak is such that visitor use will be limited to the immediate vicinity of the peak. Views from Guadalupe Peak will provide spectacular overviews of the high country of the park and the shimmering salt lakes and desert 5,000 feet below. The geologic significance of the fossil reef formation and the dramatic biological contrast of the life zones, ranging from Sonoran to Canadian along the adjacent canyon wall, will be interpreted to the visitor during the conveyor trip. Historical and archeological aspects of the park will gain added meaning from the expansive overview. The lift system will provide an excellent vehicle for visual interpretation of the desert zone contrasted to the "Island in the Desert" zone of the park's forested high country.

The length of stay on top will vary from a few minutes to half a day or longer. This will be truly a wilderness threshhold experience, for the visitor will actually stand at a portal and look into the park's primitive areas. For those so inclined, entry into the primitive area should be afforded under appropriate controls that reflect carefully considered optimum carrying capacity determinations.


HIGH COUNTRY
HEART of the "ISLAND IN THE DESERT"
PRIMITIVE AREA FOR DISPERSED USE
PRIMARILY FOR VIEWING
MAINTAIN A PRISTINE QUALITY AND MAXIMIZE WILDLIFE & VEGETATIVE VALUES
McKITTRICK CANYON
TREASURY of SCIENTIFIC & SCENIC WEALTH
OFFER LIMITED AND CAREFULLY CONTROLLED ACCESS TO ENSURE ITS PRESERVATION
From Carlsbad
EAST SIDE
STAGING AREA
HIGHWAY-ORIENTED, HIGH-INTENSITY USE-AREA CONTROLLING AND FACILITATING PRIMARY ACCESS TO THE RESOURCE
GUADALUPE PEAK
CRITICAL VIEWING PLATFORM
A LIMITED, WELL-DEFINED ZONE FROM WHICH A HIGH VOLUME OF VISITORS CAN SEE THE KEY ELEMENTS OF THE PARK
WEST SIDE
REMOTE DESERT SETTING
A SPACIOUS, LOW-DENSITY USE-AREA PROVIDING IMPORTANT LOWLAND VIEWPOINTS AND A FEELING OF ISOLATION
CONCEPTS of USE
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It is intended that the surfaced trails in the threshhold zone will channel visitors and thus lessen impact on adjoining areas. To further protect the resource, restroom facilities will not discharge in the high elevation area. Instead, sewage will be transported to disposal locations near the lower terminus by means of the same conveyor system. Horses will not be permitted in this zone.

Low density will characterize visitor use west of the mountain escarpment where the atmosphere will impart a feeling of openness and isolation from the 20th century. Here, environmental awareness will be the unifying thread in interpreting the historical, archeological, biological, and geological stories. The towering, sheer cliffs of the reef are a constant presence for the visitor in this area of desert scrub between the mountains on the east and the Salt Basin on the west.

Access to this part of the park will be by automobile along a road which will lie lightly on the land. State assistance will be required to provide an approach road from U. S. Highway 62-180 to the boundary. Access will be controlled, entrance fees collected, and information services provided at an entrance station. Scenic viewpoints with turnouts and orientation devices will be located along the road. A spur will lead to the Williams Ranch, the focus for historical interpretation in this area. Bone Canyon above the ranch is of major importance for geological study. Several miles north of the ranch, the main road will provide access to an area of grass and desert scrub communities. The ecology of this zone will be interpreted. Because the general area has been grazed for many years, causing some severe sheet erosion and gullying, there are opportunities for studying the effects of man on the environment which should not be overlooked.

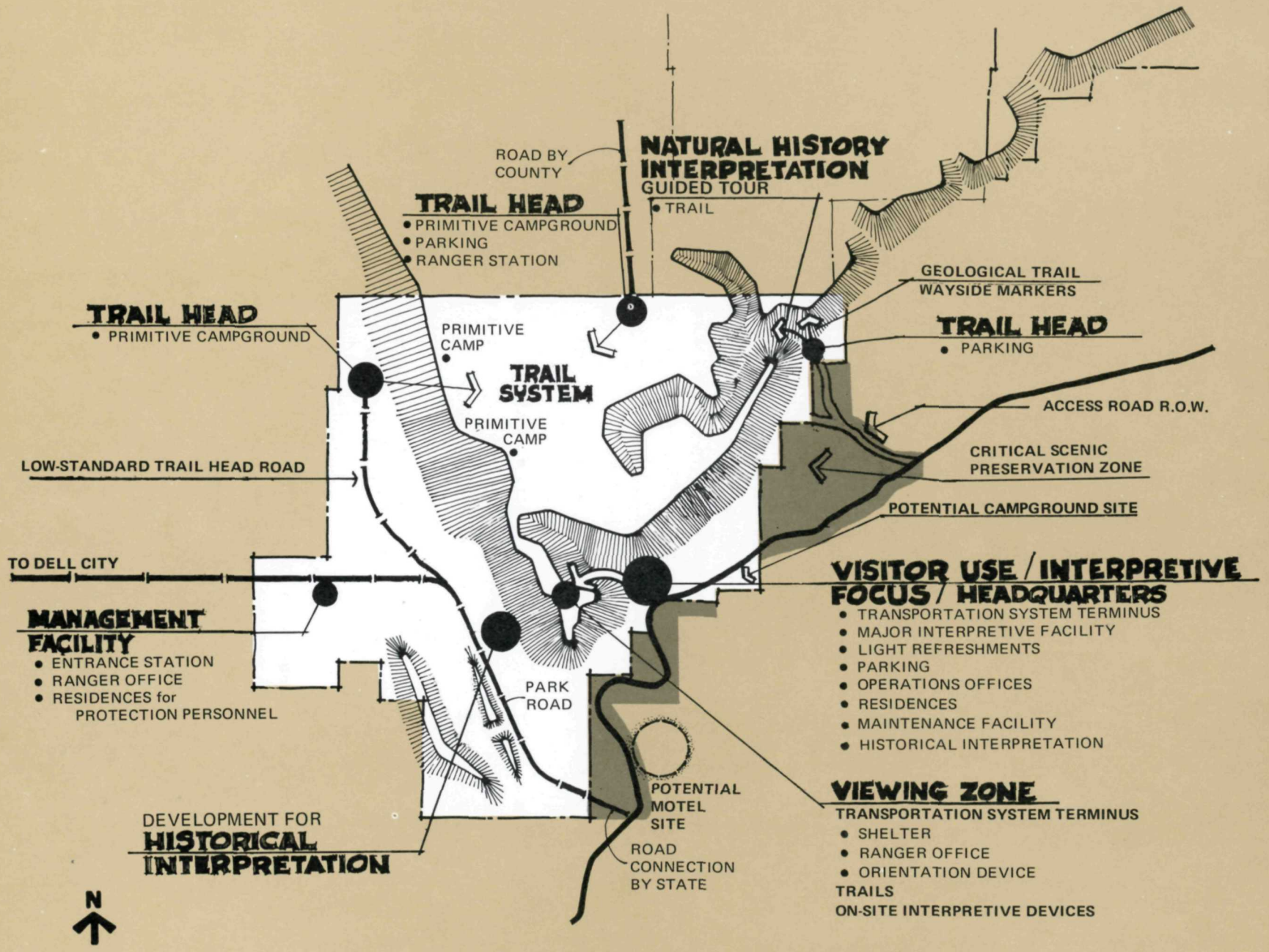
The road will continue west to the park boundary where it will connect with a county road to Dell City. There will be a primitive campground and parking, primarily for the convenience of hikers and equestrians taking the trail to PX Flat and beyond. The visitor traveling from Dell City toward the park on this road will receive one of the most spectacular views as he gazes directly at the sheer cliffs rising 5,000 feet above him. Dell City will provide needed visitor facilities – accommodations, food service, camping supplies, and gasoline.

Use of McKittrick Canyon will be carefully controlled to ensure that this fragile biological area is not destroyed. Access will be by road and private automobile to the mouth of the lower canyon. Only day use will be allowed. Parking will be provided near the mouth of McKittrick Canyon. Visitor entry to the canyon will be physically controlled beyond this point. Guided trips will be conducted to satisfy visitor interest in the canyon and to interpret the geology and the riparian and aquatic communities. This trip should be made particularly rewarding for those visitors with the special interest and motivation needed to make the effort. Visitors would be restricted to trails especially designed for this three-hour interpretive tour.

Above the McKittrick Canyon parking area is an exposed cross section of the Capitan Reef – one of the park's major scientific features. Use of this face by geology students as a field laboratory will be continued and the Service will cooperate with educational institutions. In addition to the advanced interpretation for students and scientists, interpretation will be provided for those without a geological background, the story chosen being a matter of the visitor's choice. This situation suggests that a trail to the various exposures will be necessary and that there should be an interpretive facility near the parking area for presenting the general story to those who do not take the guided tour.

The heart of the park – the major portion of the high country – will be reserved for wilderness-type experiences – usually limited to one day because of the area's small size and lack of water. Uses will include hiking, horseback riding, mountain climbing, and nature study. A well-developed trail system will help to ensure visitor safety and channel use so as to protect resources from damaging visitor impact.

For those preferring to hike up the escarpment, there will be one trail originating near Frijole and leading up Pine Spring Canyon. Secondary points of departure include the previously mentioned trailhead in the park's northwest corner. A similar development will be the trailhead with primitive camping inside the boundary in Upper Dog Canyon. The trail system will connect with a ridge trail following the hydrographic divide above McKittrick Canyon from Lincoln National Forest. Development and use of the Upper Dog Canyon campground and trailhead will be dependent upon road access to the park, which should be provided by the county.



GENERAL DEVELOPMENT

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U. S. Highway 62-180, as it approaches and passes through the park, provides an exceptional scenic drive. It is proposed that this scenic zone be managed – whether within or without the park – to achieve the greatest visitor enjoyment. Toward this end, the Service will enter into a cooperative agreement with the State of Texas and obtain easements to insure the scenic integrity of lands that might otherwise be developed to the detriment of the view. Existing roadside rests will continue to be maintained by the State, and the Service will provide roadside interpretation regarding the Permian reef and other features visible from the road. Of particular importance will be the ruins of the Butterfield Stage Station near the road. Here the story of exploration and transportation – trails, stage route, and highways through Guadalupe Pass – will be told. Reference will also be made here to the nearby sites associated with engagements between the United States Cavalry and the Apache Indians, military encampment, archeology, and ranching. Access to these sites, however, will be controlled.

Camping facilities and lodging accommodations are needed for visitor use of the park, but could also be placed on private lands outside of the park in accordance with National Park Service administrative policies for natural areas. However, these developments must be available within a reasonable time and must conform with Service standards. The Service should seek the assistance of county, State, and private enterprise toward this end.

Due to the speculative nature of developing a motel in the Guadalupe area, someone experienced in pioneering hotel ventures in similar out-of-the-way places should be contacted and encouraged to study the problem. If this study rules out the construction of suitable accommodations, visitors will be required to make a one-hour drive to Carlsbad or a two-hour drive to El Paso for lodgings.

Because campsites in the region are in shorter supply than motels, and because assurance of space is a particular problem, the Service should make certain that such facilities are provided near the eastern portion of the park. If private enterprise fails to develop campgrounds outside of the park within five years after approval of this master plan or two years after completion of the transportation system, then the Service will construct modern campgrounds within the park at one or more of the potential sites designated. A temporary campground will be

maintained at Pine Springs Canyon until a permanent facility is provided.

The long-established use of the area for research will be continued and actively encouraged. Proposed roads and trails will facilitate access to research sites. Pratt Lodge in McKittrick Canyon will be retained for administrative purposes.

RESOURCE MANAGEMENT

The park is small and many of its resources fragile. Extraordinary effort will be required to maintain the park's elements in something approaching their natural state. Protection of geological formations is mainly a matter of prohibiting development from infringing upon them. Protection of the plant and animal communities presents more complex problems. Their perpetuation means active management. The influences of man from within and without the park must be neutralized. Furthermore, it would be unrealistic to allow even natural processes to continue without some manipulation or control if their effects would destroy a major element. For instance, fire has been a natural factor in the evolution of the relict forest found in The Bowl, but a large and hot fire could completely destroy this feature. On the other hand, the relict forest will be lost if a program to exclude all fires within The Bowl is undertaken without providing some substitute management practices.

Developments to facilitate visitor use of the park have been located to minimize damage to its resources. Water for human needs is to be obtained from sources where its extraction will not be detrimental to the park. Human activity is to be carefully regulated in some areas of the park, and pack and riding stock is to be excluded from some sections to avoid destructive impact and pollution of certain precious environments.

The land classification plan will provide general guidance for the resource management action plan. Further, it is proposed that portions of McKittrick Canyon, The Bowl, and other selected sections be designated research natural areas and administered accordingly.

McKittrick Canyon with its communities containing some rare plants and animals is highly prized for its research and educational values. The

canyon is also scenic and of considerable visitor interest. The fragile aquatic and riparian communities cannot survive the impact of uncontrolled use of the canyon by visitors and domestic animals. Thus, use will be carefully controlled. Horses will be prohibited from the lower canyons. By locating trails in the higher areas of the McKittrick watershed, horse-caused damage will be minimized. Because North McKittrick Canyon lies largely within Lincoln National Forest and the water source is in the forest, the Park Service will enter into a cooperative agreement with the Forest Service for joint administration of the canyon as a research natural area, or in some other manner coordinate management to ensure perpetuation of the environment.

The relict forest of The Bowl is in a small area which can be managed to the degree necessary to ensure its perpetuation in a natural condition. Controlled burning is a suitable management tool for this forest and may be used. Visitor use will be concentrated on the edge of the forest, although light day use will be permitted on designated interior primitive trails. Horses and other domestic and feral animals will be completely excluded. The environment of The Bowl may not be as delicate as that of McKittrick Canyon and certain other moist habitats; it can stand heavier use, but such use must be monitored for detrimental effects and regulated accordingly. For visitors, the relict forest is to be viewed as a museum object; for scientists, it is a laboratory for management-approved research.

Management of other high-country primitive lands will be less intensive and use will be less tightly controlled; however, this zone is very small compared to primitive lands in other national parks and would suffer from overuse. Day use will predominate because of the limited area and lack of water. Horses will be restricted to one-day – no overnight – trips. With a mechanical conveyance available demand for saddle-horse use is expected to be light. Therefore, no horse concession is planned. To protect the resources, the trail system will be located to avoid fragile areas, and visitors will be discouraged from leaving the trails except for mountain climbing.

One of the most obvious threats to the area surrounding the Guadalupe escarpment is the off-road use of vehicles. Jeeps, motor scooters, and motorcycles scar the fragile and lightly vegetated land surface, causing disfigurement and erosion that may not be remedied for several

generations. Strict enforcement of regulations is necessary to avoid this threat. Recovery of the land from overgrazing by domestic stock will take many years. Research to guide management toward this end is needed. Here, again, fire may be a necessary management tool. Extensive and long-term research and experimentation will be needed, for there are few ready-made answers to resource management problems.

In order to partially restore the area to its previous prominence as a wildlife habitat, bighorn will be reintroduced and managed to reach their appropriate level within the habitat's carrying capacity. Harlequin quail will be reintroduced also, and other animals, if feasible.

The Williams Ranch house should be preserved. The Frijole Ranch house should be protected, pending a determination of its significance and interpretive value. The Butterfield Stage Station ruins should be stabilized now, and restored later if necessary for interpretive purposes. Sites of cavalry encampment, Indian habitation, and early pioneer settlement should be protected until research has been completed and a determination made of their significance.

GENERAL

This small park is particularly dependent upon cooperation from other agencies and individuals. County assistance is needed in providing access to Upper Dog Canyon. A cooperative program with the Forest Service is needed to preserve North McKittrick Canyon. State assistance is needed for providing access to the southeast entrance and for insuring the scenic integrity of lands adjacent to Highway 62-180. The private sector is expected to furnish camping and other overnight accommodations. Concurrent jurisdiction ceded by the State will result in increased law enforcement responsibilities.

The park, administered jointly with Carlsbad Caverns National Park by a superintendent to be headquartered in Carlsbad, will require only an operating staff onsite. The primary base of park operations will be on the east side, in the Pine Springs/Pine Canyon area near the base of the escarpment. This location will place operating personnel close to the area of concentrated visitor use; additionally, it has a relatively mild climate. Actual siting should ensure that the base does not impinge

upon the visitor-use area, either physically or visually, and that the development is not a scenic intrusion when seen from the State highway, McKittrick access road, Pine Top viewing area, or other visitor-use areas. Maintenance facilities and residences will be required. Offices will be included in the major interpretive facility at Pine Canyon.

Because of continuous protection needs and the icy road conditions during winter over Guadalupe Pass, it is proposed to have a district operations facility on the west side near the road, running from the State highway to Williams Ranch. Office, minor maintenance facilities, and residences will be required. An entrance station will be operated by personnel stationed here.

A ranger station will be required near the Upper Dog Canyon entrance to the park to provide for protection and management of the remote and primitive northern area of the park. A corral will be needed for park stock used in protection activities.

The park operations facilities should be located on sites large enough for full development needs of the future. Initial construction should be sufficient to take care of needs for the next 10 years.

BOUNDARY REVISION

The Secretary of the Interior is authorized by the establishing legislation to acquire by donation or exchange land within the boundaries of the park. The access road corridor to McKittrick Canyon has been donated to the National Park Service. However, the access road, if constructed along this corridor, would be over rough terrain not suitable for a road and therefore quite costly. A highway survey has found an alternate corridor more suitable. Legislation will be needed to place this alternate corridor within the park in order to accept a donation of land for the more preferable route. The present access road corridor would be removed from the park and the donated land returned in exchange for the newly donated land.

LAND CLASSIFICATION

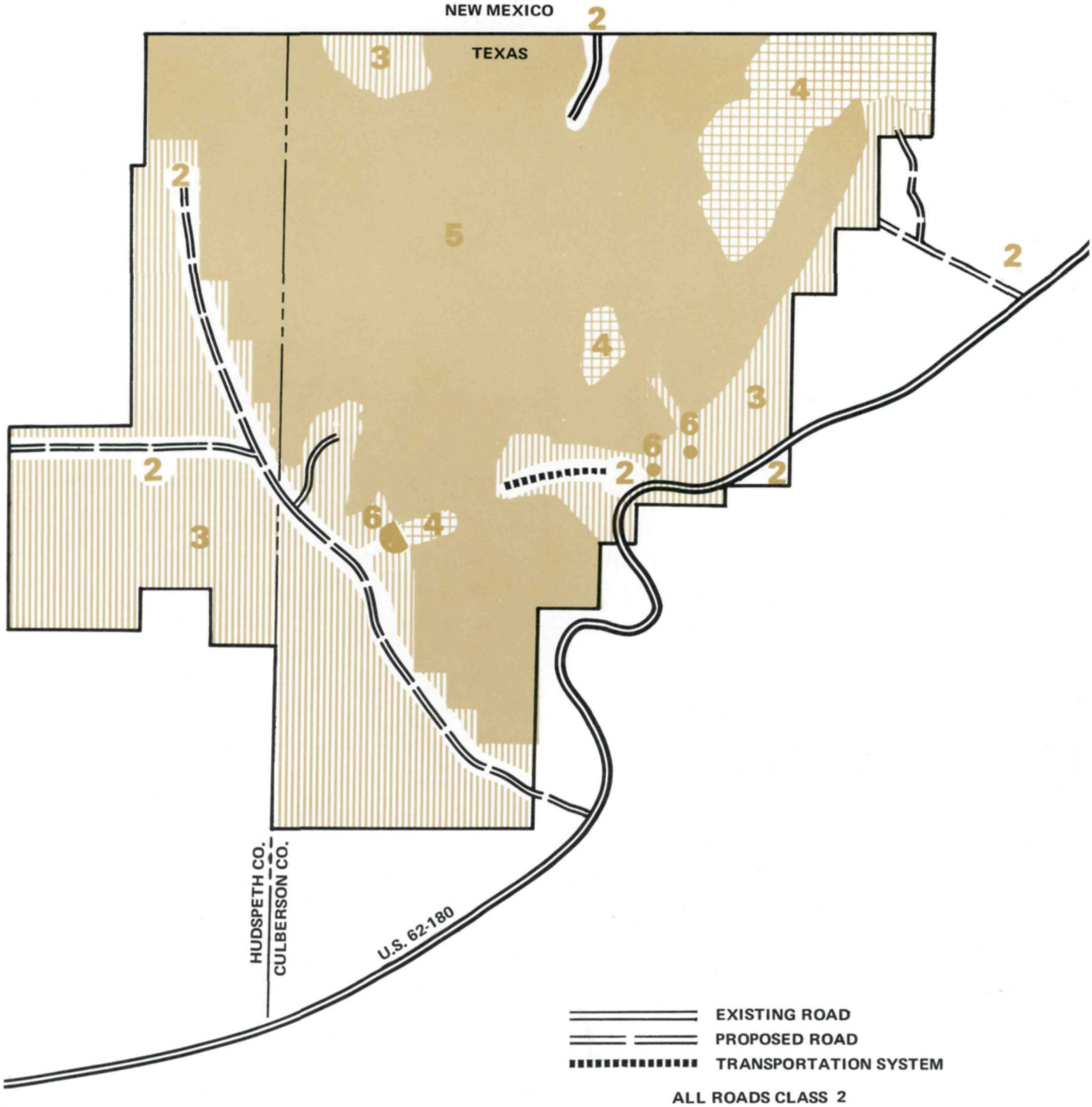
Class II lands, approximately 7 percent of the park, include roads, potential campground sites, operations facilities, and visitor-use facilities. Class II acreage will be reduced following developed-area studies.

Class III lands are those open landscapes, largely in view of roads and other developments, that buffer Class IV and V lands from the high-density use of Class II areas. Class III land is generally arid, supporting succulent, shrub, and grassland communities. Its maintenance in a natural condition is important to the park visitor's experience.

The relict forest of The Bowl, Bone Canyon, and the lower portions of North and South McKittrick Canyons have been designated as Class IV lands to emphasize their significance for research and educational purposes. Additional features will probably be selected for Class IV designation after further evaluation.

The Williams Ranch house, Frijole Ranch house, and Butterfield Stage Station are designated as Class VI. Additional sites will be considered for this classification following research.

Class V lands include the major portion of the Guadalupe high country where hiking, horseback riding, nature study, and mountain climbing are the appropriate activities. The proposed and traditionally active use of this primitive mountainous area is of particular importance in this region of the country where four-wheel-drive vehicles and other vehicles are penetrating and scarring much of the canyons, mountains, and desert flats.



EXISTING ROAD
PROPOSED ROAD
TRANSPORTATION SYSTEM

ALL ROADS CLASS 2

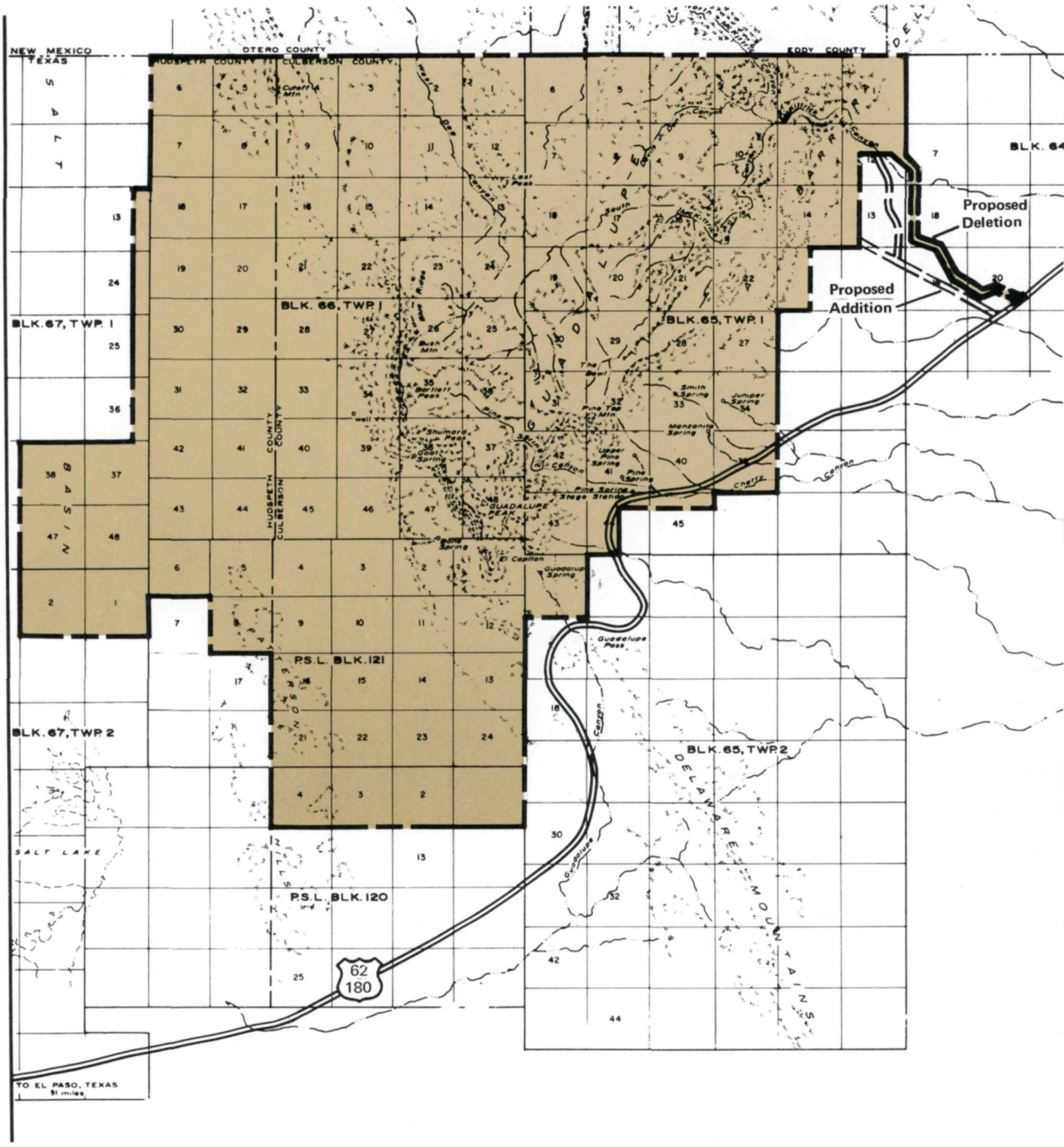
CLASS 1	HIGH DENSITY RECREATION AREA
CLASS 2	GENERAL OUTDOOR RECREATION AREA
CLASS 3	NATURAL ENVIRONMENT AREA
CLASS 4	OUTSTANDING NATURAL AREA
CLASS 5	PRIMITIVE AREA
CLASS 6	HISTORIC AND CULTURAL SITE

N

0 1 2 3 4
MILES

LAND CLASSIFICATION

166	20,013
FEB. 73	DSC

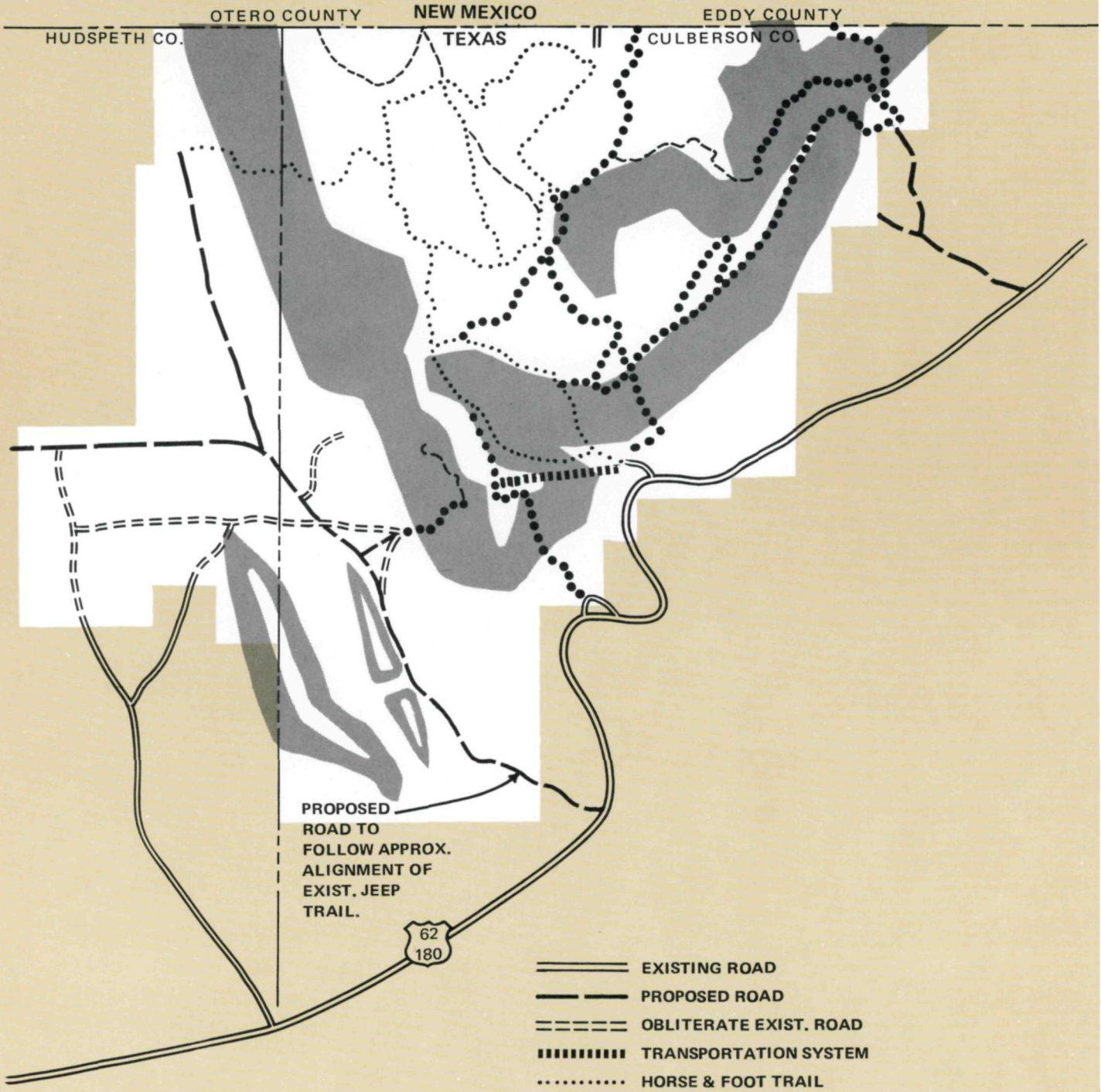


BOUNDARY

N

0 1 2 3 4
MILES

166	20,008
FEB. 73	DSC



CIRCULATION SYSTEM PLAN

0 1 2 3
MILES

166	20,009
FEB. 73	DSC

APPENDIXES

APPENDIX A: MANAGEMENT OBJECTIVES

The following statement by the superintendent of Guadalupe Mountains National Park reflects park management's needs and goals relative to this master plan.

To achieve the purpose for which Congress authorized the park, planning for the management and development of the park will be guided by the following objectives.

VISITOR USE

The features which justified the establishment of the park, its exceptional scientific values and outstanding scenery, should be made available to the public through a variety of educational and inspirational experiences. Accordingly, all visitors should be offered the following opportunities:

> To see the Permian reef where it is exposed in cross section at the mouth of McKittrick Canyon.
>
> To go to the top of the escarpment near The Bowl in order to see into McKittrick Canyon.
>
> To observe the relict forest.
>
> To reach a strategic high point such as Guadalupe Peak where a 360-degree view provides an extraordinary perspective of the park.

The mode or modes of access must be convenient and within the physical capabilities and financial means of the majority of visitors. Consideration should be given to the many potential wilderness opportunities elsewhere within the park for hiking, riding, and climbing.

Interpretation will tell the geologic story of the Permian reef and describe the unique ecosystems that are of special interest. These

several stories could logically be connected by revelation of the delicate ecological balances which are particularly significant in this park. Interpretation of the historical values such as the Indian use of the area, the story of the Butterfield Trail, and ranching operations, should be included and probably related to the harsh – by human standards – environment.

To further the purpose for which the park was authorized, the Service should seek appropriate means to facilitate the use of park resources by visiting scientists and students.

Visitor use of the park will be seriously impeded until motels, restaurants, and campgrounds become available within a convenient distance. Because it contains no existing facilities, this park offers an excellent opportunity for an enlightened approach to meeting essential visitor needs while maintaining a regard for park values.

RESOURCE MANAGEMENT

In those areas where competent scientific authority determines that the paramount value consists of rare or unique species or ecological assemblages, there shall be no development or conflicting use introduced, until it is conclusively demonstrated that such proposed development or use will have no significant adverse effect upon the locale's life-forms and their interrelationships. Such areas presently known to exist are found in North McKittrick Canyon, South McKittrick Canyon, and The Bowl.

Isolated pockets of moisture-loving plants, such as at Smith Spring and elsewhere around springs and seeps, must be perpetuated and protected from encroachment by park developments. The water needs of native plants and animals in these isolated communities must be satisfied before water is drawn for park development. In this regard, where pumping is proposed for a location some distance from important park resources, its indirect effect on the level of the water table and on springs should be carefully studied.

Congress sought to protect the natural values of South McKittrick Canyon by including it in the park. The same concern was expressed for North McKittrick Canyon; Congress, however, left the upper portion within Lincoln National Forest, with the recommendation that there be very close cooperation between the Forest Service and the National

Park Service in preserving, as nearly as possible, its natural condition for scientific study, and for the visitors' benefit. It is generally agreed that these canyons cannot stand heavy use. To assure that the intent of Congress is carried out and that pristine conditions prevail, water sources must be protected and non-native plants and animals controlled or removed. Development must be consistent with the wilderness atmosphere.

The relict forest in The Bowl is highly prized by ecologists and other students of the natural sciences who caution that heavy visitor use could be destructive. The forest is a fire subclimax community which would lose its present characteristics if fire were completely excluded. This small area should be managed to ensure its value as a biological benchmark for scientific study and as a living museum exhibit for the edification of the layman.

The open landscape, characteristic of much of the park, is particularly susceptible to visual intrusions and the vegetation of this arid land is easily scarred and slow to heal. These conditions require the greatest care in the placement of structures and the conservation of the soil and plant cover. In this connection, there is a consensus that the escarpments, which are visible for long distances, should be protected from development which would mar the prospect from the surrounding base areas. Likewise, the view from the escarpment top should be conserved; the outlying desert is the prominent feature of the landscape as seen from the park's high points.

To the extent that is ecologically feasible, the area should be restored to its prominence as a wildlife habitat. In this regard, the reestablishment of desert bighorn and harlequin quail, among other species, should be considered. Some species will be encouraged, and others, such as mule deer, may require population controls to achieve ecological balance. Toward the end of the habitat restoration process, human encroachments should be neutralized to the extent practicable.

Representations of the aquatic ecosystem and terrestrial ecosystem in McKittrick Canyon, with the relicts of the Pleistocene, are suitable for designation as research natural areas. Similarly, some part of the limber pine, Douglas-fir, and ponderosa pine forest in The Bowl might qualify for the same designation.

Archeological and historical resources, including cavalry encampment sites and the environs of the Williams Ranch, should be protected and

considered for appropriate stabilization or restoration. The Butterfield Stage Station site should be preserved and interpreted.

GENERAL

Guadalupe Mountains National Park will be managed for use and enjoyment on a year-round basis. Because the park is traversed by a U. S. highway, visitor interest may be extended over a long period of the day during vacation periods.

Guadalupe Mountains and Carlsbad Caverns National Parks will be administered jointly by the Carlsbad Caverns superintendent and his staff. Adequate headquarters must be located to serve both parks effectively and must be convenient for the work force. The site must not intrude on the park scene.

The U. S. Highway 62-180 right-of-way through the park is managed by the Texas Highway Department. It is important that this route be maintained as though it were a park road in order to provide an appropriate visual experience for travelers through this section of the park.

South of the park, U. S. 62-180 passes through an exceptionally scenic stretch with dramatic views of El Capitan. This section includes a State roadside rest and picnic area and a State interpretive marker. It is probably the most interesting part of the drive through the region. This impressive approach to the park should be protected from incompatible development.

The park's relationship to Carlsbad Caverns National Park, Lincoln National Forest, and Bureau of Land Management lands should be recognized and considered in the light of planned developments for these other areas.

Public Law 89-667
89th Congress, H. R. 698
October 15, 1966

An Act

80 STAT. 920

To provide for the establishment of the Guadalupe Mountains National Park in the State of Texas, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, in order to preserve in public ownership an area in the State of Texas possessing outstanding geological values together with scenic and other natural values of great significance, the Secretary of the Interior shall establish the Guadalupe Mountains National Park, consisting of the land and interests in land within the area shown on the drawing entitled "Proposed Guadalupe Mountains National Park, Texas", numbered SA-GM-7100C and dated February 1965, which is on file and available for public inspection in the offices of the National Park Service, Department of the Interior.

Guadalupe Mountains National Park, Texas.

Notwithstanding the foregoing, however, the Secretary shall omit from the park sections 7 and 17, P.S.L. Block 121, in Hudspeth County, and revise the boundaries of the park accordingly if the owner of said sections agrees, on behalf of himself, his heirs and assigns that there will not be erected thereon any structure which, in the judgment of the Secretary, adversely affects the public use and enjoyment of the park.

SEC. 2. (a) Within the boundaries of the Guadalupe Mountains National Park, the Secretary of the Interior may acquire land or interests therein by donation, purchase with donated or appropriated funds, exchange, or in such other manner as he deems to be in the public interest. Any property, or interest therein, owned by the State of Texas, or any political subdivision thereof, may be acquired only with the concurrence of such owner.

Land acquisition, etc.

(b) In order to facilitate the acquisition of privately owned lands in the park by exchange and avoid the payment of severance costs, the Secretary of the Interior may acquire approximately 4,667 acres of land or interests in land which lie adjacent to or in the vicinity of the park. Land so acquired outside the park boundary may be exchanged by the Secretary on an equal-value basis, subject to such terms, conditions, and reservations as he may deem necessary, for privately owned land located within the park. The Secretary may accept cash from or pay cash to the grantor in such exchange in order to equalize the values of the properties exchanged.

SEC. 3. (a) When title to all privately owned land within the boundary of the park, subject to such outstanding interests, rights, and easements as the Secretary determines are not objectionable, with the exception of approximately 4,574 acres which are planned to be acquired by exchange, is vested in the United States and after the State of Texas has donated or agreed to donate to the United States whatever rights and interests in minerals underlying the lands within the boundaries of the park it may have and other owners of such rights and interests have donated or agreed to donate the same to the United States, notice thereof and notice of the establishment of the Guadalupe Mountains National Park shall be published in the Federal Register. Thereafter, the Secretary may continue to acquire the remaining land and interests in land within the boundaries of the park. The Secretary is authorized, pending establishment of the park, to negotiate and acquire options for the purchase of lands and interests in land within the boundaries of the park. He is further authorized to execute contracts for the purchase of such lands and interests, but the liability of the United States under any such contract shall be contingent on the availability of appropriated or donated funds to fulfill the same.

Publication in Federal Register.

(b) In the event said lands or any part thereof cease to be used for national park purposes, the persons (including the State of Texas)

Preferential rights to reconveyance.

who donated to the United States rights and interests in minerals in the lands within the park shall be given notice, in accordance with regulations to be prescribed by the Secretary, of their preferential right to a reconveyance, without consideration, of the respective rights and interests in minerals which they donated to the United States. Such notice shall be in a form reasonably calculated to give actual notice to those entitled to such preferential right, and shall provide for a period of not less than one hundred and eighty days within which to exercise such preferential right. The preferential right to such reconveyance shall inure to the benefit of the successors, heirs, devisees, or assigns of such persons having such preferential right to a reconveyance, and such successors, heirs, devisees, or assigns shall be given the notice provided for in this subsection.

Lands withdrawn from leasing.

(c) Such rights and interests in minerals, including all minerals of whatever nature, in and underlying the lands within the boundaries of the park and which are acquired by the United States under the provisions of this Act are hereby withdrawn from leasing and are hereby excluded from the application of the present or future provisions of the Mineral Leasing Act for Acquired Lands (Aug. 7, 1947, c. 513, 61 Stat. 913) or other Act in lieu thereof having the same purpose, and the same are hereby also excluded from the provisions of all present and future laws affecting the sale of surplus property or of said mineral interests acquired pursuant to this Act by the United States or any department or agency thereof, except that, if such person having such preferential right to a reconveyance fails or refuses to exercise such preferential right to a reconveyance as provided in subparagraph (b) next above, then this subsection (c) shall not be applicable to the rights and interests in such minerals in the identical lands of such person so failing or refusing to exercise such preferential right to a reconveyance from and after the one hundred and eighty-day period referred to in subparagraph (b) next above.

30 USC 351 note.

Future mineral development.

(d) If at any time in the future an Act of Congress provides that the national welfare or an emergency requires the development and production of the minerals underlying the lands within the boundaries of the national park, or any portion thereof, and such Act of Congress, notwithstanding the provisions of subsection (c) of this section or any other Act, authorizes the Secretary to lease said land for the purpose of drilling, mining, developing, and producing said minerals, the Secretary shall give the persons (including the State of Texas) who donated such minerals to the United States notice of their preferential right to lease, without consideration, all or any part of the respective rights and interests in minerals which they donated to the United States, subject to such terms and conditions as the Secretary may prescribe. Such preferential right shall inure to the benefit of the successors or assigns, and of the heirs or devisees of such persons having such preferential right in the premises. The persons entitled to a preferential right under this subsection shall be given the same notice thereof as persons entitled to preferential rights under subsection (b) of this section. If such person having such preferential right fails or refuses to exercise such right within the time specified in the above notice, the Secretary may thereafter lease the minerals involved to any other person under such terms and conditions as he may prescribe.

Oil or gas communitization agreement.

(e) If at any time oil, gas, or other minerals should be discovered and produced in commercial quantities from lands outside of the boundaries of the park, thereby causing drainage of oil, gas, or other minerals from lands within the boundaries of the park, and if the Secretary participates in a communitization agreement or takes other action to protect the rights of the United States, the proceeds, if any, derived from such agreement or action shall inure to the benefit of the

donors of the oil, gas, or other minerals, or their successors, heirs, devisees, or assigns.

SEC. 4. The Guadalupe Mountains National Park shall be administered by the Secretary of the Interior in accordance with the provisions of the Act of August 25, 1916 (39 Stat. 535; 16 U.S.C. 1-4), as amended and supplemented. Administration.

SEC. 5. Any funds available for the purpose of administering the five thousand six hundred and thirty-two acres of lands previously donated to the United States in Culberson County, Texas, shall upon establishment of the Guadalupe Mountains National Park pursuant to this Act be available to the Secretary for purposes of such park. Availability of certain funds.

SEC. 6. There are hereby authorized to be appropriated such sums, but not more than $1,800,000 in all, as may be necessary for the acquisition of lands and interest in lands, and not more than $10,362,000, as may be necessary for the development of the Guadalupe Mountains National Park. Appropriation.

Approved October 15, 1966.

LEGISLATIVE HISTORY:

HOUSE REPORT No. 1566 (Comm. on Interior & Insular Affairs).
SENATE REPORT No. 1682 (Comm. on Interior & Insular Affairs).
CONGRESSIONAL RECORD, Vol. 112 (1966):
June 20: Considered and passed House.
Oct. 7: Considered and passed Senate, amended.
Oct. 10: House concurred in Senate amendments.

APPENDIX C: BIBLIOGRAPHY

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Publication services were provided by the graphics and editorial staffs of the Denver Service Center, May 1973.

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