CHAPTER 3

MORGAN TERRITORY PLANNING ANALYSIS AND PROPOSALS - A JOINT STUDY

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Introduction

The following pages comprise a land use development proposal for the Morgan Territory Regional Preserve. The intent of this study is to provide background information and specific recommendations on selected planning components. These components include: an overview of the preserve's physical characteristics; an examination of potential recreation demand and use patterns; access and transportation factors; description of potential services and costs; environmental impacts of parkland development and siting of recreational and interpretative facilities. The nature of the planning proposals suggests an implementation period of 1978-1990.

"What is to be the purpose and role of Morgan Territory?" This is an essential question that must be addressed in the planning process. Within the planning scope there are two equally important parameters. First, a park should not exist as an environmental museum. People must be able to interact with nature. But Morgan Territory is a special park and the protection of its valuable resource base must be balanced with the human use. "The job of recreational engineering," Aldo Leopold said, "is not one of building roads into lovely country but of building receptivity into the yet-unlovely mind" (p. 66).⁸ The role and purpose of Morgan Territory will be to help transform and shape this "mind" into an environmentally aware and respectful human consciousness.

Overview

The acquisition of Morgan Territory in 1975 by the East Bay Regional Park District marked a victory that resulted from the work of many people, but of one man in particular. Thanks to the perseverance of Dr. M. Lindner of Danville, who spent nearly three years convincing the District board of directors and the public to acquire Morgan Territory, the land is now owned and protected by the public.

On September 15, 1975, after long months of dispute over mining rights to the property, 989 acres of land were purchased at a cost of \$400,000. A state grant was approved 10 months later to purchase 585 additional acres of adjoining land for \$225,000. On November 30, 1976, the final acquisition of land was completed, and the park now stands at 1589 acres.

Dr. Lindner's grounds for promoting Morgan Territory as a regional preserve are clear upon visiting the area. The property is located on Morgan Territory Road, 15.7 kilometers north of I-580 at Livermore and 23.2 kilometers southeast of Clayton (See Map, Frontespiece). Morgan Territory has a unique feature found nowhere else in the Bay Area, making it a place of special interest. A glance at a topographic

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map of the area shows that a major portion of the property is a plateau extending approximately five kilometers north to south, and 3/4 kilometer wide. This sweeping plateau offers a high quality wilderness experience for the less energetic hiker, as well as the experienced naturalist. 1

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The property also includes a 3/4 kilometer long cliff area, majestically guarding a system of bubbling brooks and creeks in the deep valley below. A visitor can experience the rich ecosystems of dense woodlands, open grasslands, picturesque meadows, and rocky cliffs while enjoying exhilarating views of the surrounding countryside.

Morgan Territory has over 100 species of vegetation, including five different types of oak, over 40 different species of wildflowers and a wide variety of common and rare ferns.²² It is also rich in animal life. At any one time you may see herds of deer, a variety of snakes, rodents, raccoons, fox, bobcats, coyotes, birds, and even an occasional mountain lion. With the proper planning, Morgan Territory could prove to be a memorable experience for all park users.

Potential Demand and Use Patterns

The development proposals which will be discussed in a later section are based on a five-pronged analysis of recreation demand for Morgan Territory over the next 20 years. First, the socio-economic and cultural characteristics of potential park users were studied to determine the types of recreation activity demanded. This demand was compared with the Morgan Territory resource opportunities. Second, the residential and geographical characteristics were used to examine the access and transportation limitations of the area. Third, a comparison with an existing park of similar resource base (Sunol Regional Wilderness) was used to project the type of potential user. Fourth, a brief examination was made of the area's future urban and commercial expansion to consider the impacts of such development on recreational demand. Finally, the area's potential for recreation facility expansion was used to evaluate the probable extent of recreational demand over the next decade. The analysis concludes with some projections of peak-use periods. On the basis of these projections we make some general recommendations regarding access road improvements to deal with the user demand.

Socio-economic variables

Potential park users come from five geographic locations: the Concord-Walnut Creek-Alamo area, the Port Chicago-Pittsburg-Antioch area, the Brentwood-Byron area, the Dublin-Pleasanton-Livermore region, and the congested urban area of the East Bay.

The analysis herein rests on some broad generalizations regarding the ethnic composition of each of the five areas and the resultant implications for park use. The Concord-Walnut Creek-Alamo population is predominantly white middle to upper class, with a significant number of Spanish-speaking and Black households in Concord. The Pittsburg region can be characterized as a low to moderate income split ethnic region with non-white households outnumbering Caucasian.⁹ The Brentwood area has a moderate

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income base and has the second largest minority resident population among the five study areas. The Caucasian element is largest in the Livermore area, but with a significant portion (8%) of the population being Spanish-speaking.⁷ Metropolitan East Bay residents live within the final geographic grouping. The median family income is \$11,350, and the ethnic composition approaches parity with the white population.³⁶

Desire for specific recreational activity has been shown to be a function of socio-economic variables.^{17, 4} The 1976 Tyler Survey indicated that the most popular activities for all ethnic groups included picnicking, sightseeing, loafing on a lawn, hiking, and/or walking for pleasure.³⁴ Surprisingly, "playing outdoor games/sports is rated fifth in order of desired recreation" for all ethnic groups.¹⁰

Figure 1 summarizes the findings of a nation-wide Bureau of Recreation study and a California Department of Recreation Study of Urban Impacted Areas.¹⁰ The non-white classification is comprised of Black, Spanish-speaking, and people of Asian descent. The numbers were derived from recreation participation statistics collected at parks throughout the study areas.

The significance of this information becomes apparent upon an examination of the resource potential at Morgan Territory. All of the primary recreation activities desired can be obtained in the richness of the Morgan Territory resource base. Morgan Territory can provide the picnic and BBQ facilities for group use, as well as the individual recreation of hiking, bird-watching, study of flora and fauna, and sightseeing.

RECREATION WHIT	re*	NON- [©] White		IONAL ^O
Picnicking	60%	40%		65%
Driving for Pleasure	57%	40%		57%
Sightseeing	50%	33%		49%
Games and Sports	33%	33%		38%
Walking for Pleasure	33%	20%		48%
Bicycling	19%	14%		16%
Nature Walk	Тwo	to One		14%
Bird Watch	Thre	ee to One		5%
Photo Wildlife	Prec	dominantly Whi	te	2%
 ✓ % of White Pop. ● % of Total U.S. Po ○ Ratio White/Non-Wh 	р.	(NOTE: All	# adju	sted

Figure 1. Recreation Participation Rate Source: 10.

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One of the barriers faced by potential park users at Morgan Territory is the problem of access. Currently, all users are forced to use the private automobile. The park is nearly 23.2 km. southeast of Clayton and 15.7 km. north of Livermore. No public transportation is available to Morgan Territory. 1

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The Tyler report suggested that park users would travel approximately 45 minutes to reach a park.³⁴ All of the surrounding five geographic areas except the metropolitan East Bay are within this travel range. The primary routes of auto travel from the northern sections are Clayton Road to Marsh Creek Road, and Vasco Road to Marsh Creek Road. Western and southern access is along I-680 and I-580 to North Livermore Avenue. Ultimately, all vehicles must pass along Morgan Territory Road.

The "environmental capacity" of the roadway is a term used by transportation planners to evaluate the <u>use</u> safety of a road. It takes into account the alignment, ability to see when passing, width of the road and shoulder, and the character of the traffic. Approximately 20.8 km. of Morgan Territory Road has poor alignment, minimal shoulder and turn-out space. According to Paul Kilkenny, Assistant Public Works Director of Contra Costa County, the "road is inadequate for park land development and access.¹⁹ Its safety capacity rating is approximately 300 cars/day or one car every 12 minutes.²⁰

Morgan Territory Road will require substantial structural change to meet the safety requirements of both present and future use. This would entail a major construction cost. Because the soil type has a high erosion hazard and because of structural requirements regarding amount of fill, drainage and new bridges, a conservative estimate suggests that \$250,000-\$300,000 per mile would be required to meet the specifications of a proper two-lane highway.¹⁹ A comparison with data extrapolated from a 1960 Contra Costa Highway Deficiency report suggests that costs may reach \$420,000/mile.

The big question regarding the improvement of Morgan Territory Road is who is going to pay this multi-million dollar cost. The position of the EBRPD is that road improvement is the responsibility of the County.¹⁸ However, the current status of the Contra Costa capital construction funding precludes any major improvement on the road. Funds for capital improvements come out of the gasoline tax. Federal air quality standards have mandated a 20% reduction in vehicle miles traveled (VMT) by 1982. The Contra Costa Planning Department has estimated that by 1982 there will be no funds available for any project other than routine maintenance (Figure 2).

In addition to the economic and physical problems of access on the Morgan Territory Road, there is the spectre of discrimination. Any park that relies on the private auto for access is discriminatory against the 'captive rider group' comprised of old people, young people, and lower income families without cars.²⁴ There are a number of alternatives to the automobile to provide access for this group, as well as the rest of the populace. These include group field trips, shuttle buses, and a network of regular buses.

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Access

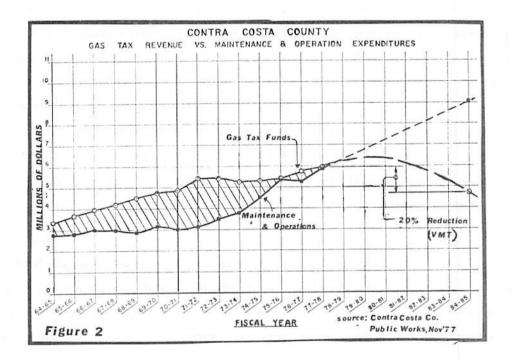
The Park District should work with the school districts serving Orinda to Livermore to arrange field trips and provide environmental education. It is possible that the school buses could be used during the summer and on weekends to provide bus transportation for peer groups of all ages to the park. The environmental education aspect should receive priority attention.

The <u>Regional Transportation Plan 1970-1999</u> developed by the Metropolitan Transportation Commission projects a trunk-rail transit system linking Pleasanton and Livermore.²⁵ A shuttle system similar to that employed by the UCB "Humphrey Go-Bart" could be used to negotiate the narrow Morgan Territory Road.

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A comprehensive coordinated strategy needs to be developed among the District, state, county, and local park districts to provide a bus service to the Mt. Diablo county and state parks, Morgan Territory, Las Trampas, Contra Loma and others. To ensure the successful operation of such a transportation system, there are two mechanisms that could be used. First, the use of a flat user fee per month that would allow access to all park areas and unlimited use of the system. Second, a media campaign could be undertaken that describes the recreation opportunities of the parks and the route of the system. The increased air quality enforcement (i.e., transportation controls) should serve to provide extra incentive for use of the system. Included in this might be a HUD-supported BART tie-in to allow residents of the metropolitan areas access to the Morgan Territory area.



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Comparison with Sunol Regional Wilderness

There are three District parks situated near Morgan Territory that offer similar recreational opportunities: Black Diamond, Las Trampas and Sunol Regional Wilderness. An examination of the socio-economic profiles of current users at these parks provides the basis for the projections of future use at Morgan Territory.

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Sunol Regional Wilderness was chosen as the representative park, for comparative purposes, because of its relative proximity to an urban area, its resource base is very similar to Morgan Territory's, and especially because of Sunol's access restraints.

Sunol has approximately 140,000 visitors a year. Park use is highest in the Fall and Spring. March and April of last year accounted for more than 49,000 users. It has an extensive school visitation program as well as a summer day camp.

Sunol offers two very different recreational experiences. For families and large groups it has 100 picnic sites. On the other hand, it provides miles of hiking and an opportunity to escape the confines of the urban environment.

Morgan Territory also offers this dichotomy of potential park experience. Although the land area is on a smaller scale, Morgan Territory can provide a rich and diversified experience.

At Sunol the hiker-naturalist crowd tends to be white upper middle class, while many of the picnickers are Chicano or other minorities. The predominant user is white.²³ The significance of this Sunol comparison is that in the absence of a coordinated transportation and access system and a public awareness program, the predominant user at Morgan Territory will be white middle to upper class.

This raises two serious implications. The Tyler Golden Gate Recreational Travel Studies suggested that the type of non-urban park experience offered at Morgan Territory is desired by all ethnic groups. The District would be, in effect, remiss in failing to serve the non-white users. A second problem is that of specific park over-use. The Tyler Survey indicated a skewed present-use pattern. 87% of the people interviewed went to a Regional District park*(e.g., Tilden), whereas only 4% visited a Regional District Preserve.³⁴ Not only will the District fail in the provision of equal recreation, but it will exacerbate the problem of over-use at existent parks.

Urban Expansion Impact

The fourth prong of this analysis examines the impact of urban growth on Morgan Territory. Contra Costa County is experiencing rapid growth and suburbanization. Leapfrog residential development, as in Clayton, and the accompanying commercial development have two potential impacts on Morgan Territory: housing encroachment on the park and induced demand for recreation activity by the new residents.

*"Park" and "Preserve" refer to specific recreation facility categories defined by the District.

Housing encroachment impact on the park will be minimal due to environmental constraints. There is neither public water nor sewer facilities in the area and the Contra Costa Water Districts 1 and 2, in conjunction with the San Ramon Planning Commission, are currently in the process of enacting a freeze on new septic tank permits. This will deter new development within the area. It is imperative, however, that the private property to the south, especially the Lynch land (Figure 3) be closely monitored. The District has no legal authority to dictate the use of the Lynch land, but it should seek to maintain good relations and communication with Mr. Lynch to avoid any development that would be detrimental to the environmental quality of the park area.

Recreation Facility Expansion

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Increased recreation demand will be offset by the expansion of recreational land holdings under the jurisdiction of the Contra Costa Comprehensive Planning Unit. The Unit Chief, James W. Cutler, foresees a de facto land dam of openspace expansion and increased urban area easements, that would preclude further urban expansion in the Mt. Diablo area.¹¹ This land dam of state, county, federal, local and private land holdings will serve as a green belt and shut off future land acquisition for urban uses. It is estimated that within 5-10 years there will be urban access to approximately 15 new park areas within the Concord-Clayton area.

Recreation Demand Analysis Conclusions

Morgan Territory Preserve will experience its peak visitor periods in the late winter, spring and early fall. Summer use will be minimal due to high temperatures, reduced availability of water and proliferation of snakes. Assuming (a) the development of a Sunol-type school visitation program, (b)'adequate transportation and access solutions, (c) media promotion of park location and facilities, and (d) the mitigating effects of the Mt. Diablo greenbelt, we would project a March-April-May peak use of 5600-6000 people/month through 1990. This would entail a Saturday and Sunday crowd of 600-700 and approximately 700 students/month.

On the basis of the preceding use projections we recommend that the District consider the following actions to alleviate the access problems:

- 1. Initiate a feasibility study for a coordinated transportation system.
- Concentrate any road improvement planning on the section of Morgan Territory Road between Manning and the park. Our analysis indicates that this will be the primary route of access. Funding for such a project could come from a General Park Bond.

Although the present use patterns are only at a maximum of 70-100 people on a sunny weekend day, and a normal usage of 20-30, the District should initiate long-term transportation planning to prevent future park access problems. Morgan Territory could experience the congestion associated with present-day use of

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Pt. Reyes in the 1990's, unless preventive measures are taken now.

Existing Structures

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After over two centuries of use, Morgan Territory has been left with several structures that can be utilized for the future development of the park. These structures include a small residence, a barn, a 40' x 50' concrete slab foundation, a small well, a septic tank with leach field, one chemical toilet, a system of fire trails, and two wooden corrals.

The residence is a small three-bedroom house, the exterior of which is well-weathered and in need of attention. The house is constructed on a foundation of 12" x 12" wooden dry-rot infested beams, the deterioration of which is responsible for warped ceilings and walls. The barn is large and in relatively good condition. Much of the siding has been destroyed, but the frame is still in excellent shape. Although it shows several years of neglect, the cost of restoration would be low. The reason for the existence of the slab of concrete is unknown. The concrete is still in excellent condition and could easily support a new structure.

There is a small well, rather old (age unknown), reaching to a depth of 15 meters. The water is of fairly high quality. The absence of fecal coliform indicates the water is safe bacteriologically. A high color content (120 units) and a low pH (6.7) would indicate a leaching of organic matter either from drainage into the well, or accumulation (growth) of organic material into the well. If this well were to serve the public (25 or more persons, 60 days per year), it would have to be sealed to prevent access to small animals and should be chlorinated periodically.³²

The septic tank on the property is a one thousand gallon tank that meets all county and state standards. A one thousand gallon tank will handle approximately a a three-bedroom residence, but would prove inadequate for public use. At the present time there is one chemical toilet on the property. One toilet is not sufficient for public use; more would have to be added.

The existing fire trail system within the park boundaries includes approximately 16 km. of trails. Although the trails are not in excellent shape at the present time, it would not take much to improve them.¹ In two locations on the property there are old wooden corrals, once used by resident ranchers. They are not in usuable shape, but add to the aesthetics of the park.

Utilities and Existing Services

Water

At the present time Morgan Territory is not serviced by any public utilities other than electricity and telephones. The Contra Costa County Water District supplies water only up to 800 feet above mean sea level. To get water piped up to Morgan Territory would require a massive system of pumps and holding tanks at an estimated cost of 4-5 million dollars. The cost alone makes the project infeasible at this

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time.³³ Presently, the only water on the property is the aforementioned well, sevaral small stock ponds, and a number of springs.

Sanitary Facilities

The nearest sewer main is approximately 2.6 km. to the west. Here again cost prevents the construction of a new system. There are two possibilities for the handling of solid wastes in the park:

- The park staff can be responsible for the transportation of the garbage out of the park and to a nearby dump - a system successfully used at Sunol Regional Wilderness.²³
- 2. The county waste disposal service could be responsible.

Fire Protection

Fire protection for the park is the responsibility of the county. The Redwood Fire Department (a subsidiary of the EBRPD) has only secondary jurisdiction and provides assistance only. It is with this understanding that the EBRPD is not charged for the service.¹

Grazing

As can be noted by the history of its prior use, Morgan Territory is excellent grazing land, and could be utilized as such by the District. This service provided to nearby ranchers, could prove beneficial to the environment as well as provide a good source of revenue for the EBRPD.

Proposals for Park Development

For a park experience to be beneficial to the user, steps must be taken to provide for the user's wants and desires. These steps, the foundation for an effective interpretive program, would include information on park conservation as well as providing users with the chance to broaden their environmental education, an area so often neglected in today's cement societies.

Trails

One way of accomplishing the above is to provide the visitor to the park with a system of hiking trails; trails for recreation, trails for learning purposes, and trails as a means between two points. Each trail should be laid out with a particular purpose in mind. It may be short in length to provide a high quality experience to those who don't want to or can't walk far; or, it may be a longer trail and lead to a particular point of interest.²⁹ Special attention should be paid to those trails designed to provide an educational experience. These trails should be constructed in areas that will provide the ultimate experience from an environmental education point of view. They must therefore be designed in conjunction with a naturalist who knows the area well. Care should be taken to construct all trails so as to disrupt the environment as little as possible. All trails should be constructed using culverts

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and/or waterbars to avoid unnecessary erosion. They should be constructed keeping public safety in mind, and be adequately marked and posted with signs to facilitate better management, increased awareness of hazards, and provide for a more beneficial experience. 1

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Except in certain cases, hiking trails are not compatible with horse trails. Due to a horse's excess weight and size, extensive damage can be incurred where both overlap.²⁹ Therefore, all horse trails should be separate from hiking trails, and special attention from an environmental viewpoint should be given to the management of these trails.

As already mentioned, the fire trail system is adequate, but should be improved to profide the best protection. First, all trails should be interconnecting so as to provide a system of loops.¹ Second, all trails must be constructed with the protection of the environment in mind. This means all trails must be constructed with culverts and/or waterbars to prevent radical erosion. Third, all fire trails should be kept in good enough shape to provide access to the park to those individuals disabled and/or confined to wheelchairs.

Interpretive Facilities

An interpretive center is imperative to a good interpretive program. The center should be at the entrance to the park and be able to offer information as to the various recreation facilities in the park. It should be a source of trail guides, self-guided tours, information on plant and animal species on the property, rules and regulations, conservation information, and a general first-aid station. The center should also be able to house a resident staff to protect the park from such activities as hunting, off-road vehicles, and vandalism. For this purpose the existent house is not sufficient. Therefore, we recommend that it be removed and a new residence be constructed on the existing concrete slab.

The barn that exists on Morgan Territory should by no means be torn down. It should be restored, both as a community project and by the park staff in their spare time. Once restored, the barn would provide an excellent classroom situation for environmental educational field trips from nearby schools.

Second to the park itself, the park staff is most important in providing a first-rate experience to park users. The number of staff members on a park staff is directly dependent upon overall use patterns. To provide minimal service Morgan Territory should employ one naturalist, full-time for a period of 8 months starting in February, and part-time thereafter on an 'on call' basis; one park worker responsible for maintainence and the enforcing of rules and regulations; and one full-time resident supervisor responsible for the management and protection of the park day and night.

The two corrals that exist on the property should remain there as historic landmarks and special points of interest.

Recreation Facilities

Morgan Territory will provide two basic types of recreational activity: hiking-naturalist pursuits, and family-oriented picnicking and playing. Picnic and BBQ sites will be provided within 1/8 mile of the staging/parking for easy access. Morgan Territory can provide family picnicking opportunities for 50-60 people in six sites. The group site (Figure 3) can accomodate 25-30 people and offers children and adults alike numerous places to explore, play frisbee or lie out in the sun. The rest of the sites are designed for use by single families and/or individuals. Park users will have the option of picnicking on any of the several meadows within the park.

Morgan Territory is a fragile and delicate ecosystem and the prevention of incompatible recreation activities should be encouraged. These uses include but are not limited to: horseback riding, development of concessions, and organized games and sports.

The elimination of old fencelines should be undertaken to prevent injury to park users. Likewise, the old ranch dump in the southern end of the property should be buried.

The hiker, photographer, naturalist, picnicker and the person who simply desires to get away from the city can all find recreation release at Morgan Territory.

Utilities and Services

With temperatures reaching into the hundreds on many summer days, public access to water is a necessity. At the present time the well will adequately provide water service to the supervisor's residence as well as a system of drinking fountains, strategically placed throughout the staging area. Drinking fountains should be constructed so as to provide service to children and disabled persons as well as adults. There is no need for expensive monumental projects; simple functional fountains are all that is needed.

If the park use increases as predicted, à new well will be required. It should reach to a depth of at least 45 meters to assure year-round service. With a new pump system (65 gal./min.), it would be possible to pump water up into a 10,000 gallon holding tank north of the staging area, high on a hill. From this point a system of gravity-fed pipes could be installed to better serve the staging area, as well as provide water access to the proposed picnic areas. An added benefit of such a system would be more efficient fire protection. At the present time, water for fire use is either brought in by truck or pumped out of stock ponds, if they exist at the time of the fire.

It is important to dispense water at many points throughout the park, specifically so that the user does not seek out brooks and other possible sources of drinking water not guarded against pollution.³⁸ Keeping this in mind, it has been suggested that a system of springs could be tapped on the property, providing safe drinking water at a reasonable cost throughout the park.²³

Second to water access is access to proper toilet facilities. Paul V. Brown, a noted park planner, writes, ". . . If we were to provide only safe water and proper toilets, we would accomplish the essentials of development of parks."³⁸ Since Morgan Territory cannot be tied into county sewers, a local system must be provided. A number of chemical toilets is the most feasible solution. Chemical toilets, assuming good upkeep, have no harmful environmental implications and at the same time provide users with sanitary conditions. On comparing the cost of purchasing the units with the cost of renting the units, it makes more

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sense to purchase. In planning the location of these toilets, three points must be kept in mind: first, easy access to the user, including the disabled user; second, easy access to the pumping trucks; and third, they should be placed where they do the least aesthetic damage. This done, chemical toilets will provide adequate facilities. As for the supervisor's residence, it can be serviced by the existent septic tank and leach field system. 1

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Solid wastes can be most economically handled by park workers themselves. Due to the special nature of the park use, a regular scheduled pick-up by the county would not prove adequate. Garbage cans should be placed generously throughout the park to prevent as much littering as possible. When needed, cans can be dumped into a park pick-up truck and taken to the nearby dump.

Staging Area

Figure #4 shows our interpretation of how the staging area should look. In addition to those structures already mentioned, a parking lot and access road must be considered. The parking lot should be large enough to provide enough space for the proposed number of users. The parking lot and access road should also be paved and constructed so as to provide easy access to horse trailers and school buses. Special attention should be paid to the prevention of off-road vehicle access into the park, as well as provide easy access to fire trucks and emergency vehicles. Culverts should be constructed around the parking lot and access road to prevent erosion.

In addition to these proposals the park management should reserve the right to:

- close the park, or sections thereof at their own discretion to protect the user as well as the environment;
- 2. require guides to specific areas of danger, such as the escarpment;
- 3. prohibit the consumption of alcohol in the park;
- 4. require reservations for group trips;
- 5. prohibit dogs on park property;
- 6. use any reasonable means of enforcing the rules and regulations of the park.

Environmental Considerations

Grazing

Grazing on park land is a very controversial subject among many park officials. One District official sees grazing as beneficial to the environment in terms of controlling brush encroachment and reducing fire hazards through the reduction of fuel, while at the same time providing a revenue source for the District. Other District officials take the opposite point of view, condemning grazing as a capitalistic venture whose side effects could lead to extensive damage of the park. Upon a visit to Sunol Regional Wilderness, one can see areas that have been grazed bare, resulting in an erosion problem. Other areas show great quantities of thistle weeds becoming the dominant plant species.

Conclusion

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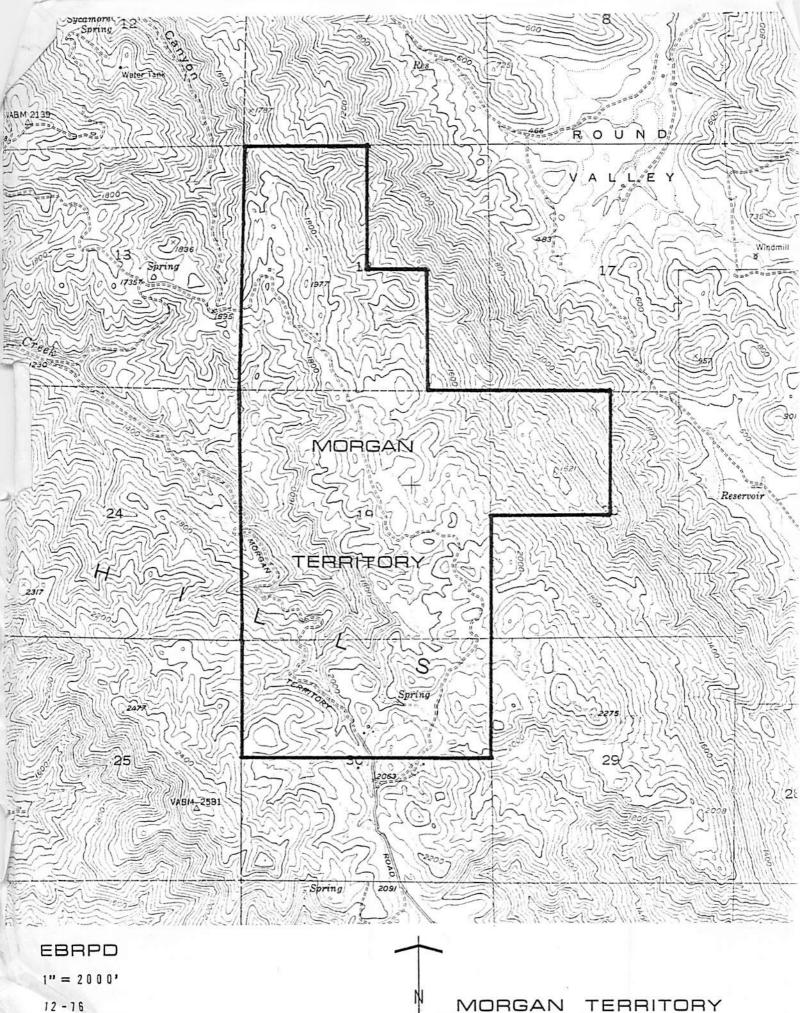
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What we have tried to do here is develop a land use plan for Morgan Territory Preserve. To do this we have tried to bring forth specific proposals for a comprehensive visitor management program that will protect both the quality of the park environment and the quality of the visotir's experience there.



(land bank - no facilities)

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