V. INVENTORY AND ANALYSIS

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A. EXISTING URBANIZATION AND FUTURE GROWTH

1. Pertinent Urban Characteristics

The majority of urban forms in the Santa Teresa Park area are present along the northern perimeter of Santa Teresa Hills. A panoramic view north and west from the Park reveals seemingly contiguous urbanization across the Santa Clara Valley floor all the way to the foothills of the Mount Hamilton Range (almost three miles to the north). The Mount Hamilton foothills serve as the same important backdrop to urbanization as Santa Teresa Park and the Santa Teresa Hills will for both the current residents of the South Santa Clara and future residents of the Almaden Valley.

Further urbanization of the Santa Clara Valley north of the Park will seem much less noticeable than the urbanization planned for the lower Almaden Valley southeast of Santa Teresa Park.

The ±2000 dwelling units ultimately planned for the Almaden Valley will begin to replace the semirural character currently typified there by grazing of pasture lands, ranchettes with equestrian stables, and small farms and orchards. The proximity of this planned residential community adjacent to the Park reinforces the responsibility of local planners to ensure sensitive planning and acquisition policies for open space. The growth plan is part of the annexation criteria included in the South Almaden Valley Urban Reserve Report and allows the City of San Jose to phase growth based on available facilities and services to support future development. The core of the urban reserve is located southeast of the line created by Mockingbird Hill Road/McKean Road/Harry Road.

Evidence of encroaching urbanization on the valuable open space provided by the Santa Teresa Hills is already present in the Almaden Valley on the southwest facing slopes west of Santa Teresa Park. Although the lot size requirements provide for development of lots in fairly large parcels, the developments are sited conspicuously, sometimes on the ridgetop with large two or three story houses.

The following map and chart indicate current County and City of San Jose zoning adjacent to and surrounding the Park.

ZONING CATEGORIES

Citv of San Jose Zoning

A	Field & Truck Crops Plant Propagation Dairy & Livestock
R-1:B-3	One Family Dwellings Public Elementary & High School (1 acre lot size)
R-1:B-6	One Family Dwellings Public Elementary & High School (6,000 sq ft lot size)
R-1:B-8	One Family Dwellings Public Elementary & High School (8,000 sq ft lot size)
Industrial	General Manufacturing & Office
PD	Planned Development*

County of Santa Clara Zoning

P	Regional Parks:
H	Hillsides: agricultural, wildlife refuge parks, low intensity residential development
RR	Rural Residential Areas
OR	Open Space Reserve: agricultural, open space

* The PD category can apply to other zones as an overlay, since it represents an approach to implementing a land use zone. Thus a A(PD), which applies to the IBM Almaden parcel in San Jose, means a planned development approach would be used to achieve what is predominantly an agricultural or open space use.

FIG. 4

B. RESOURCE VALUES

1. View and Site Character

The County of Santa Clara's goal in preserving open space is not limited to physical recreation opportunities, but also seeks to fulfill the important task of providing visual relief from the adjacent urbanized valley floors. Santa Teresa Park in particular will serve an important role in providing County wide visual linkage between the Park and the open space surrounding the Almaden and Santa Clara Valleys. Santa Teresa Park shares the characteristic steep foothills found throughout the Santa Teresa Hills. Considering the existing and inevitable proximity of urbanization, both north and south of the Park, the view of the study area's steep and highly visible flanks and ridgelines have become increasingly critical.

The quality of views afforded by the Santa Teresa Hills are typified by the yet relatively undisturbed ridges and north facing flanks of the Park. The northwest and southeast trending Santa Teresa Hills become an important visual back drop to the residents of the Santa Clara and Almaden Valleys.

The Park's two highest and most recognizable peaks roughly define the southeast and southwest boundaries of the Park. Coyote Peak, elevation ±1,150 feet is the highest peak and skirts the southeast property line. The soils and wind factors keep the property relatively void of vegetation. Bernal Hill, elevation ±1,000 feet, is located just west of the Park, skirting the IBM property line. These two peaks generally define a saddle which form the most visited and developed area of the Park, the Pueblo picnic area and Muriel Wright Residential Center.

Views of the Park may vary in character depending on one's orientation in respect to distance from the Park. Views from the Almaden Valley capture the relatively gently sloping, less vegetated southerly facing slopes. Due to the greater population density of the Santa Clara Valley, the majority of Park's visibility from surrounding development is from the north.

Visible from the surrounding urbanized valleys are three areas within the park with evidence of man made impacts. Currently, three areas of the Park reveal man made traces to the surrounding valleys. The form and elevation of Coyote Peak itself has been altered by grading efforts and has resulted in a "mesa" like silhouette. In addition to this altered form, a number of radio and television transmission towers complicate the peak's appearance from nearly all vantage points.

The Muriel Wright Residential Center and its two water tanks are visible from the north at various angles from the Santa Clara Valley. The IBM Almaden Research facility west of the Park is accessed by a 30 foot wide asphalt paved extension of Bernal Road connecting Bernal Road on the north which begins at the golf course and is visible up into the saddle of the Park. Also visible are other ad-hoc paths and trails throughout the Park.

The view of the Park from the Almaden Valley reveals less development. Aside from the neighborhood west of the study area, on the south facing Santa Teresa Hills slope, there is evidence of encroaching development. The presence of the Almaden IBM facility is also more prevalent when viewed from the Almaden Valley. It can also be anticipated that the Calero Estates sub-division south of the study area will have certain visual impacts on Almaden Valley visitors and residents as well as Santa Teresa Park users.

A more generalized assessment of the views afforded within the study area reveals a remarkable variety of panoramic vistas as well as some intimate, secluded spaces of various sizes, shapes and character.

The Pueblo area, by contrast, has a more developed feeling brought on by the existence of the paved access and parking, comfort station, turf, other non-native plantings, park benches, barbecues, and trash receptacles. The unique characteristic shared by the Pueblo area and a few other more linear zones in the Park is their visual seclusion from the adjacent urbanized valley floors as well as the Almaden IBM facility. It is in this way these "shelter" zones provide the visitors of these spaces with uninterrupted views of the Santa Teresa Hills and a rare glimpse at undisturbed environmental heritage. (See "Shelter Zone" map, Figure 25)

Another secluded zone exists in the south portion of the Park in the newly acquired Wilets Property's riparian zone. Although this can be considered an extension of the secluded visual characteristics of the Pueblo area, the relatively narrow dimension and high quality of riparian habitat of this zone gives it a unique quality within the study area. This linear system of visually "sheltered" zones meanders south westward through to a confluence of the two zones.

Although the canyon and hills of the Rossetto Property abut the lower Almaden Valley, it maintains this visually secluded character through most of the site and offers the visitor yet another unique historical setting. (See "Existing Recreation Facilities and Uses" map.)

The 360 degree panoramic view from Coyote Peak illustrates the Park's relationship to Santa Teresa Ridge, the Almaden and Santa Clara Valleys, and on a clear day, the cities of San Jose, San Francisco and Oakland. Santa Teresa Park's relationship to a County and Bay Area park system is also most apparent along the Coyote Peak ridge. Another notable highpoint named Bernal Hill by this study team is found at the west edge of the Santa Teresa Park boundary line, above the IBM Almaden facility. Bernal Hill begins the final, gradual descent of the northwest trending Santa Teresa Hills ridge. Although less densely vegetated than the slopes above the golf course, the ridge along Bernal Hill offers long views (often framed by mature oaks) of the neighboring valleys.

2. Architectural Resources

a. The architectural and constructed resources include those of the Joice Ranch, Buck Norred Ranch, the Muriel Wright Residential Center and miscellaneous utilitarian structures such as the Western Union structure (not owned by the County) and the golf course buildings. Structures outside of the existing Park boundary but close enough to be of particular interest (in cases of established County interest in acquisition), are the Rossetto Ranch buildings, the Pyzak residence, and the Bonetti residence.

   By far the largest emphasis is placed on the Joice Ranch because of recent plans to renovate the complex and establish a "living history farm" project. An agreement between the County, the University of California Cooperative Extension and 4H was discussed but not concluded. A study was prepared by the architectural firm of Alton and David Lee. Their report is included in the appendix.

b. Joice Ranch: According to slope stability maps prepared by Earth Technology, the ranch house is located either on or at the base of an

existing landslide. Even though the structure has stood since 1860, environmental changes, such as tectonic movement may have occurred and are likely to occur in the future.

The Joice site consists of the ranch house, a caretaker's house, two barns and out buildings. The barns and outbuildings were not considered in the study. In Mr. Lee's opinion, the caretaker's house is of no significant architectural or historic merit, is in need of extensive repair but could be used as a residence. The Department is currently doing a study regarding restoration of this building. The ranch house itself, which has undergone many changes in the 130 years since it was built, was determined to be lacking in outstanding merit. The house is, according to Lee, significant not for its visual qualities, but primarily because it is "all that remains of the buildings of Rancho Santa Teresa".The question of what time period should be selected as representative relative to restoration of the house remains to be answered. Its historic significance however (as confirmed by its designation by the County Historical Heritage Commission) is of course unchallenged. While the one story wooden building falls far below current construction standards, it could be restored in order to meet the standard for historic structures.

Lee notes the current floor plan does not lend itself to gatherings because of the small rooms. Entirely new electrical lighting, heating and plumbing systems would have to be installed for public use. If it were to be used for gatherings, the internal structure would have to be altered significantly in order to strengthen the building to handle the spans associated with larger rooms. Due to these limitations Lee suggests two alternative uses which better fit the current floor plan. One is as a museum based on a theme of 19th century California ranch houses and, or secondly, to simply restore as a private residence. It could also be considered for a ranger office or residence.

c. The Muriel Wright Residential Center: Also known as the Girl's Ranch, this facility is operated by the County Probation Department as a juvenile detention facility for young women. The single story structure, of 1950's vintage, is by today's standards of little architectural merit. There are no known plans for expansion, and it is fortunately relatively well hidden from the public and from the viewshed of the Santa Clara Valley to the North. The twin wooden water tanks at the top of the hill, adjacent to the Center, are unscreened by vegetation and can be readily seen from the valley floor.

d. Golf Course: The golf course structures are low pitch roofed structures which are unobtrusive and which blend well with the surrounding golf course environment. The golf course has two significant structures. The old clubhouse, now called the banquet facility was built on a hill overlooking the course in the late 50's when the golf course was first built. When the course was leased as a concession, the concessionaire made a number of substantial improvements including the construction of a new clubhouse, pro shop and restaurant. Since the new clubhouse appears to be adequate for the concessionaire's needs further consideration in this study is unnecessary. There are no known plans for significant expansion of such structures.

e. Western Union Structure: This is a privately owned utilitarian structure which is sited unfortunately on a ridge top and painted a very light color which tends to make it stand out in the landscape. The structure functions as an unmanned repeater station. Even though it is small, when seen from certain angles (particularly in the Wilets or Big Oak Valley area), it can be seen in silhouette against the sky. It should be a candidate for removal should the one acre parcel ever be purchased by the County. Staff is of the opinion that Western Union may be selling to another company which may continue to use the building.

f. The Rossetto Ranch: Specific assessment for architectural merit was not made regarding the structures on this Ranch since the County does not own the property. The main house is a concrete block structure which appears sturdy and unassuming. A good many of the structures associated with the former picnic area and swimming pool appear from the outside to be in a state of deterioration. On the east side of the Valley, slightly uphill from the swimming pool area, is a single story wood frame residential building, which might, like the concrete block residence be salvaged. More detailed study of structural safety and reuse feasibility would be necessary should this property become part of the Park.

g. The Buck Norred Facility: The County has conducted extensive and in-depth studies of this facility during various phases of negotiation with the owners over the past few years. Few of the buildings are adequate from a structural standpoint and many of them are open air barn-like structures (associated with horse corrals and the like). The relative cost of rehabilitation of these would depend on more detailed site studies. While the main ranch house has some "turn of the century" charm, it lacks adequate foundations as evidenced by sinking floors and twisted and skewed walls. Up to fifteen horses were stabled on site when Mr. Norred operated a horse rental string.

3. Historic/Prehistoric Resources

The cultural resources associated with the lands of Santa Teresa Park span both its boundaries and nearly 5,000 years. The first identified inhabitants of the area were the Ohlone Indians. These Native Americans are believed to have established a number of village sites within the study area as evidenced by scattered pre-historic traces throughout the Park.

They include permanent and semi-permanent habitation sites which usually exhibit evidence of organic midden and often include human burial remains. Artifacts noted during surveys of this area include grinding stones a quartzite scraper, chert flakes, and human bone fragments. It is believed one area was a relatively large village site.

An area east of the golf course is known to be the site of another Native American habitation site as indicated by adjacent bedrock mortar and petroglyphs. Bedrock mortars and other milling features found throughout the study area are both associated with pre-historic habitation and camp sites. The dark soil, lithic tools and fire affected rocks are all evidence of the temporary pre-historic campsite at the west portion of the Hunter's Property. Petroglyph sites may be isolated or associated with habitation and camp sites and one such petroglyph is located at the base of the Santa Teresa Park Road west of the golf course. Two more petroglyph sites are located below the west peak (Bernal Hill) of the study area and are part of a large complex of mortars and milling sites along the entire ridge of the Santa Teresa Hills. Another complex of

bedrock mortars and petroglyphic cupules have been discovered east of Bernal Hill in a small saddle near the eastern boundary of the Hunter property.

Two unrecorded pre-historic habitation sites were also observed in the course of this resource study. One was located at the confluence of the riparian area and the other is located near the large parking area and corral within the Pueblo area. Pre-historic native American burial sites have also been identified within the study boundaries including the bones uncovered during excavation in the area (then operated by the Fortinis) during the 1920's. Archival reports indicate various bull mortars and pestles within the Rossetto Canyon and identify that area as archaeologically sensitive in general. Another native American burial was reportedly found near the first tee of the golf course during utility trenching activities. Perhaps the largest pre-historic burial component within the study area is found at the base of the Santa Teresa spring and extends northward from there. Over 40 native American burials, mortars, chipped lithics, and other evidence has been recovered during several archaeological expeditions since 1973.

Historic Traces: The recorded history of the area begins with the Don Jose Joaquin Bernal who had arrived with the De Anza expedition to California in 1776. Not until 1826 did Bernal settle near the Santa Teresa Springs area. Bernal eventually petitioned the governor for a "league or less" of land in 1834 and was granted 9,647 acres in July of that year.

The Santa Teresa Rancho was constructed near the present intersection of Manila and Curie Drives. The Rancho Santa Teresa boundaries were reconfigured a number of times over the next 34 years and in 1856 the US District Court reconfirmed the land grant of 1834 to include 4,460 acres. By 1868 the Land Commission divided the Bernal land again among several different people.

Carlos Gulnac married into the Bernal family, inherited the remaining Bernal Rancho and constructed the structures now called the Joice Ranch in the late 1860's. His descendants occupied the ranch for several generations which eventually became the property of Susan Gulnac Joice whose family continued to operate the cattle ranch into the 1970's.

At the turn of the century, the State Mining Bureau established mercury mine operations just below the Hunter property ridge. Mining operations included a 40 ton furnace and several tunnels into the hill totaling nearly 2,000 feet. The Santa Teresa Quicksilver Mining Company was established and had produced a great deal of mercury by 1918. Mining operations were abandoned by 1921, but brick and concrete structures associated with mining operations still exist near the Cottle Road extension adjacent to the present P G & E right-of-way.

The Bernal Mine is another historic mining resource in the study area. This site includes an adit, cement footings and a mine shaft all located on the north side of the hills above the Buck Norred stables. It is speculated that an overhead tram used in the transportation of ore may be detected by the four concrete footings located in the area. In addition, an old wagon route coincides with the Santa Teresa Park Mine Trail which was probably the route used to transport ore and mercury down to the railway in the Almaden Valley.

A cobble quarry of unknown function, possibly for stone fence construction or mining exploration is located adjacent to the Santa Teresa Park Road west of the Pueblo meadow area. Three nearby stone fence sections may have been assembled from that quarry. Two of the sections are associated with the

Rossetto property south of the Park. These stone fences are primarily constructed of unmortared field stone and are typical of fence structures located elsewhere in Santa Clara Valley, Central and Northern California. It is assumed that these were constructed during the post-rancho period when large land grants were being sub-divided. Indian, Mexican and Chinese labor were typically used to construct these types of stone fences during a time when barbed wire and other fencing material was scarce and expensive. The other stone fence section associated with the area and the immigrant labor is located along the eastern boundary of the Rossetto property.

4. Vegetation and Wildlife

A diverse range of wildlife habitats and plant communities are found within Santa Teresa Park study limits and adjacent areas. The study area includes a varied topography, and a diversity of habitats in a relatively undisturbed setting. Birds are the largest group of vertebrate species found in the Park. Bird populations differ from season to season with the park setting. As a result of migratory and local movements as well as other changing habitat requirements. The Park's indigenous plant communities and its current light public use contribute to relatively high levels of wildlife activity, however, residential development along the northern study area boundary is beginning to impact wildlife habitats within the study area.

The following general discussion deals with representative members of wildlife groups and plant communities based on the survey by the Habitat Restoration Group (1990).

Existing Plant Community/Habitats: The north facing slopes of Santa Teresa Park support mixed oak woodlands. The slopes above the Santa Teresa golf course encompass many drainages that experience seasonal run-off typically associated with this community. They include a dense overstory of riparian vegetation: oaks, California bay, Buckeye, Blue Elderberry and Coffeeberry. Within the oak woodland is a sparse understory of shrubs including; Snow Berry, Poison Oak, and Blackberry. Non-native grasses dominate this understory and share this micro-climate with Miner's Lettuce, Bedstraw and Mugwort. A wide variety of wildlife species use these woodland habitats and the value of this habitat varies depending on the diversity of the habitat structure present in any given community. The proximity of the more mesic riparian forests within these woodlands provide habitat for amphibians such as the California Slender Salamander. The presence of downed trees and other accumulations of dead plant materials are equally important habitat components for the Tiger Salamander and other amphibians in creating suitable micro-climates.

The presence of small mammals and insects are important foraging resources for reptiles found in the study area. Amphibians, small animals, and insects inhabiting the oak woodlands are important food sources for reptiles. The Western Fence Lizard and a variety of snakes are common in these habitats. A variety of birds find nesting, forage and important cover within these oak woodlands. Woodpeckers, as well as other cavity nesting birds, find mature oaks an important resource. Passerine bird (song bird) species may occur in these oak woodlands including the California Quail, Scrub Jay, Nuttal's Woodpecker, Chestnut-backed Chickadee, Plain Titmouse, Western Bluebird, and the Wild Turkey. The Great Horned Owl, Western Screech Owl, Red-tailed Hawk, Cooper's Hawk, and Sharp-shinned Hawk are among several raptors expected to occur within the oak woodland as well. Black Shouldered Kites, and vultures could be associated with oak woodlands and/or grasslands but were not confirmed by Habitat Resource Group.

Many mammal species associated with the oak woodlands use the understory for den sites and escape cover. The oak woodlands also provide important food sources such as seeds, nuts and fruits for those species. The Western Gray Squirrel, Virginia Opossum, Striped Skunk, and Black-tailed small Deer are common mammal species in this habitat. Wild pig and a few bat species may also find forage in this habitat. One neighbor and frequent user of Park trails reported seeing recently a mountain lion and two kittens near Coyote Peak.

The majority of hillsides surrounding the Pueblo area and the Santa Teresa Park Road are characterized by non-native grasslands, the dominant plant community within the study area. Lupine, soaproot, blue dicks and California Buttercup are characteristic wildflowers associated with this community. The grasses and forbs are an important element for both granivorous and insectivorous wildlife species attracted by these host grasses. Raptorous birds and small mammalian predators commonly found in this habitat are coyote, fox, hawks, vultures, and eagles. The dry conditions of this habitat make this area largely unsuitable for amphibian use.

In general, the most actively used wildlife habitats of non-native grasslands occur adjacent to other plant communities (ecotones). The Western Fence Lizard may be the most numerous of reptilian species found in the grasslands. Typically, tall grasses and rodent burrows provide an excellent refuge for reptilian species. Extensive use by raptorous, graynivorous, and certain insectivorous birds is to be expected throughout the Park's grasslands. Smaller mammals including the Long-tailed Weasel, Black-tailed Deer and the Western Harvest Mouse are also common within these areas.

Serpentine bunchgrass communities associated with serpentine soils of the Bernal Formation are found primarily in the southern half of the Park between the Pueblo area and the southern park boundary, and the north facing slopes above the Joice Ranch. The serpentine bunchgrass community is associated with a limited distribution of unique plant species subsequently considered rare, threatened or endangered. Some of the unique wildflowers species associated with this community include Streptanthus (jewel flower), tidy tip, tarweed, goldfields, brodiaeas, and columbine. Trees may occur within serpentine soils, however they are apt to be somewhat dwarfed. Some of the dominant plant species within the serpentine bunchgrass community include melica, wild onion, common jewel flower, along with coffeeberry, manzanita and sage. The wildlife value of this habitat is apt to be similar to that of the adjacent non-native grasslands and even enhanced due to its unique characteristics and plant species distribution. The rock outcroppings associated with the host serpentinite soils may also provide valuable habitat for some grassland wildlife species. In fact, the host plant for the Checkerspot Butterfly listed on the federally endangered list, is associated with serpentine bunchgrass habitat. The reptiles associated with serpentine bunchgrass are similar in species and number to those found in other grasslands. Reptile species are commonly found on rock outcroppings which provide sunning, cover, and territorial display sites. These rock outcroppings also provide perching, roosting and/or nest sites for a variety of bird species including the Rock Wren, Horned Lark, Grasshopper Sparrow, and Common Poorwill. The serpentine bunchgrass habitat found within Santa Teresa Park is of moderate value to fossorial mammal species due to the less friable nature of the soils.

The Diablan Sage Scrub, usually associated with steep rocky south and east facing slopes, is distributed throughout the study area. This plant community consists of shrubs and herbs often forming dense stands of California Sage, Black Coffeeberry Sage, Poison Oak, Coyote Brush, Monkey Flower, and Wooly

Sunflower. Diablan Sage Scrub lands, as located throughout the study area, including one above the Buck Norred Ranch, one located east of the Pueblo area and a few stands are spotted within the serpentine bunchgrass in the southern portion of the site.

The abundance of low growing shrubs provide cover for the prey populations of rodents, insects and reptiles such as the Western Fence Lizard, the Western Whip Tail, the Striped Racer, and the Western Rattlesnake. Moderately dense vegetation offers excellent cover for a limited number of secretive bird species such as the Rufous-crowned Sparrow, California Thrasher, Anna's Hummingbird, Lesser Goldfinch, Waxwings, and Lark Sparrow. Small mammals also associated with the Diablan Sage Scrub include the brush rabbit, Heerman's Kangaroo Rat, and bobcat.

Another distinct plant community found within the study site is the California bay-oak riparian forest. This community occurs along three intermittent streams at the northern portion of the site, as well as the confluence of the three watersheds at the southern portion of the site above the Rossetto property. The dominance of California bay and buckeye trees distinguish this community from the adjacent oak woodland. The perennial creek beginning in the southeast corner of Santa Teresa Park, previously the Wilets property, is an excellent example of the California bay-oak riparian forest.

The understory vegetation is characterized by rushes, dock, Fullers Teasel, hedge nettle, bedstraw, and mugwort. This community probably ranks highest in wildlife value in terms of species diversity. It is also evidenced by the abundance of wildlife niches provided by its structural habitat diversity. The wildlife habitat value of the riparian forests in the study area however is moderate due to narrow canyon widths and the subsequent lack of plant specie diversity usually associated with this plant community. Those areas where concentrated surface drainage results in seasonal or year round water have increased habitat value and provide an important wildlife resource.

Aquatic resources are scarce due to the intermittent and ephemeral flow characteristics of these drainage areas. Amphibians are known to frequent this habitat and there is potential for sighting the California Newt, Western Toad and the Pacific Treefrog.

Reptiles associated with more mesic environments may be present in these areas including a combination of tree canopy, downed wood material, and run-off water which make a suitable habitat for reptilian species such as the Southern Alligator Lizard and Western Terrestrial Garter Snake.

Bird specie diversity within this habitat is moderate due to the habitat's confined area and relative lack of plant species diversity. Common passerine species include the California Quail, Morning Dove, Black Phoebe, Song sparrow and the White Crowned Sparrow.

Many mammal species are dependent on riparian ecosystems for cover and water, but may be more numerous in the mixed oak and other woodland areas. The Park's scrub, and mixed oak woodland areas are probably more suitable for most of the mammal species. The riparian forests also function as important corridors for the movement of larger mammals such as Black-tailed Deer, Racoon, Red Fox, skunk, and bobcat.

Freshwater seep vegetation in areas where a spring provides adequate flow to support wetland plants, occurs in four areas within the study. The largest area begins at the southern portion of the Park west of the Pueblo area. The seep

drains south, and down into the bay-oak riparian forest above the Rossetto Canyon. The associated wetland contains Fuller's teasel, rushes, ryegrass (Etymus sp), and saltgrass. Another freshwater seepage occurs east of the IBM facility and drains into the aforementioned California bay-oak riparian forest within Rossetto Canyon, supporting the endangered plant species, Mt. Hamilton Thistle. Several springs occur on the north facing slope of the canyon previously owned by Wilets and are dominated by rushes and iris-leaved sedge. Semi-aquatic reptilian species such as the Common Garter Snake may occur in these areas on a seasonal basis as will the Common Snipe (bird) when the habitat is well saturated. Shrews and moles find these habitats suitable when moist and may share these freshwater seepage habitats with rodents including the California Meadow Mouse and the Western Harvest Mouse.

The Coyote Brush Scrub plant community occurs within the site in a swale northwest of Coyote Peak. The occurrence of this community, in association with the surrounding grasslands, makes this habitat suitable for wildlife species such as the Scrub Jay, California Quail and Brush Rabbit.

The endangered Coyote Ceanothus is typically associated with Northern Mixed Chapparal and may occur in the four Northern Mixed Chapparal patches located in the southwest portion of the site (along the slopes adjacent to the Rossetto canyon). The diversity of wildlife within this plant habitat is expected to be similar to that of the Diablan Sage Scrub community which is dominated by such plant species as the Big-berried Manzanita and Leather Oak.

Wildlife use of the Evergreen Riparian forest patches in the study area is expected to be similar to that of the California bay-oak Riparian Forest and adjacent Mixed Oak Woodlands. Two Evergreen Riparian Rorest locations occur within the study area, one located south of the golf course and one at the base of the intermittent stream above the Joice Ranch.

Non-native landscape vegetation has been planted around the golf course as well as the Pueblo area. The introduced plant species include eucalyptus, Lombardi Poplar, a variety of pine species and turf grass. These habitats are of low wildlife value relative to usefulness to nature wildlife species.

The use of herbicides and pesticides for maintaining areas adjacent to the fairways of the golf course probably limits their value as wildlife habitat. A supplemental supply of nectar may be provided by the eucalyptus plantings adjacent to the Pueblo area. These plantings may attract Anna's Hummingbirds and Yellow Rumped Warblers on a seasonal basis.

Seasonal ponds such as those found at the golf course and adjacent to the Santa Teresa Park Road are vital for amphibian species during breeding season. As with the aquatic environment of the riparian forest they offer valuable resources to other wildlife species. These ponds are an important resource of Santa Teresa Park due to their temporary nature and limited distribution, and may be a potential breeding site for the California Tiger Salamander, a state species of particular concern. The percolation pond near the golf course is a resource for a variety of waterbirds such as grebes, herons, and ducks. The freshwater marsh habitat found along the pond's margin may provide potentially suitable breeding sites for a number of water fowl such as the Pied-billed Grebe and American Coot.

Rare, endangered, candidate or sensitive species include golden eagles, and the San Francisco Fork-tailed Damselfly among others. A pair of golden eagles, species of special concern, have been known to nest in a transmission tower in the vicinity of Calero Reservoir. Therefore, it may be assumed that the Park

is within their breeding and feeding territory. Another species of special concern is the Tri-colored Blackbird, also known to have nested at Calero Reservoir and may range as far as Santa Teresa Park for feeding and roosting. The Bay Checkerspot Butterfly, a federally listed endangered species, is associated with serpentine host plants for reproductive purposes and may also be found in the Park. The serpentine bunchgrasses of the Park offer potentially suitable breeding sites for this species.

The San Francisco Fork-tailed Damselfly is a candidate for the endangered species status list and breeds within seeps, springs, and drainage ditches in the San Francisco Bay Area. An unidentified damsel fly was observed adjacent to a seasonal pond northeast of the Park.

There are a number of sensitive vertebrate and invertebrate wildlife species identified as known or potentially significant users of the Park's habitat. The list of endangered species, a brief description of their status and potential habitat areas are included in the Biotic Resources Report of Santa Teresa Park compiled by the Habitat Restoration Group (Please see appendix).

In general, the Santa Teresa Park represents an invaluable botanical and wildlife natural resource for Santa Clara County.

5. Geology and Soils

The ±1,500 acres of Santa Teresa Park include a variety of geologic formations including steep, northfacing slopes in excess of 40% along the northern park boundary. Elevations within the study area range from approximately 240 feet at the Santa Teresa Park golf course to more than 1,000 feet in two geology locations. The highest elevation is at Coyote Peak in the southeast corner of the Park and the second highest is at "Bernal Hill" above the IBM Almaden Research Facility. The general geologic study identifies five geologic units which make up of Santa Teresa Park. (See "Geologic Units" map).

a. Soils

Nine soil series are found within the Santa Teresa Park study area. Limitations of the soils relative to trail use are determined through the application of the 1968 Soils of Santa Clara report (U.S. Department of Agriculture. The relevance of the soil categories to trail use is shown in the "Erosion Potential" map.

b. Geology

Five geologic units are present within the study area and are shown on the geologic units map. The Franciscan Complex underlies more than half of the study area consisting of interbedded greywacke sandstone, siltstone, volcanic rocks, chert and metamorphic rocks. This unit has varying degrees of stability given the variety of rock types that it is made up of. The valley floors north and south of the Park, as is the Pueblo area, are made up of alluvial deposits of sand and silt caused by upslope stream channel erosion.

Serpentinite, a moderately stable rock with unique habitat qualities, is present in three parts of the study area: the north- facing slopes above the Joice Ranch, the rocky hill south of the Pueblo area and a majority of the south-facing slopes above the Almaden Valley.

A relatively narrow strip of Tertiary/Cretaceous Shale, is present at midslope along the south facing slope below the IBM Almaden facility. This shale contains some interbedded sandstone. A Tertiary sandstone underlies the Bernal Hill ridge and extends north and west of the Pueblo area. The Bernal Formation contains subarkosic sandstone, a moderately stable unit.

c. Slope Stability

From an analysis of bedrock geology, slope and surficial deposits mapping, it was determined that there are a number of active landslides within the study area. They are dispersed throughout the site at slopes of 30% or greater and in drainage swales.

Several landslides of notable size exist within the study area. The large drainage swale above the golf course beginning at Coyote Peak and terminating just above the pond is the site of a sizable landslide. Another large landslide, indicated by undulating slopes, lies above the Joice Ranch and Santa Teresa Springs. Another exists in the central portion of the Park extending well into the Lagatutta Property, encompassing a large portion of the northwest facing slope south of the Pueblo area. A majority of the riparian canyon slopes within the recently acquired Wilets Property are in an active and continuing landslides condition. There are many more landslides within the study area of smaller size as indicated on the "Slope Stability" map which will present various limitations to trail and/or other improvements.

An integrated analysis of bedrock geology along with new mapping of surficial landslide deposits and a relative slope stability map were prepared using modified techniques employed by the USGS survey for slope stability. Five slope stability categories are mapped within the study area. (See "Slope Stability" map.) The slope stability categories range from 1, a relatively stable slope to 5, a more unstable slope, in most cases active landsliding.

The relatively flat areas underlain by floodplain alluvium with uplifted alluvial terrace deposits and gently sloping alluvial fan deposits make up Slope Stability Category I. Localized hazards may exist within this category from minor landsliding along creek banks including areas upslope and extending down slope into the alluvial deposits. Characteristically, areas underlain by Serpentinite and the Bernal Formations are moderately stable, usually involving slopes of 0-10%, which makes up Slope Stability Category II. Category III includes areas with slopes either greater than 10% and underlain by moderately stable Bernal Formation sandstone or areas with less than 10% slopes, underlain by the more unstable Franciscan complex.

Hillsides and upland areas of fairly steep slopes (greater than 10%) are underlain by the generally unstable Franciscan formation which makes up the moderately unstable Category IV. Those areas with evidence of landsliding in the past or are immediately adjacent to landslide deposits are the most unstable slopes and make up Category V.

C. UTILITIES AND EASEMENTS

The Santa Teresa Park Study area includes a variety of utilities. The electrical power requirements of the Park are limited to the Muriel Wright Residential Center and the golf course. These electrical needs and those of the radio and TV transmission towers on Coyote Peak are serviced by overhead lines on poles. PG&E retains an east-west easement across the study area for 115K and 230KV power lines for cross valley service. These lines pass over the Santa Teresa Hills by way of steel lattice transmission towers which crisscross the Park. PG&E also owns a strip of land contiguous with the eastern edge of the Park for other electrical transmission needs. Access to the power lines within the study area is provided by service roads in proximity to the towers and power lines with secondary access trails to individual towers. PG&E imposes restrictions on recreational activities and uses below power lines and towers.

A power and water easement at the extreme eastern corner of the Park provides service to the IBM Santa Teresa facility, east of the Park. Another PG & E sub-station is located adjacent to the two 850,000 gallon water tanks which are on IBM land near the Almaden Research Center (just below Bernal Hill).

Power lines connect this sub-station with the east-west PG & E power lines at the northern portion of the Park. Due to the steep slopes on the north face of Coyote Peak and the lengthy span between supporting poles, the telephone/cable lines sag dangerously close to the ground (in some areas withing four feet), presenting a attractive nuisance and safety hazard to Park users).

A ten foot trail easement has recently been granted by IBM. As of this printing, construction of this trail is about 2/3 complete. The trail crosses over two ridges at the east property line of the IBM Almaden Research Center. In accommodating this alignment, many switchbacks were required which necessitated a fairly wide corridor. IBM plans to fence off the entire corridor of approximately 45 acres once the trail is completed. This easement is currently the only connection between Almaden Valley and Santa Teresa Park. The trail which begins at San Vicente Avenue, will also function as an extension to the City of San Jose's Los Alamitos/Calero Creek Trail which begins at Almaden Lakes (will also connect with the proposed Gualupe Creek Park chain). The original agreement between the County and IBM designates the trail as a pedestrian and equestrian trail. The trail will function as a multi-use trails (including bicycle use) at least until an alternate connection to Almaden Valley can be designated. Continuation of a multi-use designation will be dependent on operational considerations.

From Shillingsburg Road in Almaden Valley, an access road to the recently acquired Wilets property functions as an easement for a number of adjacent properties. The easement begins at and passes through the 146 acre Lagatutta Ranch. The easement is shared by the Lagatuttas (to access their 44 acre parcel), and County Parks (access to Wilets property which was acquired in April 1990).

KSJO radio has recently improved the Coyote Peak fire road which it uses as a service road. KSJO leases an area adjacent to Coyote Peak from County Parks and retains a service easement to their transmitter station beginning at the Pueblo loop road. This fire road is unsurfaced and has asphaltic concrete water bars at gradients in excess of 10%. Water culverts were installed to control erosion. The road is secured with a steel gate at the entrance off the Pueblo area. It is assumed that this road provides vehicular service access for all of the lessees of the radio communication towers located on Coyote Peak (including KSJO Radio, SJSU Radio, Heritage Cablevision, and City of San Jose).

There are currently three areas in the Park which require water resources. These are the Muriel Wright Residential Center, the Pueblo area and the golf course. Two wells

and pump stations are located adjacent to the entrance of the golf course, near the intersection of Bernal Road and Golf Course Lane. Water for the 70,000 gallon water storage tank, located just east of the golf course pond, is supplied by these wells and is supplemented by the Great Oaks Water District water lines across the golf course. This storage tank provides the potable water for the golf course club house, banquet facilities and the three comfort stations and drinking fountains located within the golf course lease area. Another booster pump station, located just below the golf course pond, provides enough water pressure to fill the two water storage tanks (40,000 and 50,000 gallons each) for the potable water and fire suppression needs of the Girls Ranch. This same booster pump station provides a water source for the Pueblo area irrigation and drinking fountains as well as four fire hydrants in the vicinity of the Pueblo area (upper Santa Teresa Park).

One fire hydrant is located adjacent to the comfort station in the Pueblo area and the other three fire hydrants are placed around the Muriel Wright Residential Center. Another pump station is located directly adjacent to the golf course pond and provides the non-potable irrigation water for the golf course greens. An additional water line extends eastward from the pond area toward the comfort station located adjacent to the archery range at the eastern corner of the golf course.

A 212,000 gallon water tank is proposed for the top of Coyote Peak. The tank would be serviced by an eight inch water line connected to a third pump station to be located adjacent to the golf course. The Coyote Peak water tank is proposed for 40 residential connections and is part of the development plan for the 28 lot Calero Estates subdivision (south of the Park).

Within the IBM ARC (Almaden Research Center), at the western border of the study area, are two 850,000 gallon water tanks. These tanks are serviced by City of San Jose water lines, with connections at Harry Road in Almaden Valley. These tanks provide the water necessary for the operation and fire protection of the IBM Almaden Research Center. The pump station, located east of the Park boundary, up-slope from the archery range, is part of an IBM power and water easement which passes through the extreme eastern corner of the Park and the archery range. This is part of a water and power easement IBM holds to supply the Santa Teresa facility (east of the Park).

The sewer facilities at Santa Teresa Park are limited to four isolated comfort stations on septic systems. It is unclear if a sanitary sewer system with connections to the City of San Jose is in place at the golf course club house. According to the Public Works Department Lateral Sewer Permits division (City of San Jose) there is no record of a sewer connection. The Parks Department could in any case, apply for an "Outside Sewer Connection Application" since the Park is almost entirely surrounded by the City of San Jose. According to Marion Dixon of that division, it is unlikely that given normal park usage, there would ever be a problem of capacity. One comfort station is located adjacent to the archery range east of the golf course. Two other comfort stations are located within the immediate area of the golf course and a fourth station is located in the Pueblo area. The nearest potential for sanitary sewer connection for the southern and western portions of the study area is from Harry Road in Almaden Valley.

The Coyote Los Alamitos Canal borders the entire northern perimeter of the Park west of Bernal Avenue and more or less separates the golf course from the adjacent foothills east of Bernal Avenue. The meandering strip of land, a utility easement, is held and administered by the Santa Clara Valley Water District. Even though its use was discontinued some years ago and it is unfenced for much of its length the District considers the current informal use of the levee for trail purposes as trespassing. The canal was constructed to carry water from Coyote Creek to the Guadalupe Creek for release to water recharge facilities. Approximately 4.5 of its total 11 miles of right-of-way skirt the edge of the Santa Teresa Park study area. No water has been

conveyed through the canal since 1979. The canal consists of a 12' wide gunite lined channel. The canal's right-of-way varies from 50 to 100 feet which includes a gravel service road skirting the downhill levee.

D. EXISTING RECREATIONAL FACILITIES AND USES

The recreational role that Santa Teresa Park plays relative to the 2020 Task Force report includes the provision for open space, view sheds, and buffer zones, environmental heritage resources and natural areas as well as wildlife habitats for rare and endangered species. Although many active recreational needs are fulfilled by developed parks in the City of San Jose, Santa Teresa Park offers a number of unique settings not found within the adjacent suburban parks.

The most developed space (other than the golf course) within Santa Teresa Park is the Pueblo Group Picnic area. Vehicular access to the Group Picnic area is provided by a paved access road off Bernal Road (Santa Teresa Park Road). The access road T's off the Santa Teresa Park Road, intersects with the Muriel Wright Residential Center facility access road and winds around the perimeter of the saddle (Pueblo area). The road passes a number of parking areas and terminates at the equestrian ring and parking lot. The Pueblo area defines the starting point for number of trails and activities. Biking, hiking, and equestrian use of trails are often initiated from the Pueblo area. Five parking areas are provided along the loop road within the Pueblo area with space for more than 170 cars. A large unshaded turf area is situated in the center of the Pueblo area with an adjacent open meadow of non-native grass to the west. One of the fresh water seeps discussed in the Vegetation and Wildlife portion of this report exists southwest of the Pueblo area. The seep provides a potentially unique wildlife amenity near the Pueblo area and is currently protected and signed.

One comfort station is provided utilizing a leachfield system. The men's room contains 1 watercloset, 3 lavatories and 2 urinals. The women's room contains 2 lavatories, and 3 waterclosets. The facilities are inadequate for special events involving large numbers of people. A number of barbecues, and bench/table combinations are spread along the eastern and southern edges of the turfed area. A large slumpstone barbecue pit is provided for special permit groups ($\pm$100 persons) at the Pueblo Group Picnic area across the access road from the turfed area. This area is adjacent to a large oak which provides shade for picnickers. The tree is showing signs of decline. An equestrian arena, enclosed by a wooden fence, is situated at the very end of the Pueblo access road (adjacent to the fresh water seep). The area includes the largest parking area in upper Santa Teresa Park ($\pm$75 autos). There are two drinking fountains located in the Pueblo area and a number of quick coupler type irrigation heads are attached to 4 x 4 white painted posts in the turf area. Operation of the irrigation system, however, was discontinued in 1983 due maintenance requirements and to impacts on Muriel Wright Residential Center water needs.

Access to the 18 hole Santa Teresa Park golf course is provided off Bernal Road. The golf course includes two club house facilities, one of which is located on a hill overlooking the golf course. This facility is no longer used as a clubhouse but has been remodeled to function as a banquet facility. A newly constructed clubhouse complex includes a maintenance yard, golf cart garage, driving range, clubhouse, pro shop and restaurant/bar. Since the concessionaire built a new clubhouse, the banquet facility is leased out for events. The banquet facility includes a bar and kitchen. The golf course currently has no water hazards designed into the 18 hole course. The golf course equipment storage facility and a two well pump station are located adjacent to the golf course entrance (old Parks maintenance yard) near the intersection of Bernal Road and Golf Course Lane. The 70,000 gallon water storage tank, above the golf course on the north facing slope of the Park, provides potable water for the golf course. A booster pump station draining water from the pond at the base of Coyote Peak provides for the irrigation needs of the golf course. Another booster pump in the same area supplies the two water tanks located above the Girls Ranch Facility. A third booster pump is proposed to be located adjacent to the golf course to supply water to a proposed water tank (to be located on Coyote Peak) for the Calero Estates subdivision south of the Park. (See "Utilities and Easements" map.)

The only major water body is a pond at the foot of steeply sloping hillsides due south of the clubhouse. The pond located within the golf course lease area was constructed in 1953 to make use of canal water for irrigation according to the Santa Clara Valley Water District. Although not permitted, the pond was once used by youngsters for fishing and swimming. The increased potential for liability associated with these non-permitted uses resulted in the closure of this area. The pond located within the golf couse lease area is part of a Coyote/Alamitos canal system constructed in 1953 by the Santa Clara Valley Water Company.

The Coyote/Alamitos Canal right-of-way connects the archery facility at the eastern corner of the Park to the golf course, pond, the Buck Norred Ranch, the Joice Ranch, and the Hunter equestrian facility at the northwest quadrant of the study area. The canal and service road is not continuous. This is due to a number of siphon stations, required due to adverse conditions such as atypical topography, road crossings or utility lines. The levee road is used by bicyclists, joggers and hikers - an activity considered, technically speaking, trespassing by the Santa Clara Valley Water District.

Active recreation needs can be met by the wide variety of hiking, biking, jogging, and equestrian trails located throughout the Park and study area. (See "Established Trails" map.)

Established Trails and Trail Routes - The accompanying chart describes established trails and their relevant physical conditions such as type, width and in some cases gradients. Gradients are called out in most cases where the steepness of the slope exceeds 20 or 30%. Most of the trails are highly varied in one or more of these factors. For example, the Hidden Springs Trail starts out as a narrow jeep track but then follows the alignment of the relatively broad recently graded service road leading toward Coyote Peak. In other cases a portion of the trail may be a mixture of relatively level and very steep portions as is the case with the Stiles Ranch Trail. In many cases, portions of these trails exceed a desireable maximum gradient of 12% over a short distance. The average maximum gradient for pedestrians should be between 10% and 15% depending on soil conditions and surfacing.

From the standpoint of width and surfacing, five types have been identified. They are:

A. Paved road
B. Graded (dirt) road - maintained
C. Jeep track/farm road - double track, maintained
D. Narrow path - single track, unmaintained
E. Graded path - single track, maintained

The one paved "trail" in the area is the old road to the Wright Ranch. Graded dirt roads have essentially an all-weather surface, but because of the extremely low vehicular usage, could be appropriate for trail use. Type C, incorporates jeep tracks and farm roads which can vary from two ruts in poorly maintained grass, (spaced at 5 feet on center) to a dirt surface rutted in some cases and in others littered with boulders from adjacent cut slopes. The narrow paths, or Type D trails, are foot paths some of which have never been constructed to normal standards or regularly maintained. The only trail constructed specifically for that use and meeting relatively modern standards is the IBM Stiles Ranch Trail to be completed in the spring of 1991.

Several of the nine designated trails associated with the Park deserve comment. The Mountain Bike Trail was officially designated by the County in 1989 specifically for use by mountain bikers. Some biking enthusiasts have expressed concern that it is too short (±12,000 feet). The Coyote Peak Trail is one of the steepest established trails, the lowest 1/4 of this trail traverses an existing landslide. The geologist's studies

indicate tectonic movement in this area and erosion along some of the steepest reaches. About 1500 feet of the Boundary Trail appears to occur on PG&E property according to a map and aerial photo information. Detailed site investigations would be required to determine if this is the case since existing fences may not be relied upon as accurate boundary indicators. The Stiles Ranch Trail is not completed yet. It is scheduled for completion and dedication in the spring of 1991. It is not within the Park but rather part of an easement granted by IBM on its Almaden property. The Old Wright Center Road was replaced by the new entrance from the "Santa Teresa Park Road". Unused by vehicles and unmaintained for some time now, the AC paving surface is beginning to deteriorate.

ESTABLISHED TRAILS AND ROUTES

NAME	APPROX LENGTH	AVG EFFECTIVE TYPE	WIDTH	MAX GRADIENT*
Mountain Bike Trail	12,000LF=2.70M	C	±8'	54%
Mine Trail	5,000LF=1.04M	C	±8'	32%
Ohlone Trail	7,650LF=1.45M	D	2'-4'	NA
Hidden Springs Trail	5,000LF=0.94M			
Lower portion	2,500LF=0.47M	C	±8'	25%
Upper portion	2,500LF=0.47M	B	±12'	NA
Coyote Peak Trail	6,000LF=1.14M			
Lower portion	3,100LF=0.59M	C	±8'	32%
Upper portion	2,900LF=0.55M	B	±12'	23%
Ridge Trail	3,000LF=0.57M	C	±8'	NA
Boundary Trail	3,400LF=0.64M	C	±8'	30%
Pueblo Trail	3,750LF=0.71M			
Lower portion	2,500LF=0.47M	C	±8'	NA
Upper portion	1,250LF=0.24M	D	2'-4'	NA
Stiles Ranch Trail	5,500LF=1.04M	E	4'-6'	10%
Old Wright Center Road	3,000LF=0.57M	A	14'-16'	NA

TRAIL TYPE
A. Paved road
B. Graded (dirt) road - maintained
C. Jeep track/farm road - double track, maintained
D. Narrow path - single track, unmaintained
E. Graded path - single track, maintained

* Selected Segments

In addition to "established" trails there are a number of other trails, particularly along the northern perimeter of the Park, which are frequently used although they are not formally acknowledged as Park trails. Two occur at the northwest corner of the Park in the vicinity of the Joice Ranch and connect to the Mountain Bike Trail discussed earlier. This trail's main purpose is to provide service access to the PG&E towers. These both exceed a 30% gradient and are located in areas identified in this report as landslide or highly erosive soils. A third trail approximately 2250 feet in length, due west the Buck Norred stables area, slopes steeply uphill in a southerly direction, to connect to the Mountain Bike Trail. The gradient along the lower portion of this trail averages 17%.

Just northeast of the Muriel Wright Residential Center a steep trails connects the Hidden Springs and the Ohlone Trails. This trail averages a 32% gradient and is about 1400 feet long. Further east and upslope of the existing golf course pond is another ad hoc trail, exceeding 37%. It is over 1000 feet in length and is located on highly erosive soils or terrain which may be undergoing tectonic (slow slippage) movement. Upslope of the eastern end of the golf course, five additional ad hoc trails may be found. In two cases they connect the Ohlone Hiking Trail to the Coyote Peak Trail. Others connect to the FAA Repeater Station and follow the ridges in the area. The gradients for portions of these trails range from 20% to 35%. The trail up to the Repeater Station is actually a jeep track which more or less parallels the Coyote Peak Trail. The others are footpaths.

There is considerable unauthorized use of the Los Alamitos Canal levee. Such use appears to start at the eastern end outside the Park at Santa Teresa Boulevard. Hikers, joggers, and bicyclists use this route, which passes through the archery area. Trail users appear to use the Ohlone hiking trail to bypass the golf course. The Canal road is not continuous as it is broken by several underground syphons. The levee use picks up again at the golf course pond and continues westward to the vicinity of Bernal Road. Some hikers trek as far west as the lower end of the Mine Trail adjacent to the Norred property before heading up into the Park. The levee is roughly 17 feet wide constructed of graded, compacted earth and is virtually level. As such it is clearly a great attraction to trail users from the surrounding residential areas connecting as it does such distant resources as Coyote Creek and the Alamitos Creek/Guadalupe River trails. Such use, however, is considered trespassing by the Santa Clara Valley Water District which controls the rights-of-way for the canal.

E. TRAFFIC AND CIRCULATION

As indicated on the "Regional Trails and Circulation" map (Figure 3), Santa Teresa Park has two clearly defined access potentials, one existing from the north and one from the south. Because of the steep terrain and patterns of hillside development, there are no major vehicular access potentials from the west or the east. To the north, the largest potential vehicle source are the old Monterey Highway, and State Highway 101 which has since been upgraded to a major freeway. Bernal Avenue which provides the only vehicular entrance to the Park is a major off-ramp from the freeway.

Further to the west, Cottle Road provides access to the foot of the Santa Teresa Hills at Hunter Ranch. This property, however, is not in park ownership. Santa Teresa Boulevard roughly parallels the northern foot of the Santa Teresa Hill Range and is crossed by Cottle Road, San Ignacio, Bernal, Avenida Espana and Bayless Avenue, all of which are important access/feeder routes to the Park from Santa Clara Valley. The new 101 freeway from Cottle Road to the east, and County Santa Teresa Boulevard from Bernal Road south-easterly are designated State scenic routes.

The main vehicular access to the south of the Santa Teresa Hills is the Almaden Expressway, also designated as a scenic road. City plans include extension of the Expressway roughly along the existing McKean Road route extending to Calero Reservoir as a four lane road. At this writing there is no vehicular access route to the Park for the public from the south side of Santa Teresa Hills. As noted elsewhere, the Rossetto property would be a key access were it to be purchased by the County.

The southerly entrance to IBM's Almaden facility is off Harry Road. This connects to the new Santa Teresa Park Road from the Bernal Road on northern side of the Park. However, only IBM employees and Park personnel are permitted to use this road.

The City plans indicate the potential for the extension of Camden Avenue once the Almaden Valley beyond Harry Road is annexed into the City. Camden would probably follow Calero Creek southeasterly, joining and incorporating San Vicente/Fortini Roads and turn south to connect with what is currently McKean Road (and is planned to be the Almaden Expressway extension). This would of course bring a viable vehicular access close to the southeastern side of the Park.

At this writing the Park Department is negotiating for the purchase of the Rosseto Ranch which is serviced directly off of Fortini Road. Fortini Road, a single lane for light vehicle use, is partially privately owned and maintained, and would not make a plausible public vehicular access without any improvements. Except for the Santa Teresa Park Road, there are no vehicular connections across the Santa Teresa Hills. The following maps illustrate the existing and future capacity (lanes) as well as ADT's (average daily trips) for the key roads surrounding the Park as well as the Santa Teresa Park Road.

Information sources for this section include Gay Pang, Traffic Consultant and the County of Santa Clara Regional Parks Trails and Scenic Highways (map) from the County General Plan, Adopted November 18, 1980.

F. MAINTENANCE

1. Picnic and Related Recreation Center Maintenance

The County's maintenance efforts are limited primarily to the Pueblo picnic area. The site amenities requiring regular maintenance include barbecues, trash cans, and restroom facilities. Maintenance of this site requires approximately 18 man hours per week. In addition to the weekly maintenance of the Pueblo Picnic Area, park rangers are called upon to address unscheduled maintenance requirements caused by incidents of vandalism or dumping (approximately three times per month on the average).

In addition to this the Park maintenance staff assumes responsibility for maintaining the toilets at the archery range for the Black Mountain Bowman's Association.

2. Vegetation and Wildlife Management

There are no specific management policies for Santa Teresa Park even though the Park, as has been noted, contains an abundance of rare and endangered plant and animal species as well as their habitats. The County Parks Department does not, as yet, have policies regarding natural resource management.

While the eradication of exotic or noxious plant materials is a generally accepted and desired goal, dedication of staff time toward this end have been considered a luxury in the past and limited staff hour and funding resources have historically resulted in an ad hoc approach. Eradication of weeds has been done in connection with an improvement such as the development of the turf area for the Pueblo Picnic Area. In this example the County obviously maintains a policy of suppressing or eradicating weeds and non-native grasses.

Native oak trees in the study area, have according to the Park's rangers, become increasingly heat stressed during the drought. This makes them much more vulnerable to occasional wildfires and invasive pests. Such problems only add to the list of resource management responsibilities.

Some forms of wildlife in the Park can cause problems for visitors. While skunks and raccoons do inhabit the Park, there are no recorded incidents of Park visitors suffering permanent physical or psychological damage. Rattlesnakes, which appear to flourish after the cessation of grazing can however, be a problem. Locals have theorized that the resultant longer grass causes a growth in the rodent population upon which the snakes feed. The Park has set out snake warning signs but these are sometimes stolen shortly after their installation. Yellowjacket populations seemed to have increased during the drought years. They can become pests in the picnic areas, especially where wet garbage and picnic trash accumulate. Traps which have been set out for them appear to be of little success.

3. Fire Protection

As noted earlier, fires occur with relative frequency throughout the Park particularly where the public has access along trails. The small hill in the golf course (the site of the banquet facility) burns approximately every three years.

As a safety precaution, in the vicinity of picnic areas, a ten foot wide fire break is flailed around all barbecue pits or structures. Also all old farm roads or jeep tracks (±8' wide) are bladed each year to enhance fire breaks and safe

vehicular access. A ten foot wide band is disced along all property boundaries (vegetation allowing) every year.

The Santa Clara County Park Department has not maintained an active grazing lease since 1979. Recently, the Park Department developed a grazing policy and now provides grazing licenses as opposed to leases. This allows for more control over grazing operations. The County may be open to new grazing permits should that be appropriate. Prior to 1979 grazing took place above the Buck Norred Ranch.

IBM has allowed grazing on their property in the past but discontinued the practice on the IBM ARC lands while grazing on IBM STL continues. Mr. Ray Dias, a Task Force member and facilities engineer for IBM ARC is working with environmental consultants to prepare a resource management plan for the two neighboring IBM facilities.

Santa Clara County has a policy of suppressing all fires. Any fire that would occur in the Park falls under the authority of the Santa Clara County Fire Marshall and the City of San Jose Fire Department. Fire fighting equipment currently used on fires within the study area include off road four wheel drive fire fighting trucks, a helitech crew dispersed by the California Division of Forestry, as well as fixed wing fire fighting airplanes (which drop fire retardant material). In the past fires in the study area have at times consumed up to 80 acres at a time costing nearly $70,000 to $80,000 in fire suppression costs. More recently, due to improved reaction time and response from the number of different fire fighting forces, park fires have typically been contained to 40 acres or less.

For the northern face of the Santa Teresa Range, the Los Alamitos Canal serves as an effective fire break for the residential developments in Santa Clara Valley. Structures that are most immediately vulnerable to fire in the study area include the Muriel Wright girls ranch, Buck Norred Ranch and the Joice Ranch structures. The Ohlone Trail was initially constructed as a fire break and has become an important established trail within Santa Teresa Park. Reseeding of burn areas within Santa Teresa Park has not been attempted in the past. The only reseeding of burned park area in the past occurred in the Pueblo area in order to discourage a particular path. Fires within the study area have most frequently occurred in the areas adjacent to the Joice Ranch and the golf course pond. While no fires of any magnitude have been reported recently in the southern Rossetto Canyon Area some have occurred on the Lagatutta property judging from ground evidence. If the Rossetto property were purchased and grazing eliminated, the resultant growth of grasslands and chapparal succession could increase the fire hazard for this facility as well.

4. Trail Maintenance

a. Limited funding and staffing has effected maintenance of the trails within Santa Teresa Park. Subsequently trail maintenance is limited to the use of a bulldozer or back hoe style tractor for major corrective maintenance of facilities and fire trails exclusively within the Park. Most trails (fire roads) are bladed each year. However, this method of maintenance has obvious limitations for narrow pedestrian trails. In the late 1970's a program which provided workers and maintenance people from County Correctional Institutions was very effective in keeping up a regular maintenance program for the Park's facilities.

The Weekend Work Program (WWP) provides about 10 workers per weekend for seasonal help in trail maintenance, pruning and trimming

of vegetation along trails and maintenance of the Pueblo picnic area. One shortcoming of this maintenance system was that of transportation to and from the correctional institution and rest area shelters for the helpers. Unfortunately, due to the limited records hourly commitments pertaining to park maintenance are only those for corrective efforts to refine and maintain trails and facilities. The rough estimate of these hours are 100 hours per year for corrective maintenance, 20 hours per year for pruning, and mowing around trails and wires.

The large equipment used to maintain trails and to provide routine grading needs, such as the bulldozer/scraper, must be transported Central Yard (5 to 8 miles away). The mobilization of this equipment requires many hours which detracts from time that could be spent on actual maintenance consuming many inefficient staff hours.

b. The Muriel Wright Residential Center has been used as temporary storage for maintenance equipment on occasion, which cuts down equipment transportation time.

c. In the past the County has performed contour ditching and hayspread on slopes for erosion control of reclaimed areas.

d. The Park uses a commercial weed killer along roads and trails.

G. REVENUE GENERATION

Santa Teresa Park currently lacks the type of recreation facilities which could potentially generate revenue to offset the cost of staffing and maintenance. In fact, revenue generation, as with other park districts in the Bay Area, indicates that few bay area parks operate "in the black", (i.e., generated revenue equaling or exceeding the financial costs of maintenance and staffing). Those parks with water oriented facilities appear to come closest in covering these costs. The major on-going revenue generating uses within Santa Teresa Park are associated with the leases of the golf course and the Coyote Peak transmitter towers. Additional revenue is generated through special use permit fees generated at the Pueblo Group Picnic area. The lease revenue generated by the golf course is determined by an agreement which runs through the year 2006. The lease entails an ascending fee schedule which in fiscal year 1990 contributed approximately $260,630 to the County Park general fund. The Pueblo area provides a group picnic area which requires a special use permit for reservations. The fees are approximately $30.00 per permit with a $100 refundable clean up deposit.

The higher elevations of the Park, specifically at Coyote Peak, afford local radio and television stations an optimal location for transmitter towers. Local radio stations KSJO, the San Jose State University radio station SJSU and Heritage Cablevision Company all utilize Coyote Peak and pay a monthly fee of approximately $420 each. City of San Jose use of the site is predicated upon the exchange of like facilities for County Communication facilities within City sites. The Black Mountain Bowmans Association lease an area at the extreme southeast corner of the Park for an archery range. The Bowman's good will lease agreement with the County is limited to a $1 per year fee. The lease term is currently on a month to month basis.

REVENUE GENERATION COMPARISON

	EBRPD				SC COUNTY				SAN MATEO			
	A	B	C	D	A	B	C	D	A	B	C	D
GENERAL ATTENDANCE			46,932				46,745					
CAMPING	night	$10							night	$8		
Family Tent Site												
Dog Fee	day	$1										
Organized Camping	P	$1							night	$100		7,816
Backpack Camping	P	$4										
Camporees					E	$25	350	$25				
Horse Camping	P	$6			P	$4						
DAY USE												
Pre-paid Group Fee					E	$37-262						
Picnic							37,730				94,710	
Court Play (volleyball, horseshoes, etc)	E	$1										
Hiking/Jogging							9,465				38,785	
Mountain Bikes											4,780	
Day Camp											8,085	
Fishing Pond							4,840					
EQUESTRIAN USE					P		14,340					
Boarding Stalls	month	$245										
Pack Trips	hour(s)	$25										
Pony Rides	H	$10-55										

A = METHOD OF CHARGING (per Person, per Car, by Event, per Hour)
B = AMOUNT CHARGED
C = ATTENDANCE
D = REVENUE

EBRPD: County wide
SC County: Santa Teresa, based on 1980 statistics
San Mateo: San Bruno Mountain and Huddard Park

FIG 21

	EBRPD				SC COUNTY				SAN MATEO			
	A	B	C	D	A	B	C	D	A	B	C	D
SOCIAL HALLS												
Room Rental for Parties	5hr.	$500										
Wedding Sites	E	$200										
OTHER SERVICES												
Kite Fly					E		430	$75				
Scavenger Hunts					E		40	$25				
Special Day Use Programs (ROTC, etc)					E		992	$90				
Public Safety Officer Rental	H	$20										
Commercial Photography Permit	Day	$200							Day	$50		
Amphi-theater	E	$40										
NON-USE RELATED INCOME												
Annual Fees (county and non-county residents)												
Memberships												
Park Entrance Fee (per head, per car)	C	$2							C	$3		
Parking Fee	C	$3					35,800					

A = METHOD OF CHARGING (per Person, per Car, by Event, per Hour)
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FIG 21

H. PARK BOUNDARIES

The current boundaries of the Park include a great deal less area than is indicated in the County Master Plan for potential park expansion. This plan implies the potential for expansion to logical limiting boundaries primarily to the west and to a lesser extent the north and south from its current property boundaries. In these areas, there are a number of parcels (many of which are privately owned) which could make logical extensions for the Park were they to be included. These are not necessarily candidates for purchase and the County Parks Department has initiated negotiations with only a selected few. In recent months such formal negotiations has resulted in the acquisition of the Buck Norred Ranch and the Wilets property. The maps drawn for this report were prepared after the Wilets Property had been included but before purchase of the Norred Ranch.

To the north, the County Parks Department has considered in the past the Los Alamitos Canal as a logical Park boundary. However, because of ownerships and resource values identified in this report, it appears that extension of the Park boundaries to the south limits of (existing residential parcels or lands within the City limits of San Jose and those still within or directly south of the City boundary) are logical areas for potential Park expansion. A list of these areas and the rationale for expansion follows.

1. Hunter Ranch

   The attractions of the Hunter Property, including prehistoric and wildlife resources, the historic Santa Teresa Mine and the potential for an equestrian center, make this a logical expansion area. The owners and the representatives of the County are not currently negotiating for this property.

2. Century Oaks Park and Strip

   Century Oaks Park is an undeveloped knob of land directly adjacent to the entrance to the Hunter Ranch off Cottle Road. It is connected with a long strip of land owned by the City or the Santa Clara Valley Water District land extending westward. The property abutts the slopes between private residential properties and the Los Alamitos Canal. In the event that the County might acquire all or portions of the Hunter Ranch (either through fee purchase or dedication) master planning should be coordinated with Santa Clara Valley Water District and the City of San Jose.

3. Bernal Adobe Site (Ashford Properties)/Pyzak/Bonetti Parcels

   This is an area of about 13.04 acres, at the far northern edge of the Park just west of the Bernal Intermediate School. From a physical and a resource standpoint, this is a logical expansion area for the Park. The site is bordered on the west by Santa Teresa Springs and Manila Drive, to the east by San Ignacio Avenue, to the west by the Bernal Intermediate School, and to the north by Curie Drive. There are three parcels involved, all of which are all privately owned. There have been no formal contacts regarding acquisition or other forms of negotiation by the County. Acquisition would take place in the advent that the parcels become available. The area is relatively easily accessed from Santa Teresa Boulevard along Ignacio Avenue which is a collector street connecting more directly to Santa Teresa Boulevard than the other local residential feeder streets (which serve the Joice or Norred sites). The site is

   important from a historic point since it is the location of the original Rancho Santa Teresa Hacienda destroyed in 1980. It is also an area of important Native American burial sites where many artifacts have been found. These sites are

so rich in resources that it might be considered to have state-wide significance. The site is a designated County historic site as are the two adjacent houses (Pyzak and Bonetti). This site also includes the large oak (apparently associated with bull and bear fights of the Spanish colonial era) and two tall Fan Palms (which may have flanked the entrance to the Adobe in past times). These act as visual landmarks for blocks around and are typically associated with other historic sites in the Santa Clara Valley. There are two other structures on these properties, the Bonetti house (the Bonetti family no longer lives in this house) and the Pyzak house which is directly adjacent to the Bernal Adobe site. The Bonetti house sits on a rise overlooking the flat northern two-thirds of the site. Mr. Pyzak (along with others) hold access and water rights to the Springs. Santa Teresa Springs is within the County Park boundaries.

The flat terrain of these parcels would make limited parking and trail staging areas both feasible and economic. It is an area easily accessible to a proposed trail along the Los Alamitos Canal levee. There are interesting possibilities for the Pyzak and the Bonetti residences as both are on the County's historic structures list. This area would be appropriate either for an historic or archaeological museum or possibly a ranger station and operation center. Whether or not the houses are structurally sound is not known. Additionally, since some of the original vegetation may remain, the interesting possibility of restoration of historic gardens exists.

There is sufficient level area to provide for family picnic facilities and an informal play meadow which would also fit with the museum and trail head functions. Illustrated signage might be appropriate to highlight the considerable historic and prehistoric values of site. Reconstruction of the Bernal Adobe by a non-profit historical society is also a possibility that might be explored. If reconstruction of the Adobe is not feasible the Pyzak residence, itself an historic structure, might be a satisfactory alternative. It could of course be developed into an interpretive locale as well as history museum.

There are options open to County Parks operation and maintenance that should be taken into consideration should public use of these parcels become feasible in the future.

a. The County could consider a joint effort with the City of San Jose in construction and/or operation of a limited picnic facility and/or play meadow on the flat portion of the site. There are no other significant city parks in the immediate vicinity so this might be an advantage for the City of San Jose. Physical construction in the area is problematic in any case because it is within a zone of high archaeological sensitivity (burial sites).

b. The resources described above could be developed by the State and the site turned into a state park or operated as a state historic monument either by the state or a recognized non-profit historical society.

According to County staff no offers have been made to any of these owners regarding purchase or dedication of property.

4. Gorin Property

This small parcel, currently in semi-rural use, with limited equestrian facilities, lies at the mouth of Fortini Canyon adjacent to the southern edge of the Rossetto property. It might become a useful area for staging and gateway functions if the Rossetto Ranch were purchased. There are no current negotiations between the owners of this parcel and the County.

At this writing the Park boundaries include the recently acquired 217 acre Wilets Property located south of the Pueblo picnic area. Directly west of this acquisition is the 187 acre Rossetto Property currently. The County is currently negotiating for acquisition of this important parcel with the current owners, Quicksilver Development Corporation. There are two IBM Corporation facilities adjacent to Santa Teresa Park. The ±678 acre Almaden Research Center (ARC), formally the Stiles Ranch, is sited above the Almaden Valley on the south facing slopes southwest of the Park and abutting the Rossetto Property. East of the Park is the IBM Santa Teresa Facility which is on a 966 acre parcel. These provide large natural open space foregrounds along the Parks south western and eastern boundaries which should be considered as future potential expansion areas or visual buffer zones for the Park.

At the center of the Park, the Lagatutta family holds a 44 acre parcel of grassland property. This property is characterized by serpentine outcroppings and a colorful array of native wildflowers. Mr. Lagatutta has access to this property via an easement (held in perpetuity) beginning at his property on Shillingsburg Road (in the Almaden Valley). The easement crosses the Wilets Property and is shared by Mr. Lagatutta, County Parks and Western Union Telegraph Company.

During the preparation of this report, the County concluded negotiations with Buck Norred for the purchase of his ranch on Heaton Moor Road. The maps in this document were drawn before the purchase. The 17 acre parcel (discussed in detail in the Recommendation Section) includes various equestrian stable and boarding facilities, group picnic facilities,and an old residence along with a variety of other buildings and structures. It has for a variety of reasons the potential for adding to the Park's recreational and revenue generating viability.