6 MT. DIABLO – A VALID MODEL THAT EBRPD IGNORES

On November 9, 1989 the State Park & Recreation Commission approved and published the park’s General Plan. According to Resolution 49-89 “This long range development plan was prepared in order to provide for optimum use and enjoyment of the unit as well as the protection of its quality.”

Mt. Diablo State Park, in Contra Costa County in northern California, is a unique 18,000 acre “island mountain” girdled by suburban development. Rising 3,849 feet above the neighboring lowlands, Mt. Diablo offers 360° views that, on clear days, can take in 35 counties and 200 miles.

As part of this plan to restore, protect and perpetuate natural and cultural resources in the park, the California Department of Parks and Recreation (DPR) made a well-informed decision to eliminate cattle grazing from Mt. Diablo State Park. The DPR took nearly 10 years to evaluate the pros and cons of cattle grazing before making the final decision. This evaluation effort consisted of scientific studies on long-term vegetational responses at grazed and ungrazed sites within the park as well as studying the effects of grazing on the standing biomass and the reductions of fire fuels.

DPR records show that as early as 1979, cattle grazing was identified by this agency as an activity that was harmful to the environment and inconsistent with its objectives. Just as the EBRPD declares its primary vision to be one of preservation, the California State Park System (CSPS) had a strong dedication to the preservation of natural values. The goals and
objectives of the EBRPD are very similar to those identified by DPR, so it is very baffling why there is such a disparity in the implementation of preservation philosophies. The manner in which the DPR made these critical decisions makes complete sense and is truly based upon science and a comprehensive EIR, whereas the methods of the GRTF and the EBRPD lack any substance and are void of any valid environmental assessment.

On September 5, 1979 Mr. Herbert Rhodes, then Director of the Department of Parks and Recreation for the CSPS sent a letter to Richard C. Trudeau, General Manager of the EBRPD. This letter succinctly states the CSPS position on the use of cattle grazing in its parks. The following is a brief excerpt from that letter (emphasis added by author on key points):

> Generally, we have a different situation in relation to grazing in the State Park System than do you in the Regional Parks. Under our law, grazing is expressly forbidden as a commercial activity unless there is a clear resource management function involved. Generally, we find that grazing is inconsistent with our objectives in those units of the State Park System which have a strong dedication to the preservation of natural values for the following reasons:

> It is impossible to contemplate the achievement of natural conditions on grasslands under grazing, since grazing by cattle tends to discourage the native species and to encourage introduced exotics. This inescapable pattern is the factor which has produced our almost totally modified grasslands in California, where there are virtually no truly native grasslands remaining. Our management effort in a number of locations throughout the State is to achieve as close as possible a return to natural grassland conditions.

> Where oak woodlands are involved, grazing by cattle completely eliminates natural oak reproduction. The consequence, if grazing is continued over long periods, will be to eliminate the oaks from these ecosystems, as the old specimens fall out without viable reproduction.

> As to a strong role in the reduction of fire hazards, our experience has indicated that, generally, one does not achieve a meaningful reduction in fire hazard until serious overgrazing problems are experienced.

These statements by Mr. Rhodes are direct and to the point. Cattle grazing has negatively transformed California grasslands to their detriment which is completely contrary to the District’s position that cattle restore native grasses simply by their gnawing presence. This letter is clear evidence that the GRTF was ignoring pertinent data on the grazing issue from a public agency that has parklands within the geographical boundaries of the EBRPD. No reference was ever made to this historical data from Mt. Diablo State Park by any of the District staff or GRTF members in their final reports for obvious reasons.

The DPR prepared a series of Information Papers in 1987 that further documented the effects of cattle grazing on vegetation (Information Paper IV) and reducing fire hazards (Information Paper V). There was also Information Paper III which gave a History of Ranch Acquisitions and Agreements Regarding Grazing at Mt. Diablo State Park. This latter paper is referenced here only as it provides a historical reference on grazing relative to CEQA.
In 1983, land acquisition negotiations with certain landowners on Mt. Diablo were ongoing. During these negotiations a certain Blackhawk parcel was included in a grazing lease amendment which extended the lease out almost 7 years to December 31, 1990. The amendment was approved and signed on March 14, 1984 by the state park system. However, on April 20, 1984, Maurice Getty, Chief of Resource Protection Division, stated his objections to the amendment. Mr. Getty felt that the amendment allowed grazing in areas that had not been grazed for some time, and that this put the DPR in violation of CEQA. On July 11, 1984 the amendment was nullified by the State. Reasons for nullification were that the amendment “was entered into by the State contrary to the provisions of the California Environmental Quality Act”. This is significant because the EBRPD introduced cattle into SVOS-N after grazing had been stopped for at least 10 years, yet no CEQA was done. The District has never done a CEQA study for cattle grazing in any of its parks. It simply makes a proclamation of Negative Declaration which is always given with no scientific basis.

Also in 1984, Save Mt. Diablo (SMD) purchased the Soto Ranch (Crozier Property) using matching funds from the Federal Land and Water Conservation Fund. On April 1, 1985 the state park system granted a 2 year grazing lease to Louis Ginochio, lessee on the property at the time of acquisition. On June 12, 1985 SMD, major benefactor in the purchase, registered their objection to this 2 year lease, as they suggested no more than a 1 year lease. SMD’s major objection was related to the fact that land was being used for grazing. SMD stated that “the primary purpose of the acquisition was recreation and protection of resources and the lease must be consistent with these purposes.” This position was not represented by Seth Adams, SMD representative during the GRTF Review. Mr. Adams position was contrary and fully supported the EBRPD and their present grazing policy, although he indicated some improvements could be made to the program. Such a position was puzzling to those who were familiar with the preservation goals of SMD and their previous position on grazing.

Finally, Information Paper III states that “…Generally, livestock grazing is considered incompatible with accomplishing state park management objectives, and protection of natural resource values is a primary objective of park management.” Are such objectives any different than those stated more explicitly in the Master Plan 1997? The author thinks not. If anything, Master Plan 1997 elaborates in much greater detail what the District’s conservation and preservation objectives are in the context of the EBRPD founder’s vision.

In contrast to the EBRPD, which has neither conducted nor sponsored any studies on the impact of grazing in its parks, the CSPS conducted research on the impact of cattle grazing on vegetation and another study on the effectiveness of cattle grazing as a method to reduce fire hazards. The following two sections summarize the results of these studies.

**Mt. Diablo Vegetation Studies Contradict GRTF Conclusions**

Information Paper IV, Long-Term Vegetational Responses Documented in Grazed and Ungrazed Sites at Mount Diablo State Park researched how grazing affects vegetation of an area on two levels:

- **Seasonally** – with annual cycle of growth and removal by grazing
- **Cumulatively** – on a long-term basis through the alteration of species composition and overall distribution of the vegetation.
The analysis showed that there is a significant alteration in species composition associated with the grazed and ungrazed condition of the site. The data for this study was collected from 51 plots on both grazed and ungrazed sites. It should be noted that the vegetation at Mount Diablo reflects at least a century of grazing influence, regardless of the current status of use by livestock. Data collected from "ungrazed" areas records the potential on release from grazing, rather than results from native grasslands in truly pristine condition.

The study compared the herbaceous component of four categories of vegetation:

- **Grassland** – species composition was very similar in grazed and ungrazed sites; the same species are represented in both groups, with a slight shift toward *Avena fatua* (wild oats) in the ungrazed sites. The occurrence of native perennial grasses (primarily *Poa scabrella* (pine bluegrass), *Melica californica* (California melic), *Stipa pulchra* (purple needlegrass), and *Sitanion hystrix* (squirrel tail)) was less than 2% average cover for all species combined on both grazed and ungrazed sites.

- **Blue Oak Woodland (25-50% Canopy)** – this category had similar species composition to that of the Grassland category.

- **Blue Oak Woodland (50-75% Canopy)** – in this category the annual species stay much the same, although the ungrazed sites had 15.5% average cover of native perennial grass species (primarily *Festuca californica* (California fescue), *Agrostis diegoensis* (thinggrass), and *Elymus glaucus* (blue wild rye)), while the grazed sites had only 0.8% average total cover of native perennial grass species.

- **Live Oak Forest** – this category is even more pronounced than the previous. There was a general reduction in total cover of virtually every alien annual grass recorded in ungrazed plots (16% vs. 47% in the grazed plots) and a concurrent increase in native perennial grass species (primarily *Agrostis diegoensis* and *Elymus glaucus*). Occurrence of native perennial grass species in the ungrazed plots average 31% of total cover compared with only 8.2% average combined cover in the grazed plots.

**Vegetation Changes Due To Release from Grazing**

Researchers noted that changes in vegetation that have been reported to occur on other sites in California upon release from grazing, such as decrease in wildflower displays and encroachment of brush into grasslands, have not been documented on Mount Diablo.

Data from plots in grazed and ungrazed grassland indicates that the presence of forbs (herbaceous broad-leaf species) is virtually the same, averaging 19.8% on the ungrazed vs. 18.8% on the grazed sites. The same is true for the woodland understories; there is tremendous variation in the amount of forbs present, but the difference between grazed and ungrazed sites is not significant.

Observations on the occurrence of woody species in the grassland and woodland understories indicate that brush encroachment is not taking place at Mount Diablo. Woody species are absent from both grazed and ungrazed grasslands; and although
present in both blue oak and live oak understory in varying amounts (primarily *Toxicodendron diversilobium* (poison oak) and *Symphoricarpos mollis* (snowberry)), there is no significant difference between the grazed and ungrazed sites. *Baccharis pilularis* (coyote bush), a common agent of brush encroachment on other sites, was found on only one of the 51 sites sampled.

**Loss of Oak Regeneration**

Study results indicated that there is no doubt grazing is a factor in the failure of several species of California oaks to reproduce and recruit new members into the population. It has also become clear that grazing by livestock is only one of many factors (fire history, rodents, understory composition, canopy effect, and climatological cycles, to name a few) that contribute to the problem; and that the significance of livestock grazing is still being evaluated and most likely is highly site-specific.

**Grazing Release Not Significant in Plant Overproduction**

Overall, site-specific data collected at Mount Diablo suggests that with release from grazing there has been (and can be expected in the future) a significant increase in native perennial grass species in the understory of the live oak forest and increasingly in the blue oak woodland correlated with increasing woody canopy cover. It is unlikely that these trends will be observed in the more open woodland and grassland types without some sort of active management; however, spring burning of grasslands has been shown (inferentially) to promote native perennial grass species at the expense of introduced annuals [*Taylor & Davilla, 1986*]. Further, these data suggest that release from grazing does not significantly increase woody species (including, unfortunately, oaks) nor decrease forbs (wildflowers) from the grasslands or woodland understories.

**Standing Biomass Studies and Fire Hazard Reduction**

*Information Paper V, Grazing And Its Effect On Standing Biomass And Fire Hazard Reduction* addresses the effect of the annual cycle of production and removal of biomass, and how that relates to fire hazard.

The paper indicated that the relative hazard of different fuels is determined by a number of factors:

- the amount of fuels on site
- their arrangement
- topographic substrate
- presence of volatile substances
- fuel moisture
- potential for ignition.

Research was conducted on a variety of issues relating to the degree of fire hazard reduction being achieved on Mt. Diablo through grazing. These issues are discussed in detail below.

**Conflicting Grazing Regime Requirements**

*Given the climactic conditions in the SF Bay Area, grazing regimes that are effective in reducing standing biomass are inconsistent with accepted range management...*
practices for minimum Residual Dry Matter standards. Currently accepted range management practices dictate leaving a minimum of 800-1200 lbs/acre of mulch on the ground in the annual grass type for soil protection and to maximize forage production for the following year [Clawson, et al., 1982].

This paper addressed year-round vs. rotational grazing and the effects they have on effectively reducing standing fuels in the park. Year-round grazing operations are problematic in that biomass reduction occurs incrementally throughout the year, and also because new forage production in the fall is often unable to keep pace with the foraging demands of grazing animals. Therefore, predicting when the residue minimum will be reached (and preventing residues from falling below the minimum) is more difficult within the structure of a year-round grazing regime. Under such a regime, the minimal mulch residue is thus reached between December and March during normal years. Because biomass peaks by April, and year-long grazing reduces this only incrementally each month, the lowest levels of standing fuels occur at the time of year when fire hazard is not an issue; conversely, during the most hazardous period of the year (June through September), standing fuels are more than half of the maximum.

In a rotational regime, only those pastures that are included in the rotation prior to the onset of fire season have a reduction in fuel before the most critical time of year arrives. At Mount Diablo State Park, during 1986, the grazing system used was neither strictly year-round nor truly rotational.

Conclusions drawn from this study are:

- Reduction of the standing fuels to effectively reduce fire hazard was not happening (or necessarily desirable).
- To reduce the fire hazard it would necessitate:
  a) Utilization of all the forage allotted for livestock use before the first of June in all pastures, leaving no forage available for the summer and fall
  b) Utilization of forage below the level that is considered minimal for adequate soil protection (i.e., overuse).

Grazing Animal Distribution

The distribution of grazing animals is another critical factor in the effectiveness of reducing standing fuels. Overall, use by cattle is spotty, with large areas heavily utilized while other areas remain virtually unused. Fire behavior is greatly influenced by slope; rate of spread is increased in proportion to increasing slope. Analysis of biomass sampling done as part of a survey of the range resources at Mount Diablo [Hillyard & Bartolome, 1982] indicates that grazing by livestock is effective in reducing standing biomass only on slopes less than 20% (Figure 8). The steepest slopes, those over 50%, are not considered suitable for use by livestock, and theoretically should not be used at all. Fence lines create another problem; they effectively create a strip where standing fuels are not touched immediately adjacent to roadways, the most common ignition site in the park.
Fuel Loading vs. Flammability and RDM Standards

Under a regime consistent with accepted range management practices, grazing can reduce the amount of standing fuel by 50 to 80%. This appears significant (in spite of the problems pointed out in relation to time of year that this reduction actually occurs) until compared with fuel loading and flammability of adjacent vegetation types, particularly chaparral and coastal sage scrub. The reduction in grasslands and woodland understories from one or two tons per acre to a half ton per acre under a grazing regime is miniscule when compared with 10 to 12 tons per acre typical of coastal sage scrub, or the 15 to 25 tons per acre in chaparral. Coastal sage scrub, in addition, is composed of a high proportion of species containing volatile oils, increasing flammability. With or without grazing, grassland is already a low-fuel type and, although it has considerable ignition potential, factors contributing to ease of control (expected fire intensity, flame length, etc.) are much more severe in other fuel types.

Rate of Fire Spread and RDM Standards

The relatively low fuel loads on grassland aside, grasslands are considered a significant fire hazard because of ignition potential and the speed that fires can burn through them and thus spread into brush and woodland types that are much more difficult and costly to control. Further, it is considered that grazing at least incrementally decreases the height of grass and thus reduces the rate of fire spread. This is not always true, particularly in grasslands where acceptable levels of residue (800-1200 lbs/acre) are left. Fuel modeling, as a reliable tool used in predicting fire behavior, does not support the assumption that a reduction in grass height results in a reduction in rate of fire spread.

Static fuel models developed by the U.S. Forest Service at their Northern Forest Fire Laboratory (NFFL) for use in predicting fire behavior for assistance in planning suppression activities (USFS, 1981) were used to develop estimates of rate of spread and fire intensity for the most common fuel types at Mount Diablo. These models indicate that rate of spread between grazed (Fuel Model 1) and ungrazed (Fuel Model 3) grasslands is identical and faster than the rate of spread through oak woodland (Fuel Model 2), chaparral (Fuel Model 4), or coastal sage scrub (Fuel Model 4).

Fuel Moisture Cycle

Fuel moisture is another factor in determining hazard, especially as it affects probability of ignition. The annual grasses that characterize the grasslands at Mount Diablo are especially productive under a grazing regime and highly flammable once they have dried out. Release from grazing would, over the long term, tend to promote perennial grass species in the understories of the live oak forest and in most of the blue oak woodland on the mountain. In addition to remaining green well into the summer season, native perennial grasses tend to produce much less on a yearly basis than annuals, resulting in less total fuel loading.
Mt. Diablo Studies – General Conclusions
The research done by the CSPS concluded that the analysis of the standing biomass and management of the ranching operation at Mount Diablo State Park was not effective in reducing fuel hazards in the park. There were numerous contributing factors, some which are problematic because they present conflicting requirements when grazing is done, according accepted range management practices necessary to protect the soil.

Fire behavior models indicate that the grassland and woodland understories remain the lowest hazard types in the park, even in an ungrazed condition.

Restoration of the grasslands and woodland understories to native perennial species carries more of a promise of reducing fire hazard in the state park, by reducing fuel loading and decreasing flammability.

Although it has been suggested that the grazing agreements at Mount Diablo State Park are providing a dual function of hazard reduction as well as providing interpretive opportunities, monitoring of actual use patterns does not substantiate that. The current grazing regime is not effective in reducing fuels at the appropriate time of year; nor does it address those problem areas that have an increased hazard such as steep slopes, roadsides, areas adjacent to neighboring houses, or high use areas. For these reasons, the Department (DPR) does not consider grazing as an effective fire prevention tool at Mount Diablo State Park.

Mt. Diablo General Plan – Grazing Related Data
The General Plan provides numerous reasons why cattle grazing was eliminated from the park (except for a 600 acre interpretive ranch). The only commercial grazing that is still done on Mt. Diablo is on EBRPD lands. The following is a list of identified impacts. These are extractions directly from the General Plan.

Water Quality
Bacterial contamination in and around water sources occurs as a result of livestock concentrating in these areas during the dry season. (P.24)

Bacterial contamination of surface waters from livestock is a potential public health concern when cattle are in or near the state park, especially in the dry season, when cattle tend to congregate near waterways. Monitoring of pollution shall be included in any park management or interpretive plan that uses livestock in the state park where water features are affected or used to accommodate grazing. Previously and currently used hydrologic resources such as springs, creeks, and ponds that have been artificially modified and are no longer necessary for such use under the plan shall be restored to natural conditions. (P.48)

Large Stands of Native Perennial Grasses Not Present
Due to widespread livestock grazing and prolonged drought resulting in introduction and establishment of non-native species, large stands of native perennial grassland are not found. Perennial species [that are found in the park] occur primarily in areas which are not grazed. (P.28)
Grasslands and Woodland Understory – Loss of Native Grasses
Extensive changes in the grassland and woodland understory have occurred as a result of long-term grazing, fire suppression and introduction of non-native species. Virtually all of the grassland and grass understory, approximately two-thirds (10,000+ acres) of the park, have been affected. The native grasslands and grass understories have largely been converted to non-native species. (P.53)

Proliferation of Exotic Plant Species
Ninety-two species of exotic plants are reported in Mount Diablo State Park. Many of these are associated with grazed areas. (P.30)

Loss of Native Fauna
Historical influences on the native fauna in the unit include Euro American activities of hunting, which extirpated animals such as tule elk and possibly pronghorn, California grizzly bear (now extinct): predator and pest control and introduction of non-indigenous animals. Other influences include disturbances such as grazing, mining, fire exclusion, and development. (P.32)

Loss of Esthetic Value
Other negative features include graffiti carved into the sandstone outcrops and gullies, and other erosional features resulting from road construction and concentrated livestock activity. Cross-fencing, watering tanks and cattle droppings detract from natural features along hiking trails. (P.42)

Erosion
Erosion is also a result of past and present land uses, including fire suppression activities, mining, ranching, and park use. (P.50)

Potential sources of sedimentation include erosion following wildfire, disturbance associated with roads, concentrated public use, livestock grazing, and susceptible types of soil. (P.51)

Riparian Areas Damaged
In Mt. Diablo State Park, concentrated visitor use and cattle grazing in riparian zones have resulted in vegetation trampling, soil erosion and compaction, and water pollution. (P.52)

Low Rate of Oak Regeneration
Through fire suppression, grazing pressures, rodent proliferation, and habitat modification, oak trees in California and in the unit have experienced a very low rate of natural regeneration. (P.53)

Fire Prevention and Suppression
Wildfire can be a threat to natural resources, facilities, and human life and property. Because conventional fire control facilities and procedures can result in more serious and long-lasting impact on park resources than the wildfire itself, development of special standards and procedures applicable to the park environment is important.
Undesirable effects of suppression activities can be avoided by using a planned program of modified fire suppression, dividing the park into compartments bordered by existing natural and artificial firebreaks. (P.55)

Planning a fuel modification zone, part of a wildfire pre-suppression action, can substantially reduce the threat and spread of wildfire. This method of fire protection is being successfully employed in some State Park System units with fuel types and conditions that are very similar to Mt. Diablo State Park. Preparation of the zones may include techniques such as mowing, discing, and plowing of grassland fuels, and pruning and thinning of brushlands to accomplish fuel reduction in strips that would prevent the spread of wildfire. The plan will also prescribe details such as the width of zones, fuel loading and composition reductions, frequency of maintenance; and make recommendations for cooperative measures with adjacent landowners, such as buffer zones of non-combustible plant material. (P.56)

Replacement of native perennial bunchgrasses with introduced annual species, a situation which is perpetuated by livestock grazing, has increased fuel loading and fire hazard in both grassland and woodland understory. The native perennial species that once dominated California’s grasslands produce much less on a yearly basis than annuals, and remain green well into the summer season. The annual grasses that now characterize these grasslands are especially productive under a grazing regime, and highly flammable once they have dried out. Because biomass production peaks by April, and yearlong grazing reduces this only incrementally each month, the standing crop reaches its lowest level in November or December, long after the season of highest fire danger has passed. In addition, grazing use is spotty, with large areas of fuel virtually untouched, while equally large areas are heavily used. Due to the excessive level of grazing necessary to achieve uniform fuel reduction, which would need to occur early in the season to be effective, grazing cannot be relied on as a management tool for reduction of fire hazard. (P.56)

Fire hazard abatement shall not be considered adequate justification for grazing of livestock. (P.57)

Unusually High Ground Squirrel Population
Unnaturally high densities of California ground squirrels present potential threats of habitat degradation, cause costly structural damage to facilities, and can result in disease outbreaks (primarily sylvatic plague). Studies and experience indicate that ground squirrels often thrive in areas where natural habitat conditions have been modified by uses that result in removal or substantial reduction of ground cover [cattle grazing for example]. (P.58)

Mt. Diablo General Plan – Grazing Impact on Ecological Values
State Park System policy and philosophy, and enabling legislation, mandate that state parks be managed by the department with a primary purpose of restoring, protecting, and maintaining native environmental complexes and indigenous flora and fauna. While livestock grazing is an appropriate use of private land, and of public lands managed for multiple commodity and recreational uses, it is generally incompatible with state park
management objectives. State park resources are managed for their preservation and public enjoyment, and not for their commercial use.

Grazing by livestock on Mount Diablo has resulted in changes to the natural, physical, and esthetic environment; these changes have affected the resources and values the department is charged with protecting and interpreting for public benefit.

**Proliferation of Exotic Plant Species**
Historically, grazing pressure, combined with drought, fire suppression, and introduction of weedy exotic species, fostered many changes in the composition and structure of the natural plant communities. In the grasslands, native perennial bunchgrasses have been replaced with introduced annual species. Other changes are due to the habits of grazing animals: livestock tend to congregate in areas under trees and around water sources, creating a favorable seedbed for undesirable exotic plant species; and livestock seasonally browse oak seedlings, preventing recruitment into the oak populations.

**Forage Competition and Proliferation of Ground Squirrels**
Livestock can compete with native ungulate populations directly by forage use. Livestock grazing creates conditions favorable to proliferation of ground squirrels, while other rodent populations may be reduced through more vulnerability to predation.

**Water Pollution**
Livestock can pollute surface waters and break down streambanks; reducing water quality and adversely affecting habitat for aquatic organisms.

**Soil Compaction and Oak Root Fungus**
By compacting the soil, livestock reduce infiltration of precipitation, which reduces the amount of water available to the vegetation, and contributes to excessive runoff, accelerated erosion, and subsequent sedimentation. Soil compaction due to conegregation of livestock under the oak trees, particularly valley oaks, increases susceptibility of the trees to oak root fungus.

Livestock use in the unit has resulted in soil displacement and compaction. Use of the steeper slopes in the unit has resulted in "terracing" across the slopes, creating parallel bands of impervious, compacted soil, with limited vegetative cover. In areas of heavy clay soils adjacent to lower Mitchell and Donner Creeks, and southwest of Pine Ridge, livestock use in winter, when soils are saturated and residual mulch levels are low, has resulted in compaction, loss of infiltration, and increased runoff.

**Range Improvements Detract From Park Aesthetics**
The presence of a grazing operation has also altered the esthetic and recreational values of the unit. Range improvements, such as fencing and development of water for livestock use with dams and springboxes, alter the natural landscape.

In several areas, springs and seeps have been altered, and enclosed in concrete tanks. The esthetic qualities of the open landscape and water resources have been reduced significantly by cross-fencing and stock watering structures.
Cattle Are Deterrent to Park Visitor's Entry and Enjoyment
Fencing and the presence of cattle can inhibit recreational use, providing a deterrent to park visitors' entry into and use of a grazed area. Waste products and the attendant insects can provide an unpleasant environment for recreationists. Cattle, especially in the wet season, damage hiking trails, and often create their own trails.

Degradation and Elimination of Riparian Flora
Use of the woodlands and riparian areas is significant year-round, but is particularly heavy during the summer months, when these are the only areas where green forage is available. Access by livestock to riparian areas in Mitchell, Donner, Curry, and Pine Canyons has eliminated the multilayered community structure typical of riparian vegetation, through browsing on seedlings and trampling of existing vegetation. Unique and fragile flora around many of the springs have been eliminated or significantly degraded by impoundment or containment in springboxes. Those springs not developed in this fashion but still subject to livestock use have been also degraded by trampling. Browsing of oak seedlings has resulted in unhealthy stand structure in the oaks, with a predominance of older size classes.

Mt. Diablo General Plan – Environmental Impact Report (EIR)
The General Plan (GP) contains an Environmental Impact Element (EIE) that predicts the environmental effects that would result from implementation of the GP. The EIE in conjunction with the other elements of the GP comprise a focused EIR per CEQA guidelines. The remainder of this section highlights grazing related impacts and comments from the EIE.

Soil Erosion
Impact: Cattle-induced erosion (from trampled streambanks and steep and terraced cattle trails) will decline in those areas taken out of grazing.

Proposed Mitigation: Keeping disruption of soil and vegetation to a minimum.

Hydrology – General Water Quality
Impacts: Surface water will continue to be fecally contaminated by humans and animals, especially livestock.

Proposed Mitigation: Monitoring of bacterial pollution. Fencing springs and natural streams from livestock.

Vegetation
Riparian and phreatic vegetation is poorly developed or heavily disturbed at springs and stream courses in many parts of the park because of cattle impacts. Oak regeneration in the park has been found to be poor. This problem may also be caused in part by cattle.

The Department of Parks and Recreation considers commercial cattle grazing generally incompatible with its mission to protect natural environments.

Wildlife Habitat
Impact: On the favorable side, the vegetation management actions proposed in the Resource Element (reduction of cattle grazing, systematic prescribed burning,
management for oak regeneration, and native grassland restoration) should improve wildlife habitat. On balance, the actions proposed in the General Plan should improve conditions for most wildlife populations in the park.

Sierra Club Resolutions on Grazing Leases at Mt. Diablo

During the period of land acquisitions and environmental studies at Mt. Diablo concerned environmental groups like the Sierra Club were active in monitoring ongoing assessments and issues relating to cattle grazing in the park. The following resolutions were drafted by the Sierra Club in response to grazing related events at Mt. Diablo.

84.05.11 GRAZING IN MT. DIABLO STATE PARK

WHEREAS, the Sierra Club is concerned about the impact of grazing on state parks, including impacts on the native vegetation, rare plants, recreational experience of visitors, public health, and the exploitation of public parks for private profit;

WHEREAS, grazing on Mt. Diablo has recently been expanded with a new lease, without public review, without an Environmental Impact Report, without a General Plan for the park, and without adequate biological management of the park resources;

WHEREAS, the lease for grazing on Mt. Diablo extends grazing to future parcels of parkland purchased for additions to the park;

RESOLVED, the Sierra Club San Francisco Bay Chapter urges the state Department of Parks and Recreation to rescind the current grazing lease;

RESOLVED, the Sierra Club San Francisco Bay Chapter requests the services of an attorney to draft a letter pointing out the illegal nature of the grazing lease process, and authorizes up to $200 for such legal services.

2/86-6 GRAZING ON MT. DIABLO

WHEREAS, grazing is antithetical to state park values of encouraging the regeneration of native species;

WHEREAS, grazing is unsightly and detracts from the naturalness of a state park;

WHEREAS, grazing leases were expanded on Mt. Diablo without the required preparation of an EIR;

WHEREAS, there is merit to the idea of a demonstration cattle ranch on Mt. Diablo but not to the extent that most grasslands in the park are grazed;

WHEREAS, the demonstration ranch was originally 1,800 acres;

WHEREAS, the demonstration ranch is presently grazing over 5,000 acres in the park;

WHEREAS, a general plan is being prepared for Mt. Diablo State Park;

THEREFORE, MSC that the San Francisco Bay Chapter of the Sierra Club resolves that the general plan for Mt. Diablo State Park should limit grazing for the demonstration ranch to the original 1,800 acres of the ranch.