BOARD TRANSMITTAL

Prepared by David F. Eakin, Deputy Director, Park Operations
Prepared by Michael J. Bomberger, Assoc. Real Estate Agent
Reviewed by Peter Ng, Fiscal Officer
Submitted by Douglas J. Gaynor, Director, Parks and Recreation

Endorsed by Parks and Recreation Commission April 1, 1992

TO: Sally R. Reed, County Executive
FROM: Karen I. Foss, Director, Public Services Agency
SUBJECT: ADOPTION OF PARKLAND RANGE MANAGEMENT POLICY FOR SANTA CLARA COUNTY PARKS. JULY 21, 1992 AGENDA
DATE: June 5, 1992

RECOMMENDED ACTION

Adopt the "Parkland Range Management Policy" and "Grazing License" as recommended jointly by the Department of Parks and Recreation and the Range Management Task Force.

Board of Supervisors: Michael M. Honda, Zoe Lofgren, Ron Gonzales, Rod Diridon, Dianne McKenna
County Executive: Sally R. Reed
FISCAL IMPLICATIONS

This program will not impact the General Fund. The Park Charter funds for this program will come from fund # 0039.

Currently, annual revenues from grazing are $20,000 at Ed Levin, $2,100 at Field Sports Park and $41,200 at Grant Ranch. Under this proposed program, net revenues to the County will drop substantially as the costs of environmental reviews rise, license administration and monitoring rise, as do the costs of fencing and other environmental protection measures.

Precise estimates cannot be made until site management and environmental plans have been reviewed and license agreements have been negotiated. Nevertheless, the Department estimates that if this policy is adopted by the Board, and if grazing is a continuing element of the parkland management programs at Ed Levin and Grant Ranch, the program will at least break even and may in fact provide a net positive return to the County, after all revenues and costs to the Department are evaluated.

NOTE: This recommended policy views grazing primarily as a parkland management tool - not as a revenue source. Therefore, even if the program were a net cost to the County, this still might be the most cost-effective means to accomplish County parkland management objectives (fuel hazard reduction, wildlife habitat protection and enhancement, recreation uses, and so on).

BACKGROUND/REASONS FOR RECOMMENDATION

The Department has permitted grazing under lease agreements at Ed Levin County Park (since 1978), Grant Ranch (since 1979), Field Sports Park (since 1989) and Calero (until 1986). During this time concerns have arisen as to the possible adverse effects of grazing on the parklands, especially to riparian habitats and other natural plant and wildlife communities. These concerns have escalated during the recent five years of drought, as the grazed areas have become more and more barren in the summer and the parklands have shown the strain of grazing pressure under these dry conditions. As a result, in 1987 the County Executive directed staff to fully investigate the problem, evaluate alternatives and prepare a range management policy.

To accomplish this, the Department established an advisory citizen-staff task force in 1988. This committee first met May 2, 1988, then intermittently during the subsequent four year period.

This recommendation also reflects input received at two public workshops at the Morgan Hill and Milpitas libraries and at a joint workshop of the Parks and Recreation Commission and Range Management Task Force on 2/5/92 and the Park and Recreation Commission meetings of March 4 and April 1, 1992.
The recommendation consists of a policy statement, "SANTA CLARA COUNTY PARKLAND RANGE MANAGEMENT POLICY" (Exhibit 1) and a new "PARKLAND GRAZING LICENSE" (Exhibit 2). The license agreement would be administered as part of the newly Board-adopted "Lease Monitoring System" for Santa Clara County Parks. This general policy will also require that all C.E.Q.A. requirements be met for existing as well as proposed new parkland grazing programs. The minimum requirements are understood at this time to be an initial study and mitigated negative declaration.

A more comprehensive background report has also been prepared: "AN OVERVIEW OF GRAZING ISSUES IN SANTA CLARA COUNTY PARKS AND OTHER PUBLIC AGENCIES". (Exhibit 3).

CONSEQUENCES OF NEGATIVE ACTION

The Department of Parks and Recreation will continue to administer the grazing program under current lease agreements, with Department operational guidelines rather than a Board-adopted policy for grazing.

STEPS FOLLOWING APPROVAL

Approved copies of this transmittal will be forwarded by the Clerk of the Board to PSA Administration and the Parks and Recreation Department.
Exhibit 1

SANTA CLARA COUNTY PARKLAND RANGE MANAGEMENT POLICY

1. The Department of Parks and Recreation is hereby authorized to administer a program of cattle grazing at designated parklands, following Board adopted policy designed to protect, conserve, and enhance the natural resources of the parklands and to promote public recreational opportunities.

2. The primary land use objectives for each given parkland must govern the decision whether and how to best employ a grazing program.

Land management objectives include the following, in priority order:

   a. Provide visitor access and recreational opportunities.
   b. Provide for the safety of park users.
   c. Protect, conserve, enhance natural plant communities.
   d. Minimize fire hazards to parklands and private property by managing vegetative fuels.
   e. Rehabilitate degraded vegetation and wildlife habitat.
   f. Establish cooperative relationships with adjacent property owners.

3. All grazing by domestic stock on any parklands shall be managed so as to maintain the quality of the soil, water, vegetation, and wildlife. The following specific goals and commitments will guide the program:

   a. Each site shall have a management plan (and/or E.I.R. as required by law) which describes the natural resources present and the specific goals, techniques, and monitoring programs used to preserve and enhance them.

   b. The plan shall provide sufficient detail on management techniques to support their use in accomplishing the stated goals. For example, a grazing plan must provide information and justification for stocking rate, spatial and seasonal patterns of use, and type of livestock.

   c. The appropriate vegetation management technique(s) should be selected after considering a variety of options including: no action, prescribed fire, mowing, integrated pest management, herbicides, and grazing. The Department may opt to provide for any, all, or none of the above in combination in a parkland.

   d. A monitoring program should include appropriate periodic measurements of plant and wildlife species composition, density, and frequency. (Other standards, like residual dry matter and stubble height, are useful operational tools but they do not examine the effects of management on the native vegetation).

   e. Special attention shall be given to the effects of grazing on rare plants and rare plant communities, oak regeneration, riparian and wetland areas, and native perennial grasslands, and threatened or endangered wildlife. Attention should also be given to the relationship between grazing and the spread of weedy exotics such as star thistle.

APPROVED BY THE BOARD OF SUPERVISORS OF SANTA CLARA COUNTY

DONALD M. RAINS, Clerk of the Board

Deputy Clerk
f. Seasonal rather than year-around grazing will be encouraged at parklands which experience heavy summer visitor use, so as to minimize use conflict. Seasonal grazing will be employed when year around programs cannot be sustained due to inadequate forage production, low water availability, or other environmental protection needs.

g. Normal weather and public use patterns and resultant forage production will be considered when authorizing grazing in a park. Stocking rates will be reviewed quarterly, adjusted as necessary.

h. A conservative approach will be used to determine parkland cattle stocking rates so as to avoid short-term resource damage or long-term range decline.

    Residual dry matter (RDM) standards are used to determine the amount of each year’s vegetative production that should remain on the ground at the end of the grazing season. This residue or mulch acts as a protective layer over the soil to guard against erosion, encourage nutrient recycling, and promote optimum conditions for plant growth. For Santa Clara County the acceptable RDM levels are:

    * Less than 30% slope: leave 600 lbs./acre
      Alert level: 800
    * 30 to 50% slope: leave 800 lbs./acre
      Alert level: 1000
    * Greater than 50% slope: leave 1000 lbs./acre
      Alert level: 1200

    These standards generally translate into 4 to 6 inches of standing vegetation at the end of the grazing season. Individual areas may have special circumstances that will require that additional mulch remain. Residue requirements will vary according to the need to promote soil stability, maintain plant productivity, enhance visual and recreational values, or protect wildlife habitat. Staff will be given clear, practical, visual monitoring guidelines which correlate with RDM requirements.

i. Natural resource management and recreation objectives will take precedence over revenue generation in establishing grazing programs.

j. Appropriate fencing will be required to ensure the protection of sensitive natural resource areas such as springs and ponds and riparian habitats. Such fencing may not inhibit wildlife or human access to water.

k. Rare species of plants and animals and their habitat will be identified, inventoried, and protected.

l. Archeological sites will be preserved in undisturbed condition.

m. Existing native plants and animals will be encouraged.

n. Soil erosion will be minimized to prevent soil loss or surface water sedimentation.

o. Agricultural landscapes and improvements will be maintained to good visual standards and not detract from positive visitor experience.

p. The spread of noxious non-native plant species will be minimized.
9. Public access to all park areas will be maintained.

4. License agreements will be formulated and administered with an intent to be non-adversarial and supportive of sound long-term working relationships between the Department of Parks and Recreation and its licensees; the grazing operations must be economically viable to both the Department and Licensee to be effective. Environmental standards and recreational opportunities will not be sacrificed for the benefit of cattle grazing.

5. Existing licensees who have successfully met their contractual obligations will be given the opportunity to renegotiate their new licenses under these program guidelines. If these negotiations are not successful, an open competitive bidding process will be followed to solicit grazing tenants, with minimum bid set by the Department.

6. Revenues derived from grazing licenses must reflect fair market value.

7. The Department of Parks and Recreation will ensure proper and effective management of the grazing program by educating and maintaining expertise on staff and using outside experts as necessary to audit the program and/or provide necessary staff training.

8. Reasonable means will be taken to inform the visiting public about the grazing program in each grazed park: the purposes (i.e., grassland maintenance, fire hazard reduction, protection of native plant species, maintenance of healthy agricultural economy, revenue generation and so on) and about range etiquette (i.e., using gates, climbing fences, reporting dead animals and so on) and general safety guidelines for being around the animals.

9. No cattle, sheep, goats or other domestic animal will be permitted to graze in County parks except by written license as approved by the Board of Supervisors.

10. Most public agencies with grazing programs are currently studying the effects of grazing on wildlife and natural plant communities and reviewing their policies and practices, and the scientific community is conducting intensive research and expanding our knowledge of the interactions between livestock grazing and wildlife and native plant community resources; therefore, grazing policy and practices of Santa Clara County will be reviewed in a public forum at least every four (4) years, beginning in two years from the date when grazing begins under this policy. These policy reviews will be based on a comprehensive Department report which includes: (a) progress toward goals stated in the site management plans; (b) a full exposition of costs and revenues. The Parks and Recreation Commission shall review the Department report and if appropriate recommend modification to the Board of Supervisors.
COUNTY OF SANTA CLARA
PARKS AND RECREATION DEPARTMENT
CATTLE GRAZING LICENSE

THIS CATTLE GRAZING LICENSE is made and entered into this _________ day of _______ 19____ by and between the COUNTY OF SANTA CLARA PARKS AND RECREATION DEPARTMENT (COUNTY) and ______________________ (LICENSEE).

SECTION 1. DESCRIPTION OF THE PROPERTY

COUNTY hereby grants permission to LICENSEE for a non-exclusive use for cattle grazing only on that certain unimproved real property (the “Premises”) including the use of barns and corrals but excluding all residences, and consisting of approximately ______ acres, located in the County of Santa Clara, State of California, and being further delineated on the attached map which is made a part of this License and incorporated herein by reference (as Exhibit “A”) for LICENSEE’s use for grazing purposes as hereinafter provided with the exceptions set forth in Exhibit “B - Parkland Range Management Site Plan” and “C - Cattle Grazing License Checklist”, attached hereto and incorporated herein by reference. Grazing capacities according to the pasture type, including supplemental feeding areas, are set forth in Exhibit "A".

COUNTY makes no warranties and/or representations to LICENSEE as to the suitability of the Premises for grazing purposes.

LICENSEE’s use of the Premises is subject to the primary rights of park and recreation users enjoying the Santa Clara County Park of which the Premises forms a part.

SECTION 2. TERM

The term of this License shall be for four (4) years starting September 1, 19________ and ending August 31, 19______, unless the date is mutually extended as provided below.

After the end of the third (3rd) year of the term of this License, but no later than January 1 of the fourth (4th) year, LICENSEE shall provide written notice of its intention to seek a License renewal. If LICENSEE provides such written notice to COUNTY, the parties shall immediately begin to negotiate in good faith the terms and conditions under which the License may be renewed. The failure to mutually execute a new License by March 1 of the fourth (4th) year will, as of that date, establish that all LICENSEE’s rights and uses of the Premises shall end on August 31, 19______. LICENSEE must have successfully met their contractual obligations set forth herein to be entitled to negotiate a renewal of the License.

SECTION 3. FEE

As consideration for the right, license, and privilege to use the Premises during the term of this License, LICENSEE agrees to pay to COUNTY, without deduction, abatement, set off, prior notice or demand a fee of $_______ per animal unit per quarter, in advance, with the first payment being due on the date the term of this License commences, and each successive payment due three (3) months thereafter.

If COUNTY does not receive payment within ten (10) days of the due date, a late charge of ten percent (10%) of the amount due, or fifty ($50.00), whichever is greater, shall become due and payable in addition to the amounts due. The parties agree that the late charge is for the purpose of reimbursing COUNTY for administrative costs and expenses associated with the handling and processing of late payments. A failure to pay the fee within ten (10) days of the due date shall constitute a default. Acceptance of any late charges shall not constitute a waiver of LICENSEE’s default. Notwithstanding any right or remedy of COUNTY on account of such nonpayment, LICENSEE’s obligation to pay the outstanding License fee and late charge shall survive the termination of this License. Fees not paid when due shall bear simple interest from the due date at the rate of one percent (1%) per month due and payable in addition to the amounts due and late charge. Any and all indebtedness, accruing because of such nonpayment of fee, shall become a lien on any and all livestock or other property which LICENSEE may have on the Premises.

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An evaluation shall be performed by COUNTY in advance of each quarterly period to set forth the grazing carrying capacity in animal units, and thereby establish a base fee for the next quarter. Should COUNTY require the termination of grazing within a quarter and the LICENSEE is otherwise not in default of the License, LICENSEE shall be entitled to a pro-rata rebate for the time remaining once all stock have been removed.

SECTION 4. LAND MANAGEMENT OBJECTIVES

The premises are hereby licensed to LICENSEE upon the express condition that LICENSEE shall use the Premises solely for the conduct of business in connection with the grazing of cattle owned by LICENSEE, consistent with the Parkland Range Management Policy and subject to the terms and conditions of this License and the land management objectives listed below in order of priority, and consistent with the Parkland Range Management Site Plan attached hereto as Exhibit "B" and incorporated herein by reference as though set forth in full, such Parkland Range Management Site Plan to be fully completed prior to Initiating grazing at any level:

1. Provide visitor access and recreational opportunities.
2. Provide for the safety of park users.
3. Preserve and enhance natural plant and wildlife communities.
4. Minimize fire hazards to parklands and private property by managing vegetative fuels.
5. Rehabilitate vegetation and wildlife habitat degraded as a result of grazing.
6. Establish cooperative relationships with adjacent property owners.

Further, it is hereby mutually agreed by and between COUNTY and LICENSEE that the provisions of this License shall be Interpreted conservatively so as to ensure that natural resource management and recreation objectives take precedence over grazing and revenue generation.

SECTION 5. STANDARDS OF RANGELAND UTILIZATION

LICENSEE hereby agrees that the following conditions and requirements shall constitute proper utilization of COUNTY rangelands:

5.01 Stocking Levels and Animal Unit Equivalents. LICENSEE hereby agrees that this is a License for cattle grazing only. The stocking level shall be assessed in animal units per quarter and shall be the number used in the determination of quarterly base fee. The maximum number of animal units for a single grazing season shall be _____________. Animal unit levels shall be determined in accordance with the following table:

<table>
<thead>
<tr>
<th>Type of Animal</th>
<th>Animal Unit Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brood Cow (mature female, two (2) years old and above)</td>
<td>1.00</td>
</tr>
<tr>
<td>Brood Cow with Calf at side (not to exceed eight (8) months old)</td>
<td>1.00</td>
</tr>
<tr>
<td>Bull (mature male, two (2) years old and above)</td>
<td>1.50</td>
</tr>
<tr>
<td>Replacement Cattle (eight (8) to twelve (12) months old)</td>
<td>0.50</td>
</tr>
<tr>
<td>Replacement Cattle (one (1) to two (2) years old)</td>
<td>0.75</td>
</tr>
<tr>
<td>Horse</td>
<td>1.25</td>
</tr>
</tbody>
</table>
LICENSEE shall report to COUNTY the number of cattle on the Premises, by pasture, in each of the above categories with each quarterly fee payment and grazing license checklist evaluation. The report shall include the number of increases and decreases, including, but not limited to occurrence of births, purchased cattle, shipped cattle and deaths since the previous report and shall include the dates of cattle purchases and shipping. LICENSEE shall remove dead stock within five (5) days of receipt of notification by COUNTY. If a carcass is not in close proximity to recreational activities and bad weather or steep terrain requires an environmentally unsound or physically unreasonable effort to remove, LICENSEE may, with the approval of COUNTY, bury the stock. LICENSEE shall immediately report any case of infectious disease to COUNTY and shall, at LICENSEE’s sole cost and expense, take all steps required to isolate, control and eliminate any such disease.

LICENSEE shall be permitted to maintain five (5) horses per two hundred (200) head of cattle, two (2) of which must be corralled, to be used solely for management of the livestock herd, with each horse being assigned an Animal Unit Equivalent of 1.25 to be included in determining the maximum number of animal units.

LICENSEE shall restrict supplemental feeding to corral areas or COUNTY approved pastures, so as to prevent the introduction and/or spread of noxious plant species, and shall submit to COUNTY a quarterly report of the type and quantity of supplemental feed distributed, and source or origin of supplemental feed. Such supplemental feeding areas shall be strategically located to enhance the overall range condition and allow for year round access.

5.02 Visual Monitoring and Statistical Sampling. LICENSEE agrees to accompany COUNTY to visually inspect and statistically evaluate the then current grazing conditions of the Premises on a quarterly basis, together with an impartial professional rangeland ecologist, with experience in cattle grazing, to be selected by COUNTY at COUNTY expense. Each such inspection/evaluation shall include the completion, in writing, of a Grazing License Checklist, attached hereto as Exhibit "C" and incorporated herein by reference as though set forth in full, to be signed by both COUNTY and LICENSEE, with a copy provided to LICENSEE.

COUNTY and LICENSEE mutually agree that the Grazing License Checklist shall constitute an integral part of COUNTY’s decisions regarding license renewal. LICENSEE is responsible at all times to ensure that the provisions referenced in the Grazing License Checklist are met. COUNTY shall advise LICENSEE, when, in the opinion of COUNTY’s authorized representative, any of the aforementioned conditions and land management objectives are not being accomplished. If LICENSEE fails to remedy the condition within thirty (30) calendar days of receipt of notification, then said conduct shall constitute a default and COUNTY shall have the right to terminate grazing and LICENSEE shall remove all cattle within ninety (90) calendar days of first notice above. In the event of drought, overgrazing, and/or other unforeseen rangeland condition COUNTY reserves the option to terminate the License or to determine the reduction of grazing that will not constitute overgrazing. Such aforementioned “overgrazing” shall constitute just one of many items of default. In the event of such termination, any claim by LICENSEE for damages shall be limited to a pro-rata rebate of fees paid in advance as set forth in Section 3.

SECTION 6. REPAIR AND MAINTENANCE OF IMPROVEMENTS
LICENSEE shall keep all facilities in good, functional condition and readily available to safely and effectively perform the purpose for which they are installed. Certain minimum standards of performance are as follows:

6.01 Unless an express responsibility of COUNTY, LICENSEE, at LICENSEE’s sole cost and expense, shall install, maintain, repair, and replace, if necessary, all other facilities and improvements including but not limited to all interior fencing, gates, corrals, wells, waterlines and pipes, water troughs, water tanks, windmills, pumps, pressure systems, and paint all buildings and structures which have painted exposed surfaces. If LICENSEE does not perform its obligations within thirty (30) days, or begin performance of its obligations and continue within a reasonable time frame to completion, COUNTY can perform the obligations and have the right to be reimbursed for the sum it actually expends, plus twenty
percent (20%). In the performance of LICENSEE's obligations. LICENSEE shall pay the cost thereof as a part of the fee payable as such on the next day upon which the quarterly fee becomes due, and failure to pay same shall carry with it the same consequences as failure to pay any fee installment. LICENSEE further agrees that he will make no major alterations, repairs or improvements to said premises without, in each case, first obtaining the written consent of COUNTY.

6.02 COUNTY shall maintain all significant roadways and shall provide materials and installation for County Park exterior boundary fencing. Exterior fence maintenance (except for materials) shall be at LICENSEE's expense to COUNTY specifications.

6.03 LICENSEE, at its sole cost and expense, shall arrange for the storage and disposal of all garbage and waste materials in accordance with applicable law.

SECTION 7. UTILITIES

7.01 COUNTY's Obligation. COUNTY shall not be liable for any damages resulting from, and LICENSEE waives all claims against COUNTY, for any failure to furnish or delay in furnishing any utility service, when such failure or delay is caused by any condition beyond the reasonable control of COUNTY as determined by the COUNTY or the rationing or other governmental restriction on any utility or naturally occurring resource serving the Premises. The fee obligation shall not be abated by such reason. A temporary failure to furnish any of the services shall not be deemed nor construed as an eviction of LICENSEE nor relieve LICENSEE of any duty to observe or perform any of the provisions of this License.

7.02 LICENSEE's Obligation. During the term of this License, LICENSEE, at its sole cost and expense, shall contract directly with the appropriate public utility for all water, gas, electricity, portable or underground telephone service, garbage and sewage, or other utility or service furnished to or used by Licensee, and shall indemnify and hold harmless COUNTY from and against any charge for the installation, connection, maintenance and furnishing of all necessary utilities, meters and services.
LICENSEE, at LICENSEE's sole cost and expense, shall be required to provide for the extension of any utility service or distribution lines (water, gas, electricity, portable or underground telephone, garbage, sewage, or other) as may be required to serve the Premises. LICENSEE shall comply with all government mandated water and energy conservation programs in fulfilling its obligations hereunder.

SECTION 8. LICENSEE'S ACCEPTANCE OF PROPERTY

At commencement of the term, LICENSEE shall accept the building, improvements, and any equipment on or in the license premises in their existing condition. No representation, statement, or warranty, express or implied, has been made by or on behalf of COUNTY as to such condition, or as to the use that may be made of such property. In no event shall COUNTY be liable for any defect in such property or for any limitation on its use.

SECTION 9. NO ASSIGNMENT OR SUBLICENSE

LICENSEE shall not assign this License, or any interest herein, or sublet the premises, or any part thereof, or any right or privilege appurtenant thereto, or allow any person other than LICENSEE and his agents and employees to occupy or use the premises or any part of them, without first obtaining COUNTY's written consent thereto. LICENSEE shall fully disclose to COUNTY all financial information surrounding such an assignment or sublicense. COUNTY expressly covenants that such consent shall not be unreasonably refused. COUNTY's consent to one assignment, sublicense, or use shall not be a consent to any subsequent assignment or sublicense, or occupancy or use by another person. Any unauthorized assignment or sublicense shall be void, and shall terminate this license at COUNTY's option. LICENSEE's interest is not assignable by operation of law without COUNTY's written consent.

SECTION 10. WATER SYSTEM

Water for grazing operations obtained by LICENSEE under COUNTY's water rights, however acquired by COUNTY, shall be used only on the premises and in the pursuit and performance of LICENSEE's operations and obligations under this License. COUNTY assumes no responsibility to LICENSEE for any water shortage from the source or sources of water, or from any source whatsoever, nor does COUNTY warrant the quality or quantity of water obtained from any source or sources.
COUNTY reserves the right during the term of this License to enter on the premises and all parts thereof, at any reasonable time or times, for the purpose of inspection, consultation with LICENSEE, making repairs or improvements, posting notices and for all other lawful purposes.

LICENSEE shall pay all acquisition, operation, and maintenance, repair, diversion, and dispersion costs and charges and/or water tolls connected with the use of water used for whatever purpose or purposes.

SECTION 11. RIGHT OF ENTRY
11.01 COUNTY shall, after notice, have the right to enter the premises for the purpose of plowing, seeding, fertilizing, prescribed burning and performing customary seasonal work. Such entry by COUNTY shall not, however, interfere with LICENSEE in carrying out regular grazing operations that LICENSEE shall, at the time, have the right to carry out and perform under the terms of the License.

11.02 Public shall have access to all Premises for park and recreation use consistent with historical use of the Park Premises, future Park Programs, and Park Master Plans. COUNTY shall not introduce uses which diminish lbs/acre usable forage, excepting those uses set forth in Section 11.01.

SECTION 12. MITIGATION DEPOSIT
COUNTY acknowledges receipt of ___________ Dollars ($___________), which is a mitigation deposit, in an amount equal to the fee assessed for the first quarter as defined in Section 3 above, for LICENSEE's faithful performance of this License. COUNTY is not obliged to apply the deposit to fees or other charges in arrears or to damages for LICENSEE's failure to perform the License. However, COUNTY may apply the mitigation deposit at its option, for nonpayment of fee or to cure a default for any other reason. The mitigation deposit, or remaining deposit after payments, shall be returned to LICENSEE, without interest, when this License is terminated, after LICENSEE has vacated the premises and delivered possession to COUNTY.

If the mitigation deposit is used as cited above, LICENSEE shall pay to COUNTY on demand the amount applied to restore the mitigation deposit to its original amount.

SECTION 13. TAXES
LICENSEE shall be responsible for the payment of, and shall pay before delinquent, all taxes, assessments and fees assessed or levied upon LICENSEE on said Premises or any interest therein, on any buildings, structures, machines, appliances, or other improvements of any nature whatsoever, or on any interest therein, or by reason of the business or other activities of the business in this License in connection with the Premises.

SECTION 14. INDEMNITY AND HOLD HARMLESS
14.01 COUNTY shall not be liable at any time for loss, damages, or injury to the person or property of any person whosoever at any time, occasioned by or arising out of any act of LICENSEE or of anyone holding under LICENSEE; nor the occupancy or use of the premises or any part thereof by or under the LICENSEE; nor directly or indirectly from any state or condition of said premises or any part thereof during the term of this License.

14.02 Indemnification of COUNTY. The LICENSEE shall indemnify, defend, and hold harmless the COUNTY, its officers, agents and employees from any claim, liability, loss, injury or damage arising out of, or in connection with, performance of this License by LICENSEE and/or its agents, employees, or subcontractors, excepting only loss, injury, or damage caused solely by the acts or omissions or personnel employed by the COUNTY. The LICENSEE shall reimburse the COUNTY for all costs, attorneys' fees, expenses and liabilities incurred with respect to any litigation in which the LICENSEE is obligated to indemnify, defend and hold harmless the COUNTY under this License.

14.03 COUNTY agrees to indemnify and hold LICENSEE harmless from and against all claims arising out of public recreational use of the premises, except to the extent any such claim is caused by the intentional acts or omissions of LICENSEE.
SECTION 15. INSURANCE
LICENSEE agrees to procure and maintain a policy or policies of comprehensive general liability, workers compensation as required by law, and property damage insurance with an insurance company or companies approved by COUNTY, for the benefit of LICENSEE and COUNTY, in accordance with Exhibit "D" incorporated herein by reference as though set forth in full.

SECTION 16. LICENSEE NOT AN EMPLOYEE OR AGENT
It is understood and agreed that LICENSEE, in the performance of this License, is not an agent or employee of COUNTY, and that this License is not intended to and shall not be construed to create the relationship of agent, servant, employee, partnership, joint venture or association. No participant or applicant for participation in LICENSEE’s grazing operation, nor any officer or employee of LICENSEE, nor any person engaged by LICENSEE to administer or operate its grazing operation is or shall be construed to be an employee of COUNTY for any purpose, including tort claims; nor shall any person obtain any right to employment, retirement or other benefits which accrue to employees or officers of the COUNTY.

SECTION 17. DEFAULT
17.01 Default. In the event that LICENSEE violates any of the terms and conditions of this License, COUNTY shall give LICENSEE written notice of specific violation and demand for correction within the time periods set forth in Section 17.02.

17.02 Termination for Default. If, within ten (10) days after written notice and demand other than for the payment of money due to COUNTY, LICENSEE has not commenced corrective action or shown acceptable reason therefore, COUNTY has the right to immediately terminate this License, take back possession of the Premises, and pursue any and all remedies provided by law. COUNTY shall have the right to terminate this License on account of failure by LICENSEE to pay money owed to COUNTY within five (5) days after written notice and demand for correction. In the event of termination for default, COUNTY has the right to take possession of all buildings and improvements within the premises (License area).

17.03 Liability for Breach. Termination for default shall not excuse LICENSEE from any liability for breach of contract; such breach shall be deemed total.

17.04 Entry for Mitigation. In the event of default by LICENSEE occasioning subsequent entry by COUNTY, COUNTY may perform the mitigation with the intent that this License be not terminated, provided written notice of such entry and intent has been posted in or on the premises. COUNTY may at its option enter the Premises for the purpose of mitigating damages. LICENSEE shall remain liable for the covenants and conditions of the License for the balance of the term hereof.

SECTION 18. RESTORATION OF PREMISES
Upon termination of this License for any reason, LICENSEE shall vacate the Premises, remove the personal property of the LICENSEE therefrom, excepting COUNTY owned improvements, and repair any damage or injury to the said premises or to any building, structure or improvement located thereon, occasioned by installation or removal thereof and restore the Premises to the same condition as when LICENSEE first took possession.

SECTION 19. MISCELLANEOUS
19.01 Attorney's Fees. If either Party brings any action or proceeding in court to enforce any provision of this License or for damages because of an alleged breach of any provision of this License (except as may otherwise be specified in this License) the prevailing party shall be entitled to receive from the losing party the amount the court determines to be reasonable attorney's fees for the prevailing party.

19.02 Binding Effect. The covenants and agreements contained in this License shall bind the respective successors, assigns, heirs and legal representatives of the parties.
19.03 Employment Practices. LICENSEE shall not discriminate against any person or persons because of race, religious creed, color, national origin, ancestry, sex, marital status, mobility impairment, medical condition (cancer related), age (over forty), political beliefs, organizational affiliation or sexual orientation as provided by law in the conduct of operations including employment on the Premises or in the use of facilities on the Premises. LICENSEE shall indemnify and hold COUNTY harmless for any failure to so comply.

19.04 Equal Employment Opportunity. LICENSEE shall at all times conduct its employment practices in a manner consistent with the spirit of the COUNTY Equal Opportunity and Affirmative Action policies. LICENSEE shall indemnify and hold COUNTY harmless for any failure to so comply.

19.05 Entire Agreement. This License and any exhibits or addendum set forth all covenants, agreements, conditions and understandings between COUNTY and LICENSEE concerning the Premises. There are no covenants, agreements, conditions or understandings, either oral or written, between the parties other than those set forth in the License.

19.06 Compliance With Law. LICENSEE shall, at LICENSEE's sole cost and expense and prior to the commencement of activities permitted hereunder, comply with all applicable federal, state, or municipal statute or orders, regulations, California Environmental Quality Act (CEQA), orders, or directive of a governmental agency, as such statutes, ordinances, regulations, orders, or directives now exist or may hereafter provide, concerning the use and safety of the premises. LICENSEE shall obtain all permits which may be required by public agencies, including but not limited to the United States Army Corps of Engineers, Santa Clara Valley Water District, and State Department of Fish and Game, having jurisdiction over the activities of LICENSEE and comply with all conditions and requirements set forth in the permits issued by such agencies. On the Breach of any provision hereof by LICENSEE, COUNTY may at its option terminate this license forthwith and reenter and repossess the premises.

19.07 Modification. Provisions of this License may be modified, waived or added to only by a instrument in writing signed by both parties.

19.08 Notices. Communications relating to this License or under the unlawful detainer statutes of California shall be in writing and shall be delivered personally, sent by United States mail, first class postage prepaid, or by private messenger or courier service, to the addresses below:

LICENSEE: 

Director
County of Santa Clara
Parks and Recreation Dept
298 Garden Hill Drive
Los Gatos, California 95030

Any change in address shall be communicated by written notice to the other party delivered according to this Section. A communication by any method permitted under this Section shall be effective when actually received.

19.09 Personal Liability. No personal liability shall attach to any COUNTY officer or employee with respect to any financial obligation to be performed under this License.

19.10 Remedies Cumulative. All remedies conferred on COUNTY and LICENSEE by this License and by law shall be deemed cumulative and no one remedy shall be deemed to be exclusive of the other or of any other remedy conferred by this License or by law.

19.11 Severability. If any provision of this License or any specific application shall be deemed to be invalid or unenforceable, the remainder of this License or the application of the provision in other circumstances shall not be affected and each provision of this License shall be valid and enforceable to the fullest extent permitted by law.
19.12 **Surrender of Premises.** No act by COUNTY, its elected officials, officers, agents or employees during the term granted shall be deemed an acceptance of a surrender of the Premises, and no agreement to accept a surrender of the Premises shall be valid unless it is made in writing, addressed to LICENSEE and signed by COUNTY.

19.13 **Text to Prevail Over Headings.** The captions and section headings appearing in this License are included for convenience only and do not in any way limit or amplify the terms or provisions of this License.

19.14 **Waiver.** Waiver by COUNTY or LICENSEE of any breach of any term, covenant or condition shall not be deemed to waive the same term, covenant or condition on a future occasion. The acceptance of fees by COUNTY shall not be deemed a waiver of any preceding breach by LICENSEE of any covenant other than the failure of LICENSEE to pay the fee so accepted. No covenant, term or condition of this License shall be waived by COUNTY or LICENSEE, unless the waiver is in writing and signed by the party making the waiver.

IN WITNESS WHEREOF, this License has been made, executed and delivered as of the date and year of the latest signature below.

"COUNTY"

COUNTY OF SANTA CLARA

__________________________
Zoe Lofgren, Chairperson
Board of Supervisors

Date: _______________________  Date: _______________________

Attest:

__________________________
Donald M. Rains, Clerk
Board of Supervisors

Approved as to form and legality:

__________________________
Kathryn A. Berry
Deputy County Counsel
CATTLE GRAZING LICENSE CHECKLIST

VISUAL DETERMINATION OF GRAZING CONDITIONS

1. **Light Grazing:** Little or no patchy appearance; plant residues 6 inches or taller; small objects on the ground are mostly invisible [ ] [ ]

2. **Moderate Grazing:** Patchy appearance; plant residues average 5 inches tall; small objects essentially invisible from 20 feet [ ] [ ]

3. **Heavy Grazing:** Uniformly low pasture stubble; Plant residues less than 4 inches tall; small objects and bare soil visible from more than 20 feet [ ] [ ]

4. Range exhibits a healthy diversity of desirable grasses and forbs [ ] [ ]

5. Range shows no increased evidence of noxious non-native plants [ ] [ ]

6. Ravines and gullies remain stabilized against cattle induced erosion [ ] [ ]

7. Fencing is in good repair to ensure continued protection of sensitive natural resource areas; springs, ponds and riparian habitat [ ] [ ]

8. Supplemental feeding is restricted to specified areas [ ] [ ]

STATISTICAL EVALUATION OF GRAZING CONDITIONS (to be used when visual determination proves inconclusive)

1. Soil surface is covered by a residual layer of both standing and fallen vegetation that meet minimum residual dry matter (RDM) standards set by the Soil Conservation Service [ ] [ ]

2. **Light Grazing (50-75% slope):**
   - <1200 lbs/ac RDM (Alert) [ ] [ ]
   - <1000 lbs/ac RDM (Min.) [ ] [ ]

3. **Moderate Grazing (30-49% slope):**
   - <1000 lbs/ac RDM (Alert) [ ] [ ]
   - <800 lbs/ac RDM (Min.) [ ] [ ]

4. **Heavy Grazing (0-29% slope):**
   - <800 lbs/ac RDM (Alert) [ ] [ ]
   - <600 lbs/ac RDM (Min.) [ ] [ ]

STOCKING LEVELS #/$/FEE

<table>
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<th>Previous Quarter</th>
<th>Next Quarter</th>
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RESOURCE MANAGEMENT ITEMS TO BE CHECKED

1. Riparian corridor exhibits healthy habitat for plants and wildlife [ ] [ ]

2. Native plants, including oak regeneration, identified appear to be thriving well [ ] [ ]

3. Indigenous wildlife in Site Management Plan are present and appear to be thriving well [ ] [ ]

4. Annual rainfall is sufficient to provide for thriving plant and wildlife communities under grazing pressures [ ] [ ]

COUNTY OF SANTA CLARA
PARKS & RECREATION DEPARTMENT

Grazing Licensee

Professional Range Ecologist: ___________________________ Date: ____________

EXHIBIT "C"
CERTIFICATE OF INSURANCE

Certificate Holder/Additional Insured:
County of Santa Clara
70 W. Hedding - East Wing
San Jose, CA  95110-1771
Phone Number: (408) 299-3192

Licensor/Manager:
Parks and Recreation Department
298 Garden Hill Drive
Los Gatos, CA  95032
Phone Number: (408) 358-3741

Named Insured (Licensee)

Companies Affording Coverage
A)
B)
C)
D)

Coverages: This Certificate of Insurance is issued as a matter of information only, confers no right upon the policy holder, and does not amend, extend or alter the coverage afforded by the policies. This is to certify that the policies of insurance listed below have been issued to the insured named above for the policy period indicated and each has been endorsed to include all of the special coverage conditions listed below:

General Liability and Workers Compensation

<table>
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<th>Co.</th>
<th>Policy Number</th>
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<th>Policy Expiration Date mm/dd/yy</th>
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<td>Personal &amp; Advertising Injury</td>
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<td>Each Occurrence</td>
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Special Coverage Conditions:

1) The policies listed are occurrence policy form and do not contain a discovery period
2) The policies do not exclude claims brought by participants
3) The policies do not contain any endorsement which reduces the limits to less than those shown above
4) The Certificate Holder, its directors, officers, employees, volunteers and agents are named as additional insureds
5) The limits shown above apply exclusively to the operations of the above named insured tenant and cannot be reduced or impaired by any other insured
6) The policies are endorsed to specify that coverage is primary and any other insurance provided by the Certificate Holder shall be excess and not contributing
7) The policies include premises operations, products and completed operations, broad form property damage, contractual liability and personal injury liability
8) The policies have been endorsed to provide 30 day written notice of cancellation to the Certificate Holder.

Additional Coverages Required, if Checked:

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<td>The policies include Employers Non-Ownership and Hired Automobile Liability</td>
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Producer

Producer's Errors & Omissions Insurance Company

Producer's Errors & Omissions Insurance Policy Number

Producer's Errors & Omissions Insurance Policy Expiration Date

Producer's Signature

Date Signed

EXHIBIT "D"
Exhibit 3

AN OVERVIEW OF GRAZING IN SANTA CLARA COUNTY PARKS
AND OTHER PUBLIC AGENCIES

Joseph D. Grant, Calero Reservoir, and Ed R. Levin Parks were acquired as parklands in the mid 1970’s. These areas were grazed before acquisition, and have been leased for cattle and horse grazing under park ownership. Grazing continues at Ed Levin and Grant Ranch, but ceased at Calero in 1986 when the lessee terminated his operation there. Current grazing agreements have been on a month-to-month basis since December 1987, by Board action, pending adoption of a range management policy.

In the early 1980’s department staff began to express concern about the deterioration of grazed parkland areas and took some affirmative measures to restrict grazing in sensitive areas of Grant Ranch. In 1987 the Department contracted with James W. Bartolome, Range Ecology Professor at U.C. Berkeley, to study the grazing program. In the report "Assessment of Livestock Grazing in Santa Clara County Parks" (July 1, 1987), Dr. Bartolome examined the grazing resources and range production trends at Ed Levin, Grant Ranch, and Calero, and evaluated the costs and benefits of grazing in these three parks. He identified five management strategies for the Department to consider, depending on the Department's selected management objectives: No grazing; Grazing at present stocking rates with additional monitoring effort; Optimizing range forage production using standard grazing capacity estimates and management practices; Maintaining livestock grazing while enhancing wildlife habitat; Maximizing grazing revenues while protecting riparian corridors (this alternative was identified only for Levin Park).

In this report Dr. Bartolome also suggested the following land use objectives as appropriate to park agencies: Provide public access and recreational use; Protect natural resources for short-term and long-term use; Provide for public safety to park users and adjacent landowners; Minimize fire hazards to wildlands and private property by managing vegetative fuels; Optimize revenues; Rehabilitate degraded vegetation and wildlife habitat; Establish cooperative relationships with adjacent property owners. He also described the public costs and benefits of grazing programs.

Dr. Bartolome’s report was the starting point for the Range Management Task Force deliberations. This citizen-staff advisory committee to the Department was formed in May 1988, to develop a recommendation incorporating the diverse views of staff and cattle ranching interests, along with members from the Fish and Game Commission and California Department of Forestry and Fire Protection and aides from Supervisor Legan’s (later Supervisor Gonzales’) office.
Task Force Members:

Rex Lindsay, Santa Clara County Planning Commission (Former)
Dr. Robert Greenley, Santa Clara County Fish And Game Commission
Betsy Shotwell, Santa Clara County Planning Commission
Bill Maison, California Department of Forestry and Fire Protection
Pat Kammerer, Parks and Recreation Commission
Bob Benson Sr., President, Santa Clara County Cattleman’s Association
Douglas Gaynor, Director, Santa Clara County Parks Dept.
Dave Eakin, Deputy Director/Park Operations Santa Clara County Parks Dept.
Larry Coons, Deputy Director/Support Services Santa Clara County Parks Dept.
Denis Besson, Senior Park Ranger, Calero County Park
Ed Tanaka, Senior Park Ranger, Grant Ranch County Park
Reece Current, Senior Park Ranger, Ed Levin County Park

During the Task Force deliberations the grazing program at E.B.R.P.D became the conceptual cornerstone of the Department’s current recommendation. The program at E.B.R.P.D. is considered relevant because: (1) its master plan guidelines are similar to those in the County’s General Plan; (2) the East Bay has similar climate, microclimates, and range conditions; (3) cattle industry and marketplace considerations are similar; (4) a strong environmental/agricultural interest dialogue has continued over many years.

The Board adopted Natural Environment Section of the County General Plan states that:

The County shall become a leader in the protection of existing streamside riparian woodlands and grasslands and restoration of degraded streams and stream sides on lands they own and develop for any use. (Page D 1)

Multiple uses of open space lands shall be encouraged consistent with the conservation of resources and the preservation of the nature environment. (D1)

Natural riparian and streamside areas shall be left in the natural state providing percolation, wildlife habitat, aesthetic relief and recreational users that are environmentally compatible. (D2)

Minimizing sedimental and erosion through control of grading, quarrying, cutting of trees, removal of vegetation, placement of roads and bridges, use of off-road vehicles, and animal related disturbance of the soil. (D10)

No fences should be erected within the riparian area preventing the free movement of wildlife needing access to the stream. (D13)

The vast grass and mixed grass-woodland areas of the county provide the basis for one of the oldest economic activities in the county, cattle ranching. (D23)
The Task Force also considered the policies of other agencies:

A. East Bay Municipal Utility District (managed as watershed):

E.B.M.U.D owns extensive watershed properties in the Bay Area east of San Francisco. Land management objectives formulated in 1955 included grazing as a tool to prevent fires in order to reduce erosion and reduce liability from wildlife damage to adjacent properties. In 1971 the master plan for Watershed Management Preserve areas designated three land uses including "ranching areas" or grassland areas where topography and access make them suitable to livestock grazing. The justifications (in order of importance) for grazing on these sites are: 1) fire hazard reduction, 2) brush control, and 3) revenues. Prescribed burning as a management tool has not been widely used. Management costs for about 27,000 acres of grazing include 2 full time positions and additional supervisory time. Current annual revenues are approximately $300,000(1987 data). Watershed areas are also used as environmental education areas, nature study areas, and natural preserves. EBMUD is gradually excluding cattle from stream courses, which has considerably increased fencing costs. It has also implemented an expensive program using goats to control brush.

The above paragraph was the E.B.M.U.D. situation in 1987. Since then, they have reduced grazing to 18,250 acres (22,126 AUM at a rate of $17.20.) The agency provides the improvements such as fencing, water development, etc., hence the high rate.

B. California State Parks:

Livestock grazing is permitted in only about a dozen units of the California State Park System, mostly in recent acquisitions. The Public Resources Code prohibits the commercial exploitation of resources on park lands and the State Park and Recreation Commission Policy states that grazing will not generally be permitted unless it is for the benefit of the plan and purpose of the State Parks. Park designations and special uses include natural preserves, cultural preserves, and historical demonstrations. The opponents of grazing argue that preservation of natural communities is not compatible with grazing, while proponents extol its value as a demonstration of historic land use. Public debates have also focused heavily on fire hazard control. In the Santa Clara/Santa Cruz area State Parks, grazing only occurs on a small dairy farm operation on the coast and a 600 acre grazing easement at Henry W. Coe State Park has recently been terminated.

C. East Bay Regional Park District:

East Bay Parks is currently reviewing its grazing policy. Currently, livestock management guidelines are an operational document, not a policy statement. At present, livestock graze about 30,000 acres of East Bay Parkland, and until now grazing income has exceeded management costs (one full time salaried range
management specialist). Capital costs have increased significantly in recent years as more intensive developments have been installed to control grazing in sensitive areas. Grazing in EBRPD is used as a management tool to reduce fire hazard and to maintain open grasslands, believing that, for brush control purposes, grazing is less expensive than mechanical methods, and prescribed burning and herbicides are less desirable from the public’s point of view. During the recent years of drought, E.B.R.P.D. has greatly-reduced herd sizes and has eliminated grazing altogether in highly impacted areas.

D. Midpeninsula Regional Open Space District:

The Midpeninsula Open Space District provides about 23,000 acres of “natural preserves” for San Mateo and Santa Clara Counties, much of which was formerly grazed. Their policy and objectives include 1) protection of natural vegetation, and 2) protection of agriculture. They have, however, allowed all but one of their grazing leases to expire. They recently evaluated the costs and benefits of implementing a proper grazing system for the remaining lease. Annual management costs included an estimate of 31 days (about $5000) of personnel and consultant labor for the one remaining lease. Environmental analysts recommended that grazing be discontinued. Discussions by neighbors suggested a desire for conditions favoring low human use of these areas rather than strong sentiments about grazing per se. At this time 1100 acres are grazed as part of the original land purchase agreement. Midpeninsula provides double-wide disked fuel breaks along roads and adjacent developed private property. They have no burning program. A recent cost-benefit analysis determined that costs would far exceed revenues in M.R.O.S.D.

E. Marin County Open Space District:

Grazing occurs on some of these lands and is justified primarily as a method of fuel hazard reduction and for “scenic backdrop”. Marin rangers felt it was too time consuming to monitor the program, so a local range professor was contracted at $2,000 annually. Complaints from the public have included flies, manure, fear of livestock injury to children, damage to wildflowers, and the use of electric fencing for sheep grazing.

F. San Francisco Municipal Water District

Grazing is currently allowed on about 37,000 acres of San Francisco watershed lands in the east bay. It is not allowed on 27,000 acres in San Mateo County which are managed as a fish and game preserve. Justification for cattle grazing on the watershed includes fuel hazard reduction. Annual costs of fuel reduction for the ungrazed 27,000 acres of San Mateo properties have been estimated at about $10,000.
G. Summary of Agency Policies and Practices

Discussions about the role of grazing are under way by many agencies. The trend has been away from heavy grazing and toward greater concern for natural resource values. Agencies are attempting to evaluate policies and practices, but explicit agency objectives are often lacking or open to interpretation. At present the major objectives appear to be: fuel reduction and income generation. Educational or aesthetic values are also mentioned. Most large agencies have at least one full time position to manage range agreements. Other costs of grazing include damage to natural resources and concerns for public safety.

THE PUBLIC PARKLAND BENEFITS OF GRAZING PROGRAMS

Fire Hazard Reduction:

Wildland fire danger is high in coastal and inland areas of California because of our Mediterranean type climate. The California Department of Forestry (CDF) requires fuel reduction where there is wildfire hazard to adjacent rangeland or forestland. Liability concerns are often highest where residential areas are located next to or near the parks. Grazing by livestock reduces grass fuels. Brush presents an even greater fire hazard, and proper grazing management of coastal scrub has been shown to prevent brush encroachment into grasslands. Grazing exclusion, therefore, may increase fire hazard and require other means of fuel reduction. In this sense, grazing benefits include avoided costs of fuel reduction.

Fuel hazards can be reduced by providing fuelbreaks which are maintained annually, or by periodically reducing fuel loading over large areas. The need for fuel hazard reduction depends on the topography and the hazard presented by adjacent properties. Greater hazards are presented by areas that slope uphill to private property and areas with heavy fuel loading. Roads, streams, rocky ridges, and heavily grazed adjacent pasture impede the spread of wildfires.

Alternatives to grazing for fuel hazard reduction include mechanical methods such as mowing or diskng and prescribed burning. Costs for disking range from $100 to $235 per mile for a 15 foot wide fuelbreak or about $100 per acre. Mechanical methods may result in undesirable vegetation due to soil disturbance. Burning is relatively inexpensive, but costs vary according to terrain and vegetation. Average costs as of 1984 were $24 per acre. Costs for previous burns at Joseph D. Grant were estimated at $10 to $12 per acre. NOTE: The Department currently disks fuel breaks on selected boundaries, guided by County Fire Marshall or CDF requirements as applicable.

Grass fuels may be mowed or disked annually to reduce fire hazards. Although mechanical methods are labor intensive, they require less coordination and are less subject to delay or cancellation than burning. Because of the planning efforts required and the associated liability, the use of prescribed burning should be carefully evaluated, and is probably not suitable for annual grassland treatments. The California Department
of Forestry and Fire Protection conducts a Vegetation Management Program which provides for prescribed burning to control unwanted brush and other vegetation to eliminate fuels that carry wildfires. To date they have not conducted any prescribed burns in lieu of grazing in California and do not have a policy per se. They have indicated willingness to assist public agencies on a cost-sharing basis. They would provide the expertise and equipment and bear the liability.

Brush control for fire hazard reduction should be conducted at 3 to 5 year intervals. CDF will not generally burn brushlands that are less that 500 acres. While the public has not been very supportive of burning in the east bay area, Santa Clara County residents may be more receptive because of the large agricultural interests. However, the CDF budget for prescribed burning has been greatly limited due to the States fiscal crisis and the Bay Area Air Quality Control Board is steadily tightening its standards for clean air, and its controls on burning.

Livestock grazing can reduce invasion by coastal scrub species. Brush invasion is undesirable when it impedes trail access and recreational use, or presents a health and safety hazard, such as poison oak or hiding cover for rattlesnakes. A mosaic of brush, grass, and woodland, can improve wildlife habitat and increase the value of the park to hikers and birdwatchers. Other brush control measures include mechanical removal, herbicides, or prescribed burning.

Brush species at these parks include coyote brush, chamise, manzanita, ceanothus, chinquapin, toyon, coffeeberry, coastal sage, and poison oak. The behavior of these species with respect to grazing is not well documented except for coyote brush. Coyote brush has spread in some areas after grazing was removed. Establishment of coyote brush seedlings may be related to burns in some areas. Other studies suggest that high rainfall years may be primarily responsible for sporadic establishment and expansion of coyote brush stands. Poison oak, which is present all over Joseph D. Grant and Calero Parks, appears to be more prevalent in ungrazed or lightly grazed areas.

If grazing is excluded, brush will probably invade grasslands on the shallower soils of Grant and Calero Parks. Serpentine areas, south facing slopes, and moist bottomlands should remain open. Encroachment at Levin is less likely due to deeper soils; however, Coyote brush control is ongoing at the park. Where fire hazard reduction is not a problem, brush should be compatible with low intensity recreational use. If desired, brush can be burned every 10 or 15 years on selected areas.

THE COST OF GRAZING PROGRAMS       (Primary source: Bartolome report, 1987)

1. License Management Costs

Current park and county costs include license negotiation and administrative costs. Contract development costs were estimated at 30 hours every 3
years and 1 hour monthly. Clerical support was estimated at 6 hours monthly. General license inspection costs have been estimated at 5 hours per month.

A 1987 report to Midpeninsula Open Space District recommended 11 days per year to monitor 1200 acres. Other local agencies use 1 or 2 full time staff to manage 20,000 to 30,000 acres of leased grazing land. Indirect costs of livestock grazing include increased trail maintenance. Potential cost increases under proper management include fencing, water development, and additional monitoring costs.

2. Environmental Impacts

Annual grasslands: The grasslands in these parks are dominated by annual grasses and forbs which can tolerate relatively heavy grazing. Unlike perennial grassland where stocking rates and grazing season must be carefully controlled to ensure adequate reproduction, annual grasses generally produce abundant seed even when heavily grazed. However, heavy grazing can leave inadequate amounts of organic matter which is needed to maintain good soil structure and a suitable environment or "microsite" for seedling establishment. This tends to deter grass germination the following fall, thus reducing early season production and decreasing overall carrying capacity. Continuous heavy grazing can also decrease carrying capacity by promoting less desirable species (hairgrass, star thistle, nitgrass, little quaking grass, tarweed). Annual legumes which are very good forage for wildlife as well as livestock require some grazing or they will be out competed by taller grasses. However they may also be damaged without periodic rest during seedset.

A visit to Ed R. Levin in April 1987 indicated heavy utilization. Although it had been a relatively dry winter, the period of rapid growth in annual grasslands is the time when production generally "gets away" from animals, even under heavy stocking. This was not the case at Ed R. Levin where grass was closely grazed even on steep slopes. Calero Reservoir which was not grazed for most of this growing season exhibited less than potential production on some areas, indicating inadequate mulch left the previous season. Staff at Calero have reported a great increase in wildlife since grazing was terminated in 1986. Joseph D. Grant had several localized areas of extremely heavy use.

Native Perennials: Native perennial grasses once comprised a significant portion of California's annual grasslands. These species are not, however, very tolerant of season long grazing, so they were mostly replaced by annual grasses and forbs which were introduced with livestock in the early 1800's. Because the annual grasses tolerate grazing and are very competitive as seedlings, the perennial species are not likely to reestablish once they've
been eliminated even if livestock are excluded. However, relict stands may increase in vigor and reproduction with grazing exclusion or deferment till seedset. Scattered stands of needlegrass and wildrye were observed in Joseph D. Grant (e.g. among oaks in east side of Hotel Field). Calero Reservoir which has a large serpentine outcrop ridge has several extensive and healthy stands of needlegrass which should be properly managed.

**Rare Plants:** Several rare plants have been found in Santa Clara County, although none are presently recorded by the California Natural Diversity Data Base (CNDDB) in any of the parks. Potential species include Mt. Hamilton thistle, Metcalf Canyon jewel flower, Mt. Hamilton coreopsis, large butterfly flowered fiddleneck, coyote ceanothus, rock sanicle, and bay checkerspot. Calero may provide suitable habitat for the thistle which occurs mostly on serpentine and is found at 800 to 1300 foot elevations locally. The jewel flower and ceanothus also occur on serpentine soils at similar elevations. The sanicle, coreopsis, and fiddleneck have been found at 3000 to 4000 foot elevations. Most bay checkerspot butterfly populations have disappeared due to the combination of drought and grazing. If this species were present, protection from grazing would be appropriate. If any of the other species are present, it is quite possible that they are adapted to grazing. Grazing exclusion could in some case favor vegetation which competes with them. For more information, surveys should be conducted by rare plant specialists.

**Oak Woodlands:** Oak woodlands of the inner coast range and valley are used primarily for grazing where tree canopy cover is light or moderate. The oaks themselves are browsed and the acorns are also eaten. Heavy use in oak woodlands is indicated by distinct browse lines on the trees. While there is no evidence that browsing impairs the vigor of mature trees, grazing of seedlings and saplings at this level of use may significantly impact regeneration. The oaks that are present in these parks include coast live oak, interior live oak, blue oak, valley oaks, and black oaks. There is statewide concern about the general lack of regeneration of blue and valley oaks. Coast live oak is also exhibiting poor regeneration in middle and northern California locations.

Oaks have been heavily browsed in all three parks. In Ed R. Levin the oaks are all located along the creeks and drainages which were heavily used areas. Distinct browse lines, even on live oaks, were present in all parks Live oaks are not very palatable, so browsing indicates relatively heavy stocking. Browse lines may, however, persist for a long time as oaks in areas of Grant that have been protected for about 8 years suggest. Although regeneration is easily missed among poison oak understory, oak saplings should be visible. There was no evidence of blue or valley oak regeneration except in protected areas near Grant Lake. Live oak
regeneration was observed in the Brush Field Pasture at Joseph D. Grant. Some observers feel that oak seedlings are damaged more by trampling than browsing.

The levels of regeneration needed to maintain oak stands have not been well established for many areas or for different stand ages. Many factors, including grazing, may contribute to poor regeneration. In Grant Park, oak regeneration was apparent in one protected area but not others. Where regeneration is desired, heavy livestock use would not be acceptable with out protecting seedlings. Unfortunately grazing systems that are compatible with oak regeneration have not been identified.

Riparian and Wetland Sites: Streams and wet areas such as seeps and springs support riparian vegetation and lush growth. Streamside vegetation maintains water quality, prevents bank erosion, and helps regulate stream flows and flood regimes. Riparian and wetland vegetation provide important wildlife habitat, especially amid dry annual grassland and oak woodland habitat types. The succulent plant growth, however, also attracts livestock which can readily eliminate herbaceous cover, compact soils, browse and destroy woody riparian species, and impair water quality for on-site and downstream use.

At Ed R. Levin Park, Calero and Scott Creeks are heavily used and there is no herbaceous or woody riparian cover along the creeks. Streamside cover is more abundant at Calero, but streams are ephemeral. The lower stock pond has potential to support better riparian vegetation than it does currently. The seep in the pasture above Javelina Loop has some growth in and around it, but the fence that was built to protect it was cut and cattle and pigs have damaged it. The availability of nearby woodland cover make these areas potentially very valuable to wildlife. Joseph D. Grant Park has much better riparian and wetland resources. The following areas have been protected: Grant Lake, San Felipe Creek and adjacent lowlands a seep on the east side of Brush Field, and the marsh north of Grant Lake. Unprotected and heavily used areas include Eagle Lake and the stock pond below it, seeps all along North Field, a large scale in Pala Seca Field, and a small stockpond nearby. Nearby oak woodlands enhance the value of the scale and many of the ponds for wildlife because they provide cover.

Severity of impacts to riparian resources depends on potential productivity of these sites. For these parks, riparian quality is probably most important for wildlife habitat in those areas that have other cover nearby. Under livestock use, most of these areas would require complete protection to significantly improve them.

Wildlife Habitat Resources: Oak woodlands provide habitat for many animal species. Resident species include deer, quail, turkey, wild pig, bobcat,
foxes, coyote, and golden eagles. Bald eagle and peregrine falcon have used Joseph D. Grant park in the past and a bald eagle has recently been photographed over Calero. Potential impacts from livestock grazing include reduction of brush and oak cover for many species, feeding competition for oak acorns and browse, reduction of tall grass cover for nesting birds and small mammals, elimination of riparian cover for fish, waterfowl, and terrestrial species, social avoidance between cattle and deer, and transmission of livestock diseases.

Deer numbers have decreased significantly at Joseph D. Grant and Ed Levin Parks during the last ten years. Bluetongue, EHD and PI3, diseases which can all be transmitted by livestock, are important causes of mortality. Livestock can also impact fawning cover by grazing and trampling riparian and wetland vegetation. Turkey breeding was concentrated in Calero Park this season rather than adjacent properties, possibly due to livestock removal.

Moderate livestock grazing may in some cases enhance habitat for species such as quail by providing openings with short grasses, legumes and broad leaved forbs. Grazing may indirectly enhance hawk and eagle foraging by enhancing ground squirrel populations. Ground squirrels which are abundant in Ed R. Levin and Joseph D. Grant Parks are also generally undesirable in public parks because they cause structural damage to roads, trails, etc. and transmit disease.

Livestock impacts to wildlife habitat are most apparent on riparian areas. Protection of several ponds would increase habitat for fish, birds, waterfowl, and mammals. Livestock exclusion from these areas may also reduce indirect contact with deer and thus decrease the transmission of diseases caused by livestock.

**Soils:** The soils of Joseph D. Grant Park are dominated by the Los Gatos-Gaviota-Vallecitos soils association. These are well to excessively drained gravelly loams which occur on gentle to steep slopes. These soils are occupied by grasslands, woodlands, and some brush, and forage production ranges from about 1,000 to 2,400 lbs. per acre depending on rainfall. Erosion hazard ratings range from slight to high (USDA 1974), but there is little apparent erosion in either park. Due to the steep topography and the low permeabilities of some of these soils, the maintenance of vegetative cover is important to minimize soil runoff.

Soils in the eastern part of Santa Clara County have not been mapped. Soils of Calero probably include those described above as well as the Montara-Inks-Henneke formation. The latter are steep, excessively well drained shallow clay loams and gravelly loams. Roadcuts indicate extensive areas of serpentine soils. These are relatively nutrient poor and support
less vegetation than surrounding soils, but often support rare plants. Perennial grasses and chaparral species are found on these soils. The Los Osos-San Benito soil association is found in the vicinity of Ed R. Levin Park. These soils which occur on moderately to very steep terrain, are well drained, deep clay loams. They primarily support grasslands where production ranges from about 1,200 to 3,000 lbs. per acre. Erosion hazard is rated as moderate to very high, but there is also little evidence of erosion. In general, in spite of these erosion potentials, grazing appears not to be impacting soil stability in these parks.

**Conflicts with Recreational Use:** Cattle are regarded as a nuisance by some park users because of cattle manure, flies, damage to soils and vegetation in streams, ponds, and wet meadows, and encounters with the animals in some cases. Cattle can also cause substantial trail damage, requiring more frequent repair and grading. At Grant Park and Ed Levin trail use by horses during the rainy season is regulated somewhat, with limited success, but livestock have access to the trails all year long. On the other hand, livestock grazing in public parks may if developed through a 4H program, have value as an educational demonstration of traditional rural lifestyles, especially since most rangeland is privately owned.

Discussions with park rangers revealed little complaint from the public about grazing. Occasional concerns are about wildflowers and interactions with livestock, especially bulls. If grazing use is justified as an educational demonstration, it may be advisable to develop an educational program with interpretive talks, guided walk, leaflets, or posted materials funded by grazing revenues.

**SUMMARY**

Thoughtfully-conceived and carefully-managed and monitored grazing programs may often be the most cost-effective means to accomplish land management objectives such as fuel hazard reduction and grassland maintenance. The Department's proposed "Parkland Range Management Policy" is an appropriate starting point, as it puts parkland stewardship values at the forefront of the decision-making process and guarantees, that the program will be reviewed publicly at least every 4 years.