

UNITED STATES DEPARTMENT OF THE INTERIOR
National Park Service
Special Use Permit

Name of Use: Agricultural

Date Permit Reviewed 2005
Reviewed 2006
Reviewed 20
Expires 2011 (1/31)

Permit # AGR-8530-2600-6001
Type Park Code No. #

Short Term
Long Term

Point Reyes National Seashore
Name of Area

Ernie and Nichola Spaletta of C Ranch



is hereby authorized during the period **from 12:00 AM on February 1, 2006 to 11:59 PM on January 31, 2011** to use the following described land or facilities in the above named area:

Approximately seven hundred and eighteen (718) acres of land and improvements on Tract 05-118 and Tract 05-119 of which five hundred and ninety (590) acres are suitable for grazing.

For the purpose(s) of:

Continuing operation of a Grade A dairy, including pasturing of dairy cattle and replacement heifers and associated residential purposes. A dairy operation is the only agricultural enterprise authorized under this permit. The annual fee assessed for use under this Special Use Permit is \$24,600.00. This increase in appraised fair market value from an annual fee of \$14,400.00 will be phased in at 25% per year. The rental fee under this formula will be \$18,000.00 for year one, \$21,600.00 for year two and the full annual fee of \$24,600.00 for each subsequent year.

Authorizing legislation or other authority (RE - DO-53): 16USC1-4, 16USC459c

NEPA & NHPA Compliance: CATEGORICALLY EXCLUDED EA/FONSI EIS OTHER APPROVED PLANS

PERFORMANCE BOND: Required Not Required Amount \$0.00

LIABILITY INSURANCE: Required Not Required Amount \$500,000.00

ISSUANCE of this permit is subject to the conditions on the reverse hereof and appended pages and when appropriate to the payment to the U.S. Dept. of the Interior, National Park Service of the sum of **\$123,000.00**.

The undersigned hereby accepts this permit subject to the terms, covenants, obligations, and reservations, expressed or implied herein.

PERMITTEE: [Signature] [Organization] 3-14-06
Signature Organization Date

Authorizing Official: [Signature] Don L. Neubacher 1/30/06
Signature Superintendent Date

Additional Authorizing Official: _____
(if Required) Signature Title Date

CONDITIONS OF THIS PERMIT

1) GENERAL CONDITIONS

- a) The Permittee shall exercise this privilege subject to the supervision of the Superintendent, and shall comply with all applicable laws and regulations of the area.
- b) Damages - The Permittee shall pay the United States for any damage resulting from this use which would not reasonably be inherent in the use which the Permittee is authorized to make of the land described in this permit.
- c) Benefit - Neither Members of, nor Delegates to Congress, or Resident Commissioners shall be admitted to any share or part of this permit or derive, either directly or indirectly any pecuniary benefits to arise therefrom: Provided, however, that nothing herein contained shall be construed to extend to any incorporated company if the permit be for the benefit of such corporation.
- d) Assignment - This permit may not be transferred or assigned without the consent of the Superintendent, in writing.
- e) Revocation - This permit may be terminated upon breach of any of the conditions herein or at the discretion of the Superintendent.
- f) The Permittee is prohibited from giving false information; to do so will be considered a breach of conditions and be grounds for revocation [Re: 36 CFR 2.32(4)]
- g) Permittee will comply with applicable public health and sanitation standards and codes.

2) USE OF PREMISES

- a) Permittee intends to use the Premises for: Continued operation of a Grade A dairy, pasturing of dairy cattle and replacement heifers and associated residential purposes. Permitter hereby approves this use. No changes to this designated use shall be permitted.
- b) Permittee shall not engage in any activity that may be dangerous or harmful to persons, property, or the Park; that constitutes or results in waste or unreasonable annoyance (including, without limitation, signage and the use of loudspeakers, sound or light apparatus that could disturb park visitors outside of the Premises); that in any manner causes or results in a nuisance; or that is of a nature that it involves a substantial hazard, such as the manufacture or use of explosives, chemicals or products that may explode.
- c) The Parties hereby acknowledge and agree that Permittee's covenant that the Premises shall be used as set forth in this section "Use of the Premises", is material consideration for Permitter's agreement to enter into this Permit. The Parties further acknowledge and agree that any violation of said covenant shall constitute a Default under this Permit.
- d) Permittee's use of the land is subject to the right of the NPS to establish trails, roads and other improvements and betterments over, upon, or through said premises and further to the use by travelers and others of such established or existing trails and roads. Even if no trail is formally established, the Permittee understands that occasional park visitors are authorized to walk or hike on the various pastures and fields included under this Permit.
- e) Operations under this permit are subject to the conditions outlined in the U.S. Fish and Wildlife Service (USFWS) Biological Opinion for Grazing at Point Reyes National Seashore and the National Oceanic and Atmospheric Administration (NOAA) Fisheries Biological Opinion on Renewal of Grazing Permits. Both of these documents are available upon the Permittee's request.

3) CONSTRUCTION OF IMPROVEMENTS OR ALTERATIONS

- a) Permittee may only make those Improvements or Alterations to the Premises that relate to Permittee's use of the Premises as specified in Item 2, "Use of the Premises."
- b) Permittee shall not undertake any Improvements or Alterations to the Premises (including installation of temporary equipment or facilities) without the prior written approval of Permitter. Any Improvements or Alterations undertaken by Permittee shall be performed in a good and workmanlike manner and with materials of a quality and standard acceptable to Permitter. Permittee shall also maintain equipment and any construction facilities on the Premises in a safe and orderly manner.
- c) Permittee shall not construct any Improvements or Alterations outside the boundaries of the Premises.
- d) Permitter in its discretion is entitled to have on the Premises at any time during the construction of Improvements or Alterations an inspector or representative who shall be entitled to observe all aspects of the construction on the Premises.

4) WATER RIGHTS

Water rights will be perfected as deemed necessary by the Permitter in its own name for water developed or used in connection with this Permit. The Permittee shall furnish Permitter such information as is necessary for the perfection of such rights, including statutory fees, and information for the management and protection of the Park. Permittee shall not perfect water rights in permittee's own name.

5) TREATMENT OF LIVESTOCK, MANAGEMENT OF REFUSE AND CARCASSES

- a) Diseased, injured, or dying animals shall be treated promptly in accordance with customary veterinary practices. Dead animals and refuse shall be promptly removed from Point Reyes National Seashore and shall be disposed of in accordance with all Applicable Laws.
- b) Manure accumulating around feeding or watering stations shall be removed promptly and stored in accordance with Applicable Laws and in a manner that will not contribute to water pollution or create unsanitary or unsightly conditions.
- c) Manure may be stored for use as fertilizer provided that such storage and use is accomplished in accordance with Applicable Laws. Manure not stored in this manner shall be disposed of outside National Park Service boundaries in accordance with Applicable Laws.

6) PESTICIDE AND HERBICIDE USE

- a) The National Park Service utilizes Integrated Pest Management ("IPM") to treat pest and vegetation problems. The goal of IPM is to use the least-toxic, effective methods of controlling pests and vegetation. Except for normal household purposes, Permittee shall not use any pesticides that do not comply with the IPM program. To this end, Permittee shall submit in writing to Permitter, a request for the use of pesticide(s) or herbicide(s) and shall not use any pesticide(s) or herbicide(s) until Permittee has received an express written authorization therefor from Permitter.
- b) Permittee shall manage, treat, generate, handle, store and dispose of all pesticides and herbicides in accordance with Applicable Laws, including reporting requirements.

7) FIRE PREVENTION AND SUPPRESSION

Permittee and its employees, agents, and contractors shall, in Permittee's use and occupancy of the Premises, take all reasonable precautions to prevent forest, brush, grass, and structural fires and shall, if safety permits, assist the Permitter in extinguishing such fires on the Premises.

8) EXCAVATION, SITE AND GROUND DISTURBANCE

- a) Except as provided in Item 13 (Range Improvements), Permittee shall not cut, remove or alter any timber or any other landscape feature; conduct any mining or drilling operations; remove any sand, gravel or similar substances from the ground or watercourse; commit waste of any kind; or in any manner change the contour or condition of the Premises without the prior written approval of the Permitter. Except in emergencies, Permittee shall submit requests to conduct such activities in writing to the Permitter not less than sixty (60) days in advance of the proposed commencement date of any such activities.
- b) If approval is granted, Permittee shall abide by all the terms and conditions of the approval, including provisions pertaining to archaeological resources.

9) WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR CONFINED ANIMAL FACILITIES, NONPOINT SOURCE POLLUTION AND SOIL EROSION.

- a) The Permittee shall comply with all Applicable Laws regarding point source pollution. Permittee is required to operate in compliance with Statewide Minimum Standards for Discharges of Animal Wastes (Title 27, California Code of Regulations Section 22560-22565). Permittee's use and occupancy of the Premises shall be designed to minimize, to the greatest extent feasible, point source pollution within National Park Service boundaries.
- b) This dairy is operated under a Waiver of Waste Discharge Requirements for discharges from Confined Animal Facilities (waiver) issued by the Regional Office of the State Water Resources Control Board (Regional Board) under Resolution No. R2-2003-0094 with Attachment A (Conditions). Permittee shall provide Permitter with copies of all compliance documents or reports associated with this waiver and submitted to the Regional Board. These submissions or reports shall include, in part, copies of Permittee's annual certifications stating that the facility meets all conditions of the waiver and any reports of noncompliance that occur. Permittee shall notify Permitter of meetings with the Regional Board that pertain to the waiver.
- c) Potential sources of non-point source pollution associated with this Permit include soil erosion and animal waste. The Permittee shall comply with all Applicable Laws regarding non-point source pollution (including the protection of beneficial uses of waters as designated by the State of California). Further, Permittee's use and occupancy of the Premises shall be designed to minimize, to the greatest extent feasible, non-point source pollution within National Park Service boundaries or on adjacent lands.
- d) In order to document potential non-point pollution sources Permittee shall work with Permitter to complete the Livestock Facility Checklist (Exhibit D). In addition to on-the-ground performance checklists, water quality monitoring may be conducted at various locations in association with the Grazing Biological Opinion agreement with NOAA Fisheries.

10) ANIMAL UNITS

- a) Permittee agrees under the terms of this permit to a stocking level of 255 Animal Units per year including the milking string, dry cows and heifers. Any increase in the stocking level must be approved expressly in writing by Permitter. The maximum number of dry cows allowed to graze at any one time is 100 Animal Units. The USFWS Biological Opinion for Grazing for C Ranch was based on an average supportable stocking level of cattle on the rangeland, including defined feed lots and High Impact Areas, of 430 Animal Units per year to include the milking string, dry cows and heifers. Up to 10 Animal Units of livestock other than cattle for personal and/or non-commercial use are also authorized. Spot counts to determine the actual number of Animal Units being grazed may be conducted periodically by Permitter.
- b) Permittee shall use Key Areas (Exhibit C, Grazing Standards and Monitoring Procedures) to monitor residual dry matter ("RDM"). Permitter will obtain RDM measurements in the fall months prior to winter rains. If the RDM measurement indicate that less than an average of 1200 pounds per acre of RDM is present, Permitter may impose adjustments in the stocking rates or other range management practices to improve range conditions as outlined in Exhibit C.

- c) The determination of whether or not overgrazing is occurring shall be made by Permitter and Permitter's decision shall be final.

11) TREE AND VEGETATION REMOVAL

- a) The Permittee may not remove tree(s) or vegetation, including brush, unless expressly approved in writing by the Permitter. The Permittee shall provide specific plans to the Permitter for desired tree and vegetation removal during the annual meeting or in writing during the term of this Permit.
- b) Removal of exotic invasive vegetation such as thistles, trimming and vegetation removal around structures and mowing of approved areas is permissible.

12) WILDLIFE PROTECTION

- a) Wildlife is an integral part of Point Reyes National Seashore. Wildlife management practices, including removal of non-native species and the restoration of extirpated native species, are in accordance with NPS legislation, the Code of Federal Regulations, and NPS Policies (NPS Management Policies 2001).
- b) The occasional damage to fences, ranching structures, and livestock forage that is caused by wildlife is to be expected on permitted lands.
- c) Permittee should not engage in any activity that purposely causes harm or destroys any wildlife. Conversely, Permittee should not engage in any activity that purposely supports or increases populations of non-native or invasive animal species.
- d) On a case by case basis, the Permitter will evaluate incidences of depredation and choose a course of action. The nature of the course of action taken, if any, will be determined by the wildlife species, the extent and frequency of the damage and park-wide management objectives.

13) RANGE IMPROVEMENTS

- a) For the purposes of this Permit, Range Improvements include, without limitation, structural range improvements to facilitate proper grazing use and land treatment to manage vegetation or reduce erosion (such as reseeding and brush burning). Permittee shall not implement any Range Improvement without the prior, express written approval of the Permitter. Permittee shall submit written requests for conducting Range Improvement not less than thirty (30) days in advance of the proposed commencement date of proposed Range Improvement.
- b) Notwithstanding the foregoing, Permittee is prohibited from conducting any brush burning. If Permittee believes that brush burning is necessary, Permittee shall submit a request therefore to Permitter and Permitter shall determine in its sole discretion whether to perform the requested brush burning.

14) INSURANCE

- a) Permittee shall purchase the types and amounts of insurance described herein before the Commencement Date of this Permit unless otherwise specified. At the time such insurance coverage is purchased, Permittee shall provide Permitter with a statement of Permittee insurance describing the insurance coverage in effect and a Certificate of Insurance covering each policy in effect as evidence of compliance with this Permit.
- b) Permittee shall provide the Permitter thirty (30) days advance written notice of any material change in the Permittee's insurance program hereunder.
- c) Permitter shall not be responsible for any omissions or inadequacies in insurance coverage or amounts in the event such coverage or amounts prove to be inadequate or otherwise insufficient for any reason whatsoever.
- d) From time to time, as conditions in the insurance industry warrant, the Permitter reserves the right to revise the

minimum insurance limits required in this Permit.

- e) All insurance policies required by this Permit shall specify that the insurance company shall have no right of subrogation against the United States or its employees, or shall provide that the United States is named as an additional insured.
- f) All insurance policies required herein shall contain a loss payable clause approved by the Permittee which requires insurance proceeds to be paid directly to the Permittee without requiring endorsement by the United States. Insurance proceeds covering any loss of the Premises but not used to replace such losses shall be promptly paid by Permittee to Permittee. The use of insurance proceeds for the repair, restoration or replacement of the Premises shall not give any ownership interest therein to Permittee.
- g) Public Liability: The Permittee shall provide Comprehensive General Liability insurance against claims arising from or in association with Permittee's use and occupancy of the Premises. Such insurance shall be in the amount commensurate with the degree of risk and the scope and size of such use and occupancy, but in any event, the limits of such insurance shall not be less than \$500,000.00 per occurrence covering both bodily injury and property damage. If claims reduce available insurance below the required per occurrence limits, the Permittee shall obtain additional insurance to restore the required limits. An umbrella or excess liability policy, in addition to a Comprehensive General Liability Policy, may be used to achieve the required limits.
- h) Property Insurance: At a minimum, the Permittee shall be required to purchase Basic Form Actual Cash Value (replacement cost less depreciation) insurance coverage for all residences on the Premises. Within thirty days of issuance of the Permit, the Permittee shall be required to have the specified level of insurance in place. The Permittee shall, in the event of damage or destruction in whole or in part to the Premises, use all proceeds from the above described insurance policy to repair, restore, replace, or remove those buildings, betterments or improvements determined by the Permittee, in Permittee's sole discretion, to be necessary to satisfactorily discharge the Permittee's obligations under this Permit.
- i) Permittee shall also obtain the following additional coverage:
 - i) Automobile Liability - To cover all owned, non-owned, and hired vehicles in the amount of \$300,000.00.
 - ii) Workers' Compensation - The amount shall be in accordance with that which is required by the State of California.

15) INDEMNITY

- a) Permittee shall indemnify, defend, save and hold Permittee, its employees, successors, agents and assigns, harmless from and against, and reimburse Permittee for, any and all claims, demands, damages, injuries, losses, penalties, fines, costs, liabilities, causes of action, judgments and expenses incurred in connection with or arising in any way out of this Permit: the use or occupancy of the Premises by Permittee or its officers, agents, employees, or contractors; the design, construction, maintenance, or condition of any Improvements or Alterations; or any accident or occurrence on the Premises or elsewhere arising out of the use or occupancy of the Premises by Permittee or its officers, agents, employees, or contractors.
- b) Permittee's obligations hereunder shall include, but not be limited to, the burden and expense of defending all claims, suits and administrative proceedings (with counsel reasonably approved by NPS), even if such claims, suits or proceedings are groundless, false or fraudulent, and conducting all negotiations of any description, and paying and discharging, when and as the same become due, any and all judgments, penalties or other sums due against the United States.
- c) Permittee agrees to cooperate, to the extent allowed by law, in the submission of claims pursuant to the Federal Tort Claims Act against the United States by third parties for personal injuries or property damage resulting from the negligent act or omission of any employee of the United States in the course of his or her employment.
- d) This Item 15 shall survive any termination or revocation of this Permit. The provisions of Item 14 (Insurance) of this Permit shall not limit in any way Permittee's obligations under this Item (15).

16) PROPERTY INTEREST

- a) Title to real property and improvements thereon, including any improvements or alterations constructed by Permittee, shall be and remain solely in Permitter.

17) RENTS, TAXES AND ASSESSMENTS

- a) The annual rental rate for this Permit shall be established by Permitter in an appraisal of the Premises ("Appraisal") and such Appraisal shall be conducted in accordance with the Uniform Appraisal Standards for Federal Lands (version dated 1992).
- b) The annual rent under this Permit is payable in advance on a semi-annual basis. Therefore, Permittee hereby agrees to pay fifty percent of the annual rate on or before June with the remaining fifty percent payable on or before December of each year during the Term.
- c) Permittee shall pay the proper Agency, when and as the same become due and payable, all taxes, assessments, and similar charges which, at any time during the Term of this Permit, are levied or assessed against the Premises.

18) CYCLIC MAINTENANCE

- a) Permittee shall perform all Cyclic Maintenance in accordance with the Provisions of this Permit and at Permittee's sole cost and expense. Permittee is responsible for the maintenance of all fences, buildings, corrals, and other improvements upon the Premises. All improvements and facilities used and occupied by Permittee shall at all times be protected and maintained in a safe, sanitary and sightly condition.
- b) Specific maintenance requirements may be negotiated with Permittee each year as outlined in Item 20 (Annual Meeting). Cyclic Maintenance to be accomplished during the Term of this Permit includes, but is not limited to, the following.
 - i) Fences must be in good repair to ensure that cattle are confined at all times. Abandoned fences and other decrepit improvements shall be removed from the Premises and shall be disposed of outside of the Park or as directed by Permitter after review and approval by the NPS Historian.
 - ii) Ranch service roads shall be maintained in a safe condition that does not contribute to sedimentation and erosion. No new roads or truck trails shall be established without prior written permission of the Permitter.
 - iii) Existing water reservoirs shall be maintained in a safe and secure condition to prevent washouts and erosion. The NPS shall be notified prior to maintenance activities to determine potential effects to threatened and endangered plant and animal species. No new reservoirs shall be constructed or established without prior written approval of the Permitter.
 - iv) Permittee shall maintain all water systems from the main line to the building(s) and outlying water spigots, water troughs, faucets, and stand pipes on the Premises. Permittee shall replace or repair any damage or loss of the water system within the Premises.
 - v) Permittee shall be responsible for removing slash buildup around fences or other facilities within the Premises so as to prevent fire and egress hazards. Permittee shall also be responsible for removing litter and trash from the Premises.

19) COMPLIANCE WITH APPLICABLE LAWS; NEPA, NHPA

- a) General Compliance: As provided for in this permit, Permittee at its sole cost and expense shall promptly comply with all Applicable Laws. Permittee shall immediately notify Permitter of any notices received by or on behalf of Permittee regarding any alleged or actual violation(s) of or non-compliance with Applicable Laws. Permittee shall,

at its sole cost and expense, promptly remediate or correct any violation(s) of Applicable Laws.

- b) National Environmental Policy Act and National Historic Preservation Act: In order to preserve the historic appearance of certain ranch structures, the following additional compliance may be necessary. Where activities undertaken by Permittee require the preparation of compliance documents pursuant to the National Environmental Policy Act ("NEPA") or the National Historic Preservation Act ("NHPA") ("Compliance Activity"), Permittee shall supply all necessary information to Permitter and any Agency in a timely manner. If Permitter determines that the Compliance Activity is warranted, Permitter will prepare NEPA or NHPA documents as appropriate. Permittee shall not implement any aspect of the Compliance Activity until all applicable NEPA and NHPA requirements have been met.

20) ANNUAL MEETING

The Parties shall meet annually, in January, or as necessary during the Term of this Permit for the purposes of discussing and resolving issues of mutual concern and ensuring Permittee is in compliance with the Provisions of this Permit. Proposed changes or modifications to the Permit that may be required in order to meet National Park Service requirements or objectives, including range management objectives, shall be discussed and negotiated at the Annual Meeting. If National Park Service requirements or objectives require prompt attention, Permitter may reasonably change the date for the Annual Meeting.

21) PENALTY

At the option of the Permitter, Permitter may, in lieu of voiding and terminating this Permit, assess a penalty of \$100.00 per day for any failure by Permittee to keep and perform any of the Provisions of this Permit. In such case, Permittee shall be given notice in writing of a grace period (of from one to thirty days) to remedy the situation before a penalty will be assessed. Payment of any penalty under this provision shall not excuse Permittee from curing the default. This provision shall not be construed as preventing Permitter from issuing citations or initiating enforcement proceedings under Applicable Laws.

22) TERM

- a) Six months prior to the Expiration Date of this Permit, this Permit, or a similar permit, may be offered to Permittee for an additional period.
- b) If a subsequent permit is not entered into prior to the Expiration Date, the Provisions of this Permit regarding Permittee's obligations to surrender and vacate the Premises shall apply.
- c) Notwithstanding the foregoing, Permitter shall have no obligation to offer a subsequent permit to Permittee if Permittee breaches any of the Provisions of this Permit or if Permittee terminates this Permit prior to its expiration date.

23) SURRENDER AND VACATE THE PREMISES, RESTORATION

Within 90 days of the Termination Date of this Permit, Permittee shall surrender and vacate the Premises, remove Permittee's Personal Property therefrom, and remove any Improvements or Alterations identified by Permitter. Subject to the approval of the Permitter, Permittee shall also restore the Premises to a condition at least equal to that existing at the time this Permit was entered into, normal wear and tear excepted. If Permittee does not remove Permittee's Personal Property, said Improvements or Alterations, then, at Permitter's option, these items shall either become the property of Permitter without compensation therefor, or Permitter may cause them to be removed and the Premises to be repaired at the expense of the Permittee, and no claim for damages against Permitter, its employees, agents or contractors shall be created or made on account of such removal or repair work.

EXHIBIT A: C Ranch Boundary



National Park Service
Point Reyes National Seashore



Legend
 Ranch Boundary

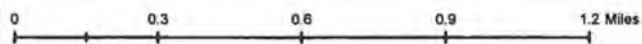


EXHIBIT B: C Ranch Structure Map



National Park Service
Point Reyes National Seashore

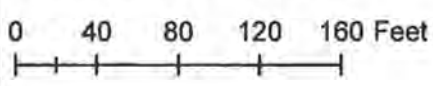


EXHIBIT C
GRAZING STANDARDS
DEFINITIONS

1) PROPER USE

- a) Proper use is a range management term defined as "the degree of livestock utilization of the current year's range forage growth which, if continued, will achieve management objectives and maintain or improve the long term productivity of the site" (RISC Report 1983).

2) RESIDUAL DRY MATTER

- a) Residual dry matter (RDM), sometimes called mulch residue, refers to the amount of forage plant material remaining on the range in the fall following spring and summer grazing. RDM consists of litter or dried plant material (either standing or on the ground) from the current season's growth. It does not include unpalatable forbs or weeds, woody plants, new green growth or dung. Research on California rangelands has shown the importance of RDM in protecting the soil from erosion, improving soil fertility, structure and infiltration rate, and in providing beneficial surface conditions for plant growth.

3) KEY AREAS

- a) A key area is approximately two (2) acres in size. It is a portion of a pasture that is selected as a monitoring point to evaluate the overall pasture conditions.
- b) Factors used in the selection of key grazing areas include:
 - i) Kind and class of grazing animal
 - ii) Range site(s), representative slope, conditions and trend
 - iii) Grazing system used or planned
 - iv) Season of use
 - v) Pasture size
 - vi) Location of fences and natural barriers, water supplies, salt and mineral block and feeding areas
- c) Key areas have the following characteristics:
 - i) They consist of a single "range site" (a classification of land based on specific soil characteristics and potential natural plant community).
 - ii) They are responsive to various management practices and reflect the results of current grazing practices.
 - iii) They represent the average amount of use for the pasture.
- d) Key areas are not located where livestock congregate such as around water and feed supplement facilities and loafing areas, nor are they located in little-used portions of pasture.
- e) Ranchers will be invited to participate in the selection of key areas. Once selected, they will be identified on range maps and maps associated with Special Use Permit or Agricultural (Dairy and Beef Cattle) Use Permits.

4) MONITORING PROCEDURES

- a) Several procedures or techniques are needed to gather sufficient information to monitor both present range condition and range trend over the long term. The three indicators which will be used to evaluate range conditions and trend on National Park Service lands are residual dry matter, species composition changes, and forage productivity.

5) RESIDUAL DRY MATTER STANDARDS AND PROCEDURES

- a) Proper use of the mixed perennial/annual ranges in the Point Reyes area is best evaluated by measuring the amount of residual dry matter (RDM) at the end of the summer grazing period just prior to the fall rains.
- b) RDM is important in that it improves surface conditions for plant growth by providing more organic matter in the topsoil and by sheltering seedlings from the desiccating effects of sun and wind. Thus it provides a favorable microenvironment for early seedling growth and extends the season in which forage is available. RDM is also important in that it provides soil protection against erosion by reducing the impact of rain splash, slowing runoff and enhancing infiltration.
- c) The RDM standard recommended by the Soil Conservation Service for Point Reyes and vicinity is 1200 pounds air dry weight per acre as an average for all grazed lands regardless of slope. Using 1200 pounds as an average will allow for areas of less than that amount, which will likely occur in very rocky or shallow soils and in areas where cattle tend to concentrate. In these areas 1000 pounds per acre is the minimum acceptable amount. Any pasture which has less than 1200 pounds per acres will need other areas with more than this amount in order to attain an overall RDM measurement of 1200 pounds per acre. High impact areas described in Section C are excluded from RMP requirements.
- d) RDM will be measured in two types of surveys September 1 and October 15, just prior to the fall rainy season. Intensive RDM sampling is conducted on key areas using the "Double Sampling Weight Estimation Method" for measuring RDM (Wilm et al 1944). This statistically based method has been extensively field tested and is a standard range management technique for RDM measurement. The double sampling methods makes possible the monitoring of many range units during the few weeks of the year which are suitable for RDM measurement. The measured results in each key area are correlated with plant species cover data in evaluating the effects of grazing management on the range resource.
- e) RDM mapping is conducted on all rangelands throughout the ranchlands. RDM is estimated over entire pastures in terms of broad classes or "zones of utilization". The zones are defined as "severe" (0-600 lb/acre); "heavy" (600-1200 lb./acre); "moderate" (1200-1800 lb./acre); and "light" (over 1800 lb./acre). The survey consists of walking through each pasture to the extent that all acreage can be viewed, and delineating the zones of field range maps in varying colors. The intensively sampled key areas are used as reference sites to aid in visual estimation of RDM zones. This method actually depicts livestock utilization patterns and identifies and quantifies overgrazed areas.

6) PLANT SPECIES COMPOSITION

- a) Range condition refers to the "health" of vegetation and soil on a particular site in relation to its natural potential. It is evaluated on the basis of the kinds, proportions and amounts of plants and the soil features in a given area.
- b) Line/point composition transects are one way of measuring the kinds and proportion of plants on a site. In this method, surveying tapes are laid out in a key area and individual plant species are identified and tallied at 400 random points located in relation to the tape. The resulting data is summarized in terms of the proportion of plant species present. In range management terminology this is referred to as "composition". The total percentage of plant cover, bare ground and litter is also summarized.
- c) Plant composition transects are sampled in spring after seed heads have developed and grasses are readily identifiable. Transects will initially be read each year to determine if the plant community is stable or changing. Changes in the proportion of desirable versus non-desirable forage species indicate whether the range condition is improving or declining in quality over a period of years. In range management terminology this is called monitoring range "trend."

7) FORAGE PRODUCTIVITY

- a) Range condition and trend can also be evaluated by measuring forage productivity. Productivity can be defined as the weight, in pounds per acre, of palatable forage species. Productivity data supplements composition data

by providing an index of plant vigor and an estimate of yield.

- b) Forage productivity data may be used in two ways:
- c) By comparing forage productivity data between pastures with similar soil characteristics, and estimate of range conditions can be obtained.
- d) By comparing forage productivity data over many years (and adjusting for rainfall) a direction can be established indicating an improving or declining range trend.

8) HIGH IMPACT AREAS

- a) The size and location of high impact areas allowed for each specific ranch unit shall be mutually agreed upon by the rancher and the National Park Service. Wherever possible, high impact areas will be restricted to level (less than 10% slope), well-drained areas, 200 feet from perennial streams or other bodies of water. Areas near main roads and other high visitor use zones will be avoided where possible.
- b) It is recognized that a high degree of trampling and denudation of vegetation is unavoidable on these sites. Therefore, the "proper use" standards described above will not apply.
- c) Examples include corrals and feedlots where livestock are confined for management purposes and permanent feeding and watering facilities.

9) MANAGEMENT PRACTICES

- a) Recommendations will be developed and implemented for any pastures, which fall below the minimum standard. For example, range conditions may reflect an unusually dry winter, and an average of range conditions over several years may be used to evaluate whether or not a reduction in animal units being grazed is necessary. Additionally, improvements in range condition may be made by changes in fencing or stock water facilities to obtain better distribution of animals. Other alternatives include changing the length of time or period of grazing, changing the type and class of livestock, or transferring animals from pastures to impact areas and increasing the supplemental feed.

Exhibit D

(Following is a Draft Copy for your information. A finalized form will be forwarded)

Tomales Bay TMDL Livestock Facility Checklist – Cover Sheet

Watershed: _____

Visits: _____

Dates of Visit: _____ Pasture Visited _____

Identify if Olama, Lagunitas or Ocean/Bay, etc.

Ranch Map Attached: Yes No

Facility Information		
Facility Name: _____	Owner/Operator: _____	
Address: _____	Telephone: _____	
	Fax: _____	
Nearest Creek: _____	Quantity of Animals: _____	
	Type of Animals: _____	
Overall Summary		
List of Pastures (approx. acreage)	NPS Identified?	Additional BMP(s) Needed?
_____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Monitoring? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Type: _____		
Location: _____		
Results Indicate Concern?: _____		
Overall summary of all pastures reviewed: _____		

Recommended BMP's in prioritized list for entire Ranch _____		

Signature		
Printed Name: _____	Title: _____	
Signature: _____	Date: _____	
Regional Board Staff: _____	Phone: _____	
PRNS Staff: _____	Phone: _____	
Other Technical Assistance: _____	Phone: _____	
Date of Next Review: _____		

Pasture Checklist

Date of Visit _____

Waterway Management

Pasture Name _____ Pasture Location _____
 Acres _____ Stocking Regime & Density (choose one): permanent, rotational,
seasonal, management intensive, other

Species Present (horse, cow, other): _____

Map Attached? Yes No Initial Visit? Follow Up Visit?

WATERWAYS AND RIPARIAN

Are there waterways present? Yes No

If not in pasture are they immediately adjacent? Yes No

Name(s): _____

Creek Classification: Perennial Intermittent Ephemeral Natural Swale

Riparian Zone Condition (check all that apply)

- Shaded with trees and shrubs (no understory)
- Trees, shrubs & understory (evident of recolonization)
- Grass, forbs, grass-like

Type of Vegetation

- Adequate
- Minimal

Pasture Inventory

Pasture Name / Location	Acreage	Season of Use	Surface Water (Type) ¹	Existing Trough Y/N	NPS Identified Y/N	BMPs Implemented ² Y/N	Monitoring Y/N

¹Discharge Points

Is there a discharge point? Yes No
 Where does the discharge go? Pasture Yes No Creek? Yes No

²BMPs implemented (map should include numbered points where BMPs were implemented, and the type of BMP and date implemented:

Examples: BMP's Location

#1 Fencing
#2 Water Development

Barriers for additional BMP's: No time No money No experience No interest

Erosion Management

Roads (Stable) Yes No Roads (Barrod) Yes No
Gullies Yes No Rills Yes No

BMPs implemented: _____

Pasture Management

Brush Management

None
 Burning, Other

Condition of Pasture Forage

Satisfactory
 Unsatisfactory

Is forage production monitored? Yes No

If yes, what is the RDM level?

Less than 1,200 lb./acre More than 1,200 lb./acre

Pasture Summary

Date of pasture review: _____ Signature of Reviewer: _____

Signature of Manager/owner: _____

Timeframe of Implementation: _____

Corrective actions / Management measures needed? Yes No

Overall Pasture Summary

Recommended BMP's for entire Ranch in order of priority: _____

