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Sacramento County Recording Mark Norris, Clerk/Recorder BOOK 20011105 PAGE 0610

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CITY AGREEMENT NO: 2001-141

2001-141

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Parcel Nos.: 226-0050-009, 226-0050-010, 226-0050-012, 226-0050-014, 226-0050-016, 226-0050-018, 226-0050-019, 226-0050-020, 226-0050-021, 226-0050-022, 226-0050-026

# **GRANT DEED OF** PERPETUAL CONSERVATION EASEMENT

THIS GRANT DEED OF PERPETUAL CONSERVATION EASEMENT ("Conservation Easement" or "Easement") is made this 14th day of (hught, 2001, by the City of Sacramento, a charter municipal corporation ("Grantor"), in favor of the Sacramento Valley Open Space Conservancy ("SVOSC"), a California nonprofit corporation ("Grantee") (collectively "Parties"), its successors and assigns.

# RECITALS

Grantor is a charter municipal corporation and is the sole owner in fee simple of certain real property located in the County of Sacramento, State of California ("Property" or "Hansen Ranch"), which is more particularly depicted on the map attached to this Conservation Easement as Exhibit A<sub>CE</sub> and incorporated herein by this reference, and described in Exhibit B<sub>CE</sub>, which is attached hereto and incorporated herein by this reference.

Grantor acquired the Property under deeds requiring that it hold the Β. Property in perpetuity for the people of Sacramento for such public recreational, cultural or other public purposes as its governing body shall from time to time determine, and the grant of this Easement is in furtherance of such purposes.

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C. Grantee is a nonprofit 501(c)(3) corporation qualified to do business in the State of California and is authorized to hold conservation easements for the conservation purposes identified in California Civil Code section 815 *et seq.* 

D. Simultaneously with the execution of this Easement, the City of Sacramento is granting to the Sacramento Area Flood Control Agency ("SAFCA") a perpetual easement for flood control purposes ("Flood Control Easement") on the Property. The Flood Control Easement grants SAFCA rights and privileges including the right to construct, reconstruct, repair and maintain the Dry Creek North Levee and its appurtenances provided such activities are undertaken only in the North Levee Area depicted and described in Exhibits  $A_{FCE}$  and  $B_{FCE}$  to the Flood Control Easement. The Flood Control Easement also grants SAFCA the right to clear and remove natural or artificial obstructions, improvements, trees and vegetation found to be detrimental to the flood water conveyance capacity of the Property. The exercise of its rights under the Flood Control Easement shall comply fully with the mandatory procedures set forth in the Memorandum of Understanding ("MOU"); the MOU is described more fully in Paragraph M, below. The Flood Control Easement is attached to the MOU as Exhibit B<sub>MOU</sub>.

E. Since 1955, a strip of land along the southern portion of the Property has been encumbered by a recorded indenture ("1955 Indenture"), which granted the Sacramento and San Joaquin Drainage District certain rights including, but not limited to, the right to construct, repair, and maintain the Robla Creek South Levee (referred to in the 1955 Indenture as the south levee of Linda Creek) and the right to clear and maintain the Robla Creek channel (referred to in the 1955 Indenture as Linda Creek). The 1955 Indenture, which was recorded in the official records of Sacramento County at Book 2837, Page 401, is attached to the Flood Control Easement as Exhibit  $C_{FCE}$ . The American River Flood Control District has, since 1958, exercised the rights granted by the 1955 Indenture. The rights identified in the 1955 Indenture are not affected by this Easement. The exercise of the rights identified in the 1955 Indenture must, however, conform to all applicable federal and state laws, including, but not limited to, the Endangered Species Act, 16 U.S.C. § 1531 *et seq.*, as amended ("ESA").

F. On April 1, 1994, the United States Army Corps of Engineers ("Corps") issued to SAFCA Permit No. 199200719 for its North Area Local Project ("NALP"), a flood control project in Sacramento, California. On December 8, 1998, the United States Fish and Wildlife Service ("Service") issued a Biological Opinion and Incidental Take Statement (Reference No. 1-1-98-F-0109) ("1998 Biological Opinion") describing the impacts of the construction of the NALP on the vernal pool fairy shrimp (*Branchinecta lynchi*) and vernal pool tadpole shrimp (*Lepidurus packardi*), crustaceans that have been federally listed as threatened and endangered respectively. The 1998 Biological Opinion

also described the impacts of NALP construction on the valley elderberry longhorn beetle ("VELB") (*Desmocerus californicus dimophus*), a federally listed threatened species, and the giant garter snake (*Thamnophis gigas*), a federally listed threatened species.

G. On March 5, 2001, the Service issued a revised Biological Opinion and Incidental Take Statement (Reference No. 1-1-01-F-0031) ("2001 Biological Opinion") containing mandatory terms and conditions with which SAFCA must comply in order for the NALP to be exempt from the prohibitions of section 9 of the ESA. The 2001 Biological Opinion amends the 1998 Biological Opinion as indicated. On or about May 1, 2001, the Corps amended its Permit No. 199200719 for SAFCA's NALP to incorporate the terms of the 2001 Biological Opinion.

H. SAFCA has complied with its obligation to create vernal pool and VELB habitat as described in the 2001 Biological Opinion by purchasing, at a Service-approved conservation bank (Conservation Resources, LLC), credits for the creation of 1.87 acres of vernal pool habitat and for the planting of 1,184 elderberry cuttings or seedlings and 1,184 associated native plant cuttings, saplings or seedlings. SAFCA will comply with its obligation to preserve existing vernal pool habitat as described in the 2001 Biological Opinion by preserving 3.74 acres of vernal pools at Hansen Ranch.

I. One of the mandatory terms and conditions of the 2001 Biological Opinion provides that if SAFCA preserves vernal pool habitat on the Property as compensation for the impacts of NALP construction, it shall acquire from the City of Sacramento a perpetual conservation easement over portions of the Property, which conservation easement shall be held by a third party acceptable to the Service. The 2001 Biological Opinion also mandates that SAFCA retain a Service-approved Preserve Manager, who will be responsible for the preservation, monitoring, and maintenance of vernal pool habitat on the Property, through implementation of a Service-approved Conservation, Monitoring and Management Plan ("CMMP"). This Conservation Easement complies with the 2001 Biological Opinion by limiting permissible uses on most of the Property, including all areas of the Property where SAFCA will preserve vernal pool habitat (the "Conservation Area"), which area is more particularly depicted and described in Exhibits  $A_{CE}$  and  $B_{CE}$  attached hereto.

J. The 2001 Biological Opinion does not describe any measures to minimize the impact of the construction of the NALP on the giant garter snake because the Service found that reasonable and prudent measures specified in a Biological Opinion and Incidental Take Statement dated March 11, 1994 (Reference No. 1-1-94-F-13) had been implemented, and no additional measures would be necessary, provided no additional take was to occur.

K. The Property possesses and may in the future possess additional significant biotic, ecological, aesthetic, educational, scientific, and habitat values (collectively "Conservation Values") of great importance to the Grantor, Grantee, people of Sacramento and people of California. Conservation Values include the vernal pools to be preserved on the Property as potential habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp in order to comply with the 2001 Biological Opinion. Conservation Values also may include habitat and species created, restored and/or preserved in the Conservation Area above and beyond the vernal pools preserved in order to comply with the 2001 Biological Opinion ("Supplemental Habitat").

L. The Service has agreed to undertake an evaluation of the Conservation Area's potential as a site for Supplemental Habitat. In the event that the Service determines that the Conservation Area can provide Supplemental Habitat as mitigation for future projects, the Service and SAFCA shall work to develop a Mitigation Banking Agreement or similar Service-approved agreement for the Property.

M. Simultaneously with the execution of this Conservation Easement, SAFCA, the City of Sacramento, the Service, and the SVOSC are entering into an MOU that identifies the responsibilities of SAFCA, the City of Sacramento, the Service, and the SVOSC, and provides a common understanding of actions that will and may be undertaken to create, preserve, restore and maintain habitat on the Property to ensure compatible use of the Property for preservation of such habitat and for flood control, recreation, and grazing. The MOU identifies the responsibilities of the Parties, SAFCA, and the Service with respect to the above-described actions.

N. SAFCA has prepared the Hansen Ranch Range Management Plan ("Range Management Plan") for the Property and shall secure Service approval for that plan. SAFCA's obligations relating to the Range Management Plan and grazing on the Property are described in detail in the MOU.

O. Grantor will in the future prepare and secure Service approval for a Recreation Plan for the Property. Grantor's obligations relating to the Recreation Plan and recreation on the Property are described in detail in the MOU.

P. Grantor intends for this Conservation Easement to ensure compatible use of the Property for flood control, for the creation, preservation, restoration, and maintenance of habitat, for recreation, and for grazing.

Q. Grantee agrees by accepting this grant to honor the intentions of Grantor stated herein and to protect in perpetuity the Conservation Values identified herein in

accordance with the terms of this Conservation Easement, the CMMP, the MOU, the 2001 Biological Opinion, and any document governing the creation, monitoring, management and/or maintenance of Supplemental Habitat.

R. The Parties intend for SAFCA to be a third-party beneficiary with rights under this Conservation Easement as specified below. The rights granted to SAFCA by this Conservation Easement will enable it to carry out its obligation to preserve vernal pool habitat as set forth in the 2001 Biological Opinion and to pursue the possibility of using the Conservation Area as a site for Supplemental Habitat.

S. The City of Sacramento and SAFCA have agreed upon the payments to be made by SAFCA to the City of Sacramento for the purchase of this Easement. The details of SAFCA's responsibilities to make payments to the City of Sacramento are described in a separate Payment Agreement between SAFCA and the City.

T. This Conservation Easement has been approved by the Service.

U. There are two pole line easements along the eastern boundary of the Property ("Pole Line Easements"). The Pole Line Easements are recorded in the official records of Sacramento County at Book 2806, Page 374 and at Book 604, Page 133. The rights identified in the Pole Line Easements are not affected by this easement.

# **COVENANTS, TERMS, CONDITIONS AND RESTRICTIONS**

In consideration of the above recitals (which the Parties agree are true and correct) and the mutual covenants, terms, conditions, and restrictions contained herein, and pursuant to the laws of California, and in particular California Civil Code section 815 *et seq.*, and any amendments or successor provisions thereto, Grantor hereby voluntarily grants and conveys to Grantee for valuable consideration, a perpetual conservation easement over the Conservation Area of the nature and character and to the extent hereinafter set forth.

# 1. PURPOSE

It is the Purpose of this Conservation Easement to ensure that the Conservation Area will be retained, protected, and preserved forever in a predominantly open-space condition and to prevent any use of the Conservation Area that will impair or interfere with the Conservation Values. Grantor intends that this Conservation Easement will ensure that the Conservation Area will be used only for such activities as are consistent with this Purpose, which activities include maintenance of the Property's flood

water conveyance capacity, creation, preservation, restoration, and maintenance of habitat, recreation, and grazing.

Grantor, Grantee, the Service and SAFCA are simultaneously with the execution of this Conservation Easement entering into the MOU to ensure compatible use of the Property for flood control, for habitat creation, preservation, restoration, and maintenance, for recreation, and for grazing. As the MOU explains in detail, the Range Management Plan and/or Recreation Plan may be amended in the future, subject to the approval of the Service, in order to further restrict grazing and/or recreation on the Property to facilitate the creation, preservation, restoration, and/or maintenance of Supplemental Habitat in the Conservation Area.

This Conservation Easement shall apply only to the Conservation Area as depicted in Exhibit  $A_{CE}$  and described in Exhibit  $B_{CE}$ , and shall not apply to the areas expressly excluded in Exhibits  $A_{CE}$  and  $B_{CE}$  (the "Excluded Area"). Nothing in this Conservation Easement shall limit in any way the rights granted by the 1955 Indenture, the Flood Control Easement or the Pole Line Easements. Likewise, nothing in this Conservation Easement shall limit in any way the exercise by persons other than Grantor, its officers, employees, assigns, agents and potential future lessees of rights relating to minerals, oil, gas, and other hydrocarbon substances that may be situated in and under the Conservation Area, which rights the prior owners of the Property reserved to themselves in the deeds by which they granted to the City of Sacramento their interest in the Property ("Hansen Ranch Mineral Rights"). Any exercise of the Hansen Ranch Mineral Rights must, however, conform to all applicable federal, state and local laws, including, but not limited to, the ESA. In the event Grantor, its officers, employees, assigns, agents and/or lessees obtain any interest in the Hansen Ranch Mineral Rights, their exercise of those rights shall be subject to the restrictions described in paragraph 3, below.

# 2. RIGHTS AND OBLIGATIONS OF GRANTEE

To accomplish the Purpose of this Conservation Easement, the following rights and obligations are conveyed to Grantee by this Conservation Easement:

a. To protect Conservation Values in a manner consistent with the CMMP, the MOU, the 2001 Biological Opinion, and any document governing the creation, monitoring, management and/or maintenance of Supplemental Habitat;

b. To enter upon and have access to the Conservation Area to monitor Grantor's compliance with and otherwise enforce the terms of this Conservation Easement and to fulfill any and all duties identified in the CMMP, the MOU, the 2001

Biological Opinion, and any document governing the creation, monitoring, management and/or maintenance of Supplemental Habitat, provided that such entry shall not unreasonably impair or interfere with Grantor's use and quiet enjoyment of its property or unreasonably disturb natural resources on the Property; and

c. To prevent any activity on or use of the Conservation Area that is inconsistent with the terms of this Conservation Easement, the CMMP, the MOU, the 2001 Biological Opinion, and any document governing the creation, monitoring, management and/or maintenance of Supplemental Habitat, and to require the restoration of such areas or features of the Conservation Area that may be damaged by any such activity or use.

## 3. <u>PROHIBITED USES</u>

Any activity on or use of the Conservation Area inconsistent with the Purpose of this Conservation Easement as stated in paragraph 1, above, is prohibited. Without limiting the generality of the foregoing, Grantor, its officers, employees, assigns, agents, and potential future lessees are expressly prohibited from engaging in the following in the Conservation Area:

a. Leveling, grading, landscaping, cultivating or otherwise altering the Conservation Area's existing topography for any purpose, including the exploration for, or development of, mineral resources, except that the existing topography of the Conservation Area may be altered:

> (i) as required for the creation, preservation, restoration, and/or maintenance of habitat consistent with the CMMP, the MOU, the 2001 Biological Opinion, and any document governing the creation, monitoring, management and/or maintenance of Supplemental Habitat,

(ii) as required for the creation and maintenance of recreational amenities, including, but not limited to interpretive trails, consistent with the Service-approved Recreation Plan,

(iii) as required for grazing consistent with the Service-approved Range Management Plan, and

(iv) as required to clear and remove natural or artificial obstructions, improvements, trees and vegetation found to be detrimental to the flood water conveyance capacity of the Property, provided that the person or entity undertaking such activities complies with mandatory procedures set forth in the MOU;

b. Placement of new structures in the Conservation Area, including buildings and billboards, except that the following structures are permitted:

(i) structures, including but not limited to interpretive signs, directional signs, and viewing structures that are placed in the Conservation Area consistent with the Service-approved Recreation Plan, and

(ii) signs that indicate the presence of protected habitat to minimize the possibility that such habitat will be disturbed inadvertently, provided such signs are consistent with the terms of the CMMP and any document governing the creation, monitoring, management and/or maintenance of Supplemental Habitat;

c. Discharging, dumping, burning or storing of rubbish, garbage, grass clippings, dredge material, household chemicals, or any other wastes or fill material in the Conservation Area, except that noncontaminating material may be deposited:

> (i) as required for the construction and maintenance of recreational amenities, including but not limited to interpretive trails, consistent with the Service-approved Recreation Plan, and

(ii) as required for the creation, preservation, restoration, and/or maintenance of habitat consistent with the CMMP, the MOU, the 2001 Biological Opinion, and any document governing the creation, monitoring, management and/or maintenance of Supplemental Habitat;

d. Constructing any new road except as may be necessary to reconstruct, widen or realign Ascot Avenue along the Northeastern and/or Eastern portion of the Property;

e. Constructing any new trail, except in a manner consistent with the Service-approved Recreation Plan;

f. Operating motor vehicles except:

(i) as required for grazing consistent with the Service-approved Range Management Plan,

(ii) as required to create, preserve, restore, monitor, and/or maintain habitat consistent with the CMMP, the MOU, the 2001 Biological Opinion, and any document governing the creation, monitoring, management and/or maintenance of Supplemental Habitat,

(iii) as required to create and maintain recreational amenities, including but not limited to interpretive trails, consistent with the Service-approved Recreation Plan, and

(iv) as required to clear and remove natural or artificial obstructions, improvements, trees and vegetation found to be detrimental to the flood water conveyance capacity of the Property, provided that the person or entity undertaking such activities complies with mandatory procedures set forth in the MOU;

g. Killing, removing, altering, or replacing existing native vegetation, except:

(i) as required to create, preserve, restore, and/or maintain habitat consistent with the CMMP, the MOU, the 2001 Biological Opinion, and any document governing the creation, monitoring, management and/or maintenance of Supplemental Habitat,

(ii) as required to create and maintain recreational amenities, including but not limited to interpretive trails, consistent with the Service-approved Recreation Plan,

(iii) as required for grazing consistent with the Service-approved Range Management Plan, and

(iv) as required to clear and remove natural or artificial obstructions, improvements, trees and vegetation found to be detrimental to the flood water conveyance capacity of the Property, provided that the person or entity undertaking such activities complies with mandatory procedures set forth in the MOU;

h. Engaging in activities in the Conservation Area that may alter the on site hydrology of the Property and the associated watersheds, including but not limited to excessive pumping of groundwater, manipulation or blockage of natural drainages, and

inappropriate water application or placement of stormwater drains, except that activities that may alter the hydrology of the Property and the associated watersheds are permitted:

(i) as required for the creation, preservation, restoration, and/or maintenance (including irrigation) of habitat consistent with the CMMP, the MOU, the 2001 Biological Opinion, and any document governing the creation, monitoring, management and/or maintenance of Supplemental Habitat,

(ii) as required to clear and remove natural or artificial obstructions, improvements, trees and vegetation found to be detrimental to the flood water conveyance capacity of the Property, provided that the person or entity undertaking such activities complies with mandatory procedures set forth in the MOU, and

(iii) as required to respond to emergencies, provided that the person or entity undertaking such activities complies with the procedures set forth in the MOU;

i. Conducting fire protection activities, including the creation of fire breaks, that may adversely impact Conservation Values, except as required to respond to an imminent threat to public health or safety or to property, unless the following criteria are satisfied:

(i) the location of any fire break is approved by the Service, Grantee, SAFCA, and the fire department,

(ii) the fire break does not exceed the minimum required width, and

(iii) mowing (not discing) is used for fire break creation whenever possible;

j. Grazing of livestock, except in a manner consistent with the Service-approved Range Management Plan;

k. Using pesticides, herbicides, or rodenticides except with prior Service approval and in a manner consistent with the CMMP, the MOU, and any other Service-approved document; and

1. Introducing exotic species, including plant and aquatic species, except

that livestock may be grazed on the Property in a manner consistent with the Service-approved Range Management Plan.

# 4. <u>GRANTOR'S DUTIES</u>

Grantor shall, by satisfying its obligations set forth in the MOU and in any future Service-approved Recreation Plan, prevent unauthorized entry of the Conservation Area by persons whose activities may degrade or harm Conservation Values.

# 5. RIGHTS RESERVED BY GRANTOR

Grantor reserves to itself, and to its officers, employees, successors, assigns, agents and present and potential future lessees all rights accruing from its ownership of the Property including, but not limited to the right to engage in or permit or invite others to engage in all uses of the Conservation Area that are not inconsistent with this Easement, the CMMP, the MOU, and any document governing the creation, monitoring, management and/or maintenance of Supplemental Habitat.

Grantor agrees to notify and obtain the written approval of Grantee, the Preserve Manager, SAFCA, and the Service prior to undertaking any activity which may have a materially adverse impact on Conservation Values. The purpose of this notice is to afford Grantee, the Preserve Manager, SAFCA, and the Service an adequate opportunity to monitor the activities in question to ensure that they are designed and carried out in a manner that is consistent with this Easement, the CMMP, the MOU, the 2001 Biological Opinion, and any document governing the creation, monitoring, management and/or maintenance of Supplemental Habitat.

# 6. <u>REMEDIES</u>

If one of the Parties hereto concludes that the other Party is in violation of the terms of this Easement or that a violation is threatened, such Party shall give written notice to the other Party, the Preserve Manager, SAFCA, and the Service of such claimed violation and demand corrective action sufficient to cure such violation and, where the violation involves injury to Conservation Values resulting from any use or activity inconsistent with the terms of this Easement, to restore the portion of the Conservation Area so injured. The Service and SAFCA may also provide such notice in which case the notice shall be given to both Parties, the Preserve Manager and, as appropriate, either the Service or SAFCA. In furtherance of the mutual commitments made in the MOU, the Service and/or SAFCA shall have the right to enforce the terms of this Easement as provided herein.

If a Party fails to cure a claimed violation, whether because the Party disputes the claimed violation or for any other reason, within sixty (60) days after receipt of notice thereof from the other Party, the Service, or SAFCA (or, under circumstances where the violation cannot reasonably be cured within a sixty (60) day period, fails to continue diligently to cure such violation until finally cured), the aggrieved Party, the Service, and/or SAFCA, may bring an action at law or in equity in a court of competent jurisdiction to enforce the terms of this Easement, to enjoin any violation, ex parte as necessary, by temporary or permanent injunction, to recover any damages to which it may be entitled for violation of the terms of this Easement or injury to any Conservation Values protected by this Easement, including damages for the loss of biotic, ecological, aesthetic, educational, scientific or habitat values, and to require restoration of the Conservation Area to the condition that existed prior to any such injury. If circumstances require immediate action to prevent or mitigate significant damage to Conservation Values, Grantor, Grantee, the Service and/or SAFCA may pursue its remedies under this section without prior notice or without waiting for the period provided for the cure to expire.

Each Party's rights, and those of the Service and SAFCA, under this section apply equally in the event of either actual or threatened violations of the terms of this Easement, and each Party agrees that the other Party's remedies, and those of the Service and SAFCA, at law for any violation of the terms of this Easement are inadequate and that such Party, the Service, and/or SAFCA shall be entitled to the injunctive relief described in this paragraph, both prohibitive and mandatory, in addition to such other relief to which such Party, the Service, and/or SAFCA may be entitled, including specific performance of the terms of this Easement, without the necessity of proving either actual damages or the inadequacy of otherwise available legal remedies. Each Party's remedies, and those of the Service and SAFCA, described in this paragraph shall be cumulative and shall be in addition to all remedies now or hereafter existing at law or in equity.

Furthermore, the provisions of California Civil Code section 815 *et seq.*, are incorporated herein by this reference and this Easement is made subject to all of the rights and remedies set forth therein. If at any time in the future Grantor or Grantee or any subsequent transferee or assignee uses or threatens to use such lands for purposes not in conformance with the provisions of this Easement, or releases or abandons this Easement in whole or in part, notwithstanding California Civil Code section 815 *et seq.*, the Service and SAFCA shall have standing as interested Parties, and as third party beneficiaries in any proceeding affecting this Easement.

a. <u>Costs of Enforcement</u>. Reasonable enforcement costs incurred as a result of a breach of the terms of this Easement, including without limitation, costs of suit

and attorneys fees, and any costs of restoration necessitated by such breach shall be borne by the breaching Party. In the event of a successful action to enforce the terms of this Easement, costs of suit including, without limitation, attorneys fees, shall be borne by the unsuccessful Party; provided, however, that costs and attorneys' fees recoverable against the United States shall be governed by applicable federal law.

b. <u>Grantee's Discretion</u>. Enforcement of the terms of this Easement by Grantee shall be at the discretion of Grantee, and any forbearance by Grantee to exercise its rights under this Easement shall not be deemed or construed to be a waiver by Grantee of such term or of any subsequent breach of the same or any other term of this Easement or of any of Grantee's rights under this Easement. No delay or omission by Grantee in the exercise of any right or remedy upon any breach by Grantor shall impair such right or remedy or be construed as a waiver.

c. <u>Acts Beyond Grantor's Control</u>. Nothing contained in this Easement shall be construed to entitle Grantee, the Service or SAFCA to bring any action against Grantor for any injury to or change in the Conservation Area resulting from causes beyond Grantor's reasonable control, including, without limitation, fire, drought, flood, storm, and earth movement.

d. <u>Waiver of Certain Defenses</u>. Each Party hereby waives any defense against enforcement of this Easement based on laches, estoppel, or prescription in view of the Party's limited and infrequent presence on the Property.

7. ACCESS TO PROPERTY

a. The Service and the Corps shall have the right to enter the Property twenty-four (24) hours after providing notice to Grantee and Grantor of their intent to enter and if the Service and/or the Corps determine that it is necessary to enter either the Dry Creek North Levee Area or the Robla Creek South Levee Area, notice shall also be provided to the respective designee(s), such as the American River Flood Control District, of Grantor and Grantee.

b. Grantor may permit public access to the Conservation Area consistent with the Service-approved Recreation Plan.

c. Grantee, SAFCA, and their designees shall have the right to enter upon and have access to the Conservation Area to monitor Grantor's compliance with and otherwise enforce the terms of this Easement, provided that such entry shall not unreasonably impair or interfere with Grantor's use and quiet enjoyment of its property or

unreasonably disturb natural resources on the Conservation Area.

d. SAFCA and its designees shall have the right to enter upon and have access to the Property in order to implement and/or comply with the CMMP, the MOU, the 2001 Biological Opinion, and any document governing the creation, monitoring, management and/or maintenance of Supplemental Habitat.

e. SAFCA and its designees shall have the right to enter upon and have access to the Property to undertake any activity permitted by the Flood Control Easement, provided that such activity complies with the mandatory procedures set forth in the MOU.

f. Any person who has the legal right to exercise the Hansen Ranch Mineral Rights shall have the right to enter the Property from time to time as necessary to exercise such Hansen Ranch Mineral Rights, so long as the exercise of the Hansen Ranch Mineral Rights fully complies with ESA.

g. Any person who has the legal right to exercise rights granted by the 1955 Indenture or the Pole Line Easements shall have the right to enter the area covered by the 1955 Indenture or the Pole Line Easements as necessary to exercise such rights, so long as the exercise of these rights fully complies with ESA.

# 8. <u>COSTS AND LIABILITIES</u>

Except as set forth in this Easement, the CMMP, the MOU, the Flood Control Easement, or as otherwise agreed to in writing between the Parties hereto, Grantor retains all responsibilities and shall bear all costs and liabilities of any kind related to the ownership, operation, upkeep, and maintenance of the Property. Unless otherwise specified in this Easement, the CMMP, the MOU, the Flood Control Easement, or as otherwise agreed to in writing between the Parties hereto, any Party proposing to undertake any construction or other activity or use not prohibited by this Easement shall be responsible for obtaining any applicable governmental permits and approvals for such activity. All such construction or other activity or use shall be undertaken in accordance with all applicable federal, state, and local laws, regulations, and requirements. Grantor shall keep the Property free of any liens arising out of any work performed for, materials furnished to, or obligations incurred by Grantor.

a. <u>Taxes</u>: Grantor shall pay before delinquency all taxes, assessments, fees, and charges of whatever description (collectively "taxes") properly levied on or assessed against the Property by competent authority, including any taxes imposed upon, or incurred as a result of, this Easement, and shall furnish Grantee with satisfactory evidence

of payment upon request.

b. <u>Representations and Warranties</u>: Grantor represents and warrants that to the best of its knowledge:

(i) No substance defined, listed, or otherwise classified pursuant to any federal, state, or local law, regulation, or requirement as hazardous, toxic, polluting, or otherwise contaminating to the air, water, or soil, or in any way harmful or threatening to human health or the environment exists or has been released, generated, treated, stored, used, disposed of, deposited, abandoned, or transported in, on, from, or across the Property;

(ii) There are not now any underground storage tanks located on the Property, whether presently in service or closed, abandoned, or decommissioned, and no underground storage tanks have been removed from the Property in a manner not in compliance with applicable federal, state, and local laws, regulations, and requirements;

(iii) Grantor and the Property are in compliance with all federal, state, and local laws, regulations, and requirements applicable to the Property and its use;

(iv) There is no pending or threatened litigation in any way affecting, involving, or relating to the Property; and

(v) No civil or criminal proceedings or investigations have been instigated at any time or are now pending, and no notices, claims, demands, or orders have been received, arising out of any violation or alleged violation of, or failure to comply with, any federal, state, or local law, regulation, or requirement applicable to the Property or its use, nor do there exist any facts or circumstances that Grantor might reasonably expect to form the basis for any such proceedings, investigations, notices, claims, demands, or orders.

The foregoing representations and warranties are based on and limited to Grantor's present knowledge, and are not intended, and shall not be interpreted, to suggest or otherwise indicate that Grantor has conducted any investigation into such matters, nor shall any provision of this Easement be interpreted to impose any duty upon Grantor to investigate such matters beyond its present knowledge.

15.

c. <u>Remediation</u>: If, at any time, Grantor, its board or council members, officers, employees, agents, lessees, contractors or any other person or entity employed by or acting on its behalf causes or has caused a release in, on, or about the Property of any substance now or hereafter defined, listed, or otherwise classified pursuant to any federal, state, or local law, regulation, or requirement as hazardous, toxic, polluting, or otherwise contaminating to the air, water, or soil, or in any way harmful or threatening to human health or the environment ("Hazardous Substances"), Grantor agrees to take all steps required by law to assure its containment and remediation, including any cleanup that may be required. Any person or entity grazing livestock on the Property after the date of the MOU shall be a lessee of SAFCA and therefore shall not be considered a lessee of Grantor for purposes of this subsection c. If the release was caused by Grantee, its board members, officers, employees, agents, lessees, contractors or any other person or entity employed by or acting on its behalf, Grantee shall take all steps required by law to assure its containment and remediation any other person or entity employed by or acting on its behalf, Grantee shall take all steps required by law to assure its containment and remediation, including any cleanup that may be may be required by or acting on its behalf, Grantee shall take all steps required by law to assure its containment and remediation, including any cleanup that may be required.

d. <u>Control</u>: Nothing in this Easement shall be construed as giving rise in the absence of a judicial decree to any right or ability in Grantee to exercise physical or managerial control over the day-to-day operations of the Property, or any of Grantor's activities on the Property, or otherwise to become an operator with respect to the Property within the meaning of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C.A. section 9601, *et seq.*, and in the Carpenter-Presley-Tanner Hazardous Substance Account Act, Cal. Health and Safety Code section 25300, *et seq.* 

e. <u>Hold Harmless</u>: Grantor, or its successor or assign, shall hold harmless, indemnify, and defend Grantee and its board members, directors, officers, employees, agents, lessees, and contractors as well as their heirs, personal representatives, successors, and assigns (collectively "Indemnified Party"), with counsel approved by the Indemnified Party, which approval shall not be withheld unreasonably, from and against any and all liabilities, penalties, fines, charges, costs, losses, damages, expenses, causes of action, claims, demands, judgments, or administrative actions, including, without limitation, reasonable attorney's fees (collectively "Liabilities"), resulting from any act, omission, condition or other matter related to or occurring on or about the Property and caused by Grantor, its board or council members, officers, employees, agents, lessees, contractors, or any other person or entity employed by or acting on its behalf. The actions, omissions, conditions, or other matters referenced above shall include, without limitation, the use, storage, treatment, transportation, release, or disposal of Hazardous Substances on or about the Property, even if such release of Hazardous Substances occurred prior to the date of this Easement but after the date on which the Grantor acquired the portion(s) of the Property affected by the release. The Liabilities referenced above shall include,

without limitation, reasonable attorney's fees arising from or in any way connected with the injury to or death of any person, or physical damage to any property. The term Hazardous Substances used above shall refer to any substance now or hereafter defined, listed, or otherwise classified pursuant to any federal, state, or local law, regulation, or requirement as hazardous, toxic, polluting, or otherwise contaminating to the air, water, or soil, or in any way harmful or threatening to human health or the environment. The above provisions shall survive the recording of any deeds hereunder. Any person or entity grazing livestock on the Property after the date of the MOU shall be a lessee of SAFCA and therefore shall not be considered a lessee of Grantor for purposes of this subsection e.

### 9. <u>AMENDMENT</u>

This Easement may be amended only with the express written consent of Grantor, Grantee, the Service and SAFCA. Any amendment must be consistent with the Purpose of this Easement, as described in Paragraph 1, above, and shall not affect its perpetual duration. Any amendment to this Easement shall be recorded in the official records of the County of Sacramento, State of California.

# 10. ASSIGNMENT AND TRANSFER

This Easement is transferable, but Grantee shall give Grantor, SAFCA, and the Service at least thirty (30) days prior written notice of the transfer. Grantee may assign its rights and obligations under this Easement only to an organization or entity that is: (1) approved in writing by the Service and SAFCA; (2) a public agency or a qualified organization at the time of transfer under section 170(h) of the Internal Revenue Code of 1954, as amended (or any successor provision then applicable), and the applicable regulations promulgated thereunder; and (3) authorized to acquire and hold conservation easements under California Civil Code section 815 *et seq*. (or any successor provision then applicable) or the laws of the United States. As a condition of such assignment or transfer, the Assignee or Transferee shall agree in writing to assume all of Grantee's obligations hereunder. Grantee shall not release, modify, relinquish or abandon its rights and obligations under this Easement without the prior written consent of the Service and SAFCA.

# 11. EXECUTORY LIMITATION

If Grantee shall cease to exist or be authorized to hold this Easement, and a prior assignment is not made in accordance with the directly preceding paragraph, Grantee's rights shall vest in an organization or entity agreed to in writing by the Grantor, Service and SAFCA or, if the Grantor, Service and SAFCA do not reach such an

agreement within 30 days, Grantee's rights shall vest in such organization or entity as a court of competent jurisdiction shall direct pursuant to applicable California law and with due regard to the requirements for an assignment described in the directly preceding paragraph.

# 12. <u>SUBSEQUENT TRANSFERS</u>

Grantor agrees to incorporate the terms of this Easement by reference in any future deed or other future legal instrument by which Grantor divests itself of any interest in all or a portion of the Property subsequent to the date of this Easement, including, without limitation, a leasehold interest. Grantor further agrees to give written notice to Grantee, SAFCA, and the Service at least thirty (30) days prior to the date of any property transfer. The failure of Grantor to perform any act required by this paragraph shall not impair the validity of this Easement or limit its enforceability in any way.

13. <u>ESTOPPEL CERTIFICATES</u>

Upon request by Grantor, Grantee shall within thirty (30) days execute and deliver to Grantor any document, including an estoppel certificate, which certifies, to the best of Grantee's knowledge, Grantor's compliance with any obligation of Grantor contained in this Easement and otherwise evidences the status of this Easement. Such certification shall be limited to the condition of the Conservation Area as of Grantee's most recent inspection. If Grantor requests more current documentation, Grantee shall conduct an inspection, at Grantor's expense, within thirty (30) days of Grantor's written request therefor.

14. <u>NOTICES</u>

Any notice, demand, request, consent, approval, or communication given pursuant to this Easement shall be in writing and either served personally or sent by first class mail, postage prepaid, addressed as follows:

To Grantor:

# Parks Manager

City of Sacramento Park Administration Department of Parks and Recreation 1023 J Street, Room 200 Sacramento, CA 95814

To Grantee: Executive Director Sacramento Valley Open Space Conservancy P. O. Box 163351 Sacramento, CA 95816

To the Service:

Field Supervisor, Sacramento Field Office U.S. Fish and Wildlife Service 2800 Cottage Way, W-2605 Sacramento, CA 95825

To SAFCA:

Executive Director & Agency Counsel Sacramento Area Flood Control Agency 1007 7<sup>th</sup> Street, 5<sup>th</sup> Floor Sacramento, CA 95814

To the Preserve Manager:

Charlotte Kimball Kimball Neely Associates LLC 4618 Campos Lane Winters, CA 95694

or to such other address or the attention of such other officer as from time to time a listed entity may designate by written notice to the others.

15. <u>RECORDATION</u>

Grantee shall promptly record this Easement in the official records of the County of Sacramento, State of California, and may re-record it at any time as may be required to preserve its rights in this Easement. The Service shall receive a true copy of the recorded Easement within thirty (30) days of its recordation.

16. <u>GENERAL PROVISIONS</u>

a. <u>Controlling Law</u>. The interpretation and performance of this Easement shall be governed by the laws of the State of California, the ESA, and other applicable Federal laws.

b. <u>Construction</u>. Any general rule of construction to the contrary notwithstanding, this Easement shall be construed in favor of the grant to effect the

Purpose of this Easement and the policy and purpose of California Civil Code section 815 *et seq.* If any provision in this instrument is found to be ambiguous, an interpretation consistent with the Purpose of this Easement, the CMMP, and the MOU that would render the provision valid shall be favored over any interpretation that would render it invalid.

c. <u>Severability</u>. If any provision of this Easement, or the application thereof to any person or circumstances, is found to be invalid, the remainder of the provisions of this Easement, or the application of such provision to persons or circumstances other than those as to which it is found to be invalid, as the case may be, shall not be affected thereby.

d. <u>Entire Agreement</u>. This instrument, and the MOU, set forth the entire agreement of the Parties with respect to the Easement and they supersede all prior discussions, negotiations, understandings, or agreements relating to the Easement. In the event of any direct contradiction between the terms of this Easement and the MOU, the terms of this Easement shall control. In all other cases, the terms of this Easement and the terms of the MOU shall be interpreted to be supplementary to each other. In the event of a direct contradiction between the terms of this Easement and the 1998 Biological Opinion, the 2001 Biological Opinion, and Corps Permit No. 199200719 for SAFCA's NALP, the terms of the Biological Opinions and/or the Permit shall control.

e. <u>No Forfeiture</u>. Nothing contained herein will result in a forfeiture or reversion of Grantor's title in any respect.

f. <u>Successors</u>. The covenants, terms, conditions, and restrictions of this Easement shall be binding upon, and inure to the benefit of, the Parties hereto and their respective personal representatives, heirs, successors, and assigns and shall continue as a servitude running in perpetuity with the Property. The terms "Grantor" and "Grantee," wherever used herein, and any pronouns used in place thereof, shall include, respectively, the above-named Grantor and its personal representatives, heirs, successors, and assigns, and the above-named Grantee and its personal representatives, heirs, successors, and assigns.

g. <u>Termination of Rights and Obligations</u>. A Party's rights and obligations under this Easement terminate upon transfer of the Party's interest in the Easement or Property, except that liability for acts or omissions occurring prior to transfer shall survive transfer.

h. <u>Captions</u>. The captions in this instrument have been inserted solely for convenience of reference and are not a part of this instrument and shall have no effect upon construction or interpretation.

i. <u>Counterparts</u>. The Parties may execute this instrument in two or more counterparts, which shall, in the aggregate, be signed by both Parties and the Service; each counterpart shall be deemed an original instrument as against any Party who has signed it.

j. <u>Third-Party Beneficiaries</u>. The Service and SAFCA are Third-Party Beneficiaries of this grant of Easement and shall have the same rights as the Parties, including all of the Grantee rights enumerated in Paragraph 2, to access the Conservation Area and to enforce the terms of this Easement.

IN WITNESS WHEREOF, Grantor and Grantee have entered into this Easement the day and year first above written.

GRANTOR:

City of Sacramento, a charter municipal corporation

By:

RICHARD RAMIREZ

DITY AGREEMENT NO. 2001 - 141

Robert P. Thomas City Manager

APPROVED AS TO FORM:

By:

ttorney

ATTEST: By:

GRANTEE: 🔍

Sacramento Valley Open Space Conservancy, a California nonprofit corporation

By: esident

APPROVED AS TO FORM:

By:

MINNE N. 4

CITY

Timothy N<sup>1</sup> Washburn Agency Counsel Sacramento Area Flood Control Agency

AGREEMENT NO.

-2001 - 141

# $\frac{\text{Exhibit } A_{CE}}{\text{Map of Property, Conservation Area and Excluded Area}}$

 $\frac{\text{Exhibit } B_{CE}}{\text{Legal Description of Property, Conservation Area and Excluded Area}}$ 

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State of California	le la constante de la constante	
County of Sacramento	> ss.	
	<b>)</b>	
On Oct. 9. 2001 before me	Toni Tone Malik	
Date	Name and Title of Officer (e.g., "Jane Doe, Notary Public")	,
personally appeared <u>Richard Rami</u>	Irez for Robert P. Thomas	I
	$\chi$ proved to me on the basis of satisfactive evidence	ory
TONI IONE MALIK COMM. # 1287113 NOTARY PUBLIC-CALIFORNIA D SACRAMENTO COUNTY O COMM. EXP. JAN. 9 2005	to be the person(s) whose name(s) is/a subscribed to the within instrument a acknowledged to me that he/she/they execu- the same in his/her/their authoriz capacity(ies), and that by his/her/th signature(s) on the instrument the person(s), the entity upon behalf of which the person acted, executed the instrument.	are nd led lein lein l(s)
	WITNESS my hand and official seal.	
	Visi 10m The K	
Place Notary Seal Above	Signature of Notary Public	
OI	PTIONAL	
Though the information below is not required by la and could prevent fraudulent removal a	w. It may prove valuable to persons relying on the document and reattachment of this form to another document.	t,
Description of Attached Document		
Title or Type of Document: Grant_Deed of	of Perpetual Conservation Easement	
	Agreement 2001-141	
Document Date: <u>August 14, 2001</u>	Number of Pages:	
Signer(s) Other Than Named Above:		
Capacity(ies) Claimed by Signer		
Signer's Name:	RIGHT THUMBP	RIN
Individual	OF SIGNER	ere
Corporate Officer — Title(s):		<b></b>
🗌 Partner — 🚍 Limited 🚍 General		
Attorney in Fact		
Trustee		
Guardian or Conservator		
Other: <u>Robert P. Thomas, Cit</u>	y Manager	
Signer Is Representing:		
olgilol lo i lopi o o o li logi		<u> </u>

RESOLUTION NO. 2001-561

ADOPTED BY THE SACRAMENTO CITY COUNCIL

ON DATE OF AUG 1 4 2001

# RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SACRAMENTO AUTHORIZING THE CITY MANAGER TO EXECUTE FOUR AGREEMENTS FOR HANSEN RANCH PARK SITE

WHEREAS, the City of Sacramento owns Carl Hansen Ranch Park Site in North Sacramento; and

WHEREAS, the Department of Parks and Recreation has determined that the best use of the property is for open space, conservation habitat, and flood control.

NOW, THEREFORE, BE IT RESOLVED that the Council of the City of Sacramento authorizes the City Manage to execute the following four (4) Agreements:

- A Flood Control Easement between the City of Sacramento and the Sacramento Area Flood Control Agency;
  - A Conservation Easement between the City of Sacramento and the Sacramento Valley Open Space Conservancy;
- 3. A Memorandum of Understanding between the City, the Sacramento Area Flood Control Agency, the Sacramento Valley Open Space Conservancy and the United State Fish and Wildlife Service; and
- 4. A Payment Agreement between the City and the Sacramento Area Flood Control Agency in the amount of \$1,652,701 over a 10-year period.

# HEATHER FARGO

MAYOR

ATTEST:

1.

VALERIE BURROWES

CITY CLERK

# FOR CITY CLERK USE ONLY

Resolution No.: 2001-561

Date Adopted:

AUG 1 4 2001

TRUE

COPY



# EXHIBIT 'A' CE

	Curve Table								
No.	Radius	Delta	Length	Chord Bearing	Chord Dist				
1	235.01	09"12'04"	37.74	S83*48'28"E	37.70				
2	255.01	24 18 28	108.19'	S67'41'31"W	107.38				
3	240.01	10'09'15"	42.54	S84*55'22"W	42.48				
4	250.01	27'37'59"	120.58	N76"11'00"W	119.41				
- 5	410.02'	29'01'19"	207.69	S75'29'21 E	205.47				
6	410.02	34 27 18	246.57	N72*46'21"E	242.87				
7	496.00	32 37 23	282.41	N69*27'13"E	278.61				
8	304.00'	26 47 11	142.12	S80'50'30"E	140.83				
9	1311.00	03'32'52"	81.18'	S69"13'20"E	81.16				
10	719.00	15'24'28"	193.35'	S78*42'00"E	192.77				
11	400.00'	10'59'14"	76.71	S80'54'36"E	76.59				
12	90.00	62 21 22	97.95	S44'14'18'E	93.19				
13	540.00	28'07'50"	265.12	S13'55'24"E	262.47				
14	650.00	37 45 17	428.31	S72'01'10"W	420.61				
15	4130.00	09'35'35"	691.49	S04'39'17"E	690.68				
16	980.00*	29'14'20"	500.11	N79'39'28"E	494.70				
17	1100.00	2914 20	561.35	S79'39'28"W	555.28				

#### AREAS TOTAL PROPERTY AREA:

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265.127 AC ±

EXCEPTION	No.	1 (NORTH LEVEE AREA):	11.279	AC :	±
EXCEPTION	No.	2 (MULTI-PURPOSE TRAIL AREA):	3.406	AC :	±
EXCEPTION	No.	3 (SOUTH LEVEE EXCLUSION):	6.935	AC	Ŧ

TOTAL CONSERVATION AREA:

243.507 AC.±

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No.     Beoring     Length       1     N61'13'06''W     4.88'       2     N85'45'55''E     145.88''       3     S70'59'46''E     96.88''       4     S86'24'13''E     257.60'       5     S75'24'59''E     60.00'       6     S13'03'37''E     65.00'       7     S27'59'19''E     25.56'       8     N10'05'15''W     15.00'       9     N88'34'04''W     200.07'       10     WEST     200.57'       11     S85'42'39''W     200.57'       12     WEST     56.27'       13     N49'33'02''W     98.38'       14     S60'58'30''E     135.57'       15     N29'01'30''W     30.00'       17     S60'58'30''E     80.57'       18     S54'07'44''W     202.64'       19     WEST     146.84'       20     S55'32'34''W     672.76'       21     N60'58'30''E     400.02'       23     EAST     814.36'       24		Line Table	]
1     N61'13'06''W     4.88'       2     N85'45'55''E     145.88'       3     S70'59'46''E     96.88'       4     S86'24'13''E     257.60'       5     S75'24'59''E     60.00'       6     S13'03'37''E     65.00'       7     S27'59'19''E     25.56'       8     N10'05'15''W     15.00'       9     N88'34'04'W     200.07'       10     WEST     200.07'       11     S85'42'39''W     200.57'       12     WEST     56.27'       13     N49'33'02''W     98.38'       14     S60'58'30''E     135.57'       15     N29'01'30''E     60.00'       16     S29'01'30''E     80.57'       18     S54'07'44''W     202.64'       19     WEST     146.84'       20     S55'32'34''W     672.76'       21     N60'58'30''E     400.02'       23     EAST     814.36'       24     N55'32'34''E     1013.68'       25	No.	Bearing	Length
2     N85'45'55"E     145.88'       3     S70'59'46"E     96.88'       4     S86'24'13"E     257.60'       5     S75'24'59"E     60.00'       6     S13'03'37"E     65.00'       7     S27'59'19"E     25.56'       8     N10'05'15"W     15.00'       9     N88'34'04"W     200.07'       10     WEST     200.01'       11     S85'42'39"W     200.57'       12     WEST     56.27'       13     N49'33'02"W     98.38'       14     S60'58'30"E     135.57'       15     N29'01'30"E     60.00'       16     S29'01'30"W     30.00'       17     S60'58'30"E     80.57'       18     S54'07'44"W     202.64'       20     S55'32'34"W     672.76'       21     N60'58'30"E     400.02'       22     S60'58'30"E     400.02'       23     EAST     814.36'       24     N55'32'34"E     1013.68'       25	1	N6113'06"W	4.88
3     \$70'59'46"E     96.88'       4     \$86'24'13"E     257.60'       5     \$75'24'59"E     60.00'       6     \$13'03'37'E     65.00'       7     \$27'59'19"E     25.56'       8     N10'09'15"W     15.00'       9     N88'34'04"W     200.07'       10     WEST     200.01'       11     \$85'42'39"W     200.57'       12     WEST     56.27'       13     N49'33'02"W     98.38'       14     \$60'58'30"E     135.57'       15     N29'01'30"W     30.00'       17     \$60'58'30"E     80.57'       18     \$54'07'44"W     202.64'       19     WEST     146.84'       20     \$55'32'34"W     672.76'       21     N60'58'30"E     400.02'       23     EAST     814.36'       24     N55'32'34"E     1013.68'       25     N53'08'32"E     400.65'       26     \$67'26'54"E     366.56'       27	2	NB5*45'55"E	145.88
4     S86'24'13'E     257.60'       5     S75'24'59'E     60.00'       6     S13'03'37"E     65.00'       7     S27'59'19'E     25.56'       8     N10'05'15"W     15.00'       9     N68'34'04"W     200.07'       10     WEST     200.01'       11     S85'42'39"W     200.57'       12     WEST     56.27'       13     N49'33'02"W     98.38'       14     S60'58'30"E     135.57'       15     N29'01'30"W     30.00'       17     S60'58'30"E     80.57'       18     S54'07'44"W     202.64'       19     WEST     146.84'       20     S55'32'34"W     650.19'       22     S60'58'30"E     400.02'       23     EAST     814.36'       20     S55'32'34"W     650.19'       22     S60'58'30"E     400.02'       23     EAST     814.36'       24     N55'32'34"E     1013.68'       25     N53'0	3	S70'59'46"E	96.88
5     \$75'24'59'E     60.00'       6     \$13'03'37'E     65.00'       7     \$27'59'19'E     25.56'       8     \$10'05'15''W     15.00'       9     N88'34'04''W     200.07'       10     WEST     200.01'       11     \$85'42'39'W     200.57'       12     WEST     56.27'       13     N49'33'02''W     98.38'       14     \$60'58'30'E     135.57'       15     \$29'01'30''E     60.00'       16     \$29'01'30''E     60.00'       16     \$29'01'30''E     80.57'       18     \$54'07'44''W     202.64'       19     WEST     146.84'       20     \$55'32'34''W     672.76'       21     N60'58'30''E     400.02'       23     EAST     814.36'       24     N53'32'34''E     1013.68'       29     \$54'34'20''W     295.28'       30     \$85'43'22''E     614.25'       31     N65'02'18''E     365.17'       32 <td>4</td> <td>S86'24'13"E</td> <td>257.60</td>	4	S86'24'13"E	257.60
6     \$13'03'37"E     65.00'       7     \$27'59'19"E     25.56'       8     N10'05'15"W     15.00'       9     N68'34'04"W     200.07'       10     WEST     200.01'       11     \$85'42'39"W     200.57'       12     WEST     56.27'       13     N49'33'02"W     98.38'       14     \$60'56'30"E     135.57'       15     N29'01'30"W     30.00'       16     \$29'01'30"W     30.00'       17     \$60'58'30"E     80.57'       18     \$54'07'44"W     20.64'       20     \$55'32'34"W     672.76'       21     N60'58'30"E     400.02'       22     \$60'58'30"E     400.02'       23     EAST     814.36'       24     N55'32'34"E     1013.68'       25     N53'08'32"E     400.62'       26     \$60'56'30"E     600.13'       28     \$00'08'31"W     \$88.18'       29     \$54'34'20"W     295.28'       30	5	S75 24'59"E	60.00
7     S27'59'19"E     25.56'       8     N10'0S'15"W     15.00'       9     N88'34'04"W     200.07'       10     WEST     200.01'       11     S85'42'39"W     200.57'       12     WEST     56.27'       13     N49'33'02"W     98.38'       14     S60'58'30"E     135.57'       15     N29'01'30"E     60.00'       16     S29'01'30"E     80.57'       18     S54'07'44"W     202.64'       19     WEST     146.84'       20     S55'32'34"W     672.76'       21     N60'58'30"E     400.02'       23     EAST     814.36'       24     N55'32'34"E     1013.68'       25     N53'08'32"E     400.65'       26     S67'26'54"E     366.56'       27     S09'27'04"E     680.13'       28     S00'08'31"W     588.18'       29     S54'32'22"E     614.25'       31     N65'02'18"E     365.17'       32	6	S13'03'37"E	65.00
8     N10'0S'15"W     15.00'       9     N88'34'04"W     200.07'       10     WEST     200.01'       11     S85'42'39"W     200.57'       12     WEST     56.27'       13     N49'33'02"W     98.38'       14     S60'58'30"E     135.57'       15     N29'01'30"W     30.00'       17     S60'58'30"E     80.57'       18     S54'07'44"W     202.64'       19     WEST     146.84'       20     S55'32'34"W     672.76'       21     N60'58'30"E     400.02'       23     EAST     814.36'       24     N55'32'34"E     1013.68'       25     N53'08'32"E     400.66'       26     S67'26'54"E     366.13'       28     S00'08'31"W     S88.18'       29     S54'34'20"W     295.28'       30     S85'43'22"E     614.25'       31     N65'02'18"E     365.17'       32     N66'18'16"E     400.33'       33	7	S27'59'19"E	25.56
9     N88'34'04''W     200.07'       10     WEST     200.01'       11     S85'42'39''W     200.57'       12     WEST     56.27'       13     N49'33'02''W     98.38'       14     S60'58'30''E     135.57'       15     N29'01'30''E     60.00'       16     S29'01'30''E     80.57'       18     S54'07'44''W     202.64'       19     WEST     146.84'       20     S55'32'34''W     672.76'       21     N60'58'30''E     400.02'       23     EAST     814.36'       24     N55'32'34''E     400.66'       25     N53'08'32''E     400.66'       26     S67'26'54''E     366.56'       27     S09'27'04''E     680.13'       28     S00'08'31''W     588.18'       29     S54'34'20''W     295.28'       30     S85'43'22''E     614.25'       31     N65'02'18''E     365.17'       32     N66'16'I6''E     400.33'	8	N10'09'15"W	15.00'
10     WEST     200.01'       11     S85'42'39"W     200.57'       12     WEST     56.27'       13     N49'33'02"W     98.38'       14     S60'58'30"E     135.57'       15     N29'01'30"W     30.00'       16     S29'01'30"E     60.00'       16     S29'01'30"W     30.00'       17     S60'58'30"E     80.57'       18     S54'07'44"W     202.64'       19     WEST     146.84'       20     S55'32'34"W     672.76'       21     N60'58'30"E     400.02'       22     S60'58'30"E     400.02'       23     EAST     814.36'       24     N55'32'34"E     1013.68'       25     N53'08'32"E     400.66'       26     S67'26'54"E     366.56'       27     S09'27'04"E     680.13'       28     S00'08'31"W     588.18'       29     S54'32'22"E     614.25'       31     N65'02'18"E     365.17'       32	9	N88'34'04"W	200.07
11     S85'42'39"W     200.57'       12     WEST     56.27'       13     N49'33'02"W     98.38'       14     S60'58'30"E     135.57'       15     N29'01'30"E     60.00'       16     S29'01'30"W     30.00'       17     S60'58'30"E     80.57'       18     S54'07'44"W     202.64'       19     WEST     146.84'       20     S55'32'34"W     672.76'       21     N60'58'30"E     400.02'       23     EAST     814.36'       24     N55'32'34"E     1013.68'       25     N53'08'32"E     400.66'       26     S67'26'54"E     366.56'       27     S09'27'04"E     680.13'       28     S00'08'31"W     588.18'       29     S54'3'22"E     614.25'       31     N65'02'18"E     365.17'       32     N66'16"16"E     400.33'       33     N65'04'24"W     575.61'       35     S66'18'16"W     400.29'       36<	10	WEST	200.01
12     WEST     56.27'       13     N49'33'02''W     98,38'       14     S60'58'30''E     135.57'       15     N29'01'30''E     60.00'       17     S60'58'30''E     80.57'       18     S54'07'44''W     202.64'       19     WEST     146.84'       20     S55'32'34''W     672.76'       21     N60'58'30''E     400.02'       23     EAST     814.36'       24     N55'32'34''E     1013.68'       25     N53'08'32''E     400.66'       26     S67'26'54''E     366.13'       28     S00'08'31''W     588.18'       29     S54'34'20''W     295.28'       30     S85'43'22''E     614.25'       31     N65'02'18''E     365.17'       32     N66'18'16''E     400.33'       33     N65'04'24''E     629.55'       34     S65'04'24''W     575.61'       35     S66'18'16''E     400.29''       36     S65'02'18''W     36.85'	11	S85'42'39"W	200.57
13     N49'33'02"W     98,38'       14     S60'58'30"E     135,57'       15     N29'01'30"E     60,00'       16     S29'01'30"W     30,00'       17     S60'58'30"E     80,57'       18     S54'07'44"W     202,64'       19     WEST     146,84'       20     S55'32'34"W     672,76'       21     N60'58'30"E     400,02'       23     EAST     814.36'       24     N55'32'34"E     400,66'       25     N53'08'32"E     400,66'       26     S67'26'54"E     366,56'       27     S09'27'04"E     680,13'       28     S00'08'31"W     588,18'       29     S54'34'20"W     295,28'       30     S85'43'22"E     614,25'       31     N65'04'24"E     365,17'       32     N66'18'16"E     400,33'       33     N65'04'24"W     575,61'       35     S66'18'16"E W     400,29'       36     S65'02'18"W     363,85'	12	WEST	56.27
14     S60*58'30"E     135.57'       15     N29'01'30"E     60.00'       16     S29'01'30"W     30.00'       17     S60'58'30"E     80.57'       18     S54'07'44"W     202.64'       19     WEST     146.84'       20     S55'32'34"W     672.76'       21     N60'58'30"E     400.02'       23     EAST     814.36'       24     N55'32'34"E     1013.68'       25     N53'08'32"E     400.66'       26     S67'26'54"E     366.56'       27     S09'27'04"E     680.13'       28     S00'08'31"W     588.18'       29     S54'34'20"W     295.28'       30     S85'43'22"E     614.25'       31     N65'02'18"E     365.17'       32     N66'18'16"E     400.33'       33     N65'04'24"E     629.55'       34     S65'04'24"W     575.61'       35     S66'18'16"W     400.23'       36     S65'02'18"W     36.85'	13	N49'33'02"W	98.38
15     N29'01'30"E     60.00'       16     S29'01'30"W     30.00'       17     S60'58'30"E     80.57'       18     S54'07'44"W     202.64'       19     WEST     146.84'       20     S55'32'34"W     672.76'       21     N60'58'30"E     400.02'       23     EAST     814.36'       24     N55'32'34"E     1013.68'       25     N53'08'32"E     400.66'       26     S67'26'54"E     366.56'       27     S09'27'04"E     680.13'       28     S00'08'31"W     588.18'       29     S54'32'22"E     614.25'       31     N65'02'18"E     365.17'       32     N66'18'16"E     400.33'       33     N65'04'24"E     629.55'       34     S65'04'24"E     629.55'       34     S65'02'18"W     36.85'       37     N85'43'22" W     475.13'       38     S38'10'37"W     31.58'       39     N87'34'08"W     56.11'	14	S60*58'30"E	135.57
16     S29'01'30"W     30.00'       17     S60'58'30"E     80.57'       18     S54'07'44"W     202.64'       19     WEST     146.84'       20     S55'32'34"W     672.76'       21     N60'58'30"E     400.02'       23     EAST     814.36'       24     N55'32'34"E     1013.68'       25     N53'08'32"E     400.65'       26     S67'26'54"E     366.56'       27     S09'27'04"E     680.13'       28     S00'08'31"W     588.18'       29     S54'34'20"W     295.28'       30     S85'43'22"E     614.25'       31     N65'02'18"E     365.17'       32     N65'04'24"E     629.55'       34     S65'04'24"W     575.61'       35     S66'18'16"E     400.33'       36     S65'02'18"W     36.85'       37     N85'43'22"W     475.13'       38     S38'10'37"W     31.58'       39     N87'34'08"W     56.11'	15	N29'01'30"E	60.00'
17     S60'58'30'E     B0.57'       18     S54'07'44''W     202.64'       19     WEST     146.84'       20     S55'32'34''W     672.76'       21     N60'58'30''W     650.19'       22     S60'58'30''W     650.19'       22     S60'58'30''E     400.02'       23     EAST     814.36'       24     N55'32'34''E     1013.68'       25     N53'08'32''E     400.66'       26     S67'26'54''E     366.56'       27     S09'27'04''E     680.13'       28     S00'08'31''W     588.18'       29     S54'34'20''W     295.28'       30     S85'43'22''E     614.25'       31     N65'02'18''E     365.17'       32     N66'18'16''E     400.33'       33     N65'04'24''E     629.55'       34     S65'04'24''W     575.61'       35     S66'18'16''W     30.85'       37     N85'43'22''W     475.13'       38     S38'10'37''W     31.58' <	16	S29'01'30"W	30.00'
18     S54'07'44''W     202.64'       19     WEST     146.84'       20     S55'32'34''W     672.76'       21     N60'58'30''W     650.19'       22     S60'58'30''E     400.02'       23     EAST     814.36'       24     N55'32'34''E     1013.68'       25     N53'08'32''E     400.66'       26     S67'26'54''E     366.56'       27     S09'27'04''E     680.13'       28     S00'08'31''W     588.18'       29     S54'34'20''W     295.28'       30     S85'43'22''E     614.25'       31     N65'04'24''E     629.55'       34     S65'04'24''E     629.55'       34     S65'04'24''E     629.55'       34     S65'04'24''E     629.55'       35     S66'18'16''W     400.29'       36     S56'21'8''W     36.85'17'       35     S66'18'16''W     400.29'       36     S55'02'18''W     36.13'       37     N85'43'22''W     475.13'	17	S60'58'30"E	80.57
19     WEST     146.84'       20     S55'32'34"W     672.76'       21     N60'58'30"W     650.19'       22     S60'58'30"E     400.02'       23     EAST     814.36'       24     N55'32'34"E     1013.68'       25     N53'08'32"E     400.66'       26     S67'26'54"E     366.56'       27     S09'27'04"E     680.13'       28     S00'08'31"W     588.18'       29     S54'34'20"W     295.28'       30     S85'43'22"E     614.25'       31     N65'02'18"E     365.17'       32     N66'18'16"E     400.33'       33     N65'04'24"E     629.55'       34     S65'04'24"W     575.61'       35     S66'18'16"W     400.29'       36     S65'02'18"W     36.85'       37     N85'43'22"W     475.13'       38     S38'10'37"W     31.58'       39     N87'34'08"W     56.11'       40     N42'30'10"W     29.38'	18	S54'07'44"W	202.64
20     S55'32'34"W     672,76'       21     N60'58'30'W     650.19'       22     S60'58'30'E     400.02'       23     EAST     814.36'       24     N55'32'34"E     1013.68'       25     N53'08'32"E     400.66'       26     S67'26'54"E     366.56'       27     S09'27'04"E     680.13'       28     S00'08'31"W     588.18'       29     S54'34'20"W     295.28'       30     S85'43'22"E     614.25'       31     N65'02'18"E     365.17'       32     N66'16'16"E     400.33'       33     N65'04'24"E     629.55'       34     S65'04'24"W     575.61'       35     S66'18'16"W     400.29'       36     S65'02'18"W     36.85'       37     N85'43'22"W     475.13'       38     S38'10'37"W     31.58'       39     N87'34'08"W     56.11'       40     N42'30'10"W     29.38'	19	WEST	146.84'
21     N60'58'30"W     650.19'       22     S60'58'30'E     400.02'       23     EAST     814.36'       24     N55'32'34"E     1013.68'       25     N53'08'32"E     400.66'       26     S67'26'54"E     366.56'       27     S09'27'04"E     680.13'       28     S00'08'31"W     588.18'       29     S54'34'20"W     295.28'       30     S85'43'22"E     614.25'       31     N65'02'18"E     365.17'       32     N66'18'16"E     400.33'       33     N65'04'24"E     629.55'       34     S65'04'24"W     575.61'       35     S66'18'16"W     400.29'       36     S65'02'18"W     36.85'       37     N85'43'22"W     475.13'       38     S38'10'37"W     31.58'       39     N87'34'08"W     56.11'       40     N42'30'10"W     29.38'	20	S55'32'34"W	672.76'
22     S60'58'30'E     400.02'       23     EAST     814.36'       24     N55'32'34'E     1013.68'       25     N53'08'32'E     400.66'       26     S67'26'54''E     366.56'       27     S09'27'04''E     680.13'       28     S00'08'31''W     S88.18'       29     S54'34'20''W     295.28'       30     S85'43'22''E     614.25'       31     N65'04'24''E     365.17'       32     N66'18'16''E     400.33'       33     N65'04'24''E     629.55'       34     S65'04'24''W     575.61'       35     S66'18'16''E'     400.29'       36     S65'02'18''W     361.35'       37     N85'43'22''W     475.13'       38     S38'10'37''W     31.58'       39     N87'34'08''W     56.11'       40     N42'30'10''W     29.38'	21	N60'58'30"W	650.19
23     EAST     814.36'       24     N55'32'34"E     1013.68'       25     N53'08'32"E     400.66'       26     S67'26'54"E     366.56'       27     S09'27'04"E     680.13'       28     S00'08'31"W     588.18'       29     S54'34'20"W     295.28'       30     S85'43'22"E     614.25'       31     N65'02'18"E     365.17'       32     N66'18'16"E     400.33'       33     N65'04'24"E     629.55'       34     S65'04'24"W     575.61'       35     S66'18'16"W     400.29'       36     S65'02'18"W     36.85'       37     N85'43'22"W     475.13'       38     S38'10'37"W     31.58'       39     N87'34'08"W     56.11'       40     N42'30'10"W     29.38'       41     N86'29'25"W     14.25'	22	S60'58'30"E .	400.02
24     N55'32'34"E     1013.68'       25     N53'08'32"E     400.66'       26     S67'26'54"E     366.56'       27     S09'27'04"E     680.13'       28     S00'08'31"W     588.18'       29     S54'34'20"W     295.28'       30     S85'43'22"E     614.25'       31     N65'02'18"E     365.17'       32     N66'18'16"E     400.33'       33     N65'04'24"E     629.55'       34     S65'04'24"W     575.61'       35     S66'18'16"W     400.29''       36     S65'02'18"W     36.85'       37     N85'43'22"W     475.13'       38     S38'10'37"W     31.58'       39     N87'34'08"W     56.11'       40     N42'30'10"W     29.38'       41     N86'29'5"W     14.25'	23	EAST	814.36
25     N53'08'32"E     400.66'       26     S67'26'54"E     366.56'       27     S09'27'04"E     680.13'       28     S00'08'31"W     588.18'       29     S54'34'20"W     295.28'       30     S85'43'22"E     614.25'       31     N65'02'18"E     365.17'       32     N66'16'16"E     400.33'       33     N65'04'24"E     629.55'       34     S65'04'24"W     575.61'       35     S66'18'16"W     400.29'       36     S65'02'18"W     36.85'       37     N85'43'22"W     475.13'       38     S38'10'37"W     31.58'       39     N87'34'08"W     56.11'       40     N42'30'10"W     29.38'       41     N86'297'5"W     14.26'	24	N55'32'34"E	1013.68
26     557'26'54"E     366.56'       27     S09'27'04"E     680.13'       28     S00'08'31"W     588.18'       29     S54'34'20"W     295.28'       30     S85'43'22"E     614.25'       31     N65'02'18"E     365.17'       32     N66'18'16"E     400.33'       33     N65'04'24"E     629.55'       34     S65'04'24"W     575.61'       35     S66'18'16"W     400.29'       36     S65'02'18"W     363.85'       37     N85'43'22"W     475.13'       38     S38'10'37"W     31.58'       39     N87'34'08"W     56.11'       40     N42'30'10"W     29.38'	25	N53'08'32"E	400.66'
27     S09'27'04"E     680.13'       28     S00'08'31"W     588.18'       29     S54'34'20"W     295.28'       30     S85'4'3'22"E     614.25'       31     N65'02'18"E     365.17'       32     N66'18'16"E     400.33'       33     N65'04'24"E     629.55'       34     S65'04'24"W     575.61'       35     S66'18'16"W     400.29'       36     S56'18'18"W     36.85'       37     N85'43'22"W     475.13'       38     S38'10'37"W     31.58'       39     N87'34'08"W     56.11'       40     N42'30'10"W     29.38'	26	S67'26'54"E	366.56
28     S00'08'31"W     588.18'       29     S54'34'20"W     295.28'       30     S85'43'22"E     614.25'       31     N65'02'18"E     365.17'       32     N66'18'16"E     400.33'       33     N65'04'24"E     629.55'       34     S65'04'24"W     575.61'       35     S66'18'16"W     400.29'       36     S65'02'18"W     36.85'       37     N85'43'22"W     475.13'       38     S38'10'37"W     31.58'       39     N87'34'08"W     56.11'       40     N42'30'10"W     29.38'       41     N86'29'5"W     14.26'	27	S09'27'04"E	680.13'
29     \$54'34'20"w     295.28'       30     \$85'43'22"E     614.25'       31     N65'02'18"E     365.17'       32     N66'18'16"E     400.33'       33     N65'04'24"E     629.55'       34     \$65'04'24"W     575.61'       35     \$66'18'16"W     400.29''       36     \$55'02'18"W     363.85'       37     N85'43'22"W     475.13'       38     \$38'10'37"W     31.58'       39     N87'34'08"W     56.11'       40     N42'30'10"W     29.38'       41     N86'29'5"W     14''25"W	28	S00'08'31"W	588.18
30     SB5'43'22"E     614.25'       31     N65'02'18"E     365.17'       32     N66'18'16"E     400.33'       33     N65'04'24"E     629.55'       34     S65'04'24"W     575.61'       35     S66'18'16"W     400.29'       36     S65'02'18"W     363.85'       37     N85'43'22"W     475.13'       38     S38'10'37"W     31.58'       39     N87'34'08"W     56.11'       40     N42'30'10"W     29.38'       41     N86'29'5"W     14.26'	29	S54'34'20"W	295.28
31     N65'02'18"E     365.17'       32     N66'18'16"E     400.33'       33     N65'04'24"E     629.55'       34     S65'04'24"W     575.61'       35     S66'18'16"W     400.29'       36     S65'02'18"W     363.85'       37     N85'43'22"W     475.13'       38     S38'10'37"W     31.58'       39     N87'34'08'W     56.11'       40     N42'30'10"W     29.38'       41     N86'29'25"W     14'25'	30	S85*43'22"E	614.25
32     N66'18'16"E     400.33'       33     N65'04'24"E     629.55'       34     S65'04'24"W     575.61'       35     S66'18'16"W     400.29'       36     S65'02'18"W     363.85'       37     N85'43'22"W     475.13'       38     S38'10'37"W     31.58'       39     N87'34'08"W     56.11'       40     N42'30'10"W     29.38'       41     N86'29'25"W     14'25'	31	N65'02'18"E	365.17
33     N65'04'24''E     629.55'       34     S65'04'24''W     575.61'       35     S66'18'16''W     400.29'       36     S65'02'18''W     363.85'       37     N85'43'22''W     475.13'       38     S38'10'37''W     31.58'       39     N87'34'08''W     56.11'       40     N42'30'10''W     29.38'       41     N86'29'25''W     14.26'	32	N66"18'16"E	400.33
34     565'04'24"W     575.61'       35     566'18'16"W     400.29'       36     565'02'18"W     368'       37     N85'43'22'W     475.13'       38     538'10'37"W     31.58'       39     N87'34'08'W     56.11'       40     N42'30'10"W     29.38'       41     N86'29'5'W     14.26'	33	N65'04'24"E	629.55
35     S66"18'16"W     400.29'       36     S65'02'18"W     363.85'       37     N85'43'22"W     475.13'       38     S38'10'37"W     31.58'       39     N87'34'08"W     56.11'       40     N42'30'10"W     29.38'       41     N86'29'25"W     14.26'	34	S65'04'24"W	575.61
36     S65'02'18"W     363.85'       37     N85'43'22"W     475.13'       38     S38'10'37"W     31.58'       39     N87'34'08"W     56.11'       40     N42'30'10"W     29.38'       41     N86'29'25"W     14'26'	35	\$66"18'16"W	400.29'
37     N85'43'22"W     475.13'       38     S38'10'37"W     31.58'       39     N87'34'08"W     56.11'       40     N42'30'10"W     29.38'       41     N86'29'25"W     14.26'	36	S65'02'18"W	363.85'
38     S38'10'37"W     31.58'       39     N87'34'08"W     56.11'       40     N42'30'10"W     29.38'       41     N86'29'25"W     14.26'	37	N85'43'22"W	475.13
39 N87'34'08"W 56.11' 40 N42'30'10"W 29.38' 41 N86'29'25"W 14.26'	38	S38'10'37"W	31.58'
40 N42'30'10"W 29.38' 41 N86'29'25"W 14 26'	39	N87'34'08"W	56.11
41 N86'29'25"W 14 26'	40	N42'30'10"W	29.38
	41	N86'29'25"W	14.26

CITY C	OF SACRAMENTO / HANS	SEN RANCH PARK	
	CONSERVATION EAS	SEMENT	
CITY OF SACRAMENTO	COUNTY OF SACRAMEN	TO ST	<u>A</u> ]
DATE: 05/01/2001	SCALE: N/A	<b>DSOM</b>	

TE OF CALIFORNIA S

2295 Gateway Ooks Drive Suite 250 Socramento, CA 95833 (916) 929-7100 (916) 929-6380 (FAX)

DATE:	05/01/2	2001	·		SCALE:	N/A	
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PTR: 253948 City of Sacramento Conservation Easement May 1, 2001 Page 1 of 6

# EXHIBIT "B"<sub>CE</sub>

LEGAL DESCRIPTION OF CITY OF SACRAMENTO/HANSEN RANCH

All that real property situate in the City of Sacramento, County of Sacramento, State of California, being a portion of the west one-half of Section 5 of Rancho Del Paso and a portion of the lands of "Hansen Bros." as said lands are shown on that Record of Survey filed in Book 20 of Surveys, at Page 16, Sacramento County Records, said real property being described as follows:

BEGINNING at the northwest corner of said Section 5; thence from said point of beginning along the northerly line of said lands of Hansen Bros. South 89°51'39" East 2676.64 feet to the northeasterly corner of said lands of Hansen Bros.; thence along the easterly line of said lands of Hansen Bros. the following two (2) courses: 1) South 00°02'15" East 2761.06 feet and 2) South 00°12'42" East 1217.37 feet to the southeasterly corner of the lands of the City of Sacramento as said lands are described in that document recorded in Book 790709 of Official Records at Page 557, Sacramento County Records; thence along the southerly line of said lands of City of Sacramento the following nine (9) courses: 1) South 65°04'24" West 575.61 feet; 2) South 66°18'16" West 400.29 feet; 3) South 65°02'18" West 363.85 feet to the beginning of a curve, concave northerly, having a radius of 1100.00 feet; 4) westerly along said curve through a central angle of 29°14'20" an arc distance of 561.35 feet (said curve being subtended by a chord which bears South 79°39'28" West 555.28 feet); 5) North 85°43'22" West 475.13 feet; 6) South 38°10'37" West 31.58 feet; 7) North 87°34'08" West 56.11 feet; 8) North 42°30'10" West 29.38 feet; and 9) North 86°29'25" West 14.26 feet to a point on the westerly line of said lands of Hansen Bros., said point also being on the easterly right of way line of the Western Pacific Railroad as shown on said Record of Survey; thence along said westerly line the following two (2) courses: 1) North 08°48'08" West 2083.62 feet and 2) North 00°21'33" West 2547.07 feet to the point of beginning, containing 265.127 acres, more or less.

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# LEGAL DESCRIPTION OF CONSERVATION AREA

All that real property situate in the City of Sacramento, County of Sacramento, State of California, being a portion of the west one-half of Section 5 of Rancho Del Paso and a portion of the lands of "Hansen Bros." as said lands are shown on that Record of Survey filed in Book 20 of Surveys, at Page 16, Sacramento County Records, said real property being described as follows:

BEGINNING at the northwest corner of said Section 5; thence from said point of beginning along the northerly line of said lands of Hansen Bros. South 89°51'39" East 2676.64 feet to the northeasterly corner of said lands of Hansen Bros.; thence along the easterly line of said lands of Hansen Bros. the following two (2) courses: 1) South 00°02'15" East 2761.06 feet and 2) South 00°12'42" East 1217.37 feet to the southeasterly corner of the lands of the City of Sacramento as said lands are described in that document recorded in Book 790709 of Official Records at Page 557. Sacramento County Records; thence along the southerly line of said lands of City of Sacramento the following nine (9) courses: 1) South 65°04'24" West 575.61 feet; 2) South 66°18'16" West 400.29 feet; 3) South 65°02'18" West 363.85 feet to the beginning of a curve. concave northerly, having a radius of 1100.00 feet; 4) westerly along said curve through a central angle of 29°14'20" an arc distance of 561.35 feet (said curve being subtended by a chord which bears South 79°39'28" West 555.28 feet); 5) North 85°43'22" West 475.13 feet; 6) South 38°10'37" West 31.58 feet; 7) North 87°34'08" West 56.11 feet; 8) North 42°30'10" West 29.38 feet; 9) North 86°29'25" West 14.26 feet to a point on the westerly line of said lands of Hansen Bros., said point also being on the easterly right of way line of the Western Pacific Railroad as shown on said Record of Survey; thence along said westerly line the following two (2) courses: 1) North 08°48'08" West 2083.62 feet and 2) North 00°21'33" West 2547.07 feet to the point of beginning.

EXCEPTING THEREFROM the following three (3) parcels:

# Exception No. 1: (North Levee Area)

**COMMENCING** at the northwest corner of said Section 5; thence along said westerly line of said Section 5 South 00°21'33" East 807.60 feet to the beginning of a non-tangent curve, concave northerly, having a radius of 235.01 feet, to which point a radial line bears South 10°47'34"

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West, said point also being the POINT OF BEGINNING; thence easterly along said curve through a central angle of 9°12'04" an arc distance of 37.74 feet (said curve being subtended by a chord that bears South 83°48'28" East 37.70 feet); thence North 55°32'34" East 1013.68 feet to the beginning of a curve, concave southerly, having a radius of 410.02 feet; thence easterly along said curve through a central angle of 34°27'18" an arc distance of 246.57 feet (said curve being subtended by a chord that bears North 72°46'21" East 242.87 feet); thence East 814.36 feet to the beginning of a curve, concave southerly, having a radius of 410.02 feet; thence easterly along said curve through a central angle of 29°01'19" an arc distance of 207.69 feet (said curve being subtended by a chord that bears South 75°29'21" East 205.47 feet); thence South 60°58'30" East 80.57 feet; thence South 29°01'30" West 30.00 feet; thence South 60'58'30" East 400.02 feet; thence North 29°01'30" East 60.00 feet; thence South 60°58'30" East 135.57 feet to a point on the east line of said lands of Hansen Bros. from which the northeast corner thereof bears North 00°02'15" West 483.90 feet; thence along said east line South 00°02'15" East 245.96 feet to a point thereon; thence North 61°13'06" West 4.88 feet; thence North 60°58'30" West 650.19 feet; thence North 49°33'02" West 98.38 feet to the beginning of a non-tangent curve, concave southerly, having a radius of 250.01 feet, to which point a radial line bears North 27°37'59" East; thence westerly along said curve through a central angle of 27°37'59" an arc distance of 120.58 feet (said curve being subtended by a chord that bears North 76°11'00" West 119.41 feet); thence West 56.27 feet; thence South 85°42'39" West 200.57 feet; thence West 200.01 feet; thence North 88°34'04" West 200.07 feet; thence West 146.84 feet to the beginning of a curve, concave southerly, having a radius of 240.01 feet; thence westerly along said curve through a central angle of 10°09'15" an arc distance of 42.54 feet (said curve being subtended by a chord that bears South 84°55'22" West 42.48 feet); thence North 10°09'15" West 15.00 feet to the beginning of a non-tangent curve, concave southerly, having a radius of 255.01 feet, to which point a radial line bears North 10°09'15" West; thence westerly along said curve through a central angle of 24°18'28" an arc distance of 108.19 feet (said curve being subtended by a chord that bears South 67°41'31" West 107.38 feet); thence South 55°32'34" West 672.76 feet; thence South 54°07'44" West 202.64 feet; thence South 54°34'20" West 295.28 feet to a point on said westerly line of said lands of Hansen Bros.; thence along said west line North 00°21'33" West 228.92 feet to the Point of Beginning, containing 11.279 acres, more or less.

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# Exception No. 2: (Multi-Purpose Trail)

A strip of land the uniform width of thirty (30.00) feet, lying fifteen (15.00) feet on each side of the following described centerline:

**COMMENCING** at the northwest corner of said Section 5; thence along the westerly line of said lands of Hansen Bros. South 00°21'33" East 1263.69 feet to the POINT OF BEGINNING; thence South 27°59'19" East 25.56 feet to the beginning of a curve, concave southeasterly, having a radius of 540.00 feet; thence along said curve through a central angle of 28°07'50" an arc distance of 265.12 feet (said curve being subtended by a chord that bears South 13°55'24" East 262.47 feet); thence South 00°08'31" West 588.18 feet to the beginning of a curve, concave easterly, having a radius of 4130.00 feet; thence along said curve through a central angle of 09°35'35" an arc distance of 691.49 feet (said curve being subtended by a chord that bears South 04°39'17" East 690.68 feet); thence South 09°27'04" East 680.13 feet; thence South 13°03'37" East 65.00 feet to the beginning of a curve, concave northeasterly, having a radius of 90.00 feet; thence along said curve through a central angle of 62°21'22" an arc distance of 97.95 feet (said curve being subtended by a chord that bears South 44°14'18" East 93.19 feet); thence South 75°24'59" East 60.00 feet to the beginning of a curve, concave northerly, having a radius of 400.00 feet; thence along said curve through a central angle of 10°59'14" an arc distance of 76.71 feet (said curve being subtended by a chord that bears South 80°54'36" East 76.59 feet); thence South 86°24'13" East 257.60 feet to the beginning of a curve, concave southerly, having a radius of 719.00 feet; thence along said curve through a central angle of 15°24'28" an arc distance of 193.35 feet (said curve being subtended by a chord that bears South 78°42'00" East 192.77 feet); thence South 70°59'46" East 96.88 feet to the beginning of a curve, concave southwesterly, having a radius of 1311.00 feet; thence along said curve through a central angle of 03°32'52" an arc distance of 81.18 feet (said curve being subtended by a chord that bears South 69°13'20" East 81.16 feet); thence South 67°26'54" East 366.56 feet to the beginning of a curve. concave northerly, having a radius of 304.00 feet; thence along said curve through a central angle 26°47'11" an arc distance of 142.12 feet (said curve being subtended by a chord that bears South 80°50'30" East 140.83 feet); thence North 85°45'55" East 145.88 feet to the beginning of a curve, concave northwesterly, having a radius of 496.00 feet; thence along said curve through a

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central angle of 32°37'23" an arc distance of 282.41 feet (said curve being subtended by a chord that bears North 69°27'13" East 278.61 feet); thence North 53°08'32" East 400.66 feet to the beginning of a curve, concave southeasterly, having a radius of 650.00 feet; thence along said curve through a central angle of 37°45'17" an arc distance of 428.31 feet (said curve being subtended by a chord that bears North 72°01'10" East 420.61 feet) to a point on the east line of said lands of Hansen Bros., said point being South 00°12'42" East 677.03 feet and South 00°02'15" East 2761.06 feet from the northeast corner of said lands of Hansen Bros., said point being the terminus of said described line, containing 3.406 acres, more or less.

The westerly end of the northerly and southerly sidelines of said thirty (30.00) foot easement being extended or shortened to the westerly line of said lands of Hansen Bros. and the easterly end of the northerly and southerly sidelines of said thirty (30.00) foot easement being extended or shortened to the easterly line of said lands of Hansen Bros.

### Exception No. 3: (South Levee Exclusion Area)

All that portion of said lands of Hansen Bros. lying southerly of the following described line:

COMMENCING at the northwest corner of said Section 5; thence along the westerly line of said lands of Hansen Bros. the following two (2) courses: 1) South 00°21'33" East 2547.07 feet and 2) South 08°48'08" East 1952.11 feet to a point thereon, said point also being the POINT OF BEGINNING; thence South 85°43'22" East 614.25 feet to the beginning of a curve, concave northerly, having a radius of 980.00 feet; thence along said curve through a central angle of 29°14'20" an arc distance of 500.11 feet (said curve being subtended by a chord that bears North 79°39'28" East 494.70 feet); thence North 65°02'18" East 365.17 feet; thence North 66°18'16" East 400.33 feet; thence North 65°04'24" East 629.55 feet to a point on the east line of said lands of Hansen Bros., said point being South 00°12'42" East 1085.27 feet and South 00°02'15" East 2761.06 feet from the northeast corner of said lands, said point being the terminus of the described line, containing 6.935 acres, more or less.

Conservation Easement Area containing 243.507 acres, more or less.

PTR: 253948 City of Sacramento Conservation Easement May 1, 2001 Page 6 of 6

The bearings herein are referenced to the California Coordinate System, NAD83, Zone 2. All distances cited herein are ground distances. Multiply ground distances by 0.99995037 to obtain California Coordinate System grid distances.

End of Description



## EXHIBIT D



### SHUTE, MIHALY & WEINBERGER LLP ATTORNEYS AT LAW

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May 6, 2003

JEFFREY M. BRAX MARLENA G. BYRNE JOHN À. HICKEY MATTHEW D. ZINN CATHERINE C. ENGBERG ERIN RYAN MATTHEW D. VESPA

LAUREL L. IMPETT, AICP CARMEN J. BORG URBAN PLANNERS

ELIZABETH M. DODD DAVID NAWI OF COUNSEL

U.S. Fish and Wildlife Service Attention: Field Supervisor, Sacramento Field Office 2800 Cottage Way, W-2605 Sacramento, CA 95825

# Re: Proposed Amendment to the April 2001 Hansen Ranch Range Management Plan

Dear Sir/Madam:

In August 2001, the Sacramento Area Flood Control Agency ("SAFCA"), the City of Sacramento ("City"), the Sacramento Valley Conservancy ("SVC") and the United States Fish and Wildlife Service ("Service") entered into a Memorandum of Understanding ("MOU") regarding the management of certain land owned by the City and commonly known as Hansen Ranch (hereinafter "the Property").

The MOU recognizes that "Grazing on the Property has been and will continue to be an important element of the management of the Property." (MOU § 1.5). By entering into the MOU, the City granted to SAFCA the exclusive right to undertake, permit and manage grazing on the Property. (MOU § 7.4). Pursuant to the MOU, SAFCA currently permits and manages grazing on the Property in a manner consistent with the Service-approved Hansen Ranch Range Management Plan ("RMP"), which identifies specific limitations on and management practices for cattle grazing and grazingrelated activities on the Property. (MOU § 2.20). The MOU also provides in relevant part that SAFCA shall develop and obtain Service approval for amendments to the RMP as necessary to ensure that cattle grazing activities on the Property are compatible with the conservation of protected habitat. (MOU § 7.8(d)). Pursuant to this MOU provision, U.S. Fish and Wildlife Service April 22, 2003 Page 2

SAFCA has, in coordination with the Service-approved Preserve Manager for the property, Charlotte Kimball of Kimball Neely Associates LLC, determined that a minor amendment should be made to the RMP to further the conservation of protected habitat. This letter describes and requests Service approval of this RMP amendment.

SAFCA proposes to amend the RMP to allow limited, controlled grazing in the area north of the Dry Creek North Levee on the Property ("North Area"), beginning in May 2003. Although the North Area was historically grazed, it has not been grazed since the construction of the Dry Creek North Levee because the new levee impeded direct access by cattle to the North Area. Due to this access restriction, the North Area was not covered in the original RMP.

Since construction of the Dry Creek North Levee, the North Area has come to contain considerable exotic vegetation and thatch (biomass). Areas impacted by this exotic vegetation and thatch include vernal pool habitat (vernal pool uplands, vernal pool boundaries, and portions of vernal pool sides and bottoms). The exotic vegetation and thatch has begun to crowd out native species in and around that vernal pool habitat. To address this exotic vegetation issue, SAFCA proposes to allow limited, controlled grazing in the North Area. This proposed introduction of cattle grazing will help reduce the total biomass of exotic vegetation in the North Area and enhance opportunities for native plant establishment.

To address the access issue, SAFCA has designed a new fencing system that will allow its grazing lessee to move cattle into the North Area and contain them there as necessary. Water for the cattle will also be provided in the area. The North Area consists of three smaller sub-areas: an approximately 9-acre western unit, an approximately 4.9-acre eastern unit and a central unit between the other two. The central unit contains numerous trees planted as mitigation under the City of Sacramento Heritage Tree Ordinance. SAFCA has designed fencing for the North Area that allows access to the eastern and western units while excluding cattle from the central unit in order to protect the mitigation trees.

The precise timing of grazing of the North Area will be determined annually by consultation between the Preserve Manager, SAFCA and the grazer. This consultation process will allow those parties to take into account spring rains and other conditions impacting the North Area and to determine the appropriate number and type/size of cattle to graze and the timing and duration of that grazing. Generally U.S. Fish and Wildlife Service April 22, 2003 Page 3

speaking, SAFCA and the Preserve Manager anticipate that approximately 20 individuals will graze the North Area (east and west units) for a period of 7 to 14 days in May of each year. During this grazing period, the Preserve Manager and grazer would monitor the North Area carefully to detect changes in biomass and watch for signs that the vernal pool habitat might be impacted. The Preserve Manager does not expect grazing to impact the vernal pools or vernal pool vegetation adversely. If signs of such impacts are detected, however, the number of cattle in the North Area will be reduced or the cattle will be moved out of the area as appropriate. Based on data obtained during monitoring of annual grazing of the North Area, the Preserve Manager will revisit the need for and extent of grazing in that area on an annual basis. This monitoring may show that grazing should be omitted in one year or that the area should be grazed twice in another year.

The MOU provides that the RMP may be amended only with the written consent of the Service, and also provides that any proposed RMP amendment must be acceptable to the City, SAFCA, the SVC and the Preserve Manager. (MOU § 9.1(b)). SAFCA has already ascertained that the above-described amendments to the RMP are acceptable to the Preserve Manager, the City and the SVC. As such, the Service's approval is the last sign-off required for the RMP amendment.

Because SAFCA, the grazer and the Preserve manager would like for grazing of the North Area to commence during May of 2003, we are asking for expedited review of this request to amend the RMP. Please note that the MOU provides in relevant part that the Service intends, subject to staffing and work load constraints, to review proposed amendments to the RMP such as this one as expeditiously as possible and to either approve the amendment or indicate why approval has been withheld. (MOU § 7.9(a)). The MOU also provides that although the Service has sole discretion to grant or withhold approval for a proposed amendment to the RMP, it shall not unreasonably or arbitrarily withhold such approval. (MOU § 7.9(a)).
U.S. Fish and Wildlife Service April 22, 2003 Page 4

If you approve of the above-described proposed amendment to the RMP, please sign and return this letter by fax and mail. Please call me if you have any questions or if you need me to provide copies of any documents referenced in this letter.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

OSĂ L. ARMI Attorneys for Sacramento Area Flood Control Agency

Approved:

By:

Date

[title] Sacramento Field Office United States Fish and Wildlife Service

cc: Peter Buck, Sacramento Area Flood Control Agency Charlotte Kimball, Kimball Neely Associates LLC V Teresa Haenggi, City of Sacramento Aimee Rutledge, Sacramento Valley Conservancy Lynn Cox, Office of the Regional Solicitor Jason Douglas, U.S. Fish and Wildlife Service

[P:\SAFCA\HCP\OLA142 (RMP Letter).wpd]

# Hansen Ranch Range Management Plan

## **Prepared for:**

# Sacramento Area Flood Control Agency 1007 Seventh Street, Fifth Floor Sacramento, CA 94814

# Prepared by:

Ray Budzinski California Board of Forestry Certified Rangeland Manager #36

in association with:

Wilde Legard of Ecologic

April, 2001

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## 1.0 BACKGROUND

### 1.1 Introduction

This Range Management Plan (Range Plan) provides management recommendations for livestock grazing on the 260+/- acre Hansen Ranch owned by the City of Sacramento (City). The Range Plan uses a conservation-oriented approach to the stewardship of the Hansen Ranch and incorporates grazing management guidelines adopted by the Sacramento Area Flood Control Agency (SAFCA). SAFCA is purchasing a conservation easement on the Hansen Ranch in compliance with the terms and conditions of the Biological Opinion issued by the U.S. Fish and Wildlife Service (USFWS) on December 8, 1998, as amended on March 5, 2001 (2001 Biological Opinion) to address flood control project-related impacts to species protected under the federal Endangered Species Act. SAFCA proposed the Hansen Ranch property to USFWS as a conservation site because of its existing biodiversity and its potential for the creation of additional habitat.

This Range Plan describes existing conditions and land management activities presently occurring on the Hansen Ranch and addresses how these conditions and activities will be modified to ensure that grazing activities on Hansen Ranch are consistent with habitat creation and preservation, flood control, and passive recreation uses of the site. The Range Plan also describes the interrelationship between livestock grazing on Hansen Ranch and on the adjacent Coyle Ranch. The Range Plan shall be implemented in conjunction with the 2001 Conservation, Monitoring and Management Plan (CMMP) for Hansen Ranch, which has been prepared by SAFCA and approved by USFWS. The CMMP identifies the measures that are necessary to satisfy the terms and condition of the

2001 Biological Opinion, the Conservation Easement for Hansen Ranch, and the Memorandum of Understanding (MOU) to which the City, SAFCA, USFWS, and Sacramento Valley Open Space Conservancy (SVOSC) are parties.

### 1.2 Site Location

The 260+/- acre Hansen Ranch is located at the northern boundary of the Sacramento city limits. The community of Rio Linda lies to its north; the suburban communities of Robla. Gardenland, and Del Paso Heights lie to the south. The western boundary of Hansen Ranch is defined by the Natomas East Main Drainage Canal (NEMDC) and the Union Pacific Railroad. In recent years, an increasing number of new housing developments have arisen to the immediate west, on land formerly used for agriculture. Undeveloped private ranch land (Coyle and Whitley Ranches) is located to the east. Dry Creek, a perennial stream originating 25 miles to the east in Placer County, bisects the site into roughly equal northern and southern halves. Robla Creek, existing primarily as a channel for collected runoff from McClellan Air Force Base, extends along the extreme southern end of the site. Both Dry and Robla Creeks flow westerly into the NEMDC. A system of two levees, the Dry Creek North Levee and Robla Creek South Levee, contain overflow from the creek system and subject the Hansen Ranch to frequent inundation, while providing flood protection to the surrounding communities. Increasing residential development of the neighboring area over the next several decades will increase the demand for open space and recreational amenities. The undeveloped wildland that remains will provide important plant and animal habitat and natural corridors for the movement of wildlife.

Hansen Ranch Range Management Plan

## **1.3** Purpose and Need

SAFCA, a joint powers agency of the State of California comprised of the County of Sacramento, City of Sacramento, Sutter County, American River Flood Control District (ARFCD), Reclamation District 1000, Sacramento County Water Agency, and Sutter County Water Agency, has participated in a series of projects that are designed to enhance flood control operations at Folsom Dam and Reservoir, improve the reliability of the levee system protecting the Sacramento area, and provide incidental environmental and recreational benefits. As part of this effort, SAFCA has undertaken a locally funded project of levee and related flood control improvements around the Natomas Basin and in the lower Dry Creek and Arcade Creek watersheds known as the North Area Local Project (NALP).

Construction of the NALP has resulted in impacts on habitat potentially used by species protected under the federal Endangered Species Act. The 2001 Biological Opinion (reference number: 1-1-01-F-0031) sets forth the following conservation requirements that SAFCA must satisfy to minimize impacts related to its construction of the NALP: acquire from the City a USFWS-approved conservation easement on the Hansen Ranch property; purchase conservation credits from a USFWS-approved conservation bank for both the creation of vernal pools, which are potential habitat for vernal pool fairy shrimp (*Branchinecta lynchi*) and vernal pool tadpole shrimp (*Lepidurus packardi*), and the planting of elderberry and associated native plant cuttings/seedlings, which are habitat for the Valley elderberry longhorn beetle; and preserve vernal pools on the Hansen Ranch site. This Range Plan, after reviewing existing conditions, identifies range management

practices, including appropriate livestock use levels, limits on the timing, duration, and distribution of grazing, and measures to conserve natural resources, that will ensure compatible use of the Hansen Ranch property for creation, preservation and restoration of habitat, flood control, recreation and grazing.

## 1.4 General History

The Hansen Ranch was once part of a vast network of wetlands characteristic of the Central Valley. In the early 1900's, local reclamation districts constructed a series of levees and canals to drain the wetlands, which allowed agricultural use of the land. The creeks and engineered canals were used for irrigation and to accommodate surplus water. Around this time, the land comprising the Hansen Ranch was used as a duck hunting club. Water was diverted from Dry Creek and other lesser drainages to create ponded areas to attract waterfowl for sport hunting. Later, portions of the land were farmed and irrigated. to grow alfalfa and grain for livestock consumption. Under the Hansen family ownership, the land was used for cattle grazing. Over a period of years commencing in the 1960's and continuing until the 1980's, the City acquired the Hansen Ranch from the Hansen family in successive grant deeds, some of which were gifts and some land exchanges. The Hansen Ranch was leased in 1981 to Cub Coyle, the current grazing tenant and the owner of the neighboring Coyle Ranch to the east. Since that time, the Hansen Ranch has been grazed by cattle on a year-round, rotational basis in conjunction with grazing of the adjacent 149 acre Coyle Ranch. The Coyle Ranch has been in the Coyle family since 1911, when it was purchased upon the subdivision of the Rancho Del Paso Spanish land grant. The land has been used historically for livestock grazing, which continues up to the

present time.

### 2.0 EXISTING CONDITIONS AND MANAGEMENT

#### 2.1 Access

The Hansen Ranch is bounded by Ascot Avenue on the north, the Robla Creek South Levee to the south, the Union Pacific Railroad and the NEMDC to the west, and the private Coyle and Whitley Ranches to the east. The northern part of the Hansen Ranch is accessible from West 2<sup>nd</sup> Street, from the Dry Creek North Levee, or through the Coyle Ranch. A southern entry point across Robla Creek is currently impassable. Dry Creek bisects the Hansen Ranch into northern and southern halves and there are no vehicular crossing points along the creek. A bridge located on the Coyle property provides the only vehicular access to the southern portion of the Hansen Ranch from the north. Given that access to Hansen Ranch is so restricted, and that livestock grazing is rotational in nature, the grazing operation on Hansen Ranch should be undertaken in combination with grazing activities on the adjacent Coyle Ranch.

## 2.2 Flooding

The Hansen Ranch is surrounded by levees and the area's hydrology is altered and artificially regulated by water that is released into and pumped out of the Dry Creek system. The Hansen Ranch is regularly inundated following rainfall events that create high water levels in Dry and Robla Creeks. The amount, extent, and duration of the flooding varies from year to year, with the water typically receding within 3 to 4 days of dry weather conditions. Other artificial sources of water may also contribute to flood

conditions and influence the amount of time that water remains on the Hansen Ranch site. Residential and pasture water runoff currently drains into the northern portion of the site from Ascot Avenue during the rainy season. Excess groundwater is pumped at a rate of approximately 1000 cubic feet/second into the creek and canal system from an adjacent housing development to the west. Irrigation runoff from the Coyle property is discharged onto the Hansen Ranch site via a drainage channel located in the northeast portion of the property. These natural and artificial sources of water collect as seasonal wetlands in lowlying areas of the Hansen Ranch property.

### 2.3 Vegetation

The vegetation on the majority of the Hansen Ranch site is California annual grassland dominated by non-native annual grasses and herbs, which were introduced to California by early settlers and have since become naturalized as an irreversible component of the flora. Other plant communities present are riparian woodland and freshwater marsh. The annual grassland vegetation provides the bulk of the forage resource consumed by livestock on the property. The riparian areas are used incidentally by the cattle in the course of watering and seeking shade and shelter. The Hansen Ranch is moderately grazed, appropriately stocked, and relatively free of opportunistic weedy plant species, which indicates a history of responsible livestock grazing. The plant communities on the Hansen Ranch provide for the potential existence of several special plant species, although no populations of special plants are known to occur on the site. Special plants is a general term that refers to all taxa that the California Natural Diversity Data Base (CNDDB) is interested in monitoring, regardless of their legal or protective status.

## 2.3.1 California Annual Grassland

The California annual grassland is comprised mostly of non-native, annual grasses and native and non-native herbs. Native, perennial grasses occur in isolated stands or are sparsely scattered throughout the annual grassland. The dominant annual grasses include wild oats (*Avena barbata; A. fatua*), soft chess (*Bromus hordeaceus*), annual ryegrass (*Lolium multiflorum*), wild barleys (*Hordeum spp.*), and ripgut brome (*Bromus diandrus*). Other non-native grasses, such as annual fescue (*Vulpia myuros*), silver hairgrass (*Aira caryophyllea*), little quaking grass (*Briza minor*), and foxtail brome (*Bromus madritensis ssp. madritensis*) occur in lesser amounts. Common native, perennial grasses include saltgrass (*Distichlis spicata*), creeping wildrye (*Leymus triticoides*), and purple needlegrass (*Nasella pulchra*). Saltgrass, a plant that inhabits marshes and moist, sandy or alkaline flats, is common throughout the southwestern portion of the property. Hardinggrass (*Phalaris aquatica*), a hardy, non-native, perennial pasture grass traditionally planted as a forage or hay crop, and Bermudagrass (*Cynodon dactylon*), a non-native, perennial irrigated pasture and lawn grass, are sporadically common.

Interspersed throughout the grassland are numerous species of both native and non-native broadleaf plants commonly referred to as wildflowers. The more common non-natives include storksbill (*Erodium cicutarium*; *E. botrys*), bur clover (*Medicago polymorpha*), wild geranium (*Geranium molle*, *G. dissectum*), peppergrass (*Lepidium nitidum var. nitidum*), smooth cats ear (*Hypochoeris glabra*), scarlet pimpernel (*Anagalis arvensis*), mouse-eared chickweed (*Cerastium glomeratum*), and many others. Weedy, opportunistic species, such as yellow starthistle (*Centaurea solstitialis*), tarweed (*Holocarpha virgata*), and sweet

fennel (*Foeniculum vulgare*) are present to a minor extent. The more common native wildflowers include California buttercup (*Ranunculus californica*), lupine (*Lupinus bicolor*), popcorn flower (*Plagiobotrys spp.*), blue-eyed grass (*Sisyrinchium bellum*), red maids (*Calandrinia ciliata*), dwarf owls clover (*Triphysaria pusilla*), California poppy (*Eschscholtzia californica*), blue dicks (*Dichelostemma capitatum ssp. capitatum*), and various kinds of clovers (*Trifolium spp*).

## 2.3.2 California Annual Grassland Management

California annual grassland on the Hansen and Coyle Ranches is managed to control the dominating influence of the non-native plants by altering the grassland biomass. This is accomplished by using livestock grazing to reduce the vertical structure of the herbaceous vegetation from a tall growth to a short growth stature. The intent is to impair the growth of the more aggressive and competitive non-native grasses and herbs to allow smaller and slower-growing plants to regenerate and coexist with them. Under these conditions, a discontinuous plant cover is maintained so that areas of bare ground or sparse vegetation are recolonized annually by a variety of plant species. Areas subject to such management techniques generally display a greater diversity of plant life than areas of unmanaged habitats.

The California annual grassland can pose a fire hazard because its annual grass component does not survive from one year to the next. The annual plant life cycle is completed by late spring or early summer and the remnant dried plant material left standing during the summer and early fall months, if left unmanaged, represents a high

fuel load. This fuel load can amount to as much as two or more tons of biomass per acre each year. The Hansen Ranch is currently subject to accidental and deliberate arson fires as a result of its attraction to children from nearby residential neighborhoods and will be subject to increased risk of fires due to its future use as a public recreation area. Livestock grazing on the Hansen Ranch minimizes the potential for uncontrolled wildfire inherent in the dried, annual grassland vegetation by reducing the fuel load to manageable levels. Livestock grazing also ensures the regular presence of a rancher on the Hansen Ranch site which is a deterrent to vandalism, including arson fires.

## 2.3.3 Riparian and Wetland Areas

The Hansen Ranch contains two perennial creeks (Dry and Robla Creeks) that traverse the property and empty into the NEMDC. The flora of these riparian corridors is a mixture of mostly native trees and shrubs, and native and non-native annual and perennial herbaceous plants. The riparian corridors along Dry and Robla Creeks support trees and shrubs, such as Oregon ash (*Fraxinus latifolia*), valley oak (*Quercus lobata*), California walnut (*Juglans californica var. californica*), Fremont cottonwood (*Populus fremontii*), arroyo willow (*Salix lasiolepis*), shining willow (*Salix lucida ssp. lasiandra*), Himalayan blackberry (*Rubus discolor*), poison oak (*Toxicodendron diversiloba*), and a few species of escaped, cultivated shrubs that have become established along the creek banks. Common understory vegetation includes various annual grasses, creeping wildrye (*Leymus triticoides*), saltgrass (*Distichlis spicata*), hardinggrass (*Phalaris aquatica*), mugwort (*Artemisia douglasiana*), lady's thumb (*Polygonum persicaria*), curly dock (*Rumex crispus*), pennyroyal (*Mentha pulegium*), vervain (*Verbena bonariensis*) and numerous

other herbaceous plant species.

Wetlands on the Hansen Ranch consist of vernal pool and freshwater marsh habitats that support a mostly herbaceous vegetation component. Approximately 5.07 acres of existing vernal pools are distributed throughout the northern half of the site. Another approximately 13.29 acres of seasonal, freshwater marsh habitat occur as depressions and low-lying features in the landscape that contain water during the winter and spring months and are dry throughout the summer and fall. These sites support a mixture of both moisturedependent and dryland plants normally found in the annual grassland and include various obligate and facultative wetland indicator species, such as rabbitsfoot grass (Polypogom monospeliensis), pennyroyal (Mentha pulegium), curly dock (Rumex crispus), cocklebur (Xanthium strumarium), rushes (Juncus spp.) and sedges (Cyperus spp.). The marshlands associated with Robla Creek are perennially wet and contain nutsedge (Cyperus spp.), sedge (Carex spp.), rush (Juncus spp.), bulrush (Scirpus spp.), spikerush (Eleocharis sp.), cattail (Typha spp.), water primrose (Ludwigia palustris), pondweed (Potamogeton spp.), water smartweed (Polygonum amphibium), duckweed (Lemna minor), azolla (Azolla filiculoides), marsilea (Marsilea sp.), water plantain (Alisma plantago-aquatica), and many other wetland plant species.

#### 2.3.4 Riparian and Wetland Management

The riparian corridors along Dry and Robla Creeks are managed for their intrinsic value as habitat for plants and animals. Accumulated debris is removed periodically from Dry Creek by Cub Coyle, who leases the land for livestock grazing, to eliminate obstructions

that can lead to bank erosion. Dry Creek supports a dense and healthy stand of vegetation that appears to be minimally impacted by livestock grazing activities. The steep and abundantly vegetated banks render 95 percent of Dry Creek inaccessible to livestock. The few intermittent locations along Dry Creek where the topography lends itself to livestock access appear to be seldom used and adequately vegetated. Bank erosion is minor to nonexistent along Dry Creek and appears to be a function of scouring from high water events and debris accumulation in the creek, rather than being attributable to impacts from livestock. The livestock using the area concentrate most of their grazing activities in the surrounding grassland, and the riparian areas are used incidentally in the course of watering and seeking shade and shelter. A comparison to ungrazed portions of Dry Creek revealed no significant difference in vegetative structure and composition.

Two primary cattle crossings and watering points occur along Dry Creek where the banks are laid back and sparsely vegetated from the activity of livestock crossing the creek to access drinking water. One of these crossings served in the past as an old wagon road to cross Dry Creek.

Robla Creek is entirely accessible to livestock, but is buffered by standing water that limits grazing activities to the margins of the freshwater marsh that extends north of the creek for the majority of its length through the Hansen Ranch. Livestock utilize the annual grassland that borders this area and portions of the freshwater marsh. The seasonal wetlands scattered throughout the Hansen Ranch are used by the cattle in the course of their grazing the annual grassland vegetation. Grazing within these seasonal wetland

areas helps maintain overall plant diversity through herbivory, which inhibits the non-native vegetation from monopolizing the vegetative cover, stimulates growth of new vegetation, and minimizes the accumulation of plant litter.

#### 2.4 Wildlife

The Hansen Ranch and the surrounding private open space land provide habitat for many common wildlife species that typically use grassland, riparian and wetland areas as foraging, den, roosting and nesting habitat. These areas support many species of small mammals, songbirds, raptors, reptiles and amphibians, and provide prey to resident and migratory wildlife. The importance to wildlife of the perennial creeks and wetlands on the Hansen Ranch is noteworthy, given the nature of the dry, rainless summers characteristic of the region. The USFWS and California Department of Fish and Game generally consider all riparian and wetland areas to have wildlife value. These areas provide important nesting, perching, and feeding sites for many species of wildlife, as well as critical habitat for other aquatic insect and invertebrate organisms. The California annual grassland and riparian and wetland areas on the Hansen Ranch provide potential habitat for certain "special animals," a general term that refers to all taxa that the CNDDB is interested in monitoring, regardless of their legal or protective status.

Wildlife species richness and diversity are moderate to high on the Hansen Ranch and in the surrounding area. Wildlife observations during prior surveys indicated the presence of such mammals as raccoon, California ground squirrel, and black-tailed hare. Birds sighted were American kestrel, yellow-billed magpie, mourning dove, rock dove, barn

swallow, western kingbird, great blue heron, snowy egret, great egret, mockingbird, western meadowlark, scrub jay, red-tailed hawk, and turkey vulture. Amphibian and reptile species included bullfrog, western fence lizard, northwestern pond turtle, and California kingsnake. Numerous ducks and shorebirds use the marshlands along Robla Creek.

#### 2.4.1 Wildlife Management

The key to the conservation of most terrestrial wildlife is the preservation of its vegetative habitat, because animals are dependent upon plant communities for cover, food and water. Livestock grazing on the Hansen Ranch sustains habitat conditions that contribute to the maintenance of viable wildlife populations. This management strategy is consistent with the California Wildlife Habitat Relationships Database (Mayer and Laudenslayer 1988), which indicates that the reduction of the natural vegetation in California annual grassland from a tall-herb to a short-herb habitat structure as a result of grazing has either a beneficial or a neutral effect on most wildlife. Studies of the effects of grazing on bird populations indicate that it has a minimal impact on avian fauna, and that grazing is an essential factor in maintaining habitat conditions for burrowing owls and many raptor species. Several upland game birds, such as California quail, wild turkey, and pheasant prefer grazed grassland/brush or grassland/riparian transition zones, because they feed on seeds or vegetation found in open habitats or cultivated fields, and rely on dense vegetation for cover.

#### 2.5 Soil

The soils of the Hansen and Coyle Ranches have been identified and mapped (see

Appendix A - Range Analysis) based on information contained in the Sacramento County Soil Survey (United States Department of Agriculture, 1993). County soil surveys have been prepared by the USDA Natural Resource Conservation Service for most counties in the United States and provide information to land users about the suitability and productivity of local soil types for various uses, such as crop growing, range, and forest management. Soil maps included in the soil survey are aerial photographs that provide an overview of the soils and vegetation of a given area. The soils on the Hansen and Coyle Ranches are identified as productive sandy loams, sandy clay loams, and silt loams that occur on flat to gently rolling landscapes. Certain soils on the Hansen Ranch have been identified as suitable for the creation and long-term persistence of vernal pools due to the presence of underlying shallow claypans and hardpans that restrict water percolation. The northern portion of the site is underlain by San Joaquin soils and is, in part due to its soil characteristics, the most appropriate location for the creation of vernal pool habitat.

## 2.6 Current Livestock Grazing Operation

Current livestock grazing operations on Hansen Ranch are carried out within the confines of the Dry Creek North Levee and Robla Creek South Levee and the east and west property boundary fences. Barbed wire fencing extends along the length of the levees to exclude livestock. The City of Sacramento Tree Ordinance Mitigation Area, situated north of the Dry Creek North Levee, within which oak trees have been planted, is isolated from the remainder of the property and is ungrazed.

The management of Hansen Ranch is closely coordinated with the management of the adjacent Coyle Ranch to achieve resource and fire prevention objectives for the land. Livestock access to the entire Hansen Ranch can only be obtained via the Coyle Ranch. Gates along the eastern boundary fence between the Hansen Ranch and Coyle Ranch are left open to allow livestock to range freely between the two properties throughout the year. The nature of flooding on the Hansen Ranch precludes its stand-alone use for livestock grazing during the winter and spring; it is impractical to repeatedly move animals on and off the property to accommodate the episodic flooding of the land. There are no corral facilities on the Hansen Ranch and there is limited acreage within which to confine animals on dry land during periods of inundation. Thus, livestock are removed from the Hansen Ranch and confined on the Coyle Ranch whenever the Hansen Ranch becomes inundated with standing water in the winter and spring months. When the water recedes and the soils dry sufficiently, the gates in the eastern boundary fence between the two properties are reopened and livestock are allowed access back into the Hansen Ranch.

Livestock drinking water is currently obtained from Dry and Robla Creeks and from natural pools that occur on the Hansen Ranch site during the rainy season. There is no developed water source on the Hansen Ranch to provide drinking water for domestic animals should livestock be excluded entirely from Dry and Robla Creeks as part of proposed or future conservation requirements, whereas a developed source of water for livestock is readily available throughout the year on the Coyle Ranch. Consequently, the use of the Hansen Ranch for livestock grazing is impractical in the absence of a land management strategy that coordinates grazing activities on the site with such activities on the adjacent Coyle

Ranch.

The Hansen Ranch and Coyle Ranch are grazed under an adaptive management strategy that allows for modifications in the livestock operation to accommodate flooding events, abnormal rainfall years, and variations in forage production. Under the current livestock grazing operation, approximately 100 animal units are grazed on the combined Hansen and Coyle Ranches. Typically, cow/calf units are the primary grazing animals on the two ranches, although there may also be yearling cattle that are raised as eventual replacements for those cows that have outlived their usefulness. In addition, there are three bulls whose function it is to breed with the cows.

The Hansen Ranch and Coyle Ranch are managed to ensure that adequate amounts of residual dry matter (ungrazed standing and downed plant material) remain on the ground at the end of the grazing season in October to provide soil protection, encourage nutrient recycling, and maintain suitable conditions for subsequent regrowth. Livestock numbers are reduced overall or livestock are confined to the Coyle Ranch if there is a need to alleviate grazing pressure on the Hansen Ranch.

## 2.7 Existing Range Improvements

Range improvements are structural developments or treatments undertaken for the purpose of improving the land or promoting better management. Improvements such as fencing, water developments, salting, supplemental feeding, fertilizing, seeding, stock trail construction and herding are practices used to control or influence the movement of

grazing animals within a given area. The Hansen Ranch contains barbed wire fencing along its eastern and western borders and along the length of the Dry Creek North Levee and Robla Creek South Levee. The fencing serves to define property boundaries and to contain livestock on the Hansen Ranch. The eastern boundary fence that separates public from private land, while currently functional, is in poor condition and will require replacement in the near future. All other boundary and levee fences are in good condition. Currently, there is no internal fencing to facilitate the rotation and segregation of livestock into individual pastures.

Water is perhaps the most important factor influencing livestock distribution. Land that contains strategically located and dispersed water sources is used more uniformly and effectively by livestock. While sources of developed water are nonexistent on the Hansen Ranch, livestock drinking water currently obtained from Dry and Robla Creeks is instrumental in encouraging livestock to distribute evenly across the landscape. An old well exists along the eastern boundary of the Hansen Ranch, but it has been inoperable since the 1960's. This potential water source could be redeveloped to provide drinking water to livestock via a network of water lines connected to troughs located throughout the property.

#### 2.8 Other Management Activities

Livestock currently graze within the boundaries of the Dry Creek North Levee and Robla Creek South Levee and the eastern and western boundary fences. The City of Sacramento Tree Ordinance Mitigation Area north of the Dry Creek North Levee is

currently ungrazed to protect tree seedlings that have been planted there. Fenced maintenance corridors separate the grazing land from the levees. Work crews use equipment to perform routine maintenance within the levee corridors to ensure the structural integrity of the levees, including mowing the levee slopes and adjacent access roads as necessary. Weed and pest control activities, conducted by the ARFCD, are confined to the levees to keep them free of woody vegetation and burrowing rodents. ARFCD sprays a pre-emergent on the levee crowns, slopes and adjacent access roads annually in the winter or early spring. The herbicide is not applied if the wind exceeds eight (8) miles per hour. Annual grassland vegetation is managed using both mechanical and chemical methods. The use of pesticides in the conservation area is prohibited except with prior USFWS approval and in a manner consistent with the CMMP and MOU. The levees are not included as part of the conservation area and are exempt from the conservation easement's restrictions. Chemical mosquito abatement activities will not be permitted in the area subject to the conservation easement, except with prior USFWS approval and in a manner conistent with the CMMP and MOU.

## 3.0 PROPOSED RANGE MANAGEMENT PLAN

## 3.1 Habitat Conservation Measures

SAFCA will purchase a conservation easement on the Hansen Ranch to minimize NALPrelated impacts to species protected under the federal Endangered Species Act. The proposed conservation measures, in conjunction with other measures mandated by the 2001 Biological Opinion, will compensate for the impacts to vernal pool crustaceans through the preservation of habitat for these species on the Hansen Ranch. Because of the difficulty of quantifying the number of protected vernal pool crustaceans, the USFWS has quantified take incidental to the NALP as the amount of habitat that has been or will become unsuitable for the species as a result of the NALP project.

The required conservation measures include the preservation of 3.74 acres of existing vernal pool habitat in perpetuity to address, in part, NALP-related impacts to vernal pool crustaceans. Livestock do not have access to the City of Sacramento Tree Ordinance Mitigation Area located north of the North Levee because of barb wire fencing around the perimeter of Hansen Ranch and the North Levee.

## 3.2 Range Analysis

Several methods are available for estimating the amount of livestock that can be supported on a given area of land (livestock carrying capacity). Most approaches used to approximate livestock carrying capacity involve conducting an appraisal of an area's soils, terrain features, vegetation, and water availability. A review of historic and current stocking levels can also provide an indication of the amount of livestock the land can support. A "range analysis" process using both of these techniques was conducted to evaluate existing livestock use and to determine appropriate stocking levels consistent with the proposed conservation measures (see §§ 3.2.1, 3.2.2, and Appendix A). The process was used to determine the overall livestock carrying capacity and stocking rate of both the Hansen and Coyle Ranches, given the compelling rationale for and effectiveness of managing these two properties in combination with one another.

The range analysis of the Hansen Ranch assessed forage productivity within the conservation area that would be accessible to livestock grazing. Areas excluded included the Dry Creek North Levee and Robla Creek South Levee, the City of Sacramento Tree Ordinance Mitigation Area, and the proposed trail corridor along Robla Creek associated with the Ueda Parkway project. The analysis also disregarded Dry Creek and a corridor incorporating a 100-foot setback in either direction from the center line of the creek.

## 3.2.1 Actual Use Determination

An accurate method of determining the livestock carrying capacity of a given area is to obtain actual use data from a current or past grazing operator. This information can be used to assess whether existing use levels and livestock numbers are appropriate or whether adjustments may be necessary. If actual use information from the site is unavailable, the next best source is from neighboring ranches. The Hansen and Coyle Ranches appear to be moderately grazed under a current use level of 100 animal units, with more than adequate residual dry matter remaining on the ground on both ranches at the end of the grazing season. This indicates that the combined Hansen and Coyle Ranches can safely support approximately 100 animal units, and perhaps more, consistent with defined conservation objectives for the land, as set forth in the CMMP.

## 3.2.2 Range Site Process

The Sacramento County Soil Survey (USDA 1993) and the Statewide Correlation of Natural Resource Conservation Service (NRCS) Range Sites (McCleery 1993) was used to determine forage production on the Hansen Ranch and the dryland portions of the Coyle

Ranch. The Coyle Ranch also includes irrigated pasture, which required a different type of analysis. The Soil Survey was used to identify the various soils on the site, and the Statewide Correlation of NRCS Range Sites was used to determine the forage productivity of those soils. Soils are grouped into "range sites" on the basis of their similarities in texture, depth, slope, and relative productivity. Forage production estimates for normal, favorable, and unfavorable rainfall years are provided in pounds per acre for each range site.

Vegetative growth on the Hansen Ranch in most years is a product of both rainfall and flooding, hence annual forage production can be considered to be comparable to that of a favorable rainfall year due to the added soil moisture, which enhances plant growth. As a result, the animal unit month figures for a favorable rainfall year provided in the range analysis should be the basis upon which to gauge stocking levels.

Overall forage production was calculated by multiplying the forage productivity in pounds per acre by the acreage of the various range sites on the two ranches. Residual dry matter (RDM) in the amount of 800 pounds per acre (SAFCA RDM standard) was subtracted from total forage production. RDM is the amount of vegetation that must remain on the ground at the end of the grazing season to provide soil protection, encourage nutrient recycling, and maintain suitable conditions for subsequent regrowth. The amount of forage available for livestock to consume equals the amount of vegetation produced minus the amount of RDM. Pounds per acre of available forage was converted into animal unit months (AUMs). An AUM is the amount of forage needed to sustain a 1000 pound cow and a calf as old as

6 months of age, or their equivalent, for a period of one month. Conversion factors are available that take into account the relative forage requirements of other animals, such as different age classes of cattle, horses, goats, and sheep. The number of animals the land can support is determined by dividing the length of the grazing season in months into the total available AUMs.

## 3.2.3 Results of Range Analysis

The range analysis provided an assessment of the forage productivity of the Hansen and Coyle Ranches and afforded a reasonably accurate estimate of stocking levels for each of these ranches consistent with resource conservation objectives, as set forth in the CMMP. The combined carrying capacities of the two ranches indicate how many animals could be supported on the land in a coordinated grazing operation involving both properties. The methodology employed in the range analysis for the Hansen and Coyle Ranches cross-referenced several sources of information, including the Sacramento County Soil Survey, the Statewide Correlation of NRCS Range Sites, and actual livestock use records.

The result of the range analysis indicates a general compatibility with the actual livestock use (approximately 100 cow/calf units) that has occurred on the Hansen and Coyle Ranches over a period of decades. The range site process in Appendix A indicates that the combined properties can sustain an estimated 118 cow/calf units, assuming the land is used uniformly and completely. However, since it is often difficult to achieve such optimal use of rangelands, a conservative approach would be to adhere to the historic use

level of 100 cow/calf units as the stocking rate for the two ranches, while permitting up to 118 cow/calf units to be grazed on the properties in exceptional forage years. This permitted range of 100 to 118 cow/calf units, depending on forage conditions, presumes that the livestock will be fed hay during periods of inundation to offset the temporary loss of natural forage.

## 3.3 Land Management and Stewardship

The current livestock grazing program appears to be compatible with habitat conservation goals and objectives for the Hansen Ranch property. Existing private land ownership patterns may change in the future and present other land management alternatives. However, cattle grazing is presently the most practical and cost-effective option to achieve many of the land management objectives identified in the conservation easement and the CMMP for Hansen Ranch. The overall, long-term resource management goals for the Hansen Ranch, in conjunction with its flood control and passive recreation functions, are to preserve potential habitat for the federally protected vernal pool crustaceans and to conserve and enhance the overall biological diversity of the site. Livestock grazing is an integral part of the overall management program to achieve these resource management goals.

## 3.3.1 Vegetation Management Strategy

The vegetation on the majority of the Hansen and Coyle Ranches is California annual grassland. The need for management of California annual grassland vegetation is related to the tendency of the non-native annual grasses and herbs to rapidly monopolize the

landscape and inhibit the germination and growth of other plant species through the capture of water and mineral resources and the physical and chemical effects of accumulated plant litter. California annual grassland and vernal pool habitats, if allowed to lie fallow, are prone to invasion by undesirable, weedy species, which can displace native plants and diminish overall biodiversity. Unmanaged California annual grassland vegetation also presents a potential fire hazard. A managed grazing regime that reduces plant material to low or moderate amounts opens up the vegetative canopy and admits light, which encourages a more diverse assemblage of plant species while reducing fire hazard conditions.

Livestock grazing will continue to be the primary vegetation management activity on the site to maintain and enhance biodiversity, reduce wildland fuels, minimize weed encroachment, and preserve the open space character of the landscape on the Hansen Ranch. Mowing and hand removal may be used as secondary management alternatives on a small-scale basis for specific purposes, such as fire prevention, the maintenance of specific protected areas, or for weed and pest control. Pile burning and prescribed broadcast burning in the general vicinity is prohibited by the City. The creation of perimeter fire breaks may be required by the City of Sacramento Fire Chief. The conservation easement specifies mowing of these fire breaks as a preferred alternative to discing to minimize soil disturbance and impacts to wetland habitat.

## 3.3.2 Grazing Management Strategy

The overall livestock grazing operation for Hansen Ranch will remain essentially

unchanged. However, possible future conservation measures for the Hansen Ranch will alter some current grazing practices and place restrictions upon how the property is used by livestock, including a reduction in the total acreage available to livestock. The recommended management regime in the context of these restrictions will be to graze the Hansen Ranch and Coyle Ranch together on a year-round, rotational basis consistent with the carrying capacity estimates outlined in the range analysis. Livestock will range freely between the two properties via open gates situated along the eastern boundary fence. Livestock will be confined to the Coyle Ranch during flooding events or if there is a need to alleviate grazing pressure on the Hansen Ranch due to abnormal rainfall resulting in poor forage production. The two properties will be managed to ensure that adequate amounts of residual dry matter remain on the ground at the end of the grazing season. Modifications to the grazing program will be initiated if monitoring results indicate a demonstrated conflict between habitat conservation objectives and livestock grazing practices. (See discussion in CMMP.)

## 3.3.3 Management of Existing Vernal Pool Habitat

Wetlands on the Hansen Ranch are vernal pool and freshwater marsh habitats that support a mostly herbaceous vegetation component. Approximately 5.07 acres of vernal pools currently are distributed throughout the northern half of the site. Another 13.54 acres of seasonal, freshwater marsh habitat occur in depressions and low-lying features of the landscape that contain water during the winter and spring months and are dry throughout the summer and fall. The 2001 Biological Opinion requires, among other measures, that SAFCA preserve 3.74 acres of existing vernal pool habitat on the Hansen

Ranch to minimize NALP-related impacts to protected species.

Research and experience indicate that vernal pools can benefit from appropriately managed livestock grazing, which enhances habitat conditions for associated resident plants and animals, and may provide a mechanism for the transport of plant seeds and invertebrate eggs and cysts between pools (Lis and Eggeman, 2000; Griggs, 2000; Barry, 1998; Barry 1996; Barry, 1995; Barry 1995). Vernal pools evolved under the influence of herbivorous wild animals, and grazing by domestic livestock can simulate the natural conditions under which plant and animal life associated with vernal pools developed and were sustained. Moreover, livestock have grazed in and among most vernal pools in the Sacramento Valley for over a century, and native vernal pool flora and fauna have coexisted under these conditions.

Vernal pools within the California annual grassland are subject to the dominating influence of non-native annual grasses and herbs, which can negatively affect plant and animal life characteristic of these habitats (The Nature Conservancy 1999; Barry 1995; Stone et al. 1987). Grazing animals play a role in the maintenance of vernal pool flora by minimizing the invasion of weedy plant species and the accumulation of plant litter (Griggs 2000; Lis and Eggeman, 2000; The Nature Conservancy 1999; Barry 1998; Barry 1995). Vegetation removal and soil compaction around vernal pools as a result of livestock grazing can also improve water yields by increasing surface runoff into the pools (Gifford and Hawkins 1978; Liacos 1962). The effect of trampling along pool margins creates depressions that serve as microenvironments for vernal pool plant and invertebrate species. The exclusion

of livestock from vernal pool habitats without the substitution of alternative management methods has resulted in a decline of biodiversity in similar settings.

Livestock grazing of the vernal pool areas within the Hansen Ranch conservation area will be managed so as to minimize the dominating effect of the non-native annual grasses and herbs on vernal pool ecology and to enhance the development of associated plant and animal life. The grazing of vernal pools, in general, is intended to impede the growth of the more aggressive and competitive non-native grasses and herbs and to provide the opportunity for vernal pool plant species to maintain and expand their populations. The unfenced pools will be grazed on a year-round rotational basis.

Habitat conditions will be monitored as specified in the CMMP to determine the effect that grazing is having on the preserved vernal pools. Modifications to the season, timing, duration, and/or level of livestock use will be undertaken, consistent with the procedures identified in the MOU, in response to any observable and documented adverse effects that any of these grazing regimes may be having on vernal pool habitat.

## 3.3.4 Fencing

Fencing around the perimeter of the Hansen Ranch is adequate, with the exception of the eastern boundary, which is in disrepair and must be replaced. Under proposed conservation measures for the Hansen Ranch, fencing would be constructed to exclude livestock from a future recreational use zone. The use of alternative grazing animals, such as sheep or goats, could preclude the need for permanent fencing to conserve and protect

sensitive areas, but the need to remove these animals from the Hansen Ranch upon short notice during flooding events renders their use impractical.

Fencing installed to accommodate conservation measures must be constructed according to rangeland barbed wire fencing specifications (see Appendix B). Past attempts at fencing seasonal wetlands on the Hansen Ranch to exclude cattle failed due to poor fence design and construction standards. The exclusion of grazing animals inhibited the functioning of the vernal pools and the habitat value of these areas diminished as a result. The remnant fencing still in place from this effort will be removed.

## 3.3.5 Water

Developed sources of water are nonexistent on the Hansen Ranch and drinking water for the livestock grazing operation is currently obtained from Dry and Robla Creeks and developed water on the adjacent Coyle Ranch. There is an old, inoperable well along the eastern boundary of Hansen Ranch that possibly could be redeveloped as a source of drinking water for livestock by connecting troughs located throughout the property to the well via a series of waterlines.

## 4.0 INSPECTIONS AND MONITORING

The ultimate goal of the monitoring program for the Hansen Ranch is to evaluate the success of SAFCA's conservation efforts, including assuring that livestock grazing activities do not adversely affect vernal pool crustaceans and their habitat. The monitoring methods and standards that shall be used are set forth in the CMMP. Inspections and

monitoring of livestock grazing activities will be conducted by the preserve manager, with the assistance of a USFWS-approved biologist and/or revegetation specialist and the grazing lessee, to ensure that the land management and stewardship objectives outlined in this Range Plan and in the CMMP are being achieved and that these activities remain compatible with habitat conservation efforts. A Range Monitoring Plan is included as Appendix B.

Monitoring of vegetative conditions will be conducted throughout the grazing season to confirm that adequate forage is available to support permitted livestock and that required amounts of residual dry matter remain on the ground to protect the soil, encourage nutrient recycling, and maintain suitable conditions for plant regrowth. Regular inspections will be carried out to assure that desired conditions are being maintained. Management of livestock within the conservation area will require close supervision to achieve desired grazing levels. Observations on changes in livestock land use habits and patterns in the context of the conservation measures, and relevant information collected in the course of monitoring for protected species will be used to improve upon or modify overall grazing management practices, as necessary.

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## APPENDIX A

## Hansen Ranch Range Management Plan Range Analysis

### pendix A nsen Ranch Range Management Plan nge Analysis by Range Site Process

Hansen Ranch	Range Site	Forage Pr	oductivity	in Lbs./Acre	Forage F	Production	Minus RDM	Anima	Unit Mont	hs (AUMs)
Range Sites	Acreage	Favorable	Normal	Unfavorable	Favorable	Normal	Unfavorable	Favorable	Normal	Unfavorable
ny Claypan ny Flat and Claypan Flat	56 119	3500 4500	2500 3500	1500 1500	151200 440300	95200 321300	39200 83300	193.85 564.49	122.05 411.92	50.26 106.79
Totals:	175	•			591500	416500	122500	758.33	533.97	157.05
	· · ·			Cattle r	numbers for	r 12 month	season:	63	44	13

Coyle Ranch	Range Site	Forage Pr	oductivity	in Lbs./Acre	Forage P	roduction	Minus RDM	Animal	Unit Mont	hs (AUMs)
Range Sites	Acreage	Favorable	Normal	Unfavorable	Favorable	Normal	Unfavorable	Favorable	Normal	Unfavorable
imy Claypan imy Flat and Claypan Flat jated Pasture	45 84 13	3500 4500 NA	2500 3500 NA	1500 1500 NA	112700 282800 NA	67700 198800	22700 30800 NA	144.49 362.56 156.00	86.79 254.87 156.00	29.10 39.49 156.00
Totals	5: 142				395500	266500	53500	663.05	497.67	224.59
۰. ,				Cattle r	numbers for	12 month	season:	55	41	19

ansen and Covie Ranches	Range Site	Forage Pr	oductivity	in Lbs./Acre	Forage F	roduction	Minus RDM	Animal	Unit Mont	hs (AUMs)
Range Sites	Acreage	Favorable	Normal	Unfavorable	Favorable	Normal	Unfavorable	Favorable	Normal	Unfavorable
amy Claypan amy Flat and Claypan Flat gated Pasture	101 203 13	3500 4500 NA	2500 3500 NA	1500 1500 NA	263900 723100 NA	162900 520100 NA	61900 114100 NA	338.33 927.05 156.00	208.85 666.79 156.00	79.36 146.28 156.00
Totals	317	n <u> </u>			987000	683000	176000	1421.38	1031.64	381.64
				Cattle r	umbers for	12 month	season:	118	85	32

# Hansen Ranch Range Management Plan Range Sites



Loamy Flat and Claypan Flat
Loamy Claypan
Irrigated Pasture

# Hansen Ranch Range Management Plan Soil Types



## APPENDIX B

## Hansen Ranch Range Monitoring Plan

### APPENDIX B HANSEN RANCH RANGE MONITORING PLAN

This Range Monitoring Plan identifies a variety of tasks that will be undertaken at various times throughout the year to assess range management activities on the Hansen Ranch. Monitoring efforts may involve simple observations and/or detailed plots, transects, and photo-points to document forage utilization, assess vegetative conditions, verify compliance to grazing standards, insure conformity to lease provisions, and collect information that can be used to improve management. Monitoring will measure change in the status of resources over time through repeated measurements or examinations of selected areas. Standards are included in the Range Monitoring Plan as criteria to be used in evaluating the impact of range management activities on conditions at Hansen Ranch.

#### 1. RANGE READINESS

#### <u>Task</u>

Observe residual dry matter (RDM) remaining from the previous grazing season to determine whether adequate amounts of RDM are present to carry livestock into the new green feed period.

Assess the range to determine how the new green vegetation is responding to early rainfall and weather conditions and whether livestock numbers or season of use require modification should the results indicate a late or below normal rainfall year.

#### When Conducted

Upon the onset of fall rains and thereafter following germination of new regrowth.

#### Standards

Rangeland onto which livestock will be reintroduced prior to the onset of fall rains must have adequate RDM available to provide soil protection and carryover forage to support permitted animal numbers into the late fall when new, green vegetation will begin to provide sufficient cover.

Rangeland that has been grazed to within or beyond acceptable RDM standards the previous grazing season must support 2 to 3 inches of new, green, vegetative growth before grazing is allowed to resume or continue.

#### 2. FORAGE UTILIZATION

<u>Task</u>

Monitor rangeland to regulate forage utilization by grazing animals so that an appropriate amount of residual dry matter (RDM) remains on the ground to achieve resource conservation objectives.

Compare RDM levels of various areas against photographs that illustrate how the vegetation and landscape appear when different amounts of RDM are present.

Assess the level of forage utilization to allow ample time to notify the rancher to decrease herd size or remove livestock when or before residual dry matter levels reach the designated low-end standard of 800 lbs./acre or 4 to 6 inches of standing vegetation.

#### When Conducted

When forage utilization begins to approach established RDM standards.

<u>Standards</u>

Stocking levels and/or season of use must remain commensurate with forage availability and other resource management considerations.

The amount of RDM remaining on the ground at the end of the grazing season must not be any less than 800 lbs./acre. This standard translates into approximately 4 to 6 inches of standing vegetation.

Use the Residual Dry Matter (RDM) Monitoring Photo Guide to determine residual dry matter levels observed in the field or "clip and weigh" vegetation in sample plots to measure residual dry matter or to forecast the amount of forage remaining (see attached Clipping and Weighing Process)

The RDM forage utilization levels illustrated in the Residual Dry Matter (RDM) Monitoring Photo Guide should generally not be allowed to fall below that shown in the 750-1000 lbs./ac. reference class. The reference class showing RDM levels in excess of 1,000/lbs./ac. indicates undergrazing, which is inconsistent in meeting resource and fire management objectives for the Hansen Ranch. The reference classes in the 500-750 lbs./ac. reference class range and below constitute overgrazing, and should be considered an unacceptable use of the Hansen Ranch and a violation of the grazing lease.

2

### 3. RANGE IMPROVEMENT INSPECTIONS

#### <u>Task</u>

Inspect all structural range improvements to ensure that they are properly maintained, functional, and compatible with the aesthetics and operation of the Hansen Ranch.

#### When Conducted

Prior to and throughout the grazing season, as needed.

#### **Standards**

Range improvements must meet proper design, size, location, and installation standards.

Any new range improvements must be subject to SAFCA approval, and construction and installation must be in accordance with SAFCA specifications and instructions.

# 4. EVALUATION OF VEGETATION, SOIL AND RIPARIAN AND WETLAND CONDITIONS

#### <u>Task</u>

Evaluate rangeland conditions to determine what effect land management practices are having on natural resources.

#### When Conducted

Ongoing effort, as needed.

#### Standards

Observe soil, vegetation and riparian and wetland conditions using indicators outlined in attached Tables 1, 2, and 3. Ensure that vegetation, soil, and riparian and wetland resources remain in satisfactory to good condition.

Make observations and prepare maps or overlays indicating problem areas; provide documentation.

### RANGELAND PLANT DIVERSITY

#### <u>Task</u>

5.

Note the relative abundance, density and vigor of forage species in the plant composition, the success or failure of seedling establishment in revegetated areas, and the presence or absence of undesirable plants.

#### When Conducted

During the flowering season from February through June, and during the summer months for summer-blooming plants to note plant composition and the presence and abundance of undesirable weeds.

#### Standards

Observations or measurements by a qualified botanist and documentation of findings, if necessary.

Photopoints and/or transects, if necessary, to document species composition (mixture), frequency (relative occurrence) and density (space occupied).

#### 6. PROBLEM AREAS

#### <u>Task</u>

Observe infestations of noxious weeds or poisonous plants, areas of visible insect infestations, and gopher or ground squirrel activity and damage.

Inspect range to ensure that protective cover is being furnished by vegetation and plant litter (residual dry matter or RDM). Record indicators of declining soil conditions, such as major areas of bare soil and rill and gully development.

#### When Conducted

Ongoing effort, as needed.

#### **Standards**

Make observations and prepare maps or overlays indicating problem areas; provide documentation.

### Hans Ranch Range Monitoring Plan Indicators of Grassland Condition



POOR OR UNSATISFACTORY VEGETATIVE CONDITION	FAIR OR SATISFACTORY VEGETATIVE CONDITION	GOOD VEGETATIVE CONDITION
Plant composition of limited diversity and overwhelmingly comprised of "weedy" non-native grasses and forbs; various thistles and summer annuals conspicuously present.	Plant composition a relatively diverse mixture of native and non-native forbs and a small percentage of native grasses; various thistles and summer annuals uncommon or conspicuously absent.	Plant composition a diverse mixture of native and non-native grasses and forbs with native grasses well represented; various thistles and summer annuals largely absent.
Reproduction of native grasses and wildflowers inhibited by excessive grazing.	Reproduction of native grasses and wildflowers occurring in the presence of livestock.	Reproduction of native grasses and wildflowers widespread and uninhibited by grazing.
Forage utilization is beyond residual dry matter standards; standing vegetation and plant litter insufficient to protect the soil from erosion.	Forage utilization routinely meets residual dry matter standards; standing vegetation and plant litter sufficient to protect the soil from erosion throughout the majority of the area.	Forage utilization meets or exceeds residual dry matter standards; standing vegetation and plant litter more than sufficient to protect the soil from erosion.
Cow dung and small ground objects are visible through the plant cover and litter from a short distance; cow dung is conspicuously distributed and prevalent.	Cow dung and small ground objects somewhat visible through the plant cover and litter from a short distance; cow dung is widely dispersed.	Cow dung and small ground objects not visible through the plant cover and litter from a short distance; cow dung is scattered and mostly inconspicuous.
Most vegetation in partially protected places in and under brush and around rocks depleted.	Vegetation existing in partially protected places in and under brush and around rocks lightly grazed.	Vegetation unused in partially protected places in and under brush and around rocks.



# Table 2

### Hansen Ranch Range Monitoring Plan Indicators of Soil Condition

POOR OR UNSATISFACTORY SOIL CONDITION	FAIR OR SATISFACTORY SOIL CONDITION	GOOD SOIL CONDITION
Extensive areas of bare soil evident through the vegetation; roots of some herbaceous plants, shrubs and trees exposed.	Few areas of bare soil evident through the vegetation; plant litter dispersed and revegetation occurring in exposed areas.	Naturally occurring bare spots small and occasional; vegetative cover and plant litter uniformly distributed.
Presence of rills and/or gullies, and continued head cutting; gullies with insufficient vegetative cover to protect the soil.	Rills and/or gullies stabilized, head cutting contained; gullies with sufficient vegetative cover to protect the soil.	Rills and/or gullies mostly absent.
Sunken, multiple and abandoned stock trails present; displaced and pockmarked soil from hoofprints widespread; terrace trails on hillsides well-defined.	Stock trails apparent but unobtrusive; displaced and pockmarked soil from hoofprints uncommon; terrace trails on hillsides stable and vegetated.	Stock trails inconspicuous, except at close range; displaced and pockmarked soil from hoofprints and terrace trails on hillsides uncommon and sporadic.
Perennial plants, small rocks and pebbles on pedestals.	Perennial plants, small rocks and pebbles flush with soil surface.	Perennial plants, small rocks and pebbles flush with soil surface.
Plant litter on soil surface limited; plant material in transition to organic matter sparse; abnormal amount of subsurface decay evident.	Adequate plant litter on soil surface: plant material in transition to organic matter and subsurface decay evident.	Abundant plant litter on soil surface without forming thatch layer; remnant plant material converting to ample surface and subsurface organic matter.

## Table 3

### Hansen Ranch Range Monitoring Plan Indicators of Riparian and Wetland Condition

POOR OR UNSATISFACTORY WETLAND CONDITION	SATISFACTORY WETLAND CONDITION
Soil surface appears uneven and pockmarked due to past trampling of wet soil by livestock; soil may be compacted in spots; wet areas are freshly trampled and muddy; plant cover is discontinuous with plants often pedestaled as a result of prior disturbance.	Soil continuous and unbroken except where natural water courses cross the surface; little or no evidence of trampling or soil compaction; plant cover intact.
Wetland vegetation closely cropped to near ground level; woody vegetation, if present, is heavily used and exhibits a well-defined browse line.	Wetland vegetation largely undisturbed and in various stages of growth; shrubs, where present, without a noticeable browse line; grazing use random to nonexistent.
Soil surface may be dry due to lowering of the water table from gully erosion; gully head-cuts actively advancing.	Surface water present throughout.
Streams exhibit active cutting, their steep banks support little or no vegetation; exposed banks crumbling or sloped back and trampled; water in slow-moving streams is muddy or cloudy.	Streams have stable bottoms and sides; banks undamaged and vegetated; running water in slow- moving streams generally clear.

### HANSEN RANCH RANGE MONITORING PLAN CLIPPING AND WEIGHING PROCESS

#### Clipping and Weighing

Clipping and weighing is a process used to measure residual dry matter and to estimate forage production for any given year. The technique involves clipping a representative sample of vegetation from a designated location, drying and weighing the sample, and recording the biomass on a weight per unit area basis in pounds per acre or kilograms per hectare. Residual dry matter and forage production levels also can be visually estimated by a trained or seasoned observer.

#### Clip and Weigh Process

- 1. Select Site: Thoroughly examine all portions of the range to get a good crosssection of forage utilization. Sample areas that are both suitable and primary range consistently used by livestock. This simplifies data gathering by concentrating sampling time on a few small areas rather than on the whole range. Avoid excellent or poor conditions, as well as areas where livestock congregate, such as watering sites and supplemental feeding areas. Some locations are naturally barren and the absence of an adequate plant cover oftentimes does not indicate overuse by grazing animals.
- 2. **Plot Size:** The determination of plot size is dependent upon the type and density of the vegetation to be sampled. Plant density in annual grasslands requires the use of small plots, such as a square foot frame or 0.96 square foot hoop. The latter can be fashioned by forming a circle with a length of heavy wire 41.66 inches long having a 13.26 inch diameter.
- 3. Sample Vegetation: Herbage is clipped as close to the ground as possible. The current and past year's standing and fallen plant material that is readily collectable from the ground surface is included in the sample to be weighed. Woody twigs, tree leaves, decaying organic matter, bark, dung, and any other foreign material should be discarded.
- 4. **Convert to air-dry weight**: Wet or green forage samples should be air-dried or oven-dried before weighing to determine dry matter content. Herbage collected in the summer and early fall is usually dry enough to weigh as is.

- **Convert grams per plot clipped to pounds per acre:** Use the appropriate formula below for the plot size used.
  - a. grams/454 x 43,560/square feet sampled = pounds/acre
  - b. grams/square foot x 96 = pounds/acre
  - c. grams/0.96 square foot x 100 = pounds/acre

#### Clipping and Weighing to Forecast Forage Production

5.

The objective of forecasting forage production is to provide an estimate of how many animals can be supported by an existing amount of vegetation, given the need to maintain residual dry matter standards. One could measure total plant production for any given year, or the amount of forage remaining on the ground after grazing has occurred for several months. This information indicates if an increase or decrease in livestock numbers or an adjustment in the season of use is warranted.

The following formula is used to determine how many animal unit months can be supported on a given area of land. An animal unit month, or AUM, is the amount of dried forage (1000 lbs.) Necessary to sustain an adult cow or cow and calf for one month. The numbers used in the top portion of the formula are for demonstration purposes only.

> what you want what is there to remain # acres | | | AUMs remaining = <u>(1500 lbs./ac. - 800 lbs./ac.) x 100 ac.</u> = 70 AUMs 1000 lbs. forage/month/cow

The pounds per acre of vegetation available (what is there) is determined through the clipping and weighing process. The vegetation intended to remain is the RDM standard. The number of acres is the size of the area of land being grazed. The divisor of 1000 pounds is the amount of forage it takes to sustain an adult cow or cow and calf for one month. The number of animals the land is able to support is determined by dividing AUMs by the time remaining in the grazing season in months. Using the above example, the 70 AUMs available on the 100 acres of land would support 23 animals over a 3 month period.

# APPENDIX C

# Barbed Wire Fence Specifications





BOUNDARY



#### NOTES:

INTERMEDIATE ANGLE ERACE TO BE USED AT BOTH VERTICAL AND HORISONTAL ANGLE POINTS OF LESS THAN SO WHERE WIRE STRESSES WILL PLILL OR FUSH SECTIONS OF LINE POSTS OUT TO VERTICAL AND HORIZONTAL ALIGNMENT - PARTICULARLY WHERE FENCE LINE FOLLOWS TIGHT ROADWAY CURVES, STREAMWAYS, ROUGH TERRAIN OR WHERE PROPERTY LINE LHANGES DIRECTION OVER SHORT DISTANCES,













DATE

GATE DETAILS

**8** or 10



### ADJUSTABLE CABLE BRACE DETAIL

9

10

SHEET NO. SCILE DRAWING HO. HINGE POST DETAILS OF



## INDEX

### **TECHNICAL SPECIFICATIONS**

### NO. OF PAGES

. 1-1 thru 1-5

### DIVISION 1: FENCING . .

**Technical Specifications** 

Fencing Page 1-1

#### **DIVISION 1: FENCING**

#### 01.1 General

.1 The General Conditions and Supplementary Conditions shall apply to all work of every Division, Section, or Subsection of these specifications as if fully repeated in each.

#### 01.2 Summary of Work

.1 Provide all materials, labor and equipment necessary to complete all work as shown on the drawings, as staked in the field, and/or as indicated on project maps, and as specified herein, including, but not limited to, the following:

a. Removal and disposal of \_\_\_\_\_ linear feet of existing fencing

- b. Installation of \_\_\_\_\_ linear feet of barbed wire boundary fencing
- c. Installation of \_\_\_\_\_ linear feet of barbed wire riparian pasture fencing
- d. Incorporation into fence line of \_\_\_\_\_ existing metal gates
- d. Installation of \_\_\_\_\_ new wire gates

#### 01.3 Materials

- .1 Barbed Wire Fence
  - a. Steel line posts shall be Class B steel, heavy-duty studded "T" section posts, weighing 1.33 pounds per linear foot, with green enamel finish, conforming with ASTM A702.
  - b. Corner, end, brace, and pull posts shall be Schedule 40 steel pipe with 2.375-inch outside diameter, weighing 3.65 pounds per linear foot.
  - c. Braces shall be Schedule 40 steel pipe with 1.66-inch outside diameter, weighing 2.27 pounds per linear foot.
  - d. All posts, braces and other necessary or required fittings shall be galvanized in accordance with ASTM A123. Posts and braces shall be galvanized after rolling and forming.
  - e. Barbed wire shall conform to specifications of ASTM Designation A121, Class 1. It shall consist of 2 strands of 12 and ½ or 15 and ½ gauge

**Technical Specifications** 

Fencing Page 1-2

galvanized wire, twisted with 4 point 14-gauge barbs. Wire stays shall be 9gauge galvanized twisted wire or equivalent.

- f. Steel tie wires, clips, hog rings and staples shall be 9-gauge, and all shall be galvanized in accordance with ASTM A116, Coat Class 3.
- g. Woven wire coil at corners shall be #1047-6-12 ½ woven field fencing as manufactured by Davis-Walker Company, Hayward, California, or Colorado Fuel and Iron Company, Pueblo, Colorado, No known equal.
- h. Post tops, anchor plates and other required fittings and hardware shall be steel, malleable iron or wrought iron and shall be galvanized, in accordance with Section 75-1.05, "Galvanizing" of the Standard Specifications. Submit a sample of post tops for approval prior to installation.
- i. Gates shall be 14-feet wide, heavy-duty steel gates as fabricated conforming to the plans and specifications (see "Vehicle Gate and Post Details", Detail Sheets 1, 2, and 3 of 4) as manufactured by Powder River Company, Provo, Utah, as Classic Heavy-Duty Green Gate, or approved equal.
- .2 Zinc metal paint shall be a single component, zinc-rich compound. The compound, when dried to a film, shall be a minimum of 95% pure zinc. Application shall be in accordance with the manufacturer's specifications. The compound shall be approved by project inspector prior to use.

#### .3 Footings

- Portland Cement: ASTM Standard Specifications for Portland Cement (C150-74). It shall be Type II for general construction and only one brand shall be used on the project.
- b. Concrete Aggregates: ASTM Standard Specifications for Concrete Aggregates (C-33), including methods of sampling and testing. Obtain from established sources proven to be highly resistant to alkali in cement.
- c. Mixing water shall be free from impurities that would be injurious to concrete.
- d. Strength and design requirements for all footings:
  - (1) Minimum compressive strengths for concrete at 28 days shall be 2,500 pounds per square inch. Minimum cement content per cubic yard shall be 4 sacks. Maximum aggregate size shall be 1-inch.

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#### 01.4 Workmanship

- .1 Removal of Exiting Fencing
  - a. Existing fence identified for removal shall be totally removed including fabric, wire, posts, hardware, etc.; salvageable iron "T" posts shall be stacked in a designated location on-site; unsalvageable iron "T" posts, metal wire and hardware shall be hauled off-site to be recycled as scrap metal; wood posts shall be hauled off-site and chipped for reuse as mulch or compost. Verification of said disposal methods for removed materials shall be provided to the agency.

#### .2 Fence Installation

- a. Workmanship shall meet minimum requirements of Standard specifications, Section 80-3.02, except as modified below.
- b. Fence shall be installed to line and grade as staked in the field, or as directed by the project inspector.
- c. "T" posts shall be driven to the depth indicated on the drawing in all soils, however, no bent or damaged posts shall be accepted. In locations where the soils are of a nature that "T" posts cannot be driven, posts shall be set in concrete footing 12 inches in diameter and 2-1/2 feet deep, at no additional cost to the agency. Posts shall be set plumb and post tops shall not appear to deviate horizontally from the alignment. Post tops shall also appear to conform smoothly to grade changes in the alignment.
- d. Horizontal angle points in the fence alignment, where the angle or deflection is 30 degrees or more, shall be considered as corners and corner sets (twin terminal braces - see Detail Sheet 1) conforming to the plans and specifications shall be installed.
- e. Vertical angle points in the fence alignment, where the vertical grade change is 30 degrees or more shall be considered terminal points for runs of fence in either direction from the grade break. Corner sets (twin terminal braces see Detail Sheets 1, 4, and 5) shall be installed at these points. Any braces installed on slopes along the alignment greater than 30 degrees (or 58%) from the horizontal shall be modified dimensionally to conform to the degree of slope where installed. They shall be fabricated according to the material and workmanship specifications for the standard terminal brace (Sheet 1).
- f. Terminal braces shall be installed on either side of gate openings and shall be separate from gate posts (see gate detail sheets). Terminal braces shall

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be installed on either side of ravine bottoms or any other stream bed or wash. The lowest leg of the terminal brace shall be set in relatively undisturbed soil above the highest point of obvious stream flow evidence or active erosional features. One or more 8-foot anchor tee posts shall be installed as a break away fence section between terminal braces (see Detail Sheet 4).

- g. Intermediate angle braces shall be installed at both horizontal and vertical angle points of less than 30 degrees where wire tension will pull, push or bend sections of line posts out of vertical and/or horizontal alignment. Intermediate angle braces shall also be installed at 500-foot maximum intervals on straight runs of fence not otherwise interrupted by other bracing requirements due to corners, horizontal angles, curves or grade breaks or gates (see Detail Sheet 3).
- h. Barbed wire shall be fastened to the side of the posts designated by the project inspector. The wire shall be installed by stretching equipment, and shall be securely fastened to posts with wire clips in a manner approved by the project inspector. Clearance between the ground and the bottom wire shall not be greater than the dimension indicated on the drawing. Wire runs shall terminate at all terminal braces.
- i. Damaged galvanized surfaces shall be repaired in accordance with the provisions in Section 75-1.05, "Galvanizing", of the Standard Specifications.
- j. Line posts shall be spaced at not more than 10-foot intervals, measured from center to center of posts. In general, in determining the post spacing, measurement will be made parallel to the slope of the natural ground, and all posts shall be placed in a vertical position, except in locations where the project inspector, determines that the posts shall be set perpendicular to the ground surface.
- Fence construction operations shall be conducted so as to prevent the escape of livestock.
- Fences and gates that are to remain in place and which have been damaged by the Contractor shall be replaced by him at his expense.
- m. All earth, trees, brush, and other natural obstructions which interfere with the proper construction of fences shall be removed and dropped and spread evenly onto the Waste Management Authority side of the boundary but shall not be piled up in any manner so as to produce accessibility or fire hazards. The project inspector shall order certain trees to remain in place as trees "on line" and installation of the fence at these locations shall conform to the

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plans and specifications. Such work will be considered as part of fence construction and no measurement nor payment will be made for this work.

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