RESOLUTION NO. 2018-141

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ELK GROVE ADOPTING AN ADDENDUM TO THE SOUTHEAST POLICY AREA STRATEGIC PLAN CERTIFIED ENVIRONMENTAL IMPACT REPORT AND PREVIOUSLY ADOPTED MITIGATION MONITORING AND REPORTING PROGRAM (PROJECT EG18-017)

- WHEREAS, the Development Services Department of the City of Elk Grove received an application on or about March 5, 2018, from Souza Elk Grove, LLC to revise the Environmental Impact Report (EIR) for the Southeast Policy Area Special Planning Area (SEPA); and
- WHEREAS, the proposed Project described in Exhibit A is located on real property located within the incorporated portions of the City of Elk Grove and within SEPA; and
- **WHEREAS**, the Project qualifies as a project under the California Environmental Quality Act (CEQA), Public Resource Code Section 21000 et:seq.; and
- WHEREAS, Section 15164 (Addendum to an Environmental Impact Report (EIR) or Negative Declaration) of Title 14 of the California Code of Regulations (State CEQA Guidelines) provides that a lead agency may prepare an Addendum to a previously-certified EIR; and
- WHEREAS, an EIR was certified by the City Council as part of the adoption of the SEPA Specific Plan Area (State Clearinghouse No. 2013042054); and
- WHEREAS, the EIR analyzed the overall development of the SEPA area and adopted mitigation measures including, but not limited to, potential project impacts related to traffic, air quality, and biological resources; and
- **WHEREAS**, the Project proposes text changes to the Swainson's hawk foraging habitat mitigation measures of the Certified SEPA EIR with no changes to the adopted SEPA land use plan; and
- WHEREAS, the Addendum found that the text amendments to the EIR would not generate any new environmental impacts, and that the mitigation proposal found in Appendix A to the Addendum complies with Elk Grove Municipal Code Chapter 16.130 related to mitigation for the loss of Swainson's hawk foraging habitat; and
- WHEREAS, the Development Services Department considered the Project request pursuant to the Elk Grove General Plan, the Elk Grove Municipal Code (EGMC) Title 23 (Zoning), the SEPA Special Planning Area, and all other applicable State and local regulations; and
- **WHEREAS**, on June 27, 2018, the City Council held a noticed public hearing to receive and consider all of the information presented by staff, the Applicant, the public, and other interested persons.

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Elk Grove hereby finds the Addendum prepared for the SEPA EIR to be the appropriate environmental review pursuant to section 15164 of the State CEQA Guidelines and adopts the Addendum based upon the following findings:

Finding: The proposed Project will not have a significant adverse impact on the environment and all potentially significant effects have been adequately analyzed in the SEPA EIR. The EIR adequately addresses all environmental issues related to the development of the subject property, and there are no new subsequent significant environmental impacts as a result of this Project. None of the conditions calling for the preparation of a subsequent EIR are present.

Evidence: The California Environmental Quality Act (CEQA) requires analysis of agency approvals of discretionary "projects." A "project," under CEQA, is defined as "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." The proposed Project is a project under CEQA.

The SEPA Special Plan Area was approved and an EIR certified by the City Council on July 9, 2014 (State Clearinghouse No. 2013042054). In conjunction with the certification of the EIR a Mitigation Monitoring and Reporting Program (MMRP) was adopted for the Specific Plan.

Section 15164 of the State CEQA Guidelines describes the conditions under which an Addendum to a previously certified EIR is appropriate. These conditions are as follows:

- (a) The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.
- (b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.
- (c) An addendum need not be circulated for public review but can be included in or attached to the final EIR.
- (d) The decision making body shall consider the addendum with the final EIR prior to making a decision on the project.
- (e) A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.

Pursuant to section 15164(a) above, the Addendum was reviewed against CEQA Section 15162 which describes the situations when a Subsequent EIR (SEIR) should be prepared. These conditions include:

- (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:
 - (a) The project will have one or more significant effects not discussed in the previous EIR;
 - (b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - (c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measures or alternatives; or
 - (d) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

None of the aforementioned conditions calling for the preparation of an SEIR are met

The Addendum to the SEPA EIR evaluates text changes to the EIR and its Mitigation Monitoring and Reporting Program. These text changes provide an additional option to mitigate for the loss of Swainson's hawk foraging habitat at the Van Vleck Ranch pursuant to EGMC Section 16.130.110 which reserves for the City Council the ability to consider and approve means of mitigating significant impacts on Swainson's hawk foraging habitat other than those prescribed mitigation standards contained in EGMC Section 16.130.040. Staff finds that the conditions A though E of State CEQA Guidelines section 15164 are met, therefore the Addendum prepared to the SEPA EIR is the appropriate environmental review document.

i

The Mitigation Proposal and Addendum provide an opportunity to boost Swainson's hawk conservation significantly in Sacramento County ("County") while preserving broader ecosystem functions and values. The City supports the Mitigation Proposal and Addendum based on the following attributes:

Regional perspective: The 895-acre proposed preserve, which is adjacent to the 775-acre Westervelt Mitigation Bank, will result in the preservation of an intact 1,670-acre block of diverse habitats including grassland, vernal pools, creeks, oak woodland, and oak savanna with a cropland component. This large, contiguous preserve cannot be achieved elsewhere within the range of the Swainson's hawk population in the County and would have a higher ecological value than the preservation of a number of smaller, discontinuous parcels. This preserve site is utilized by a wide range of species and can provide a regional movement corridor as it is proximate to portions of the 50,000-acre Cosumnes River Preserve and the 4,000-acre Deer Creek Hills Preserve

Sustainability: Although CDFW cites that Swainson's hawk forage more often in mixed agricultural lands, the Habitat Suitability Assessment identifies a sustaining (and possibly increasing) population on the east side of the County. As climate change exposes our region to extreme droughts and unreliable water supply, it is likely that farmland practices will be altered over the next few decades in ways that may impact the Swainson's hawk. Research suggests that annual grasslands' plants species composition and relative abundance may also shift over time, but this land cover is not dependent on secondary water supply and cultivation. It follows then, that the grasslands of the proposed preserve would not be as vulnerable to climate change as Swainson's hawk agricultural preserves that are established elsewhere in the County.

Improved population recruitment: To improve existing population recruitment in the preserve, several measures are proposed to increase the existing prey base and nesting opportunity. Improvement of prey base will be accomplished through the implementation of enhanced foraging habitat management practices including:

- The implementation of range management methods to promote prey visibility through managing vegetation height. This may include crossfencing and other ranching techniques. These methods will be monitored and adaptively managed to optimize success.
- Conversion of approximately 50 acres of the existing irrigated lands to high-value habitat of alfalfa crops (four out of five years). The height of the alfalfa will be maintained at six to 12 inches to optimize Swainson's hawk foraging. This conversion not only creates additional prime Swainson's hawk habitat, but increases the total habitat conservation above the standard 1: 1 mitigation.
- Establishment of 20 additional cottonwood saplings at the preserve to supplement the existing cottonwood and oak trees to promote sustainability of active nest sites and the potential for creation of new nest sites, therefore increasing the overall species.

This opportunity to provide mitigation land at the Van Vleck Ranch does not change the effectiveness of the EIR's Mitigation Measures and provides other viable options for mitigating the loss of foraging habitat at a 1:1 ratio consistent with EGMC Chapter 16.130. There would not be an increase in severity of environmental impacts. Pursuant to CEQA Guidelines, Section 15164, the text amendments are consistent with the conditions under which an Addendum to the Certified EIR is appropriate, and the Addendum attached as Exhibit B is hereby adopted.

PASSED AND ADOPTED by the City Council of the City of Elk Grove this 27th

day of June 2018.

STEVE LY, MAYOR of the CITY OF ELK GROVE

ATTEST:

APPROVED AS TO FORM:

IASON LINDGREN, CNY CLERK

JONATHAN P. HOBBS, CITY ATTORNEY Exhibit A
SEPA EIR Addendum (EG18-017)
Project Description

PROJECT DESCRIPTION

The Project consists of an Addendum to the certified Environmental Impact Report (EIR) for the Southeast Policy Area (SEPA) Strategic Plan involving text changes to the EIR and adopted Mitigation Monitoring and Reporting Program.

Addendum to the Southeast Policy Area Strategic Plan Environmental Impact Report

June 5, 2018

State Clearinghouse No. 2013042054

BACKGROUND AND ACTION TRIGGERING THE ADDENDUM

This document serves as an addendum to the certified Environmental Impact Report (EIR) for the Southeast Policy Area Strategic Plan. This addendum evaluates proposed text changes to the Southeast Policy Area Strategic Plan EIR related to Mitigation Measure 5.4.7d. The Souza Dairy Project is a subsequent development area under the Southeast Policy Area Strategic Plan and is proposing text edits to the EIR to clarify that Elk Grove Municipal Code (EGMC) Section 16.130.110, which allows the City of Elk Grove (City) to approve other means of mitigation for Swainson's hawk, is an available option to comply with Mitigation Measure 5.4.7d that is consistent with the intent and the foraging habitat mitigation ratio of 1:1 set forth in EGMC Chapter 16:130. These edits would apply to all subsequent projects in the Southeast Policy Area Strategic Plan. For further detail and analysis, see section below titled, "Evaluation of Amendments to the EIR."

CALIFORNIA ENVIRONMENTAL QUALITY ACT GUIDELINES REGARDING AN ADDENDUM TO AN ENVIRONMENTAL IMPACT REPORT

Altered conditions, changes, or additions to the description of a project that occur after certification of an EIR may require additional analysis under CEQA. The legal principles that guide decisions regarding whether additional environmental documentation is required are provided in the State CEQA Guidelines, which establish three mechanisms to address these changes: a subsequent environmental impact report (SEIR) or negative declaration, a Supplement to an EIR, and an Addendum to an EIR.

Section 15162 of the State CEQA Guidelines describes the conditions under which a SEIR or negative declaration would be prepared. In summary, when an EIR has been certified for a project, no Subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in light of the whole record, one or more of the following:

- (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:
 - (A) The project will have one or more signif cant effects not discussed in the previous EIR;

- (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
- (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measures or alternatives; or
- (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Section 15163(a) of the State CEQA Guidelines states that a lead agency may choose to prepare a supplement to an EIR rather than a Subsequent EIR if:

- (1) any of the conditions described above for Section 15162 would require the preparation of a SEIR; and
- (2) only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.

An addendum is appropriate where a previously certified EIR has been prepared and some changes or revisions to the project are proposed, or the circumstances surrounding the project have changed, but none of the changes or revisions would result in significant new or substantially more severe environmental impacts, consistent with CEQA Section 21166 and State CEQA Guidelines Sections 15162, 15163, 15164, and 15168.

This addendum is intended to evaluate and confirm CEQA compliance for the proposed text changes to the Southeast Policy Area Strategic Plan EIR.

PROPOSED TEXT CHANGES TO THE SOUTHEAST POLICY AREA STRATEGIC PLAN EIR

The Swainson's Hawk Mitigation Proposal, Kamilos Southeast Policy Area Project (Mitigation Proposal) (ECORP 2018) for the Souza Dairy Project identifies the Van Vleck Ranch as a qualifying Swainson's hawk habitat mitigation site to mitigate the Souza Dairy Project's 895 acres of Swainson's hawk foraging habitat loss that is a subsequent development of a portion of the Southeast Policy Area. The Van Vleck Ranch is located 18 miles northeast of the Southeast Policy Area. The City Council may require acquisition of conservation easements consistent with EGMC Section 16.130.040 (discussed below) acceptable to the California Department of Fish and Wildlife and the City. To approve the Mitigation Proposal, as alternative means of mitigating significant impacts within the City Council's authority pursuant to EGMC Section 16.130.110, the City Council must make findings that the proposed site is appropriate for use as mitigation consistent with the requirements under EGMC Section 16.130.110. Reference to, and reliance upon, EGMC Section 16.130.110 have been added to the EIR, as discussed below.

The following text changes shown in double underline are proposed in the Southeast Policy Area Strategic Plan Draft EIR on pages 5.4-53 through 5.4-56:

Impacts to Swainson's Hawk, White-Tailed Kite, and Other Raptors (Standard of Significance 1 and 7)

Impact 5.4.7 Implementation of Project-related activities could result in substantial adverse effects, either directly or through habitat modifications, to foraging and nesting Swainson's hawk, nesting white-tailed kites, and other protected raptor species. These effects would be considered a **potentially significant** impact.

Ten occurrences of Swainson's hawks have been reported within 1 mile of the Project area, and one occurrence of a white-tailed kite has been reported within 5 miles of the Project area. The 1,090

acres of irrigated row and field crops, irrigated hayfields, and annual grassland habitats provide suitable nesting and/or foraging habitat for Swainson's hawks, white-tailed kites, and other raptor species not identified in **Table 5.4-1**. As a result, vegetation clearing during the nesting season could result in direct impacts to nesting birds should they be present. Furthermore, noise and other human activity may result in nest abandonment if nesting birds are present within 500 feet of a work site. Due to the presence of suitable habitat for these species, implementation of Project-related activities may result in adverse impacts should they be present in areas proposed for disturbance. This impact would be considered **potentially significant**.

Mitigation Measures

MM 5.4.7a

If clearing and/or construction activities would occur during the raptor nesting season (January 15–August 15), preconstruction surveys to identify active raptor nests shall be conducted by a qualified biologist within 14 days of construction initiation in specific project sites. Focused surveys must be performed by a qualified biologist for the purposes of determining presence/absence of active nest sites within the proposed impact area, including construction access routes and a 1,000-foot buffer. If no active nests are found, no further mitigation is required. Surveys shall be repeated if construction activities are delayed or postponed for more than 30 days.

Timing/Implementation: Prior to approval of final maps. Minimization

measures shall occur throughout construction

Enforcement/Monitoring: City of Elk Grove Planning Department

MM 5.4.7b

If active white-tailed kite or other raptor (excluding Swainson's hawk) nest sites are identified within 1,000 feet of Project activities, the applicant shall impose an 500-foot setback of all active nest sites prior to commencement of any Project construction activities to avoid construction or access-related disturbances to nesting raptors. Project-related activities (i.e., vegetation removal, earth moving, and construction) will not occur within the setback until the nest is deemed inactive. Activities permitted within setbacks and the size of setbacks may be adjusted through consultation with the CDFW and/or the City.

If active Swainson's hawk nest sites are identified within 1,000 feet of project activities, the applicant shall impose a 1,000-foot setback of all active nest sites prior to commencement of any construction activities to avoid construction or access-related disturbances to nesting raptors. Project-related activities (i.e., vegetation removal, earth moving, and construction) will not occur within the setback until the nest is deemed inactive. Activities permitted within setbacks and the size of setbacks may be adjusted through consultation with the CDFW and/or the City.

Timing/Implementation: Prior to approval of final maps. Minimization measures shall occur throughout construction

Enforcement/Monitoring: City of Elk Grove Planning Department

MM 5.4.7c

Trees containing white-tailed kite-or other raptor (excluding Swainson's hawk) nests that must be removed as a result of Project implementation shall be removed during the non-breeding season (September 1-January 1). Swainson's hawks are State and federally listed as a threatened species; therefore, impacts to Swainson's hawk nest trees require regulatory authorization from the USFWS and the CDFW prior to removal.

Timing/Implementation:

Prior to approval of final maps. Construction

minimization measures shall occur throughout

construction

Enforcement/Monitoring:

City of Elk Grove Planning Department

MM 5.4.7d

Project applicants shall mitigate for the loss of Swainson's hawk foraging habitat at a 1:1 ratio by implementing either Option one or two listed below consistent with Elk Grove Municipal Code (EGMC) Chapter 16.130, Swainson's hawk Impact Mitigation Fees. Alternatively if the SSHCP is implemented, future projects may participate in the SSHCP in lieu of this mitigation measure if the SSHCP meets the standards set forth herein and intent of the Code Chapter 16.130.

Timing/Implementation:

Prior to approval of final maps

Enforcement/Monitoring:

City of Elk Grove Planning Department

Implementation of mitigation measures **MM 5.4.7a** through **5.4.7d** would reduce potential impacts to a less than significant level by ensuring that impacts to nesting Swainson's hawks, white-tailed kites, and other raptors are minimized. <u>Consistent with EGMC Chapter 16.130, project applicants shall implement requires implementation of the one of the two following measures for any project forty (40) acres and greater:</u>

Option one pursuant to 16.130.040: "The project applicant shall acquire conservation easements or other instruments to preserve suitable foraging habitat for the Swainson's hawk, as determined by the California Department of Fish and Game. The location of mitigation parcels as well as the conservation instruments protecting them shall be acceptable to the City and to the California Department of Fish and Game. The amount of land preserved shall be governed by a one-to-one (1:1) mitigation ratio for each acre developed at the project site. In deciding whether to approve the land proposed for preservation by the project applicant, the City shall consider the benefits of preserving lands in proximity to other protected lands. The preservation of land shall be done prior to any site disturbance, such as clearing or grubbing, or the issuance of any permits for grading, building, or other site improvements, whichever occurs first. In addition, the City shall impose the following minimum conservation easement content standards:

- 1) The land to be preserved shall be deemed suitable Swainson's hawk foraging habitat by the California Department of Fish and Game (sic).
- 2) All owners of the mitigation land shall execute the document encumbering the land.
- 3) The document shall be recordable and contain an accurate legal description of the mitigation land.
- 4) The document shall prohibit any activity which substantially impairs or diminishes the land's capacity as suitable Swainson's hawk foraging habitat.
- 5) If the land's suitability as foraging habitat is related to existing agricultural uses on the land, the document shall protect any existing water rights necessary to maintain such agricultural uses on the land covered by the document, and retain such water rights for ongoing use on the mitigation land.
- 6) The applicant shall pay to the City a mitigation monitoring fee to cover the costs of administering, monitoring and enforcing the document in an amount determined by the receiving entity, not to exceed ten (10%) percent of the easement price paid by the

applicant, or a different amount approved by the City Council, not to exceed fifteen (15%) percent of the easement price paid by the applicant.

- 7) Interests in mitigation land shall be held in trust by an entity acceptable to the City in perpetuity. The entity shall not sell, lease, or convey any interest in mitigation land which it shall acquire without the prior written approval of the City.
- 8) The City shall be named a beneficiary under any document conveying the interest in the mitigation land to an entity acceptable to the City.
- 9) If any qualifying entity owning an interest in mitigation land ceases to exist, the duty to hold, administer, monitor and enforce the interest shall be transferred to another entity acceptable to the City:"

Option two pursuant to EGMC Section 16.: 30.110. The cited code section reserves for the City Council the ability to consider or approve "other means" of mitigating a significant impact on Swainson's hawk foraging habit at or to override mitigation measures "for reasons permitted by CEQA." Subsequent development projects in the Southeast Policy Area may provide alternative forms of foraging habit at mitigation that meet the intent of mitigating foraging habitat impacts at a 1:1 ratio pursuant to EGMC Section 16.130.010.

Consistent with this option the Swainson's Hawk Mitigation Proposal, Kamilos Southeast Policy Area Project (Mitigation Proposal) (ECORP 2018) would establish a conservation easement on property that is found to be other means of mitigation satisfactory under EGMC Section 16.130.110 for the Souza Dairy Project and other subsequent projects within the Southeast Policy Area. The Mitigation Proposal indicates that the Souza Dairy Project contains approximately 985 acres of irrigated pastures, hayfields, irrigated cropland, and alfalfa that provides mostly moderate foraging habitat requiring mitigation. It proposes to preserve 895 acres within the 4,768-acre Van Vleck Ranch. The preservation of 895 acres at Van Vleck Ranch would meet the intent of EGMC Chapter 16.130 to mitigate loss of Swainson's hawk foraging habitat at a 1:1 ratio with suitable foraging habitat consisting of annual grassland that provides moderate foraging habitat value within the current geographic range of the species and enhancement of nesting and foraging habitat quality within the Van Vleck Ranch (see EGMC Section 16.130.010).

Other sites may also be considered by the City Council as mitigation under the EGMC for subsequent development outside of the Souza Dairy Project.

Compliance with Code Chapter 16.130 (by the procedure under Section 16.130.040 or other means where circumstances warrant pursuant to Section 16.130.110, as set forth above) will assure that the loss of Swainson's hawk foraging habitat is mitigated through preservation of foraging habitat in perpetuity (at 1:1 ratio). The Mitigation Proposal demonstrates that the foraging habitat lost from the development of the Souza Dairy Project within the Southeast Policy Area would be mitigated at a 1:1 ratio with foraging habitat at the Van Vleck Ranch. Specifically, the Mitigation Proposal identifies that 985 acres of the Souza Dairy Project consists of irrigated pastures, hayfields, irrigated cropland, and alfalfa. Of this 985 acres, approximately 71 percent (639 acres) consists of moderate value foraging habitat and 29 percent (256 acres) consists of high value foraging habitat. The proposed 895 acres of preservation area at Van Vleck Ranch consist of moderate foraging habitat. The Mitigation Proposal also identifies the following measures that include habitat enhancements at the Ranch:

■ The Van Vleck Ranch preservation site would consist of 895 acres of contiguous area of natural habitat that has documented occurrences of Swainson's hawks at the Van Vleck Ranch. This site would also have habitat connection to approximately 3,000 acres of other preserved lands on the Van Vleck Ranch to the Cosumnes River corridor and Deer Creek Hills Preserve.

- The 895 acres would be managed to prey production and suitable prey visibility management of vegetation height and prohibition of rodenticide use.
- Planting of 20 cottonwood trees on the Van Vleck Ranch to enhance/create nesting habitat.
- ▲ The conversion of 50 acres of irrigated pasture under conservation easements within the Van Vleck Ranch to alfalfa for augmentation of Swainson's hawk foraging habitat.

The preservation of foraging habitat for habitat lost at a 1:1 ratio and proposed habitat enhancements would provide similar habitat conditions to those that would be lost at the Souza Dairy Project. There would also be improvements to Swainson's hawk foraging and nesting habitat opportunities because the 895 acres of preserved habitat would be connected to large preserved habitat areas (Cosumnes River corridor and Deer Creek Hills Preserve) that currently do not exist in the Southeast Policy Area. Thus, the Mitigation Proposal satisfies EGMC Chapter 16.130 to mitigate loss of Swainson's hawk foraging habitat consistent with Mitigation Measure MM 5.4-7d under option two.

In addition, water availability would be ensured to continue farming operations to support foraging habitat. Finally, compliance with the Code would provide financial assurances to support monitoring and enforcement of easement conditions. Thus, the impact on Swainson's hawk foraging habitat is less than significant.

EVALUATION OF AMENDMENTS TO THE EIR

EGMC Section 16.130.110 specifically states:

Nothing herein shall be construed to preclude the City Council's consideration or approval of other means of mitigating significant impact or significant cumulative impact on Swainson's hawk foraging habitation to limit the City Council's authority to override mitigation measures for reasons permitted by CEQA.

Thus, Section 16.130.110 allows the City to consider other means of mitigation for Swainson's hawk habitat beyond the provisions of Sections 16.130.010 and 16.130.040.

The Mitigation Proposal provided in Appendix A provides an alternative habitat preservation option to mitigate the loss of Swainson's hawk habitat at a 1:1 ratio within the current geographic range of the species that meets the intent of EGMC Chapter 16.130 for the Souza Dairy Project within the Southeast Policy Area. Specifically, the Mitigation Proposal identifies an off-site mitigation preservation site at the 4,768-acre Van Vleck Ranch located 18 miles northeast of the Southeast Policy Area. The Van Vleck Ranch would provide adequate habitat conditions to address the loss of 895 acres of Swainson's hawk foraging habitat that would be lost from development of the Souza Dairy Project site. Specifically, the Mitigation Proposal identifies that 985 acres of the Souza Dairy Project consists of irrigated pastures, hayfields, irrigated cropland, and alfalfa. Of this 985 acres, approximately 71 percent (639 acres) consists of moderate value foraging habitat and 29 percent (256 acres) consists of high value foraging habitat. The proposed 895 acres of preservation area at Van Vleck Ranch consist of moderate foraging habitat that would be enhanced through measures identified below. The Mitigation Proposal provides a technical analysis that supports the adequacy of the Van Vleck Ranch site for Swainson's hawk habitat mitigation.

Specifically, the Mitigation Proposal (Appendix A, pages 9 through 43, based on technical analysis provided by Estep Environmental Consulting) identifies the following:

<u>Habitat Suitability:</u> The Van Vleck Ranch site is within the eastern portion of the breeding range of Swainson's hawk, and there are documented nests within three miles of the site and one documented

nest on-site. The Van Vleck Ranch site is characterized by annual grassland (1,574 acres within the Ranch mitigation area), irrigated pasture (371 acres within the Ranch mitigation area), and oak woodland and cottonwood groves (536 acres within the Ranch mitigation area). The annual grassland habitat proposed for preservation within the Van Vleck Ranch boundaries provides moderate Swainson's hawk foraging habitat. This annual grassland at the Van Vleck Ranch supports Swainson's hawk base prey species including vole (*Microtus californicus*) and pocket gopher (*Thomomys bottae*) and that evidence of the presence of vole and pocket gopher was noted throughout the Van Vleck Ranch. In addition, the Van Vleck Ranch supports other small rodents, reptiles, and birds that are also Swainson's hawk prey.

The proposed mitigation areas at Van Vleck Ranch would also provide habitat and wildlife corridor connection to the Cosumnes River corridor and the Cosumnes River Preserve and the Deer Creek Hills Preserve which consists of approximately 4,000 acres, enhancing the habitat value of these preserves and corridors. The proximity of the potential mitigation area to existing conservation lands would satisfy a key criterion of EGMC Section 16.130.040 to prioritize preserving lands close to other protected lands.

- Habitat Enhancement Measures for Van Vleck Ranch: The Mitigation Proposal includes Swainson's hawk habitat enhancement measures. These include:
 - The 895 acres would be managed to prey production and suitable prey visibility management of vegetation height and prohibition of rodenticide use.
 - Planting of 20 cottonwood trees on the Van Vleck Ranch to enhance/create nesting habitat.
 - The conversion of 50 acres of irrigated pasture under conservation easements within the Van Vleck Ranch to alfalfa for augmentation of Swainson's hawk foraging habitat.

The proposed text amendment to the EIR (described above) would not change the impact conclusions of the EIR. As demonstrated above, the implementation of the Mitigation Proposal through compliance with Section 16.130.110 would meet the intent of EGMC Chapter 16.130 to mitigate loss of Swainson's hawk foraging habitat for the Souza Dairy Project or other subsequent development projects within the Southeast Policy Area. The Mitigation Proposal documents that the habitat lost from the development of the Souza Dairy Project would be mitigated at a 1:1 ratio with habitat of similar value at the Van Vleck Ranch along with Swainson's hawk habitat enhancements and being attached to a wildlife corridor to provide more access for the hawks. This addition does not change the effectiveness of Mitigation Measure 5.4.7d and provides other options for mitigating the loss of foraging habitat at a 1:1 ratio consistent with the intent of EGMC Chapter 16.130. There would not be an increase in severity of impact and no further analysis is required.

Appendix A

Swainson's Hawk Mitigation Proposal

Swainson's Hawk Mitigation Proposal

Kamilos Southeast Policy Area Project

City of Elk Grove, California

Prepared for:

The Van Vleck Ranch Kamilos Companies

February 5, 2018



CONTENTS

1.0	INTRODUCTION							
2:0	PROJECT LOCATION							
3.0	REGU	REGULÁTORY BÁCKGROUND						
	3.1	7 7 7						
	3.2		f Elk Grove Swainson's Hawk Program					
4:0	REGIONAL SWAINSON'S HAWK STATUS							
5:0	DOCUMENTED SWAINSON'S HAWK NESTS WITHIN THE PROJECT							
6.0		POTENTIAL FORAGING HABITAT WITHIN THE PROJECT						
7.0		FORAGING HABITAT IMPACTS						
8.0	PROP	PROPOSED MITIGATION SITE						
	8.1							
	8.2							
		8.2.1	Proposed Acreage of Habitat Preservation					
			osed Habitat Enhancement within the Van Vleck Ranch					
		8:3.1	Enhanced Grassland Management for Prey	10				
		8.3.2	Nesting Habitat Enhancement					
		8.3.3	Foraging Habitat Quality Enhancement	12				
	8.4	Mitiga	ation Site Suitability					
9.0	REFERENCES							
LIST	OF TAB	LES:		•				
			ypes and Habitat Value within the Project	4				
Table	2. Acres	of Habit	tat Value Ranks within Project					
Table	3. Prop	osed Swa	ainson's Hawk Habitat Preservation at the Van Vleck Ranch					
LIST :	OF FIGU	RES						
Figur	e 1. Loca	ition and	l Vicinity	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Figur	e 2. Calil	ornia Na	atural Diversity Database Swainson's Hawk Occurrences					
			「ypes					
			anch Location and Vicinity					
_			within the Van Vleck Ranch Mitigation Area					

i

ATTACHMENTS

- Attachment A Swainson's Hawk Habitat Suitability Assessment for the Project
- Attachment B Swainson's Hawk Habitat Suitability Assessment for Van Vleck Ranch
- Attachment C Letter Regarding SSHCP
- Attachment D Representative Photographs of Van Vleck Ranch
- Attachment E Cosumnes River Preserve Property Map
- Attachment F Existing and Planned SSHCP Preserves

1. 1

1.0 INTRODUCTION

This Swainson's Hawk Mitigation Proposal (Mitigation Proposal) has been prepared for the Kamilos Southeast Policy Area Project (Project). The purpose of this Mitigation Proposal is to describe the methods by which Swainson's hawk mitigation will be accomplished for the Project consistent with California Department of Fish and Wildlife's (CDFW) Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California (CDFW 1994; 1994 Staff Report) and the City of Elk Grove Swainson's Hawk Program. Habitat Suitability Assessments have been conducted by Estep Environmental Consulting (Estep) for the Project (Estep 2017; Attachment A) and the proposed mitigation site (Van Vleck Ranch) (Estep 2016; Attachment B), and the results of the assessments are incorporated into this Mitigation Proposal.

2.0 PROJECT LOCATION

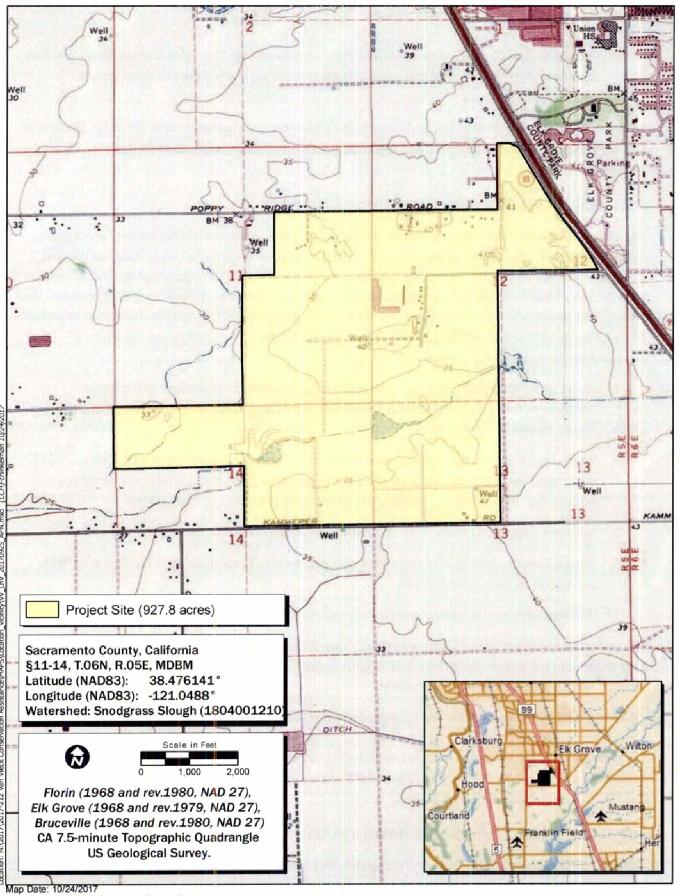
The Southeast Policy Area is located within the City of Elk Grove, Sacramento County, California. The Southeast Policy Area is an area defined by the City of Elk Grove as intended for urbanization and growth and is generally bound by State Route (SR) 99 on the east, Bruceville Road on the west, Kammerer Road on the south and Poppy Ridge Road on the north. The Project consists of ±927-acres within the Southeast Policy Area proposed for development by Kamilos Companies (Figure 1. Location and Vicinity). The Project site is located on portions of Sections 11, 12, 13, and 14, Township 6 North, Range 5 East (Mount Diablo Base Meridian) of the "Florin, California," "Elk Grove, California," and "Bruceville, California" 7.5-minute quadrangles (U.S. Geological Survey [USGS] 1968a, 1968b, and 1968c). The center of the Project site is approximately 38.476141° and -121.0488° within the Snodgrass Slough Watershed (Hydrologic Unit Code# 1804001210) (Natural Resources Conservation Service [NRCS], Environmental Protection Agency [EPA], and USGS 2016).

3.0 REGULATORY BACKGROUND

3.1 California Department of Fish and Wildlife 1994 Staff Report

The 1994 Staff Report outlines guidelines for mitigation of Swainson's hawk foraging habitat with "habitat management lands" based on the location of the project to active Swainson's hawk nests (California Department of Fish and Game [CDFG] 1994).

- 1. Projects within one mile of an active nest tree shall provide:
 - Done acre of habitat management lands for each acre of development authorized (1:1 ratio); or
 - one-half (0.5) acre of habitat managed land under active management of the habitat for prey production for each acre of development authorized (0.5:1 ratio).
- 2. Projects within five miles of an active nest tree but greater than one mile from the nest tree shall provide 0.75 acres of habitat management land for each acre of urban development authorized (0.75:1 ratio).



Service Layer Credits: Copyright:@ 2015 DeLorme Copyright:@ 2013 National Geographic Society, i-cubed



Figure 1. Location and Vicinity 2017-212 Van Vleck Conservation Assistance

3. Projects within 10 miles of an active nest tree but greater than five miles form an active nest tree shall provide 0.5 acres of habitat management land for each acre of urban development authorized (0.5:1, ratio).

While not a component of the 1994 Staff Report, the CDFW typically prefers mitigation within 10 miles of the impacted site. However, mitigation is approved through evaluation of multiple factors on a case-by-case basis.

3.2 City of Elk Grove Swainson's Hawk Program

The City of Elk Grove (City) adopted Chapter 16.130 – Swainson's Hawk Impact Mitigation Fees of the Elk Grove Municipal Gode in 2003. Chapter 16.130.110 (referred to as Swainson's Hawk Code) established mitigation policies for projects within the City that were determined to have potential significant impacts to Swainson's hawk foraging habitat during the California Environmental Quality Act (CEQA) Process. The Swainson's Hawk Code (City of Elk Grove 2017) allows project applicants to mitigate for loss of Swainson's hawk foraging habitat at a ratio of 1:1 (one acre to impact to one acre of mitigation) by one on a combination of the following options:

- 1. Direct land preservation to the City by fee title or conservation easement, including an endowment for annual monitoring. Land preservation should occur on a per-acre basis (one acre impact to one acre mitigation).
- 2. Payment of the Swainson's hawk impact mitigation fee on a per-acre basis. As of October 2017, the current fee is \$11,452 per acre. The Swainson's Hawk Code restricts payment of the fee to projects less than 40 acres; however, this restriction has been temporarily lifted.
- 3. Purchase mitigation credits at an approved mitigation bank acceptable to the City and CDFW.
- 4. Purchase credits from a property owner with eligible credits for projects in the City and that is acceptable to the City and CDFW.
- 5. Provide other instruments to preserve suitable foraging habitat as determined by CDFW.

It is important to note that the Swainson's Hawk Code allows the Council to adopt mitigation measures that differ from the above specifications. The City may consider or approve other means of mitigating impacts to Swainson's hawk foraging habitat.

Other regional guidance includes the South Sacramento Habitat Conservation Plan (SSHCP). The SSHCP does not require mitigation to occur within a set distance, instead taking a landscape-scale approach to conservation in order to preserve larger conservation areas and reduce habitat fragmentation, as described in a letter from Bill Ziebron (County of Sacramento) to Stan Van Vleck (Attachment C). However, the City is not currently an SSHCP partner.

4.0 REGIONAL SWAINSON'S HAWK STATUS

Swainson's hawk is a migratory species that winters from Mexico south to Argentina in South America and spends the breeding season in agricultural and grassland plains in western North America. Individuals

have been seen wintering in the Central Valley and Sacramento-San Joaquin Delta. Currently, the range of Swainson's hawk in California includes the Central Valley, the high desert regions and valleys of northeastern California, and the east side of the Sierra Nevada from Owens Valley and extending southwestward into the western Mojave Desert in the vicinity of Antelope Valley (Estep 2017).

In the Central Valley of California, Swainson's hawk typically nests in mature trees within riparian corridors and in scattered trees adjacent to agricultural fields or pastures, which serve as the primary foraging areas (CDFG 1994). It has been documented that a variety of factors including crop types, agricultural practices, and harvesting regimes can have a significant effect on both the availability and abundance of prey items in these areas (CDFG 1994). The highest nesting densities of Swainson's hawk occur in Yolo, Sacramento, Solano, and San Joaquin counties and are almost entirely dependent on cultivated foraging habitats (Estep 2017). Uncultivated grassland communities along the perimeter of the Central Valley support lower densities of Swainson's hawk; however, these areas more closely resemble the historic native landscape and are critical to the overall foraging landscape for Swainson's hawk (Estep 2017).

5.0 DOCUMENTED SWAINSON'S HAWK NESTS WITHIN THE PROJECT

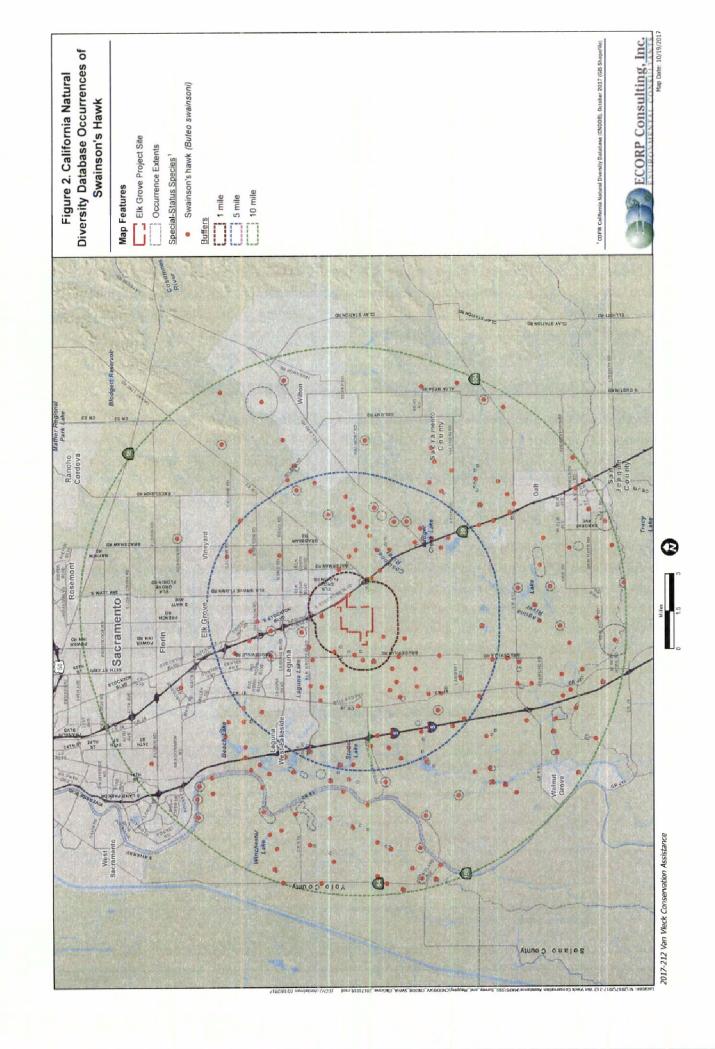
According to CDFW's California Natural Diversity Database (CNDDB), there are approximately 7 previously-documented Swainson's hawk nest locations within 1 mile of the Project; however, there have been no active nests documented within the Project (Figure 2. California Natural Diversity Database Swainson's Hawk Occurrences) (CDFW 2017, Estep 2017).

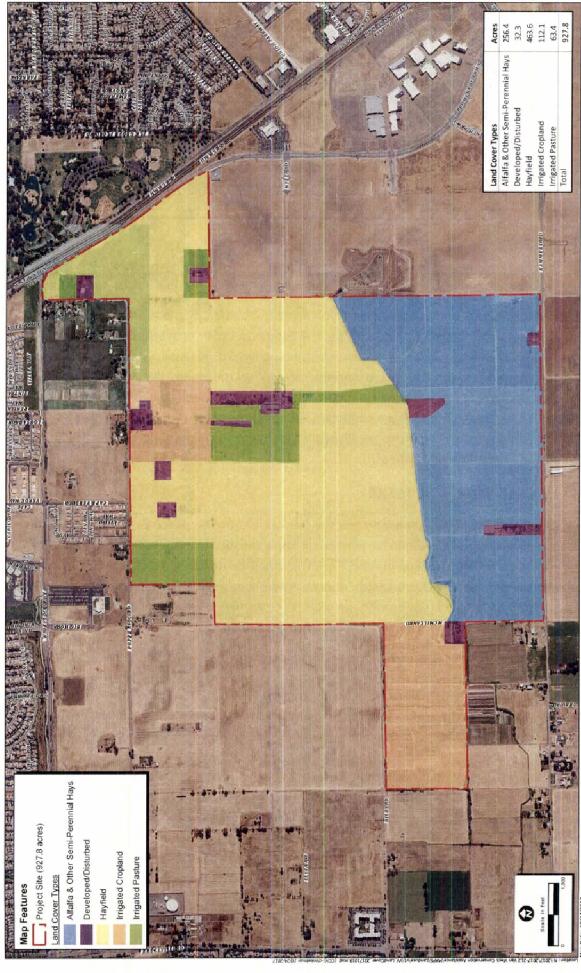
6.0 POTENTIAL FORAGING HABITAT WITHIN THE PROJECT

Estep evaluated the entire ±927-acre Project site for Swainson's hawk foraging suitability (Estep 2017). The entire Project site is considered suitable Swainson's hawk foraging habitat except for the existing rural development sites present within the site (Estep 2017). The entire site was classified into land cover types and the land cover types were given ranks (high, moderate, or low) based on the habitat value the land cover type provided (Figure 3. Land Cover Types). A summary of the Project site's land cover types and corresponding habitat value rankings is provided in Table 1, and a summary of the acres for each habitat value rank is provided in Table 2.

Land Cover Type	Habitat Vâlue Rank (High, Moderate, Low)	Acres within Project
Alfalfa & other semi-perennial hays	Eligh	256
Developed	l.ow	32
Hayfield	Mo Jerate	464
Irrigated cropland	Mo Jerate	112
Irrigated pasture	Mo Jerate	63
•	Total:	927

Source: Estep 2017; Attachment A





Map Date: 10/24/2017 Photo (or Base) Source: USGS 2016



Habitat Value Rank	Acres within Project	
Low	32	
Moderate	639	
High	256	
Total:	927	

7.0 FORAGING HABITAT IMPACTS

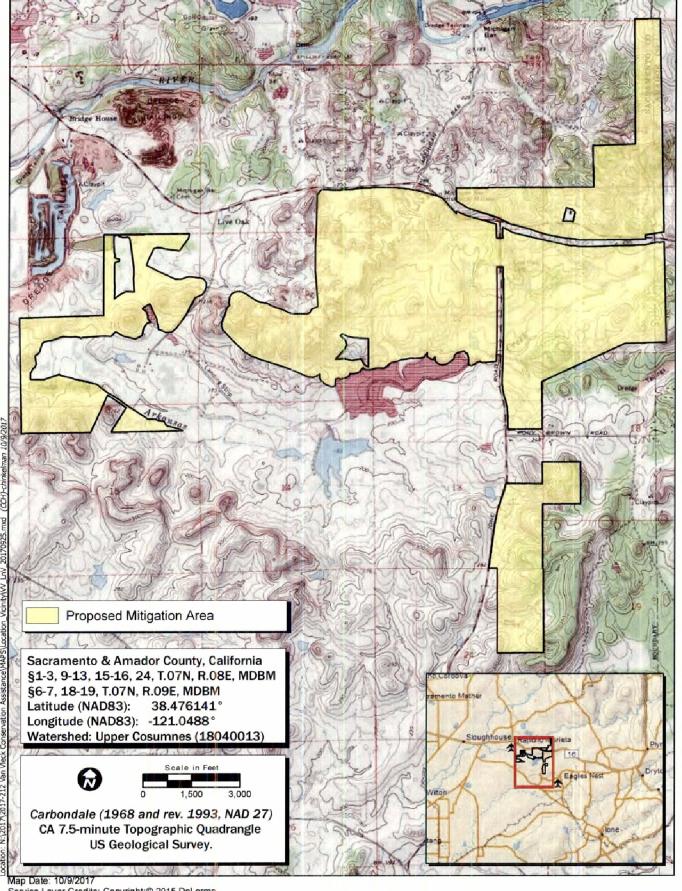
The entire ±927-acre site is proposed for development. The majority of the Project is ranked as moderate habitat value (639 acres), with 256 acres ranked as high habitat value and 32 acres ranked as low habitat value (i.e. developed lands). Both moderate and high habitat value classifications are considered suitable Swainson's hawk foraging habitat. Additionally, per the Southeast Policy Area Strategic Plan Draft Environmental Impact Report (Draft EIR) (State Clearinghouse No. 2013042054, City of Elk Grove 2014), irrigated row crops and field crops, irrigated hayfields, and annual grassland habitats within the Southeast Policy Area are considered suitable Swainson's hawk foraging habitat. Habitats considered Swainson's hawk foraging habitat by the Draft EIR are consistent with portions of the Project area ranked as moderate or high habitat value by Estep. Therefore, the Project will permanently impact approximately 895 acres of suitable Swainson's hawk foraging habitat.

8.0 PROPOSED MITIGATION SITE

Consistent with the CDFW 1994 Staff Report and the City of Elk Grove Swainson's Hawk Program, the Project proponent proposes to mitigate for permanent impacts to Swainson's hawk foraging habitat through preservation of offsite mitigation land. The Project has identified the Van Vleck Ranch, located 18 miles to the northeast in eastern Sacramento County, California, as a potential mitigation site. Van Vleck Ranch was determined to be the option with the greatest conservation value due to the large, contiguous nature of the site and the proposed habitat enhancement described below.

8.1 Mitigation Site Location, Landscape Context, and History

The Van Vleck Ranch is located on portions of Sections 1 – 3, 9 – 13, 15, 16, and 24, Township 7 North, Range 8 East (Mount Diablo Base Meridian [MDBM]) and portions of Sections 6, 7, 18, and 19, Township 7 north, Range 9 East (MDBM) of the "Carbondale, California" 7.5-minute quadrangle (USGS 1968) (Figure 4. *Van Vleck Ranch Location and Vicinity*). The approximate center of the site is 38.476141° and -121.0488° within the Upper Cosumnes Watershed (Hydrologic Unit Code# 18040013) (USGS 1978). Representative photographs of the site are provided in Attachment D. The Van Vleck Ranch is located in the transitional zone between flat, cultivated lands of the Central Valley and the low-elevation foothills of the western Sierra Nevada. Within the Van Vleck Ranch, there are several existing conservation easements established on ±300 acres of irrigated pastures for the preservation of Swainson's hawk foraging habitat.



Service Layer Credits: Copyright:© 2015 DeLorme Copyright:© 2013 National Geographic Society, i-cubed



Figure 4. Van Vleck Ranch Location and Vicinity

Immediately to the south of the potential mitigation area within the Ranch lies the Van Vleck Mitigation Bank, a 775-acre mitigation bank authorized to sell vernal pool creation, vernal pool preservation, and Swainson's hawk foraging credits from the U.S. Army Corps of Engineers, U.S. Fish & Wildlife Service, U.S. Environmental Protection Agency, and CDFW. Other adjacent land uses include grassland, cultivated and woodland communities, as well as urbanization and development associated with the town of Rancho Murieta (Estep. 2016).

The Van Vleck Ranch is ±2 miles south of Deer Creek Hills Preserve, which is managed by the Sacramento Valley Conservancy. Van Vleck Ranch lies ±1 mile north of Howard Ranch, which is a component of the Cosumnes River Preserve. The Cosumnes River Preserve consists of 50,000 acres of conservation lands along the Cosumnes River corridor from the headwaters of Laguna Creek South near the boundary between Sacramento and Amador Counties, to near the confluence of the Mokelumne River and the San Joaquin River. The Van Vleck Ranch serves as,an important wildlife corridor connecting the Howard Ranch to the south with the Cosumnes River corridor and the Deer Creek Hills Preserve to the north, and would be a key component needed to create a contiguous preserve along the Cosumnes River and its tributaries. Attachments E and F shows regional preserves (associated with the Cosumnes River Preserve and identified in the SSHCP) in relation to Van Vleck Ranch.

The Van Vleck Ranch is currently an operational cattle ranch. The Van Vleck Ranch previously participated in the Williamson Act Program, agreeing to forego conversion of the ranch to urban development for a period of 10 years. However, approximately 10 years ago this agreement was not renewed, and thus will be expiring in January of 2018, enabling sale of the ranch for development. The Van Vleck family wishes to maintain the property as an operational ranch and conservation area by establishing conservation easements. However, if it is not possible to sell the majority of ranch lands for mitigation use, sale of the ranch for development purposes will be necessary.

8.2 Habitat Preservation within the Mitigation Site

Estep evaluated the Van Vleck Ranch for Swainson's hawk foraging habitat suitability (Estep 2016; Attachment C). The entire Van Vleck Ranch is within the eastern portion of the breeding range of Swainson's hawk, and there are documented nests within two to three miles of the site and one documented nest onsite (Estep 2016). The majority of the site is characterized by annual grassland with oak woodland and oak savannah also occurring throughout the site. The annual grassland habitat within the potential mitigation area provides moderate Swainson's hawk foraging habitat (Estep 2016). The annual grassland supports a prey base of vole (*Microtus californicus*) and pocket gopher (*Thomomys bottge*), the primary rodent prey species for Swainson's hawk. Evidence of vole and pocket gopher was noted throughout the Ranch. In addition, the Ranch supports other small rodents, reptiles, and birds that are used as prey by Swainson's hawk. Adjacent to the potential mitigation area, there are ±300 acres of irrigated pastures that are already (or are currently being) designated as Swainson's hawk habitat in perpetuity. The irrigated pastures are considered high value Swainson's hawk foraging habitat, and they help to sustain prey populations throughout the adjacent annual grassland. The proximity of the potential mitigation area to existing conservation lands, including the irrigated pastures and the Van Vleck

Mitigation Bank to the south, satisfies a key criterion of the Elk Grove Swainson's Hawk Ordinance to prioritize preserving lands in proximity to other protected lands.

Of the $\pm 2,100$ acres of potential mitigation area, there are $\pm 1,574$ acres of suitable Swainson's hawk foraging habitat. In addition, there are ± 505 acres of oak woodland, and ± 31 acres of cottonwood groves, totaling ± 536 acres of suitable nesting habitat (Figure 5. Land Cover within the Van Vleck Ranch Mitigation Area).

8.2.1 Proposed Acreage of Habitat Preservation

Per the Draft EIR and the City of Elk Grove Swainson's Hawk Program, the Project is required to mitigate for impacts to Swainson's hawk foraging habitat at a 1:1 ratio (City of Elk Grove 2014 and 2017). Therefore, a 1:1 ratio is recommended for mitigating impacts to moderate and high value Swainson's hawk habitat identified at the Project site through the preservation of Swainson's hawk habitat at the Van Vleck Ranch site through the preservation of Swainson's hawk habitat at the Van Vleck Ranch. No mitigation is recommended for developed land (i.e., low habitat quality). A total of 895 acres of Swainson's hawk habitat is proposed to be preserved at the Van Vleck Ranch as mitigation for Project impacts.

Table 3. Proposed Swainson's Hawk Habitat Preservation at the Van Vleck Ranch								
Impacted Acres	Mitigation Ratio	Required Mitigation Acreage						
895 acres	1:1	895 acres						

8.3 Proposed Habitat Enhancement within the Van Vleck Ranch

The Van Vleck Family proposes to implement habitat enhancement measures within the Ranch in addition to the preservation of 895 acres of existing habitat. These measures include enhancement of existing foraging habitat through grazing for the specific purpose of managing the prey base for Swainson's hawk, increasing nesting habitat through the planting of additional cottonwood (*Populus fremontii*) trees, and converting 50 acres of irrigated pasture within adjacent existing easements to alfalfa for the specific purpose of augmenting Swainson's hawk foraging habitat.

8.3.1 Enhanced Grassland Management for Prey

Currently, the Van Vleck Ranch is grazed by cattle for the purpose of beef production. In order to enhance Swainson's hawk foraging habitat, the annual grasslands will be actively managed for prey production and suitable prey visibility.

Management practices to be implemented will include:

- Adaptive management methods will be used to promote prey visibility through managing vegetation height.
- Annual monitoring of vegetation height will be implemented.
- Use of rodenticides will be prohibited.

Figure 5. Land Cover within Van Vleck Ranch Mitigation Area

2017-212 Van Vleck Conservation Assistance

ECORP Consulting, Inc.

8.3.2 Nesting Habitat Enhancement

In addition to existing oak and cottonwood trees representing suitable nesting habitat onsite, a minimum of 20 cottonwood saplings will be planted within the Ranch. Cottonwood saplings will be maintained or replaced as needed to meet a minimum of 20 established cottonwood trees after 3 years. Locations of cottonwood plantings are to be determined, and would be located within areas with sufficient water supply to support their growth (e.g. adjacent to irrigated pastures or open waters).

8.3.3 Foraging Habitat Quality Enhancement

Within the Van Vleck Ranch, there are several existing conservation easements established for the preservation of Swainson's hawk foraging habitat (Figure 5), which currently contain dry pasture and irrigated lands used for pasture, hay, oats, wheat and other suitable crops to support Swainson's hawk foraging. In order to enhance habitat value for Swainson's hawk; ±50 acres of the existing irrigated lands will be converted to alfalfa for the purpose of enhancing Swainson's hawk foraging value. The height of the alfalfa will be maintained at 6 to 12 inches to optimize Swainson's hawk foraging. The alfalfa will be cultivated using standard agricultural practices, which require rotation every 4 to 5 years during which the alfalfa is replaced with grain crops for a 1 to 2 year period. Alfalfa cultivation will continue as long as it is agronomically practicable to do so (e.g., sale of alfalfa production is feasible and sufficient water is available to cultivate alfalfa). A maximum of 50 acres is necessary in order to maintain sufficient remaining acreage of irrigated summer pasture for cattle.

Upon approval of this Mitigation Proposal, a document describing the requirement to establish and maintain a minimum of ±50 acres of alfalfa, managed for Swainson's hawk foraging use, will be prepared. This document will be appended to the Long Term Management Plan for the existing conservation easements (Madrone 2017) upon approval by the City of Elk Grove and the California Rangeland Trust (as holder of the existing easements).

8.4 Mitigation Site Suitability

As stated above, the Van Vleck Ranch supports suitable resting and foraging habitat for Swainson's hawk. The mitigation site is located approximately 18 miles nor heast from the Project; both areas are located within the Central Valley breeding range for Swainson's hawk (Estep 2016 and 2017). While the mitigation site is located out of the typical mitigation range of 10 miles from the Project site, the Van Vleck Ranch provides many ecological benefits identified as key to Swainson's hawk persistence in the 1994 CDFG Staff Report and the 5-Year Review: Swainson's Hawk (Buteo swainsoni) prepared by CDFG (CDFG 1993; 5-Year Review).

In particular, the Van Vleck Ranch affords an opportunity to provide a large (895-acre), contiguous area of natural habitat for the entirety of the mitigation, which is not practicable within a 10-mile radius of the Project. There are currently no mitigation banks with service areas including the Project site that have sufficient SWHA mitigation credit availability to service the Project. For mitigation to occur within 10 miles of the Project, preservation of multiple smaller parcels would be required. These fragmented mitigation parcels would most likely be interspersed within an agricultural landscape with uncertain long-term

habitat value as a result of changing land use and farming practices. The lands surrounding them may be converted to development or non-compatible agricultural uses in the future. It is a tenet of conservation biology that the conservation of a single, large site has higher ecological value than the conservation of several smaller sites, due to the effects of habitat fragmentation and edge effects (e.g. Wilcox and Murphy 1985). Fragmentation of nesting and foraging habitats and loss of historic grassland foraging habitat was a key factor in the recommendation to retain a "Threatened" classification for Swainson's hawk within the 5-Year Review. Preservation of habitat at the Van Vleck Ranch would be in line with the conservation strategies identified by the 5-Year Review by preserving unfragmented historic grassland habitat to support long-term persistence of Swainson's hawk populations, and preventing the conversion of this habitat to urban development.

In addition, while Swainson's hawk mitigation typically focuses solely on conserving existing habitat, the Van Vleck Ranch would provide habitat enhancement activities as well. To enhance foraging habitat, ±50 acres of irrigated pasture under existing easements will be converted to alfalfa, considered to have high quality for Swainson's hawk foraging. To enhance/create Swainson's hawk nesting habitat, 20 additional cottonwood trees will be planted to increase nest tree availability.

Though land cover types differ between the Project site and the Van Vleck Ranch, the Ranch was determined to represent moderate foraging habitat value, similar to the majority of the Project site (Estep 2016 and 2017). The Van Vleck Ranch supports Valley grassland habitat that more closely resembles the historic pre-European settlement landscape used by Swainson's hawk, as well as irrigated pastures that are grazed and hayed periodically and provide high value foraging habitat. While the density of Swainson's hawk nests is lower in the grasslands of the eastern Central Valley, this area likely supports a breeding density more closely resembling the historic, pre-agricultural condition. Densities of nesting Swainson's hawks within some irrigated agricultural lands are considered to be anthropogenically elevated due to farming practices. In light of global climate change and the decline of water-intensive farming practices, including alfalfa production, preservation of the grasslands that have historically supported Swainson's hawk foraging have a vital role in providing stable nesting and foraging conditions that enable long-term resilience of the regional Swainson's hawk population.

Preserving these additional mitigation lands at Van Vleck Ranch helps to establish a corridor connection to the Cosumnes River Preserve. The proposed mitigation areas at Van Vleck Ranch would help connect a total of ±3,000 acres of preserve lands on the Ranch to the Cosumnes River corridor, in addition to ±4,000 acres at the Deer Creek Hills Preserve to the north of Rancho Murieta, enhancing the habitat value of the corridor. The Cosumnes River Preserve has a direct connection to the City of Elk Grove, and enhancing the Preserve is of benefit to the City of Elk Grove and the surrounding communities. Preservation along the Cosumnes River corridor will have benefits for multiple additional species, and will maintain the hydrology and water quality of the Arkansas Creek (tributary to the Cosumnes River).

9.0 REFERENCES

- California Department of Fish and Game (CDFG). 1994. Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo swainsoni*) in the Central Valley of California. November 8, 1994.
- California Department of Fish and Game (CDFG). 1993. 5 Year Status Review: Swainson's Hawk (Buteo swainson!).
- California Department of Fish and Wildlife (CDFW). 2017. Rarefind 5. Natural Diversity Data Base Program.

 Version 5.1.1, dated: February 28, 2016. California Natural Diversity Database. The Resources

 Agency, Sacramento.
- City of Elk Grove. 2014. Southeast Policy Area Strategic Plan Draft Environmental Impact Report (SCH:No. 2013042054). March 2014.
- City of Elk Grove. 2017. Swainson's Hawk Program. Available online at:

 http://www.elkgrovecity.org/cms/One.aspx?portalId=109669&pageId=127914. Accessed 27 September 2017.
- Estep Environmental Consulting (Estep). 2016. Habitat Suitability Assessment for the State-listed Swainson's Hawk on the Van Vleck Ranch, Sacrainento County. Prepared for Downy Brand, LLP: October 1, 2016.
- Estep Environmental Consulting (Estep). 2017. Habitat Suitability Assessment for the State-listed Swainson's Hawk within the City of Elk Grove's Southeast Policy area, Sacramento County. Prepared for Downy Brand, LLP and Kamilos Companies. October 6, 2017.
- U.S. Geological Survey (USGS). 1968a. "Florin, California" 7.5-minute Quadrangle. Geological Survey. Denver, Colorado.
- U.S. Geological Survey (USGS). 1968b. "Elk Grove, California" 7.5-minute Quadrangle. Geological Survey.

 Denver, Colorado.
- U.S. Geological Survey (USGS). 1968c. "Bruceville, California" 7.5-minute Quadrangle. Geological Survey.

 Denver, Colorado.
- U.S. Geological Survey (USGS). 1978. Hydrologic Unit Map, State of California. Geological Survey. Reston, Virginia.
- U.S. Geological Survey (USGS). 1979. "Elk Grove, California" 7:5-minute Quadrangle. Geological Survey. Denver, Colorado.
- Wilcox, Bruce, A., and Dennis, D. Murphy. Conservation Strategy: The Effects of Fragmentation on Extinction. The American Naturalist, vol. 125, no. 6, 1985, pp. 879–887. Available at: www.jstor.org/stable/2461453.

LIST OF ATTACHMENTS

Attachment A – Swainson's Hawk Habitat Suitability Assessment for the Project

Attachment B - Swainson's Hawk Habitat Suitability Assessment for Van Vleck Ranch

Attachment C - Letter Regarding SSHCP

Attachment D - Representative Photographs of Van Vleck Ranch

Attachment E - Cosumnes River Preserve Property Map

Attachment F – Existing and Planned SSHCP Preserves

	1	
	ř,	
	11	ATTACHMENT A
Swains	on's Hawk	Habitat Suitability Assessment for the Project
	;{ 	, , , , , , , , , , , , , , , , , , , ,
	ř.	
	§	
	ř	
	t) 1)	
	; ;	
	4	
	n N	
	й Н	
	0 0	
	i 1	
	4	
) H	
	19	
	1) ()	
	# V :	
	1	
	i i	
	j	
	6	
	ģ	
	() 	
	g g q	·
	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	i d	

+ · · · ·

Habitat Suitability Assessment for the State-listed Swainson's Hawk within the City of Elk Grove's Southeast Policy Area, Sacramento County

October 2017



Prepared for:

Van Vleck Family

and

Kamilos Companies

Préparéd by:

Estep Environmental Consulting

Habitat Suitability Assessment for the State-listed Swainson's Hawk within the City of Elk Grove's Southeast Policy Area, Sacramento County

Prepared for:

Van Vleck Family 7879 Van Vleck Road Rancho Murieta, CA 95683

and

Kamilos Companies 11249 Gold Country Blvd Gold River, CA 95670

Prepared by:

Estep Environmental Consulting 3202 Spinning Rod Way Sacramento, CA 95833

Introduction

Background and Purpose

The City of Elk Grove intends to provide opportunities for urbanization of their Southeast Policy Area, generally located between State Route 99 and Bruceville Road, north of Kammerer Road and south of Poppy Ridge Road in the City of Elk Grove (Figure 1). Within this area, Kamilos Cos. are proposing residential and commercial uses on approximately 924 acres (Project). As a condition of approval, Kamilos Cos. are required to provide mitigation for the removal of Swainson's hawk (*Buteo swainsoni*) foraging habitat according to the provisions of the City of Elk Grove Swainson's Hawk Mitigation Program (Elk Grove Municipal Code, Chapter 16.130 [Swainson's Hawk Impact Mitigation Fees]). The mitigation program requires compensatory mitigation at a 1:1 ratio for all lands considered suitable Swainson's hawk foraging habitat.

Securing suitable replacement habitat in Sacramento County to comply with the required mitigation has proven to be challenging primarily due to the availability of suitable contiguous mitigation lands in Sacramento County, particularly at the scale of the Project. The Van Vleck Family, owners of the Van Vleck Ranch, located east of Elk Grove near the town of Rancho Murieta, has offered to establish conservation easements on portions of their 4,768-acre ranch that provide suitable Swainson's hawk foraging habitat as an opportunity to offset impacts occurring within the City of Elk Grove. Approval by the City of Elk Grove and consistency with the City's Swainson's Hawk Mitigation Program is required for all prospective mitigation properties. Provisions of the Mitigation Program relevant to this assessment include the following:

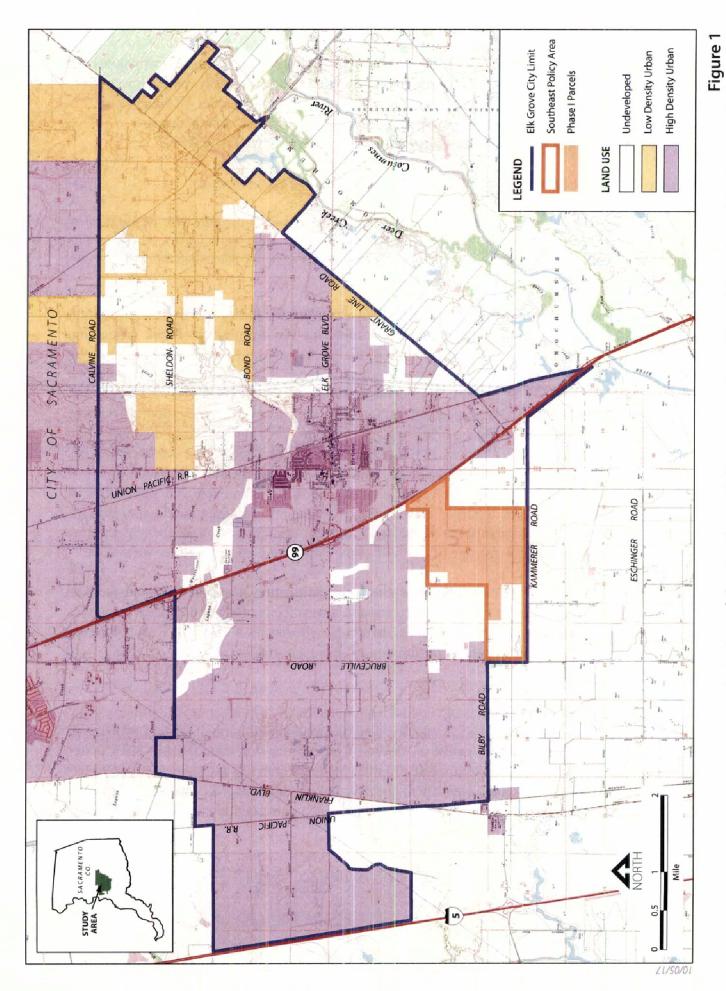
Section 16.130.040 Conditions, Part A

The project applicant shall acquire conservation easements or other instruments to preserve suitable foraging habitat for the Swainson's hawk, as determined by the California Department of Fish and Game. The location of mitigation parcels as well as the conservation instruments protecting them shall be acceptable to the City and to the California Department of Fish and Game. The amount of land preserved shall be governed by a one-to-one (1:1) mitigation ratio for each acre developed at the project site. In deciding whether to approve the land proposed for preservation by the project applicant, the City shall consider the benefits of preserving lands in proximity to other protected lands.

This provision indicates that conservation easements designed to preserve Swainson's hawk habitat are an appropriate mitigation instrument and that impacts must be mitigated at a 1:1 replacement ratio. This requires approximately 924 acres of suitable Swainson's hawk foraging habitat to fully address impacts of the Project. The Van Vleck Ranch satisfies this requirement.

Section 16.130.040 Conditions, Part A-1.

The land to be preserved shall be deemed suitable Swainson's hawk foraging habitat by the California Department of Fish and Game.



Location of the Southeast Policy Area and the Phase I Parcels within the City of Elk Grove

This provision indicates that the mitigation property must provide habitat suitable for Swainson's hawk foraging. Suitable Swainson's hawk foraging habitat includes annually rotated irrigated croplands, pasturelands, and grasslands. The Van Vleck Ranch supports over 4,000 acres of suitable cultivated and grassland foraging habitat, a portion of which is already under conservation easement as a Swainson's hawk mitigation bank approved by CDFW.

Section 16.130.110 Authority of City Council to override mitigation measures

Nothing herein shall be construed to preclude the City Council's consideration or approval of other means of mitigating significant impact or significant cumulative impact on Swainson's hawk foraging habitat or to limit the City Council's authority to override mitigation measures for reasons permitted by CEQA.

This provision indicates that the City of Elk Grove has the flexibility to consider mitigation alternatives that may not fully meet other conditions in the Swainson's Hawk Mitigation Program. This is particularly relevant to provisions in the program that specify approval by CDFW regarding suitability and location of mitigation lands. It is generally preferable that mitigation occur as close as possible to the impact site. CDFW typically uses a maximum distance of 10 miles between the impact and mitigation site. However, if mitigation alternatives are not available within that distance or if they are considered less optimal from a conservation perspective (e.g., acquisition of numerous disconnected small parcels versus a single contiguous landscape), then the city can pursue alternative mitigation. Although the Van Vleck Ranch is approximately 18 miles from the Project area, it is within the same regional population of Swainson's hawks, supports a large, suitable, and contiguous foraging landscape, and its permanent protection would contribute to and facilitate opportunities for connectivity with other protected lands along the eastern edge of the valley and within the Cosumnes, River watershed.

Anticipating the need for the city to explore alternative mitigation, Kamilos Cos. and the Van Vleck Family have undertaken further investigation to assess the habitat value of both properties and the nesting population that they support to determine whether the Van Vleck Ranch provides sufficient compensatory mitigation opportunities to reasonably offset impacts occurring from development of the Project.

The first step in this investigation is to conduct a habitat suitability assessment of both properties and evaluate how each is situated within the local and regional distribution of nesting Swainson's hawks. A habitat suitability assessment of the Van Vleck Ranch was conducted in 2016 (Estep 2016). This report was prepared to provide a similar habitat suitability assessment of the Project parcels. Information from both reports will then be incorporated into a comprehensive report that will address the extent to which the Van Vleck Ranch can provide suitable compensatory mitigation for the Project.

Location

The Project consists of 17 parcels totaling 924.63 acres within the Southeast Policy Area (Figure 2). The parcels are contiguous, extending from State Route 99 to 0.5 miles east of Bruceville Road and extending between Poppy Ridge Road on the north to Kammerer Road on the south. The area represents a substantial portion of the last remaining undeveloped land along the City's southern border, which is surrounded on the west, east, and north by existing urbanization. Open agricultural lands occur south of the Project area (Figures 1 and 2).

Species Background

Swainson's Hawk Natural History

Description

The Swainson's hawk is a medium-sized buteo most often characterized by its long, narrow, and tapered wings held in flight in a slight dihedral shape (Plate 1). The body size is somewhat smaller, thinner, and less robust than other buteos, although the wings are at least as long as other buteos. This body and wing shape allow for efficient soaring flight and aerial maneuverability; important for foraging, which Swainson's hawks do primarily from the wing, and during courtship and inter-specific territorial interactions.

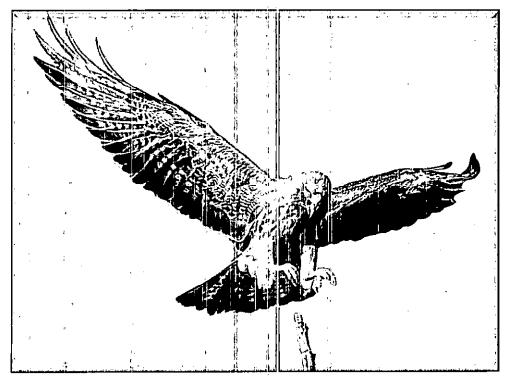


Plate 1. Adult Swainson's hawk showing the long, tapered wings that allow for efficient soaring and flight maneuverability.

Figure 2 Parcel Locations within the Phase I Area

21/50/01

There are three definitive plumage morphs: light, rufous, and dark, with numerous intermediate variations between these plumage morphs. The two most distinguishing plumage characteristics are a dark breast band and the contrasting darker flight feathers and lighter wing linings on the underwings giving most individuals a distinctive bicolored underwing pattern (Plate 2). These characteristics are most pronounced in lighter morph birds and become less so as the plumage darkens, and can be indistinguishable in the definitive dark morph, which is completely melanistic. All three definitive plumage morphs are present in California, with a relatively large proportion of the population categorized as intermediate between the definitive morphs, with varying amounts of streaking or coloration in the belly and wing linings.

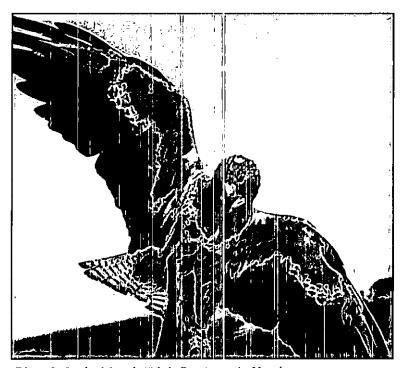


Plate 2. Light Mörph Adult Swainson's Hawk

Breeding Range

Swainson's hawks inhabit grassland plains, shrublands, and agricultural regions of western North America during the breeding season and inhabit similar habitats from Central Mexico to southern South America during the migration and winter non-breeding seasons (England et al. 1997; Kochert et al. 2011, Airola et al. in preparation). Early accounts described Swainson's hawk as one of the most common raptors in the state, occurring throughout much of lowland California (Sharp 1902). Since the mid-1800s, the native habitats that supported the species have undergone a gradual conversion to agricultural uses, or as in the case of southern California coastal valleys, to urbanization. Today, with the exception of desert scrub communities in the high desert regions of the state and the grassland prairie and oak savannah communities around the perimeter of the Central Valley, native landscapes that supported nesting and foraging Swainson's hawks are virtually nonexistent. This habitat loss is thought to have caused a substantial reduction in the breeding range and in the size of the breeding population in California (Bloom 1980: England et al. 1997). The current range of the species in California

includes the Central Valley, the high desert regions and valleys of northeastern California, the east side of the Sierra Nevada from Owens Valley and extending southwestward into the western Mojave Desert in the vicinity of Antelope Valley (Figure 3).

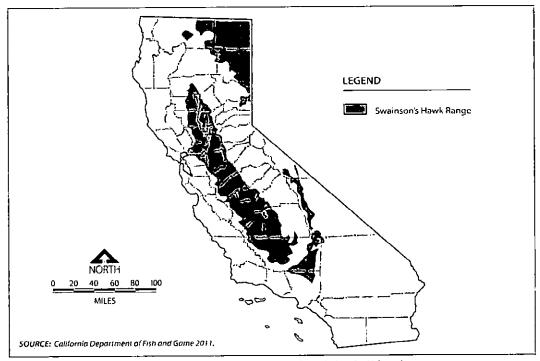


Figure 3. The breeding range of the Swainson's hawk in California.

Despite the loss of native habitats throughout the species' range in California, Swainson's hawks appear to have adapted relatively well to certain types of agricultural patterns in areas where suitable nesting habitat remains. Today, the species is most abundant in landscapes that are entirely under cultivation. The largest segment of the statewide population is in the Central Valley, with the highest nesting densities occurring in Yolo, Sacramento, Solano, and San Joaquin Counties (Bloom 1980, Estep 2007, 2008, Anderson et al 2007), and where the species is nearly entirely dependent on cultivated foraging habitats. The nesting distribution in the Central Valley largely follows the distribution of suitable hay, grain, and row crop agriculture compatible with the foraging requirements of the Swainson's hawk and where it occurs in association with suitable nesting habitat (Anderson et al. 2007, Estep and Dinsdale 2012). Uncultivated grassland communities, particularly around the perimeter of the Central Valley, support lower breeding density, but remain an essential component of the overall foraging landscape for Swainson's hawks by providing a stable natural community that more closely resembles the historic native landscape.

The dependency on cultivated habitats also has potential negative implications related to landscape-level management of the species. Cultivated landscapes are subject to agricultural economics and changes in crop patterns, which can affect the distribution and abundance of the regional nesting population. This further emphasizes the importance of protecting uncultivated natural communities, particularly grassland prairies, within the breeding range to ensure long-term persistence of the species.

Habitats and Habitat Use

Nesting

Nesting habitat is variable throughout the species range. In the Central Valley, Swainson's hawks nest in large native trees such as valley oak! (Quercus lobata), cottonwood (Populus fremontia), walnut (Juglans californica), and willow (Salix spp.), and in nonnative trees, such as eucalyptus (Eucalyptus spp.) and ornamental pine trees. Prior to agricultural conversion, Central Valley populations nested primarily in riparian woodlands and on the edges of oak woodlands. Today, in addition to riparian and remnant oak woodlands, the species nests in roadside trees, trees along field borders, isolated trees, trees around farm houses and farmyards, and in urban areas that are adjacent to cultivated lands (England et al. 1995, Estep 2007, 2008) (Plate 3).

Nesting habitat within the low-elevation grassland prairies on the east side of the Central Valley includes riparian woodlands, isolated trees, cottonwood and willow trees associated with wetland habitats formed within historic mine tailings, and patches of oak woodland. Recently documented activity near Ione includes nests in blue oak (Quercus douglasii) and live oak (Quercus wislizeni) groves.

Nesting pairs are highly traditional in their use of nesting territories. Many monitored nesting territories in the state have been occupied annually since at least the early 1980s and banding studies conducted since 1986 confirm a high degree of territory and mate fidelity (Woodbridge 1991, Briggs 2007, Estep *in progress*).



Plate 3. Typical Swainson's hawk nest in a willow tree (center of photo). Nests are often inconspicuous and difficult to see. The white objects in the nest are downy nestlings.

Foraging

Swainson's hawks are plains or open-country hunters, requiring large open landscapes for foraging. Historically, the species hunted the grasslands of the Central Valley and coastal valleys and the open desert scrub and shrublands in high desert regions. With the cultivation of virtually all of the Central Välley, and a portion of the high desert region, Swainson's hawk foraging has largely shifted onto agricultural lands that provide a dynamic, regularly manipulated landscape that maximizes prey populations and accessibility of rodent prey (Estep 1989, Babcock 1995, Woodbridge 1991).

Foraging habitat use, particularly agricultural foraging habitat, is largely a function of two primary variables: abundance of prey and amount of vegetative cover that affects access to prey (Bechard 1982, Estep 1989, 2009). Suitability is in part a function of changing vegetation structure throughout the growing season, which influences prey accessibility. Agricultural cover types that provide suitable foraging habitat conditions include hay, grain and row crops, fallow fields, and irrigated and dryland pasture. The matrix of these cover types can create a dynamic foraging landscape as temporal changes in vegetation results in changing foraging patterns and foraging ranges (Estep 1989, Babcock 1995, Fleishman et al. 2016). Uncultivated habitats, such as grasslands, shrub-steppe communities in northeastern California, and desert scrub in the Mojave Desert provide more stable, consistent habitat value (Plate 4). However, although maintaining these remaining native landscapes within the range of the species is essential for long-term persistence, they probably do not provide the extent of available prey resources that would support the artificially-high breeding densities found in some cultivated habitats.



Plate 4. Grassland landscape on the Van Vleck Ränch. Grasslands provide consistent value and represent the native landscape condition necessary for long-term persistence of the species.

Methods

I conducted a field assessment of the Project parcels in the ;Southeast Policy Area on September 29, 2017. The assessment was conducted by visiting each of the 17 parcels to document and evaluate habitat suitability for nesting and foraging Swainson's hawks. Public and farm roads provided sufficient access to each parcel by vehicle. All lands were evaluated with regard to their potential use by nesting and foraging Swainson's hawks, including examination of vegetation type and structure, rodent prey availability and accessibility, and an evaluation of nesting habitat on and in the vicinity of the ranch. Land uses and habitats were mapped on USGS quadrangle field maps and aerial photos. Photographs were taken of representative locations and habitats

I also conducted a survey of nesting Swainson's hawk within and around the Southeast Policy Area for the City of Elk Grove in 2012 (Estep 2012). Data from the 2012 survey area are used in this report to represent the distribution of Swainson's hawk nests on and in the immediate vicinity of the Project area.

Nesting and foraging habitats for the Swainson's hawk were evaluated on the basis of distribution and abundance of suitable nest trees and reported nest sites, topography and other physical features, surrounding land uses, and the extent, type, vegetative composition and structure, and management of the land uses. Foraging habitats were evaluated using a simple high, moderate, and low-ranking system based on previous habitat use investigations (Estep 1989, 2009, Babcock 1995, Anderson et al. in preparation).

Results

General Description of the Project Area

All 17 parcels within the Project area are rural, agricultural parcels, many of which have been historically farmed in hay or other silage crops in support of local dairy operations, primarily the Souza Dairy Farm, which includes much of the land within the Project area. The majority of the agricultural land has historically been devoted to the cultivation of hays, such as oat hay and alfalfa, which are used as silage or livestock feed. Several smaller parcels are used for cultivation of vegetable crops or as irrigated pastures for livestock grazing. There are several rural farm residences and associated farming-related facilities within the Project area, the largest of which is the Souza Dairy Farm.

Lands adjacent to the Project area include remaining portions of the undeveloped Southeast Policy Area, primarily contiguous with the southwest border of the Project area west to Bruceville Road, remaining undeveloped parcels within the Laguna Ridge Specific Plan Area, contiguous with the northwestern border of the Project area, and undeveloped Sterling Meadows and Elk Grove Promenade properties, contiguous with the southeastern border of the Project area. Together, these areas represent the last remaining undeveloped lands along the City's southern border. This area is surrounded on the north, west, and east by existing urbanization, mostly moderate to high density residential and commercial development. Open, agricultural land occurs south of the Project area (Figures 1 and 2).

Swainson's Hawk Nesting and Foraging Habitat

Foraging Habitat

Figure 4 illustrates the distribution of nesting and foraging habitat within the Project area. With the exception of rural development sites, the entire 924-acre area is considered suitable Swainson's hawk foraging habitat. Most of the Project area was part of the Souza Dairy, a large historic dairy farm in Sacramento County. Land uses include those that support dairy operations, including hayfields used to produce livestock feed, irrigated pastures used for livestock grazing, and fields used to cultivate vegetable crops. Table 1 lists each of the 17 parcels along with their associated land cover type and habitat suitability ranking as Swainson's hawk foraging habitat. The following briefly describes each of the major land uses.

Table 1. Land cover and habitat value rankings of Project parcels.

Table 1. Land cover and napitat value rankings of Froject parcels.			
Parcel	Acres	Land Cover	Habitat Value Rank
		Туре	(High, Moderate, Low)
1320290014 (1)	19.93	Irrigated Pasture	Moderate
1320290015 (2)	19.76	Hayfield	Moderate
1320290016 (3)	19.59	Hayfield	Moderate
1320290017 (4)	19.51	Irrigated Cropland	Moderate
1320290018 (5)	18.92	Irrigated Cropland	Moderate
1320290019 (6)	11.78	Hayfield	Moderate
1320290020 (7)	13.58	Hayfield	Moderate
1320290021 (8)	13.76	Hayfield	Moderate
1320290040 (9)	4:96	Developed	Low
1320290041 (10)	68.89	Hayfield	Moderate
1320300017 (11)	39.36	Irrigated Cropland	Moderate
1320300021 (12)	30.12	Irrigated Cropland	Moderate
1320300022 (13)	10.35	Irrigated Cropland	Moderate
1320320006 (14)	371.92	Hayfield/Irrigated Pasture	Moderate
1320320008 (15)	4.38	Developed	Low
1320320009 (16)	158.48	Alfalfa	High
1320320010 (17)	99.34	Alfalfa	High
Total Acres	924.63		

Hayfields

The majority of the Project area consists is of annually cultivated hayfields (Figure 4) (Plate 5). These fields (Parcels 2, 3, 6, 7, 8, 10, and 14) are cultivated and planted each year with a seasonal hay crop, such as oat hay, which is used as a silage or livestock feed. They typically require minimal to no irrigation depending on annual rainfall and receive a single cutting per season. Once cut, these fields are often left as stubble or disked in preparation for the next reseeding. These fields may also periodically be used for wheat, triticale, or other silage crops. Structurally, these fields resemble dry grasslands. They potentially support a variety of rodent

Figure 4 Figure 4 Land Use within the Phase I Area

11/10/01

species, including meadow voles (*Microtus californicus*); however, because they are disked and cultivated each year, rodent populations must re-inhabit fields following reseeding, similar to annually-rotated croplands. Like grassland habitats, these fields are typically accessible for foraging by Swainson's hawks most of the breeding season, with highest use during the harvesting of the hay crop. However, prey populations are likely unstable in these fields due to periodic disturbance from disking, cultivating, and harvesting operations. Overall, they are considered to have moderate foraging habitat value to Swainson's hawks.

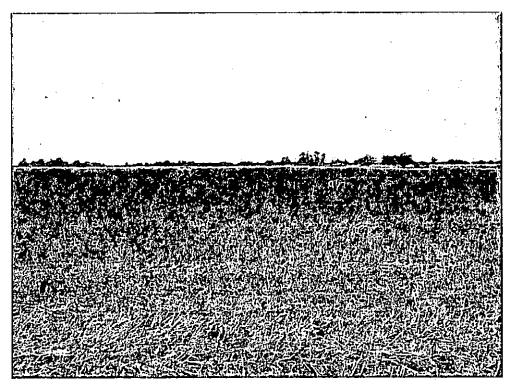


Plate 5. Cut hayfield in Parcel 14.

Alfalfa and Other Semi-perennial Hays

Parcels 16 and 17 are used primarily for alfalfa and other semi-perennial hays, such as orchard grass, burseem, or other clovers (Figure 4) (Plate 6). These fields are more frequently irrigated than annual hay crops, receive several cuttings per season, and remain uncultivated for at least three years. Because they are not annually cultivated, rodent prey populations are more stable. Hunting Swainson's hawks also respond to flood irrigation and mowing practices, both of which expose prey and increase accessibility to foraging hawks. As a result, these fields represent high value foraging habitat for Swainson's hawks.

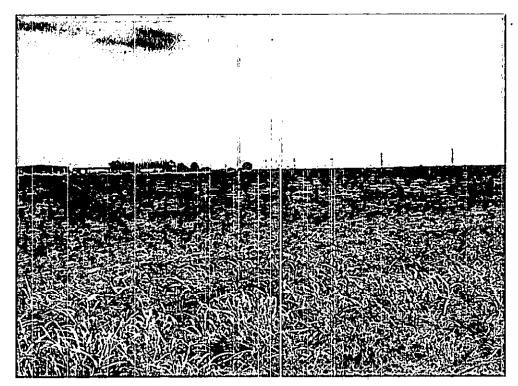


Plate 6. Recently mowed alfalfa field in Parcel 16.

Irrigated Pasture

Irrigated pastures are irrigated grasses that are grazed by livestock and may be periodically cut for hay. There are only four relatively small fields that appear to have been regularly managed as irrigated pastures in the Project area, including Parcel 1, small irrigated pastures adjacent to rural residences in Parcels 9 and 10, and adjacent to the dairy facility in Parcel 14 (Figure 4). These fields represent moderate value foraging habitat for Swainson's hawk.

Irrigated Cropland

Fields that are more regularly cultivated and planted with seasonal crops occur adjacent to the irrigated hayfields in parcels 2, 3 and 4 on the west side of the Project area and in Parcels 7 and 10, along the northern edge of the Project area (Figure 4). These fields were idle during the site visit. A review of historical aerial photos indicates that these fields were used mainly for truck farm vegetable crops. These seasonally or annually rotated croplands are considered moderate value foraging habitat for Swainson's hawk.

With the primary focus on hay production and livestock grazing, the majority of the Project area is available for foraging throughout the entire Swainson's hawk breeding season with approximately 71 percent of the area traditionally managed with moderate foraging value cover types and approximately 28 percent of the area traditionally farmed with high value cover types.

Nesting Habitat

Nesting habitat is present, but unevenly distributed within the Project area (Figure 4). There are several mature valley oak trees in Parcel 10, in the northeast corner of the Project area; a row of mature valley oak trees along the border of Parcels 8 and 10 (Plate 8); valley oak, eucalyptus, and other ornamentals along Poppy Ridge Road, the northern boundary of the Project area; several isolated and small groups of valley oak trees in Parcels 1, 2, 4, 5 and 8; numerous suitable trees around the Souza Dairy Farm facility in Parcel 14; several trees along the southern border of Parcel 11; and several willow trees along the remnant stream channel separating Parcels 14 and 15. There are also suitable nest trees around most of the rural farmsteads.

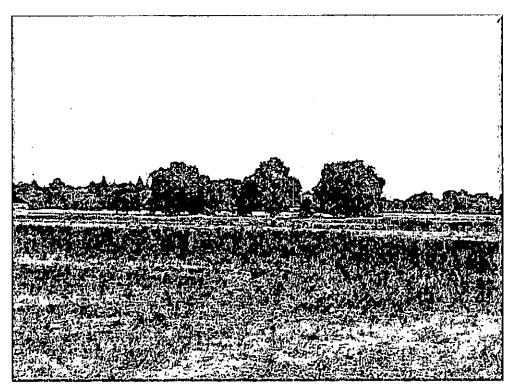


Plate 8. Valley oak trees along the border of Parcels 8 and 10.

Local Swainson's Hawk Nesting Distribution

Located in the middle of the Sacramento Valley, the Southeast Policy Area is situated within the interior of a dense Swainson's hawk nesting population. The availability of suitable nesting habitat associated with an agricultural landscape that is highly compatible with Swainson's hawk foraging needs has created a robust nesting population that extends throughout the lowland agricultural areas of Sacramento, Yolo, Solano, and San Joaquin Counties (Jones & Stokes 1990, Estep 2007, 2008, Anderson et al, 2007). More locally, because of extensive urbanization to the north, east, and west, the nesting distribution is limited primarily to lands around the immediate perimeter and south of the Southeast Policy Area. Figure 5 illustrates the distribution of reported Swainson's hawk nests in the immediate and surrounding vicinity of the Southeast Policy Area.

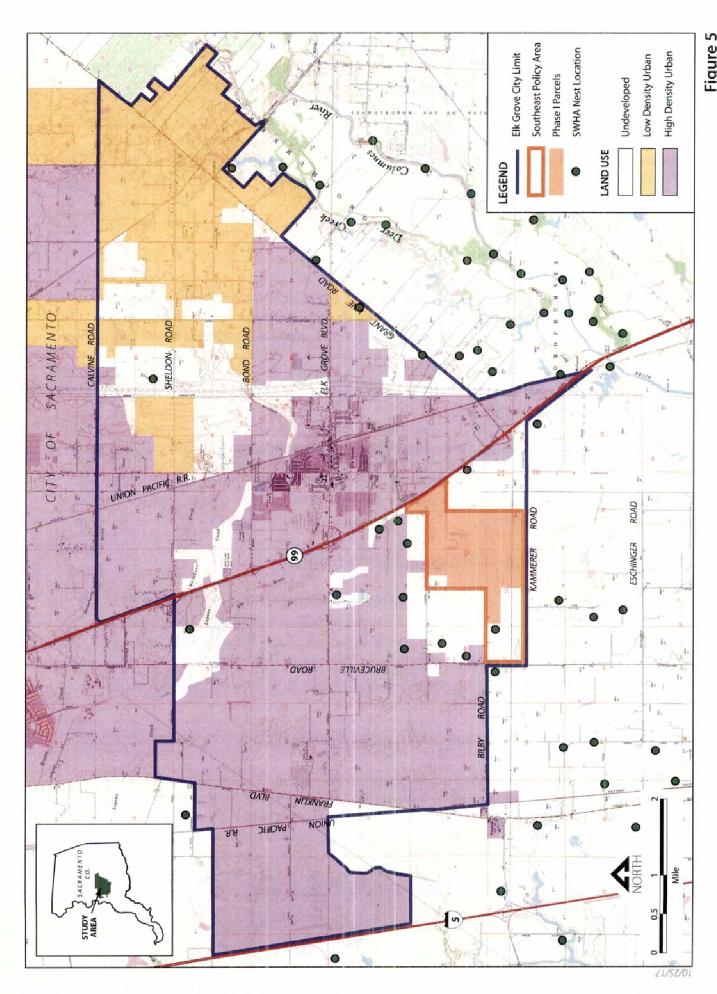


Figure 5 Swainson's Hawk Nest Locations in the Vicinity of the Phase I Parcels

Although suitable nesting and foraging habitat is available, there are no reported nest sites from the Project area. However, there are several reported nest sites in the immediate vicinity to the north and west of the Project area and numerous nests south of the Elk Grove city limit, particularly along the Cosumnes River corridor. Several of the sites within the city limits, last reported in 2012 (Estep 2012), may have since abandoned due to ongoing urbanization of the remaining portions of the Laguna Ridge Specific Plan Area. It is expected that active nest sites within the remaining undeveloped areas will eventually abandon as urbanization replaces farmland within the city limits of Elk Grove.

Summary

With the exception of several small rural residential residences and associated farmyards, the entire Project area supports suitable foraging habitat for Swainson's hawks. The annually harvested hays, irrigated cropland, and irrigated pastures all support moderately suitable foraging habitat conditions, and the alfalfa and other semi-perennial hay fields support high value foraging habitat conditions. Suitable nesting habitat is also available within the Project area, most occurring as isolated valley oak trees or small tree rows, trees around rural residences, roadside trees, and small groups of trees.

The Project area includes approximately one-half of the remaining undeveloped land along the southern border of Elk Grove. Several Swainson's hawk nest sites have been reported from this area (Figure 5), some of which may still remain active. However, with continued urbanization of the remaining open lands along the southern border of Elk Grove, these nesting territories are expected to eventually abandon.

The Van Vleck Ranch as a Mitigation Opportunity

The extent to which the Van Vleck Ranch can provide sufficient mitigation value to offset impacts from the Project will be addressed in a more comprehensive report. The following provides a brief summary of the habitat suitability assessment for Van Vleck Ranch (Estep 2016), a discussion of the potential inconsistencies with the Elk Grove Swainson's Hawk Mitigation Program; and an overview of the regional Swainson's hawk distribution relative to the Project area and Van Vleck Ranch sites.

Summary of Van Vleck Ranch Habitat Suitability Assessment

The 4,768-acre Van Vleck Ranch is located in eastern Sacramento County just southeast of Rancho Murieta, approximately 18 miles east-northeast of the Project Area. Most of the ranch supports suitable nesting and foraging habitat for the Swainson's hawk. The grassland prairies and irrigated pastures provide suitable foraging conditions and the cottonwood and oak groves and isolated trees provide suitable nesting habitat. Use of the ranch by nesting and foraging Swainson's hawks has been documented and a portion of the ranch is an approved mitigation bank for which Swainson's hawk credits are available. There is one documented nest on the

ranch and potential for others. Several documented nesting pairs north and west of the ranch are within foraging distance of the ranch.

Regional Nesting Distribution

Figure 6 illustrates the regional distribution of nesting Swainson's hawks relative to the Project area and the Van Vleck Ranch. The Van Vleck Ranch is on the eastern edge of the breeding range and is more distant from the high breeding density in the vicinity of the Project area. However, the ranch does support nesting Swainson's hawks, is well within the range of numerous nesting territories, and as noted above, provides an important source of stable foraging habitat within a natural landscape not subject to changes in habitat condition or value.

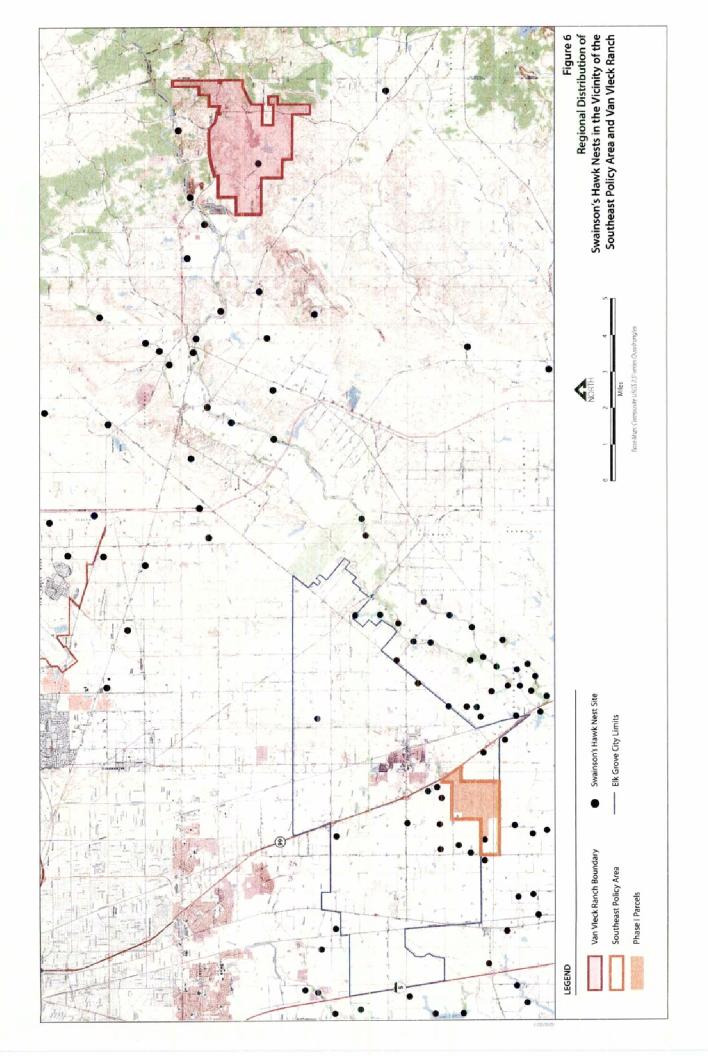
Elk Grove Swainson's Hawk Mitigation Program

The City of Elk Grove's Swainson's Hawk Mitigation Program (Elk Grove Municipal Code, Chapter 16.130 [Swainson's Hawk Impact Mitigation Fees]) provides a mechanism through which compensatory mitigation is used to offset land use impacts that remove suitable Swainson's hawk foraging habitat. Using guidance from the CDFW, the mitigation program establishes several key conditions related to securing appropriate replacement lands that meet the city's mitigation objective. Those that are relevant to this assessment and the potential for using the Van Vleck Ranch as a mitigation site include:

- Section 16.130.040 Conditions, Part A, which establishes a 1:1 mitigation ratio requirement, the use of conservation easements as an appropriate conservation instrument; and coordination with CDFW regarding the location of mitigation parcels.
- Section 16.130.040 Conditions, Part A-1, which states that mitigation parcels must be suitable Swainson's hawk foraging habitat, and
- Section 16.130.110 Authority of City Council to override mitigation measures, which allows the city flexibility to consider mitigation alternatives that do not fully meet the conditions in the Swainson's Hawk Mitigation Program in the event that other mitigation options are limited.

The Van Vleck Ranch supports suitable foraging habitat as evidenced by their existing Swainson's hawk mitigation bank permitted by CDFW and the habitat suitability assessment conducted in 2016 (Estep 2016). The ranch also has available acreage to accommodate the mitigation needs of the entire 924-acre Project. As a result, the Van Vleck Ranch meets the conditions related to habitat suitability and available acreage.

As indicated in the conditions noted above, the city would also typically coordinate with CDFW regarding the location of the mitigation lands. Although not specifically identified in the Swainson's Hawk Mitigation Program, CDFW has established internal guidance that addresses the location of the mitigation site and the proximity between the impact and mitigation sites. CDFW's preference is that mitigation be within 10 miles of the impact site and that the



mitigation site provides in-kind habitat replacement. The intent is to ensure a clear nexus between the impact and the mitigation.

Although coordination with and acceptance by CDFW is established in Section 16.130.040 Conditions, Parts A and A-1, the city retains the flexibility to pursue alternative mitigation scenarios as per Section 16.130.110 in the event mitigation options that meet CDFW guidance and that are economically and ecologically sound, are unavailable.

The Potential Mitigation Value of the Van Vleck Ranch

The Van Vleck Ranch supports a large contiguous block of suitable moderate- to high-value habitat for Swainson's hawks similar to the conditions in the Project area. Although, due to its location along the eastern edge of the Central Valley, the ranch does not support the nesting density found in the interior of the valley; it likely supports the breeding density that more closely resembles the historic pre-agricultural condition. The interior of the Central Valley is entirely under cultivation (or is urbanized) and while certain types of irrigated agriculture are beneficial and can increase local breeding density, these areas are also subject to agricultural economics and the potential for conversion to unsuitable agricultural uses. While currently supporting fewer nesting pairs, the largely uncultivated open grassland prairies around the perimeter of the valley have a vital role in the long-term sustainability of the Central Valley population by providing stable nesting and foraging conditions that more closely resemble the native pre-agricultural condition of the Central Valley. As a result, protection of these largely uncultivated landscapes is essential to provide secure habitat for the population.

In addition, the size and contiguity of the ranch lands provides a unique opportunity to secure protection for several thousand acres of grassland prairies, irrigated pastures, and oak woodlands within a natural setting that is not subject to habitat modification. Other large protected ranchlands are also in the vicinity of the Van Vleck Ranch, increasing the potential for protection of a large contiguous swath of natural lands across the region, and adding another important conservation property within the upper Cosumnes Faiver watershed and facilitating future connectivity with the Cosumnes River Preserve.

The CDFW concern with regard to distance from impact is certainly valid and should continue to be a focus of the overall mitigation program for Elk Grove and other jurisdictions. However, there are circumstances that necessitate a more thorough analysis to ensure that important opportunities such as providing permanent protection for the Van Vleck Ranch are explored and considered in a more comprehensive approach to protecting and maintaining the regional Swainson's hawk breeding population.

Literature Cited

- Airola, D. A., J. A. Estep, D. Anderson, and D. Krolick. In preparation.

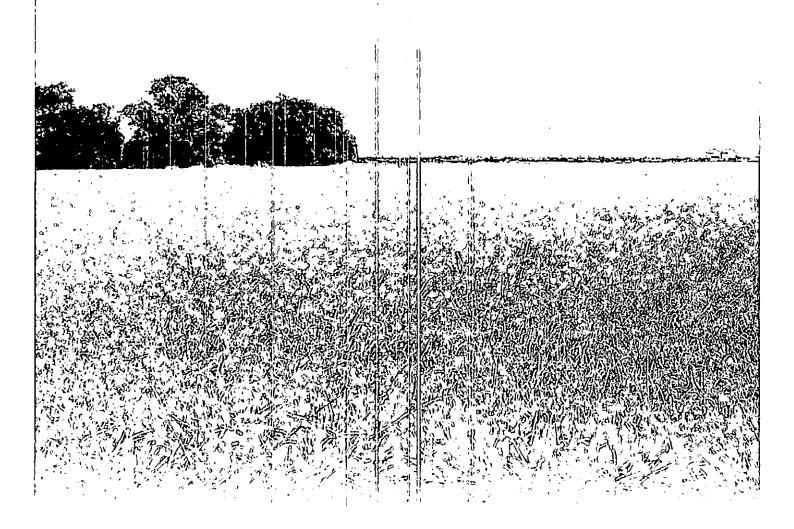
 Migratory Patterns and Wintering Range of the Central Valley Swainson's Hawk.
- Anderson, D. R., M. Bradbury, C. Chun, J. Dinsdale, J. Estep, K. Fein, and R. Schlorff. 2007. California Swainson's hawk inventory: 2005-2006; Draft Report. California Department of Fish and Game, Resource Assessment Program.
- Anderson, D.R., J. Dinsdale, N. Nur, S. Veloz, C. Battistone, J. Estep. In preparation. Use of agricultural foraging habitat by Swainson's hawks in the Central Valley of California. California Department of Fish and Wildlife, Sacramento, CA.
- Babcock, K. W. 1995. Home Range and Habitat Use of Breeding Swainson's Hawks in the Sacramento Valley of California. Journal of Raptor Research 29:193–197.
- Bechard, M. J. 1982. Effect of Vegetative Cover on Foraging Site Selection by Swainson's Hawk. Condor 84:153–159.
- Bloom, P. H. 1980. The Status of the Swainson's Hawk in California. California Department of Fish and Game, Nongame Wildlife Investigations. Project Report W-54-R-1'2, Sacramento, California.
- Briggs, C. 2007. Survival and nesting ecology of the Swainson's hawk in Butte Valley, California. M.S. Thesis, University of Nevada, Reno.
- England, A. S., J. A. Estep, and W. Holt. 1995. Nest-Site Selection and Reproductive Performance of Urban-Nesting Swainson's Hawks in the Gentral Valley of California. Journal of Raptor Research 29(3):179–186.
- England, A.S., M.J. Bechard, and C.S. Houston. 1997. Swainson's Hawk (Buteo swainson). In Birds of North America no. 265 (A. Poole and F. Gill [eds.]). The Academy of Natural Sciences, Philadelphia, PA, and The American Ornithologists' Union, Washington, D.C.
- Estep, J.A. 1989. Biology, movements, and habitat relationships of the Swainson's Hawk in the Central Valley of California, 1986-87. California Department of Fish and Game. Unnumbered Report.
- 2007. The Distribution, Abundance, and Habitat Associations of the Swainson's Hawk (*Buteo swainsoni*) in South Sacramento County. Prepared by Estep Environmental Consulting for the City of Elk Grove, CA.
- 2008. The distribution, abundance, and habitat relationships of the Swainson's hawk in Yolo County. Prepared for the Yolo County Natural Heritage Program, Woodland, CA.

- . 2009. The influence of vegetation structure on Swainson's hawk foraging habitat suitability in Yolo County. Prepared for the Yolo Natural Heritage Program.
- . 2012. The Distribution, Abundance, and Habitat Associations of the Swainson's Hawk (Buteo swainsoni) in the City of Elk Grove and Proposed Expansion Area; Results of 2012 Surveys. Prepared by Estep Environmental Consulting for the City of Elk Grove.
- 2016. Habitat Suitability Assessment for the State-listed Swainson's Hawk on the Van Vleck Ranch. Sacramento, CA. Prepared by Estep Environmental Consulting for Downy Brand, LLC, Sacramento CA.
- Estep, J. A., and J. Dinsdale. 2012. Distribution, abundance, and habitat associations of nesting Swainson's hawks in the Central San Joaquin Valley. Central Valley Bird Club Bulletin 15(4):84-106.
- Fleishman, E., J. Anderson, B.G. Dickson, D. Krolick, J.A. Estep, R.L. Anderson, C.S. Elphick, D.S. Dobkin, and D.A. Bell. 2016. Space use by Swainson's hawk (*Buteo swainsoni*) in the Natomas Basin, California. Collabra 2(1):5 pp1-12.
- Jones & Stokes. 1990. Preliminary administrative duaft habitat conservation plan for the Swainson's hawk in San Joaquin County. (JSA 90-039.) Sacramento, CA. Prepared for the City of Stockton Community Development Department, Planning Division, Stockton, CA.
- Kochert M. N., M. R. Fuller, L. S. Schueck, L. Bond, M. J. Bechard, B. Woodbridge, G. L. Holroyd, M. S. Martell, and U. Banasch. 2011. Migration areas, use of stopover areas, and austral summer movements of Swainson's hawks. The Condor 113(1):89-106.
- Sharp, C. S. 1902. Nesting of Swainson's hawk. Condor 4:116–118.
- Woodbridge, B. 1991. Habitat selection by nesting Swainson's hawks: a hierarchical approach. M.S. thesis, Oregon State University., Corvallis.

	ATTACHMENT B
	Swainson's Hawk Habitat Suitability Assessment for Van Vleck Ranch
•	
	·

Habitat Suitability Assessment for the State-listed Swainson's Hawk within the City of Elk Grove's Southeast Policy Area, Sacramento County

October 2017



Prepared for:

Van Vleck Family

and

Kamilos Companies

Prepared by:

Estep Environmental Consulting

Habitat Suitability Assessment for the State-listed Swainson's Hawk within the City of Elk Grove's Southeast Policy Area, Sacramento County

Prepared for:

Van Vleck Family 7879 Van Vleck Road Rancho Murieta, CA 95683

and

Kamilos Companies 11249 Gold Country Blvd Gold River, CA 95670

Prepared by:

Estep Environmental Consulting 3202 Spinning Rod Way Sacramento, CA 95833

Introduction

Background and Purpose

The Van Vleck Ranch is a 4,768-acre working ranch located in eastern Sacramento County, just east of the community of Rancho Murieta (Figure 1). Located along the eastern edge of the Central Valley as it transitions into the Sierra Nevada foothills, the ranch is a large, undeveloped, and ecologically diverse landscape consisting primarily of low elevation grassland prairies and irrigated pasturelands and hayfields. Within this broad, open landscape, the ranch also supports vernal pools, ponds and associated wetland habitats, riparian woodlands, cottonwood groves, oak groves, a reservoir, and isolated oak and cottonwood trees.

The state-listed Swainson's hawk (*Buteo swainsoni*) occurs throughout much of the Central Valley and perimeter foothills in generally flat, open cultivated and grassland communities. Its breeding range extends into the low-elevation foothills of eastern Sacramento County including the entire Van Vleck Ranch. Unlike the interior of the Central Valley, which is entirely under intensive cultivation, the ranch supports habitat for the Swainson's hawk that more closely resembles its historic pre-agricultural range and a more ecologically diverse and stable environment that is less dependent on agricultural management practices to provide suitable habitat conditions.

The interest of the Van Vleck Ranch is to continue operating as a working cattle ranch with managed grazing throughout the prairie grasslands and production of feed crops in their cultivated fields. As a result, there may be opportunities for permanent conservation of the ranch through the establishment of perpetual easements that offset habitat impacts to the Swainson's hawk occurring elsewhere in the region. Westervelt Ecological Services currently operates a mitigation bank on 778 acres of the ranch, where mitigation credits are available to offset habitat impacts to Swainson's hawk and other special-status species. With the potential for additional mitigation opportunities at the ranch, particularly for Swainson's hawk habitat, the Van Vleck Ranch is interested in evaluating the extent to which remaining portions of the ranch are suitable for Swainson's hawk use and that may be appropriate for mitigation purposes. This assessment was conducted to determine the extent and quality of Swainson's hawk nesting and foraging habitat on the remaining 3,990 acres of the Van Vleck Ranch.

Location

The Van Vleck Ranch is located in eastern Sacramento County just southeast of Rancho Murieta. The property borders Jackson Highway (SR 16) on the north, and extends from 1 to 2.5 miles south of Jackson Highway, and from 0.25 to 1 mile east of Ione Road, which extends southward through the eastern portion of the ranch. There is also one parcel that extends north of Jackson Highway, east of Ione Road (Figure 2).

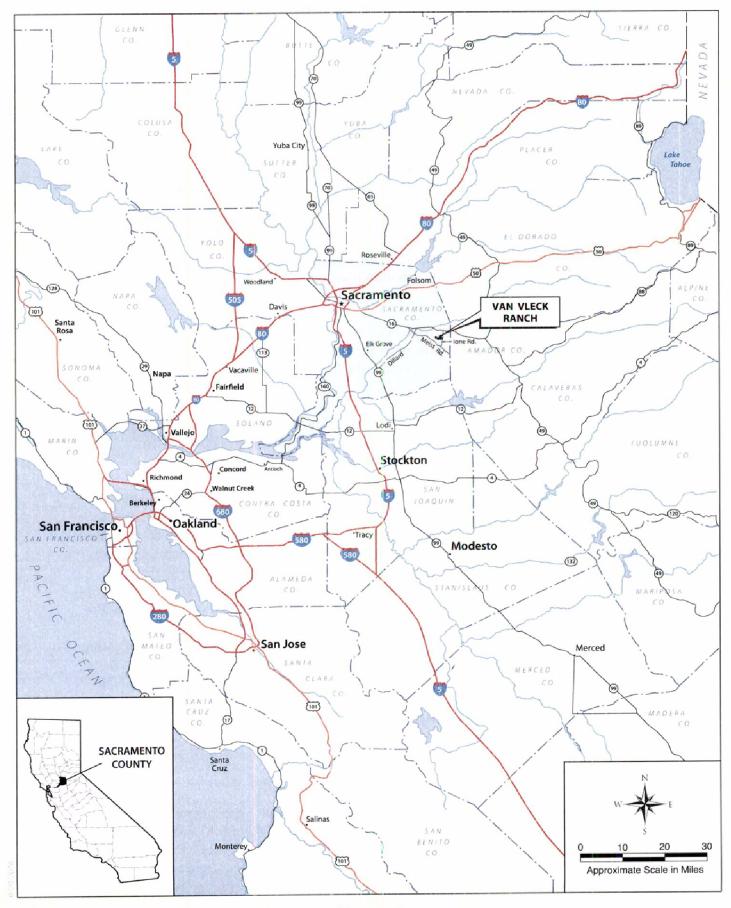


Figure 1 Regional Location of the Van Vleck Ranch

Figure 2 Van Vleck Ranch

Species Background

Swainson's Hawk Natural History

Description

The Swainson's hawk is a medium-sized buteo most often characterized by its long, narrow, and tapered wings held in flight in a slight dihedral shape (Plate 1). The body size is somewhat smaller, thinner, and less robust than other buteos, although the wings are at least as long as other buteos. This body and wing shape allow for efficient soaring flight and aerial maneuverability, important for foraging, which Swainson's hawks do primarily from the wing, and during courtship and inter-specific territorial interactions.

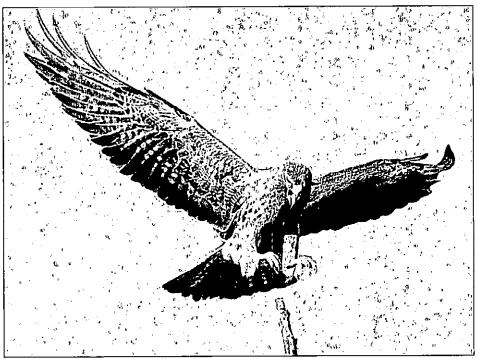


Plate 1. Adult Swainson's hawk showing the long, tapered wings that allow for efficient soaring and flight maneuverability.

There are three definitive plumage morphs: light, rufous, and dark, with numerous intermediate variations between these plumage morphs. The two most distinguishing plumage characteristics are a dark breast band and the contrasting darker flight feathers and lighter wing linings on the underwings giving most individuals a distinctive bicolored underwing pattern (Plate 2). These characteristics are most pronounced in lighter morph birds and become less so as the plumage darkens, and can be indistinguishable in the definitive dark morph, which is completely melanistic. All three definitive plumage morphs are present in California, with a relatively large proportion of the population categorized as intermediate between the definitive morphs, with varying amounts of streaking or coloration in the belly and wing linings.

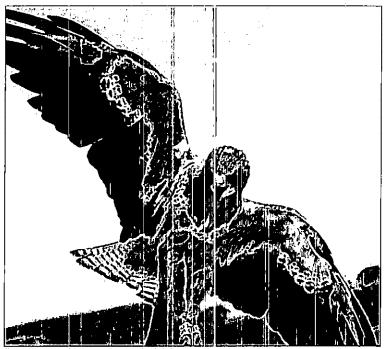


Plate 2. Light Morph Adult Swainson's Hawk

Breeding Range

Swainson's hawks inhabit grassland plains, shrublands, and agricultural regions of western North America during the breeding season and inhabit similar habitats from Central Mexico to southern South America during the migration and winter non-breeding seasons (England et al. 1997; Kochert et al. 2011, Bradbury et al. in preparation). Early accounts described Swainson's hawk as one of the most common raptors in the state, occurring throughout much of lowland California (Sharp 1902). Since the mid-1800s, the native habitats that supported the species have undergone a gradual conversion to agricultural uses, or as in the case of southern California coastal valleys, to urbanization. Today, with the exception of desert scrub communities in the high desert regions of the state and the grassland prairie and oak savannah communities around the perimeter of the Central Valley, native landscapes that supported nesting and foraging Swainson's hawks are virtually nonexistent. This habitat loss is thought to have caused a substantial reduction in the breeding range and in the size of the breeding population in California (Bloom 1980; England et al. 1997). The current range of the species in California includes the Central Valley, the high desert regions and valleys of northeastern California, the east side of the Sierra Nevada from Owens Valley and extending southwestward into the western Mojave Desert in the vicinity of Antelope Valley (Figure 3).

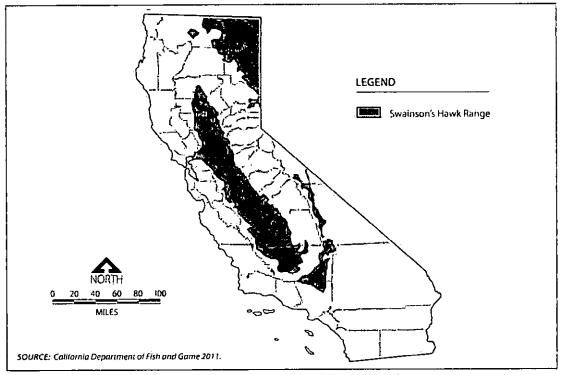


Figure 3. The breeding range of the Swainson's hawk in California.

Despite the loss of native habitats throughout the species' range in California, Swainson's hawks appear to have adapted relatively well to certain types of agricultural patterns in areas where suitable nesting habitat remains. Today, the species is most abundant in landscapes that are entirely under cultivation. The largest segment of the statewide population is in the Central Valley, with the highest nesting densities occurring in Yolo, Sacramento, Solano, and San Joaquin Counties (Bloom 1980, Estep 2007, 2008, Anderson et al 2007), and where the species is nearly entirely dependent on cultivated foraging habitats. The nesting distribution in the Central Valley largely follows the distribution of suitable hay, grain, and row crop agriculture compatible with the foraging requirements of the Swainson's hawk and where it occurs in association with suitable nesting habitat (Anderson et al. 2007, Estep and Dinsdale 2012). Uncultivated grassland communities, particularly around the perimeter of the Central Valley, support lower breeding density, but remain an essential component of the overall foraging landscape for Swainson's hawks by providing a stable natural community that more closely resembles the historic native landscape.

The dependency on cultivated habitats also has potential negative implications related to landscape-level management of the species. Cultivated landscapes are subject to agricultural economics and changes in crop patterns, which can affect the distribution and abundance of the regional nesting population. This further emphasizes the importance of protecting uncultivated natural communities, particularly grassland prairies, within the breeding range to ensure long-term persistence of the species.

Habitats and Habitat Use

Nesting

Nesting habitat is variable throughout the species range. In the Central Valley, Swainson's hawks nest in large native trees such as valley oak (*Quercus lobata*), cottonwood (*Populus fremontia*), walnut (*Juglans californica*), and willow (*Salix spp.*), and in nonnative trees, such as eucalyptus (*Eucalyptus spp.*) and ornamental pine trees. Prior to agricultural conversion, Central Valley populations nested primarily in riparian woodlands and on the edges of oak woodlands. Today, in addition to riparian and remnant oak woodlands, the species nests in roadside trees, trees along field borders, isolated trees, trees around farm houses and farmyards, and in urban areas that are adjacent to cultivated lands (England et al. 1995, Estep 2007, 2008) (Plate 3).

Nesting habitat within the low-elevation grassland prairies on the east side of the Central Valley includes riparian woodlands, isolated trees, cottonwood and willow trees associated with wetland habitats formed within historic mine tailings, and patches of oak woodland. Recently documented activity near lone includes nests in blue oak (Quercus douglasii) and live oak (Quercus wislizeni) groves.

Nesting pairs are highly traditional in their use of nesting territories. Many monitored nesting territories in the state have been occupied annually since at least the early 1980s and banding studies conducted since 1986 confirm a high degree of territory and mate fidelity (Woodbridge 1991, Briggs 2007, Estep *in progress*).



Plate 3. Typical Swainson's hawk nest in a willow tree (center of photo). Nests are often inconspicuous and difficult to see. The white objects in the nest are downy nestlings.

Foraging

Swainson's hawks are plains or open-country hunters, requiring large open landscapes for foraging. Historically, the species hunted the grasslands of the Central Valley and coastal valleys and the open desert scrub and shrublands in high desert regions. With the cultivation of virtually all of the Central Valley, and a portion of the high desert region, Swainson's hawk foraging has largely shifted onto agricultural lands that provide a dynamic, regularly manipulated landscape that maximizes prey populations and accessibility of rodent prey (Estep 1989, Babcock 1995, Woodbridge 1991).

Foraging habitat use, particularly agricultural foraging habitat, is largely a function of two primary variables: abundance of prey and amount of vegetative cover that affects access to prey (Bechard 1982, Estep 1989, 2009). Suitability is in part a function of changing vegetation structure throughout the growing season, which influences prey accessibility. Agricultural cover types that provide suitable foraging habitat conditions include hay, grain and row crops, fallow fields, and irrigated and dryland pasture. Alfalfa fields provide the highest value due to vegetation structure and compatible farming practices (Plate 4). The matrix of these cover types can create a dynamic foraging landscape as temporal changes in vegetation results in changing foraging patterns and foraging ranges (Estep 1989, Babcock 1995). Uncultivated habitats, such as grasslands, shrub-steppe communities in northeastern California, and desert scrub in the Mojave Desert provide more stable, consistent habitat value (Plate 5). However, although maintaining these remaining native landscapes within the range of the species is essential for long-term persistence, they probably do not provide the extent of available prey resources that would support the artificially-high breeding densities found in some cultivated habitats.

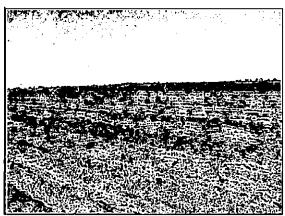


Plate 4. Alfalfa fields have consistently low vegetation structure and can support abundant and highly accessible rodent prey.

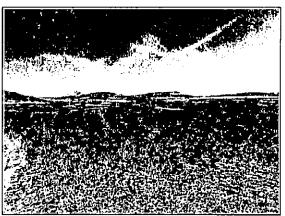


Plate 5. Grasslands also provide consistent value and represent the native, landscape. condition necessary for long-term persistence of the species.

Methods

I conducted a field assessment of the Van Vleck Ranch September 7, 2016. The assessment was conducted by visiting all areas of the ranch to document and evaluate habitat suitability for nesting and foraging Swainson's hawks. Ranch roads provided excellent access to most areas of the ranch, and I was able to access the majority of the ranch by vehicle. I also walked to the relatively few inaccessible areas where ranch roads were not available. All lands were evaluated with regard to their potential use by nesting and foraging Swainson's hawks, including examination of vegetation type and structure, rodent prey availability and accessibility, and an evaluation of nesting habitat on and in the vicinity of the ranch. Land uses and habitats were mapped on USGS quadrangle field maps and acrial photos. Photographs were taken of representative locations and habitats. I also conducted an earlier assessment and Swainson's hawk survey of the mitigation bank area on May 12, 2016. During the May 12 survey, all trees on and surrounding the mitigation bank were also checked for the presence of active Swainson's Hawk and other raptor nests using binoculars and spotting scope.

Nesting and foraging habitats for the Swainson's hawk are evaluated on the basis of distribution and abundance of suitable nest trees, topography, the location of the ranch relative to the current breeding range of the species, and the extent, type, vegetative composition and structure, and management of the land uses.

Results

General Description of the Ranch

The Van Vleck Ranch occurs within the transition between the flat, cultivated lands of the Central Valley and the low-elevation foothills of the western Sierra Nevada. As a result, it includes conditions characteristic of and unique to the eastern edge of the Central Valley. In general, the topography ranges from flat to gently rolling hills, with elevations ranging from approximately 170 to 300 feet above mean sea level. The most significant natural feature on the ranch is Arkansas Creek, which extends east-west through the center of the ranch. The eastern portion of the creek remains as a stream/riparian corridor. Just west of lone Road, the creek emptied into a shallow seasonal lake basin. A dam was constructed decades ago along the creek near the center of the ranch, which allowed for the formation of small reservoir (incorporating the seasonal lake), and allowed for water management of the downstream irrigated portion of the ranch. The reservoir and associated wetlands provide habitat for a variety of wildlife including wintering waterfowl, while the irrigated pasture along the lowland portion of the ranch below the dam is grazed and periodically mowed

The landscape surrounding Arkansas Creek and the reservoir is primarily open moderately-grazed grassland prairie. Much of this area is relatively flat or gently rolling low elevation foothills. Within this landscape are other unique communities, including

vernal pools and swales, ponds with emergent wetlands and cottonwood groves, live oak groves and savanna, and cottonwood groves associated with past mining activities. There are also rows of cottonwood trees along field borders, and scattered cottonwood, valley oak, and live oak trees.

While the majority of the ranch is open grassland prairie or irrigated pastureland, the extent of live oak woodland increases east of Ione Road. Still primarily open grassland, oak groves and oak savannah are more prevalent in this area, and continue to increase further eastward beyond the ranch boundary. With the exception of the main ranch headquarters near the west end of the ranch, which consists of a three residences, barns, shops, corrals, and other outbuildings, a single residence near the north ranch entrance, and two centrally-located hay barns, there are no structures anywhere on the entire 4,568-acre ranch (Plates 6 through 11).

The landscape surrounding the ranch includes similar grassland, cultivated, and woodland communities, but also increasing urbanization. The landscape north of Jackson Highway includes similar open grasslands and oak groves and an extensive riparian system along the east-west flowing Cosumnes River, just north of the ranch. Toward the south, rolling grassland hills give way to additional cultivated land east of lone Road and further eastward toward the mid-elevation foothills. Toward the west, the landscape remains relatively flat as it extends toward the largely cultivated landscape of the Central Valley. The residential community of Rancho Murieta is located northwest of the ranch on the north side of Jackson Highway. The most recently developed area is immediately north of the ranch (Figure 2).



Plate 6. Typical grassland prairie community on the Van Vleck Ranch.

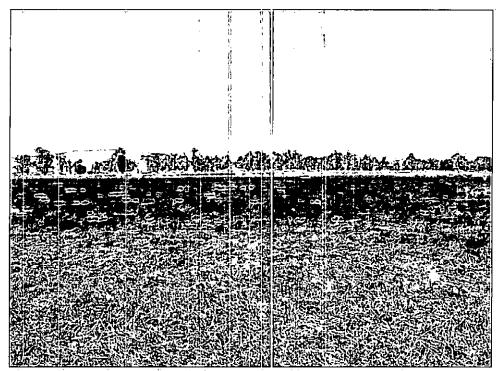


Plate 7. Irrigated pasture/hayfields on the Van Vleck Ranch, with a large cottonwood grove in the background bordering the pasture. Looking south from near the west-central end of the ranch.



Plate 8. Looking southeast from the west end of the reservoir showing the open grassland prairie and scattered trees surrounding the reservoir.

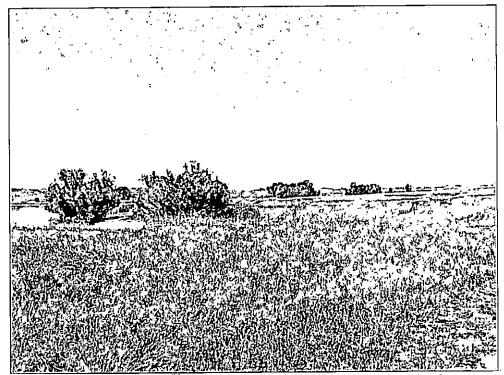


Plate 9. Arkansas Creek at the east end of the reservoir supporting riparian and wetland communities. The surrounding landscape is primarily low elevation grassland prairie.

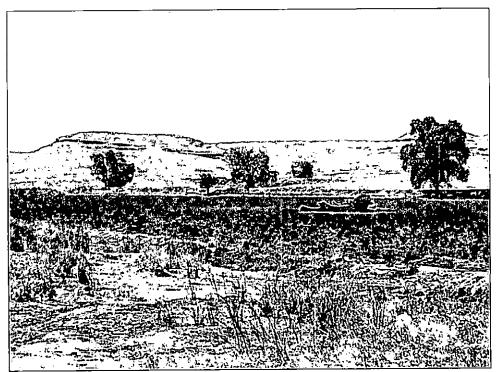


Plate 10. Looking southeast from the interior of the ranch toward the irrigated pasture and grassland hills beyond. Note the mature valley oak and cottonwood trees along the edge of the pasture.

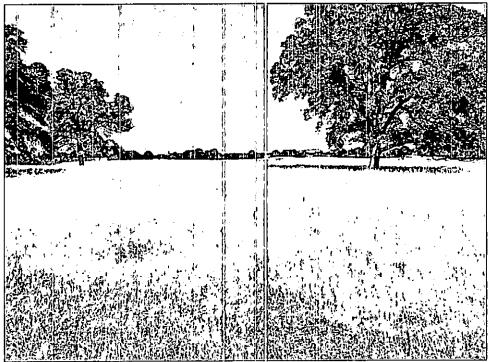


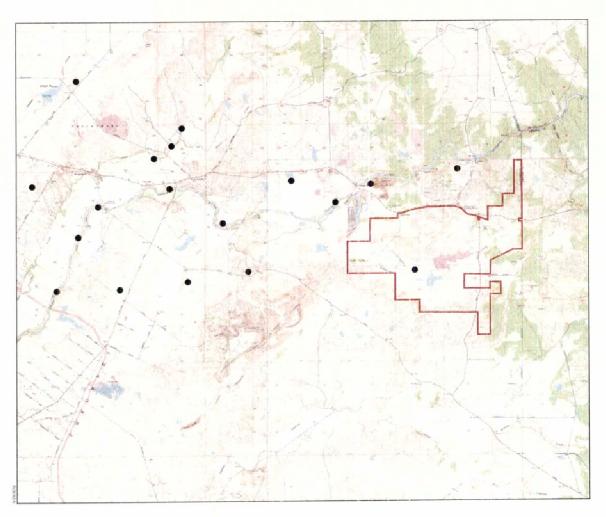
Plate 11. Open grassland prairie with scattered oak woodland communities east of Ione Road

Local and Regional Swainson's Hawk Nesting Distribution

The Van Vleck Ranch is on the eastern edge of the Swainson's hawk breeding range. This is an area that retains habitat conditions that most resemble historic nesting and foraging conditions. While much of the nesting population in the interior of the valley is associated with non-native nest trees and cultivated foraging habitats, nesting pairs in this area are more closely associated with native nesting trees and open grassland or pastureland communities and are less subject to changes in landscape conditions, such as urbanization and conversion to unsuitable crop patterns. Nest distribution also more likely resembles the historic distribution compared with the dense nesting distribution found in some cultivated landscapes in the interior of the valley.

Figure 4 illustrates the nesting distribution in the vicinity of the ranch. All are within foraging distance of the ranch. There are four documented sites within 2 to 3 miles of the ranch and one documented nest site on the ranch. The nest is in one of two mature cottonwood trees located in the center of the ranch, west of the reservoir (Plate 12). Several other nest sites occur further westward. It is also likely that other unreported sites occur on and in the vicinity of the ranch. Note that only the area in the immediate vicinity of the mitigation bank area has been surveyed for nesting Swainson's hawks. It is very likely that other nesting pairs occur on and in the vicinity of the ranch.

During the May 12, 2016 field assessment, four adult Swainson's hawks were observed flying above the central and eastern portion of the ranch. One of these adults was the





male from the nest noted above. These birds were engaged in territorial behavior, indicating the possibility of at least one additional nesting pair in the immediate vicinity. Once the territorial behavior had terminated, these birds continued foraging in the grasslands north and south of the reservoir.

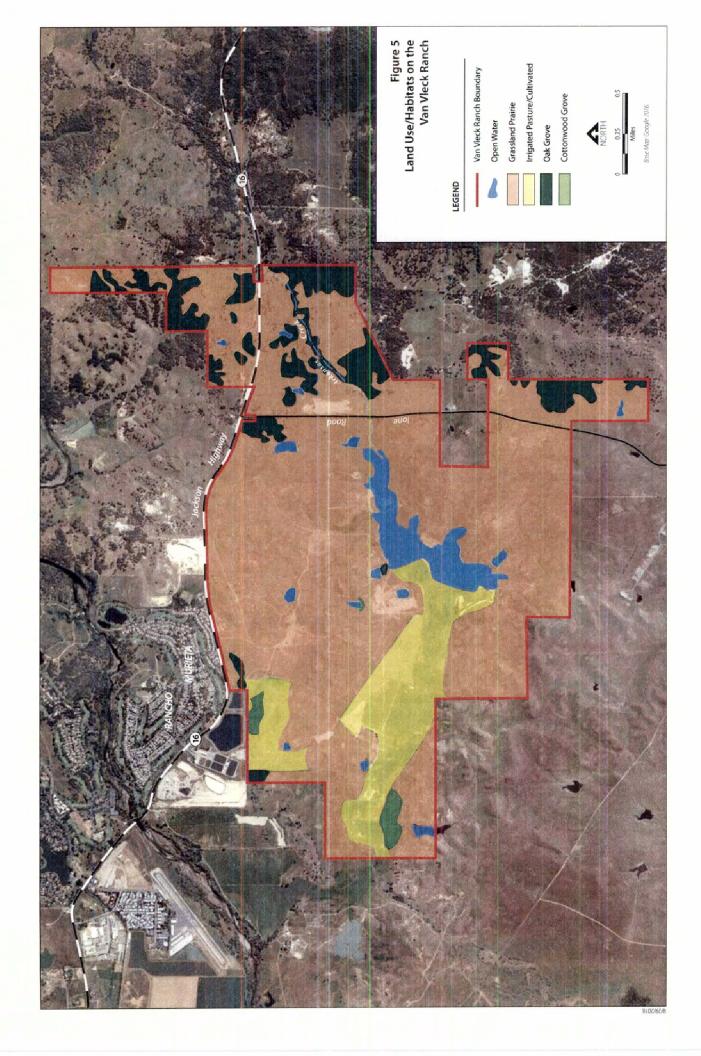


Plate 12. Swainson's hawk nest tree (on right) located just north of the mitigation bank on Van Vleck Ranch.

Swainson's Hawk Nesting and Foraging Habitat

Figure 5 illustrates the distribution of nesting and foraging habitat on the Van Vleck Ranch. Plates 13 through 26 show a variety of examples of nesting and foraging habitat conditions on the ranch. The entire ranch is within the breeding range of the Swainson's hawk and with the exception of open water habitats, the entire ranch is considered suitable nesting or foraging habitat.

There are two types of foraging habitat on the ranch, irrigated pasture and grassland prairie. Grassland prairie is the most common habitat type on the ranch, occupying most of the low, hilly terrain and interspersed with vernal pools and swales and stock ponds (Figure 5). These grasslands consist of dense to sparse cover of annual grasses that often grow with a variety of showy annual forbs (both native and non-native). Common plant species found in annual grasslands include wild oats (Avena fatua), bromes (Bromes spp), fescues (Festuca spp), barbed goatgrass (Aegilops triuncialis), Italian ryegrass (Lolium multiflorum), mustards (Brassica spp), filarees (Erodium spp), yellow star-thistle (Centaurea solstitialis), and other forbs.



Annual grasslands provide variable suitability as Swainson's hawk foraging habitat depending on composition, management, and prey abundance, but are generally considered to have at least moderate value as foraging habitat (compared with some irrigated crops). The grasslands on the Van Vleck Ranch are moderately grazed and maintained in a condition that promotes good prey availability and accessibility for foraging Swainson's hawks. Evidence of vole (*Microtis californicus*) and pocket gopher (*Thomomys bottae*) activity, the primary rodent prey species for Swainson's hawk, was noted throughout the ranch.

Although supporting lower breeding densities of Swainson's hawks compared with irrigated cropland in the interior of the Central Valley, grasslands provide stable foraging conditions that are not subject to changing agricultural patterns and thus are essential to the long-term's ustainability of Central Valley populations. Grassland habitats more closely resemble the historic pre-agricultural foraging landscape of Swainson's hawks and provide increasingly important habitat for the segment of the breeding population that nests along the eastern edge of the Central Valley.

Suitable nest trees occur throughout the ranch in association with the grassland prairie foraging habitat. These include oak groves, cottonwood trees around ponds, and scattered isolated trees (Figure 5).

In addition to the grassland prairies, irrigated pastures occur in the low-lying basin along Arkansas Creek extending from the reservoir to the western edge of the ranch. Other irrigated pastures occur in the northwest corner of the ranch (Figure 5). These areas are planted with a variety of pasture grasses and breadleaves, including ryegrass, orchard grass, and clovers. They are managed with flood irrigation, moderate grazing, and are periodically hayed for livestock feed. All of these activities attract and are beneficial to foraging Swainson's hawks. Irrigated pastures that are light- to moderately-grazed and periodically hayed are considered high value foraging habitat for Swainson's hawks due to abundant prey resources and low vegetative structure. Evidence of vole and pocket gopher activity was also noted throughout the irrigated pasture areas

Abundant nesting habitat also occurs in association with the irrigated pastures, including cottonwood groves, tree rows, and isolated cottonwood and oak trees.

Overall, the low elevation grassland prairies interspersed with the irrigated pastures, and in association with numerous potential nest trees, provides a highly suitable nesting and foraging landscape for the Swainson's hawk. On the easternmost areas of the ranch, east of Ione Road, live oak groves are a greater proportion of the landscape and are interspersed within the open grassland prairie community. Although this area is more densely wooded on the extreme eastern edge of the Central Valley breeding range, the oak groves provide suitable nesting trees and the open grasslands are suitable foraging habitat. Throughout the current range of the species, these types of habitats support lower breeding densities; however, in recent years, nesting pairs have been found in similar habitats including similar oak woodlands near Ione, southeast of the ranch.

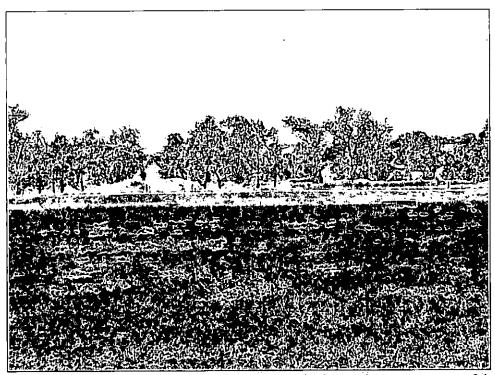


Plate 13. Irrigated pasture and cottonwood grove in the southwestern corner of the ranch. This is considered high value nesting and foraging habitat for the Swainson's hawk.



Plate 14. The west-central end of the ranch is characterized by flat, open grasslands with scattered trees.

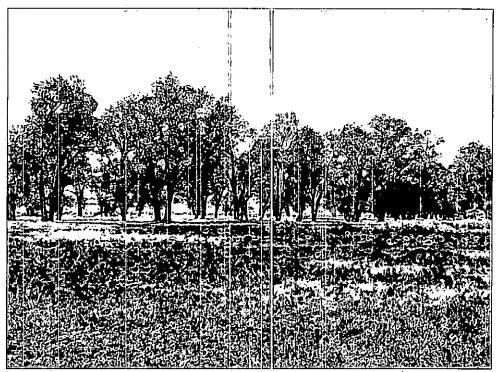


Plate 15. Cottonwood grove near the northwest corner of the ranch. This is high value nesting habitat entirely surrounding by grassland and irrigated pasture foraging habitat.



Plate 16. Open pastureland near the northwest corner of the ranch. The combination of suitable nesting and foraging habitats is ideal for Swainson's hawks and other raptors.

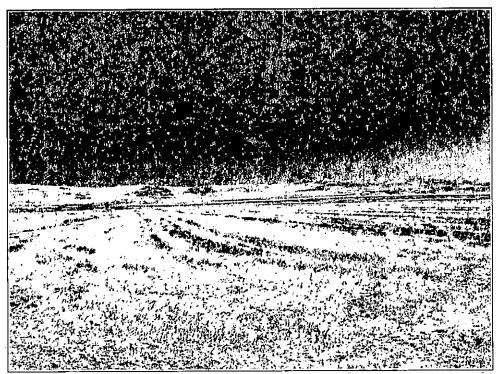


Plate 17. Grassland prairie on the north-central portion of the ranch. There are fewer trees in this immediate area, but many occur nearby.



Plate 18. Looking southeast toward the central ranch showing the transition between the irrigated pasture and the grassland habitats. Suitable nest trees are scattered throughout this area.



Plate 19. Cottonwood trees around a stock pond in the north-central part of the ranch. This is another good nesting-foraging habitat association.

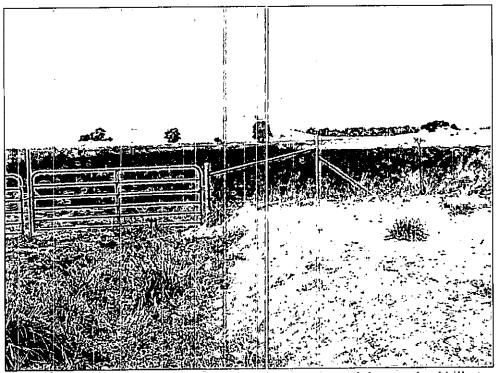


Plate 20. Looking south across the irrigated pasture toward the grassland hills on the far south side of the ranch.

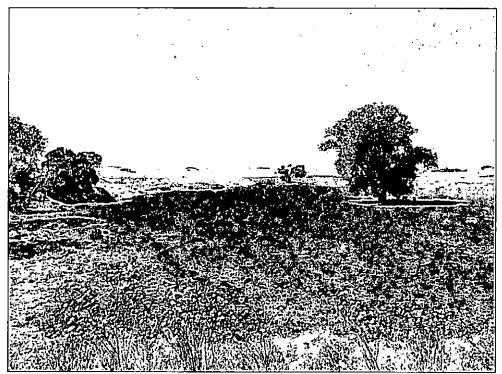


Plate 21. Looking west from the reservoir dam road toward the easternmost extent of the irrigated pasturelands.

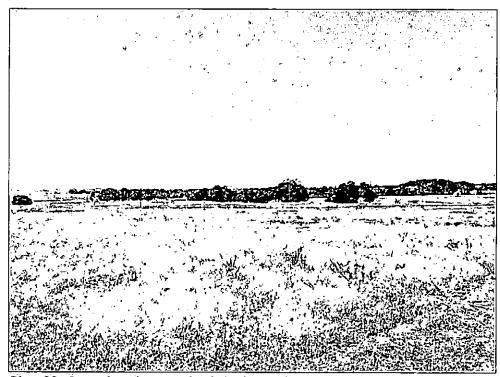


Plate 22. Low elevation grasslands in the northeast corner of the ranch, west of Ione Road.



Plate 23. Looking southwest from near the intersection of Jackson Highway and Ione Road.

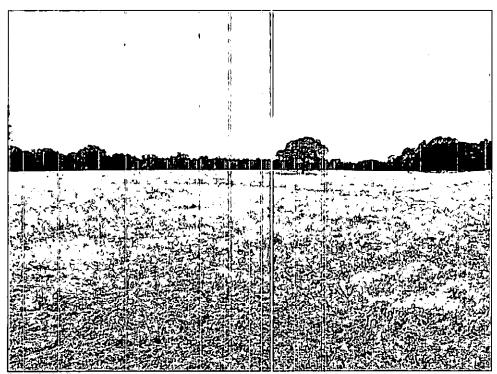


Plate 24. Open grassland prairie surrounded by oak woodland in the far eastern part of the ranch, east of Ione Road and south of Jackson Highway.



Plate 25. Open grasslands with adjacent oak grove in the far northeast corner of the ranch, north of Jackson Highway and east of Ione Road.



Plate 26. Open grassland prairie on the far southeastern corner of the ranch, east of Ione Road.

Summary

The entire Van Vleck Ranch supports suitable nesting and foraging habitat for the Swainson's hawk. The grassland prairies and irrigated pastures provide suitable foraging conditions and the cottonwood and oak groves and isolated trees provide suitable nesting habitat. Use of the ranch by nesting and foraging Swainson's hawks has been documented and a portion of the ranch is an approved mitigation bank for which Swainson's hawk credits are available. Remaining areas of the ranch provide at least similar habitat value. There is one documented nest on the ranch and potential for others. Several documented nesting pairs north and west of the ranch are within foraging distance of the ranch.

Due to its location along the eastern edge of the Central Valley range of the species, the ranch does not support the nesting density found in the interior of the valley; however, it likely supports the breeding density that more closely resembles the historic preagricultural condition. The interior of the Central Valley is entirely under cultivation (or is urbanized) and while certain types of irrigated agriculture are beneficial and can increase local breeding density, these areas are also subject to agricultural economics and the potential for conversion to unsuitable agricultural uses. While currently supporting fewer nesting pairs, the largely uncultivated open grassland prairies around the perimeter of the valley have a vital role in the long-term sustainability of the Central Valley population by providing stable nesting and foraging conditions that more closely resemble the native pre-agricultural condition of the Central Valley. As a result, protection of these largely uncultivated landscares is essential to provide secure habitat for the population.

Literature Cited

- Anderson, D. R., M. Bradbury, C. Chun, J. Dinsdale, J. Estep, K. Fein, and R. Schlorff. 2007. California Swainson's hawk-inventory: 2005-2006; Draft Report. California Department of Fish and Game, Resource. Assessment Program.
- Babcock, K. W. 1995. Home Range and Habitat Use of Breeding Swainson's Hawks in the Sacramento Valley of California. Journal of Raptor Research 29:193–197.
- Bechard, M. J. 1982. Effect of Vegetative Cover on Foraging Site Selection by Swainson's Hawk. Condor 84:153–159.
- Bloom, P. H. 1980. The Status of the Swainson's Hawk in California. California Department of Fish and Game, Nongame Wildlife Investigations. Project Report W-54-R-12, Sacramento, California.
- Bradbury, M., J. A. Estep, and D. Anderson. *In preparation*. Migratory Patterns and Wintering Range of the Central Valley Swainson's Hawk.

- Briggs, C. 2007. Survival and nesting ecology of the Swainson's hawk in Butte Valley, California. M.S. Thesis, University of Nevada, Reno.
- England, A.S., M.J. Bechard, and C.S. Houston. 1997. Swainson's Hawk (Buteo swainsoni). In Birds of North America no. 265 (A. Poole and F. Gill [eds.]). The Academy of Natural Sciences, Philadelphia, PA, and The American Ornithologists' Union, Washington, D.C.
- Estep, J.A. 1989. Biology, movements, and habitat relationships of the Swainson's Hawk in the Central Valley of California, 1986-87. California Department of Fish and Game. Unnumbered Report.
- ______. 2007. The Distribution, Abundance, and Habitat Associations of the Swainson's Hawk (*Buteo swainsoni*) in South Sacramento County. Prepared by Estep Environmental Consulting for the City of Elk Grove, CA.
- 2008. The distribution, abundance, and habitat relationships of the Swainson's hawk in Yolo County. Prepared for the Yolo County Natural Heritage Program, Woodland, CA.
- . 2009. The influence of vegetation structure on Swainson's hawk foraging habitat suitability in Yolo County. Prepared for the Yolo Natural Heritage Program.
- Estep, J. A., and J. Dinsdale. 2012. Distribution, abundance, and habitat associations of nesting Swainson's hawks in the Central San Joaquin Valley. Central Valley Bird Club Bulletin 15(4):84-106.
- Estep Environmental Consulting. 2007. Swainson's Hawk Habitat Assessment of the Proposed Van Vleck Conservation Area. Prepared for Westervelt Ecological Services, Sacramento CA.
- Kochert M. N, M. R. Fuller, L. S. Schueck, L. Bond, M. J. Bechard, B. Woodbridge, G. L. Holroyd, M. S. Martell, and U. Banasch. 2011. Migration areas, use of stopover areas, and austral summer movements of Swainson's hawks. The Condor 113(1):89-106.
- Schlorff, R. and P.H. Bloom. 1984. Importance of Riparian Systems to Nesting Swainson's Hawks in the Central Valley of California. In: R.E. Warner and K.M. Hendrix, eds., California riparian systems: ecology, conservation, and productive management. University of California Press, Berkeley, CA. pp. 612-618
- Sharp, C. S. 1902. Nesting of Swainson's hawk. Condor 4:116–118.
- Woodbridge, B. 1991. Habitat selection by nesting Swainson's hawks: a hierarchical approach. M.S. thesis, Oregon State University., Corvallis.

Δ	TT	Δ	CI	П	V	F	N	Т	•
$\overline{}$		~	~.		٧ı	_			•

Letter Regarding SSHCP



October 3, 2017

Mr. Stan Van Vleck President, Van Vleck Ranch 7879 Van Vleck road Rancho Murieta, CA 95683

Subject: Questions Related to SSHCP

Dear Mr. Van Vleck.

Thank you for your letter of October 1, 2017 regarding terms of the proposed SSHCP relating to easements. In that letter you pose two questions. I have paraphrased the questions and provided responses to each below:

- 1. Does the SSHCP allow for mitigation easements to be placed on property that is farther than 10 miles from where impacts to Swainson's Hawk habitat occur? ANSWER: Yes, as long as the mitigation easement property is suitable habitat and located with the SSHCP Plan Area.
- 2. Your letter indicates that you are currently in discussions with a city that is interested in purchasing some or all of your 2,000 acres for their Swainson' hawk mitigation property. The city is in Sacramento County but is not one of the members of the SSHCP. If some or all of these acres were purchased by this city for mitigation purposes, would it "unbalance" the habitat needs or create a problem for the SSHCP. ANSWER: No. We do not feel that a mitigation purchase of property in this amount would unbalance the total inventory available for potential use as part of the overall SSHCP preserve system.

Thanks for your letter and ongoing interest in the SSHCP. If you have further questions please do not hesitate to contact us:

Sincerely

William S. Zigoron

Consulting Program Manager

South Sacramento Habitat Conservation Plan-

c. Richard Radmacher

	9 0 1	1	
· · · · · · · · · · · · · · · · · · ·	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	-	ATTACHMENT D
	F	₹e	presentative Photographs of Van Vleck Ranch
	d ti		
	6 6 0	Ì	
		,	
	1	-	
	H H G	[•	
		\ \ \	
		[]	
	0		
	i i i i		
	i H		
	# # # #	- [
		1	
	100 marks	1	
		-	
		[
	1	1	
	4	,	

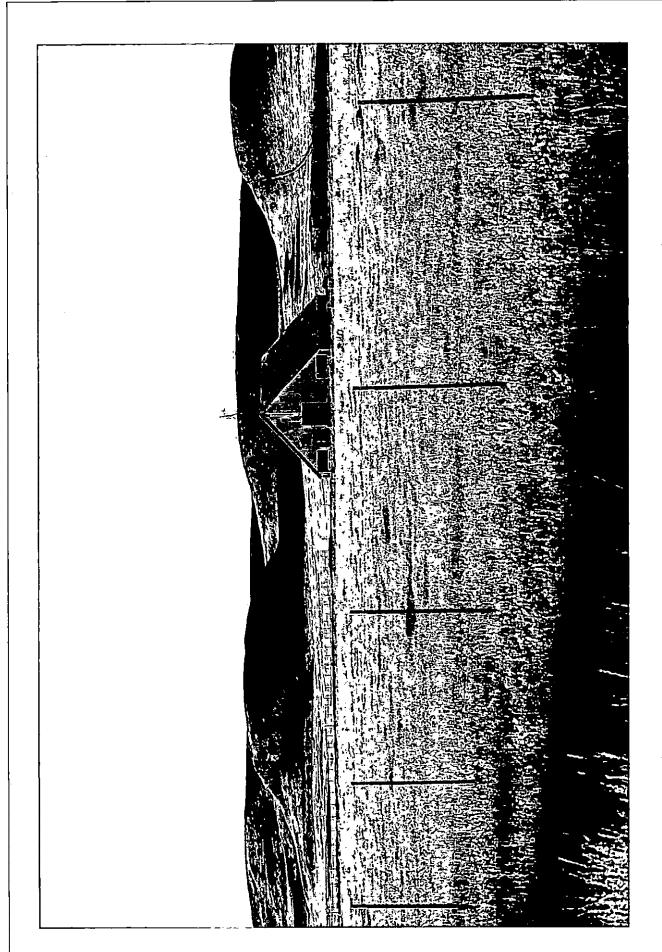


Photo 1: Dry land pasture and barn in southern portion of Van Vieck Ranch. View south. Photograph taken April 2017.



Photo 1: Dry land pasture and stock pond in central portion of Van Vleck Ranch. View west towards Ranch headquarters. Photograph taken April 2017.





Photo 1: Dry land pasture and oaks in northeastern portion of Van Vleck Ranch. View southwest. Photograph taken April 2017.



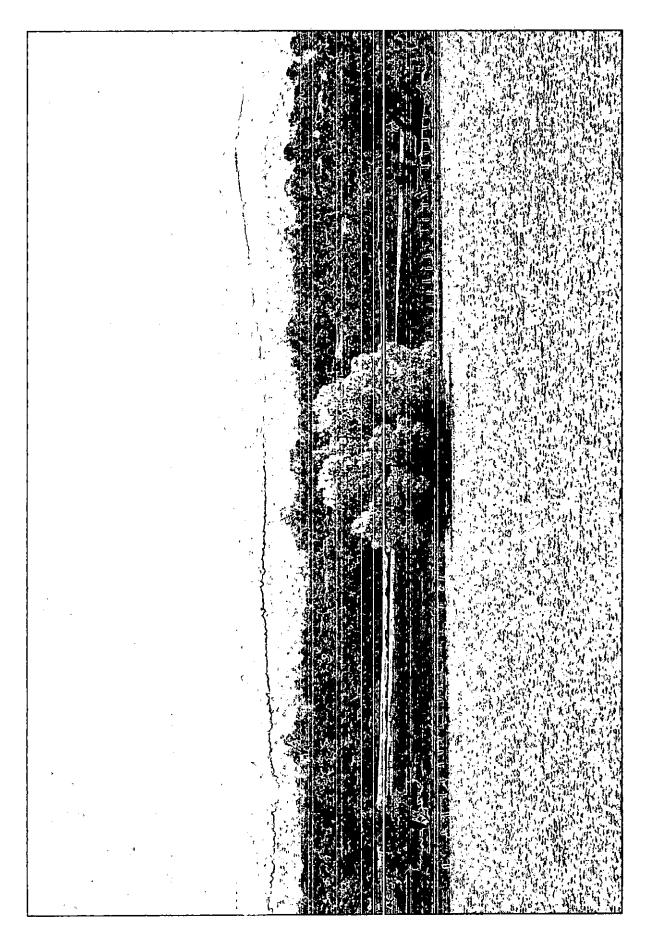
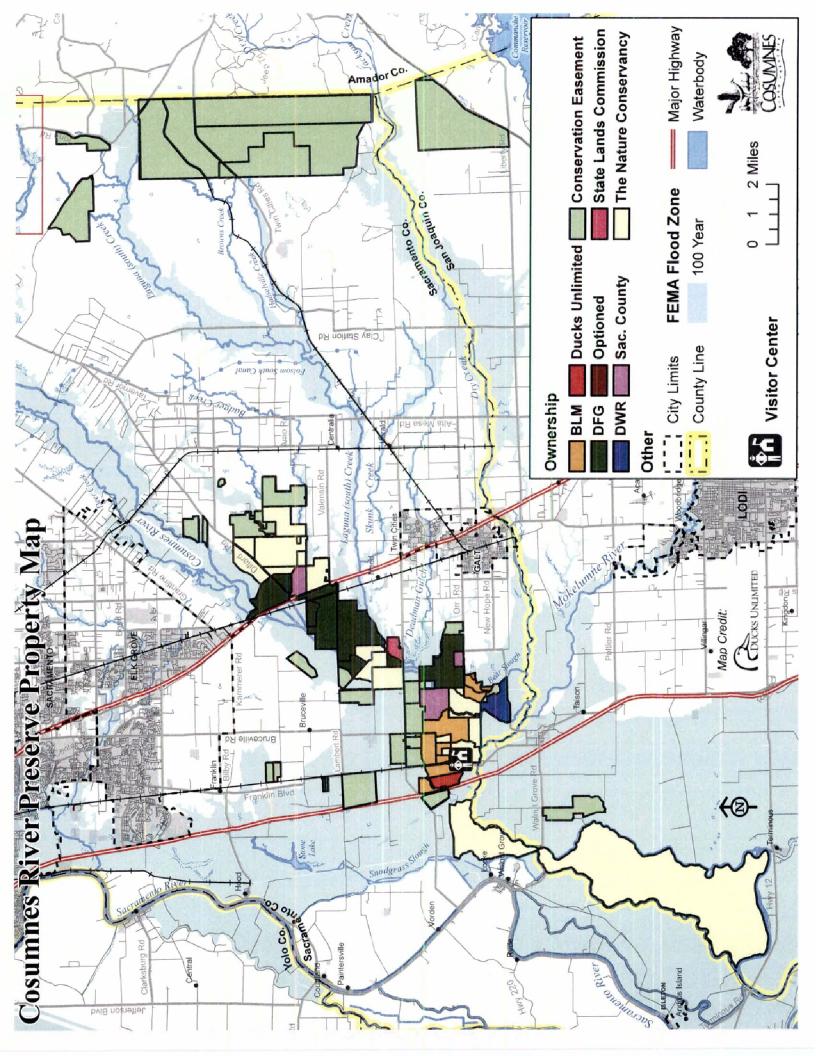


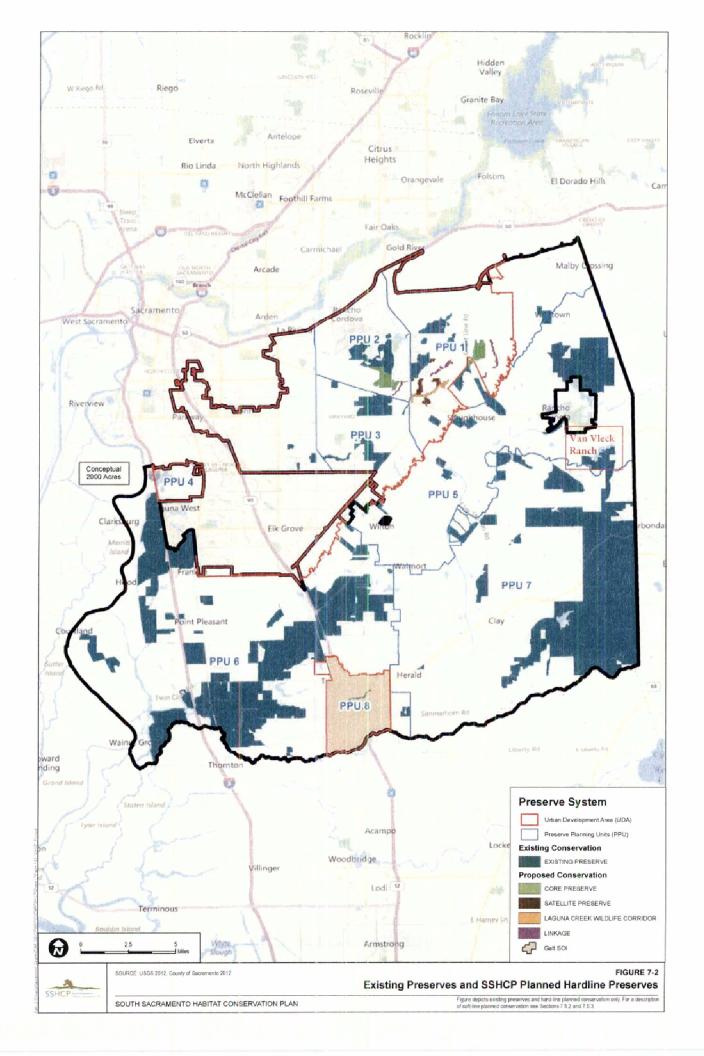
Photo 1: Van Vieck Reservoir in central portion of Van Vieck Ranch. View east, Photograph taken April 2017.



 ATTACHMENT E
Cosumnes River Preserve Property Man



ATTACHMENT F
Existing and Planned SSHCP Preserves



Response to Comments on Souza Dairy Project Swainson's Hawk Mitigation Proposal

ECORP Consulting, Inc. prepared a proposal (Mitigation Proposal) to mitigate impacts to Swainson's hawk (SWHA; *Buteo swainsoni*) foraging habitat associated with the Souza Dairy Project (Project), a component of the Southeast Policy Area Strategic Plan Project. The Mitigation Proposal consisted of permanently preserving land at the Van Vleck Ranch, located near Rancho Murieta, California. The City of Elk Grove submitted this proposal to the California Department of Fish and Wildlife (CDFW) for review and comment on December 8, 2017, and received comments from CDFW on January 12, 2018. In addition, the City received letters with comments from Habitat 2020 and Friends of the Swainson's Hawk on December 22, 2017 and January 17, 2018. A point-by-point response to these comments follows.

RESPONSE TO CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE LETTER

In a letter dated January 12, 2018, CDFW analyzed the Mitigation Proposal using nine criteria regarding the value of lands offered as mitigation for the loss of SVHA foraging habitat. Below are summaries of and responses to CDFW's comments for each of the nine criteria evaluated.

Proposed foraging habitat mitigation sites should be used as foraging habitat by SWHA.

CDFW acknowledges the Van Vleck Ranch as suitable foraging habitat for SWHA.

Response:

None.

2. Proposed foraging habital mitigation sites are in close proximity to the impact site.

CDFW noted that the Van Vleck Ranch mitigation site is 18 miles from the Project site, and concluded that this is not a biologically supportable distance from the impact site. CDFW advised that mitigation should be conducted within a 10-mile radius from the impact site.

Response:

The Van Vleck Ranch is ±18 miles from the Project site when measuring between centerpoints, or ±16 miles when measuring the distance between the two site boundaries. We acknowledge that SWHA nesting pairs near the Project site would be less likely to utilize the mitigation site due to this distance. However, the preservation of foraging habitat at the Van Vleck Ranch will benefit the regional SWHA population as a whole. It is a tenet of conservation biology that the conservation of a single, large site has

higher ecological value than the conservation of several smaller sites; due to the effects of habitat fragmentation and edge effects (e.g., Wilcox and Murphy 1985). Fragmentation of nesting and foraging habitats and loss of historic grassland foraging habitat were key factors in the recommendation to retain a "Threatened" classification for SWHA within CDFW's Five-Year Review. Preservation of habitat at the Van Vieck Ranch would be in line with the conservation strategies identified by the Five-Year Review by preserving unfragmented historic grassland habitat to support long-term persistence of SWHA populations, and preventing the conversion of this habitat to urban development.

Preservation of a large, contiguous area of natural habitat for the entirety of the mitigation is not practicable within a 10-mile radius of the Project. There are currently no mitigation banks with service areas including the Project site that have sufficient SWHA mitigation credit available to service the Project. For mitigation to occur within 10 miles of the Project, preservation of multiple smaller parcels would be required. An analysis of potential mitigation sites within 10 miles of the Project demonstrated that there, are no currently available sites that can provide the acreage needed to mitigate the Project's impacts in one contiguous site. Searches for alternative mitigation sites within 10 miles of the Project were conducted using search criteria of agricultural sites larger than 80 acres that are currently available for sale (Attachment A). Ten available sites were identified, and these were analyzed for their potential for SWHA mitigation use. Four sites were found to have potential use as SWHA mitigation. These four sites totaled 709 acres, a shortfall of 186 acres below the 895 acres of mitigation required. Total cost of these sites was \$16,436,111 (presuming those lands are available and excluding the cost of establishing conservation easements and endowments for management), nearly four times the cost of mitigation at the Van Vleck-Ranch. These potential mitigation sites are located in Elk Grove, Galt, and Wilton. The majority of these fragmented parcels would most likely be interspersed within an agricultural landscape with uncertain long-term habitat value as a result of changing land use and farming practices. The lands surrounding them may be converted to development or non-compatible agricultural uses in the future (e.g., due to the proliferation of orchards and vineyards). Although providing less certainty for individual nest sites near the impacted area, the proposed mitigation site focuses on the protection and long-term sustainability of the larger regional population by protecting a large; intact natural area that more closely resembles the historic-pre-European settlement landscape used by SWHA that is less subject to future changes in the function and value of nesting and foraging habitats. The proposed approach will also provide substantially greater overall ecological and resource value compared with several smaller, fragmented agricultural parcels.

In addition, while mitigation within 10 miles of the impacted site is commonly recommended, the 10-mile distance is not a requirement of the existing California Fish and Game Code or formal policy or guidance issued by CDFW. Neither is mitigation within 10 miles of the impacted site a requirement of the Elk Grove Swainson's Hawk Ordinance (EGSHO). Both the EGSHO (Section 160130.010) and the Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California (CDFG 1994) require mitigation for impacts to SWHA habitat when impacts occur within 10 miles of an active SWHA nest, but do not specify a need for the mitigation to occur within 10 miles of the impacted site.

3. Proposed foraging habitat mitigation sites should contain at least the same quality or better suitable foraging habitat than habitat impact site.

CDFW noted that the Van Vleck Ranch does not contain similar foraging habitat as the impact site, as proposed mitigation at Van Vleck Ranch is annual grassland whereas the Project site contains hayfields, alfalfa/other semi-perennial hays, cropland, and pasture. CDFW concludes that the Van Vleck Ranch would not be able to support the higher SWHA population density present near the Project site.

Response:

Swainson's hawk expert biologist James A. Estep performed an onsite investigation of the Project and mitigation sites to assess foraging habitat suitability. Each land cover type was given a rank of either high, moderate or low habitat value. Habitat assessments (Estep 2016 and 2017) indicated that both the Van Vleck Ranch and the Project contained predominantly impderate habitat quality for SWHA, with alfalfa/semi-perennial hays within the Project site and adjacent irrigated pastures within the Van Vleck Ranch having high habitat quality.

Though density of SWHA nests is lower in the grasslands of the eastern Central Valley, this area likely supports a breeding density more closely resembling the historic, pre-agricultural condition. Densities of nesting SWHA within some irrigated agricultural lands are considered to be anthropogenically elevated due to farming practices. In light of global climate change and the decline of water-intensive farming practices, including alfalfa production, preservation of the grasslands that have historically supported SWHA foraging have a vital role in providing stable nesting and foraging conditions that enable long-term resilience of the regional SWHA population. Preservation of this large natural area will also provide habitat for multiple native species in addition to SWHA.

As discussed in response to Comment 2 above, in-kind mitigation in proximity to the Project would result in preservation of a heavily fragmented patchwork of habitat due to the lack of available mitigation lands. While the Van Vleck Ranch mitigation area contains annual grassland, use of this mitigation site would enable the preservation of a large, contiguous area of habitat. Adjacent to the potential mitigation area, there are ±300 acres of irrigated pastures already (or currently being) designated as SWHA habitat in perpetuity. The irrigated pastures are considered high value SWHA foraging habitat, and they help to sustain prey populations throughout the adjacent annual grassland. The proximity of the potential mitigation area to existing conservation lands, including the irrigated pastures and the Van Vleck Mitigation Bank to the south, satisfies a key criterion of the EGSHO to prioritize preserving lands in proximity to other protected lands. An additional component of the Mitigation Proposal was to convert ± 50 acres of irrigated pasture to alfalfa in order to provide increased prey availability to SWHA. The Mitigation Proposal also included the planting of additional nesting habitat within the Van Vleck Ranch. Adjacent to the irrigated pasture and the proposed mitigation site there is also a large riparian area that covers more than 300 acres that is also part of the Van Vleck Ranch that provides high quality nesting and foraging habitat. In sum, the habitat mitigation sites described in the Mitigation Proposal contain equal or better foraging habitat as compared with the habitat impact site.

4.	Proposed foraging habitat mitigation sites should be connected to other
	protected habitat thereby contributing to a larger habitat preserve

CDFW notes that the Van Vleck Ranch meets this criterion.

Response:

None.

5. Foraging habitat mitigation sites should be outside of areas identified for urban growth

CDFW notes that the Van Vleck Ranch meets this criterion.

Response:

None.

6. Proposed foraging habitat mitigation sites should be managed in perpetuity as foraging habitat

CDFW notes that the Van Vleck Ranch meets this criterion.

Response:

None.

 CEQA lead agencies should be supportive of the proposed foraging habitat mitigation sites

CDFW notes that the Van Vleck Ranch meets this criterion.

Response:

None.

8. Proposed foraging habitat mitigation sites should not conflict with regional conservation planning efforts

CDEW noted that South Sacramento Habitat Conservation Plan (SSHCP) staff stated that the proposed mitigation at Van Vleck Ranch would not conflict with the SSHCP. However, CDFW expressed that the proposed mitigation would not advance the SWHA preservation goals under the SSHCP conservation strategy.

Response:

Use of 895 acres of the Van Vleck Ranch as mitigation for the Project will provide the ranch with enough financial stability to allow the remainder of the ranch's potential mitigation area to be sold to the SSHCP upon SSHCP-approval.

Mr. Van Vleck has agreed with SSHCP management to sell up to ±1,100 acres of the potential mitigation area within the ranch to the SSHCP; contingent upon the preceding sale of 895 acres as mitigation for the Project. The Van Vleck Ranch will be one of the initial (and largest) mitigation areas targeted for dedication and conservation, which will help ensure that the SSHCP achieves its "stay ahead" conservation goals. Dedication of the ±1,100 acres within Van Vleck Ranch to the SSHCP would not be feasible without an initial sale of sufficient acreage to financially sustain the ranch and preclude the need to sell a portion of the ranch for development. One of the most difficult challenges for habitat conservation plans (HCPs) is getting the initial land into the banks and this mitigation proposal will help the HCP do exactly that. Therefore, this proposed mitigation would, in fact, advance the SWHA preservation goals under the SSHCP-conservation strategy.

Proposed foraging habitat mitigation sites should not conflict with nearby approved mitigation banks

CDFW notes that the approved Van Vleck Mitigation Bank (Bank) is located adjacent to the proposed Van Vleck Ranch mitigation area, but that the Project is outside of the service area for this bank.

Response:

There are currently no mitigation banks that have sufficient SWHA mitigation credits available to serve the Project and have service areas including the Project site. As noted, the service area for the Van Vleck Mitigation Bank does not include the Project site. In addition, there are approximately 391 SWHA credits currently available at the Van Vleck Mitigation Bank per the Regulatory In-Lieu Fee and Bank Information Tracking System (RIBITS). This represents a shortfall of 504-credits needed per the Mitigation Proposal. In addition, the Bank contains the same annual grassland hibitatias the proposed mitigation area; however, the purchase of credits from the Bank would not provide the opportunity to further enhance SWHA habitat through cultivation of alfalfa or planting of additional nesting trees as discussed in the Mitigation Proposal. Nor would it allow for the SSHCP to purchase an additional 1,100 acres at Van Vleck Ranch.

RESPONSE TO HABITAT 2020 AND FRIENDS OF THE SWAINSON'S HAWK LETTERS

Habitat 2020 and Friends of the Swainson's Hawk (jointly referred to as Environmental Organizations) provided comments on eight main points in a letter dated December 22, 2017. The eight points have been summarized below and responses are provided. A second letter was submitted on January 17, 2018, reiterating points 1 through 3.

1. Relationship to Southeast Policy Area Final Environmental Impact Report

The Environmental Organizations commented that the Environmental Impact Report (EIR) states that SWHA mitigation shall be accomplished in accordance with Elk Grove Municipal Code Chapter 16 Section 130 or with the SSHCP. The Environmental Organizations summarized concerns regarding the distance between the impact and mitigation sites and the difference in habitat types and qualities, as well as the potential inconsistencies with Elk Grove's stated policy and with requirements of the SSHCP.

Response:

For response to comments on the distance between impact and mitigation site, please see the response to CDFW Comment 2 above. Neither the EGSHO nor the EIR provide any specific geographic limit on the conservation of mitigation acreages. Purchase of conservation easements within regional areas to support species habitats or agriculture are commonly accepted as mitigation for individual projects. (Masonite Corporation v. County of Mendocino (2013) 218 Cal.App.4th 230, 238-239 (noting that offsite conservation easements are well-accepted method for mitigating impacts to loss of prime farmland and wildlife habitat); Environmental Council of Sacramento v. City of Sacramento (2006) 142 Cal.App.4th 101 (preservation of foraging habitat at a ratio of 0.5:1 upheld as adequate mitigation for conversion of SWHA foraging habitat).)

For response to comments on the difference in habitat types and qualities, please see the response to CDFW Comment 3 above. In comparison to other available options, the Van Vleck Ranch is the ecologically superior mitigation site as it contains comparable habitat to the majority of the impacted site in a single contiguous site which is in close proximity to other preserved areas.

For response to comments on potential inconsistencies with the EGSHO, please see the response to Environmental Organizations Comment 2 below.

For response to comments on potential inconsistencies with the SSHCP, please see the response to Environmental Organizations Comment 6 below. The City of Elk Grove is not a participating member of the SSHCP. In addition, the Mitigation Proposal will help ensure that the Van Vleck Ranch is available to provide additional conservation land to the SSHCP as discussed in CDFW Comment 8 above.

2. Potential inconsistencies with the Elk Grove Swainson's Hawk Mitigation Program

The Environmental Organizations cite guidance from the City of Elk Grove's webpage, which describes adequate mitigation for impacts to SWHA as being within 10 miles of the impacted site.

Response:

The City of Elk Grove Swainson's Hawk Program webpage no longer describes adequate mitigation for impacts to SWHA as being within 10 miles of the impacted site (City of Elk Grove 2018). As discussed in the response to CDFW Comment 2 above, while mitigation within 10 miles of the impacted site is commonly recommended, it is not a requirement of the existing California Fish and Game Code or formal policy or guidance issued by CDFW. Nor is the recommended 10-mile limit a component of the EIR or Chapter 16, Section 130 of the City of Elk Grove's code. Indeed, as outlined above and in the Mitigation proposal, the Van Vleck Ranch is *environmentally superior* to the more fragmented mitigation that would occur within a 10-mile radius of the Project.

The City's Swainson's Hawk Mitigation Program does not have sufficient acreage of conservation lands to support the Project's mitigation needs and the Program is intended to provide mitigation for much smaller projects (less than 40 acres). While there has been concern that adoption of the Mitigation Proposal may allow future projects to mitigate more than 10 miles from Elk Grove, the intent of the

approach for this particular Project is to allow conservation of a large, single site contiguous with other conserved lands. The Van Vleck Ranch affords an opportunity to provide the necessary 895 acres of habitat in a single, contiguous site, which is not practicable within a 10-mile radius of the Project. Smaller future projects could not be expected to provide the same magnitude of mitigation acreage as the Mitigation Proposal and would continue to be directed to use the Swainson's Hawk Mitigation Program or to conserve lands within the Elk Grove area. If the Project were to utilize the Swainson's Hawk Mitigation Program and/or conserve available lands within 10 miles, there would be little opportunity for future projects to mitigate for SWHA impacts within the Elk Grove area.

3. Potential conflicts with the Van Vleck Mitigation Bank

The Environmental Organizations note that the Van Vleck Mitigation Bank is not permitted to sell credits for impacts within the City of Elk Grove, and express a concern that the Bank may request to extend its service area to include Elk Grove.

Response:

Please see the response to CDFW Comment 9 above. In addition, approval of mitigation bank service areas is determined by CDFW and other pertinent regulatory agencies, while approval of mitigation pursuant to California Environmental Quality Act (CEQA) is determined by the CEQA lead agency, in this case the City of Elk Grove.

4. Difference in habitat quality between impact and mitigation sites

The Environmental Organizations note the difference in habitat type and quality between the Project site and Van Vleck Ranch, and that Mr. Estep's report stated that preservation at the Van Vleck Ranch would be suitable if lands could not be preserved south of Elk Grove.

Response:

Please see the response to CDFW Comment 3 above. In addition, as discussed in response to CDFW Comment 2, an analysis of potential mitigation sites within 10 miles of the Project demonstrated that there are no currently available sites that can provide the acreage needed to mitigate the Project's impacts in one contiguous site (Attachment A). As indicated by the analysis, a minimum of five sites would be needed to meet the required acreage, resulting in fragmentation of habitat. The total cost of the four alternative sites identified was \$16,436,111 (presuming those lands are available and excluding the cost of establishing conservation easements and endowments for management), nearly four times the cost of mitigation at the Van Vleck Ranch. Therefore, preservation of lands to the south of Elk Grove is not practicable or desirable from a policy standpoint.

5. Potential mitigation discussed in the EIR

The Environmental Organizations state that the EIR describes sufficient SWHA mitigation areas to the south of EIR Grove.

Response:

The EIR was reviewed, but a statement concerning the availability of SWHA mitigation lands to the south of Elk Grove was not found.

Potential inconsistencies with the SSHCP

The Environmental Organizations note that the SSHCP requires mitigation for impacts to high value SWHA habitat to occur within Preserve Planning Units (PPUs) 4, 6, and 8. The Van Vleck Ranch is not located within those PPUs.

Response:

As noted by the Environmental Organizations, the City of Elk Grove is not a participating member of the SSHCP and thus is not subject to SSHCP requirements. In addition, Mr. William Ziebron, the Consulting Program Manager of the SSHCP, provided a letter stating that the use of the Van Vleck Ranch to mitigate for impacts within a non-participating city would not cause difficulties for the SSHCP's mitigation planning. Please also see the response to CDFW Comment 8 above for more information.

6. [Sic] Historic conservation of farmland

The Environmental Organizations state that prior to the incorporation of the City of Elk Grove, conservation policies required impacts within the urban area to be mitigated with conservation of like agricultural areas outside of the urban area to preserve farmland.

Response:

Mitigation for SWHA that conserves similar farmland values as the impacted site is generally preferred but not required under CEQA or the City's code. (Endangered Habitats League, Inc. v. County of Orange (2005) 131 Cal.App.4th 777, 794 (mitigation by "offsite preservation of similar habitat"); Preserve Wild Santee v. City of Santee (2012) 210 Cal.App.4th 260, 278 (offsite habitat mitigated at 1:1 ratio).) Further, in-kind value includes factors other than just the particular agricultural use. For example, as previously noted, mitigating south of Elk Grove would result in small, fragmented mitigation parcels spread across a broad landscape that would be increasingly subject to land use changes incompatible with SWHA foraging. Preserving small farmland parcels is not as effective at replacing the value of a large, contiguous impact area.

The Sacramento County Farm Bureau, the Sacramento Metropolitan Chamber of Commerce and the Sacramento Region Business Association have all expressed support for the use of the Van Vleck Ranch as mitigation for the Project (Attachments B, C and D). The Farm Bureau has expressed that the dedication of easements for SWHA habitation lands in the Elk Grove area imposes restrictions on the types of crops that can be grown, reducing the flexibility of farmers to respond to changes in economic demand and available resources (e.g., long-term drought). The Farm Bureau states that these restrictions have a detrimental effect on the local agricultural economy. Out of the top five agricultural commodities (wine grapes, milk, pears, poultry, and nursery stock; County of Sacramento 2016), none are fully compatible with SWHA easement restrictions. Likewise, the Sacramento Metropolitan Chamber of Commerce and the

Sacramento Region Business Association stated that requiring mitigation to occur on high-quality agricultural lands close to the Project site would significantly and negatively impact Sacramento County's local agricultural economy. Therefore, placing easements on 895 acres of agricultural lands in the Elk Grove area may be detrimental to the sustainability of farmland and the agricultural economy in the Elk Grove area, whereas use of the Van Vleck Ranch as mitigation will not impair existing farming operations in the Elk Grove area and will enable the more than 160-year-old working ranch to continue operating in perpetuity.

7. Potential for mitigation to the south of the City of Elk Grove

The Environmental Organizations state that mitigation within the area to the south of the City of Elk Grove would add to existing preserve areas and benefit the SWHA population.

Response:

Mitigation through the City of Elk Grove's Swainson's Hawk Mitigation Program, or otherwise within the area to the south of Elk Grove, would be the preferred option if a mitigation site meeting the majority of the nine criteria discussed by CDFW could be secured. However, the City's Swainson's Hawk Mitigation Program does not have sufficient acreage to support the Project's mitigation needs and the Program is intended to provide mitigation for much smaller sites (less than 40 acres). In addition, an analysis of potential mitigation sites demonstrated that preservation of lands to the south of Elk Grove is not practicable, as discussed in response to the Environmental Organizations' Comment 4 above.

REFERENCES

- California Department of Fish and Game (CDFG). 1994. Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainson) in the Central Valley of California. November 8, 1994.
- California Department of Fish and Game (CDFG). 1993. 5-Year Status Review: Swainson's Hawk (*Buteo swainsoni*).
- City of Elk Grove. 2018. Swainson's Hawk Program. Available at:

 http://www.elkgrovecity.org/city_hall/departments_divisions/planning/resources_and_policies/swainsons_hawk_program/). Accessed on February 5, 2018.
- County of Sacramento. 2016. The Sacramento County 2016 Crop and Livestock Report. Available at: http://www.agcomm.saccounty.net/Documents/CropandLivestockReports/2016Report.pdf.
- Estep Environmental Consulting (Estep). 2016. Habitat Suitability Assessment for the State-listed Swainson's Hawk on the Van Vleck Ranch, Sacramento County. Prepared for Downy Brand, LLP. October 1, 2016.
- Estep Environmental Consulting (Estep). 2017. Habitat Suitability Assessment for the State-listed Swainson's Hawk within the City of Elk Grove's Southeast Policy area, Sacramento County.

 Prepared for Downy Brand, LLP and Kamilos Companies. October 6, 2017.
- Wilcox, Bruce A., and Dennis D. Murphy. Conservation Strategy: The Effects of Fragmentation on Extinction. The American Naturalist, vol. 125, no. 6, 1985, pp. 879–887. Available at: www.istor.org/stable/2461453:

LIST OF ATTACHMENTS

Attachment A – Analysis of Available Parcels

Attachment B – Farm Bureau Letter of Support

Attachment C – Sacramento Metropolitan Chamber of Commerce Letter of Support

Attachment D – Sacramento Region Business Association Letter of Support

ATTACHMENT A

Analysis of Available Parcels

Analysis of Available Parcels: Alternative Mitigation Sites Identified and Evaluated

1 408-200-04 100.5 \$3,200,000 2 067-0050-005 191,35 \$11,000,000 3 Not available 158.59 \$3,171,800 4 132-0320-010 102 Not applicable – 5 132-0320-009 165 Not applicable – 6 Not Available 102 Not applicable – 7 Not Available 103 \$2,200,000 9 148-0073-002, 148-0073-002, 148-0073-006, 148-0073-006, 148-0073-006, 150-0011-070, 134-0250-031, 134-0250-023, 134-0250-023, 134-0250-023	9	Other Considerations	Potential SWHA mitigation site?
067-0050-005 191,35 Not available 158.59 Not available 102 132-0320-009 165 132-0320-009 Not Available 102 Not Available 103 148-0073-001, 108 148-0073-002, 148-0073-005, 148-0073-006, 150-0011-059, 150-0011-059, 150-0011-059, 134-0250-031, 134-0250-033, 134-0250-033, 134-0250-033	200,000 Dry land	Contains homes/ structures/cell tower that would need to be excluded from easement.	yes
Not available 158.59 132-0320-010 102 132-0320-009 Not Available 102 Not Available 113 044-080-003 148-0073-001, 108 148-0073-002, 148-0073-006, 150-0011-069, 150-0011-069, 150-0011-069, 150-0011-070 134-0250-031, 134-0250-032, 134-0250-033, 134-0250-033	,000,000 Degraded/ industrial land	Current Raceway, Zoned for industrial use and located inside Urban Services Boundary.	N S
132-0320-010 102 132-0320-009, 165 132-0320-009, 165 132-0320-009 102 Not Available 113 044-080-003 610.91 148-0073-001, 108 148-0073-002, 148-0073-006, 148-0073-006, 150-0011-069, 150-0011-069, 150-0011-069, 150-0011-069, 134-0240-028, 134-0250-031, 134-0250-033, 134-0250-033, 134-0250-033, 134-0250-023	171,800 Dry land	Within Urban Services Boundary and proposed for future development for General Plan Jackson Visioning Area.	N
132-0320-008, 165 132-0320-009 Not Available Not Available 102 Not Available 103 044-080-003 148-0073-002, 148-0073-002, 148-0073-005, 148-0073-006, 150-0011-068, 150-0011-069, 150-0011-070 134-0250-031, 134-0250-031, 134-0250-033, 134-0250-033	Not applicable - Part of Project Site		<u>8</u>
Not Available 102 Not Available 113 044-080-003 610.91 148-0073-001, 108 148-0073-005, 148-0073-005, 148-0073-006, 150-0011-069, 150-0011-070 134-0250-031, 134-0250-031, 134-0250-033, 134-0250-033	Not applicable – Part of Project Site		No
Not Available 113 044-080-003 610.91 148-0073-001, 108 148-0073-002, 148-0073-005, 148-0073-007, 148-0073-006, 150-0011-069, 150-0011-069, 150-0011-070 134-026-023, 134-0256-023, 134-0256-023	Not applicable - Part of Project Site (repetition of Site No. 4)	spetition of Site No. 4)	Š
044-080-003 610.91 148-0073-001, 108 148-0073-002, 148-0073-003, 148-0073-006, 148-0073-007, 148-0073-006, 150-0011-069, 150-0011-069, 150-0011-070 134-0260-031, 134-0250-033, 134-0250-023	200,000 Irrigated pasture	Contains homes that would need to be excluded from easement	Yes.
148-0073-001, 108 148-0073-002, 148-0073-003, 148-0073-003, 148-0073-006, 148-0073-008, 150-0011-068, 150-0011-069, 150-0011-070, 134-0260-031, 134-0250-033, 134-0250-033, 134-0250-033, 134-0250-033, 134-0250-033, 134-0250-033, 134-0250-033, 134-0250-033, 134-0250-033, 134-0250-033, 134-0250-033, 134-0250-033, 134-0250-033, 134-0250-023	110,000 Vineyard	Vinevard – not SWHA foraging habitat	i S
148-0073-002, 148-0073-003, 148-0073-005, 148-0073-007, 148-0073-008, 150-0011-068, 150-0011-069, 150-0011-070 134-0240-028, 134-0250-031, 134-0250-032,		Consists of 37 acres currently zoned for industrial use and	71 acres available
148-0073-005, 148-0073-007, 148-0073-008, 150-0011-068, 150-0011-069, 150-0011-070 134-0240-028, 134-0250-031, 134-0250-032,	<u> </u>	71 acres zoned for agricultural use. Industrial parcels are planned for future development within City of Galt.	for mitigation use (\$4,536,111).
148-0073-007, 148-0073-008, 150-0011-068, 150-0011-070 134-0240-028, 134-0250-031, 134-0250-023			
148-0073-008, 148-0073-008, 150-0011-069, 150-0011-070 134-0240-028, 134-0250-031, 134-0250-032, 134-0250-023			
150-0011-006, 150-0011-009, 150-0011-070 134-0240-028, 134-0250-031, 134-0250-023			
134:0250-023 134-0250-031 134-0250-031 134-0250-023			
134-0240-028, 134-0250-031, 134-0250-032, 134-0250-023	500 000 Irrigated and dry	I arrie area of vinevands and orchards to the east and some	Yes
134-0250-033, 134-0250-032, 134-0250-023		conversion to orchards occurring to the west. Ranchette	3
134-0250-032, 134-0250-023		development occurring to the north. Parcels are currently	
		conserved under Williamson Act Program (not at risk of development in near future)	
	01	Total Number of Potential Alternative SWHA Mitigation Sites	4
		Total Acres of Potential Alternative SWHA Mitigation Sites	709.2
		Total Cost of Potential Alternative SWHA Mitigation Sites	\$16,436,111
		Shortfall in Mitigation Acreage	185.8

1/26/2018

Map data @2018 Google

250 /ds

Page 1

10250 Arno Rd - 10250 Arno Rd, Galt, CA 95632

Gait, CA 95632 - Outer Sacramento County Submarket Land of 100:50 AC is for sale at \$3,200,000 (\$31,840:80/AC)

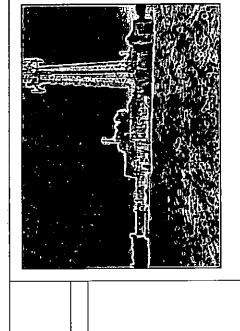
Investment Information

\$3,200,000 \$31,840.80 Sale Price: Price/AC:

Sale Status: Active

Sale Conditions:

Days On Market: 150



Investment Notes

Over 100 acres w/ tons of possibilities! Current use produces over \$6k a month income. 2 homes on the property, both 3 bd, 1 ba, 1500 sqft, outbuildings, also 2 wells. Conveniently located to the upcoming ELK Grove Collection Mall and proposed Casino in Elk Grove just a few miles up the freeway, easy access to I-99 and possible future development as Galt expands northbound, been on the table in the past Galt General Plan. Possible split into two 50 acre parcels. Future uses can be importexport, distribution.

-Only, a couple miles from the newly approved \$500 million dollar casino.

-Highway 99 exposure to all metropolis, surrounding cities, and Elk Grove. -Population estimate within 25 miles radius is 2.5 million

-Seller financing with minimum 25% down payment.

Highway 99 south to Arno Rd East, over the highway overpass, the property is on the right.

Land Information

Proposed Use: Agricultural Parcel Size: 100.50 AC

Lot Dimensions: -

On-Site Improv:

Number Of Lots: Improvements:

Zoning **Density**: Parcel Number: 408-200-04

Off-Site Improv: Electricity, Water

Copyrighted report licensed to PDF Commercial, 975113.

Page 3

Copyrighted report licensed to PDF Commercial - 975113.

1/26/2018 Page 4

		in Spainter		#								<	*	Kammerer Rd		250 yds	Google Map data @2018 Google
8499 Kammerer Rd - 8499 Kammerer Road	ove Submarket sn undisclosed price	Investment Information	Sale Price For Sale Price/AC: -	Sale Status: Active	Days On Market: 703	Investment Notes		Land Information	Proposed Use: Commercial Parcel Size: 165 AC Lot Dimensions: - On-Site Improv: -	J-008, 132-0320-009	, A						
5 8499 Kammer	Elk Grove, CA 95757 - Elk Grove Submarket Land of 165 AC is for sale at an undisclosed price						Elk Grove/Laguna/Galt		Zoning: AG-80 Density Number Of Lots: Improvements:	Parcel Number: 132-0320-008, 132-0320-009	Off-Site Improv: Electricity						

Copyrighted report licensed to PDF Commercial - 975113.

1/26/2018 Page 6 Page 6

Et Grove, CA 65/757 - Oute Securative County Statewiskit Land of 113 AC is for sale at \$2.200 (200. \$15 456 0.004) Sale Price XC 5. \$10,450 0.004 Sale Considers - 1.30 Sale Considers - 1.30 Days On Market - 1.30 Canings AG Express of propose 1 be Hold for Development Agricultural Improvement Of Like Cooks Land Information Land Information Land Information Canings AG Proposed Use Hold for Development Agricultural Improvement Of Like Cooks Canings AG Proposed Use Hold for Development Agricultural Improvement Court - 10 AC 45 th Information Canings AG Proposed Use Hold for Development Agricultural Improvement Court - 10 AC 45 th Information Canings AG Proposed Use Hold for Development Agricultural Improvement Agricultural	3264 Point Pleasant Rd - Agricultural crops	
Sale Price: \$2,200,000 Price/AC: \$19,469.03 Sale Status: Active Sale Conditions; Days On Market: 130 Land Information Land Information Proposed Use: Hold for Development, Agricultural	lk Grove, CA 95757 - Outer Sacramento County Submarkët and of 113 AC is for sale at \$2,200,000 (\$19,469.03/AC)	
Sale Price: \$2,200,000 Sale Status: Active Sale Conditions: Days On Market: 130 Investment Notes Land Information Proposed Use: Hold for Development, Agricultural Proposed Use: Hold for Development, Agricultural Prace! Size: 113 AC In.; Telephone, Water	Investment Information	<u>.</u>
Sale Status: Active Sale Conditions: Days On Market: 130 Investment Notes I domestic well. Old home and barns. Suited for trees or grapes I domestic well. Old home and barns. Suited for trees or grapes Land Information Proposed Use: Hold for Development, Agricultural Parcel Size: Hold for Development, Agricultural Proposed Use: Hold for Development, Agricultural Proposed Use: Hold for Development, Agricultural Proposed Use: Water I stephone, Water	Sale Price: \$2,200,000 Price/AC: \$19,469.03	
Investment Notes Investment Notes I domestic well. Old home and barrs. Suited for trees or grapes Land Information Proposed Use: Hold for Development, Agricultural Parcel Size: 113 AC In. Site Improv: Raw land In. Telephone, Water	Sale Status: Active Sale Conditions:	
Investment Notes I domestic well. Did home and bargs. Sufed for trees or grapes Land Information Land Information Parces Size. 113 AC Dispensions: irregular Distembrow: Raw land On, Telephone, Water		
Investment Notes I domestic well. Old home and barrys. Suited for trees or grapes Land Information Land Information Parcel Size: Hold for Development, Agricultural Parcel Size: Hold for Development, Irregular Discharge Instruct. Raw land Discharge Information Telephone, Water		
Land Information Proposed Use: Hold for Development, Agricultural Proposed Use: Hold f	Investment Notes	
Land Information Proposed Use: Hold for Development, Agricultural Parcel Size: 113 AC Dimensions: Irregular Information Infelphone, Water	3 acres prime agricultural land. 2 ag wells + 1 dömestic well. Old home and barns. Suited for trees or grapes	
AG Proposed Use: Hold for Development, Agricultural Parcel Size: 113 AC Lot Dimensions: Irregular On-Site Improv: Raw land Level Electricity, Gas, Irrigation, Telephone, Water	ise to Hwy 5 in the delta region of Elk Grove	
AG Proposed Use: Hold for Development, Agricultural Parcel Size: 113 AC Lot Dimensions: Irregular On-Site Improv: Raw land Level Electricity, Gas., Irrigation, Telephone, Water		
AG Proposed Use: Hold for Development, Agricultural Parcel Size: 113 AC Lot Dimensions: Irregular On-Site Improv: Raw land Level Electricity, Gas, Irrigation, Telephone, Water	Land Information	→ ~
Electricity, Gas, Irrigation, Telephone, Water	AG Proposed Use: Hold for Developm - Parcel Size: 113 AC - On-Site Improv: Raw land	. * %%
		\Diamond
		* už. kuštūšė 4
1		ы <u>ў</u>
		SDL-05Z

Page 8

Page 9

1/26/2018

Map data @2018 Google

10326 Walnut Ave - Development Property

6

Galt, CA 95632 - Outer Sacramento County Submarket Land of 108 AC is for sale at \$6,900,000 (\$63,888.89/AC)

nvestment Information

\$6,900,000 \$63,888.89 Sale Price: Price/AC:

Active Sale Status:

Sale Conditions:

Days On Market: 736

Walnut Ave

Investment Notes

108 acres - half zoned M-1 the other AG. In the process of being brought into the City of Galt. City of Galt is proposing all M-1 Zoning with the possibility of some Hwy Commercial Zoning. Boarders Hwy 99 and RRX / Walnut and Live Oak. City Sewer and water lines boarder property. SMUD is the utility provider. Property fronts Walnut Avenue On/Off ramp. Cal Trans is proposing overpass at Walnut.

On Hwy 99 btwn Walnut and Live Oak. RRX is Westside boundry.

Land Information

Proposed Use: -Parcel Size: 108 AC

Ξ

Zoning:

Density: Number Of Lots:

Improvements:

Lot Dimensions: -

On-Site Improv:

148-0073-001, 148-0073-002, 148-0073-003, 148-0073-005, 148-0073-006, 148-0073-007, 148-0073-008, 150-0011 068, 150-0011-069, 150-0011-070 Parcel Number:

Cable, Curb/Gutter/Sidewalk, Electricity, Gas, Irrigation, Sewer, Streets, Telephone, Water Off-Site Improv Copyrighted report licensed to PDF Commercial - 975113.

VRP N

DOM: 54 CDOM: 54

HUD: No Auction: No

Bonds/Asmts/Taxes: Unknown

Client Full Report - Lots and Land

Listings as of 02/06/2018 at 9:58AM

ST: Active 12/14/17

Page: 1 10672 Davis Rd, Wilton, CA 95693-9785 Listing Price: \$6,500,000

Terms: Cash, Conventional, Federal Land Bank

Map

REO: No Short Sale:

Minimum Building Sqft:

Subtype: Agricultural

CC&RS: No

B/A/T Desc:

HOA: No **Current Rent:**

Docs: None

Pending Date:

Escrow: Escrow #: Days in Escrow: Selling Date: Selling Price: SP % LP: Financing:

MLS#: 17076920 01KMNL Cross Street: Walmort Road

Additional Pictures Virtual Media

Number of Lots: Lot Dimensions: Horse Property: Yes

Acres: 424.7800

Horse Amenities: Barn, Pasture Irrigated, Riding

Price/Acre: 15,302.04

Addl Living Unit: No

Prob Use: Grazing, Tree/Crop/Orchard, Vineyard

Cur Use: Agricultural, Grazing, Livestock

Dev Status: Farm Land

Income: Crop(s),Lease

Vegetatn: Grassland, Pasture

Map Mortgage Calculator

Agricultural/Res

Census Tract: Apprx Elevation:

School County: Sacramento

EL: Elk Grove Unified JH: Elk Grove Unified SH: Elk Grove Unified

Area: 10693 County: Sacramento APN: 134-0240-025 Zoning: AG-80 Zone Desc: Agricultural,

Map Sec: Subdivision:

Improvmt: Cross Fenced, Fenced

Prim Res: Other-Rmks

Addl Livn:

Outbuildings: Barn

Irrigatn: Deep Water Turbine, Water Reservoir

Utility: Electricity to Site

Equip: Irrigation Equipment Special: Other-Rmks

Misc:

Crops: Irrigated Pasture

Soil: Mineral:

Rd Front: Private Road

Rd Surf: Gravel

Topo Desc: Lot Grade Varies, Lot Irregular, Lot Sloped, Pond

Seasonal, Stream Seasonal

Site Loc:

Water: Domestic Well w/Pump,Pond Seasonal,Stream Seasonal

Sewer: Other-Rmks

ATTACHMENT B

Farm Bureau Letter of Support

January 29, 2018

Honorable Mayor Steve Ly City of Elk Grove 8401 Laguna Palms Way Elk Grove California 95758

RE: Sacramento County Farm Bureau Support for Van Vleck Ranch Mitigation Proposal

Dear Mayor Ly:

On behalf of the Sacramento County Farm Bureau's (SCFB) Board of Directors, I am writing to express this organization's <u>unanimous support</u> to the use of land for Swainson's Hawk mitigation on the Van Vleck Ranch near Rancho Murieta for the proposed 900-acre development inside Elk Grove city limits, north of Kammerer Road.

The SCFB supports this plan because it places the easements on land that that is used now, and will be used in the future for livestock, which has a lower agronomic per acre value. Simply put, if this easement is placed on their land, the Van Vleck family will be still able to continue to raise cattle in much of the same manner that it has for over 100-years.

However, it is our understanding that some contend that the mitigation should be placed on irrigated lands within ten miles from the proposed development in Elk Grove. We strongly oppose this proposal because it will significantly and negatively impact Elk Grove's local agricultural economy. Placing wildlife easements on irrigated lands significantly limits the crops that can be grown on that land. Fruit trees, wine and table grape vines and structures that are necessary for dairies, nurseries and processing facilities would be severely restricted. These crops are of high value and important to Elk Grove's local agricultural economy.

According to the Sacramento County 2016 Crop and Livestock Report, the value of the top ten commodities raised in Sacramento (wine grapes, milk, pears, poultry, nursery, cattle, aquaculture, corn, hay and tomatoes) is aproximately\$500 million. Swainson's Hawk easements would prohibit all of the top five crops and all but three of the top ten commodities (cattle, hay and tomatoes would still be allowed). This means that approximately 900 acres of valuable farm land would be prevented from growing or containing crops that represent nearly 90% of the value in Sacramento County. A significant portion of this land is in Elk Grove. This is an unacceptable loss.

Losing that many acres of this high-quality land also affects the economic viability of businesses that provide service and goods for those crops and will jeopardize the availability of these goods and services to other farmers. It also drastically limits the flexibility that farmers and ranchers have to respond to future demands for certain types of crops. What happens if in 20 years there is little or no economic viability for cattle, hay or tomatoes in this county? That land would have little or no value and would contribute little or nothing to Elk Grove's agricultural economy.

The good news is that there is very good option that high quality agricultural land won't be locked up or prevented from responding to market conditions. That option is placing the easement on land that is consistent with the uses under the easement, like the Van Vleck Ranch.

It is beneficial to the environment and Sacramento County to keep large working landscapes like the Van Vleck Ranch in agriculture. The Van Vleck family has been ranching in this region for over 160-years and currently operates several other ranches in Sacramento County. Without the Van Vleck Ranch the future of those operations, which combined with Van Vleck holdings represents over 4% of our county, could be lost.

As supported in the report, the Van Vleck Ranch represents very good quality Swainson's Hawk habitat that is home to actual nesting pairs. The large size of this mitigation area provides an enhanced benefit to the environment. Finally, the Van Vleck Ranch is strategically located between two existing preserves and putting that land under easement creates a large corridor that connects to the Cosumnes River Preserve which is biologically important to this region.

Furthermore, this proposal complies with the Property Rights and Land Use Policy that the SCFB Board of Directors adopted in 2007. That policy states, in part, "private property must not be damaged or taken for public use without critical and absolute need. Therefore, agricultural land should be protected from conversions to non-agricultural uses."

Our organization appreciates the City of Elk Grove's thoughtful approach to this proposed mitigation and supports the use of Van Vleck Ranch instead of land within ten miles of the proposed development.

Thank you for your consideration of this matter. Please feel free to contact me if you have any questions or concerns.

Sincerely,

Bill Bird

Executive Director

Bill Bud

Sacramento County Farm Bureau

۸	TT	Λ	_	ħЛ	C	NIT	
н		м	П.	IVI		IVI	

Sacramento Metropolitan Chamber of Commerce Letter of Support



February 5, 2017

Honorable Steve Ly, Mayor City of Elk Grove 8401 Laguna Palms Way Elk Grove California 95758

RE: Support for Van Vleck Ranch Mitigation Proposal

Dear Mayor Ly:

I am writing to express the Sacramento Metro Chamber of Commerce's support for the City of Elk Grove's proposal to use land from the Van Vleck Ranch for Swainson's hawk mitigation. Since its inception 120 years ago, the Sacramento Metro Chamber has been a leader in advocating for and supporting regional economic success, embracing innovation and economic evolution, and supporting organic job and business growth in the region. This Swainson Hawk mitigation plan will enable the city to move forward with important economic activity, create much needed jobs, and provide housing at a time when housing supply in the Sacramento region is at a critical point.

The Metro Chamber is pleased to lend its support for plans like these that create a balance of growth and environmental protection without impacting our local agriculture economy. We feel strongly that placing mitigation easements on land whose highest agronomic value is consistent with that easement's restrictions is the right approach. To instead require mitigation of this nature on high quality agriculture land closer to the proposed development would significantly and negatively impact Sacramento County's local agricultural economy, put our region's ability to continue to be the "Farm to Fork Capital" in jeopardy, and directly impact Elk Grove's economy as well.

The economic value of Sacramento's top 10 commodities is over \$420,000,000. Appropriate Swainson hawk easements limit, and in almost all cases, prohibit production of our top 5 crops and all but 2 of the top 10 commodities, with the exception, of Cattle and hay. To put this type of mitigation easement on land that produces our top producers creates a slippery slope that undercuts our region's local economy. The region's top Swainson hawk expert, Jim Estep, even supports using the Van Vleck Ranch for this mitigation because of its compatibility and has stated that it is a once in a lifetime opportunity for the hawk to have the type of preserve you are considering.

We must keep our region's agricultural lands productive. Mitigation opportunities like this, where the environmental needs and agricultural uses are compatible, will help ensure that large working landscapes like the Van Vleck Ranch stay in agriculture. The Metro Chamber appreciates Elk Grove's thoughtful and balanced approach to this proposed mitigation and supports use of the Van Vleck Ranch for this important mitigation.

Please feel free to contact me directly if you have any questions.

Sincerely,

Robert Dugan

Senior Vice President of Public Policy and Economic Development

Sacramento Metro Chamber

ATTACHMENT D

Region Business letter to Elk Grove regarding Van Vleck Ranch easement



February 9th, 2018

Mayor Ly and Councilmembers City of Elk Grove 8401 Laguna Palms Way Elk Grove California 95758

RE: Van Vleck Ranch Mitigation Proposal

Dear Mayor Ly and Councilmembers:

Sacramento Region Business Association (hereafter Region Business) supports the City of Elk Grove's proposal to use land from the Van Vleck Ranch for Swainson's hawk mitigation for the proposed 900 acre development inside the city limits of Elk Grove which is commonly referred to as the Southeast Policy Area (SEPA).

Region Business advances regional economic growth through public policy. The organization is led by a Board of Directors of thirty-five local business executives. We serve as the broad-based representative of the business community and the association manager for several vertically aligned trade associations – Region Builders, Region Restaurants, Region Technology, and Region Finance.

Mitigation on the Van Vleck Ranch allows the proposed development to meet its California Environmental Quality Act (CEQA) requirements and start construction. This development in SEPA is over 1,000 acres bringing a combination of residential units and commercial buildings for jobs. The lack of housing in the Sacramento region is at a critical point; this creates important relief. Adding the jobs in this area will help Elk Grove to achieve a greater job/housing balance to reduce vehicle miles which reduces pollution and highway gridlock.

Region Business also supports this plan because it helps meet growth demands, balancing the protection of the environment and not harming the local agriculture economy. Placing mitigation easements on land whose highest agronomic value is consistent with that easement's restrictions is the right approach. In this case, you have Swainson's hawk easements which prohibit the growing of high value crops like trees, vines and dairies and only allow lower value crops like cattle grazing or hay. In this instance, the highest and best use for the Van Vleck Ranch land is cattle or hay, the same thing they have been doing for 161 years.

We have seen letters from the environmental community contend that the mitigation should be placed on high quality agriculture land within 10 miles from the development. We strongly disagree with this contention because it severely impacts Elk Grove's local agricultural economy. Severely restricting the commodities that can be grown on high quality land "forever" puts our region's ability to continue to be responsive to market demands and continue to be the "Farm to Fork Capital" in jeopardy. Swainson's hawk-easements specifically prohibit trees, vines and structures that are necessary for dairies, nurseries



and processing facilities. These agriculture sectors are of high value and important to Sacramento County's and Elk Grove's local agricultural economy.

According to official publications by the County Agriculture Commissioner, the top 10 commodities raised in Sacramento are, in order: wine grapes, milk (dairies), pears, poultry, nursery, cattle, aquaculture, corn, hay and tomatoes. These commodities represent over \$420,000,000 to the agriculture economy. Swainson hawk easement would prohibit in most cases all but 3 of the top 10. Cattle, hay and tomatoes would be allowed, ranked 6th, 9th, and 10th respectively. This severely limits the ability for this region to use the land for its highest and best use and undercuts our region's local economy. The Van Vleck Ranch is a very good option that does not lock up high quality agriculture land and creates an opportunity for one of the largest Swainson's hawk preserves in the region.

In closing, it is beneficial to the environment and the County to keep large working landscapes like the Van Vleck Ranch in agriculture. At 161 years, this family ranch is one of the oldest businesses in our region and for over 50 years they have allowed first responders from the National Guard Medical Unit, Sacramento Sherriff's Department, Sacramento Metro Fire, Cal Fire, California Highway Patrol and others to train on their ranch so these different agencies are prepared to protect the Sacramento Region.

Our organization appreciates Elk Grove's thoughtful and balanced approach to this proposed mitigation and supports using the Van Vleck Ranch. Thank you for your consideration on this important matter. If you have any questions you can contact me directly at (916) 397-4776.

Sincerely,

Joshua Wood

Chief Executive Officer

Region Business

CERTIFICATION ELK GROVE CITY COUNCIL RESOLUTION NO. 2018-141

STATE OF CALIFORNIA)	
COUNTY OF SACRAMENTO)	SS
CITY OF ELK GROVE)	

I, Jason Lindgren, City Clerk of the City of Elk Grove, California, do hereby certify that the foregoing resolution was duly introduced, approved, and adopted by the City Council of the City of Elk Grove at a regular meeting of said Council held on June 27, 2018 by the following vote:

AYES: COUNCILMEMBERS:

Ly, Suen, Detrick, Hume

NOES:

COUNCILMEMBERS:

None

ABSTAIN:

COUNCILMEMBERS:

None

ABSENT:

COUNCILMEMBERS:

Nguyen

Jason Lindgren, City Gerk City of Elk Grove, California