



COMMUNITY DEVELOPMENT AGENCY

DEVELOPMENT SERVICES DIVISION

<http://www.edcgov.us/DevServices/>

PLACERVILLE OFFICE:

2850 Fairlane Court, Placerville, CA 95667

BUILDING

(530) 621-5315 / (530) 622-1708 Fax

bldgdept@edcgov.us

PLANNING

(530) 621-5355 / (530) 642-0508 Fax

planning@edcgov.us

LAKE TAHOE OFFICE:

3368 Lake Tahoe Blvd., Suite 302

South Lake Tahoe, CA 96150

(530) 573-3330

(530) 542-9082 Fax

tahoebuild@edcgov.us

MEMORANDUM

DATE: November 21, 2016

TO: El Dorado County Agricultural Commissioners

FROM: Jennifer Franich-Associate Planner

SUBJECT: Granade Subdivision
TM15-1527/Z15-0003
Assessor's Parcel Number: 087-310-64

NOV29'16 11:15

We are processing the above mentioned application available at:
<http://edcapps.edcgov.us/Planning/ProjectInquiryDisplay.asp?ProjectID=20520>

The applicants are requesting the following: A rezone and tentative map application for an 11-lot rural tentative subdivision map in the Latrobe area. The subdivision would include a change in zoning from Rural Lands Twenty-Acre (RL-20) to Estate Residential 10-Acre (RE-10), consistent with the Rural Residential (RR) General Plan Land Use Designation. The proposed project includes the installation of wells and septic systems. Lots range in size from 10.02 to 20.12 acres. The property, identified by Assessor's Parcel Number 087-310-64, consists of 134.05 acres, and is located on the east side of South Shingle Road at the intersection with Brandon Road, in the Shingle Springs area.

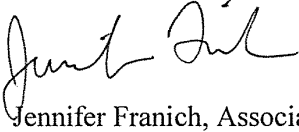
The following General Plan Policy directs Commission guidance:

Policy 8.1.4.1 The County Agricultural Commission shall review all discretionary development applications and the location of proposed public facilities involving land zoned for or designated agriculture, or lands adjacent to such lands, and shall make recommendations to the reviewing authority. Before granting approval, a determination shall be made by the approving authority that the proposed use:

- A. Will not intensify existing conflicts or add new conflicts between adjacent residential areas and agricultural activities; and
- B. Will not create an island effect wherein agricultural lands located between the project site and other non-agricultural lands will be negatively affected; and
- C. Will not significantly reduce or destroy the buffering effect of existing large parcel sizes adjacent to agricultural lands.

Please direct the Agricultural Commission to review the application and provide a recommendation.

Sincerely,

A handwritten signature in black ink, appearing to read "Jennifer Franich". The signature is fluid and cursive, with the first name "Jennifer" written in a larger, more prominent script than the last name "Franich".

Jennifer Franich, Associate Planner



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REVISED May 11, 2016

October 1, 2015

TO ALL CONCERNED AGENCIES:

Please find enclosed the Initial Consultation information for your review and comment regarding the following application:

Z15-0003/TM15-1527 – GRANADE SUBDIVISION (Doug Granade/Granade Family Trust/Lawrence Patterson): A rezone and tentative map application for an 11-lot rural tentative subdivision map in the Latrobe area. The subdivision would include a change in zoning from Rural Lands Twenty-Acre (RL-20) to Estate Residential 10-Acre (RE-10), consistent with the Rural Residential (RR) General Plan Land Use Designation. The proposed project includes the installation of wells and septic systems. Lots range in size from 10 to 30.1 acres. The property, identified by Assessor's Parcel Number 087-310-64, consists of 134.05 acres, and is located on the east side of South Shingle Road at the intersection with Brandon Road, in the Shingle Springs area.

Pursuant to Section 15063 of the State CEQA Guidelines, this Initial Consultation is being conducted to determine if the project may have a significant effect on the environment and determine whether an environmental impact report or a negative declaration will be prepared.

DRAFT project documentation is available for review online:

<http://edcapps.edcgov.us/Planning/ProjectInquiryDisplay.asp?ProjectID=20520>

Review and comment by your agency is requested to identify your concerns to be considered by the County during our environmental review to mitigate impacts, develop conditions of approval, and/or modify the project. Your agency's written responses must be received by the Planning Services **no later than June 10, 2016**. If we do not receive written correspondence from your agency by that date, we will assume your agency has no comment and your agency's concerns may not be reflected in our recommendations.

The Technical Advisory Committee (TAC) will meet on June 13, 2016 to take one or more of the following actions; 1) Make an environmental determination, 2) Determine Final project conditions and/or, 3) Confirm the public hearing date. The meeting will be held in the *El Dorado County TAC Conference Room*, at 2850 Fairlane Court, Placerville, CA. Please call this office one week prior to the meeting for the scheduled time. Technical Advisory Committee meetings are for agency discussion with the applicant and/or agent only. Other interested individuals may obtain project information by contacting the project planner.

If you have questions or need additional information, please call Planning Services office at (530) 621-5355.

EL DORADO COUNTY PLANNING SERVICES

Jennifer Franich, Project Planner

JHF/dre

cc: Gary Miller, Planning Commissioner District 2
Building Services
Latrobe Advisory Committee
Air Quality Management District
Environmental Management
U.S. Army Corps of Engineers
Comcast
El Dorado County Resource Conservation District
CA Air Resources Board
CA Department of Fish & Wildlife
El Dorado Irrigation District
Transit Authority, Mindy Jackson
LAFCO
El Dorado Disposal
El Dorado County Historical Society
Doug Granade
Lawrence Patterson

Shiva Frentzen, Supervisor District 2
Department of Transportation, Dave Spiegelberg
El Dorado County Agricultural Commission
El Dorado County Assessor's Office
El Dorado County Surveyor's Office
Latrobe Fire Protection District
Pacific Gas & Electric
Latrobe School District
Caltrans District 3
Cal Fire (California Department of Forestry)
U.S. Fish & Wildlife Service
Parks & Trails Advisory Committee
U.S. Post Office, Shingle Springs/Latrobe
CA Water Resources Control Board BRD/CV
El Dorado County Housing Authority
Granade Family Trust

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EL DORADO COUNTY PLANNING DEPARTMENT

FILE # TM15-1527
20520

APPLICATION FOR ~~Subdivision Map~~
TENTATIVE

ASSESSOR'S PARCEL NO.(s) 087-310-64

PROJECT NAME/REQUEST: (Describe proposed use) Tentative Subdivision Map

IF SUBDIVISION/PARCEL MAP: Create 11 lots, ranging in size from 10 to 30.1 acre(s) / SF

IF ZONE CHANGE: From AE to RR-10 IF GENERAL PLAN AMENDMENT: From to

IF TIME EXTENSION, REVISION, CORRECTION: Original approval date Expiration date

APPLICANT/AGENT DOUG GRANADE

Mailing Address 4420 BUSINESS DR. SHINGLE SPRINGS, CA 95682

Phone (530) 677-7484 FAX ()

PROPERTY OWNER GRANADE FAM SURV TRUST

Mailing Address 7501 BRANDON DR. SHINGLE SPRINGS, CA 95682

Phone (530) 677-7484 FAX ()

LIST ADDITIONAL PROPERTY OWNERS ON SEPARATE SHEET IF APPLICABLE

ENGINEER/ARCHITECT LAWRENCE A. PATTERSON

Mailing Address 6610 MERCHANDISE WAY DIAMOND SPRINGS, CA 95619

Phone (530) 626-3746 EXT. 11 FAX (530) 621-2997

LOCATION: The property is located on the EAST side of SOUTH SHINGLE RD
N/E/W/S street or road
 feet/miles of the intersection with BRANDON RD
N/E/W/S major street or road
in the Shingle Springs area. PROPERTY SIZE 134.05 ACRES
acreage / square footage

X Lawrence A. Patterson Date 8/13/18
signature of property owner or authorized agent

FOR OFFICE USE ONLY

Date 8/19/15 Fee \$ 10,538.50 Receipt # 29506 Rec'd by MOUNT Census
Zoning AE GPD RN Supervisor Dist 2 Sec/Twn/Rng 34+35+2+3/9N/9E

ACTION BY: ☐ PLANNING COMMISSION
☐ ZONING ADMINISTRATOR
☐ PLANNING DIRECTOR

ACTION BY BOARD OF SUPERVISORS

Hearing Date

Hearing Date

☐ Approved ☐ Denied (findings and/or conditions attached)

☐ Approved ☐ Denied (findings and/or conditions attached)

APPEAL: ☐ Approved ☐ Denied

Executive Secretary

Executive Secretary

Revised 07/02)

Z15-0003/TM15-1527



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FILE # Z15-0003RECEIVED
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EL DORADO COUNTY PLANNING SERVICES

ZONE CHANGE & GENERAL PLAN AMENDMENT APPLICATION

ASSESSOR'S PARCEL NO.(S) 087-310-64PROJECT NAME/REQUEST: (Describe proposed use) TSMIF SUBDIVISION/PARCEL MAP: Create 11 lots, ranging in size from 10 to 30.1 acre(s) / SFIF ZONE CHANGE: From AE to RR10 IF GENERAL PLAN AMENDMENT: From _____ to _____

IF TIME EXTENSION, REVISION, CORRECTION: Original approval date _____ Expiration date _____

APPLICANT/AGENT Patterson DevelopmentMailing Address 6610 Merchandise Way Diamond SpgsPhone 530-626-3746 Ext. 1 FAX 530-621-2997PROPERTY OWNER Doug GranadeMailing Address 4420 Business Dr. Shingle Spgs 95682Phone 530-677-7484 FAX _____

LIST ADDITIONAL PROPERTY OWNERS ON SEPARATE SHEET IF APPLICABLE

ENGINEER/ARCHITECT Patterson DevelopmentMailing Address 6610 Merchandise Way Diamond SpgsPhone 530-626-3746 ext. 1 FAX 530-621-2997LOCATION: The property is located on the East side of Brandon street or road_____ feet/miles <pick from list> of the intersection with Brandon major street or roadin the _____ area. PROPERTY SIZE 134.05 Acres
acreage / square footageSignature of property owner or authorized agent Patterson Dev. Date 8-19-15

FOR OFFICE USE ONLY

Date 8/19/15 Fee \$ 10,538.80 Receipt # 29506 Rec'd by MDWT Census _____
Zoning AE GPD VRN Supervisor Dist 2 Sec/Twn/Rng 34+35+2+3/9N/9EACTION BY: ☐ PLANNING COMMISSION

ACTION BY BOARD OF SUPERVISORS

Hearing Date _____

Hearing Date _____

☐ Approved ☐ Denied (Findings and/or conditions attached)☐ Approved ☐ Denied (Findings and/or conditions attached)

Executive Secretary _____

Executive Secretary _____

(Revised 07/07)

Z15-0003/TM15-1527



EL DORADO COUNTY PLANNING SERVICES

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REQUIRED SUBMITTAL INFORMATION
for
Tentative Subdivision Map

The following information must be provided with all applications. If all the information is not provided, the application will be deemed incomplete and will not be accepted. For your convenience, please use the check (✓) column on the left to be sure you have all the required information. All plans and maps MUST be folded to 8 1/2" by 11".

FORMS AND MAPS REQUIRED

Check (✓)

Applicant County

- | | | | |
|----|---|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ✓ | ✓ | 1) | Application form and Agreement to Pay Time and Materials, completed and signed by the property owner(s). |
| ✓ | ✓ | 2) | Letter of Authorization: When there are multiple owners, a Letter of Authorization is required from the other property owner(s) authorizing the applicant to act as their agent. |
| ✓ | ✓ | 3) | One copy of a Title Report (no more than six (6) months old) for the project. Proof of ownership (Grant Deed), if the property has changed title since the last tax roll. |
| ✓ | ✓ | 4) | A copy of the current Assessor's map, with the subject property outlined in red. |
| ✓ | ✓ | 5) | An 8 1/4 by 11" vicinity map showing the location of the project in relation to the distance to major roads, intersections, and town sites. |
| ✓ | ✓ | 6) | Environmental Questionnaire form, completed and signed. |
| NA | | 7) | Provide name, mailing address and phone number of all property owners and their agents. |
| NA | | 8) | If public sewer or water service is proposed, obtain and provide a Facilities Improvement Letter if the project is located within the El Dorado Irrigation District service area, or a similar letter if located in another sewer/water district. |
| NA | | 9) | If off-site sewer or water facilities are proposed to serve the project, provide four (4) copies of a map showing location and size of proposed facilities. |
| NA | | 10) | If groundwater is to be used for domestic water, submit a report noting well production data for adjacent parcels, or submit a hydrological report prepared by a geologist noting the potential for water based on the nature of project site geology. |
| NA | | 11) | Submit four (4) copies of a tree canopy preservation plan, showing the existing conditions and projecting potential tree removal. Projects that are over an acre and have at least one percent (1%) total canopy or are less than an acre and have cover of at least ten percent (10%) are subject to canopy coverage retention standards as follows, pursuant to General Plan Policy 7.4.4.4: |

Existing Canopy Cover:

80 - 100 percent
60 - 79 percent
40 - 59 percent
20 - 39 percent
10 - 19 percent or less
1 - 9 percent or less

**Percent of Canopy Cover to
be Retained:**

60 percent of existing canopy
70 percent of existing canopy
80 percent of existing canopy
85 percent of existing canopy
90 percent of existing canopy
90 percent of existing canopy

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Applicant County

- NA 12) ☒ Oak Tree Protection Plan pursuant to General Plan Policy 7.4.5.2 (B) (where native oak(s) may be removed as a result of the project):
- A written statement by the applicant or arborist stating the justification for the development activity, identifying how trees in the vicinity of the project will be protected.
 - A site map that identifies all native oaks on the project site.
 - An arborist report providing specific information on all native oak trees on the project site.
- NA 13) ☒ A tree replacement plan shall be provided pursuant to General Plan Policy 7.4.4.4 and 7.4.5.1. The replacement plan shall identify the numbers and types of trees to be removed as part of subdivision improvements, including future residential construction. The replacement plan shall show locations for tree replacement and include a mitigation monitoring plan to ensure the proper ratio of replacement trees are planted and that proposed replacement trees survive.
- NA 14) ☒ An on-site plant survey to determine the extent and location of rare plants on the project site is required, if located within Mitigation Area 0 ("EP" overlay designation on the General Plan land use map) or Mitigation Area 1 (within the EID service area). (The Mitigation Area for each parcel may be determined on the following website: <http://www.co.el-dorado.ca.us/Planning/ParcelData.html>.) Such a survey can only occur from March 15 through August 15 when plants are readily identifiable. (A list of possible Botanical Consultants is available at Planning Services.)
- NA 15) ☒ Name and address of Homeowners' Association, CSA 9 Zone of Benefit or other road maintenance entity, if it exists in the project area.
- NA 16) ☒ Four (4) copies of a preliminary grading, drainage plan and report. The plan should be of sufficient detail to identify the scope of grading, including quantities, depths of cut and fills for: roads, driveways where cuts/fills exceed 6 feet, retaining walls, and mass pad graded lots. Show location of existing drainage, proposed modifications, and impacts to downstream facilities. (See Section 15.14.240 of County Grading Ordinance for submittal detail of grading plan. See Section 1.8.3 of the County of El Dorado Drainage Manual for submittal requirements of the drainage plan and report.)
- ✓ 17) ☒ Nine (9) copies of a Land Capability Report with support data as required by Volume I of the Subdivision Design and Improvements Standards Manual. (The Manual is available from the Department of Transportation.)
- ✓ 18) ☒ A survey for archaeological resources shall be submitted. The survey shall meet the "Guidelines for Cultural Resource Studies" approved by the Board of Supervisors, available at Planning.
- NA 19) ☒ A site-specific wetland investigation shall be required on projects with identified wetlands shown on the USGS Quad maps when proposed improvements will directly impact the wetland (reduce the size of the wetland area) or lie near the wetlands. (A list of qualified consultants is available from Planning.)
- NA 20) ☒ An acoustical analysis shall be provided to demonstrate consistency with General Plan Policies (see policies following General Plan Objective 6.5.1). The analysis shall define the existing and projected (2025) noise levels and define how the project will comply with standards set forth in the General Plan. The analysis should include description of construction noise, traffic noise generated from the project, and impacts of traffic noise to the residences within the project.

Applicant County

NA 21) ?

An on-site biological study shall be required to determine if the site contains special status plant or animal species or natural communities and habitats. The report should include proposed mitigation measures if applicable.

NA 22)

An air quality impact analysis shall be provided utilizing the El Dorado County Air Pollution Control District's *Guide to Air Quality Assessment*.

✓ 23)

A traffic study shall be provided utilizing El Dorado County Department of Transportation's *Generic Traffic Study Scope of Work* or other latest traffic study requirements as determined by DOT. Applications shall:

- a) Demonstrate consistency with 2004 General Plan Transportation and Circulation Element Policies.
- b) Identify access to County Road(s); describe proposed road and intersection improvements (on-site and off-site).

NA 24)

Copy of previous parcel map or subdivision map, if applicable

✓ 25)

Application Fees pursuant to the adopted fee schedule.

✓ 26)

Twenty-five (25) copies of the tentative map. The maps shall not exceed 24" wide by 36" long. The maps shall be drawn to scale, and of sufficient size to clearly show all details and required data. All maps **MUST** be folded to 8 1/2" x 11". **NO ROLLED DRAWINGS WILL BE ACCEPTED.**

✓ 27)

Four (4) copies of a slope map noting the following slope range categories: 0 to 10%, 11 to 20%, 21 to 29%, 30% to 39%, 40% and over.

✓ 28)

One aerial photograph with the tentative map overlaid. Scale should be 1" = 100' or same scale as tentative map.

REQUIRED INFORMATION ON TENTATIVE MAP

Check (✓)

Applicant County

✓ 1)

North arrow and scale.

✓ 2)

Project boundaries with dimensions

✓ 3)

The approximate dimensions and area of all lots (gross and net). Net area of lots excludes non-buildable areas such as road right(s) of way, bodies of water, and areas of 30 percent or greater slope. Parcel sizes must be consistent with Zoning and General Plan standards unless the application is accompanied by a Planned Development, Rezone and/or General Plan Amendment application(s).

✓ 4)

Show adjacent ownership with book and page number of recorded deeds or parcel map references.

✓ 5)

Show the location, names and right-of-way width of adjacent streets, highways and alleys.

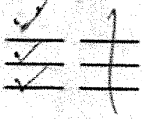
✓ 6)

Show access easements to a connection with a public road, together with deed or map reference documenting such access.

✓ 7)

Note all existing encroachments to the public road on adjacent parcels. If a new access is proposed through adjacent parcels, provide letter of authorization and a description of the access easement.

- [illegible]



- o) Proposed structural fire protection
- p) Date of preparation
- q) In the lower right-hand corner of each map a signature block should be shown, giving space for:

Planning Commission: _____

Approval/Denial Date: _____

Board of Supervisors: _____

Approval/Denial Date: _____

Planning reserves the right to require additional project information as provided by Section 15060 of the California Environment Quality Act, as required by the General Plan development policies, or when such is necessary to complete the environmental assessment.

**NOTE: APPLICATION WILL BE ACCEPTED BY APPOINTMENT ONLY.
MAKE YOUR APPOINTMENT IN ADVANCE BY CALLING (530) 621-5355.**



LARRY PATTERSON
Civil Engineer P.E. #26342

6610 MERCHANDISE WAY • DIAMOND SPRINGS, CA 95619-9450 • (530) 626-3746 • FAX (530) 626-8972

Owner's Authorization

This is my authorization for Patterson Development to act as my agent in procuring all necessary permits, maps, reports, etc. in order to provide Engineering Services for a Tentative Subdivision Map submittal on my property at Brandon Rd., Shingle Springs, CA

APN 087-310-64-100

Date:

7/29/14

Owner's (Trustee) Signature:

[Signature] (TRUSTEE)

Owner's Printed Name:

DOUGLAS G GRANADE

Address:

7501 Brandon Rd Shingle Springs Ca 95682

Telephone Number:

363-0735

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Z15-0003/TM15-1527



**COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT AGENCY
DEVELOPMENT SERVICES DIVISION**

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RECEIVED
PLANNING DEPARTMENT

Date: September 2, 2014
To: Larry Patterson
From: Mel Pabalinas, Senior Planner
Subject: **Granade Subdivision
Pre-Application PA14-0008
APN 087-310-64**

This is a request for pre-application review of a proposed 10-lot subdivision in Latrobe Area. The subdivision would include a rezone of the property from Exclusive Agricultural (AE) District to Estate Residential-10 Acre (RE-10) consistent with the Rural Residential (RR) Land Use designation.

The following details the project information and the related analyses.

Pre-Application Information

Applicant: Patterson Development
Request: 1) Rezone Exclusive Agricultural (AE) District to Estate Residential-10 Acre (RE-10); and
2) Tentative Map dividing the 134-acre property into ten lots with lot sizes ranging from 10 acres to 30 acres
Location: Northeast corner area of South Shingle Road and Brandon Road
APN: 087-310-64
Acreage: 134.05 acres
General Plan: Rural Residential (RR)
Zoning: Exclusive Agricultural (AE) District

Staff Review and Comments

- Site is surrounded by properties with RE-10 and AE zones.

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- Proposed lots would meet the minimum 10-acre size. Rezone would be verified for consistency with General Plan Policy 2.5.5.3.
- Lots 1 to 4 appear to exceed the 3 to 1 width to length lot ratio, which would require justification for Design Waivers for deviation from standard.
- Oak tree canopy impacts would have to conform to retention and replacement requirements under General Plan Policy 7.4.4.4 Option A and its Interim Interpretive Guideline.
 - o May consider differentiating oak tree canopy impacts between the developer versus the lot owner
- Given the agricultural nature in the area, applicable agricultural requirements, including buffers, would apply. If reduced buffer is requested, it can be made as part of the tentative map application. (see attached comments from Agricultural Department)
- Any streams, ponds and wetlands features preserved shall require minimum buffer per General Plan policy 7.3.3.4 and its Interim Interpretive Guideline. Reduced buffer may be requested subject to the policy.
- An approved Safe Plan shall be submitted with the application. Additional comments from local fire protection district (El Dorado Hills Fire Department in behalf of Latrobe Fire Department) are included.
- On-site wastewater treatment systems and individual wells shall conform to current standards enforced by the Environmental Management Department- Environmental Health Division (see attach Interim Guidelines for Land Development).
- A Traffic Impact Analysis shall be required in accordance with preliminary comments by Transportation Division (see attached). The comments include specific and general provisions and EDC Design and Improvement Standards Manual (DISM) standards that would apply to the tentative map.
- Standard lot design consideration includes:
 - o Lot Design (size and frontage vs slope).
 - o Sidewalks (required or not)
 - o Streets (width, standard plan)
 - o Drainage (storm water; water quality)
 - o Identification of all off-site improvements such as roads and drainage.
 - o Road Circulation: Dead end roads over 2640 feet would require a design waiver, and would not likely be approved if over one mile on a dead end road due to inconsistency with Fire Safe Regulations.
 - o Road suitability: On-site and off-site roads must meet minimum Fire-Safe standards.

- Potential CEQA Document: Mitigated Negative Declaration
- Recommended Application Entitlements: Rezone and Tentative Map with Design Waivers, if applicable.
- See attached Tentative Subdivision Map information and checklist

Conclusion

The proposed 10-lot rural subdivision would be consistent with the proposed rezone of RE-10 consistent with underlying land use designation of Rural Residential. The proposal would be verified for applicable policies of the General Plan including 2.5.5.3 (Rezone), 7.3.3.4 (Wetland Buffer) and 7.4.4.4 (Oak Woodland Retention and Replacement). Applicable subdivision standards regulating road and access, water, septic, and lot design and buffers shall apply. Potential environmental effects from the project shall be evaluated in accordance with the California Environmental Quality Act (CEQA) guidelines.

NOTE: While staff will take utmost care to accurately represent County Codes, Policies and applicable past positions of staff, the Planning Commission and the Board of Supervisors, it should be noted that matters discussed in the Pre-Application meeting should be not construed to bind, restrict or obligate the staff or review boards when processing a subsequent application. A more thorough review that occurs during the formal application process could reveal issues and circumstances that were not known or reviewed during the much shorter review of the Pre-Application review process. Further, it is incumbent on the part of the applicant to obtain and understand all applicable Codes and policies.

Attachments:

Comment Letter from Agricultural Department
Interim Guidelines for Land Development (On-site Wastewater Treatment System and Well)
Comments from Transportation Division
Comments from El Dorado Hills Fire Department
Tentative Map General Information and Checklist

FILE # _____
DATE FILED _____

EL DORADO COUNTY PLANNING DEPARTMENT
ENVIRONMENTAL QUESTIONNAIRE

Project Title Granade Tentative Subdivision Map - 11 Lot rural subdivision of 10 acre minimum lots
Lead Agency El Dorado County Planning Department
Name of Owner Doug Granade Telephone (530) 677-7484
Address 7501 Brandon Rd., Shingle Springs, CA 95682
Name of Applicant Doug Granade Telephone (530) 677-7464
Address 4420 Business Dr., Shingle Springs, CA 95682
Project Location 7501 Brandon Dr
Assessor's Parcel Number(s) 087-310-64-100
Acreage 134.05 Zoning AE

Please answer all of the following questions as completely as possible. Subdivisions and other major projects will require a Technical Supplement to be filed together with this form.

1. Type of project and description: 11 parcel subdivision. Land split only
2. What is the number of units/parcels proposed? 11 parcels

GEOLOGY AND SOILS

3. Identify the percentage of land in the following slope categories:
75% 0 to 10% 15% 11 to 15% 6% 16 to 20% 3% 21 to 29% 1% over 30%
4. Have you observed any building or soil settlement, landslides, rock falls or avalanches on this property or in the nearby surrounding area? NO
5. Could the project affect any existing agriculture uses or result in the loss of agricultural land?
NO

DRAINAGE AND HYDROLOGY

6. Is the project located within the flood plain of any stream or river? NO
If so, which one? _____
7. What is the distance to the nearest body of water, river, stream or year-round drainage channel?
1 mile southerly Name of the water body? Clark Creek
8. Will the project result in the direct or indirect discharge of silt or any other particles in noticeable amount into any lakes, rivers or streams? NO

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9. Will the project result in the physical alteration of a natural body of water or drainage way?
If so, in what way? NO
10. Does the project area contain any wet meadows, marshes or other perennially wet areas?
Yes. 50 foot setback from all seasonal streams shown on map

VEGETATION AND WILDLIFE

11. What is the predominant vegetative cover on the site (trees, brush, grass, etc.)? Estimate percentage of each: Oakwood land canopy 40% Grassland 60%
12. How many trees of 6-inch diameter will be removed when this project is implemented?
NONE

FIRE PROTECTION

13. In what structural fire protection district (if any) is the project located? EDH Fire Dept.
14. What is the nearest emergency source of water for fire protection purposes (hydrant, pond, etc.)? Hydrants approximately 1/2 northerly
15. What is the distance to the nearest fire station? _____
16. Will the project create any dead-end roads greater than 500 feet in length? NO
17. Will the project involve the burning of any material including brush, trees and construction materials? NO

NOISE QUALITY

18. Is the project near an industrial area, freeway, major highway or airport? NO
If so, how far? _____
19. What types of noise would be created by the establishment of this land use, both during and after construction? NONE

AIR QUALITY

20. Would any noticeable amounts of air pollution, such as smoke, dust or odors, be produced by this project? NO

WATER QUALITY

21. Is the proposed water source ☐ public or ☒ private, ☐ treated or ☐ untreated?
Name the system: Individual wells

22. What is the water use (residential, agricultural, industrial or commercial)? Residential

AESTHETICS

23. Will the project obstruct scenic views from existing residential areas, public lands, public bodies of water or roads? NO

ARCHAEOLOGY/HISTORY

24. Do you know of any archaeological or historical areas within the boundaries or adjacent to the project? (e.g., Indian burial grounds, gold mines, etc.) See Archaeological Report

SEWAGE

25. What is the proposed method of sewage disposal? ☒ septic system ☐ sanitation district
Name of district: _____
26. Would the project require a change in sewage disposal methods from those currently used in the vicinity? NO

TRANSPORTATION

27. Will the project create any traffic problems or change any existing roads, highways or existing traffic patterns? See Traffic Study
28. Will the project reduce or restrict access to public lands, parks or any public facilities?
NO

GROWTH-INDUCING IMPACTS

29. Will the project result in the introduction of activities not currently found within the community?
NO
30. Would the project serve to encourage development of presently undeveloped areas, or increases in development intensity of already developed areas (include the introduction of new or expanded public utilities, new industry, commercial facilities or recreation activities)?
NO
31. Will the project require the extension of existing public utility lines? NO
If so, identify and give distances: _____

GENERAL

32. Does the project involve lands currently protected under the Williamson Act or an Open Space Agreement? NO
33. Will the project involve the application, use or disposal of potentially hazardous materials, including pesticides, herbicides, other toxic substances or radioactive material? NO
34. Will the proposed project result in the removal of a natural resource for commercial purposes (including rock, sand, gravel, trees, minerals or top soil)? NO
35. Could the project create new, or aggravate existing health problems (including, but not limited to, flies, mosquitos, rodents and other disease vectors)? NO
36. Will the project displace any community residents? NO

DISCUSS ANY YES ANSWERS TO THE PREVIOUS QUESTIONS (attached additional sheets if necessary)

Seasonal streams within project will be provided with 50 foot building and septic set backs throughout the project

MITIGATION MEASURES (attached additional sheets if necessary)

Proposed mitigation measures for any of the above questions where there will be an adverse impact:

Form completed by: Lawrence C. Patten Date: 6/10/10 (revised 03/99)

Parcel Number 087-310-64-100

California Code Sec 6254.21 Prohibits the display of addresses on a government website.

Current Property Owners

GRANADE DOUGLAS G TR

GRANADE FAM SURV TR

100% Ownership Trust

Assessor's information is for assessment and tax purposes only and should not be relied upon for status of development or building purposes.

Property Description

Assessor's Plat map 087-31

Inactive Assessor's Plat map 087-31_20100621 (Old map)

Inactive Assessor's Plat map 087-31_20080225 (Old map)

Ag Preserve number: 236

Abstract code: Secured

Reference: S 35 9 9 & 2 8 9

For Zoning, Flood Zone, Census Tract, etc. : "El Dorado County Planning Dept." or "Tahoe Regional Planning Agency"

Last appraisal effective date: 12/31/2013

Last appraisal reason: Reduction in enrolled value due to decrease in market value (Prop. 8)

APN Status: 00, Active

APN Status Change date: 01/14/2010

Primary use: 23, Rural residential land 20+ acres

The **USE** is only reviewed at the time of last taxable event and may not be a legal use.

Secondary use: 06, Secondary Residence or 'Granny flat'

The **USE** is only reviewed at the time of last taxable event and may not be a legal use.

Tax Rate Area: 076-007 Latrobe school district

**2014-2015
Taxable Property Values**

Property Type	Value
Land	1,108,228
Land Prop 8	600,000
Land Total	1,108,228
Improvement Structures	910,458
Improvement Prop 8	750,000
Improvement Total	910,458

Z15-0003/TM15-1527

Total Roll	1,350,000
Net Roll	1,350,000

Event List

Roll	Date	APN Status	Event Status	Seq.	Type	I.D.	Stmt. #	Value
2014	01/01/2014	Annual Roll	Active	1	Roll			1,350,000
2013	07/18/2013	Not to be billed		1	Change in Ownership	0037483		
2013	01/01/2013	Annual Roll	Active	1	Roll		056074	1,350,000
2012	01/01/2012	Annual Roll	Active	1	Roll		056058	1,350,000
2011	01/01/2011	Annual Roll	Active	1	Roll		803455	1,350,000
2011	01/01/2011	Been Corrected	Inactive	1	Roll		056079	1,500,000
2010	04/09/2010	Not to be billed		1	Change in Ownership	0037482		
2010	01/01/2010	Annual Roll	Active	1	Roll		056089	1,500,000
2009	04/09/2010	Not to be billed		1	Change in Ownership	0037482		
2009	01/01/2009	Annual Roll	Inactive	1	Roll			
2008	01/01/2008	Annual Roll	Inactive	1	Roll			

Property Characteristics

Area calculations and characteristics are not guaranteed.

Users should verify items such as permits,
building areas, acreages, zoning, legal use, etc.

Characteristic	Change Date 01/02/2009 Value
Estimated Acreage	134.050
Proper Building Use	Yes
Workmanship	Good
Utility Rooms	1
Architectural Attractiveness	Good
Construction type	Wood
Construction quality	9.0
Building Shape	Complex
Building Type	Modern

Characteristic	Change Date 01/02/2009 Value
Total Units	2
Stories	2.0
Approx. Total Square feet Improvements	4,851
Year Built	2003
Effective Year Built	2003
Bedrooms	4
Bathrooms	4.5
Total Rooms	10
Fireplaces and/or Woodstoves	2
Building condition	Average
Functional Plan	Average
Building Design	Single family residence
Building Use	Single family residence
Garages	1
Swimming pool	Y

Related Accounts

Account: 1-360-000-2460 Kennels, pet grooming, pet sitters, animal trainers,

Parcel Split Background

This parcel was formed from parcel 087-021-07-100 01/02/2009

This parcel was formed from parcel 087-310-24-100 01/02/2009

Owner Change History

Recorded Document:

Document Number: 2013-0037483

Record Change Date: 07/18/2013

Effective Owner Change Date: 07/18/2013

Recorded Document:

Document Number: 2013-0037482

Record Change Date: 07/18/2013

Effective Owner Change Date: 04/09/2010

Recorded Document:

Document Number: 2008-0007327

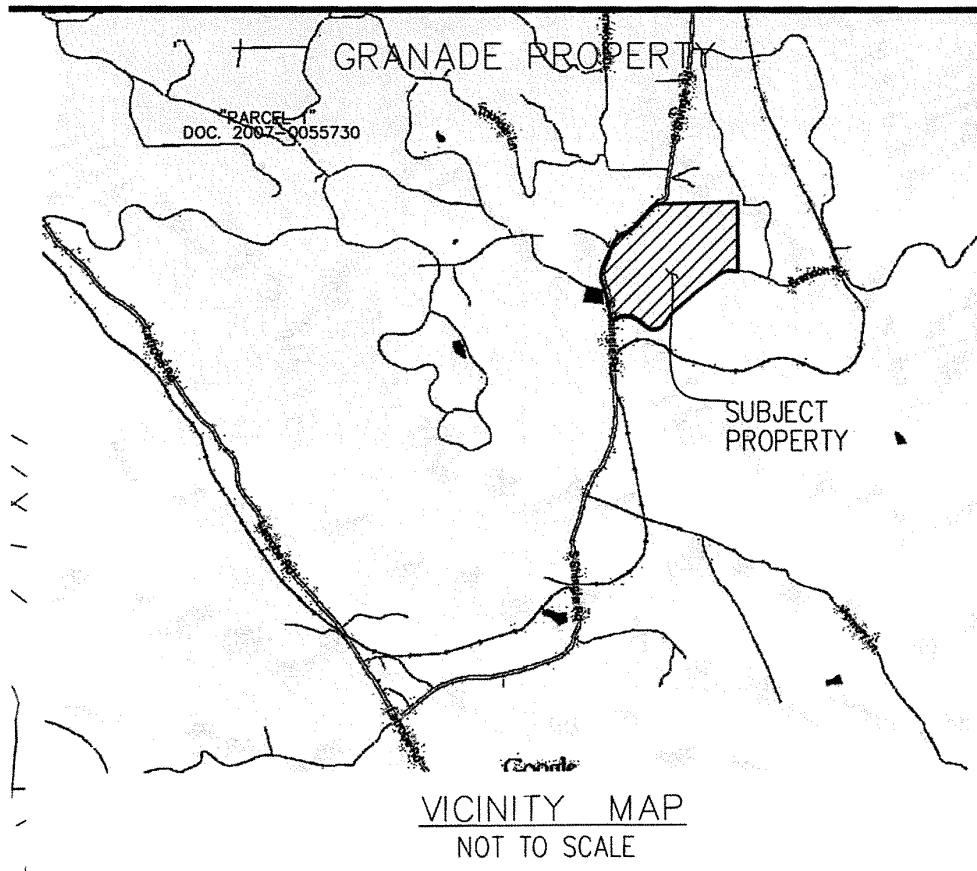
Record Change Date: 02/20/2008

Effective Owner Change Date: 08/28/2007

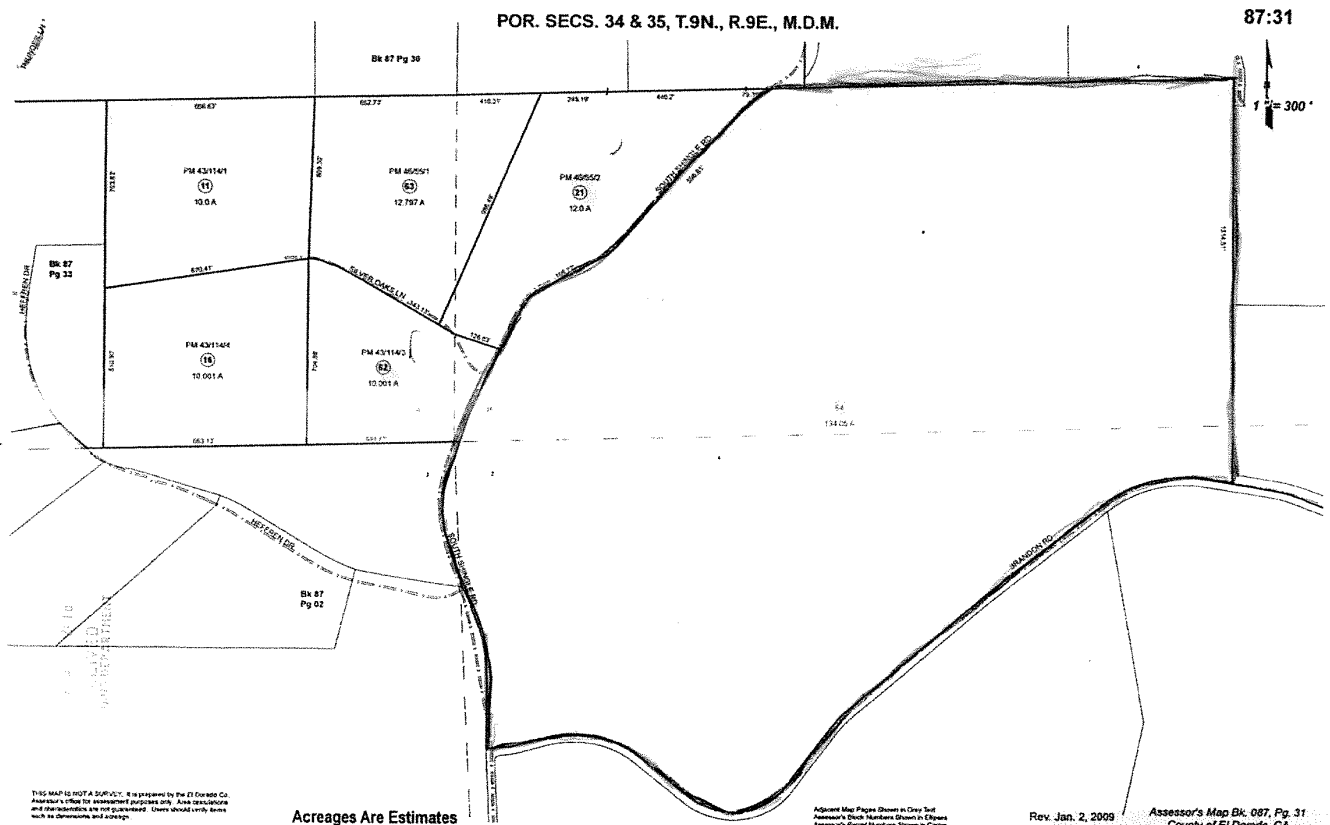
Ownership Information Carry Forward From Parent Parcel

Generated Tuesday July 22, 2014 11:17:53 PDT for PUBLIC at 69.229.123.34
e-mail the Assessor assessor@edcgov.us

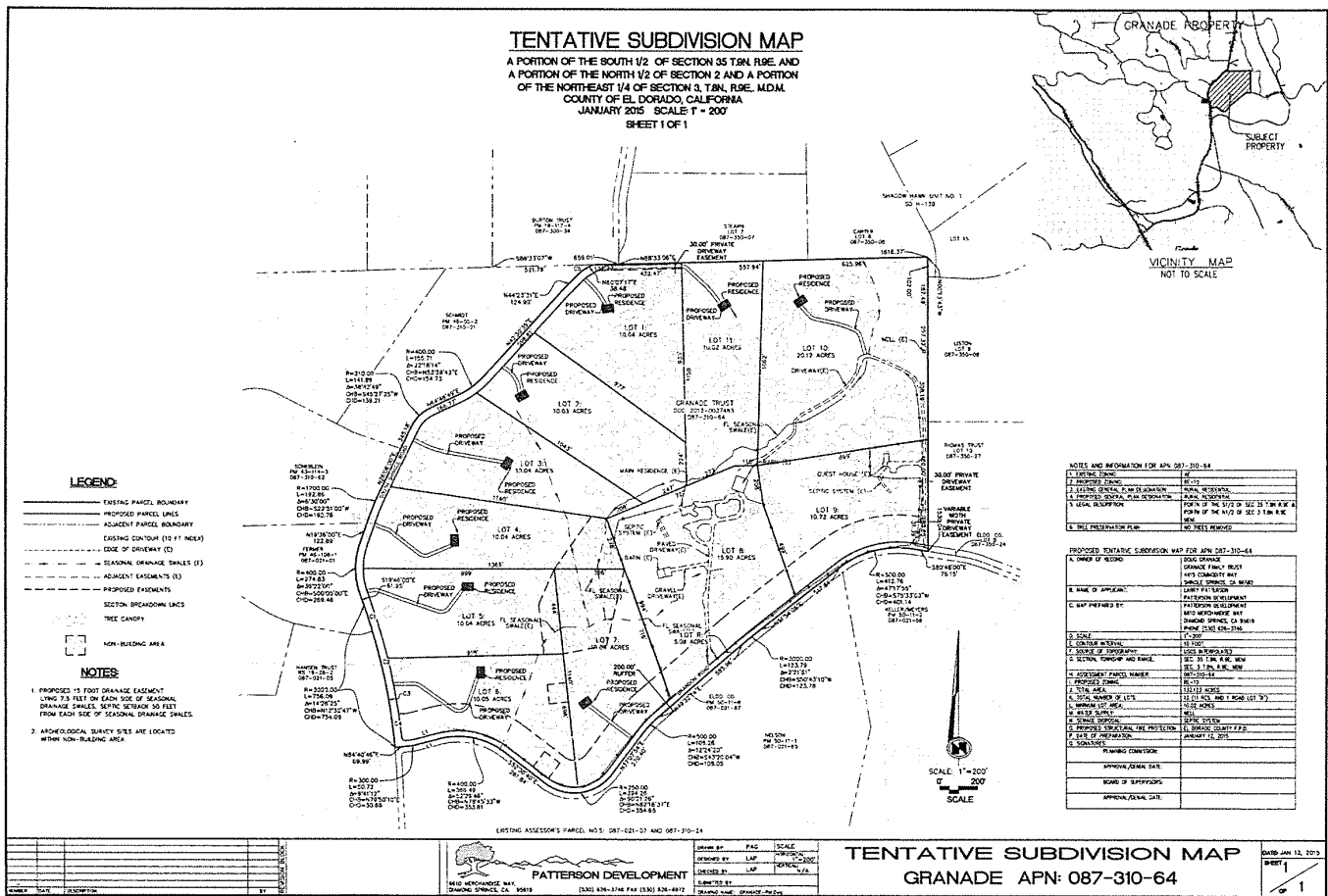
12-16
PLANNING
DEPARTMENT



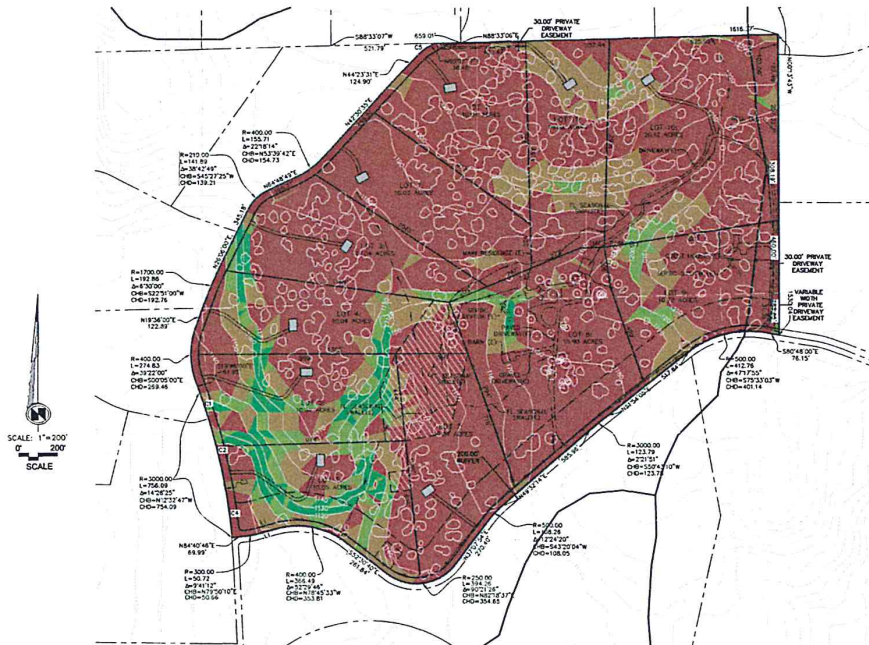
Z15-0003/TM15-1527



Z15-0003/TM15-1527



A PORTION OF THE SOUTH 1/2 OF SECTION 35 T.9N. R.9E. AND
A PORTION OF THE NORTH 1/2 OF SECTION 2 AND A PORTION
OF THE NORTHEAST 1/4 OF SECTION 3, T.9N. R.9E., M.D.M.
COUNTY OF EL DORADO, CALIFORNIA
JANUARY 2015 SCALE: 1" = 200'
SHEET 1 OF 1



Number	Minimum Slope	Maximum Slope	Color	Area	Percent
1	0.00%	10.00%		99.64 Ac.	75.4%
2	10.00%	15.00%		20.12 Ac.	15.2%
3	15.00%	20.00%		7.60 Ac.	5.8%
4	20.00%	30.00%		4.28 Ac.	3.2%
5	30.00%	450.10%		0.50 Ac.	0.3%

[illegible]

PATTERSON DEVELOPMENT
 (530) 626-3748 FAX (530) 626-8972

(530) 626-3748 FAX (530) 626-8972

DRAWN BY:	PAG	SCALE
DESIGNED BY:	LAP	HORIZONTAL 1" = 200'
CHECKED BY:	LAP	VERTICAL N/A
SUBMITTED BY:		
DRAWING NAME:	GRADE PLAN	

SLOPE ANALYSIS MAP
GRANADE APN: 087-310-64

DATE JULY 8, 2015
SHEET 1
OF 1

Biological Resources Evaluation
for the
Granite Springs Subdivision Project
El Dorado County, CA

Prepared by:

Sycamore Environmental Consultants, Inc.
6355 Riverside Blvd., Suite C
Sacramento, CA 95831
Phone: 916/ 427-0703
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Prepared for:

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28 January 2016

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Biological Resources Evaluation
for the
Granite Springs Subdivision Project

El Dorado County, CA

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I. SUMMARY OF FINDINGS AND CONCLUSIONS

This biological resources evaluation was prepared for the Granite Springs Subdivision Project to identify baseline biological resources in the biological study area (BSA). The Project proposes a subdivision map of 10-acre minimum parcels. The lot layout has been designed so that a home and driveway could be constructed on each lot without any tree removal, any fill of waters or wetlands, and in compliance with standard County setbacks to waters and wetlands. The construction of improvements on new parcels, such as homes and driveways, would occur after lots were sold.

The approximately 132 acre BSA provides potential habitat for some special-status wildlife and plants that may occur in oak woodlands and grasslands. The BSA is in the wintering range of burrowing owl, but outside the breeding range. Grasshopper sparrow, golden eagle, and white-tailed kite could nest in the BSA or nearby. Some oaks in the BSA are large enough to have cavities that could provide roosts for pallid bat. Big-scale balsamroot and Tuolumne button-celery are special-status plants with records in the region and potential habitat in the BSA. The Project is unlikely to have a significant impact on any of these species because the project will avoid tree removal, water/wetland fill, and impacts to habitat that is unique or limiting locally.

Oak woodlands in the BSA are regulated by the County under General Plan Policy 7.4.4.4 and the Interpretive Guidelines. The County has established standard setbacks to waters and wetlands under General Plan Policy 7.3.3.4 and the Interpretive Guidelines.

II. INTRODUCTION

A. Purpose of Report

The purpose of this report is to document baseline biological resources in the BSA. This report may be used in support of permit applications and in the California Environmental Quality Act (CEQA) review process.

B. Project Location

The approximately 132.13 acre BSA is located on the northeast corner of the intersection of South Shingle Road and Brandon Road. The BSA is on the Latrobe U.S. Geological Survey topographic quad (Section 35 [T09N, R09E] and Section 2 [T08N, R09E]; Figure 1), and is in the Upper Cosumnes hydrologic unit (hydrologic unit code 18040013). Its centroid is 38.584427° north, 120.961702° west, UTM coordinates 677,540 meters E, 4,272,630 meters N, Zone 10 (WGS84). Figure 2 is an aerial photograph of the BSA.

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Figure 1. Project Location Map

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Figure 2. Aerial Photograph

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The BSA is not located in an El Dorado County rare plant mitigation area, and is outside the U.S. Fish and Wildlife Service (USFWS) recovery boundary for the Pine Hill plants (USFWS 2002b). The BSA is located outside the El Dorado County Important Biological Corridor (IBC) and Ecological Preserve (EP) overlay areas (El Dorado County 2004b).

C. Project Owner and Engineer

Mr. Doug Granade
Granade Family Trust
4415 Commodity Way
Shingle Springs, CA 96582

Mr. Larry Patterson, P.E.
Patterson Development
6610 Merchandise Way
Diamond Springs, CA 95619
Phone: (530) 626-3746

D. Project Description

The project is a tentative subdivision map that would subdivide the BSA into 11 residential parcels of 10-acre minimum size. The existing main house and guest house in the BSA would occupy two of the new parcels. The project does not include construction of new residences on any of the lots. Future homes on the lots would be serviced by wells, septic systems, and driveways connecting to the existing public roads. The proposed lots have been designed such that each could contain a new residence, driveway, and septic system without tree removal, and in compliance with standard County setbacks to waters and wetlands.

III. STUDY METHODS

A. Studies Conducted

An evaluation of biological resources was conducted to determine whether any special-status plant or wildlife species, their habitat, or sensitive habitats occurs in the BSA. Data on known special-status species and habitats in the area was obtained from state and federal agencies. Maps and aerial photographs of the BSA and surrounding area were reviewed. A field survey was conducted to determine what habitat types were present. The field survey, map review, and a review of the biology of evaluated species and habitats were used to determine the special-status species and sensitive habitats that could occur in the BSA.

Special-status species in this report are those listed under the federal or state endangered species acts, under the California Native Plant Protection Act, as a California species of special concern or fully protected by the California Department of Fish and Wildlife (CDFW), or that are on List 1 or 2 of the California Native Plant Society's Inventory of Rare and Endangered Plants of California (CNPS 2015). Special-status natural communities are waters, wetlands, riparian communities, and any natural community ranked S1, S2, or S3 by CDFW (2010).

B. Literature Search

Sycamore Environmental obtained a list through the U.S. Fish and Wildlife Service (USFWS) Sacramento Field Office that identifies federal-listed species that could potentially occur in or could be affected by a project in the BSA. The list is in Appendix A.

The California Natural Diversity Database (CNDDDB) and the California Native Plant Society (CNPS) Inventory were queried for the Latrobe quad and eight surrounding USGS quads to determine known records of special-status species that occur in the vicinity of the BSA (Appendix A). The CNDDDB tracks some species that have not been designated by CDFW as a California species of special concern and do not otherwise meet the criteria for special-status species in this BRE; these species were not evaluated as special-status species.

C. Survey Dates and Personnel

Fieldwork was conducted by Chuck Hughes, M.S., and Juan Mejia on 31 December 2015.

D. Field Survey Methods

The reconnaissance-level biological survey consisted of walking through the BSA to assess potential habitat for special-status species and sensitive communities. Plant and animal species and vegetative communities were identified and recorded. A list of plant and wildlife species observed in the BSA is in Appendix C. Photographs of the BSA are in Appendix D.

A reconnaissance-level survey of wetlands and waters was included. Areas appearing to meet the U.S. Army Corps of Engineers criteria (Corps 2008) for either waters or wetlands were mapped with a sub-meter accurate GPS and included on Figure 4. In general, features were mapped based on above-ground criteria only (vegetation and some hydrology indicators), with some spot-checking of soil characteristics.

E. Problems Encountered and Limitations That May Influence Results

The surveys conducted for this BRE are not intended to meet the documentation requirements of a formal jurisdictional delineation of waters of the U.S., or any published agency protocol or guideline surveys for special-status species. No other problems or limitations were encountered during the fieldwork that would influence the results.

F. Mapping

An aerial photograph acquired from Google Earth Pro (2015) provided the base layer for Figure 4. Waters and wetland boundaries were mapped with a sub-meter accurate global positioning system (GPS). The aerial photograph and field notes were used to estimate the boundaries of upland biological communities. The minimum mapping unit (MMU) used for uplands was two acres. There was no MMU for waters and wetlands. Areas mapped as oak

woodlands have a minimum of 10% cover of oak tree canopy, consistent with new County oak woodland policies that have not yet been adopted. Acreages were calculated using ArcMap functions.

IV. ENVIRONMENTAL SETTING

The BSA is located in the low foothills of the western slope of the Sierra Nevada Mountains. The elevation ranges from approximately 1,110 to 1,230 feet. The BSA is mostly undeveloped and characterized by rolling hills and oak woodland. There are two single-family homes in the BSA, two outbuildings, and some corrals. The area surrounding the BSA includes similar undeveloped land or rural residential use.

A. Soils

Soil mapping units in the BSA (Figure 3) are summarized below (NRCS 1974, USDA-NRCS 2015). Reported colors are for moist soil. The mapping units in the BSA are not categorized as hydric by the USDA (2014).

Auburn silt loam, 2 to 30% slopes;

Auburn very rocky silt loam, 2 to 30% slopes: The Auburn series consists of well-drained soils underlain by hard metamorphic rocks at a depth of 12 to 26 inches. A typical profile of Auburn very rocky silt loam, 2 to 30% slopes has dark reddish brown (5YR 3/3) slightly acidic silt loam from 0 to 3 inches, dark reddish brown (5YR 3/4) slightly acidic silt loam from 3 to 14 inches, and weathered metabasic rock below 14 inches. In Auburn silt loam less than 5% of the surface is exposed bedrock. In Auburn very rocky silt loam 5–25% of the surface is bedrock outcrops. Permeability is moderate, surface runoff and erosion hazard increases with slope.

Figure 3. Soils Map

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B. Biological Communities

Biological communities are defined by species composition and relative abundance. The biological communities described below correlate where applicable with the list of California terrestrial natural communities recognized by the CNDDDB (CDFW 2010) and the El Dorado County General Plan EIR (2004a). The communities were identified based on Sawyer *et al.* (2009). Biological communities are mapped on Figure 4 and listed in Table 1. Photographs of the BSA are in Appendix D.

Table 1. Biological Communities.

Biological Community Common Name (Scientific Name [CDFW Code] ¹)	El Dorado County Major Habitat Type ²	Area (ac)
Blue Oak Woodland (<i>Quercus douglasii</i> woodland [71.020.00])	Blue Oak Woodland	71.19
California Annual Grassland (<i>Bromus [diandrus, hordeaceus]</i> – <i>Brachypodium distachyon</i> semi-natural herbaceous stands [42.026.00])	Annual Grassland	49.40
Clark Creek	--	0.08
Seeps	--	0.13
Wetland Swale	--	0.85
Structures, Roads, and Landscaping	--	10.48
Total:		132.13

¹ Sawyer *et al.* 2009, CDFW 2010

² El Dorado County 2004a

1. Blue Oak Woodland

Blue oak woodland is an upland tree dominated community. In the BSA, the blue oak (*Quercus douglasii*) woodland has an open canopy and a shrub layer is nearly completely lacking. Few individuals of other tree species are mixed with the blue oaks. A single young valley oak (*Q. lobata*) was observed along South Shingle Road, and there is one small patch of mature interior live oaks (*Q. wislizeni*) on the east side of the BSA. The blue oaks are widely spaced with open grassy areas between them. The herbaceous layer is dominated by nonnative grasses and native and nonnative forbs similar to the California annual grassland described below. The blue oak woodland in the BSA does not have the characteristics of any of the community associations within the blue oak woodland alliance that are considered sensitive by CDFW (CDFW 2010; state rarity ranking S3 or lower).

Figure 4. Biological Resources Map
Sheet 1

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Figure 4, Sheet 2

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2. California Annual Grassland

California annual grassland is an upland, herbaceous community dominated by nonnative grasses, and native and nonnative forbs. In the BSA, only a few widely spaced trees (<10% cover) occur within the grassland. Common species include bromes (*Bromus* sp.), wild oat (*Avena* sp.), hedgehog dogtail (*Cynosurus echinatus*), clovers (*Trifolium* sp.), and filaree (*Erodium* sp.). California annual grassland is a community dominated by nonnatives and does not have a State rarity ranking (CDFW 2010).

3. Clark Creek

Clark Creek is identified as an intermittent creek in the BSA on the Latrobe USGS quad map. Clark Creek is identified as a wetland (PEMC; palustrine, emergent, seasonally flooded) on the National Wetlands Inventory (NWI) map for the Latrobe quad. The U.S. Army Corps of Engineers characterizes waters and wetland based on its own definitions. The mapping in this BRE is based on a reconnaissance-level survey using the Corps' definitions.

The BSA is in the uppermost watershed area of Clark Creek. As a result, relatively little of the Clark Creek drainageway in the BSA meets the Corps' definition of a tributary [33 CFR 328.3(c)]. In the BSA, most of the Clark Creek drainageway is more likely to meet the Corps' definition of a wetland (see below).

The area mapped as Clark Creek in the BSA is characterized by the presence of a bed and bank, and an ordinary high water mark (OHWM). The creek bed is typically soil, sand, or bedrock, and the bank is typically soil or bedrock. The OHWM is characterized by scoured soil or the presence of wracking of dead vegetation. Clark Creek had a small amount of flowing water during the fieldwork, and may have continuous flow seasonally based on the USGS quad map, the NWI map, and the site characteristics. There are two small pools up to approximately 18 inches deep just below rock outcrops. There are a few perennial herbaceous plants along Clark Creek, a willow (*Salix* sp.), and some nonnative invasive Himalayan blackberry (*Rubus armeniacus*), but there is no continuous riparian corridor.

4. Seeps

Three seeps in the BSA have clearer wetland indicators than the wetland swales, and may be influenced by seasonal near-surface groundwater. Vegetation is dominated by the wetland obligate pennyroyal (*Mentha pulegium*). Runoff from the seeps ultimately drains to wetland swales in the BSA.

5. Wetland Swales

The wetland swales in the BSA are in the uppermost part of the Clark Creek watershed. They are linear features with flow infrequent enough or insufficient to create a clear OHWM. The wetland swales are dominated by hydrophytic vegetation including rye grass (*Festuca perennis*), water chickweed (*Montia* sp.), and buttercup (*Ranunculus muricatus*). Spot checks were conducted for redoximorphic indicators in the soil and indicators of wetland hydrology that the Corps uses to delineate wetlands (Corps 2008). Areas that did not appear likely to meet the Corp's 3-parameter test for wetlands were not included in the wetland swales.

6. Structures, Roads, and Landscaping

This area includes the existing main house and guest house in the BSA, and adjacent landscaping. Driveways, outbuildings, and livestock corrals are included. The two public roads South Shingle Road and Brandon Road are included. The current parcel boundaries extend into those public right-of-ways. In general, the level of disturbance in this area is high, and native vegetation is intermittent or lacking. Some native blue oaks have been incorporated into landscaping or occur around the edges of outbuildings or corrals and are included in this area. There is landscaping with horticultural species around the main house.

C. The Existing Level of Disturbance

Most of the BSA is relatively undisturbed grazing land. The area mapped as structures, roads, and landscaping is generally highly disturbed or altered, although some native oaks have been incorporated into landscaping. Drainage patterns in the BSA have not been highly disturbed and follow natural contours.

V. BIOLOGICAL RESOURCES IN THE STUDY AREA

A. Determination of Special-Status Species in the Study Area

USFWS file data, CNDDDB/CNPS records, and field surveys were used to determine the special-status species that could occur in the BSA (Appendix A). A field survey was conducted to determine whether habitat for special-status species identified in the file data is present in the BSA. Special-status species for which suitable habitat is present in the BSA are listed in Table 2.

Table 2. Special-Status Species and Natural Communities.

Special-Status Species	Common Name	Federal Status ^a	State Status ^a & other codes ^b	Source ^c	Habitat Present? / Species Observed?
Birds					
Nesting Birds (MBTA or CA regulated)		--	--	3	Yes/ Yes
<i>Ammodramus savannarum</i>	Grasshopper sparrow	--	SSC	2	Yes/ No
<i>Aquila chrysaetos</i>	Golden eagle	--	FP	2	Yes/ No
<i>Athene cunicularia</i>	Burrowing owl	--	SSC	2	Yes/ No
<i>Elanus leucurus</i>	White-tailed kite	--	FP	2	Yes/ No
Mammals					
<i>Antrozous pallidus</i>	Pallid bat	--	SSC	2	Yes/No
Plants / CNPS List ^b					
<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>	Big-scale balsamroot	--	--/ 1B.2	2	Yes/ No
<i>Eryngium pinnatisectum</i>	Tuolumne button-celery	--	--/ 1B.2	2	Yes/ No
Natural Communities					
Oak Woodlands		--	--	3	Yes/ Yes
Waters and Wetlands		--	--	3	Yes/ Yes

^a **Listing Status** Federal status determined from USFWS letter. State status determined from CDFW (2015a, b, c, d). Codes used in table are: E = Endangered; T = Threatened; P = Proposed; C = Candidate; R = California Rare; * = Possibly extinct.

^b **Other Codes** Other codes determined from USFWS letter; DFG (2015a, b, c, and d). Codes used in table are as follows:
SSC = CDFW Species of Special Concern; FP = CDFW Fully Protected; Prot = CDFW Protected; CH = Critical habitat designated.
CNPS List (plants only): 1A = Presumed Extinct in CA; 1B = Rare or Endangered (R/E) in CA and elsewhere; 2 = R/E in CA and more common elsewhere; 3 = Need more information; 4 = Plants of limited distribution
CNPS List Decimal Extensions: .1 = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat); .2 = Fairly endangered in CA (20-80% of occurrences threatened); .3 = Not very endangered in CA (< 20% of occurrences threatened or no current threats known).

^c **Source:** 1 = USFWS letter. 2 = CNDDDB. 3 = Observed or included by Sycamore Environmental.

B. Special-Status Species not in the Project Study Area

Special-status species for which suitable habitat is not present, or whose distributional limits preclude the possibility of their occurrence in the BSA, are not discussed in Section V of this report. An evaluation of these species is in Appendix B.

C. Evaluation of Special-Status Wildlife Species

1. Birds

Nesting Birds Listed Under the MBTA or Regulated by CA Fish and Game Code

California Fish and Game Code §3503 protects most birds and their nests. CA Fish and Game Code §3503.5 further protects all birds in the orders Falconiformes and Strigiformes (collectively known as birds of prey). Birds of prey include raptors, falcons, and owls. The federal Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711) also protects most birds and their nests, including most non-migratory birds in California. The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any bird listed in 50 CFR Part 10 including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations. Any disturbance that causes direct injury, death, nest abandonment, or forced fledging of migratory birds, is restricted under the MBTA. Any removal of active nests during the breeding season or any disturbance that results in the abandonment of nestlings is considered a 'take' of the species under federal law.

HABITAT PRESENT IN THE BSA: The BSA provides potential nesting habitat for birds listed under the MBTA or regulated by California Fish and Game Code.

DISCUSSION: Depending on the species, birds may nest on trees, shrubs, in or on the ground, and on artificial structures such as buildings, poles, and signs. The Project does not propose any construction and will not impact any nesting birds. Future construction on parcels created by the Project are also subject to the MBTA and CA Fish and Game Code.

Grasshopper sparrow (*Ammodramus savannarum*)

HABITAT AND BIOLOGY: Grasshopper sparrow is a CDFW species of special concern (CDFW 2015c). Grasshopper sparrows occur in California primarily as a summer resident from March to September (Shuford and Gardali 2008). Most migrate south in August or September. Grasshopper sparrows that winter in California are secretive and chiefly occur along the southern coast (CWHR 2015). The grasshopper sparrow's ecology varies substantially from region to region within its wide range, and has received very little study in California. In general, grasshopper sparrows in California prefer short to middle-height, moderately open grasslands with scattered shrubs. In some parts of the sparrow's California range, native bunchgrasses appear to be important habitat components, although this is probably not the case in most of the state, given that non-native annuals dominate most grasslands. Grasshopper sparrows are generally absent from areas with extensive shrub cover, though some shrubs are tolerated and perhaps preferred. Patchy bare ground has also been noted as an important habitat component elsewhere. Grasshopper sparrows are more likely to be found in large tracts of habitat than in small ones (Shuford and Gardali 2008).

Grasshopper sparrows breed from early April to mid-July, with a peak in May and June. A thick cover of grasses and forbs is essential for concealment. Pairs are generally solitary and build a nest of grasses and forbs in a slight depression in the ground, hidden at the base of an overhanging clump of grasses or forbs. They search for food on the ground and in low foliage within relatively dense grasslands (CWHR 2015).

RANGE: In California, grasshopper sparrow is an uncommon and local, summer resident and breeder in foothills and lowlands west of the Cascade-Sierra Nevada crest, and from Mendocino and Trinity counties south to San Diego County (CWHR 2015). Agriculture and urbanization have greatly reduced numbers in the Central Valley, but anecdotal evidence indicates they still breed very locally, primarily at the edges and in low foothills, but also very sparingly on the valley floor (Shuford and Gardali 2008).

KNOWN RECORDS: The nearest CNDDDB record is approximately 7.4 miles southwest of the BSA in habitat described as grassland, rolling hills, and swales. Two adults were observed in May 2007.

HABITAT PRESENT IN THE BSA: The BSA provides potential habitat for grasshopper sparrow.

DISCUSSION: The Project does not propose any construction and will not directly impact grasshopper sparrow. Grasshopper sparrow is listed by the MBTA and regulated by CA Fish and Game Code, which prohibit take by future construction on parcels created by the Project.

Golden eagle (*Aquila chrysaetos*)

HABITAT AND BIOLOGY: Golden eagle is a CDFW species of special concern (CDFW 2015c). Habitat is typically rolling foothills, mountain areas, sage-juniper flats, and desert. Golden eagle requires open terrain for hunting such as grasslands, deserts, savannahs, and early successional stages of forest and shrub habitats. Golden eagles use secluded cliffs with overhanging ledges and large trees for cover. Nesting occurs on cliffs of all heights and in large trees in open areas. Rugged, open habitats with canyons and escarpments are used most frequently for nesting. Breeding occurs from late January through August, with a peak in March through July (CWHR 2015).

RANGE: Golden eagle is an uncommon permanent resident and migrant throughout California, except in the center of the Central Valley. They range from sea level up to 11,500 feet. They are perhaps more common in Southern California than northern California.

KNOWN RECORDS: There are two CNDDDB records of golden eagle approximately 8.7 miles northwest of the BSA, in habitat described as oak woodland and foothill pines with steep slopes. The records are in a strip of oak woodland with pines between residential areas in Folsom and El Dorado Hills. The first record reports two adults and two juveniles were observed on a nest in August 2013. A pair of adults was observed sitting on the same nest in February 2014. One chick fledged in June 2014, and all three eagles were observed through the fall of 2014. The nest tree in this record reportedly blew down in November 2014. The second record is about 0.5 miles from the first, and is recorded as being most likely an alternate nest site for the pair from the first record. The second record reports that two adults were observed at or near the nest tree in February 2015.

HABITAT PRESENT IN THE BSA: The BSA provides potential habitat for golden eagle. There are no foothill pines in the BSA, but there are on nearby areas. Some of the larger oaks in the BSA could support a golden eagle nest. No nests large enough to support a golden eagle were observed during the reconnaissance survey.

DISCUSSION: The Project does not propose any construction and will not directly impact golden eagle. Golden eagle is listed by the MBTA and regulated by CA Fish and Game Code, which prohibit take by future construction on parcels created by the Project. Take of golden eagle is further regulated by the federal Bald and Golden Eagle Protection Act, and prohibited as a California fully-protected species.

Burrowing Owl (*Athene cunicularia*)

HABITAT AND BIOLOGY: Burrowing owl is a CDFW species of special concern (CDFW 2015c). Burrowing owls inhabit open, dry grassland and desert habitats, and grass, forb, and open shrub stages of pinyon-juniper and ponderosa pine habitats. Main habitat components include burrows for roosting and nesting, and relatively short vegetation with sparse shrubs and taller vegetation. Burrowing owls most commonly use ground squirrel burrows, but they may also use badger, coyote, and fox holes or dens; or human-made structures such as culverts, piles of concrete rubble, pipes and nest boxes. An active nest chamber is often lined with excrement, pellets, debris, grass and feathers (CWHR 2015, Shuford and Gardali 2008).

Burrowing owl may thrive in highly altered human landscapes. In agricultural areas, owls nest along roadsides, under water conveyance structures, and near and under runways and similar structures. In urban areas, burrowing owls persist in low numbers in highly developed areas, busy urban parks, and adjacent to roads with heavy traffic. In the Imperial Valley, owls are able to excavate their own burrows in soft earthen banks of ditches and canals (Shuford and Gardali 2008).

Burrowing owls are a semi-colonial species that breeds from March through August, peaking in April and May, though breeding can begin as early as February and extend into December. The female typically lays two to ten eggs and young emerge from the burrow in about two weeks. The young are able to fly by week four. A large proportion of adults show strong nest site fidelity, though both young and adults have a high dispersal rate. Burrowing owls will perch in open sunlight in the early morning, and move to shade or the burrow when hot. Owls typically feed on a broad range of arthropods, but also feed on small rodents, birds, amphibians, reptiles, and carrion. Foraging usually occurs close to their burrow. The greatest threat to burrowing owls is habitat loss and degradation from rapid urbanization of farmland in the core of the Central and Imperial valleys (Shuford and Gardali 2008, CWHR 2015).

RANGE: Burrowing owls are a year round resident in most of the state, particularly in the Central Valley, San Francisco Bay region, Carrizo Plain, and Imperial Valley. It is generally absent from the coastal counties north of Marin and mountainous areas above 5,300 feet. Burrowing owl has declined along the central and southern coast, but large populations

remain in agricultural areas in the Central and Imperial valleys (CWHR 2015, Shuford and Gardali 2008).

KNOWN RECORDS: The nearest CNDDDB record is approximately 5.1 miles southwest of the BSA from 2007.

HABITAT PRESENT IN THE BSA: The BSA is outside the summer, breeding range of burrowing owl (CWHR 2015). The BSA is within the winter range of burrowing owl and non-breeding owls could occur. No burrowing owls or suitable burrows were observed during the reconnaissance survey.

DISCUSSION: The Project does not propose any construction and will not directly impact burrowing owl. Burrowing owl is listed by the MBTA and regulated by CA Fish and Game Code, which prohibit take by future construction on parcels created by the Project. Future construction would not impact nests because the BSA is outside the breeding range.

White-tailed kite (*Elanus leucurus*)

HABITAT AND BIOLOGY: White-tailed kite is a CA fully protected species (CDFW 2015c). White-tailed kites occur in herbaceous and open stages of most habitats in cismontane CA. Areas with substantial groves of dense, broad-leaved deciduous trees are used for nesting and roosting. They also roost in saltgrass and Bermuda grass in southern CA. White-tailed kites breed from February to October, with peak activity from May to August. Nests are typically located near the top of dense oak, willow, or other tree stands from 20 to 100 feet above the ground, and are often located near an open foraging area with a dense population of voles (CWHR 2015).

RANGE: White-tailed kites are a year-round resident of coastal and valley lowlands in cismontane CA. They are absent from higher elevations in the Sierra Nevada, the Modoc Plateau, and from most desert regions (CWHR 2015).

KNOWN RECORDS: The nearest CNDDDB record is a nest approximately 8.9 miles west of the BSA from 1989. The surrounding habitat is described as oaks and grassland in rolling terrain.

HABITAT PRESENT IN THE BSA: The BSA provides potential habitat for white-tailed kite.

DISCUSSION: The Project does not propose any construction and will not directly impact white-tailed kite. White-tailed kite is listed by the MBTA and regulated by CA Fish and Game Code, which prohibit take by future construction on parcels created by the Project. Take of white-tailed kite is further prohibited as a California fully-protected species.

2. Mammals

Pallid bat (*Antrozous pallidus*)

HABITAT AND BIOLOGY: Pallid bat is a CDFW species of special concern (CDFW 2015c). It occupies a wide variety of habitats including grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. Pallid bat is most common in open, dry habitats with rocky areas for roosting. It feeds on a wide variety of insects and arachnids, foraging over open ground, usually 1.6 to 8 feet above level ground. Day roosts in caves, crevices, mines, and occasionally buildings and in hollow trees. Roost must protect bats from high temperatures. Night roosts may be in more open sites, such as porches and open buildings. Prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging (CWHR 2015). Pallid bat may be more dependent on tree roosts than was previously realized. They have been located in tree cavities in oak, ponderosa pine, coast redwood and giant sequoia (Bolster 1998).

RANGE: Locally common in low elevations in CA. It occurs throughout CA and is a yearlong resident in most of the range (CWHR 2015).

KNOWN RECORDS: The nearest CNDDDB record is approximately 6 miles south of the BSA. The CNDDDB record is based on a record in the Mammal Networked Information System which contains records and specimens from many sources. A specimen was collected prior to 1999, but no more precise date is available. The geographic information is approximate and is recorded as “6 miles west of Plymouth.” The next closest CNDDDB record is approximately 11.5 miles northwest of the BSA near Folsom.

HABITAT PRESENT IN THE BSA: The BSA provides marginal habitat for pallid bat due to the lack of cliffs or tall rock outcrops. The tallest rock outcrops in the BSA are about six feet high, and most are much shorter. The trees in the BSA are nearly all mature oaks. Some of the oaks are large enough to have cavities that could provide roosts for pallid bat.

DISCUSSION: The Project does not propose any construction and will not directly impact pallid bat. The Project design demonstrates that residences could be constructed on the parcels created by the Project without removing any trees. Trees are widely spaced in the BSA. Although the future construction of residences on the parcels could be done without tree removal, individual applicants could remove trees upon further review and approval from the County. No amount of tree removal that would likely result from the construction of residences would have a significant impact on pallid bat. The BSA contains marginal habitat, tree removal would be limited or none, and pallid bat has a wide range that encompasses most of the State. The BSA does not contain habitat that is unique or limited locally for pallid bat.

D. Evaluation of Special-Status Plants

Big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*)

HABITAT AND BIOLOGY: Big-scale balsamroot is a perennial herb found in chaparral, cismontane woodland, and valley and foothill grassland, sometimes on serpentine and rocky soils, from 295 to 5,100 feet. Blooms March through July (Baldwin *et al.* 2012; CNPS 2015).

RANGE: Known from the Sierra Nevada foothills, central high Sierra Nevada, Sacramento Valley, and eastern San Francisco Bay (Baldwin *et al.* 2012).

KNOWN RECORDS: The nearest CNDDDB record is based on an 1895 collection approximately 16.6 miles southeast of the BSA, near the town of Sutter Creek (Occurrence #43). The next nearest CNDDDB record is a 1920 collection in an area that was likely inundated by Folsom Lake, about 17 miles northwest of the BSA (Occurrence #14).

HABITAT PRESENT IN THE BSA: Uplands in the BSA may provide potential habitat for big-scale balsamroot. Areas of the BSA around rock outcrops, or where bedrock is near the surface and the soil is thin are more likely to support big-scale balsamroot than areas of thicker soil densely vegetated with grasses.

DISCUSSION: The Project does not propose any construction and will not directly impact big-scale balsamroot. If big-scale balsamroot occurs in the BSA, it could be impacted by the future construction of residences on the parcels created by the Project. The BSA does not contain habitat that is unique or limited locally for big-scale balsamroot.

Tuolumne button-celery (*Eryngium pinnatisectum*)

HABITAT AND BIOLOGY: Tuolumne button-celery is an annual to perennial herb found in mesic areas in cismontane woodland, lower montane coniferous forest, and vernal pools from 230 to 3,000 feet. Blooms May through August (Baldwin *et al.* 2012; CNPS 2015).

RANGE: Currently known from the northern and central Sierra Nevada foothills including Amador, Calaveras, Sacramento, and Tuolumne counties (Baldwin *et al.* 2012; CNPS 2015).

KNOWN RECORDS: The nearest CNDDDB record is a 1941 collection approximately 6 miles southwest of the BSA (Occurrence #17). There is a record in the California Consortium of Herbaria (CCH 2016) labeled "4 miles west of Shingle Springs," which would place the collection approximately 5.8 miles north of the BSA.

HABITAT PRESENT IN THE BSA: The segment of Clark Creek, the wetland swales, and the seeps in the BSA may provide potential habitat for Tuolumne button-celery.

DISCUSSION: The Project does not propose any construction and will not directly impact Tuolumne button-celery. The Project design demonstrates that residences and driveways could be constructed on the parcels created by the Project without crossing any waters or

wetlands. If Tuolumne button-celery occurs in the BSA, it would not likely be impacted by any future construction.

E. Evaluation of Sensitive Natural Communities

Waters and Wetlands

There are approximately 1.06 acres of waters and wetlands in the BSA (Figure 4). Fill of waters and wetlands generally requires a permit under Sections 404 and 401 of the federal Clean Water Act. The U.S. Army Corps of Engineers would likely request a formal delineation of waters and wetlands prior to processing a permit application. The California Department of Fish and Wildlife could require a Streambed Alteration Agreement for work in the waters and wetlands under Section 1600 of the Fish and Game Code. There are no riparian communities in the BSA, although there are a few widely scattered willows along Clark Creek and Wetland Swale 1. El Dorado County General Plan Policy 7.3.3.4 identifies a standard 50 foot setback for intermittent channels and wetlands (El Dorado County 2004b).

DISCUSSION: The Project does not propose any construction and will not directly impact any waters or wetlands. The Project Design demonstrates that residences and driveways could be constructed on parcels created by the Project without fill of waters or wetlands, and in compliance with the standard County setback.

Oak Woodlands

There are approximately 71.19 acres of oak woodland in the BSA. The oak woodlands mapped in Figure 4 include some open grassy areas between trees. Likewise, some widely spaced oak trees occur in the California annual grassland. Areas mapped as oak woodland have at least 10% canopy cover, consistent with new oak policies being drafted by the County that have not been adopted. The County is currently preparing a revision of Policy 7.4.4.4 and an environmental document for the revised policy pursuant to CEQA. Oak woodlands in the BSA would be subject to the revised policy if it is adopted by the County.

El Dorado County currently regulates oak woodlands pursuant to County General Plan (2004b) Policy 7.4.4.4. Policy 7.4.4.4 limits the amount of oak tree canopy that may be removed by a project, and requires replacement of any removed oak canopy. The County currently implements Policy 7.4.4.4 through Interpretive Guidelines.

DISCUSSION: The Project does not propose any construction and will not directly impact any oak woodlands. The Project Design demonstrates that residences and driveways could be constructed on parcels created by the Project without removal of any oak trees or canopy, in compliance with Policy 7.4.4.4.

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VII. PREPARERS

Chuck Hughes, M.S., Plant Biology, Michigan State University. Thirteen years experience preparing biological/botanical resource evaluations, wetland delineations, arborist reports, impact analyses, and mitigation and restoration plans. He is a Professional Wetland Scientist (#2029), an ISA Certified Arborist (WE-6885A) with a tree risk assessment qualification, and is listed on a USFWS recovery permit for listed fairy and tadpole shrimp (TE799564-3). His bachelor degree from UC Davis is in environmental horticulture and urban forestry, with an emphasis in plant biodiversity.

Responsibilities: Field work and report preparation.

Juan Mejia, B.S., Environmental Science and Management, University of California, Davis. Conducts plant and wildlife surveys, provides technical support for wetland delineations, biological resource evaluations, mitigation plans, and other documents used in the CEQA/NEPA process, queries the CNDDDB, and researches special-status species for projects.

Responsibilities: Field work and report preparation.

Aramis Respall, GIS Analyst/ CAD Operator. Over 20 years experience in drafting and spatial analysis using AutoCAD and ArcGIS for public and private projects. He provides geospatial analysis and support for projects involving geodesy, hydrology, watersheds, project impact analysis, CNDDDB occurrences, and critical habitat information. Primary experience evolved from conventional surveying and civil engineering practices to advanced GPS and GIS based technology.

Responsibilities: Figure preparation and spatial analysis.

Jeffery Little, Vice President, Sycamore Environmental.

Responsibilities: Principal in charge.

APPENDIX A.

Database Queries

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APPENDIX B.

Species Evaluated Table

Special-Status Species from USFWS Letter, CNDDDB Data, CNPS Data					
Special-Status Species/ Common Name	Federal Status ^{a,b}	State Status ^{a,b}	Source ^c	Habitat Requirements	Potential to Occur in the BSA
Invertebrates					
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	T, CH	--	1, 2	Exist only in vernal pools or vernal pool-like habitats. Individuals have never been found in riverine, marine, or other permanent bodies of water. Water movement within complexes allows movement between individual pools. Currently found in 28 counties across the Central Valley and coast ranges of California. Occupies a variety of vernal pool habitats (USFWS 2005).	No. There are no vernal pools in the BSA. The BSA is not in critical habitat.
<i>Desmocerus californicus dimorphus</i> Valley elderberry longhorn beetle	T, CH	--	1, 2	Requires an elderberry shrub (<i>Sambucus</i> sp.) as a host plant (USFWS 1999a).	No. There are no elderberry shrubs in the BSA. The BSA is not in critical habitat.
<i>Lepidurus packardii</i> Vernal pool tadpole shrimp	E, CH	--	2	Occurs in vernal pools and sometimes other areas of similar hydrology across the Central Valley of California and in the San Francisco Bay area. Requires a minimum of about 25 days to mature, and usually inhabits large, deep vernal pools that pool continuously for many months (USFWS 2005). They can also make use of smaller pools that are present as part of a larger vernal pool complex (Witham <i>et al.</i> 1998), and they may be able tolerate temporary dry conditions (USFWS 2005).	No. There are no vernal pools in the BSA. The BSA is not in critical habitat.
Fish					
<i>Hypomesus transpacificus</i> Delta smelt	T, CH	T	1	Euryhaline (tolerant of a wide salinity range) species that spawns in freshwater dead-end sloughs and shallow edge-waters of channels of the Delta (USFWS 1994).	No. The project is outside the range and there is no suitable habitat. The BSA is not in critical habitat.
<i>Oncorhynchus mykiss</i> Central Valley steelhead DPS	T, CH	--	2	Anadromous salmonid historically distributed throughout the Sacramento and San Joaquin river drainages. While steelhead are found elsewhere in the Sacramento River system, the principal remaining wild populations are a few hundred fish that spawn annually in Deer and Mill Creeks in Tehama County and a population of unknown size in the lower Yuba River. With the possible exception of a small population in the lower Stanislaus River, steelhead appear to have been extirpated from the San Joaquin system (Moyle 2002). Spawning occurs in small tributaries on coarse gravel beds in riffle areas (Busby <i>et al.</i> 1996). Federal listing includes all runs in the Sacramento and San Joaquin Rivers and their tributaries (CDFW 2015d).	No. There is no suitable habitat. The BSA is not in critical habitat.
<i>Oncorhynchus mykiss</i> Northern California steelhead DPS	T, CH	--	1	Fish that exhibits both anadromy and freshwater residency. This DPS includes all naturally spawned populations in California coastal river basins from Redwood Creek southward to, and including, the Gualala River in Mendocino County (NMFS 2006).	No. The BSA is outside the range and there is no suitable habitat. The BSA is not in critical habitat.

Special-Status Species/ Common Name	Federal Status ^{a,b}	State Status ^{a,b}	Source ^c	Habitat Requirements	Potential to Occur in the BSA
Amphibians					
<i>Ambystoma californiense</i> California tiger salamander (central population)	T, CH	T	2	Occurs in grassland, oak savannah, and edges of mixed woodland and lower elevation coniferous forest. Spends much time underground in mammal burrows. Requires pools lasting approximately 10 weeks or longer to complete larval development (Jennings and Hayes 1994). Usually breeds in temporary ponds such as vernal pools but may also breed in slower parts of streams and some permanent waters (Stebbins 2003). The state listing refers to the entire range of the species. The federal threatened listing is only for the Central Valley population. The Sonoma and Santa Barbara populations are federally listed as endangered (CDFW 2015d).	No. The BSA is outside the current range. There is no breeding habitat in the BSA and no populations within dispersal distance. The BSA is not in critical habitat.
<i>Rana draytonii</i> California red-legged frog	T, CH	SSC	1, 2	Inhabits quiet pools of streams, marshes, and occasionally ponds with dense, shrubby, or emergent vegetation. Requires permanent or nearly permanent pools for larval development (CWHR 2015; USFWS 2010). The range of CA red-legged frog extends from near sea level to approximately 5,200 ft, though nearly all sightings have occurred below 3,500 ft. California red-legged frog was probably extirpated from the floor of the Central Valley before 1960 (USFWS 2002a).	No. The BSA is outside the current range. There is no breeding habitat in the BSA and no populations within dispersal distance. The BSA is not in critical habitat.
<i>Spea hammondi</i> Western spadefoot	--	SSC	2	Ranges throughout the Central Valley and adjacent foothills, and is usually quite common where it occurs. Occurs primarily in grasslands, but occasionally occurs in valley-foothill hardwood woodlands (CWHR 2015). Primarily found in the lowlands frequenting washes, floodplains of rivers, alluvial fans, playas, and alkali flats. Also ranges into foothills and mountains. Prefers areas of open vegetation and short grasses with sandy or gravelly soil (Stebbins 2003). Spends most of the year in underground burrows up to 36 inches deep, which they generally construct themselves. Most surface movements by adults are associated with rains or high humidity at night. Breeding and egg laying occur almost exclusively in shallow, temporary pools formed by heavy winter rains (CWHR 2015).	No. There is no suitable habitat.
Reptiles					
<i>Emys marmorata</i> Western pond turtle	--	SSC	2	Prefers aquatic habitats with abundant vegetative cover and exposed basking sites such as logs. Associated with permanent or nearly permanent water in a wide variety of habitat types, normally in ponds, lakes, streams, irrigation ditches, or permanent pools along intermittent streams (CWHR 2015).	No. Clark Creek in the BSA is not large enough, and downstream areas outside the BSA are unsuitable for dispersal.
<i>Phrynosoma blainvillii</i> Coast (California) horned lizard	--	SSC	2	Occurs in valley and foothill hardwood, conifer, and riparian habitats, as well as in pine-cypress, juniper and annual grasslands up to 4,000 ft in the Sierra Nevada and 6,000 ft in southern California Basks in the early morning. Often associated with sandy or loose soil areas (CWHR 2015). Feeds mostly on native ants. Tends not to persist where the Argentine ant invades (Suarez <i>et al.</i> 2000, Suarez and Case 2002).	No, there are no sandy soils in the BSA. All four CNDDB records in El Dorado County are from gabbroic northern mixed chaparral.

Special-Status Species/ Common Name	Federal Status ^{a,b}	State Status ^{a,b}	Source ^c	Habitat Requirements	Potential to Occur in the BSA
<i>Thamnophis gigas</i> Giant garter snake	T	T	2	Known from low basins in the Central Valley. Habitat requisites consist of 1) adequate water during the snake's active season (early spring through mid-fall) to provide food and cover; 2) emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat during the active season; 3) grassy banks and openings in waterside vegetation for basking; and 4) higher elevation uplands for cover and refuge from flood waters during the snake's winter dormant season (USFWS 1999b).	No. The BSA is outside the range and there is no suitable habitat.
Birds					
<i>Agelaius tricolor</i> Tricolored blackbird	--	SSC	2	Forages on ground in cropland, grassland, and on pond edges. Nests near freshwater, preferably in emergent marsh densely vegetated with cattails or tules, but also in thickets of willow, blackberry, and wild rose. Highly colonial; nesting area must be large enough to support a minimum colony of about 50 pairs (CWHR 2015). Chooses areas with widespread water and large, thick patches of vegetation for colonies to reduce predation (Hamilton 2004).	No. There is no suitable nesting habitat in the BSA.
<i>Ammodramus savannarum</i> Grasshopper sparrow	--	SSC	2	An uncommon local summer resident and breeder in foothills and lowlands west of the Cascade-Sierra Nevada crest from Mendocino and Trinity cos. south to San Diego Co. Occurs in dry, dense grasslands, especially with scattered shrubs for sitting perches. A thick cover of grasses and forbs is essential for concealment. Nests are built of grasses and forbs in slight depressions in ground hidden by a clump of grasses or forbs. Usually nests solitarily from early April to mid-July. May form semicolonial breeding groups of 3-12 pairs (CWHR 2015).	Yes. See text.
<i>Aquila chrysaetos</i> Golden eagle	--	FP	2	Uncommon permanent resident and migrant throughout California, except in the central portion of the Central Valley. Perhaps more common in southern California than in northern California. Ranges from sea level up to 11,500 ft (Grinnell and Miller 1944). Typically inhabits rolling foothills, mountainous areas, sage-juniper flats, and deserts. Uses secluded cliffs with overhanging ledges and large trees for cover. Nest on cliffs of all heights and in large trees in open areas. Rugged, open habitats with canyons and escarpments are used most frequently for nesting. Needs open terrain for hunting (CWHR 2015).	Yes. See text.
<i>Athene cunicularia</i> Burrowing owl	--	SSC	2	Yearlong resident of open, dry grassland and desert habitat, and in grass, forb, and open shrub stages of pinyon-juniper and ponderosa pine habitats. Uses small mammal burrows, often ground squirrel, for roosting and nesting cover (CWHR 2015).	Yes. See text.
<i>Buteo swainsoni</i> Swainson's hawk	--	T	2	Uncommon breeding resident and migrant in the Central Valley, Klamath Basin, Northeastern Plateau, Lassen Co., and Mojave Desert. Nests in stands with few trees in juniper-sage flats, in riparian areas and in oak savannah in the Central Valley. Forages in adjacent grasslands or suitable grain or alfalfa fields, or livestock pastures. Feeds on small birds, rodents, mammals, reptiles, large arthropods, amphibians, and, rarely, fish (CWHR 2015).	No. The BSA is outside the range.

Special-Status Species/ Common Name	Federal Status ^{a,b}	State Status ^{a,b}	Source ^c	Habitat Requirements	Potential to Occur in the BSA
<i>Elanus leucurus</i> White-tailed kite	—	FP	2	Yearlong resident in coastal and valley lowlands. Rarely found away from agricultural areas. Inhabits herbaceous and open stages of most habitats, mostly in cismontane California. Substantial groves of dense, broad-leaved deciduous trees are used for nesting and roosting. Nest placed near top of dense oak, willow, or other tree stand located near open foraging area. Forages in undisturbed, open grasslands, meadows, farmlands, and emergent wetlands (CWHR 2015).	Yes. See text.
<i>Haliaeetus leucocephalus</i> Bald eagle	D	E/ FP	2	Occurs along coasts, rivers, and large, deep lakes and reservoirs in California. Nests mostly in Butte, Lake, Lassen, Modoc, Plumas, Shasta, Siskiyou, and Trinity cos. More widespread as a winter migrant. Requires large bodies of water or free flowing rivers with abundant fish and perching sites. Nests in large old growth and dominant live trees with open branchwork. Favors ponderosa pine (CWHR 2015).	No. There is no suitable habitat in the BSA. CNDDB records in the nine-quad area occur next to lakes. There are no lakes or large bodies of water in or adjacent to the BSA.
<i>Riparia riparia</i> Bank swallow	—	T	2	Found primarily west of CA deserts in riparian and other lowland habitats during the spring-fall period. In summer, restricted to riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with fine textured sandy soils, into which it digs nesting holes. About 75% of the breeding population in CA occurs along banks of the Sacramento and Feather Rivers in the northern Central Valley. Other colonies are known from the central coast from Monterey to San Mateo cos., and in northeastern California in Shasta, Siskiyou, Lassen, Plumas, and Modoc cos. Breeding colonies can have between 10 and 1,500, but typically between 100 and 200, nesting pairs (CWHR 2015).	No. There is no suitable habitat.
Mammals					
<i>Antrozous pallidus</i> Pallid bat	—	SSC	2	Occupies many habitats including desert, grasslands, shrublands, woodlands, rocky canyons, oak savannah, redwood, open farmland and mixed conifer forest from sea level up to 3,000 ft (Bolster 1998, CWHR 2015). Prefers open, dry habitats with rocky areas for roosting, and rock outcrops, cliffs, and crevices with access to open habitats for foraging. Day roosts in caves, crevices, mines, and occasionally buildings and hollow trees. Night roosts may be more open, such as porches and open buildings. Social, often roosting in groups of 20 or more. Absent in the northwest from Del Norte and western Siskiyou cos. south to northern Mendocino Co. (CWHR 2015). May be more dependent on tree roosts than was previously realized. They have been located in tree cavities in oak, ponderosa pine, coast redwood and giant sequoia (Bolster 1998).	Yes. See text.
<i>Pekania pennanti</i> Fisher – West Coast DPS	PT	CT/ SSC	2	Permanent resident of the Sierra Nevada, Cascades, Klamath Mountains, and the North Coast Range. Occurs above 3,200 ft in the Sierra Nevada and Cascades (Jameson and Peeters 2004). Occurs in coniferous or deciduous riparian habitats with intermediate to large trees and closed canopies. Dens in protected cavities, brush piles, logs, or under an upturned tree. Hollow logs, trees, and snags are especially important. Mostly nocturnal and crepuscular (CWHR 2015). Federal candidate status refers to the distinct population segment in WA, OR and CA (CDFW 2015).	No. The BSA is outside the range.

Special-Status Species/ Common Name	Federal Status ^{a,b}	State Status ^{a,b}	Source ^c	Habitat Requirements	Potential to Occur in the BSA
Plants					
/ CNPS ^d					
<i>Allium jepsonii</i> Jepson's onion	--	--/ 1B.2	2	Bulbiferous herb found in serpentine or volcanic soils in chaparral, cismontane woodland, and lower montane coniferous forest from 984 to 4,331 ft. Known from Butte, El Dorado, Placer, and Tuolumne cos. Blooms April through August (Baldwin <i>et al.</i> 2012; CNPS 2015).	No. There are no suitable soils in the BSA.
<i>Arctostaphylos myrtifolia</i> Ione Manzanita	T	--/ 1B.2	2	Perennial evergreen shrub found in acidic, lone soil, and clay or sandy soil in chaparral and cismontane woodland from 197 to 1,903 ft. Known from Amador and Calaveras cos. Blooms November through March (Baldwin <i>et al.</i> 2012; CNPS 2015).	No. There are no suitable soils in the BSA. The BSA is outside the range.
<i>Arctostaphylos nissenana</i> Nissenan manzanita	--	--/ 1B.2	2	Perennial evergreen shrub found in rocky closed-coned coniferous forest, chaparral, and woodland from 1,476 to 5,414 ft. Known from El Dorado and Tuolumne cos. Blooms February through March (Baldwin <i>et al.</i> 2012; CNPS 2015).	No. There is no suitable habitat in the BSA. The BSA is outside the range.
<i>Balsamorhiza macrolepis</i> Big-scale balsamroot	--	--/ 1B.2	2	Perennial herb found in chaparral, cismontane woodland, and valley and foothill grassland, sometimes on serpentine soils, from 295 to 5,102 ft. Known from the Bay Area, Sacramento Valley, and Sierra foothills. Blooms March through July (Baldwin <i>et al.</i> 2012; CNPS 2015).	Yes. See text.
<i>Calystegia stebbinsii</i> Stebbins' morning-glory	E	E/ 1B.1	2	Perennial rhizomatous herb found in serpentine or gabbroic soils in openings in chaparral and cismontane woodland from 607 to 3,576 ft. Known from El Dorado and Nevada cos. Blooms April through July (Baldwin <i>et al.</i> 2012, CNPS 2015).	No. There are no suitable soils in the BSA. The BSA is outside the range. In El Dorado County this species is known from the gabbro soils of the Pine Hill formation, elsewhere in the County.
<i>Ceanothus roderickii</i> Pine Hill ceanothus	E	R/ 1B.1	2	Perennial evergreen shrub found on serpentine or gabbroic soils in chaparral and cismontane woodland from 804 to 2,067 ft. Known from less than 10 occurrences in El Dorado Co. Blooms April through June (Baldwin <i>et al.</i> 2012, CNPS 2015).	No. There are no suitable soils in the BSA. The BSA is outside the range. In El Dorado County this species is known from the gabbro soils of the Pine Hill formation, elsewhere in the County.
<i>Chlorogalum grandiflorum</i> Red Hills soaproot	--	--/ 1B.2	2	Perennial bulbiferous herb found in serpentine, gabbroic, and other soils in chaparral, cismontane woodland, and lower montane coniferous forest from 804 to 4,067 ft. Known from Amador, Butte, Calaveras, El Dorado, Placer, and Tuolumne cos. Blooms May through June (Baldwin <i>et al.</i> 2012, CNPS 2015).	No. There are no suitable soils in the BSA. In El Dorado County this species is known from the gabbro soils of the Pine Hill formation, elsewhere in the County.
<i>Crocianthemum suffrutescens</i> Bisbee Peak rush-rose	--	--/ 3.2	2	Perennial evergreen shrub found often in gabbroic or lone soils, burned or disturbed areas, and chaparral from 246 to 2198 ft. Known from Amador, Calaveras, and El Dorado cos. Blooms April through August (Baldwin <i>et al.</i> 2012, CNPS 2015).	No. There are no suitable soils, or chaparral in the BSA. In El Dorado County this species is known from the gabbro soils of the Pine Hill formation, elsewhere in the County.
<i>Downingia pusilla</i> Dwarf downingia	--	--/ 2B.2	2	Annual herb found in mesic valley and foothill grassland and vernal pools from 3 to 1,460 ft. Known from the north Coast Range, Bay Area, and Central Valley. Blooms March through May (Baldwin <i>et al.</i> 2012, CNPS 2015).	No. There are no vernal pools or vernal pool complexes in the BSA. The range does not extend into the Sierra foothills.

Special-Status Species/ Common Name	Federal Status ^{a,b}	State Status ^{a,b}	Source ^c	Habitat Requirements	Potential to Occur in the BSA
<i>Eriogonum apricum</i> var. <i>apricum</i> lone buckwheat	E	E / 1B.1	2	Perennial herb found in chaparral openings in lone formation soil from 190 to 480 ft. Blooms July through October (CNPS 2015).	No. There is no suitable habitat or soil in the BSA.
<i>Eriogonum apricum</i> var. <i>prostratum</i> Irish Hill buckwheat	E	E / 1B.1	2	Perennial herb found in chaparral openings in lone formation soil from 290 to 400 ft. Known from two occurrences near Irish Hill and Carbondale Mesa in Amador County. Blooms June through July (CNPS 2015).	No. There is no suitable habitat or soil in the BSA.
<i>Eryngium pinnatisectum</i> Tuolumne button-celery	--	-- / 1B.2	2	Annual to perennial herb found in mesic areas of cismontane woodland, lower montane coniferous forests, and vernal pools/swales, and intermittent streams from 230 to 3,000 ft. Known from Amador, Calaveras, Sacramento, and Tuolumne cos. Blooms May through August (Baldwin <i>et al.</i> 2012, CNPS 2015).	Yes. See text.
<i>Fremontodendron decumbens</i> Pine Hill flannelbush	E	R / 1B.2	2	Perennial evergreen shrub found on rocky, gabbroic, and serpentine soil in chaparral and cismontane woodland from 1,394 to 2,494 ft. Known from 10 occurrences in El Dorado, Nevada, and Yuba cos. Uncertain about distribution or identity in Nevada and Yuba cos. Blooms April through July (Baldwin <i>et al.</i> 2012, CNPS 2015).	No. There are no suitable soils in the BSA. In El Dorado County this species is known from the gabbro soils of the Pine Hill formation, elsewhere in the County.
<i>Galium californicum</i> ssp. <i>sierrae</i> El Dorado bedstraw	E	R / 1B.2	2	Perennial herb found in gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest from 330 to 1,920 ft. Known from El Dorado County. Blooms March through July (Baldwin <i>et al.</i> 2012, CNPS 2015).	No. There are no suitable soils in the BSA. In El Dorado County this species is known from the gabbro soils of the Pine Hill formation, elsewhere in the County.
<i>Horkelia parryi</i> Parry's horkelia	--	-- / 1B.2	2	Perennial herb found on lone formation and in other soils in chaparral and cismontane woodland from 260 to 3,510 ft. Known from Amador, Calaveras, El Dorado, and Mariposa cos. Blooms April through September (Baldwin <i>et al.</i> 2012, CNPS 2015). Jepson eFlora (2016) describes the habitat as open chaparral.	No. There are no suitable soils or chaparral in the BSA. Only known in El Dorado County east of Placerville.
<i>Legenere limosa</i> Legenere	--	-- / 1B.1	2	Annual herb found in vernal pools from 3 to 2900 ft. Known from Alameda, Lake, Monterey, Napa, Placer, Sacramento, Santa Clara, Shasta, San Joaquin, San Mateo, Solano, Sonoma, Tehama, and Yuba cos. Presumed extirpated in Stanislaus Co. Blooms April through June (Baldwin <i>et al.</i> 2012, CNPS 2015).	No. There are no vernal pools or vernal pool complexes in the BSA. The range does not extend into the Sierra foothills.
<i>Navarretia myersii</i> ssp. <i>myersii</i> Pincussion navarretia	--	-- / 1B.1	2	Annual herb found in vernal pools, often with acidic conditions, from 65 to 1,100 ft. Known from Amador, Calaveras, Merced, Placer, and Sacramento cos. Blooms April through May (Stanislaus Co. Blooms April through June (Baldwin <i>et al.</i> 2012, CNPS 2015).	No. There are no vernal pools or vernal pool complexes in the BSA.
<i>Packera</i> (= <i>Senecio</i>) <i>layneae</i> Layne's ragwort	T	R / 1B.2	2	Perennial herb found in rocky serpentine or gabbroic soils in chaparral and cismontane woodland from 650 to 3,560 ft. Known from Butte, El Dorado, Placer, Tuolumne, and Yuba cos. Blooms April through August (Baldwin <i>et al.</i> 2012, CNPS 2015).	No. There are no suitable soils in the BSA. In El Dorado County this species is known primarily from the gabbro soils of the Pine Hill formation, elsewhere in the County.
<i>Sagittaria sanfordii</i> Sanford's arrowhead	--	-- / 1B.2	2	A perennial emergent rhizomatous herb found in assorted shallow freshwater marshes and swamps from 0 to 2,130 ft. Known from northwestern CA, Cascade foothills, Central Valley, and South Coast. Blooms May through November (Baldwin <i>et al.</i> 2012, CNPS 2015).	No. There is no suitable habitat. The channels and wetlands do not retain sufficient inundation into the summer dry season.

Special-Status Species/ Common Name	Federal Status ^{a,b}	State Status ^{a,b}	Source ^c	Habitat Requirements	Potential to Occur in the BSA
<i>Sphenopholis obtusata</i> Prairie wedge grass	--	--/ 2B.2	2	Perennial herb found in mesic cismontane woodland, and meadows and seeps from 980 to 6,560 ft. Blooms April through July (CNPS 2015).	No. There are no records farther north than the Sutter Creek area in the western Sierra Nevada.
<i>Viburnum ellipticum</i> Oval-leaved viburnum	--	--/ 2B.3	2	Deciduous shrub found in chaparral, cismontane woodland, and lower montane coniferous forest from 700 to 4,600 ft. Known from northwestern CA, Bay Area, and northern/central Sierra foothills. Blooms May through August (Baldwin <i>et al.</i> 2012, CNPS 2015). Jepson eFlora (2016) describes the habitat as chaparral, yellow-pine forest, generally on north-facing slopes.	No. There is no suitable habitat in the BSA.
<i>Wyethia reticulata</i> El Dorado County mule ears	--	--/ 1B.2	2	Perennial rhizomatous herb found on clay or gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest from 600 to 2,100 ft. Known from El Dorado and Yuba cos. Blooms April through August (Baldwin <i>et al.</i> 2012, CNPS 2015).	No. There are no suitable soils in the BSA. In El Dorado County this species is known from the gabbro soils of the Pine Hill formation, elsewhere in the County.
Natural Communities					
Central Valley drainage hardhead/ squawfish stream	--	--	2	Hardhead occur in low- to mid-elevation streams in the main Sacramento-San Joaquin drainage and in the Russian River. Their range extends from the Kern River in Kern County, in the south, to the Pit River in Modoc County in the north. In the San Joaquin drainage, the species is scattered in tributary streams and absent from valley reaches of the San Joaquin River. In the Sacramento drainage, the hardhead is present in most large tributary streams as well as in the Sacramento River. Hardhead are typically found in undisturbed areas of larger low- to mid-elevation streams, although they are also found in the mainstem Sacramento River at low elevations and in its tributaries to about 4,920 ft. They prefer clear, deep (>32 inches) pools and runs with sand-gravel-boulder substrates and slow velocities. Hardhead are always found in association with Sacramento pikeminnow (squawfish) and usually with Sacramento sucker. They tend to be absent from streams where introduced species, especially centrarchids (sunfish), predominate and from streams that have been severely altered by human activity. Sacramento pikeminnow occur in clear rivers and creeks of central California and occur in small numbers in the Sacramento-San Joaquin Delta. They are most characteristic of low- to mid-elevation streams with deep pools, slow runs, and undercut banks, and overhanging vegetation. They are most abundant in lightly disturbed, tree-lined reaches that also contain other native fish (Moyle 2002).	No. This community does not occur in the BSA. The intermittent channel in the BSA is too small to support this community.

Special-Status Species/ Common Name	Federal Status ^{a,b}	State Status ^{a,b}	Source ^c	Habitat Requirements	Potential to Occur in the BSA
Lone Chaparral	--/--	--/--	2	A chaparral community of low shrubs and scattered herbs dominated by lone manzanita (<i>Arctostaphylos myrsinifolia</i>). Shrub cover in mature stands usually exceeds 50%. Edaphically restricted to acidic, nutrient-poor, and coarse soils. This community occurs across the Central Valley directly east of the Golden Gate. This creates milder summer high temperatures and higher relative humidities than elsewhere in the Sierran foothills. Additional characteristic species include: <i>Adenostoma fasciculatum</i> , <i>Ceanothus tomentosus</i> , <i>Eriodictyon californicum</i> , <i>Eriogonum apricum</i> , <i>Pinus</i> spp., and <i>Quercus</i> spp. Occurs in western Amador and northern Calaveras counties (Holland 1986).	No. This community does not occur in the BSA.
Northern hardpan vernal pool	--	--	2	A low emergent wetland community dominated by annual herbs and grasses on very acidic soils with an iron-silicon cemented hardpan. Evaporation (not runoff) dries pools in spring creating concentric bands of vegetation. Occurs primarily on old alluvial terraces on the east side of the Great Valley from Tulare or Fresno County north to Shasta County (Holland 1986).	No. There are no vernal pools in the BSA.

^a **Listing Status** E = Endangered; T = Threatened; P = Proposed; C = Candidate; R = California Rare; D = Delisted; * = Possibly extinct.

^b **Other Codes** SSC = CA Species of Special Concern; FP = CA Fully Protected; Prot = CA Protected; CH = Critical habitat designated.

CNPS Rank (plants only): 1A = Presumed Extinct in CA; 1B = Rare or Endangered (R/E) in CA and elsewhere; 2 = R/E in CA and more common elsewhere; 3 = Need more information; 4 = Plants of limited distribution

CNPS List Decimal Extensions: .1 = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat); .2 = Fairly endangered in CA (20-80% of occurrences threatened); .3 = Not very endangered in CA (< 20% of occurrences threatened or no current threats known).

^c **Source:** 1 = USFWS letter. 2 = CNDDDB/CNPS. 3 = Observed or included by Sycamore Environmental.

APPENDIX C.

Plant and Wildlife Species Observed

Plant species observed.

FAMILY	SCIENTIFIC NAME	COMMON NAME	NATIVE/ INTRODUCED	CAL-IPC PEST RATING ¹
FERNS & ALLIES				
Polypodiaceae	<i>Polypodium</i> sp.	Polypody	N	--
Pteridaceae	<i>Pentagramma triangularis</i>	Goldback fern	N	--
EUDICOTS				
Anacardiaceae	<i>Toxicodendron diversilobum</i>	Western poison oak	N	--
Apiaceae	<i>Daucus pusillus</i>	Daucus	N	--
	<i>Torilis arvensis</i>	Tall sock-destroyer	I	Moderate
Asteraceae	<i>Baccharis pilularis</i>	Coyote Brush	N	--
	<i>Carduus</i> sp.	Carduus	I	--
	<i>Centaurea solstitialis</i>	Yellow star-thistle	I	High
	<i>Centromadia</i> sp.	Spikeweed	N	--
	<i>Cirsium vulgare</i>	Bull thistle	I	Moderate
	<i>Holocarpha virgata</i>	Tarplant	N	--
	<i>Hypochaeris glabra</i>	Smooth cat's ear	I	Limited
	<i>Lactuca</i> sp.	Lettuce	--	--
	<i>Logfia</i> sp.	Logfia	--	--
	<i>Senecio vulgaris</i>	Common groundsel	I	--
	<i>Soliva sessilis</i>	Soliva	I	--
Boraginaceae	<i>Eriodictyon californicum</i>	California yerba santa	N	--
	<i>Phacelia</i> sp.	Phacelia	N	--
	<i>Plagiobothrys</i> sp.	Popcornflower	N	--
Brassicaceae	<i>Hirschfeldia incana</i>	Hirschfeldia	I	Moderate
	<i>Nasturtium officinale</i>	Water cress	N	--
Caryophyllaceae	<i>Silene gallica</i>	Small-flower catchfly	I	--
	<i>Stellaria</i> sp.	Chickweed, starwort	--	--
Chenopodiaceae	<i>Salsola</i> sp.	Salsola	I	--
Crassulaceae	<i>Crassula</i> sp.	Crassula	--	--
	<i>Dudleya</i> sp.	Dudleya, liveforever	N	--
Euphorbiaceae	<i>Croton setigerus</i>	Turkey-mullein	N	--
Fabaceae	<i>Acmispon</i> sp.	Deervetch, deerweed	N	--
	<i>Lupinus</i> sp.	Lupine	N	--
	<i>Trifolium glomeratum</i>	Clustered clover	I	--
	<i>Trifolium hirtum</i>	Rose clover	I	Moderate
	<i>Trifolium subterraneum</i>	Subterranean clover	I	--
	<i>Vicia</i> sp.	Vetch	--	--
Fagaceae	<i>Quercus berberidifolia</i>	Scrub oak	N	--
	<i>Quercus douglasii</i>	Blue oak	N	--
	<i>Quercus lobata</i>	Valley oak	N	--
	<i>Quercus wislizenii</i>	Interior live oak	N	--
Gentianaceae	<i>Zeltnera</i> sp.	Centaury	N	--
Geraniaceae	<i>Erodium botrys</i>	Storksbill, filaree	I	--
	<i>Erodium moschatum</i>	Greenstem filaree	I	--
	<i>Geranium</i> sp.	Cranesbill, geranium	--	--
Hypericaceae	<i>Hypericum</i> sp.	Hypericum	--	--
Lamiaceae	<i>Mentha pulegium</i>	Pennyroyal	I	Moderate
	<i>Trichostema lanceolatum</i>	Vinegar weed	N	--
Linaceae	<i>Linum</i> sp.	Flax	--	--
Limnanthaceae	<i>Limnanthes</i> sp.	Meadowfoam	N	--

Lythraceae	<i>Lythrum</i> sp.	Loosestrife	--	--
Montiaceae	<i>Claytonia perfoliata</i>	Miner's lettuce	N	--
	<i>Montia</i> sp.	Water chickweed	N	--
Oleaceae	<i>Olea europaea</i>	Olive	I	Limited
Onagraceae	<i>Clarkia</i> sp.	Clarkia	N	--
	<i>Epilobium</i> sp.	Willowherb	--	--
	<i>Epilobium densiflorum</i>	Willowherb	N	--
Plantaginaceae	<i>Kickxia</i> sp.	Kickxia	I	--
	<i>Plantago lanceolata</i>	English plantain	I	Limited
Polygonaceae	<i>Polygonum</i> sp.	Knotweed	--	--
	<i>Rumex</i> sp.	Dock	--	--
Ranunculaceae	<i>Ranunculus muricatus</i>	Buttercup	I	--
Rubiaceae	<i>Galium parisiense</i>	Wall bedstraw	I	--
	<i>Sherardia arvensis</i>	Field madder	I	--
Rosaceae	<i>Rubus armeniacus</i>	Himalayan blackberry	I	High
Salicaceae	<i>Populus fremontii</i> ssp. <i>fremontii</i> (Sapling)	Fremont cottonwood	N	--
	<i>Salix</i> sp.	Willow	--	--
Viscaceae	<i>Phoradendron villosum</i>	Oak mistletoe	N	--
MONOCOTS				
Agavaceae	<i>Chlorogalum</i> sp. (fibrous bulb coat)	Soap plant, amole	N	--
Araceae	<i>Lemna</i> sp.	Duckweed	N	--
Cyperaceae	<i>Cyperus eragrostis</i>	Nutsedge	N	--
Juncaceae	<i>Juncus</i> sp.	Rush	--	--
Poaceae	<i>Avena</i> sp.	Oat	I	--
	<i>Elymus caput-medusae</i>	Medusa head	I	High
	<i>Briza minor</i>	Small quaking grass	I	--
	<i>Bromus diandrus</i>	Ripgut grass	I	Moderate
	<i>Bromus hordeaceus</i>	Soft chess	I	Limited
	<i>Bromus madritensis</i> ssp. <i>rubens</i>	Red brome	I	High
	<i>Cynodon dactylon</i>	Bermuda grass	I	Moderate
	<i>Cynosurus echinatus</i>	Hedgehog dogtail	I	Moderate
	<i>Festuca perennis</i>	Rye grass	I	Moderate
	<i>Hordeum marinum</i> ssp. <i>gussoneanum</i>	Mediterranean barley	I	Moderate
	<i>Hordeum marinum</i> ssp. <i>leporinum</i>	Hare barley	I	Moderate
	<i>Muhlenbergia rigens</i>	Deer grass	N	--
	<i>Paspalum</i> sp.	Paspalum	--	--
	<i>Polypogon</i> sp.	Beard grass	I	--

¹ High/Moderate/Limited = CA-IPC Inventory; reflects level of each species' negative ecological impact in California.

Wildlife species observed.

COMMON NAME	SCIENTIFIC NAME
Birds	
Acorn woodpecker	<i>Melanerpes formicivorus</i>
Brewer's blackbird	<i>Euphagus cyanocephalus</i>
Dark-eyed junco	<i>Junco hyemalis</i>
Common raven	<i>Corvus corax</i>
Lesser goldfinch	<i>Carduelis psaltria</i>
Mourning dove	<i>Zenaida macroura</i>
Northern flicker	<i>Colaptes auratus</i>
Oak titmouse (Plain titmouse)	<i>Baeolophus inornatus</i>
Turkey vulture	<i>Cathartes aura</i>
Western meadowlark	<i>Sturnella neglecta</i>
White-crowned sparrow	<i>Zonotrichia leucophrys</i>

APPENDIX D.

Photographs
31 December 2015



Photo 1. View looking north of Wetland Swale 1 in oak woodland.



Photo 2. Grassland in the foreground, and oak woodland in the background, on the north side of the BSA. This area is typical of much of the BSA.



Photo 3. An area of small rock outcrops and near surface bedrock near the northeastern corner of the BSA.



Photo 4. View looking north of Seep 1.



Photo 5. View looking west of Wetland Swale 1 in the low area in the center of the photo. The main house in the BSA is on the left.



Photo 6. View looking west along Brandon Road. The intersection with South Shingle Road is in the background. The low area in the foreground is Wetland Swale 6.



Photo 7. A landscaped area between the main house and barn. Some native oaks have been incorporated into the landscaping.

